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

In the Matter of	)	
	)	
Application of	)	
HUGHES COMMUNICATIONS GALAXY, INC.	)	File Nos. 174-181-SAT-P/LA-95
	)	3/4-DSS-P/LA-94
For Authority to Construct, Launch	)	CSS-94-021-25
and Operate GALAXY/SPACEWAY, a	)	
Global Interconnected System of	)	
Geostationary Ka-band Fixed-Service	)	
and Ku-band Broadcast	)	
Communications Satellites	)	

COMMENTS OF ORION ASIA PACIFIC CORPORATION

Orion Asia Pacific Corporation ("Orion"), an applicant for authority to construct, launch and operate a proposed hybrid Ku/Ka-band international separate satellite space station at 126° E.L. (File Nos. CSS-94-009; 206-SAT-AMEND-95), hereby submits its comments on the above-captioned application of Hughes Communications ("Hughes"), as amended September 29, 1995, for authority to construct, launch, and operate a global, interconnected system of hybrid geostationary satellites.[1/] The Hughes application includes a proposed space station with a Ka-band payload to be located at 125° E.L. Orion's comments are directed at that portion of the Hughes system application.

1/ The Orion and Hughes applications were accepted for filing on Nov. 1, 1995. See Public Notice, Report No. SPB-29, DA 95-2273. Pursuant to that notice, comments or petitions on these applications may be filed on or before December 15, 1995.

On October 26, 1995, all of the Ka-band satellite applicants in the current processing round were assembled by the Commission's International Bureau staff for a "Status Conference." The applicants were informed that the generic Appendix-4 ("AP-4") materials for Ka-band satellite systems to be submitted by the Commission before the close of the 1995 World Radiocommunications Conference to the International Telecommunications Union ("ITU") Radiocommunications Bureau must, among other things, conform to 2° spacing, e.g., the Commission would not submit AP-4 materials for a Ka-band satellite at both the 126° E.L. and 125° E.L. locations. Subsequently, the Ka-band applicants worked cooperatively to develop a joint proposal for the Commission's AP-4 submission which was submitted to the Commission on November 9, 1995.[2/]

On October 27, 1995, Dr. Robert Sorbello, Orion's Director of Systems Engineering, met with Mr. Vu Phang, Systems Engineer with Hughes' Galaxy Systems Engineering, to discuss the apparent conflict in the requested orbital locations of Hughes at 125° E.L. and of Orion at 126° E.L. Orion and Hughes discussed the possibility of simultaneous operation of both the Hughes and Orion space stations from the proposed orbital locations with 1° spacing, provided that suitable spectrum sharing arrangements could be made. Both Orion and Hughes agreed to collaborate to achieve this type of accommodation. However, in order to comply with the Commission's instructions regarding the need to maintain 2° spacing in the AP-4 submissions, Orion and Hughes each agreed to a

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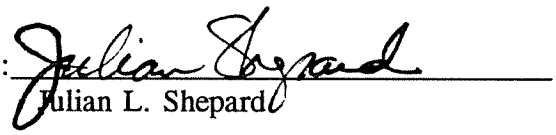
2/ See Letter of Raymond G. Bender, Jr., counsel for Lockheed Martin Corporation, to the Chief of the Commission's Satellite Engineering Branch, enclosing a proposed "generic" AP-4 for submission by the Commission to the ITU's Radiocommunications Bureau.

generic AP-4 submission that provided orbital locations adjusted by .5° in opposite directions (copies attached as Appendix "A" hereto), i.e., 124.5° E.L. and 126.5° E.L.

In the event that Orion and Hughes cannot achieve suitable spectrum-sharing arrangements to permit one-degree spacing from the orbital locations proposed in their respective applications, Orion recommends that the Commission adjust the orbital locations specified in the Hughes and Orion applications to conform with the orbital locations specified in the generic AP-4 materials.

Respectfully submitted,

ORION ASIA PACIFIC CORPORATION

By: 
Julian L. Shepard

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MCPHERSON & HAND, CHARTERED
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Richard H. Shay, Esq.
V.P. Corporate and Regulatory Affairs
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Director of Regulatory Affairs
Orion Asia Pacific Corporation
2440 Research Boulevard, Suite 4000
Rockville, Maryland 20850

December 15, 1995

APPENDIX A

DATE (Day/Month/Year): / / 95

Administration Serial Number:

FORM OF NOTICE

SATELLITE NETWORK

(APPENDIX 4)

PAGE 1 OF 31

AP4

NOTIFYING ADMINISTRATION	RR1042	RR1047A		NOTIFICATION INTENDED FOR
USA/	Advance Publication [X]	Request for Assistance of the IFRB [ ]		ADD [X] MOD [ ] SUP [ ]

IFRB IDENTIFICATION NO OF NETWORK TO BE MODIFIED/SUPPRESSED:

B: CHARACTERISTICS OF THE NETWORK

1 NAME OF THE SPACE STATION: USASAT-33F

2 DATE OF BRINGING INTO USE: Day 01 Month 11 Year 2001

REFERENCE TO PREVIOUS SPECIAL SECTION NUMBER (if network modified): AR11/A/ Number

3a ADMINISTRATIONS IN GROUP:

3b OPERATING AGENCY OR COMPANY: 120

3c ADMINISTRATION RESPONSIBLE FOR THE STATION: A

4 ORBITAL INFORMATION

a. FOR GEOSTATIONARY SATELLITES

1. NOMINAL ORBIT LONGITUDE	2. LONGITUDINAL TOLERANCE		3. INCLINATION EXCURSION	4. VISIBILITY ARC		5. SERVICE ARC	
Degrees E/W	Degrees To West	Degrees To East	Degrees	Degrees From W E/W	Degrees To E E/W	Degrees From W E/W	Degrees To E E/W
126.5 E	0.05	0.05	0.05	051 E	158 W	051 E	158 W

6. REASON FOR SERVICE ARC < VISIBILITY ARC ATTACHED:

b. FOR NON-GEOSTATIONARY SATELLITES

1. INCLINATION ANGLE	2. PERIOD		3. APOGEE	4. PERIGEE	5. CELESTIAL BODY	6. NUMBER OF SATS.
Degrees	Days D Hours	Hours H Min.	(km)	(km)		
.						

SEE NOTE 1.

GENERAL NOTES :

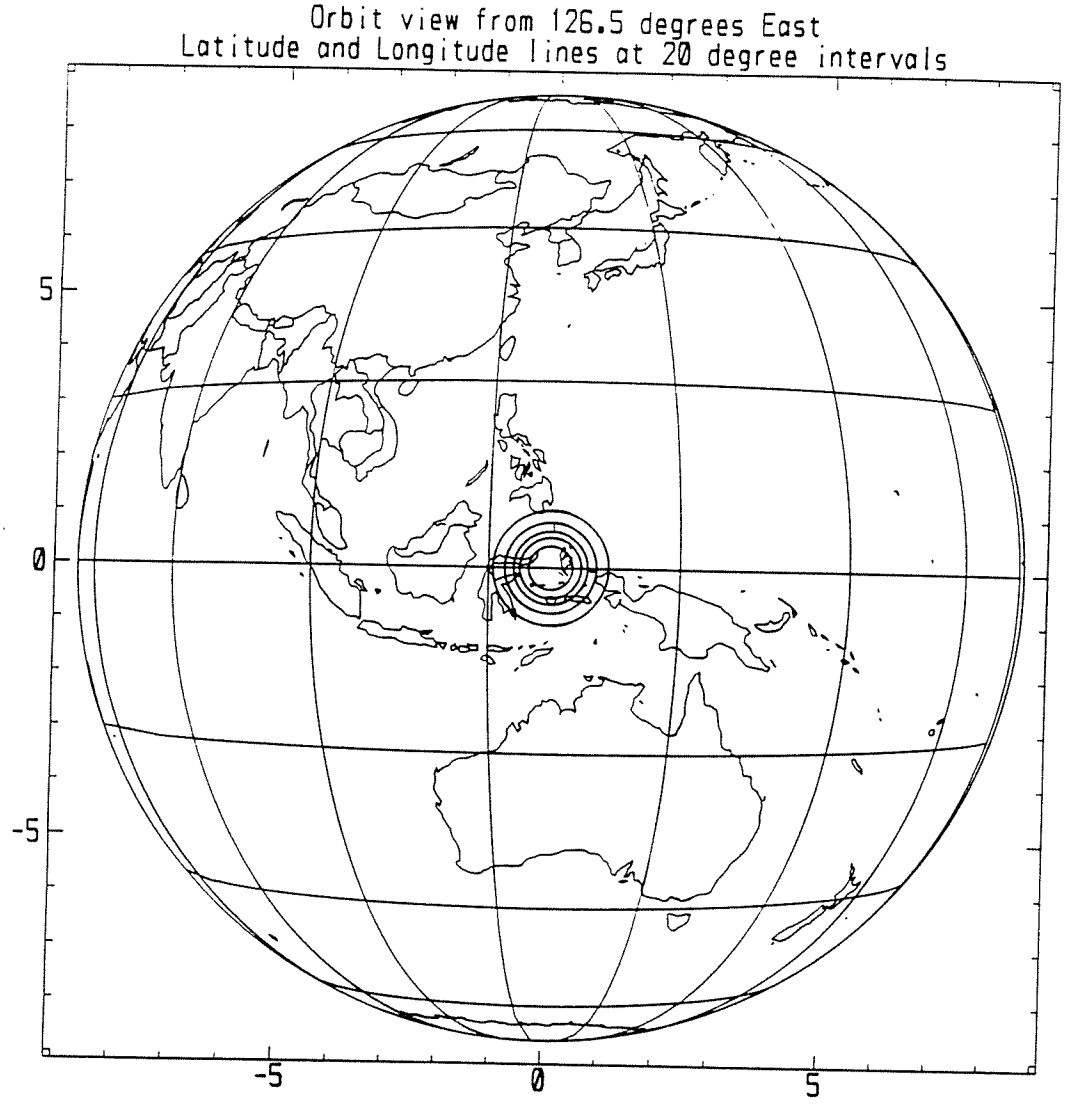
i. This form of notice consists of four parts - 1, 2, 3, and 4. In each part, each information item/data field includes a number in its label. This number is the same as that used for the same item in Appendix 4 (ORB-88) within the same part. For example, on the page labelled "Form AP4 - 2" (at the bottom), the field "4a1. Maximum power density" is the first item in section (a) of the paragraph numbered 4 in Part C.
The items from parts F and G of Appendix 4 have been included in the parts C and D referred to above. The items from these parts have the letters F and G (correspondingly) preceding the number that is included in their labels.

ii. Data items that are related are grouped together in a box. For example, the page labelled "Form AP4 - 2" (at the bottom) contains a box titled "Emissions and power characteristics". It is possible to specify 6 different emissions with the associated power and power density information in this box. If there are more emissions, use another page of the same type to provide additional data, after checking (X) the field labelled "More emissions on next page" on the preceding page. In all cases where there is more information than can fit in a box, follow this procedure.

iii. This form can be used to add to, modify or suppress an existing station, by checking the corresponding box at the top right-hand corner of this page in the area titled "Notification intended for". In the case of a modification of an existing station, where certain data fields are to be added, modified or suppressed, provide ALL the data in the particular box as they would look after the change. In addition, indicate that the corresponding beam, associated station or frequency range value is being modified by entering M in the field that has been provided for this purpose at these levels.

iv. Certain fields in this notice form have a superscript "1" as part of their labels. This has the following meaning :
1 - This information is to be provided only if available.

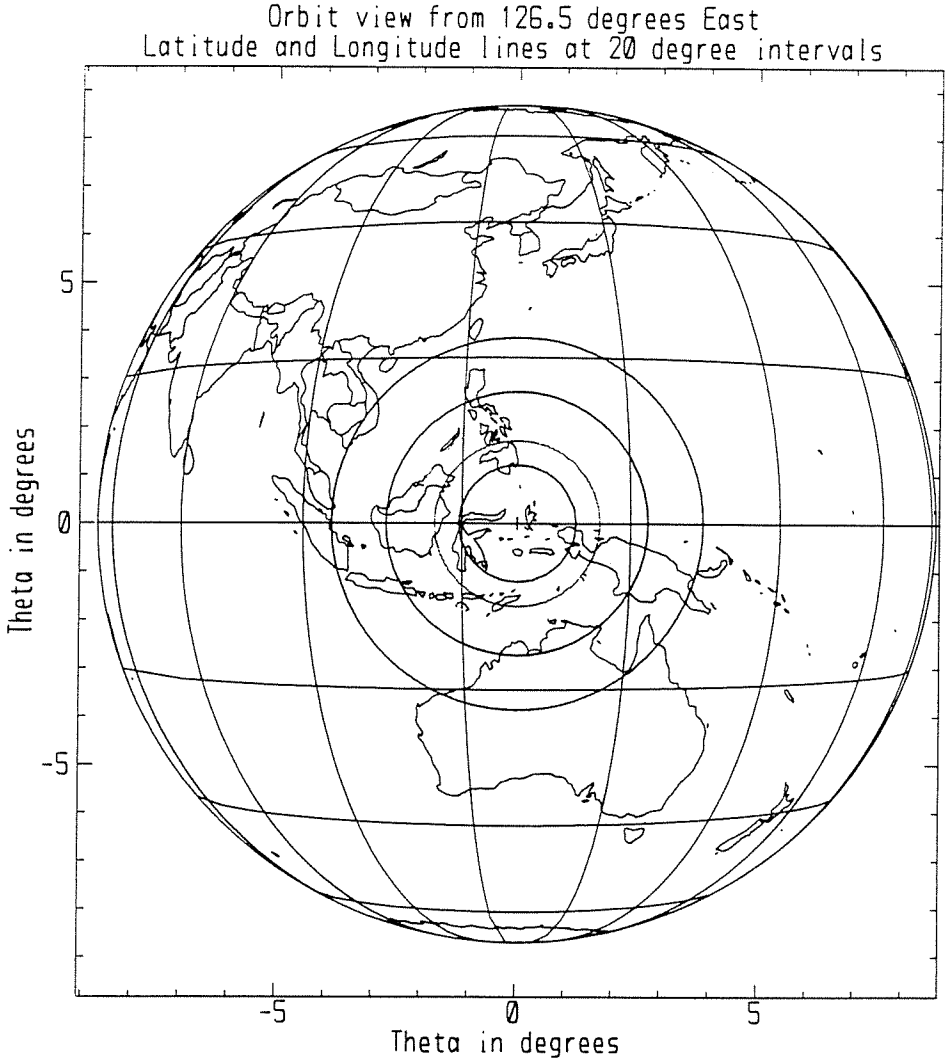
FIGURE 01
SPACE STATION RECEIVING AND TRANSMITTING
ANTENNA GAIN CONTOURS FOR BEAM "K1R"



Notes:

1. The space station antenna coverage actually consists of multiple overlapping spot-beams, capable of being pointed to any part of the visible Earth's surface. Only one such typical spot-beam is shown as an example. All beams may operate at all associated assigned frequencies.
2. Service area consists of all visible areas of the Earth.
3. Maximum isotropic gain is +45.0 dBi.
4. Contours shown are -2, -4, -6, -10 and -20 dB relative to maximum gain.
5. Does not include antenna pointing error which is ±0.15° worst case.
6. Power flux density at the Earth's surface will be controlled in order to be compliant with the limits specified in Article 28 of the Radio Regulations.

FIGURE 02
SPACE STATION RECEIVING AND TRANSMITTING
ANTENNA GAIN CONTOURS FOR BEAM "K2R"



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2. Service area consists of all visible areas of the Earth.
3. Maximum isotropic gain is +35.0 dBi.
4. Contours shown are -2, -4, -6, -10 and -20 dB relative to maximum gain.
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FIGURE 03
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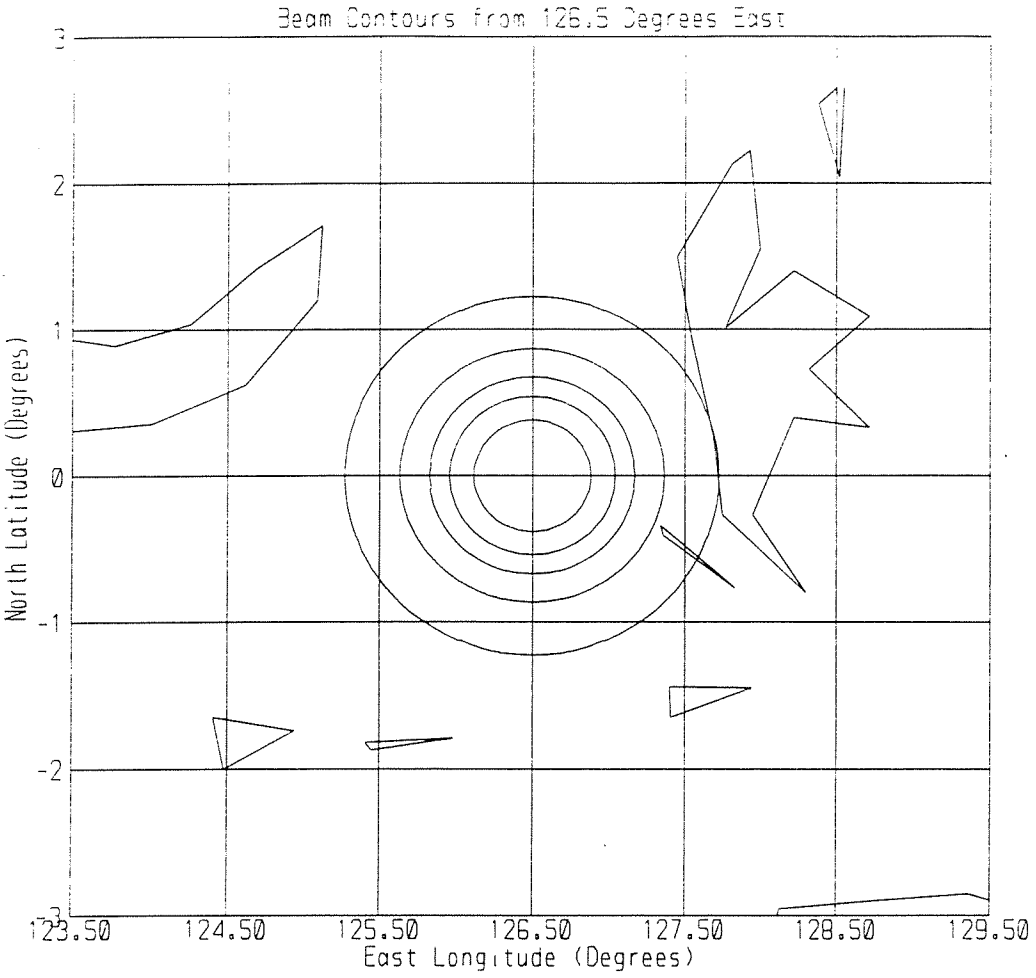

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3. Maximum isotropic gain is +60.0 dBi.
4. Contours shown are -2, -4, -6, -10 and -20 dB relative to maximum gain.
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FIGURE 04
GAIN TOWARDS GEOSTATIONARY SATELLITE ORBIT
FOR BEAM "K1R"

Orbit Location 126.5E

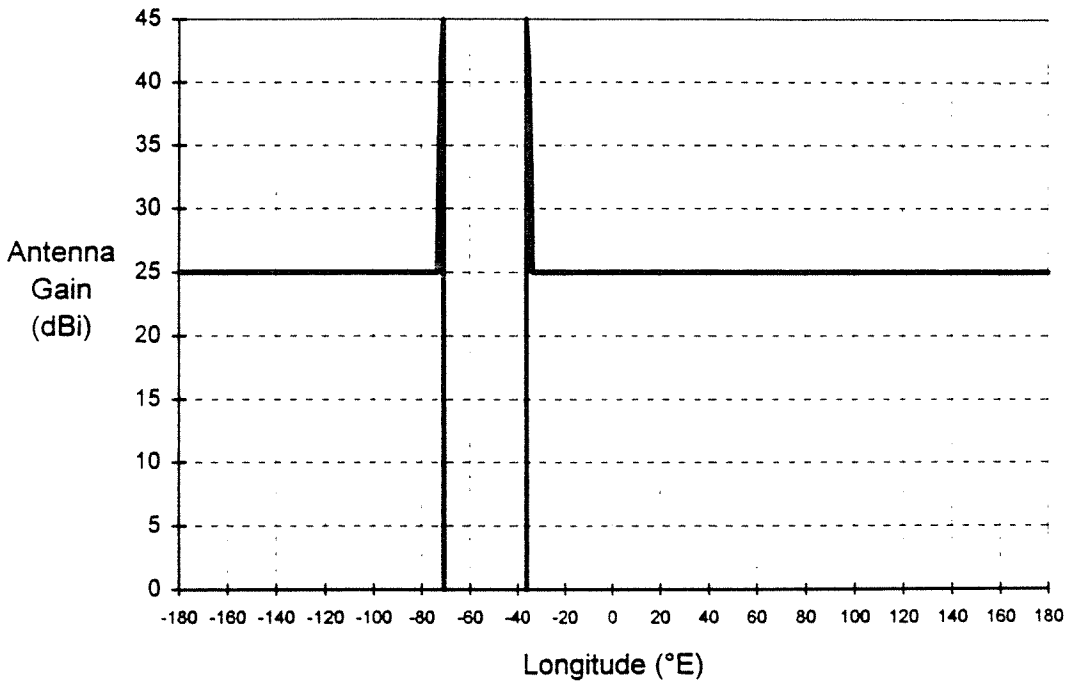


FIGURE 05
GAIN TOWARDS GEOSTATIONARY SATELLITE ORBIT
FOR BEAM "K2R"

Orbit Location 126.5E

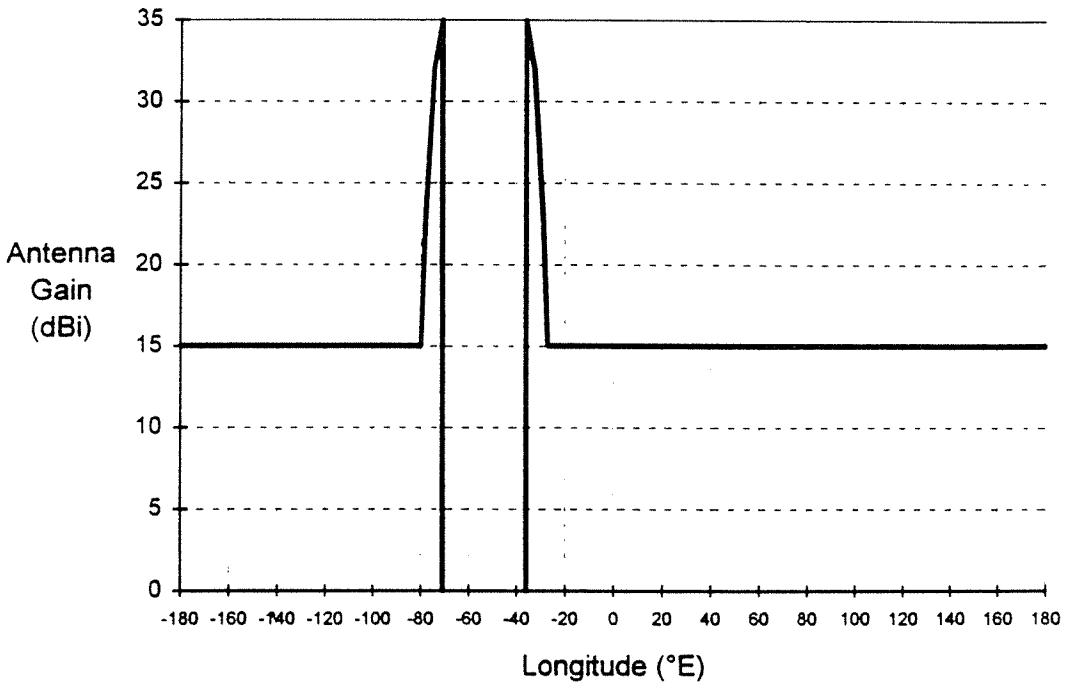
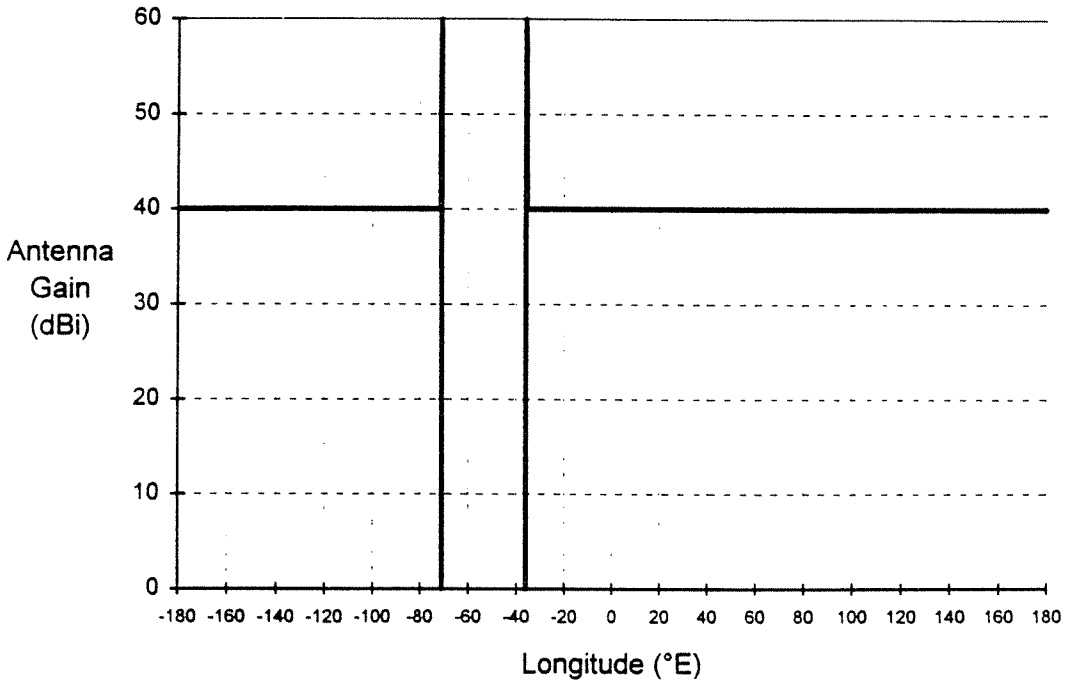


FIGURE 06
GAIN TOWARDS GEOSTATIONARY SATELLITE ORBIT
FOR BEAM "K3R"

Orbit Location 126.5E



DATE (Day/Month/Year): / / 95

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FORM OF NOTICE

SATELLITE NETWORK

(APPENDIX 4)

PAGE 1 OF 31

AP4

NOTIFYING ADMINISTRATION: USA/

RR1042 Advance Publication: X

RR1047A Request for Assistance of the IFRB:

NOTIFICATION INTENDED FOR: ADD X MOD SUP

IFRB IDENTIFICATION NO OF NETWORK TO BE MODIFIED/SUPPRESSED:

B: CHARACTERISTICS OF THE NETWORK

1 NAME OF THE SPACE STATION: USASAT-33E

2 DATE OF BRINGING INTO USE: Day 01 Month 11 Year 2001

REFERENCE TO PREVIOUS SPECIAL SECTION NUMBER (if network modified): AR11/A/ Number

3a ADMINISTRATIONS IN GROUP:

3b OPERATING AGENCY OR COMPANY: 120

3c ADMINISTRATION RESPONSIBLE FOR THE STATION: A

4 ORBITAL INFORMATION

a. FOR GEOSTATIONARY SATELLITES

1. NOMINAL ORBIT LONGITUDE (Degrees / E/W)	2. LONGITUDINAL TOLERANCE (Degrees: To West / To East)	3. INCLINATION EXCURSION (Degrees)	4. VISIBILITY ARC (Degrees: From W E/W / To E E/W)	5. SERVICE ARC (Degrees: From W E/W / To E E/W)
124.5 E	0.05 / 0.05	0.05	049 E / 160 W	049 E / 160 W

6. REASON FOR SERVICE ARC < VISIBILITY ARC ATTACHED:

b. FOR NON-GEOSTATIONARY SATELLITES

1. INCLINATION ANGLE (Degrees)	2. PERIOD (Days / D / Hours; Hours / H / Min.)	3. APOGEE (km)	4. PERIGEE (km)	5. CELESTIAL BODY	6. NUMBER OF SATS.

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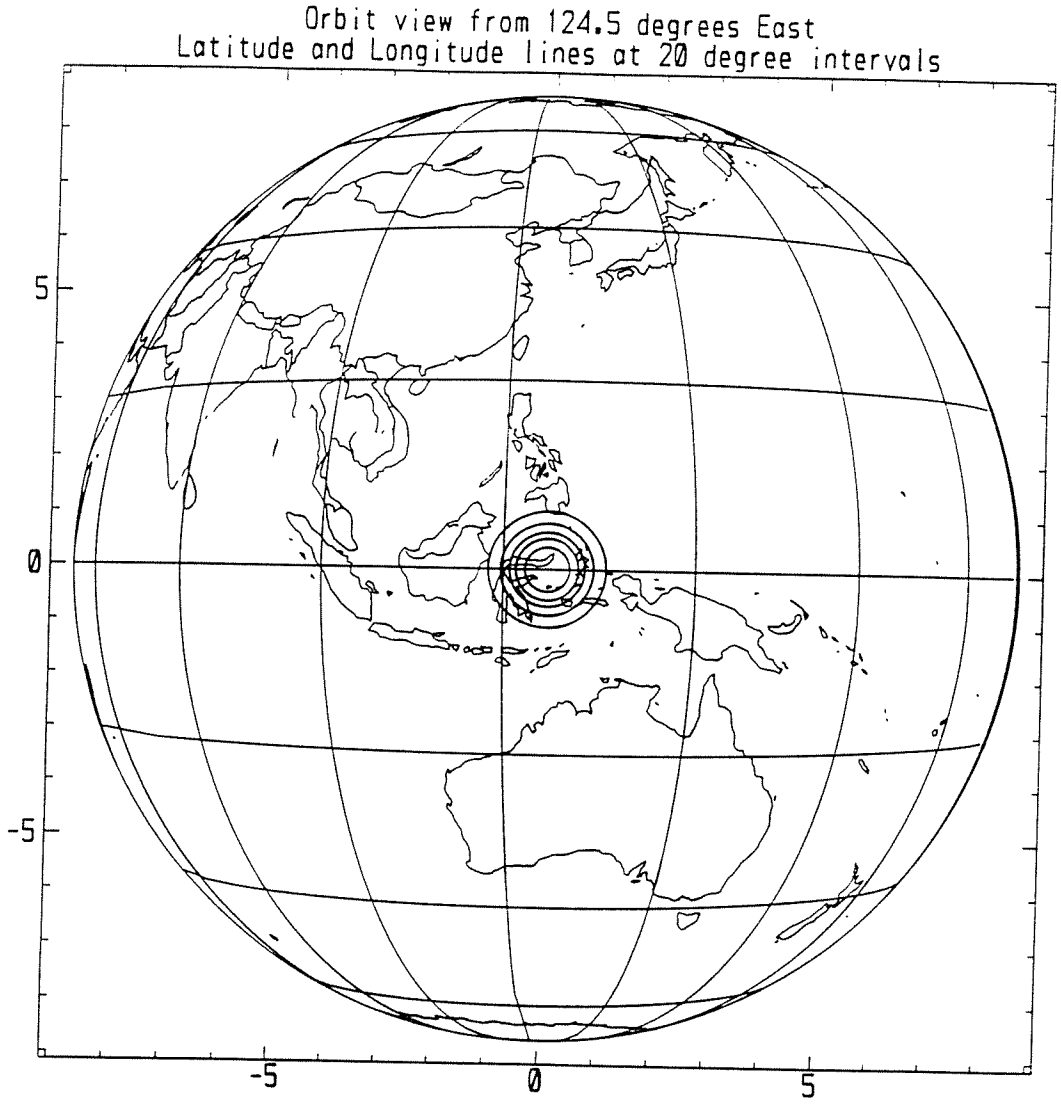

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FIGURE 02
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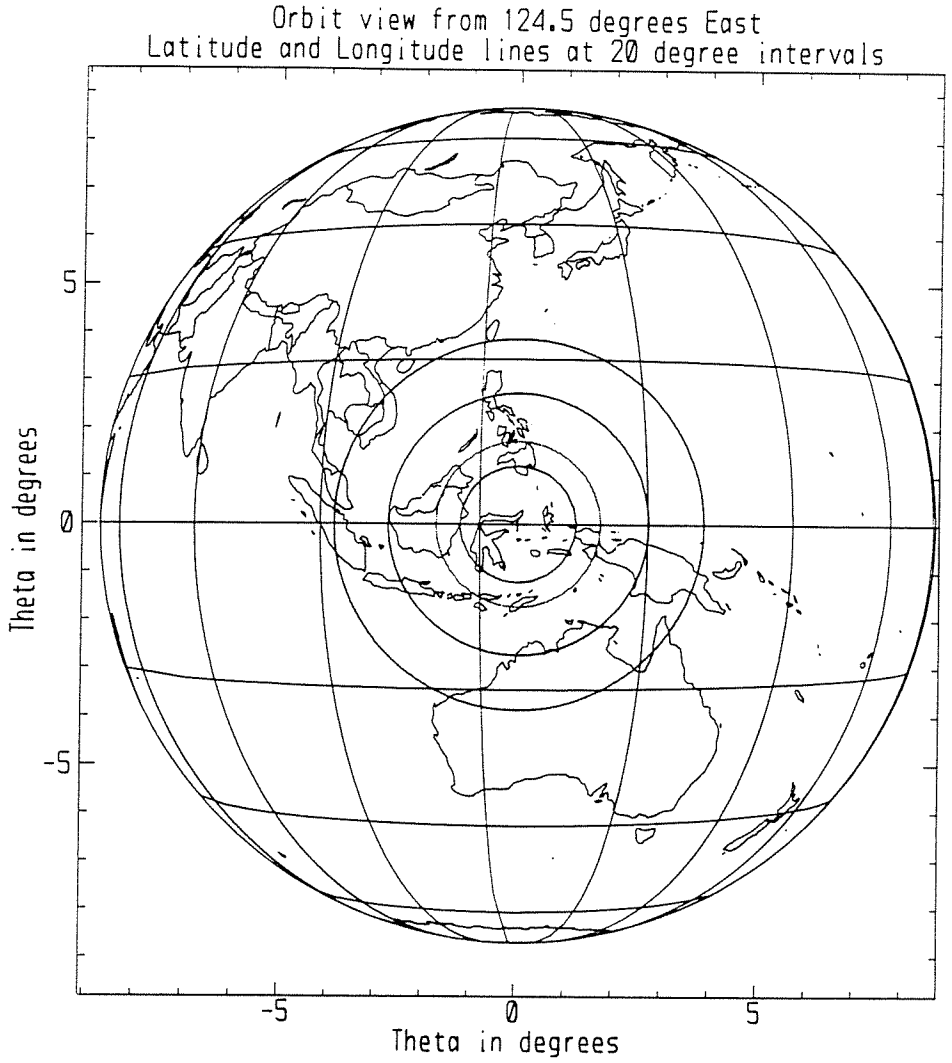

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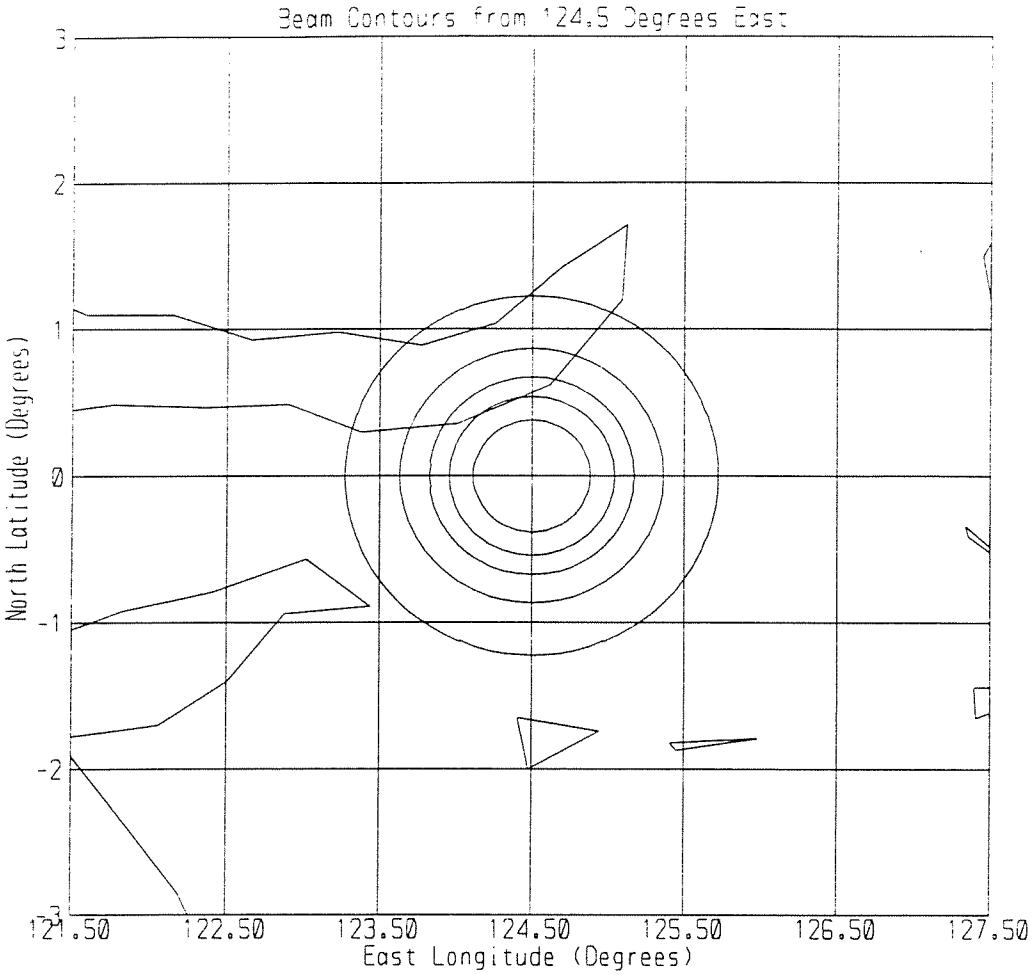

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FOR BEAM "K1R"

Orbit Location 124.5E

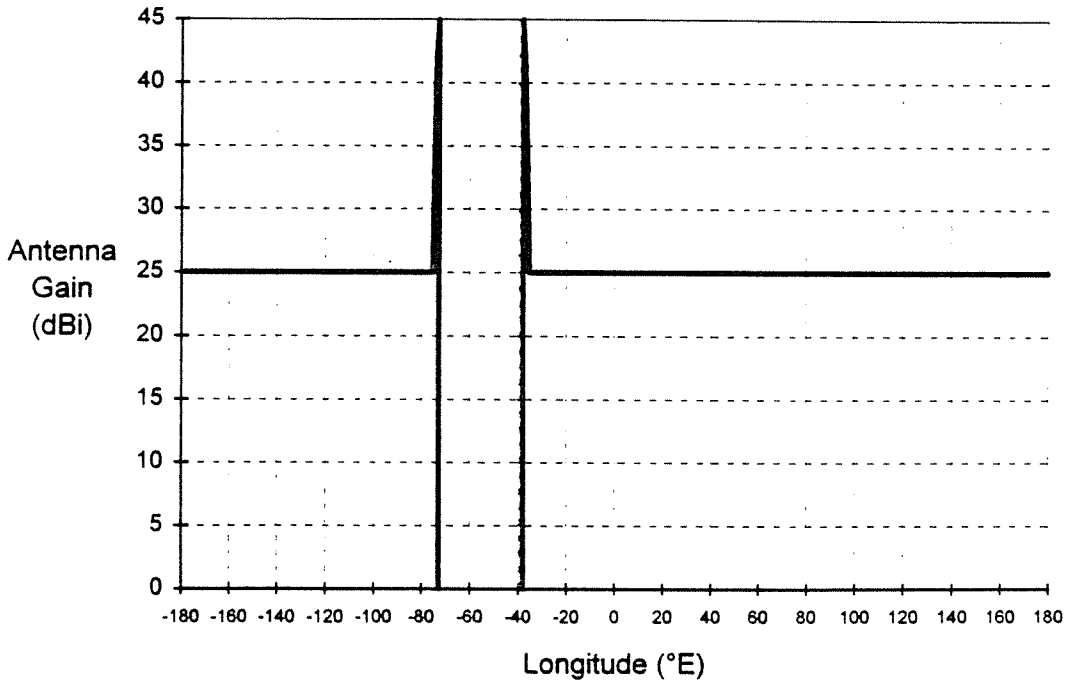


FIGURE 05
GAIN TOWARDS GEOSTATIONARY SATELLITE ORBIT
FOR BEAM "K2R"

Orbit Location 124.5E

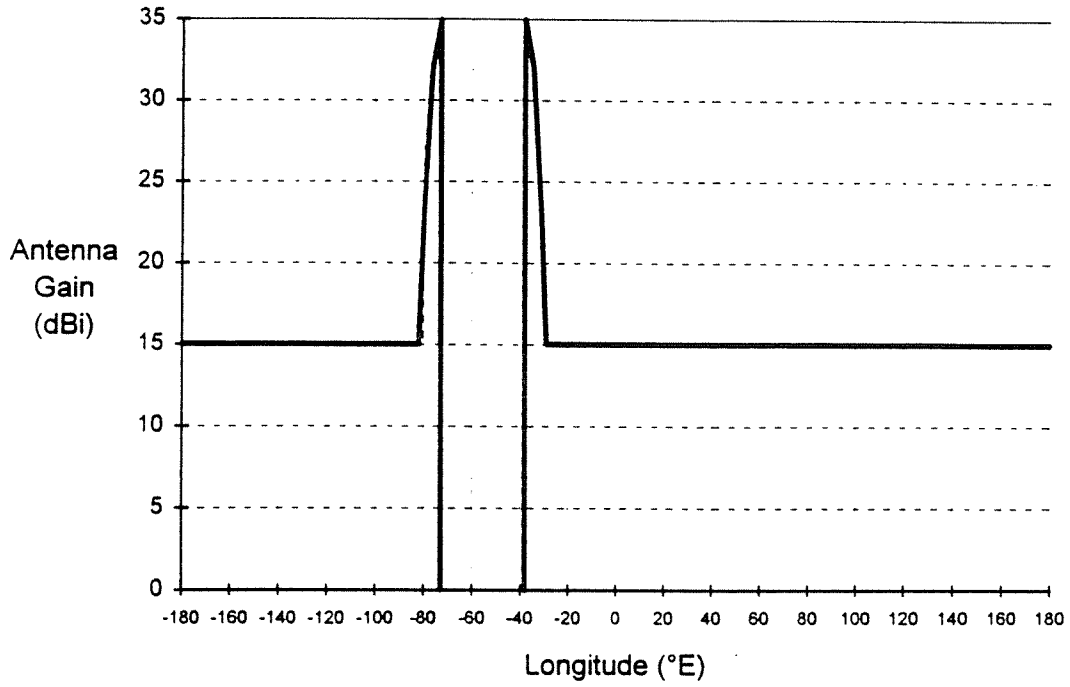
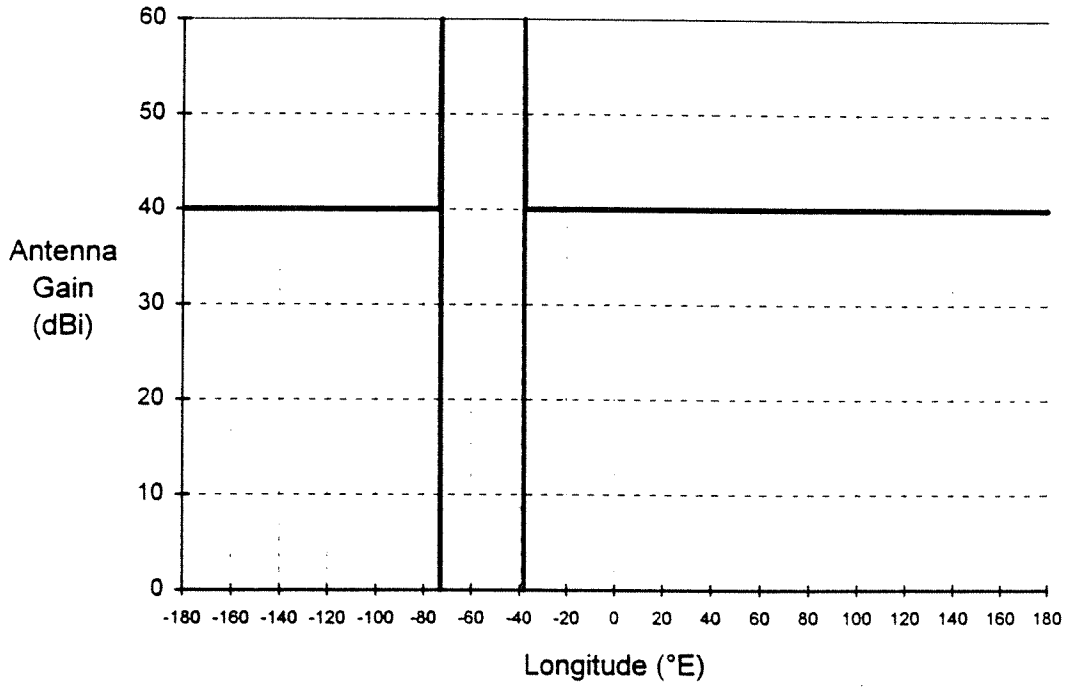


FIGURE 06
GAIN TOWARDS GEOSTATIONARY SATELLITE ORBIT
FOR BEAM "K3R"

Orbit Location 124.5E



CERTIFICATE OF SERVICE

I, Bridget Y. Monroe, hereby certify that on this 15th day of December, 1995, copies of the foregoing were mailed, first class postage prepaid to the following:

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Leventhal Senter & Lerman
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Washington, D.C. 20006

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Dow Lohnes & Albertson
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Washington, D.C. 20037

Henry Goldberg
Goldberg Godles Wiener & Wright
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Charles R. Milkis
Law Office of
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Albert Shuldiner
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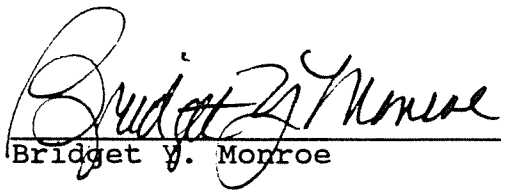
Washington, D.C. 20004-1008

Stephen Goodman
Halprin Temple Goodman &
Sugrue
1100 New York Avenue, NW
Suite 650E
Washington, D.C. 20005



Bridget Y. Monroe