August 31, 2007

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street SW
Washington DC 20554

Re: WT Docket No. 07-54, *Antenna Requirements for the 10.7 – 11.7 GHz Band*

Dear Ms. Dortch:

On behalf of the Fixed Wireless Communications Coalition (FWCC), I am electronically filing this written *ex parte* communication pursuant to Section 1.1206(b)(1) of the Commission's Rules.[1]

The FWCC agrees with FiberTower Corporation that requests by Mobile Satellite Ventures LP ("MSV") for extraordinary protection of its 11 GHz feeder link earth stations are not well founded.

The Commission has designated the 11 GHz band primarily for fixed service use. Fixed satellite service use, while permitted on a co-primary basis, is limited to international operations,

[1] The FWCC is a coalition of companies, associations, and individuals interested in the Fixed Service -- *i.e.*, in terrestrial fixed microwave communications. Our membership includes manufacturers of microwave equipment, licensees of terrestrial fixed microwave systems and their associations, and communications service providers and their associations. The membership also includes railroads, public utilities, petroleum and pipeline entities, public safety agencies, cable TV and private cable providers, backhaul providers, and/or their respective associations, communications carriers, and telecommunications attorneys and engineers. Our members build, install, and use both licensed and unlicensed point-to-point, point-to-multipoint, and other fixed wireless systems, in frequency bands from 900 MHz to 95 GHz. For more information, see www.fwcc.us.

specifically to leave room for fixed service expansion.[2] MSV's feeder link stations are authorized under a limited waiver.[3]

As the FWCC noted earlier in the proceeding, the 11 GHz band is a critically important component of the fixed service spectrum. Fixed service operators need frequencies capable of handling reasonably long links. That potentially includes the 4, 6, 11, and 23 GHz bands, and the remaining fixed service allocation at 18 GHz. But each of these bands has serious limitations. Satellite earth stations in the 4 and 6 GHz bands, which are routinely coordinated and licensed for the entire band and satellite arc, block many fixed service coordination efforts. Coordination at 4 GHz is all but impossible nationwide. The lower 6 GHz band is largely unavailable in and near major population centers, where the need for fixed service communications is greatest. Federal Government installations in the 23 GHz band limit private use, and there is little 18 GHz spectrum left for the fixed service, following recent reallocations to satellite operations. The Commission should enable the fixed service industry to make full use of the limited spectrum still available.

The existing coordination rules give full protection to MSV's feeder link earth stations. MSV reports that it is currently operating 11 GHz stations in Alexandria, VA and Reston, VA,[4] hardly remote locations, yet MSV does not mention any incidents of actual harmful interference. Its complaints of interference into as-yet-unbuilt earth stations are wholly conjectural.[5] Rather than triggering demands to change the coordination procedures at the expense of the fixed service, such interference predictions should serve to alert MSV that it should either plan to shield its earth stations or consider alternative sites.

MSV originally objected to the coordination procedures on the supposed ground that they consider only one fixed service antenna at a time, overlooking the possibility of aggregate interference from multiple antennas.[6] MSV subsequently acknowledged that the procedures do

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[2] *Establishment of Policies and Service Rules for the Non-Geostationary Satellite Orbit* (NPRM), 16 FCC Rcd 9680 at para. 45 (2001) (Commission restricted earth station usage in shared bands to "allow[] the continued use and growth of terrestrial operations in those bands.")

[3] *Land Mobile Satellite Service for the Provision of Various Common Carrier Services*, 4 FCC Rcd 6041 at para. 68 (1989).

[4] Letter from Glenn S. Richards to Marlene H. Dortch, Secretary, FCC, attachment at slide 4 (filed Aug. 10, 2007).

[5] Letter from Bruce D. Jacobs to Marlene H. Dortch, Secretary, FCC, attachment (filed Aug. 21, 2007).

[6] Letter from Glenn S. Richards to Marlene H. Dortch, Secretary, FCC, attachment at slide 7 (filed Aug. 10, 2007).

consider two possible exposures, but continues to insist on the possibility of interference from three or more.[7] This is not a realistic concern. By Commission rule, fixed service antennas must be highly directional.[8] Emissions from the back and sides -- indeed, from every direction except within 5 degrees of the axis -- are required to be suppressed to a large degree.[9] MSV thus would change the rules to allow for a case in which three or more fixed service antennas all have axes that happen to intersect at the same earth station. This is unlikely in the extreme. It is all but impossible for co-channel links, which would almost certainly cause interference to one another, and so could not have been coordinated in the first place. Moreover, unless all of the fixed service links impinge on the earth station with nearly the same power, those contributing less power have negligible effect.

We note also that MSV seeks to change the coordination rules even for 11 GHz systems operating with 4 foot or larger dishes that are otherwise unaffected by the present proceeding.

In short, MSV's proposed coordination procedures are both unnecessary and contrary to the public interest.

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[7] Letter from Jennifer A. Manner, MSV, to Marlene H. Dortch, Secretary, FCC, at 1 (filed Aug. 27, 2007).

[8] 47 C.F.R. Sec. 101.115. Even two-foot antennas under the NPRM would be required to have an antenna gain of 33.5 dBi.

[9] *Id*.

Please do not hesitate to call with any questions.

Respectfully submitted,

Dennis J. Guill
Chief Technical Officer
Wireless Transmission Division, North America
Alcatel-Lucent Technologies
3400 West Plano Parkway
Plano, Texas 75075
(972) 477-6525
Dennis.Guill@alcatel-lucent.com

Member, FWCC

cc: Courtesy service list

COURTESY SERVICE LIST

Chairman Kevin J. Martin
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Commissioner Michael J. Copps
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Commissioner Jonathan S. Adelstein
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Commissioner Deborah Tate
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Commissioner Robert McDowell
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Erika Olsen
Office of Chairman Martin
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Bruce Gottlieb
Office of Commissioner Copps
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Renee Roland Crittendon
Office of Commissioner Adelstein
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Wayne Leighton
Officer of Commissioner Tate
Bruce Gottlieb, Esq.
Office of Commissioner Copps
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Angela Giancarlo, Esq.
Officer of Commissioner McDowell
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Fred Campbell, Chief
Wireless Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Karl Kensinger, Associate Chief
Satellite Division
International Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Julius Knapp, Chief
Office of Engineering & Technology
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Cathy Massey, Deputy Chief
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Robert Nelson, Chief
Satellite Division
International Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Jamison Prime, Chief
Spectrum Policy Branch
Policy and Rules Division
Office of Engineering & Technology
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Bruce Romano, Associate Chief, Legal
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

John J. Schauble, Deputy Chief
Broadband Division
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Mark Settle
Deputy Chief
Policy and Rules Division
Office of Engineering & Technology
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Alan Stillwell
Senior Associate Chief, Policy
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Joel Taubenblatt, Chief
Broadband Division
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Bruce D. Jacobs, Esq.
Glenn S. Richards, Esq.
Pillsbury Winthrop Shaw Pittman
2300 N Street, NW
Washington, DC 20037
Counsel for Mobile Satellite Ventures LP

Jennifer A. Manner, Esq.
Mobile Satellite Ventures LP
10802 Park Ridge Drive
Reston VA 20191