Date & Time Filed: Feb 18 2005 5:06:17:676PM File Number: SES–LIC–INTR2005–00371 Callsign/Satellite ID:

APP	LICATION FOR EARTH STATIC	ON AUTHORIZATIONS		FCC Use Only
	FCC 312 MAIN FORM FOR OF	FICIAL USE ONLY		
APPLICANT INFOR Enter a description of Joint–Stars 1.8 Meter	this application to identify it on	the main menu:		
1–8. Legal Name of App	plicant			
Name:	Northrop Grumman Systems Corporation	Phone Number:	202-	-551-1802
DBA Name:		Fax Number:	202-	-551-0202
Street:	875 15th Street, NW	E-Mail:	davi	dsiddall@paulhastings.com
City:	Washington	State:	DC	
Country:	USA	Zipcode:	2000	05 –
Attention:	David R. Siddall			

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Name:	David R .Siddall	Phone Number:	202-551-1802
Company:		Fax Number:	202-551-0202
Street:	875 15th Street, NW	E-Mail:	davidsiddall@paulhastings.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20005-
Contact Title:	Attorney	Relationship:	Legal Counsel

CLASSIFICATION OF FILING

17. Choose the button next to the classification that applies to this filing for both questions a. and b. Choose only one	 b. b1. Application for License of New Station
for 17a and only one for 17b. a. a. a. (N/A) a2. Space Station	 b2. Application for Registration of New Domestic Receive–Only Station (N/A) b3. Amendment to a Pending Application (N/A) b4. Modification of License or Registration (N/A) b5. Assignment of License or Registration (N/A) b6. Transfer of Control of License or Registration (N/A) b7. Notification of Minor Modification (N/A) b8. Application for License of New Receive–Only Station Using Non–U.S. Licensed
	 Satellite (N/A) b9. Letter of Intent to Use Non–U.S. Licensed Satellite to Provide Service in the United States b10. Other (Please specify) b11. Application for Earth Station to Access a Non–U.S.satellite Not Currently Authorized to Provide the Proposed Service in the Proposed Frequencies in the United States.

 17c. Is a fee submitted with this applicat If Yes, complete and attach FCC Form Governmental Entity Other(please explain): 	159. If No, indicate reason for fee exemption (s	ee 47 C.F.R.Section 1.1114).
17d. Fee Classification BAX – Fixed Satellite T	Fransmit/Receive Earth	
Station	1	
18. If this filing is in reference to an existing station, enter:	19. If this filing is an amendment to a pending a(a) Date pending application was filed:	pplication enter: (b) File number of pending application:
(a) Call sign of station: Not Applicable	Not Applicable	Not Applicable

TYPE OF SERVICE

$\mathbf{F}_{\mathbf{r}}$ = $\mathbf{F}_{\mathbf{r}}$ = $1 \mathbf{G}_{\mathbf{r}}$ = $1 \mathbf{G}_{\mathbf{r}}$
a. Fixed Satellite
b. Mobile Satellite
c. Radiodetermination Satellite
d. Earth Exploration Satellite
e. Direct to Home Fixed Satellite
f. Digital Audio Radio Service
g. Other (please specify)

21. STATUS: Choose the button next to the applicable status. Choose	22. If earth station applicant, check all that apply.
only one.	Using U.S. licensed satellites
○ Common Carrier	Using Non–U.S. licensed satellites
23. If applicant is providing INTERNATIONAL COMMON CARRIER s facilities:	service, see instructions regarding Sec. 214 filings. Choose one. Are these
• Connected to a Public Switched Network • Not connected	to a Public Switched Network 💿 N/A
24. FREQUENCY BAND(S): Place an "X" in the box(es) next to all a	pplicable frequency band(s).
a. C–Band (4/6 GHz) k. Ku–Band (12/14 GHz)	
c.Other (Please specify upper and lower frequencies in MHz.)	
Frequency Lower: Frequency Upper:	

TYPE OF STATION

25. CLASS OF STATION: Choose the button next to the class of station that applies. Choose only one.
a. Fixed Earth Station
b. Temporary–Fixed Earth Station
c. 12/14 GHz VSAT Network
d. Mobile Earth Station
(N/A) e. Geostationary Space Station
(N/A) f. Non–Geostationary Space Station
g. Other (please specify)

26. TYPE OF EARTH STATION FACILITY: Choose only one.

Transmit/Receive
Transmit–Only
Receive–Only
N/A

PURPOSE OF MODIFICATION

27. The purpose of this proposed modification is to: (Place an 'X' in the box(es) next to all that apply.)

Not Applicable

ENVIRONMENTAL POLICY

28. Would a Commission grant of any proposal in this application or amendment have a significant environmental impact as defined by 47 CFR 1.1307? If YES, submit the statement as required by Sections 1.1308 and 1.1311 of the Commission's rules, 47 C.F.R. §§ 1.1308 and 1.1311, as an exhibit to this application. A Radiation Hazard Study must accompany all applications for new transmitting facilities, major modifications, or major amendments.

ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aeronautical en route or aeronautical fixed radio station services are not required to respond to Items 30–34.

29. Is the applicant a foreign government or the representative of any foreign government?	O Yes ⊗ No O N/A
30. Is the applicant an alien or the representative of an alien?	O Yes ⊗ No O N/A

No No

31. Is the applicant a corporation organized under the laws of any foreign government?	O Yes	● No	O N/A
32. Is the applicant a corporation of which more than one–fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	O Yes	● ^{No}	O N/A
33. Is the applicant a corporation directly or indirectly controlled by any other corporation of which more than one–fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	O Yes	No No	O N/A
34. If any answer to questions 29, 30, 31, 32 and/or 33 is Yes, attach as an exhibit an identification of the aliens or foreign entities, their nationality, their relationship to the applicant, and the percentage of stock they own or vote.			

BASIC QUALIFICATIONS

35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules? If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.	O Yes	● No

36. Has the applicant or any party to this application or amendment had any FCC station authorization or license revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explination of circumstances.	O Yes	● No
37. Has the applicant, or any party to this application or amendment, or any party directly or indirectly controlling the applicant ever been convicted of a felony by any state or federal court? If Yes, attach as an exhibit, an explination of circumstances.	● Yes Exhibit B	O No
38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement or any other means or unfair methods of competition? If Yes, attach as an exhibit, an explanation of circumstances	• Yes	O No
39. Is the applicant, or any person directly or indirectly controlling the applicant, currently a party in any pending matter referred to in the preceding two items? If yes, attach as an exhinit, an explanation of the circumstances.	O Yes	● No

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40. If the applicant is a corporation and is applying for a space station license, attach as an exhibit the names, address, and citizenship of those stockholders owning a record and/or voting 10 percent or more of the Filer's voting stock and the percentages so held. In the case of fiduciary control, indicate the beneficiary(ies) or class of beneficiaries. Also list the names and addresses of the officers and directors of the Filer.		
41. By checking Yes, the undersigned certifies, that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti–Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application" for these purposes.	Yes	O No
42a. Does the applicant intend to use a non–U.S. licensed satellite to provide service in the United States? If Yes, answer 42b and attach an exhibit providing the information specified in 47 C.F.R. 25.137, as appropriate. If No, proceed to question 43.	O Yes	● No
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, v coordinated or is in the process of coordinating the space station?N/A	vhat administr	ration has

43. Description. (Summarize the nature of the application and the services to be provided). (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Northrop Grumman Systems Corporation seeks a new temporary-fixed transmit/receive satellite earth station authorization.

CERTIFICATION

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 an authorization in accordance with this application. The applicant certifies that grant of this application would not cause the applicant to be in violation of the spectrum aggregation limit in 47 CFR Part 20. All statements made in exhibits are a material part hereof and are incorporated herein as if set out in full in this application. The undersigned, individually and for the applicant, hereby certifies that all statements made in this application and in all attached exhibits are true, complete and correct to the best of his or her knowledge and belief, and are made in good faith.

44. Applicant is a (an): (Choose the button next to applicable response.)

Individual

O Unincorporated Association

- Partnership
- Corporation
- Governmental Entity
- Other (please specify)

6 6		46. Title of Person Signing Corporate Vice President and Secretary		
7. Please supply any need attachmen	ts.			
Attachment 1:	Attachment 2:		Attachment 3:	
(U.S. Code, Ti	tle 18, Section 1001), AND/O	REVOCATION OF AN	E BY FINE AND / OR IMPRISONY STATION AUTHORIZATION Code, Title 47, Section 503).	

SATELLITE EARTH STATION AUTHORIZATIONS FCC Form 312 – Schedule B:(Technical and Operational Description) FOR OFFICIAL USE ONLY

E14. Site Elevation (AMSL):		0.0 meters				
E13. Lat/Lon Coor	dinates are:	● NAD-27	● NAD-83	O N/A		
E12. Longitude:	0 °0 '0.0 "					
E11. Latitude:	0 °0 '0.0 "					
E10. Area of Opera	tion:	Various locations throughout United States				
E4. State		E9. Zip Code				
		E8. County:				
E3. Street:	Joint–Stars 1.8 meter No. 5	E7. City:				
E2: Contact Name		E6. Phone Number:	(321)931-6294			
E1: Site Identifier:	1	E5. Call Sign:				

E15. If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement? If NO, provide as a technical analysis showing compliance with two–degree spacing policy.	• Yes	O ^{N₀}	O ^{N/A}
E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non–geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements?	O Yes	○ ^{No}	● N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	o 1	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	Yes	•	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(c)) Where FAA notification is required, hav you attached a copy of a completed FCC Form 854 and or the FAA's study regarding the potential hazard of the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.	0	Yes	•	No

Satellite Name: PERMITTED LIST If you selected OTHER, please enter the following:

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
POINTS OF COMMUNICATION (Destination Points)	
E25. Site Identifier:	
E26. Common Name:	E27. Country:

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer		E32. Antenna Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
1	1	1	Vertex/RSI	18QD	1.8	45.0 dBi at 11.95
						46.5 dBi at 14.25

Id	Diameter	E35. Above Ground Level (meters)	(meters)	0	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers (dBW)
1	0.0/0.0	3.0	0.0	0.0	8.0	0.0	55.5

FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands	E45. T/R Mode		E48. Maximum EIRP per Carrier	E49. Maximum ERIP Density per
	(MHz)		L,R)	(dBW)	Carrier
					(dBW/4kHz)

1	11700 12200	R	Horizontal and Vertical	6M55G7W	0.0	0.0
E50. Modulation entirety.)	and Services (If the	he complete descripti	on does not appear in	this box, please go to	o the end of the form	to view it in its
8.192 Mbps	3, QPSK, FEC					
1	14000 14500	Т	Horizontal and Vertical	6M55G7W	55.5	23.4
E50. Modulation entirety.)	and Services (If the	he complete descripti	on does not appear in	this box, please go to	o the end of the form	to view it in its
8.192 Mbps	S, QPSK, FEC					
FREQUENCY CO	OORDINATION					

E28. Antenna Id		Frequency Limits(MHz)	E54/55. Range of Satellite Arc E/W Limit	Station Azimuth Angle	E57. Antenna Elevation Angle Eastern Limit	Station Azimuth Angle	Antenna Elevation Angle Western	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
1	Geostationary	11700 12200	60.0/ 270.0	0.0	5.0	0.0	5.0	-9.45

	Geostationary	14000 14500	60.0/ 270.0	0.0		5.0	0.0	5.0	-9.45	
REMOTE CO	REMOTE CONTROL POINT LOCATION									
E61. Call Sign E65. Phone Number										
callsign for whi	NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed. E62. Street Address									
E63. City E67. County E64/68. E66. Zip Code State/Country /										

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

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