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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:

Herndon, VA Transportable Gigasat 1

1	-8.]	Legal	Name	of App	licant
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Name: The Boeing Company Phone Number: 866–248–1493

DBA Fax Number: 206–544–6592

Name:

Street: Attn E-Mail: bob.douglass@boeing.com

PO Box 3707

City: Seattle State: WA

Country: USA **Zipcode:** 98124 –2207

Attention: Mr Robert B Douglass

9–16. Name of Contact Representative

Name: Ron Center Phone Number: 206–544–6583

Company: The Boeing Company **Fax Number:** 206–544–6592

Street: P.O. Box 3707 E–Mail: ronald.e.center@boeing.com

City: Seattle State: WA

Country: USA **Zipcode:** 98124–2207

Attention: Frequency Manager **Relationship:** Other

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	b2. Application for Registration of New Domestic Receive–Only Station
for 17a and only one for 17b.	
	(N/A) b3. Amendment to a Pending Application (N/A) b4. Modification of License or Registration
a.	(N/A) b5. Assignment of License or Registration
a1. Earth Station	(N/A) b6. Transfer of Control of License or Registration
(N/A) a2. Space Station	(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 h 10. Other (Please specify)
	o 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.
	(N/A) b13. Amendment to a Pending Database Entry Application
	(N/A) b14. Modifiction of Database Entry
17c. Is a fee submitted with this applicati	on?
If Yes, complete and attach FCC Form	159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).
Governmental Entity Noncomme	ercial educational licensee
Other(please explain):	
17d.	
Fee Classification BAX – Fixed Satellite T	ransmit/Receive Earth
Station	

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
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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:			
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.	C	Yes	⊚ No	D.
ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aerona aeronautical fixed radio station services are not required to respond to Items 30–34.	utical e	n route	or	
29. Is the applicant a foreign government or the representative of any foreign government?	O Yes	s ⊚ N	0	
30. Is the applicant an alien or the representative of an alien?	O Yes	6 6 N	o o N	J/A
31. Is the applicant a corporation organized under the laws of any foreign government?	O Yes	s ⊚ N	о о ^N	J/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	6 N	о о N	I/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 ● N	To 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.	○ 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.	○ 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 Felony Letter	O No
38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attemptiing 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	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.	○ 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, we coordinated or is in the process of coordinating the space station?	hat 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.)

License request for a 1.2 meter Ku-band transportable transmit/receive earth station. The earth station will be used to support VSAT communications at various facilities throughout CONUS.

Radhaz Study

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.

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 button nex	t to applicable response.)					
O Individual						
O Unincorporated Association	Unincorporated Association					
O Partnership	Partnership					
Corporation						
Governmental Entity						
Other (please specify)						
45. Name of Person Signing		46. Title of Person Sign	ning			
Robert B Douglass Manager						
47. Please supply any need attachments.						
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) FOR OFFICIAL USE ONLY

Location of Earth Station Site E1: Site Identifier: Gigasat 1 E5. Call Sign: E2: Contact Name Susan Bach E6. Phone 703-467-7179 Number: E3. Street: 460 Herndon E7. City: Herndon Parkway E8. County: Fairfax E4. State VA E9. Zip Code 20170 **CONUS** E10. Area of Operation: E11. Latitude: 0 °0 '0.0 " E12. Longitude: 0 °0 '0.0 " E13. Lat/Lon Coordinates are: NAD-27 NAD-83 N/A E14. Site Elevation (AMSL): 0.0 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.	⊗ Yes	O No	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	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 Yes	s 💿	No
E18. Is frequency coordination required? If YES, attach a frequency coordination report as	O Yes	s 💿	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	O Yes	s 💿	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.	O Yes	s 🔞	No
POINTS OF COMMUNICATION			
Satellite Name: ALSAT ALL AUTHORIZED U.S. ALSAT If you selected OTHER, please enter the followin	g:		

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

POINTS OF COMMUNICATION (Destination Points)

E25. Site Identifier: Gigasat 1	
E26. Common Name:	E27. Country: USA

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi atGHz)
Gigasat 1	Gigasat 1	1	GIGASAT	FA 120	1.2	41.0 dBi at 12
						43.0 dBi at 14.125

Id	Diameter		(meters)	Height Above Ground Level 	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers (dBW)
Gigasat 1	0.0/0.0	3.0	0.0	0.0	16.0	0.0	55.04

FREQUENCY

E28. Antenna Id	E43/44.	E45. T/R Mode	E46. Antenna	E47. Emission	E48. Maximum	E49. Maximum
	Frequency Bands		Polarization(H,V,	Designator	EIRP per Carrier	ERIP Density per
	(MHz)		L,R)		(dBW)	Carrier
						(dBW/4kHz)

Gigasat 1	11700 12200	R	Linear and Circular	1M00G7D	0.0	0.0
E50. Modulation entirety.)	and Services (If the	ne complete descripti	on does not appear in	this box, please go t	to the end of the form	to view it in its
Digital Da	ta Carrier					
Gigasat 1	11700 12200	R	Linear and Circular	2M00G7D	0.0	0.0
entirety.) Digital Da	ta Carrier					
Gigasat 1	11700 12200	R	Linear and Circular	4M00G7D	0.0	0.0
E50. Modulation entirety.)	and Services (If the	ne complete descripti	on does not appear in	this box, please go t	to the end of the form	to view it in its
Digital Da	ta Carrier					

Gigasat 1	11700 12200	R	Linear and Circular	512K0G7D	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	ta Carrier					
Gigasat 1	14000 14500	Т	Linear and Circular	1M00G7D	52.54	28.57
Digital Da	ta Carrier					
Gigasat 1	14000 14500	Т	Linear and Circular	2M00G7D	55.04	28.06
E50. Modulation entirety.) Digital Da	,	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its

Gigasat 1	14000 14500	Т	Linear and Circular	4M00G7D	55.04	25.04
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	ta Carrier					
Gigasat 1	14000 14500	Т	Linear and Circular	512K0G7D	49.98	28.91
E50. Modulation entirety.) Digital Da		ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its

FREQUENCY COORDINATION

E28. Antenna Id		E52/53. Frequency Limits(MHz)	Range of Satellite Arc E/W Limit	Station Azimuth Angle	Antenna Elevation Angle Eastern Limit	Station Azimuth Angle	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
Gigasat 1	Geostationary	11700 12200	60.0/ 143.0	0.0	5.0	0.0	5.0	0.0

	Geostationary	14000 14500	60.0/ 143.0	0.0	5.0	0.0	5.0	-2.56				
REMOTE CO	REMOTE CONTROL POINT LOCATION											
E61. Call Si	gn				E65. Phone N	Number						
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.												
E62. Street A	Address											
E63. City			E67. Count	ty		E64/68. State/Coun		E66. Zip Code				

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