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Callsign/Satellite ID:

APPLICATION FOR EARTH STATION AUTHORIZATIONS

FCC Use Only

FCC 312 MAIN FORM FOR OFFICIAL USE ONLY

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:

New 9 meter C-band and 8.1 Meter Ku-band earth stations at Ft. Monmouth, N.J.

1–8. Legal Name of Applicant

Name: Northrop Grumman Information Phone Number: 732–542–0080

Technology

DBA Fax Number: 732–542–1088

Name:

Street: 17 Christopher Way E–Mail: jbatista@northropgrumman.com

City: Eatontown State: NJ

Country: USA Zipcode: 07724 -

Attention: Dr Jesus M Batista

9–16. Name of Contact Representative (If other than applicant)

Name: Dr Jesus M Batista Phone Number: 732–542–0080

Company: Northrop Grumman Information **Fax Number:** 732–542–1088

Technology

Street: 17 Christopher Way **E–Mail:** jbatista@northropgrumman.com

City: Eatontown State: NJ

Country: USA Zipcode: 07724–

Contact Contracting Officer Relationship: Same

Title:

CLASSIFICATION OF FILING

17. Choose the button next to the	b.
classification that applies to this filing for	b1. Application for License of New Station
both questions a. and b. Choose only one for 17a and only one for 17b.	b2. Application for Registration of New Domestic Receive–Only Station
a. a. a1. Earth Station (N/A) a2. Space 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 application of the submitted with t	159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).
17d.	
Fee Classification BAX – Fixed Satellite T Station	ransmit/Receive Earth

18. If this filing is in reference to an existing station, enter: (a) Call sign of station: Not Applicable 19. If this filing is an amendment to a pending application enter: (a) Date pending application was filed: (b) File number of pending application: Not Applicable Not Applicable

TYPE OF SERVICE	
20. NATURE OF SERVICE: This filing is for an authorization to provide	or use the following type(s) of service(s): Select all that apply:
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
O Common Carrier Non–Common Carrier	Using Non–U.S. licensed satellites
23. If applicant is providing INTERNATIONAL COMMON CARRIER sefacilities:	ervice, see instructions regarding Sec. 214 filings. Choose one. Are these
O Connected to a Public Switched Network Not connected to	o a Public Switched Network

24. FREQUENCY BAND(S): Place an "X" in the box(es) next to all applicable frequency band(s).	
a . C–Band (4/6 GHz) b . Ku–Band (12/14 GHz)	
c.Other (Please specify upper and lower frequencies in MHz.)	
Frequency Lower: Frequency Upper:	
YPE 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

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.	Exhibit A	N O
ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aeron aeronautical fixed radio station services are not required to respond to Items 30–34.	autical en route or	
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 O No	O N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	O Yes O 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?	○ Yes	⊚ No	o 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	o 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.	٥	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.	0	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.	O Yes	⊚ 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	O Yes	⊚ 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
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?	what administr	ration has

License request for a 9 meter C-band and a 8.1 meter Ku-band earth station antennas to

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.)

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.

true, complete and correct to the best of	rue, 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 but	ton next to applicable response	e.)		
O Individual				
O Unincorporated Association				
O Partnership				
Corporation				
Governmental Entity				
Other (please specify)				
45. Name of Person Signing Jesus M. Batista		46. Title of Person Sig Contract Officer	gning	
47. Please supply any need attachments				
			A 441 2 -	
Attachment 1:	Attachment 2:		Attachment 3:	

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT (U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION (U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).

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

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Location of Earth Station Site

E1: Site Identifier: Ft. Monmouth, NJ. E5. Call Sign:

E2: Contact Name Henry Moreno E6. Phone 732 532–0905

Number:

E3. Street: SATCOM E7. City: Ft. Monmouth

Engineering Laboratory

AMSEL-RD-ST- E8. County: Monmouth

TE-EL

E4. State NJ E9. Zip Code 07703

E10. Area of Operation: Ft. Monmouth, N.J.

E11. Latitude: 40 ° 19 '11.4 "N

E12. Longitude: 74 °2 '7.2 "W

E13. Lat/Lon Coordinates are: NAD-27 NAD-83 NAD-83

E14. Site Elevation (AMSL): 5.49 meters

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.	⊗ Ye	ès	O No	0	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 Ye	es	O No	•	N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Y	/es	•	No)
E18. Is frequency coordination required? If YES, attach a frequency coordination report as	● Y	les	С	No)
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	O Y	<i>l</i> es	•	No)
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(c)) Where FAA notification is required, have 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.		l'es	•	, No)
POINTS OF COMMUNICATION					
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	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi atGHz)
Ft. Monmouth, NJ.	9C	1	Vertex	9 KPC	9.0	50.1 dBi at 4
						53.5 dBi at 6
	8.1KU			8.1 KPK	8.1	58.2 dBi at 11
						59.8 dBi at 14

E28. Antenna Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level (meters)	(meters)	Height Above Ground	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers (dBW)
9C	0.0/0.0	9.1	14.59	0.0	200.0	0.0	76.51
8.1KU	0.0/0.0	8.2	13.69	0.0	175.0	0.0	82.23

FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization(H,V, L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
9C	3700 4200	R	Horizontal and Vertical	210KG1D	0.0	0.0
E50. Modulation entirety.) Digital I	on and Services (If t	he complete descrip	tion does not appear ir	n this box, please go	to the end of the form	to view it in its
9C	3700 4200	R	Horizontal and Vertical	35M5G1D	0.0	0.0
E50. Modulation entirety.) Digital I	on and Services (If t	ne complete descrip	tion does not appear if	i tinis box, piease go	to the end of the form	to view it in its
	5925 6425	Т	Horizontal and	210KG1D	68.0	50.8

E50. Modulati entirety.)	ion and Services (If the	ne complete descripti	on does not appear in	n this box, please go t	o the end of the form	to view it in its
Digital	Data Carrier					
9C	5925 6425	Т	Horizontal and Vertical	35M5G1D	76.51	37.03
entirety.) Digital	Data Carrier					
8.1KU	10950 11200	R	Horizontal and Vertical	210KG1D	0.0	0.0
entirety.)	ion and Services (If the Data Carrier	he complete descripti	on does not appear in	n this box, please go t	o the end of the form	to view it in its
8.1KU	10950 11200	R	Horizontal and Vertical	35M5G1D	0.0	0.0

E50. Modulation entirety.)	and Services (If the	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
Digital Da	ata Carrier					
8.1KU	11450 12200	R	Horizontal and Vertical	210KG1D	0.0	0.0
entirety.) Digital Da	ata Carrier				o the end of the form	
8.1KU	11450 12200	R	Horizontal and Vertical	35M5G1D	0.0	0.0
E50. Modulation entirety.) Digital Da	and Services (If the	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
8.1KU	14000 14500	Т	Horizontal and Vertical	210KG1D	63.0	45.8

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Digital Data Carrier

8.1KU	14000	T	Horizontal and	35M5G1D	82.23	42.75
	14500		Vertical			

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Digital Data Carrier

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc E/W Limit	E56. Earth Station Azimuth Angle Eastern Limit	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
9C		3700 4200	8.0/ 143.0	106.0	9.5	256.0	7.3	0.0
		5925 6425	8.0/ 143.0	106.0	9.5	256.0	7.3	4.8

8.1KU	10950 11200	8.0/ 143.0	106.0	9.5	256.0	7.3	0.0
	11450 12200	8.0/ 143.0	106.0	9.5	256.0	7.3	0.0
	14000 14500	8.0/ 143.0	106.0	9.5	256.0	7.3	-3.62

REMOTE CONTROL POINT LOCATION

E61. Call Sign		E65. Phone Number		
NOTE: Please enter the callsign of the contro callsign for which this application is being filed.				
E62. Street Address				
E63. City	E67. County		E64/68. State/Country	E66. Zip Code

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