Approved by OMB 3060–0678

Date & Time Filed: Oct 18 2012 9:00:48:080PM File Number: SES–MOD–INTR2012–02441

FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD – MAIN FORM	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: Modification of license to add Intellian V60 and V80 Ku ESVs

1–8. Legal	Name of App	olicant		
	Name:	Harris CapRock Communications, Inc.	Phone Number:	832–668–2751
	DBA Name:		Fax Number:	832–668–2780
	Street:	4400 S. Sam Houston Parkway Ea	E-Mail:	esands@caprock.com
	City:	Houston	State:	ТХ
	Country:	USA	Zipcode:	77048 –
	Attention:	Ms EllenAnn Sands		

Name:	Raul Magallanes	Phone Number:	281-317-1397
Company:	The Law Office of Raul Magallanes, PLLC	Fax Number:	281 271 8085
Street:	PO Box 1213	E-Mail:	raul@rmtelecomlaw.com
City:	Houston	State:	TX
Country:	USA	Zipcode:	77549-
Attention:	Raul Magallanes	Relationship:	Legal Counsel

CLASSIFICATION OF FILING

17. Choose the button next to the	
classification that applies to this filing for	(N/A) b1. Application for License of New Station
both questions a. and b. Choose only one	(N/A) b2. Application for Registration of New Domestic Receive–Only Station
for 17a and only one for 17b.	b 3. Amendment to a Pending Application
 a1. Earth Station a2. Space Station 	 b4. Modification of License or Registration b5. Assignment of License or Registration b6. Transfer of Control of License or Registration 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 (N/A) b10. Other (Please specify) (N/A) 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) b12. Application for Database Entry b13. Amendment to a Pending Database Entry b14. Modification of Database Entry
17c. Is a fee submitted with this application	on?
11	159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).
Governmental Entity Noncomme	-
Other(please explain): DA 12–1673	
17d.	
Fee Classification CGX – Fixed Satellite T Station	Fransmit/Receive Earth

18. If this filing is in reference to an existing station, enter:	19. If this filing is an amendment to a pending ap modification please enter only the file number:	pplication enter both fields, if this filing is a
(a) Call sign of station: E060157	(a) Date pending application was filed:	(b) File number: SESMOD2012021300166

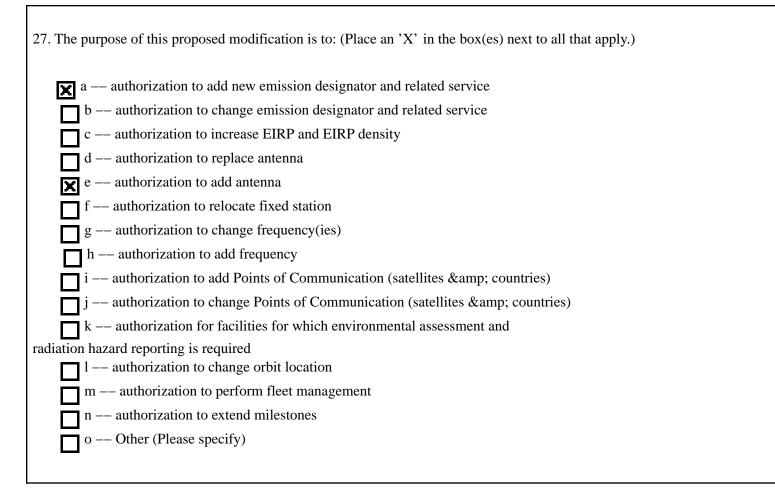
TYPE OF SERVICE

on applicant, check all that apply. icensed satellites U.S. licensed satellites ctions regarding Sec. 214 filings. Choose one. Are these Network N/A
1

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
• e. Geostationary Space Station
o f. Non–Geostationary Space Station
• g. Other (please specify) ESV
26. TYPE OF EARTH STATION FACILITY:
Transmit/Receive Transmit-Only Receive-Only N/A
"For Space Station applications, select N/A."

PURPOSE OF MODIFICATION



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.	● Yes ● No Exhibit A					
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.	iutic	al en	rou	te or		
29. Is the applicant a foreign government or the representative of any foreign government?	0	Yes	۲	No		
30. Is the applicant an alien or the representative of an alien?	0	Yes	0	No	۲	N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	0	Yes	0	No	۲	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?	0	Yes	0	No	۲	N/A

33. Is the applicant a corporation directly or indirectly controlled by any other corporation of which more than	0
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?	

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 Exhibit B 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 No ■

Yes 🔿 No 💿 N/A

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.	• Yes	O 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.

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 No

Yes

42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, what administration has coordinated or is in the process of coordinating the space station? In the Permitted List

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.)

Modification of license to add Intellian V60 and V80 Ku ESVs

Report

43a. Geographic Service Rule Certification By selecting A, the undersigned certifies that the applicant is not subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25.	● A
By selecting B, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will comply with such requirements.	О ^В
By selecting C, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will not comply with such requirements because it is not feasible as a technical matter to do so, or that, while technically feasible, such services would require so many compromises in satellite design and operation as to make it economically unreasonable. A narrative description and technical analysis demonstrating this claim are attached.	O C

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)	
45. Name of Person Signing	46. Title of Person Signing
EllenAnn Sands	Senior Counsel
>	
(U.S. Code, Title 18, Section 1001), AND/OR	M ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT REVOCATION OF ANY STATION AUTHORIZATION R 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 St	tation Site					
E1: Site Identifier:	Intellian V60	E5. Call Sign:				
E2: Contact Name	Alan Frost	E6. Phone Number:	832-668-2753			
E3. Street:	4400 Sam Houston Pkwy	E7. City:	Houston			
		E8. County:	Harris			
E4. State	TX	E9. Zip Code	77048			
E10. Area of Operat	tion:	Gulf of Mexico, Atlantic Ocean, Pacific Ocean, Caribbean Sea, US Waterways				
E11. Latitude:	0 °0 '0.0 "N					
E12. Longitude:	0 °0 '0.0 "W					
E13. Lat/Lon Coord	linates are:	O NAD-27	● NAD-83	O N/A		
E14. Site Elevation	(AMSL):	0.0 meters				

15. If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with geostationary satellites, do(roposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demons y the manufacturer's qualification measurement? If NO, provide as a technical analysis showing compliance wo-degree spacing policy.	trated Yes	● ^{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.	• Yes	0	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as Exhibit D	0	Yes	۲	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	۲	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.	0	Yes	۲	No

POINTS OF COMMUNICATION

Satellite Name: OTHER OTHER If you selected OTHER, please enter the following:					
E21. Common Name: G25	E22. ITU Name: USASAT24S /USASAT35M				
E23. Orbit Location: 93.1WL	E24. Country: USA				
POINTS OF COMMUNICATION (Destination Points)					
E25. Site Identifier:					

E26. Common Name:	E27. Country:
	127. County.

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi at GHz)
Intellian V60	Inel 60cm	500	Intellian Technologies	Intellian V60	0.6	35.8 dBi at 11850
Intellian V60	Inel 60cm	500	Intellian Technologies	Intellian V60	0.6	38.5 dBi at 14250

Id	Diameter		· · · ·	Height Above	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
Inel 60cm	0.6/0.0	0.0	0.0	0.0	4.0	0.0	44.52

FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
Inel 60cm	11700 12200	R	Horizontal and Vertical	2M30G7W	0.0	0.0

E50. Modulat entirety.)	ion and Services (If the complete de	escription does not appear	in this box, please	go to the end of th	e form to view it in its
Digital						
Inel 60cm	14000 14500	Т	Horizontal and Vertical	3M00G7W	44.29	15.5
E50. Modulat entirety.) Digital	ion and Services (If the complete de	escription does not appear	in this box, please	go to the end of th	e form to view it in its
Inel 60cm	14000 14500	Т	Horizontal and Vertical	567KG7W	37.22	15.71
E50. Modulat entirety.)	ion and Services (If the complete de	escription does not appear	in this box, please	go to the end of th	he form to view it in its
Digital						

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/West ern 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)
Inel 60cm	Geostationary	11700 12200	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	14000 14500	0.0/0.0	0.0	5.0	0.0	5.0	-32.7
REMOTE CC	NTROL POIN	T LOCATION						·
	ign use enter the calls ich this application	•	•	832-	. Phone Number -668–2753			
E62. Street 4400 S. San	Address n Houston Pwky	E		- I				
E63. City Houston			E68. County Harris	/		E67/68. State/Country TX/ US/		E64. Zip Code 77048

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

Location of Earth St	tation Site					
E1: Site Identifier:	Intellian V80	E5. Call Sign:				
E2: Contact Name	Alan Frost	E6. Phone Number:	832-668-2753			
E3. Street:	4400 S. Sam Houston Pkwy E	E7. City:	Houston			
		E8. County:	Harris			
E4. State	ТХ	E9. Zip Code	77048			
E10. Area of Opera	tion:	Gulf of Mexico, Atlantic Ocean, Pacific Ocean, Caribbean Sea, US Waterways				
	0.00.10.0."N					
E11. Latitude:	0 °0 '0.0 "N					
E12. Longitude:	0 ° 0 ' 0.0 "W					
E13. Lat/Lon Coord	dinates are:	ONAD-27	● NAD-83	O ^{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.	O Yes	● ^{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.	• Yes	O No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as Exhibit F	0	Yes	۲	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	۲	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.	0	Yes	۲	No

POINTS OF COMMUNICATION

Satellite Name: OTHER OTHER	If you selected OTHER, please en	ter the following:
E21. Common Name: G25		E22. ITU Name: USAT24S / USASAT35M
E23. Orbit Location: 93.1 WL		E24. Country: USA

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 Gain Transmint and/or Recieve (dBi at GHz)
Intellian V80	Inte 83cm	500	Intellian	Intellian V80	0.83	38.3 dBi at 12200
Intellian V80	Inte 83cm	500	Intellian	Intellian V80	0.83	39.6 dBi at 14250

Id	Diameter		· · · ·	Height Above	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
Inte 83cm	0.0/0.0	0.0	0.0	0.0	8.0	0.0	48.63

FREQUENCY

E28. Antenna Id		E45. T/R Mode		Designator	EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
Inte 83cm	11700 12200	R	Horizontal and Vertical	2M30G7W	0.0	0.0

E50. Modula entirety.)	ation and Services (If the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
Digital						
Inte 83cm	14000 14500	Т	Horizontal and Vertical	1M50G7W	44.78	19.33
entirety.) Digital	-					
Inte 83cm	14000 14500	Т	Horizontal and Vertical	284KG7W	37.8	19.28
E50. Modula entirety.)	ation and Services (If the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
Digital	-					

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/West ern 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)
Inte 83cm	Geostationary	11700 12200	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	14000 14500	0.0/0.0	0.0	5.0	0.0	5.0	-30.56
REMOTE CC	DNTROL POIN	T LOCATION					•	
E61. Call SignE66. Phone NumberE030279832-668-2783NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.E66. Phone Number								
E62. Street 4400 S. San	Address n Houston Pkwy	E.		I				
E63. City Houston			E68. County Harris	1		E67/68. State/Country TX/ USA	A	E64. Zip Code 77048

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