DEC 1 5 1995

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION OFFICE OF SECRETARY

Received

In re Applications of)	JAN 176 1996
)	
)	Satellite Enthancing Branch
AT&T Corporation)	File Nos. 156-162-SAT-P/LA-95118
Comm, Inc.)	File Nos. 163-166-SAT-P/LA-95
EchoStar Satellite Corporation)	File Nos. 167/168-SAT-P/LA-95
GE American Communications, Inc.)	File Nos. 169-173-SAT-P/LA-95
Hughes Communications Galaxy, Inc.)	File Nos. 174-181-SAT-P/LA-95
KaStar Satellite Communications Corp.)	File No. 203-SAT-P/LA-95
Lockheed Martin Corporation)	File Nos. 182-186-SAT-P/LA-95
Loral Aerospace Holdings, Inc.)	File Nos. 187-SAT-AMEND-95
)	188/189-SAT-P/LA-95
Morning Star Satellite Co., L.L.C.)	File Nos. 190-193-SAT-P/LA-95
NetSat 28 Company, L.L.C.)	File No. 194-SAT-P/LA-95
Orion Asia Pacific Corporation)	File No. 206-SAT-AMEND-95
Orion Atlantic, L.P.)	File No. 204-SAT-ML-95
Orion Network Systems, Inc.)	File Nos. 195-197-SAT-P/LA-95
)	205-SAT-AMEND-95
PanAmSat Corporation)	File Nos. 198/199-SAT-P/LA-95
- /)	202-SAT-AMEND-95
VisionStar, Inc.)	File No. 200-SAT-P/LA-95

CONSOLIDATED COMMENTS AND PETITIONS TO DENY OF NETSAT 28 COMPANY, L.L.C.

NetSat 28 Company, L.L.C. ("NetSat 28"), by its attorneys, hereby files these consolidated comments and petitions to deny (hereinafter "NetSat 28 Comments") in the referenced proceedings. The NetSat 28 Comments are filed pursuant to the Commission's recent Public Notice^{1/2} seeking comment on the fifteen applicants for authority to construct, launch and operate Ka-band satellite systems. As one of the fifteen applicants in this processing round, NetSat 28 has a direct interest in

Public Notice, Report No. SPB-28, released November 1, 1995.

Commission consideration of these applications. As such, NetSat 28 requests Commission acceptance of these comments.

I. <u>Background</u>

The above fifteen applicants filed new, amended or modified applications pursuant to the Commission's Public Notice^{2/} opening a filing window for Ka-band satellite system applications. The applicants have sought Commission authorization to construct, launch and operate one or more Ka-band satellites in the geostationary fixed-satellite service. In some cases, applicants have sought authorization to provide only domestic or regional service. In other cases, applicants have proposed global systems.

NetSat 28 has proposed to operate a single satellite to be located at 103° W.L. That individual satellite, using an innovative optical cross bar switch, will be capable of operating 1,000 spot beams, each carrying 500 channels at T-1 equivalent data rates. NetSat 28 anticipates that its satellite will be able to provide service to 500,000 users simultaneously on a fully-switched basis.

As is the case for many of the other Ka-band applicants, NetSat 28 proposes to provide broadband facilities for multimedia interactivity, Internet access, on-line services and other applications requiring high data rates. This may include such diverse offerings as two-way videoconferencing, distance learning and telemedicine.

² Public Notice, Report No. SPB-20, released July 28, 1995.

In order to maximize the benefits of NetSat 28's innovative satellite design and breakthrough capacity levels, NetSat 28 has requested 8° orbital spacing. This unconventional orbital spacing would permit NetSat 28 to offer the projected capacity levels and to operate with low cost, small user terminals. As is explained in greater detail below, NetSat 28's single satellite will be able to provide more efficient use of the orbital arc and greater capacity than the seven satellites that would otherwise occupy the same orbital arc with 2° spacing.

In the absence of final rules for this band, it is unclear to NetSat 28 whether other applicants' proposals will ultimately conflict with the NetSat 28 satellite system proposal. To the extent that any of the other system proposals would prevent the Commission from granting the NetSat 28 application at 103° W.L., NetSat 28 formally petitions the Commission to deny those applications for the reasons set out in Section II below. In addition, NetSat 28 specifically petitions to deny a number of applications based on the discussion in Section III below. ⁴/

II. NetSat 28 Offers the Most Efficient Use of the Orbital Arc

Because NetSat 28 proposes levels of efficiency that far exceed those for satellites proposed to operate under a regime of 2° spacing, the Commission should deny any application which would preclude the Commission from granting NetSat 28 authority to operate its satellite at 103° W.L.

As the Commission is aware, the rules for the Ka-band have not yet been adopted and the required orbital spacing for the band is still an open question.

PanAmSat Corporation ("PanAmSat") has petitioned the FCC to reopen the processing round for Ka-band applicants. See PanAmSat Petition to Reopen the Ka-band Processing Round dated October 11, 1995. In conjunction with that petition, PanAmSat has filed with the Commission a number of late-filed applications. See Letter from Henry Goldberg to William F. Caton dated November 8, 1995. NetSat 28 supports those comments that have opposed the PanAmSat petition and assumes that the Commission will issue a separate Public Notice seeking comments in the event those late-filed applications are accepted for filing.

The Commission's decision to impose reduced orbital spacing in the Ku- and C- bands was driven by a concern that growing user demand could not be met without the introduction of increased capacity, which increased capacity could not be attained without additional satellites and transponders. MetSat 28's revolutionary capacity levels turn this previously undisturbed logic on its head. With the NetSat 28 technology, the Commission can ensure greater capacity levels with fewer satellite transponders. The NetSat 28 satellite provides greater capacity for users than the combined capacity of seven conventional satellites that would occupy the same amount of the orbital arc as that requested by NetSat 28. Although NetSat 28 can operate in a 2° spacing environment, the tremendous advantages that the innovative NetSat 28 technology can provide would be diminished; satellite capacity would be reduced and user equipment size and cost would increase. Although NetSat 28 would still be more efficient than any of the other proposed Ka-band satellites in a 2° orbital spacing environment, to require NetSat 28 to operate at 2° spacing would deny the benefits of NetSat 28's technology to the public. To require NetSat 28 to forgo the benefits of this technology and to require construction and launch of multiple satellites to match the capacity of this one satellite is economically inefficient and undermines the purpose and spirit of the Commission's satellite policies. Grant of the NetSat 28 proposal will satisfy the Commission's long-standing policy of promoting innovative uses of the orbital arc and of promoting efficiency. It comports with the

See Licensing of Space Stations in the Domestic Fixed-Satellite Service and Related Revisions of Part 25 of the Rules and Regulations, CC Docket No. 81-704 (Aug. 16, 1983).

Imposition of 2° spacing would be illogical. In order to replace lost capacity from 2° spacing, NetSat 28 would be forced to launch additional satellites using additional orbit locations. There is no justification for requiring the construction and launch of multiple satellites when the same capacity can be attained at much lower cost with one satellite.

Commission's traditional "flexible responses to concrete domestic satellite facility proposals" and the U.S. Government's interest in promoting the development of a national information infrastructure ("NII"). Consequently, NetSat 28 requests that the Commission deny any competing application which would preclude the Commission from granting its truly innovative satellite application.

III. The Following Applications Fail to Satisfy the Commission's Requirements and Must be Denied

NetSat 28 petitions the Commission to deny each of the following applications for the reasons described in greater detail below.

A. AT&T

AT&T has sought authorization to construct, launch and operate sixteen satellites, including four spares. Four of those satellites, one to be located at 103° W.L., two to be located at 93° W.L., and one to be located at 54° W.L., will be situated to provide domestic service to locations in the United States. In conjunction with this application, AT&T has requested a number of waivers of the Commission's rules. AT&T has sought a waiver (i) to permit a launch schedule that extends beyond the normal five year time period, (ii) to withhold cost and revenue information and (iii) to be assigned more than two orbital locations in violation of Section 25.140(f) of the Commission's rules.

NetSat 28 opposes grant of the second waiver request in AT&T's application. With regard to the cost and revenue information AT&T has failed to include, withholding this information intentionally precludes other applicants from assessing AT&T's financial plans for bringing to

Id. at §8.

⁸/ 47 C.F.R. § 25.140(f). See Application of AT&T.

fruition the plans articulated in its application. To allow large companies currently holding FCC licenses to avoid scrutiny in the context of this proceeding undermines the Commission's rules and unfairly discriminates against smaller entities and new entrants. Grant of the AT&T waiver request would undermine the basic goals of open competition which have guided the Commission's satellite policies.

B. Comm Inc.

Comm Inc. (hereinafter "Motorola") has sought authority to operate four Ka-band satellites to be located at 105° W.L., 103° W.L., 88° W.L. and 86° W.L. These satellites will provide domestic U.S. coverage, including Puerto Rico and the U.S. Virgin Islands, as well as serve customers in most of Central and South America. Motorola's proposal for satellites at 105° W.L. and 103° W.L. are of particular concern. Motorola has indicated its intention to rely primarily on the satellite to be located at 105° W.L. with the satellite at 103° W.L. relegated to serving as a backup and eventually for growth capability. NetSat 28 petitions to deny this application based on Motorola's intended use of these orbital locations. Due to the rain attenuation problem in the Kaband, there is significant demand for orbital locations in the center of the domestic orbital arc. Central locations provide service providers with better elevation angles for full domestic service. Based on this situation, the Commission should not permit the warehousing of primary orbit locations as Motorola has set out in its application. To endorse this course of conduct would be contrary to longstanding Commission precedent requiring prompt and efficient use of scarce orbital

⁹ See Application of Comm, Inc. at 37-38.

resources. NetSat 28 has proposed an innovative and extremely efficient use of this spectrum which should be given precedence over backup and speculative potential uses.

C. Morning Star Satellite Company, L.L.C.

Morning Star Satellite Company, L.L.C. ("Morning Star") has sought authorization for four hybrid satellites to be located at 148° W.L., 69.5° W.L., 107.4° E.L. and 30° E.L. The satellites at 148° W.L. and 69.5° W.L. will be used to provide service to U.S. locations. The remaining two satellites will be used for service in Asia and Europe. By its own admission, Morning Star does not have the current financial ability to meet the costs of construction and first year of operation of these satellites. Morning Star requests a waiver of the financial qualification requirements for satellite system authorizations. He was a waiver of the financial qualification requirements for satellite

NetSat 28 opposes this waiver and petitions to deny this application due to Morning Star's inability to meet the financial qualification requirements set out in Section 25.140 of the Commission's rules. Morning Star's discussion of its financial qualifications appears to be based on its assumption that because it proposes to offer international as well as domestic service, it only needs to meet a financial qualification test for separate satellite systems. Morning Star has proposed, however, to operate two of the satellites for domestic service, triggering a need for Morning Star to

 $[\]underline{^{10'}}$ See Application of Morning Star Satellite Company, L.L.C. at 40-42.

<u>11</u>/ *Id*.

¹²/ 47 C.F.R. § 25.140.

satisfy the requirements of Section 25.140.^{13/} Because Morning Star has failed to establish its financial qualifications, its application is fatally defective and must be denied.

The financial qualification test has been a cornerstone of the Commission's satellite licensing policies since the early domsat proceedings. The Commission has not hesitated to impose its financial qualification requirements with the introduction of new satellite services. The Commission's endorsement of financial qualification requirements was based on the Commission's "repeated experience that licensees without sufficient available resources spend a significant amount of time attempting to raise the necessary financing and that those attempts often end unsuccessfully." Commission waiver of the financial qualification requirements in this situation where there are numerous qualified applicants to provide service would promote speculative applications and potential warehousing of valuable frequency. Consequently, the Morning Star application should be denied. The commission of the

NetSat 28 notes that the Commission's Public Notice establishing a cut-off date for Ka-band applications explicitly referenced the need for applicants to satisfy the requirements of Section 25.140. See Public Notice, Report No. SPB-20, released July 28, 1995 at 3. ("Applicants that fail to satisfy these requirements as of the cut-off date will be dismissed as unacceptable for filing.")

See Processing of Pending Space Station Applications in the Domestic Fixed Satellite Service, 90 F.C.C.2d 1, 2 (1982); Filing of Applications for New Space Stations in the Domestic Fixed Satellite Service, 93 F.C.C.2d 1260 (1983).

See In the Matter of Amendment of the Commission's Rules to Establish Rules and Policies Pertaining to a Mobile Satellite Service in the 1610-1625.5/2483.5-2500 MHz Frequency Band, 9 FCC Rcd 5936 (1994) at ¶30.

^{16.} Id. at ¶26.

The Morning Star application presents an interesting contrast with the situation which confronted the Commission when it considered the Ka-band application of Norris Satellite (continued...)

D. KaSTAR Satellite Communications Corp.

KaSTAR Satellite Communications Corp. ("KaSTAR") has sought authorization to operate two satellites at 95° W.L. and 140° W.L. KaSTAR also requests a waiver of the Commission's financial qualifications requirements. It is clear from KaSTAR's balance sheet that it does not have current assets to finance construction and operation for one year of two proposed satellites. Moreover, KaSTAR's letter of support from Legg Mason Wood Walker, Incorporated does not satisfy the Commission's requirements set out in Section 25.140. As NetSat 28 has articulated previously herein, there is no justification for grant of waivers of the Commission's financial qualifications requirements. Notwithstanding KaSTAR's arguments to the contrary, the Ka-band is no longer a vacant band that will remain fallow absent grant of this application. There are numerous proposed satellites from financially qualified applicants who should receive the limited number of useful domestic orbit locations in the Ka-band. If the Commission assigns an orbit position to an unqualified applicant, it could effectively preclude the implementation of the truly innovative system proposed by NetSat 28, which has demonstrated its financial qualifications.

E. VisionStar, Inc.

VisionStar, Inc. ("VisionStar") has sought authorization to operate one satellite at 105° W.L. to provide one-way, multi-channel TV distribution as well as two-way digital messaging. VisionStar

^{(...}continued)
Communications, Inc. In that case, the Commission waived its financial qualification standard because there were no other pending 28 GHz band applications and because "the entire orbital arc remains available for future applicants." *Norris Satellite Communications, Inc.*, 7 FCC Rcd 4289, 4290 (1992). That is no longer the case in this band.

See Application of KaSTAR Satellite Communications Corp. at Part IV.

requests a waiver of the Commission's financial qualifications requirements due to its inability to establish current assets to finance construction and operation for one year of two proposed satellites. 19/2 NetSat 28 opposes this waiver for the reasons articulated above concerning Morning Star's and KaSTAR's requests for a waiver of these rules. VisionStar's request relies heavily on its assumption that there is little demand for use of the Ka-band spectrum. This assumption has been proven incorrect by the number of applicants in this processing round. With the heavy demand for limited orbital spectrum from qualified applicants, the Commission should strictly apply its financial qualification test to ensure that innovative Ka-band systems can be expeditiously implemented.

F. Orion Network Systems, Inc.

Orion Network Systems, Inc. ("Orion") has sought authorization to operate three domestic Ka-band satellites and to add a Ka-band payload to its pending application for a Ku-band satellite at 127° W.L. The three Ka-band satellites would be located at 93° W.L., 78° E.L. and 83° W.L. Orion requests that the Commission defer its consideration of the financial qualifications of the applicants in this proceeding in light of the Commission's consideration of competitive bidding for the Ka-band and its proposal to change the financial qualifications for satellite systems. ²⁰ As NetSat 28 has explained above, NetSat 28 opposes requests for the Commission to defer from application of its financial qualifications. The Orion application fails to satisfy the Commission's filing requirements and should be denied.

See Application of VisionStar, Inc. at 8-11.

See Application of Orion Network Systems, Inc. at 8.

CONCLUSION

For the foregoing reasons, NetSat 28 Company, L.L.C. requests that the Commission accept these comments and deny the referenced applications to the extent requested herein

Respectfully submitted,

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Dated: December 15, 1995

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Consolidated Comments and Petitions to Deny of Netsat 28 Company, L.L.C. was sent by first-class mail, postage prepaid, this 15th day of December, 1995, to each of the following:

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