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December 15, 1995

BY HAND DELIVERY

Federal Communications Commission
International Bureau -- Satellites
P.O. Box 358210
Pittsburgh, PA 15251-5120

Re: Hughes Communications Galaxy, Inc.
Second System Amendment to GALAXY/SPACEWAY Application

Ladies and Gentlemen:

Enclosed on behalf of Hughes Communications Galaxy, Inc. ("Hughes") is an amendment to its pending request filed September 29, 1995 to construct, launch and operate a hybrid FCC/BSS international geostationary satellite system known as GALAXY/SPACEWAY™. By this amendment, Hughes requests authority to construct, launch, and operate a satellite system at the 132° E.L. orbital location that will perform communications in the BSS Ku bands 11.7 GHz to 12.2 GHz (downlink) and 17.3 GHz to 17.8 GHz (uplink).

Also enclosed is a check payable to the Federal Communications Commission in the amount of $25,615.00 to cover the requisite filing fee.

If there are any questions about this filing, please call me.

Sincerely,

James H. Barker
of LATHAM & WATKINS

Enclosures

ORIGINAL

Second System Amendment

Before the

FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

Application of

HUGHES COMMUNICATIONS GALAXY, INC.

for

Authority to Construct, Launch and Operate

GALAXY/SPACEWAY™

A Global System of Geostationary Ka band Fixed and Ku band
Broadcast Communications Satellites

December 15, 1995

Carl A. Brown
Senior Vice President
Hughes Communications Galaxy, Inc.
1990 Grand Avenue
El Segundo, California 90245
(310) 607-4000

Gary M. Epstein
John P. Janka
James H. Barker
Latham & Watkins
1001 Pennsylvania Avenue, N.W.
Suite 1300
Washington, D.C. 20004
(202) 637-2200

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

In the Matter of the Application of HUGHES COMMUNICATIONS GALAXY, INC. For Authority to Construct, Launch and Operate GALAXY/SPACEWAY™, a Global Interconnected System of Geostationary Ka band Fixed-Service and Ku band Broadcast Communications Satellites	File Nos. 174-181-SAT-P/LA-95

SECOND SYSTEM AMENDMENT

Hughes Communications Galaxy, Inc. ("HCG") hereby amends its pending request of September 29, 1995 for authority to construct, launch and operate a hybrid FSS/BSS international geostationary satellite system, known as GALAXY/SPACEWAY™ (the "GALAXY/SPACEWAY System Amendment").

By this Amendment, Hughes requests authority to construct, launch and operate a satellite system at the 132° E.L. orbital location that will perform communications in the BSS Ku bands 11.7 GHz to 12.2 GHz (downlink) and 17.3 GHz to 17.8 GHz (uplink). The 132° E.L. system also will utilize the intersatellite link and tracking, telemetry and command

frequencies that will be utilized by the other satellites in the GALAXY/SPACEWAY system.[1/]

This Amendment is necessitated by events that have arisen since the filing of the GALAXY/SPACEWAY System Amendment in September 1995. As part of that filing, Hughes requested authority to construct, launch and operate a satellite system at 125° E.L. that would utilize both the BSS Ku band and the FSS Ka band. On the BSS Ku band side, Hughes' system at 125° was a non-standard system that conformed fully with the Region 1 and 3 ITU Plans for those BSS bands, but required certain permitted changes to those Plans.

On the same date that the United States submitted a request to the ITU to modify the BSS plan at the 125° E.L. location as proposed by Hughes, another administration submitted a similar request for the 126° E.L. location. There currently is no information available to allow Hughes to determine whether these two systems can coexist one degree away from each other. It also is unclear whether one system has any priority over the other at this point in the ITU plan modification processes. Hughes is filing this request to utilize BSS Ku band frequencies at the 132° E.L. location in order to provide sufficient flexibility to allow Hughes to resolve this possible conflict at 125° E.L. and to ensure the continued ability to provide adequate Ku band BSS coverage of China.

An explanation of the factors supporting the assignment of this location is contained in Exhibit 1. Ku band coverage maps from 132° E.L. are contained in Exhibit 2.

[1/] At all other locations proposed for the GALAXY/SPACEWAY system where Hughes requests BSS Ku band frequency assignments, Hughes also proposes to utilize the Ka band as well. Because the processing round for Ka band requests closed on September 29, 1995, Hughes is not seeking another Ka band orbital assignment by this Amendment.

With respect to capital expenditures required for this system, Hughes estimates that constructing this system at 132° E.L. will require capital expenditures of approximately $230,300 more than the amounts given in Item I of the GALAXY/SPACEWAY™ System Amendment.[2/] All other required information about the proposed system for 132° E.L. is contained in the GALAXY/SPACEWAY System Amendment, which is incorporated herein by reference.

Hughes has demonstrated that it is legally, financially and technically qualified to operate the proposed GALAXY/SPACEWAY network, and that grant of this Application, as amended, will serve the public interest, convenience and necessity.

2/ As demonstrated therein, Hughes has more than adequate resources to fund the construction of the additional system at 132° E.L.

For these reasons, Hughes respectfully requests that the Commission grant this Application.

Respectfully submitted,

HUGHES COMMUNICATIONS GALAXY, INC.

By: _____
Carl A. Brown
Senior Vice President

December 15, 1995

CERTIFICATION AND SIGNATURE

HCG waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests construction and launch and operating authority in accordance with this Application. All statements made in the attached exhibits are a material part hereof, and are incorporated herein as if set out in full in this Application.

The undersigned certifies individually and for HCG that the statements made in this Application are true, complete, and correct to the best of his knowledge an belief, and are made in good faith.

HUGHES COMMUNICATIONS GALAXY, INC.

By: _____
Carl A. Brown
Senior Vice President

December 15, 1995

CERTIFICATION OF PERSON RESPONSIBLE FOR PREPARING ENGINEERING INFORMATION SUBMITTED IN THIS APPLICATION

I hereby certify that I am the technically qualified person responsible for preparation of the engineering information contained in this Application, that I am familiar with Part 25 of the Commission's Rules, that I have either prepared or reviewed the engineering information submitted in this Application, and that it is complete and accurate to the best of my knowledge.

By: Bernard Vecerek

Bernard F. Vecerek, Ph.D.
Director
Galaxy Satellite Services
Hughes Communications Galaxy, Inc.

December 15, 1995

ANTI DRUG ABUSE ACT CERTIFICATION

HCG certifies that neither HCG, nor its parent company, Hughes Communications, Inc. ("HCI"), nor any of the officers or directors of HCG or HCI, is subject to a denial of federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti Drug Abuse Act of 1988, 21 U.S.C. § 853a.

HUGHES COMMUNICATIONS GALAXY, INC.

By: _____
Carl A. Brown
Senior Vice President

Date: 12-15-95

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20536

In the Matter of the Application of HUGHES COMMUNICATIONS GALAXY, INC. For Authority to Construct, Launch and Operate GALAXY/SPACEWAY,™ a Global System of Geostationary Ka band Fixed and Ku band Broadcast Communications Satellites	File Nos. 174-181-SAT-P/LA-95

APPLICATION

Hughes Communications Galaxy, Inc. ("Hughes"), pursuant to Sections 308, 309 and 319 of the Communications Act of 1934, as amended, hereby applies for authority to construct, launch and operate a communications satellite system that will function in the BSS Ku band at 132° E.L. Certain information contained in HCG's Second System Amendment, to which this is attached, and in Hughes' September 29, 1995 System Amendment, Application for Authority to Construct, Launch and Operate GALAXY/SPACEWAY,™ Global System of Geostationary Ka band Fixed and Ku band Broadcast Communications Satellites ("GALAXY/SPACEWAY™ System Amendment"), is incorporated herein by reference.

I. REQUIRED SATELLITE INFORMATION

A. Applicant

Hughes Communications Galaxy, Inc.
1990 Grand Avenue
El Segundo, California 90245
213-607-4400
Attention: Carl A. Brown, Senior Vice President

B. Correspondence

Name, address and telephone number of the persons to whom inquiries or correspondence should be directed:

Gary M. Epstein
John P. Janka
James H. Barker
Latham & Watkins
1001 Pennsylvania Avenue, N.W.
Suite 1300
Washington, D.C. 20004
202-637-2200

C. Frequencies, Polarization and Emission Parameters

The satellite system at 132° E.L. will perform communications in the 11.7 GHz to 12.2 GHz (downlink) and 17.3 GHz to 17.8 GHz (uplink) Ku BSS bands; and will perform tracking, telemetry, and control ("TT&C") functions in the bands described in Figures D-1 and D-2 of the GALAXY/SPACEWAY™ System Amendment.

Detailed technical information regarding satellite transmission and performance characteristics is contained in the GALAXY/SPACEWAY™ System Amendment at Item D.

D. Orbital Location

Hughes requests that the Commission reserve the geosynchronous orbital position at 132° East Longitude for this system. Factors supporting this requested orbital

position and the range of adequate locations are discussed in the Second System Amendment.

E. Predicted Coverage Contours for Each Antenna Beam

Coverage data and contours are provided in the Second System Amendment.

F. Physical Characteristics of the Space Station

A detailed description of the spacecraft to be utilized at 132° E.L. is contained in the GALAXY/SPACEWAY™ System Amendment at Item D, including data regarding accuracy of orbital parameters and antenna direction, estimated lifetime, attitude stabilization and station-keeping, and satellite subsystems (including the electrical power system).

G. Emission Limitations

Control of spurious emissions of the spacecraft is discussed in the GALAXY/SPACEWAY™ System Amendment at Item D.

H. Schedule for Construction, Launch and Placement into Service

A schedule for constructing, launching and placing the spacecraft in this system into operation is provided in the GALAXY/SPACEWAY™ System Amendment at Item H.

II. WAIVER

The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests construction, launch, and operating authority in accordance with this application.

III. ADDITIONAL INFORMATION REGARDING PROPOSED SATELLITE SYSTEM

The GALAXY/SPACEWAY™ System Amendment sets forth the public interest considerations and the financial, legal and technical qualifications of Hughes and other information pertinent to this application, and is incorporated herein by reference. Hughes estimates that constructing this additional system will require capital expenditures of approximately $230,300 more than the amounts given in Item I of the GALAXY/SPACEWAY™ System Amendment. As demonstrated therein, Hughes has more than adequate resources to fund the construction of this additional system.

IV. CERTIFICATIONS

The undersigned certifies individually and for Hughes that the statements made in this application are true, complete and correct to the best of his knowledge and belief, and are made in good faith.

Hughes further certifies that neither Hughes, nor its parent company, Hughes Communications, Inc. ("HCI"), nor any of the officers or directors of Hughes or HCI, is subject to a denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 835a.

Hughes requests that the Commission grant this application.

Respectfully submitted,

HUGHES COMMUNICATIONS GALAXY, INC.

By: _____
Carl A. Brown
Senior Vice President

December 15, 1995

CERTIFICATION OF PERSON RESPONSIBLE FOR PREPARING ENGINEERING INFORMATION SUBMITTED IN THIS APPLICATION

I hereby certify that I am the technically qualified person responsible for preparation of the engineering information contained in this Application, that I am familiar with Part 25 of the Commission's Rules, that I have either prepared or reviewed the engineering information submitted in this Application, and that it is complete and accurate to the best of my knowledge.

By: Bernard Vecerek

Bernard F. Vecerek, Ph.D.
Director
Galaxy Satellite Services
Hughes Communications Galaxy, Inc.

December 15, 1995

EXHIBIT 1

Consideration of the 132° E.L. Orbital Position

The existing BSS plan employs easterly-looking beams exclusively, so the assigned satellite orbital positions always lie to the west of the assigned service area. The selected orbital location for China coverage, at 132° E, lies to the east of the service area and employs westerly looking beams which allows the utilization of peak EIRPs of 55 dBW without generating any undue interference with beams found in the current BSS plan.

The impact of the proposed China beams was determined by comparing the total uplink and downlink protection margins resulting from the BSS plan alone with the protection margins resulting when the proposed beams were added. The results from the analysis for this position show that the interference levels introduced by the China beams are acceptable. In no case is any total uplink or downlink margin which was originally negative degraded by more than 0.1 dB. When the BSS plan protection margins are positive, the resulting protection margins remain positive.

EXHIBIT 2

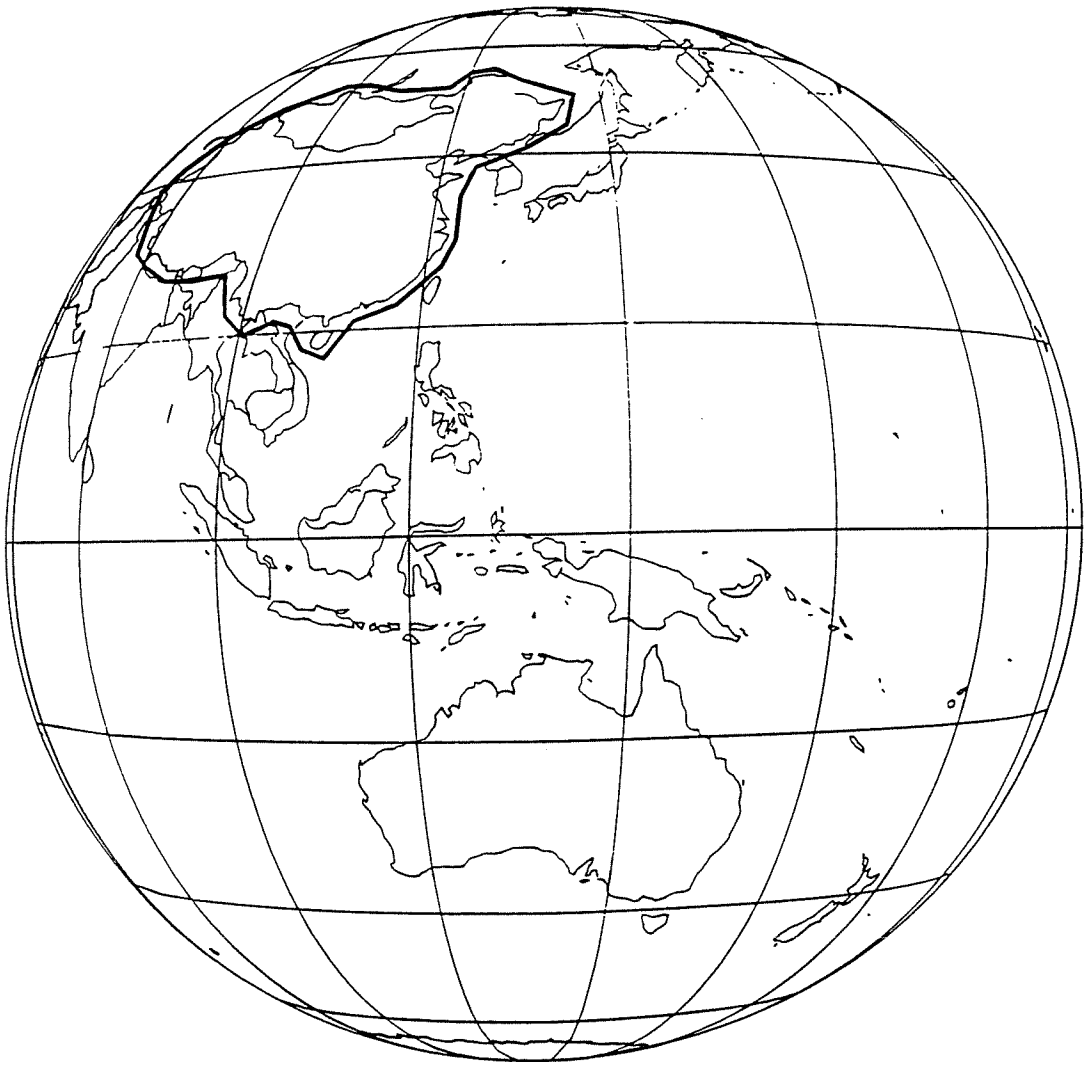

Figure P1. Beam KBx Service Area

Orbital Longitude = 132° E

The beams in this service area meet the overall equivalent protection margin requirements of Appendix 30A of the Radio Regulations. Surface power flux density limits specified in Annex 1 of Appendix 30A of the Radio Regulations are met.

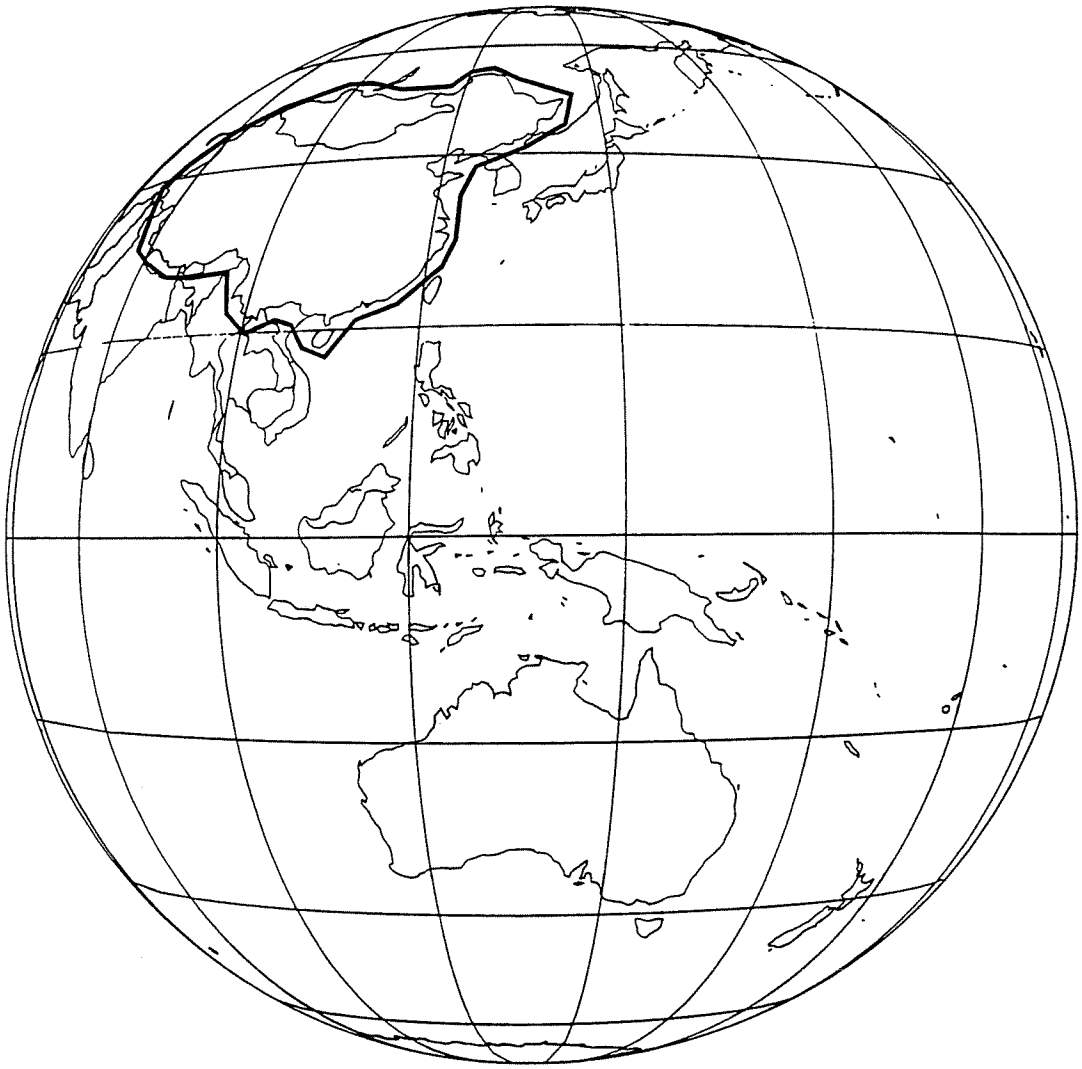

Figure P1. Beam KBx Service Area

Orbital Longitude = 132° E

The beams in this service area meet the overall equivalent protection margin requirements of Appendix 30 of the Radio Regulations. Surface power flux density limits specified in Annex 1 of Appendix 30 of the Radio Regulations are met.