

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

_____)
 In the Matter of Amendment of Parts)
 2 and 15 of the Commission's Rules)
 to Permit Use of Radio Frequencies)
 Above 40 GHz for New Radio)
 Applications)
)
 Petition of Sky Station)
 International, Inc. for Amendment)
 of the Commission's Rules to)
 Establish Requirements for a)
 Global Stratospheric)
 Telecommunications Service in the)
 47.2-47.5 GHz and 47.9-48.2 GHz)
 Frequency Bands)
 _____)

ET Docket No. 94-124

RM-8784

RECEIVED
 MAY 16 1996
 FEDERAL COMMUNICATIONS COMMISSION
 OFFICE OF THE SECRETARY

REPLY COMMENTS OF MOTOROLA SATELLITE
COMMUNICATIONS, INC.

Motorola Satellite Communications, Inc. ("Motorola")
 hereby submits its Reply Comments in the above-captioned
 proceeding, where Sky Station International, Inc. ("Sky Station")
 is requesting a new allocation of the 47.2-47.5 and 47.9-48.2 GHz
 bands to a new service, styled "Global Stratospheric
 Telecommunications Service" ("GSTS").

Sky Station has not made any showing that GSTS can
 co-exist on a co-frequency, co-primary basis with the
 Fixed-Satellite Service ("FSS"), which has a primary allocation
 in that spectrum. In that regard, Motorola shares the concerns

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expressed by Hughes Communications, Inc. ("Hughes") and United States Satellite Broadcasting Company ("USSB"). Obviously, the FSS allocation in that band is of the utmost importance to the satellite community, in light of the congestion of lower satellite bands. Further, nothing in the comments submitted alleviates the grave safety and environmental concerns arising from this unprecedented concept. Finally, all of the benefits cited by various parties supporting this concept are readily attainable today by means of satellite technology.

I. THE 47 GHz BAND HAS A PRIMARY FSS ALLOCATION THAT MUST NOT BE DOWNGRADED

As both Hughes and Motorola point out in their comments, Sky Station has failed to show whether it is possible to share that spectrum with the FSS on a co-frequency, co-primary basis.^{1/} Plainly, the band segments that are the subject of Sky Station's petition provide necessary expansion capacity to meet future FSS requirements. Motorola also shares USSB's apprehension about the disruptive effects on existing allocations from operation of the stratospheric platforms proposed by Sky Station.^{2/}

^{1/} See Hughes Comments at 2. Motorola Comments at 2-4.

^{2/} See USSB Comments at 1-2.

For the same reason, the Commission should resist the proposal put forward by the Telecommunications Industry Association ("TIA") for an even broader new allocation styled "Global Airborne Telecommunications Service" ("GATS").^{3/} Under TIA's proposal, GATS would expand the allocation requested by Sky Station to include any service operating in the stratosphere or below.^{4/} Again, TIA offers no proof that such a new allocation can co-exist with FSS.^{5/}

II. SKY STATION'S PROPOSAL RAISES SIGNIFICANT PUBLIC SAFETY, ENVIRONMENTAL AND INTERNATIONAL ISSUES

SSI's proposed service will involve huge balloon-supported platforms hovering just 30 Kilometers over every major metropolitan center in the world and just 20 kilometers above commercial airline flights. The safety, environmental and national sovereignty concerns that such a system would entail are daunting. None of the commenters supporting Sky Station's request offers any information that would alleviate or shed light on these concerns.

^{3/} See Comments of Fixed Point-to-Point Communications Section, Network Equipment Division of the Telecommunications Industry Association to Sky Station Petition at 6.

^{4/} Id.

^{5/} Motorola agrees, however, with TIA's assessment that the service contemplated by Sky Station requires a new allocation. See TIA Comments at 3.

III. ALL OF THE BENEFITS CITED BY PROPONENTS OF THE NEW ALLOCATION ARE AVAILABLE BY USE OF SATELLITE TECHNOLOGY

In support of the suggested new allocation, several commenters cite benefits including accessibility to developing and rural areas,^{6/} imaging transmission for news reporting,^{7/} tele-diagnosis and other medical applications,^{8/} low-cost interactive television transmission,^{9/} and Internet access.^{10/} As the Commission is aware, however, satellite technology is now well equipped to deliver those benefits globally. Low earth orbit ("LEO") satellite systems will shortly realize the goal of worldwide communications to mobile users "any time any place," with numerous educational, medical, safety, search and rescue applications. Further, both LEO and geostationary system proponents in the Ka-band stand ready to provide global broadband services including Internet access, video on demand and video-conferencing. These systems will for the first time make available the benefits of seamless mobile and broadband communications to vast populations in developing countries and

^{6/} See Comments of Care.

^{7/} See Comments of Sygma Photo News, Inc. at 2.

^{8/} See Comments of Mercy Medical Airlift at 3.

^{9/} See Comments of Eden at 1.

^{10/} See Comments of Magnet Interactive Group, Inc. at 2-3.

rural areas without access to wireline telephony, much less to terrestrial fiber transmission.

The ability of satellite technology to deliver those benefits is proven and already available, whereas the corresponding claims of GSTS's supporters with respect to GSTS's future capability are speculative and at best contingent on the resolution of several safety issues. The Commission should not, in the name of the cited benefits, downgrade the 47 GHz allocation to satellite services, which alone can secure these benefits in short order.

III. CONCLUSION

For the foregoing reasons, the Commission should not grant Sky Station's petition for a new allocation in the 47 GHz band.

Respectfully submitted,

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Dated: May 16, 1996

CERTIFICATE OF SERVICE

I, Pantelis Michalopoulos, hereby certify that a copy of the foregoing Reply Comments of Motorola Satellite Communications, Inc. was hand-delivered (*) and/or sent by first class prepaid mail on this 16th day of May 1996 to the following:

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