Date & Time Filed: May 9 2012 8:17:59:540PM File Number: SES-MOD-INTR2012-01199

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 Applicant
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Name: Harris CapRock Communications, **Phone Number:** 832–668–2751

Inc.

**DBA Fax Number:** 832–668–2780

Name:

Street: 4400 S. Sam Houston Parkway Ea E–Mail: esands@caprock.com

City: Houston State: TX

Country: USA Zipcode: 77048 –

**Attention:** Ms EllenAnn Sands

9–16. Name of Contact Representative

Name: Raul Magallanes Phone Number: 281–317–1397

**Company:** The Law Office of Raul **Fax Number:** 281 271 8085

Magallanes, PLLC

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 both questions a. and b. Choose only one for 17a and only one for 17b.	(N/A) b1. Application for License of New Station (N/A) b2. Application for Registration of New Domestic Receive—Only Station b3. Amendment to a Pending Application
a1. Earth Station a2. Space Station	<ul> <li>b4. Modification of License or Registration</li> <li>b5. Assignment of License or Registration</li> <li>b6. Transfer of Control of License or Registration</li> <li>b7. Notification of Minor Modification</li> <li>(N/A) b8. Application for License of New Receive—Only Station Using Non—U.S. Licensed Satellite</li> <li>(N/A) b9. Letter of Intent to Use Non—U.S. Licensed Satellite to Provide Service in the United States</li> <li>(N/A) b10. Other (Please specify)</li> <li>(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</li> <li>(N/A) b12. Application for Database Entry</li> <li>b13. Amendment to a Pending Database Entry Application</li> <li>b14. Modification of Database Entry</li> </ul>
17c. Is a fee submitted with this application of the submitted with th	159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).
17d.  Fee Classification CGX – Fixed Satellite T Station	Transmit/Receive Earth

18. If this filing is in reference to an existing station, enter:	19. If this filing is an amendment to a pending apmodification 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

20. NATURE OF SERVICE: This filing is for an authorization to provide of	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)  ESV	
21. STATUS: Choose the button next to the applicable status. Choose 2	22. If earth station applicant, check all that apply.
only one.	■ Using U.S. licensed satellites
L Common Carrier Non-Common Carrier	Using Non–U.S. licensed satellites
23. If applicant is providing INTERNATIONAL COMMON CARRIER ser facilities:	vice, see instructions regarding Sec. 214 filings. Choose one. Are these
Connected to a Public Switched Network Not connected to a Public Switched Network	ublic Switched Network N/A

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: (Please specify additional frequencies in an attachment)
THE OF STATION
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>b.</b> Temporary–Fixed Earth Station
o c. 12/14 GHz VSAT Network
o d. Mobile Earth Station
• e. Geostationary Space Station
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

27. The purpose of this proposed modification is to: (Place an 'X' in the box(es) next to all that apply.)
a — authorization to add new emission designator and related service
b — authorization to change emission designator and related service
c — authorization to increase EIRP and EIRP density
d — authorization to replace antenna
e — authorization to add antenna
f — authorization to relocate fixed station
g — authorization to change frequency(ies)
h — authorization to add frequency
i — authorization to add Points of Communication (satellites & Double
j — authorization to change Points of Communication (satellites & Double of Communication (satellites & Doub
k — authorization for facilities for which environmental assessment and
radiation hazard reporting is required
1 — authorization to change orbit location
m — authorization to perform fleet management
n — authorization to extend milestones
o — Other (Please specify)

### **ENVIRONMENTAL POLICY**

under the laws of a foreign country?

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.		Exhi	bit A			
ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aeronatical fixed radio station services are not required to respond to Items 30–34.	autio	cal en	rou	te or	,	
29. Is the applicant a foreign government or the representative of any foreign government?	0	Yes	•	No		
30. Is the applicant an alien or the representative of an alien?	0	Yes	0	No	•	N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	٥	Yes	0	No	•	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	0	Yes	0	No	•	N/A

O Yes O No

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

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 O	No 😝 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.	Exhibit B	
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	<b>⊚</b> 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	<b>⊚</b> 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	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	<b>⊘</b> 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	O 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? In the Permitted List	vhat administr	ration has
43. Description. (Summarize the nature of the application and the services to be provided). (If the complete description, please go to the end of the form to view it in its entirety.)	on does not a	ppear in this
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.	<b>●</b> 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.	O B
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.	<b>o</b> c

#### **CERTIFICATION**

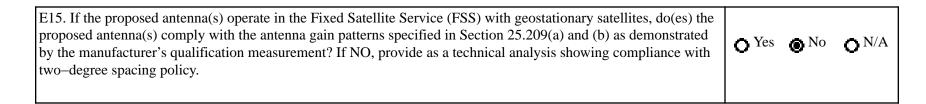
The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. The 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.

O Individual		
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 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 St	ation 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:	<b>o</b> NAD-27	● NAD-83	O N/A		
E14. Site Elevation	(AMSL):	0.0 meters				



E16. If the proposed antenna(s) do not operate in the Fixed Satellite S Satellite Service (FSS) with non–geostationary satellites, do(es) the program patterns specified in Section 25.209(a2) and (b) as demonstrated measurements?	roposed antenna(s) comply with the antenna	O Yes O No	● N/A
E17. Is the facility operated by remote control? If YES, provide the loop point.	cation and telephone number of the control	Yes	No
E18. Is frequency coordination required? If YES, attach a frequency co	oordination report as Exhibit D	O Yes	No
E19. Is coordination with another country required? If YES, attach the coordination contours as	e name of the country(ies) and plot of	O Yes 💿	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25. have you attached a copy of a completed FCC Form 854 and/or the FA the structure to aviation?  FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILI APPLICATION.	AA's study regarding the potential hazard of	O Yes	No
POINTS OF COMMUNICATION			
Satellite Name: OTHER   OTHER   If you selected OTHER, please	enter the following:		
E21. Common Name: G25	E22. ITU Name: USASAT24S /USASAT3	35M	
E23. Orbit Location: 93.1WL	E24. Country: USA		
POINTS OF COMMUNICATION (Destination Points)	1		
E25. Site Identifier:			

E26. Common Name:	E27. Country:
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# 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 atGHz)
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

- 1	Id	Diameter		,	Height Above Ground Level	Input Power at antenna flange	0	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		Designator	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. Modulatio entirety.)	n and Services (I	f the complete d	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	-22.3
entirety.)  Digital						
Inel 60cm	14000 14500	Т	Horizontal and Vertical	567KG7W	37.22	-22.3
E50. Modulatio entirety.)  Digital	n and Services (I	f the complete d	escription does not appear	in this box, please	go to the end of th	e form to view it in its

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/West ern Limit	Station Azimuth Angle	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 CONTROL POINT LOCATION

E61. Call Sign E030279 NOTE: Please enter the callsign of the contro callsign for which this application is being filed.	E66. Phone Number 832–668–2753			
E62. Street Address 4400 S. Sam Houston Pwky E				
E63. City	E68. County		E67/68.	E64. Zip Code
Houston	Harris		State/Country TX/ USA	77048

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

Location of Earth St	ation 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	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:	NAD-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.	<b>O</b> Yes	<b>●</b> 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 lopoint.	Yes	O No	
E18. Is frequency coordination required? If YES, attach a frequency co	oordination report as Exhibit F	O Yes	<b>⊚</b> No
E19. Is coordination with another country required? If YES, attach the coordination contours as	O Yes	No	
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25 have you attached a copy of a completed FCC Form 854 and/or the FA the structure to aviation?  FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILI APPLICATION.	O Yes	No	
POINTS OF COMMUNICATION		•	
Satellite Name: OTHER   OTHER   If you selected OTHER, please	enter the following:		
E21. Common Name: G25	Л		
E23. Orbit Location: 93.1 WL			
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	Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)
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

E. Id	1	Diameter		` ′	Height Above	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
In	ite 83cm	0.0/0.0	0.0	0.0	0.0	8.0	0.0	48.63

# FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			E48. Maximum 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 d	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	-20.13
entirety.)  Digital						
Inte 83cm	14000 14500	Т	Horizontal and Vertical	284KG7W	37.8	-20.13
E50. Modula entirety.)  Digital		(If the complete d	escription does not appear	in this box, please	go to the end of the	ne form to view it in its

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/West ern Limit	Station Azimuth Angle	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 CONTROL POINT LOCATION

E61. Call Sign E030279 NOTE: Please enter the callsign of the contro callsign for which this application is being filed.	E66. Phone Number 832–668–2783			
E62. Street Address 4400 S. Sam Houston Pkwy E.				
E63. City Houston	E68. County Harris		E67/68. State/Country TX/ USA	E64. Zip Code 77048

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