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

FEDERAL COMMUNICATIONS
OFFICE OF THE SECRETARY

In re Application of)
)
MOTOROLA SATELLITE COMMUNICATIONS,)
INC.)
)
For Authority to Construct,)
Launch, and Operate a Low Earth)
Orbit Satellite System in the)
1610-1626.5 MHz Band.)
)
ELLIPSAT CORPORATION)
)
For Authority to Construct)
Ellipso I, an Elliptical Orbit)
Communication Satellite System)
in the 1610-1626.5 MHz and)
2483.5-2500 MHz Bands)

File Nos. 9-DSS-P-1(87)
CSS-91-010

File No. 11-DSS-P-91(6)

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JUL 8 1991

DOMESTIC FACILITIES DIVISION
SATELLITE RADIO BRANCH

REPLY COMMENTS OF AERONAUTICAL RADIO, INC.

Aeronautical Radio, Inc. (ARINC), by its attorneys hereby submits this reply to Comments submitted on the Iridium and Ellipsat applications.

ARINC is the communications company of the air transport industry and provides civil aviation with communications and information services on a not-for-profit basis. ARINC also sponsors a number of air transport industry forums that address communications and electronics issues for aviation. One of these industry committees is the Airlines Electronic Engineering Committee (AEEC), which establishes characteristics and specifications for aircraft electronic systems.

ARINC and the air transport industry is concerned with the possible impact on GLONASS of Motorola's and Ellipsat's proposed use of the band 1610-1626.5 MHz for low-earth orbit (LEO) mobile satellite systems (MSS). AEEC is currently completing work on a draft Characteristic 743A for Global Positioning System (GPS)/GLONASS avionics. The Soviet Union has provided the AEEC and the Radio Technical Commission for Aeronautics (RTCA) technical information concerning the GLONASS system that specifies the following 24 discrete frequencies in the band 1602.5625-1615.5 MHz to be used by GLONASS:¹

1602.5625 MHz	1609.3125 MHz
1603.1250	1609.8750
1603.6875	1610.4375
1604.2500	1611.0000
1604.8125	1611.5625
1605.3750	1612.1250
1605.9375	1612.6875
1606.5000	1613.2500
1607.0625	1613.8125
1607.6250	1614.3750
1608.1875	1614.9375
1608.7500	1615.5000

Because the proposed LEO systems and the GLONASS aeronautical radionavigation system will be global in coverage and propose use of the same frequencies, careful design and frequency coordination will be necessary to

¹ See U.S.S.R. Research and Production Association of Applied Mechanics, Glavkosmos U.S.S.R., and U.S.S.R. Institute of Space Device Engineering, Global Satellite Navigation System GLONASS Interface Control Document (2d wording) at 12 (1991).

protect GLONASS. GLONASS will probably become an important part of the worldwide aeronautical radionavigation system and be used by aircraft of all nations. For example, Northwest Airlines has begun tests using GLONASS, and the International Civil Aviation Organization (ICAO) is also considering the roles that GPS and GLONASS will play in the future air navigation systems.

Accordingly, ARINC requests that the United States consider the requirements of the aeronautical radionavigation services of GLONASS prior to authorizing use of the band 1610-1626.5 MHz for LEO MSS.

Respectfully submitted,
AERONAUTICAL RADIO, INC.

By: 

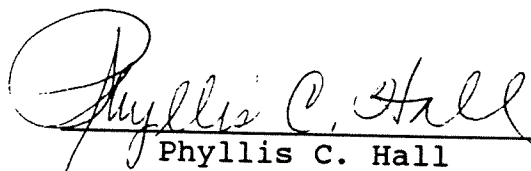
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July 3, 1991

CERTIFICATE OF SERVICE

I, Phyllis C. Hall, a legal secretary at the law offices of WILEY, REIN & FIELDING, hereby certify that on this 3rd day of July 1991, copies of the attached "Reply Comments of Aeronautical Radio, Inc." were caused to be served by first-class mail, postage prepaid, on the parties listed on the attached service list.


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