FCC Use Only APPLICATION FOR EARTH STATION AUTHORIZATIONS FCC 312 MAIN FORM FOR OFFICIAL USE ONLY

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu: Ku-band network -2003

Ku-bar	Ku-band network -2003						
1–8. Le	1–8. Legal Name of Applicant						
	Name:	iDirect, Inc.	Phone Number:	703–648–8106			
	DBA		Fax Number:	703-648-8014			
	Name:						
	Street:	10803 Parkridge Blvd	E-Mail:	dcarpenter@idirect.net			
	City:	Reston	State:	VA			
	•						
	Country:	USA	Zipcode:	20191 –			
	Attention:	Mr David Carpenter					
		•					

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

Name: Leslie A. Taylor Phone Number: 301–229–9410

Company: Leslie Taylor Associates, Inc. **Fax Number:** 301–229–3148

Street: 6800 Carlynn Court E–Mail: ltaylor@lta.com

City: Bethesda State: MD

Country: USA **Zipcode:** 20817–4302

Contact Relationship: Legal Counsel

Title:

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 for 17a and only one for 17b.

a.

a1. Earth Station

(N/A) a2. Space Station

b.

b1. Application for License of New Station

6 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

o b10. Other (Please specify)

17c. Is a fee submitted with this application? 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 Noncommercial educational licensee						
Other(please explain):						
17d.						
Fee Classification BGV – Fixed Satellit	e VSAT System					
18. If this filing is in reference to an existing station, enter: (a) Call sign of station:	19. If this filing is an amendment to a pending (a) Date pending application was filed:	ng application enter: (b) File number of pending application:				
Not Applicable	Not Applicable	Not Applicable				
TYPE OF SERVICE						
20. NATURE OF SERVICE: This filing i	s for an authorization to provide or use the follow	wing 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)	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 Non–Common Carrier	Using Non–U.S. licensed satellites
23. If applicant is providing INTERNATIONAL COMMON CARRIER sfacilities:	ervice, see instructions regarding Sec. 214 filings. Choose one. Are these
Connected to a Public Switched Network Not connected	to a Public Switched Network
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) 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

TOM OSE 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.	O Yes	S No	
ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aeronateronautical fixed radio station services are not required to respond to Items 30–34.	autical en roi	ute 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 ●	No O N/A	

31. Is the applicant a corporation organized under the laws of any foreign government?	O Yes	No No	O N/A
32. Is the applicant a corporation of which any officer or director is an alien or 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 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 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.	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 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	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.	○ Yes	⊚ No
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, w coordinated or is in the process of coordinating the space station?	hat administr	ation has

43. Description. (Summarize the nature of the application and the services to be provided). (If the complete description does not appear in	n this
box, please go to the end of the form to view it in its entirety.)	ii uiis
NULL	
CERTIFICATION	
The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with the application. The applicant certifies that grant of this application would not cause the applicant to be in violation of the spectrum aggregation 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 applicant to the undersigned, individually and for the applicant, hereby certifies that all statements made in this application and in all attached exhibits true, complete and correct to the best of his or her knowledge and belief, and are made in good faith.	nis on limit tion.
44. Applicant is a (an): (Choose the button next to applicable response.)	
ndividual	
Unincorporated Association	
O Partnership	
Corporation	
O Governmental Entity	
Other (please specify)	

45. Name of Person Signing David Carpenter		46. Title of Person Sign Director of Implementa	•	
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: HUB E5. Call Sign:

E2: Contact Name David Carpenter E6. Phone 703–648–8106

Number:

E3. Street: 10803 Parkridge E7. City: Reston

Blvd.

E8. County: Fairfax

E4. State VA E9. Zip Code 20191

E10. Area of Operation: CONUS

E11. Latitude: 38 °56 '40.0 "N

E12. Longitude: 77 ° 19 '0.0 "W

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

E14. Site Elevation (AMSL): 109.7 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.	⊗ Yo	es	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 Yo	es	O No	(o N∕A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	0,	Yes	•	N	No
E18. Is frequency coordination required? If YES, attach a frequency coordination report as					
12. Is frequency coordination required? If TES, attach a frequency coordination report as	0,	Yes	•	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	•	1	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.		Yes	c	1	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)
HUB	HUB-A	1	Prodelin	1244	2.4	47.6 dBi at 11.9
						49.2 dBi at 14.25
	Remote 1A	500	Channel Master	Type 123	1.2	41.8 dBi at 11.9
						43.3 dBi at 14.25
	Remote 2A			Type 184	1.8	44.9 dBi at 11.9
						46.6 dBi at 14.25
	Remote 3A			Type 244	2.4	47.4 dBi at 11.9
						49.1 dBi at 14.25

E28. Antenna Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level (meters)	E36. Above Sea Level (meters)	E37. Building Height Above Ground Level (meters)	E38. Total Input Power at antenna flange (Watts)	E39. Maximum Antenna Height Above Rooftop (meters)	E40. Total EIRP for al carriers (dBW)
HUB-A	/	9.4	119.1	6.7	8.0	2.7	58.2
Remote 1A	/	5.0	100.0	0.0	4.0	3.0	49.3
Remote 2A	/	5.0	100.0	0.0	4.0	3.0	52.6
Remote 3A	/	5.0	100.0	0.0	4.0	0.0	55.1

FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
HUB-A	11700 12200	R	Horizontal and Vertical	405KG7W	0.0	0.0

E50. Description of 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.)

qpsk, digital data, video, voice

HUB-A	11700	R	Horizontal and	8M00G7W	0.0	0.0
	12200		Vertical			

E50. Description view it in its entirety		ervices (If the con	nplete description doe	es not appear in this b	oox, please go to the e	nd of the form to
QPSK, digi	tal data, vide	o, voice				
HUB-A	14000 14500	Т	Horizontal and Vertical	2M50G7W	58.2	30.2
view it in its entirety	of Modulation and S y.) tal data, vide	·	nplete description doe	es not appear in this b	oox, please go to the e	nd of the form to
Remote 1A	11700	R	Horizontal and	2M50G7W	0.0	0.0
Remote 171	12200	IX.	Vertical	21V130G7 W	0.0	0.0
E50. Description view it in its entirety	of Modulation and S y.)	ervices (If the con	plete description doe	es not appear in this b	oox, please go to the e	nd of the form to
qpsk, digi	tal data, vide	o, voice				
Remote 1A	14000 14500	Т	Horizontal and Vertical	405KG7W	49.3	29.3

E50. Description view it in its entirety		ervices (If the con	nplete description doe	es not appear in this b	oox, please go to the e	nd of the form to
qpsk,digit	al data, video	, voice				
Remote 1A	14000 14500	Т	Horizontal and Vertical	8M00G7W	49.3	16.3
view it in its entirety	of Modulation and S y.) tal data, vide	·	nplete description doe	es not appear in this b	oox, please go to the e	nd of the form to
Remote 2A	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
view it in its entirety	of Modulation and S y.) tal data, vide	·	Inplete description doe	es not appear in this b	oox, please go to the e	nd of the form to
Remote 2A	14000 14500	Т	Horizontal and Vertical	405KG7W	52.6	32.63

E50. Descriptio view it in its entire	n of Modulation arty.)	nd Services (If	the complete description do	oes not appear in the	nis box, please go	to the end of the form	ı to
qpsk, dig	ital data, v	ideo, voice					
Remote 2A	14000 14500	Т	Horizontal and Vertical	8M00G7W	52.6	19.6	
view it in its entire	n of Modulation anty.)	· 	the complete description do	oes not appear in tl	nis box, please go	to the end of the form	n to
Remote 3A	14000 14500	Т	Horizontal and Vertical	405KG7W	55.1	35.1	
view it in its entire	n of Modulation and ty.)	· 	the complete description do	pes not appear in the	nis box, please go	to the end of the form	n to
Remote 3A	14000 14500	Т	Horizontal and Vertical	8M00G7W	55.1	22.1	

E50. Description of 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.)

qpsk, digital data, video, voice

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)
HUB-A		11700 12200	10.0/ 143.0	104.0	8.8	254.0	8.8	0.0
		11700 12200	10.0/ 143.0	104.0	8.8	254.0	10.0	0.0
		11700 12200	10.0/ 143.0	104.0	8.8	254.0	10.0	0.0
		14000 14500	10.0/ 143.0	104.0	8.8	254.0	10.0	-13.6
Remote 1A		11700 12200	60.0/ 143.0	0.0	5.0	0.0	5.0	0.0
		14000 14500	60.0/ 143.0	0.0	5.0	0.0	5.0	-2.5
Remote 2A		14000 14500	60.0/ 143.0	0.0	5.0	0.0	5.0	-2.5

Remote 3A	11700 12200	60.0/ 143.0	0.0	5.0	0.0	5.0	0.0
	14000 14500	60.0/ 143.0	0.0	5.0	0.0	5.0	-2.5

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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