

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:  
60-day STA for Permitted List Authority (E050332)

1. Applicant

**Name:** Harris CapRock Communications, Inc. **Phone Number:** 832-668-2753

**DBA Name:** **Fax Number:** 832-668-2780

**Street:** 4400 S. Sam Houston Parkway Ea **E-Mail:** ellenann.sands@harris.com

**City:** Houston **State:** TX

**Country:** USA **Zipcode:** 77048

**Attention:** Ms. EllenAnn Sands



File # SES-STA-2016-0112-00037  
 Call Sign E050332 Grant Date 1-28-16  
 (or other identifier)  
 Term Dates From: 1-28-16 To: 3-28-16  
 Approved: Paul E. Hayes

**2. Contact**

**Name:** Carlos Nalda      **Phone Number:** 571-332-5626  
**Company:** LMI Advisors      **Fax Number:**  
**Street:** 8601 James Creek Drive      **E-Mail:** cnalda@lmiadvisors.com  
**City:** Springfield      **State:** VA  
**Country:** USA      **Zipcode:** 22152 -  
**Attention:**      **Relationship:** Other

(If your application is related to an application filed with the Commission, enter either the file number or the IB Submission ID of the related application. Please enter only one.)

3. Reference File Number or Submission ID

4a. 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):

4b. Fee Classification    CGX - Fixed Satellite Transmit/Receive Earth Station

5. Type Request

Use Prior to Grant       Change Station Location       Other

6. Requested Use Prior Date  
01/20/2016

7. City Neptune Spar      8. Latitude  
(dd mm ss.s h) 29 9 48.4 N

9. State	10. Longitude (dd mm ss.s h) 87 59 15.9 W
11. Please supply any need attachments. Attachment 1: Narrative Statement      Attachment 2: Mod App      Attachment 3: Coordination Report	
12. Description. (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.) <div style="border: 1px solid black; padding: 5px;">Harris CapRock seeks a 60-day special temporary authorization to operate its licensed Sea Tel Model 9797 C-band terminal on the Neptune Spar while communicating with satellites on the Commission's Permitted Space Station List.</div>	
13. 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 <input checked="" type="radio"/> No <input type="radio"/>	
14. Name of Person Signing EllenAnn Sands	15. Title of Person Signing Legal Counsel
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).	

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**THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104-13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.**

# FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for  
**CAPROCK COMMUNICATIONS CORP.**  
**NEPTUNE, GM**  
**(E050332)**  
**Satellite Earth Station**

Prepared By:  
COMSEARCH  
19700 Janelia Farm Boulevard  
Ashburn, VA 20147  
January 07, 2016

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## 1. CONCLUSIONS

An interference study considering all existing, proposed and prior coordinated microwave facilities within the coordination contours of the proposed earth station demonstrates that this site will operate satisfactorily with the common carrier microwave environment. Further, there will be no restrictions of its operation due to interference considerations.

## **2. SUMMARY OF RESULTS**

A number of great circle interference cases were identified during the interference study of the proposed earth station. Each of the cases, which exceeded the interference objective on a line-of-sight basis, was profiled and the propagation losses estimated using NBS TN101 (Revised) techniques. The losses were found to be sufficient to reduce the signal levels to acceptable magnitudes in every case.



### **3. SUPPLEMENTAL SHOWING**

Pursuant to Part 25.203(c) of the FCC Rules and Regulations, the satellite earth station proposed in this application was coordinated by Comsearch using computer techniques and in accordance with Part 25 of the FCC Rules and Regulations.

Coordination data for this earth station was sent to the below listed carriers with a letter dated 12/15/2015.

Company  
RigNet SatCom, Inc.

## **4. EARTH STATION COORDINATION DATA**

This section presents the data pertinent to frequency coordination of the proposed earth station that was circulated to all carriers within its coordination contours.

# COMSEARCH

## Earth Station Data Sheet

19700 Janelia Farm Boulevard, Ashburn, VA 20147  
(703)726-5500 <http://www.comsearch.com>

Date: 01/07/2016  
Job Number: 151215COMSGE14

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### Administrative Information

Status ENGINEER PROPOSAL  
Call Sign E050332  
Licensee Code CAROCO  
Licensee Name CAPROCK COMMUNICATIONS CORP.

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### Site Information NEPTUNE, GM

Venue Name  
Latitude (NAD 83) 29° 9' 48.4" N  
Longitude (NAD 83) 87° 59' 15.9" W  
Climate Zone A  
Rain Zone 1  
Ground Elevation (AMSL) 0.0 m / 0.0 ft

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### Link Information

Satellite Type Geostationary  
Mode TR - Transmit-Receive  
Modulation Digital  
Satellite Arc 60° W to 143° West Longitude  
Azimuth Range 132.5° to 251.2°  
Corresponding Elevation Angles 44.2° / 22.0°  
Antenna Centerline (AGL) 60.96 m / 200.0 ft

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### Antenna Information

Manufacturer  
Model  
Gain / Diameter  
3-dB / 15-dB Beamwidth

#### Receive - FCC32

Seatel  
9797  
38.5 dBi / 2.4 m  
1.00° / 2.00°

#### Transmit - FCC32

Seatel  
9797  
41.7 dBi / 2.4 m  
1.20° / 2.40°

Max Available RF Power (dBW/4 kHz)  
(dBW/MHz)

-22.1  
1.9

Maximum EIRP (dBW/4 kHz)  
(dBW/MHz)

19.6  
43.6

Interference Objectives: Long Term -156.0 dBW/MHz 20%  
Short Term -146.0 dBW/MHz 0.01%

-151.8 dBW/4 kHz 20%  
-130.8 dBW/4 kHz 0.0025%

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### Frequency Information

Emission / Frequency Range (MHz)

#### Receive 4.0 GHz

450KG7W - 4M47G7W / 3700.0 - 4200.0

#### Transmit 6.1 GHz

450KG7W - 4M47G7W / 5925.0 - 6425.0

Max Great Circle Coordination Distance  
Precipitation Scatter Contour Radius

344.7 km / 214.2 mi  
574.8 km / 357.1 mi

133.2 km / 82.8 mi  
100.0 km / 62.1 mi

# COMSEARCH

## Earth Station Data Sheet

19700 Janelia Farm Boulevard, Ashburn, VA 20147  
(703)726-5500 <http://www.comsearch.com>

### Coordination Values

### NEPTUNE, GM

Licensee Name	CAPROCK COMMUNICATIONS CORP.				
Latitude (NAD 83)	29° 9' 48.4" N				
Longitude (NAD 83)	87° 59' 15.9" W				
Ground Elevation (AMSL)	0.0 m / 0.0 ft				
Antenna Centerline (AGL)	60.96 m / 200.0 ft				
Antenna Model	SeaTel 2.4 meter				
Antenna Mode	Receive 4.0 GHz		Transmit 6.1 GHz		
Interference Objectives: Long Term	-156.0 dBW/MHz	20%	-151.8 dBW/4 kHz	20%	
Short Term	-146.0 dBW/MHz	0.01%	-130.8 dBW/4 kHz	0.0025%	
Max Available RF Power			-22.1 (dBW/4 kHz)		

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 4.0 GHz		Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	107.42	-10.00	285.28	-10.00	111.21
5	0.00	112.01	-10.00	285.28	-10.00	111.21
10	0.00	112.66	-10.00	285.28	-10.00	111.21
15	0.00	109.33	-10.00	285.28	-10.00	111.21
20	0.00	105.93	-10.00	285.28	-10.00	111.21
25	0.00	102.46	-10.00	285.28	-10.00	111.21
30	0.00	98.94	-10.00	285.28	-10.00	111.21
35	0.00	95.38	-10.00	285.28	-10.00	111.21
40	0.00	91.81	-10.00	285.28	-10.00	111.21
45	0.00	88.22	-10.00	285.28	-10.00	111.21
50	0.00	84.65	-10.00	285.28	-10.00	111.21
55	0.00	81.09	-10.00	285.28	-10.00	111.21
60	0.00	77.57	-10.00	285.28	-10.00	111.21
65	0.00	74.10	-10.00	285.28	-10.00	111.21
70	0.00	70.69	-10.00	285.28	-10.00	111.21
75	0.00	67.37	-10.00	285.28	-10.00	111.21
80	0.00	64.15	-10.00	285.28	-10.00	111.21
85	0.00	61.06	-10.00	285.28	-10.00	111.21
90	0.00	58.12	-10.00	285.28	-10.00	111.21
95	0.00	55.37	-10.00	285.28	-10.00	111.21
100	0.00	52.83	-10.00	285.28	-10.00	111.21
105	0.00	50.55	-10.00	285.28	-10.00	111.21
110	0.00	48.56	-10.00	285.28	-10.00	111.21
115	0.00	46.90	-9.78	286.69	-9.78	111.77
120	0.00	45.62	-9.48	288.62	-9.48	112.53
125	0.00	44.74	-9.27	289.99	-9.27	113.06
130	0.00	44.29	-9.16	290.69	-9.16	113.34
135	0.00	44.29	-9.16	290.70	-9.16	113.34
140	0.00	44.73	-9.27	289.99	-9.27	113.07
145	0.00	45.61	-9.48	288.64	-9.48	112.53
150	0.00	46.89	-9.78	286.70	-9.78	111.77
155	0.00	48.54	-10.00	285.28	-10.00	111.21
160	0.00	50.53	-10.00	285.28	-10.00	111.21
165	0.00	52.73	-10.00	285.28	-10.00	111.21
170	0.00	54.50	-10.00	285.28	-10.00	111.21
175	0.00	55.61	-10.00	285.28	-10.00	111.21
180	0.00	55.98	-10.00	285.28	-10.00	111.21
185	0.00	55.61	-10.00	285.28	-10.00	111.21

# COMSEARCH

## Earth Station Data Sheet

19700 Janelia Farm Boulevard, Ashburn, VA 20147  
(703)726-5500 <http://www.comsearch.com>

### Coordination Values

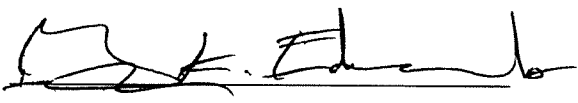
### NEPTUNE, GM

Licensee Name	CAPROCK COMMUNICATIONS CORP.		
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Antenna Model	SeaTel 2.4 meter		
Antenna Mode	Receive 4.0 GHz	Transmit 6.1 GHz	
Interference Objectives: Long Term	-156.0 dBW/MHz 20%	-151.8 dBW/4 kHz	20%
Short Term	-146.0 dBW/MHz 0.01%	-130.8 dBW/4 kHz	0.0025%
Max Available RF Power		-22.1 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 4.0 GHz		Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	54.50	-10.00	285.28	-10.00	111.21
195	0.00	52.73	-10.00	285.28	-10.00	111.21
200	0.00	50.41	-10.00	285.28	-10.00	111.21
205	0.00	47.64	-9.95	285.61	-9.95	111.34
210	0.00	44.50	-9.21	290.36	-9.21	113.21
215	0.00	41.08	-8.34	296.05	-8.34	115.42
220	0.00	37.44	-7.33	302.81	-7.33	118.01
225	0.00	33.67	-6.18	310.74	-6.18	120.99
230	0.00	30.15	-4.98	319.81	-4.98	124.12
235	0.00	27.05	-3.80	328.26	-3.80	127.23
240	0.00	24.53	-2.74	336.00	-2.74	130.05
245	0.00	22.79	-1.94	341.91	-1.94	132.19
250	0.00	22.02	-1.57	344.73	-1.57	133.20
255	0.00	22.30	-1.71	343.68	-1.71	132.82
260	0.00	23.61	-2.33	339.07	-2.33	131.16
265	0.00	25.79	-3.29	332.02	-3.29	128.60
270	0.00	28.64	-4.43	323.78	-4.43	125.59
275	0.00	31.98	-5.62	315.27	-5.62	122.45
280	0.00	35.68	-6.81	306.38	-6.81	119.36
285	0.00	39.62	-7.95	298.66	-7.95	116.43
290	0.00	43.75	-9.03	291.55	-9.03	113.68
295	0.00	48.02	-10.00	285.28	-10.00	111.21
300	0.00	52.38	-10.00	285.28	-10.00	111.21
305	0.00	56.82	-10.00	285.28	-10.00	111.21
310	0.00	61.32	-10.00	285.28	-10.00	111.21
315	0.00	65.86	-10.00	285.28	-10.00	111.21
320	0.00	70.44	-10.00	285.28	-10.00	111.21
325	0.00	75.04	-10.00	285.28	-10.00	111.21
330	0.00	79.66	-10.00	285.28	-10.00	111.21
335	0.00	84.28	-10.00	285.28	-10.00	111.21
340	0.00	88.92	-10.00	285.28	-10.00	111.21
345	0.00	93.56	-10.00	285.28	-10.00	111.21
350	0.00	98.19	-10.00	285.28	-10.00	111.21
355	0.00	102.81	-10.00	285.28	-10.00	111.21

## 5. CERTIFICATION

I HEREBY CERTIFY THAT I AM THE TECHNICALLY QUALIFIED PERSON RESPONSIBLE FOR THE PREPARATION OF THE FREQUENCY COORDINATION DATA CONTAINED IN THIS APPLICATION, THAT I AM FAMILIAR WITH PARTS 101 AND 25 OF THE FCC RULES AND REGULATIONS, THAT I HAVE EITHER PREPARED OR REVIEWED THE FREQUENCY COORDINATION DATA SUBMITTED WITH THIS APPLICATION, AND THAT IT IS COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BY: 

Gary K. Edwards  
Senior Manager  
COMSEARCH  
19700 Janelia Farm Boulevard  
Ashburn, VA 20147

DATED: January 07, 2016

Date & Time Filed: Jan 12 2016 12:06:12:383PM  
File Number: SES-MFS-20160112-00008

<b>FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD - MAIN FORM</b>	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 to Add Permitted List as POC (E050332)

1-8. Legal Name of Applicant	
Name: Harris CapRock Communications, Inc.	Phone Number: 832-668-2753
DBA Name:	Fax Number: 832-668-2780
Street: 4400 S. Sam Houston Parkway Ea	E-Mail: ellenann.sands@harris.com
City: Houston	State: TX
Country: USA	Zipcode: 77048 -
Attention: Ms. EllenAnn Sands	

9-16. Name of Contact Representative	
Name: Carlos Nalda	Phone Number: 571-332-5626
Company: LMI Advisors	Fax Number:
Street: 8601 James Creek Drive	E-Mail: cnalda@lmiadvisors.com
City: Springfield	State: VA
Country: USA	Zipcode: 22152-
Attention: Mr. Carlos M. Nalda	Relationship: Other

**CLASSIFICATION OF FILING**

<p>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.</p> <p><input checked="" type="radio"/> a1. Earth Station <input type="radio"/> a2. Space Station</p>	<p>(N/A) b1. Application for License of New Station (N/A) b2. Application for Registration of New Domestic Receive-Only Station <input type="radio"/> b3. Amendment to a Pending Application <input checked="" type="radio"/> b4. Modification of License or Registration b5. Assignment of License or Registration b6. Transfer of Control of License or Registration <input type="radio"/> 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.</p>
--	--

<p>17c. Is a fee submitted with this application?</p> <p><input checked="" type="radio"/> If Yes, complete and attach FCC Form 159.</p> <p>If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114).</p> <p><input type="radio"/> Governmental Entity <input type="radio"/> Noncommercial educational licensee <input type="radio"/> Other (please explain):</p>
---

<p>17d. Fee Classification CGX - Fixed Satellite Transmit/Receive Earth Station</p>
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<p>18. If this filing is in reference to an existing station, enter: (a) Call sign of station: E050332</p>	<p>19. If this filing is an amendment to a pending application enter both fields, if this filing is a modification please enter only the file number: (a) Date pending application was filed:  (b) File number: SESMFS2008120901565</p>
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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 only one.

- Common Carrier  Non-Common Carrier

22. If earth station applicant, check all that apply.

- Using U.S. licensed satellites  
 Using Non-U.S. licensed satellites

23. If applicant is providing INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings. Choose one. Are these facilities:

- Connected to a Public Switched Network  Not connected to a Public 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)

### 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
- f. Non-Geostationary Space Station
- g. Other (please specify)

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 & countries)
- j -- authorization to change Points of Communication (satellites & countries)
- k -- authorization for facilities for which environmental assessment and radiation hazard reporting is required
- l -- authorization to change orbit location
- m -- authorization to perform fleet management
- n -- authorization to extend milestones
- o -- Other (Please specify)

### 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

ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aeronautical en route or



aeronautical fixed radio station services are not required to respond to Items 30-34.

29. Is the applicant a foreign government or the representative of any foreign government?	<input type="radio"/> Yes <input checked="" type="radio"/> No
30. Is the applicant an alien or the representative of an alien?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> 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?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> 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?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> 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.	<input type="radio"/> Yes <input checked="" type="radio"/> 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 explanation of circumstances.	<input type="radio"/> Yes <input checked="" type="radio"/> 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 explanation of circumstances.	<input type="radio"/> Yes <input checked="" type="radio"/> 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	<input type="radio"/> Yes <input checked="" type="radio"/> 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 exhibit, an explanation of the circumstances.	<input type="radio"/> Yes <input checked="" type="radio"/> 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. <i>See 47 CFR 1.2002(b) for the meaning of "party to the application" for these purposes.</i>	<input checked="" type="radio"/> Yes <input type="radio"/> 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.	<input checked="" type="radio"/> Yes <input type="radio"/> No
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? Permitted List	
43. Description. (Summarize the nature of the application and the services to be provided). Harris CapRock seeks to modify its existing C-band fixed earth station license (Call Sign E050332) by adding 'Permitted List' as an authorized point of communication. (See Narrative). Narrative Statement	
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. <input checked="" type="radio"/> 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. <input type="radio"/> 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. <input type="radio"/> 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
- Unincorporated Association
- Partnership
- Corporation
- Governmental Entity
- Other (please specify)

45. Name of Person Signing  
EllenAnn Sands

46. Title of Person Signing  
Legal Counsel

**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:	Neptune Spar	E5. Call Sign:	E050332
E2. Contact Name	NOC	E6. Phone Number:	832-668-2775
E3. Street:	Gulf of Mexico	E7. City:	
E4. State		E8. County:	
E10. Area of Operation:		E9. Zip Code	Gulf of Mexico
E11. Latitude:	29 ° 9 ' 48.4 " N		
E12. Longitude:	87 ° 59 ' 15.9 " W		
E13. Lat/Lon Coordinates are:	<input type="radio"/> NAD-27	<input checked="" type="radio"/> NAD-83	<input type="radio"/> 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. | <input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> 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?                     | <input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A |
| E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.   | <input checked="" type="radio"/> Yes <input type="radio"/> No                           |
| E18. Is frequency coordination required? If YES, attach a frequency coordination report as   | <input checked="" type="radio"/> Yes <input type="radio"/> No                           |
| E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as   | <input type="radio"/> Yes <input checked="" type="radio"/> 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?  | <input type="radio"/> Yes <input checked="" type="radio"/> No                           |

**FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.**

**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: Neptune Spar

E26. Common Name:

E27. Country: USA

**ANTENNA**

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size	E41/42. Antenna Gain Transmint and/or Recieve(____dBi at ____GHz)		
Neptune Spar	Seatel9797	1	Sea Tel	9797	2.4	0.0 dBi at		
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)
Seatel9797	0.0/0.0		31.4	31.4	0.0	6.84	0.0	50.05

**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)
E50. Modulation and Services						

**FREQUENCY COORDINATION**

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/Western 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)
Seatel9797	Geostationary	3700 4200	60.0/143.0	132.5	44.2	251.2	22.0	0.0
	Geostationary	5925 6425	60.0/143.0	132.5	44.2	251.2	22.0	-23.67

**REMOTE CONTROL POINT LOCATION**

E61. Call Sign E030253			E66. Phone Number 832-668-2775		
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.					
E62. Street Address 4400 S. Sam Houston Pkwy. E					
E63. City Houston		E68. County Harris		E67/68. State/Country TX/ USA	E64. Zip Code 77046

**FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT**

The public reporting for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD-PERM, Paperwork Reduction Project (3060-0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to PRA@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember - You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to

provide you with this notice. This collection has been assigned an OMB control number of 3060-0678.

THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104-13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of

Application of Harris CapRock  
Communications, Inc. for Modification of  
Fixed Earth Station License to Add  
Permitted List Authority

)  
)  
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)  
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File No:

Call Sign: E050332

**Earth Station License Modification Application**

By this application, Harris CapRock Communications, Inc. ("Harris CapRock") seeks to modify its existing C-band fixed earth station license (Call Sign E050332) by adding "Permitted List" as an authorized point of communication for the earth station terminal. The subject terminal – a Sea Tel Model 9797– is located on the Neptune Spar (Viosca Knoll 826), an offshore oil platform located in the Gulf of Mexico (29° 9' 48.4" N, 87° 59' 15.9" W). Presently under the license, the terminal is authorized to communicate with certain satellite points of communication and this modification seeks to expand communications to include satellites on the Commission's Permitted Space Station List. The requested modification will afford Harris CapRock additional operational flexibility and allow it to obtain more reliable and cost-effective satellite services on the offshore platform, where reliable broadband connectivity is critical for operational, safety and other reasons.

In seeking Permitted List authority, Harris CapRock requests authority to operate the earth station terminal with any U.S. licensed satellite and non-U.S. licensed satellite on the Commission's Permitted Space Station List. Accordingly, Harris CapRock also seeks to widen the range of satellite arc currently in the license to 60° W.L. to 143° W.L., which will slightly modify the maximum EIRP towards the horizon value, as well as the azimuth and elevation angles, as indicated in the Schedule B. Harris CapRock certifies that the remaining technical information in its earth station license and associated

application<sup>1</sup> remains unchanged.

A frequency coordination analysis was conducted by Comsearch and demonstrates that Harris CapRock may operate the Sea Tel 9797 earth station terminal over the proposed satellite arc range and will not cause harmful interference. Comsearch sent a coordination notice to existing licensees in the band within relevant coordination distances and no objections have been received from incumbent licensees.<sup>2</sup> Accordingly, Harris CapRock's proposed operations are fully compatible with other FCC-licensed operations. The requested modification will serve the public interest by enhancing Harris CapRock's satellite communication capabilities on the Neptune Spar, thereby improving the critical services its provides to crew members for business and emergency operations.

Harris CapRock respectfully requests that the Commission grant its application to modify its existing C-band earth station license, Call Sign E050332, by adding Permitted List authority to allow the terminal to communicate with satellites on the Commission's Permitted Space Station List.

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<sup>1</sup> See File No. SES-MFS-20081209-01565 (Call Sign E050332).

<sup>2</sup> Please note that potentially affected licenses may respond to Comsearch by January 19, 2016, but Comsearch's analysis suggests that there will be no impact to such licensees by the operations proposed herein. To the extent that a potentially affected licensee contacts Comsearch regarding the proposed operations, Harris CapRock will inform the Commission and amend its application to the extent necessary to address the concerns of the affected licensees.

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of

Application of Harris CapRock Corporation	)	
for a Special Temporary Authorization to	)	File No:
Operate a Fixed Earth Station Terminal with	)	
Permitted List Satellites in the 5.925-6.425	)	Call Sign: E050332
GHz (Earth-to-space) and 3.7-4.2 GHz	)	
(space-to-Earth) Frequency Bands	)	

**Application for Special Temporary Authorization**

Pursuant to Section 25.120 of the Rules and Regulations of the Federal Communications Commission (the "Commission Rules"), 47 C.F.R. § 25.120, Harris CapRock Corporation ("Harris CapRock") seeks a special temporary authorization ("STA") to operate its licensed Sea Tel Model 9797 C-band terminal on the Neptune Spar – an offshore oil platform located in the Gulf of Mexico (29° 9' 48.4" N, 87° 59' 15.9" W) – while communicating with satellites on the Commission's Permitted Space Station List ("Permitted List"). Presently under the license, the terminal is authorized to communicate with certain satellite points of communication in the C-band.

The requested STA will afford Harris CapRock short-term operating authority during the pendency of its concurrently filed modification application<sup>1</sup> to add Permitted List authority. Grant of the requested STA is essential to ensure that there is no lapse in essential satellite-based services to the oil platform in the context of an upcoming change in serving satellite capacity scheduled for late January/early February 2016. Harris CapRock seeks an STA for a period of up to 60 days, commencing no later than January 20, 2016.

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<sup>1</sup> See Application of Harris CapRock Communications, Inc. for Modification of Fixed Earth Station License to Add Permitted List Authority, Call Sign E050332 ("*Modification Application*").

## **I. DISCUSSION**

Harris CapRock requests authority to operate the earth station terminal with U.S. licensed satellite and non-U.S. licensed satellites on the Commission's Permitted Space Station List. Accordingly, Harris CapRock also seeks to widen the range of satellite arc currently in the license to 60° W.L. to 143° W.L., which will slightly modify the maximum EIRP towards the horizon value, as well as the azimuth and elevation angles, as indicated in the modification application. Harris CapRock certifies that the remaining technical information in its earth station license and associated application<sup>2</sup> remains unchanged.

A frequency coordination analysis was conducted by Comsearch and demonstrates that Harris CapRock may operate the Sea Tel 9797 earth station terminal over the proposed arc range without causing harmful interference. Comsearch sent a coordination notice to existing licensees in the band within the relevant coordination distances and no objections have been received from incumbent licensees. Accordingly, Harris CapRock's proposed operations are fully compatible with other FCC-licensed operations.<sup>3</sup> The requested STA will serve the public interest by enhancing Harris CapRock's satellite communication capabilities on the Neptune Spar in the near-term, thereby improving the critical services it provides to crew members for business and emergency operations.

## **III. EXPEDITED CONSIDERATION**

Harris CapRock respectfully requests expedited processing of this STA request under Section 25.120. Section 25.120(a) provides that STA requests should be filed at least three working days prior to the date of commencement of the proposed operations. Here, Harris CapRock seeks to commence operations on or after January 20, 2016.

Pursuant to Section 25.120(b)(3), Harris CapRock is filing for 60-day STA to

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<sup>2</sup> See File No. SES-MFS-20081209-01565 (Call Sign E050332).

<sup>3</sup> Please note that potentially affected licenses may respond to Comsearch by January 19, 2016, but Comsearch's analysis suggests that there will be no impact to such licensees by the operations proposed herein. To the extent that a potentially affected licensee contacts Comsearch regarding the proposed operations, Harris CapRock will inform the Commission and adjust its operations accordingly to address the concerns of the relevant licensees.



ensure proper short-term authorizations during the pendency of its earth station modification application. Section 25.120(b)(3) provides that the Commission may grant STA for a period not to exceed 60 days if it has not placed the STA request on public notice and the applicant plans to file a request for regular authority for the service. Here, Harris CapRock has concurrently filed a request to modify its license to add Permitted List authority.<sup>4</sup>

Due to a change in satellite capacity, Harris CapRock requires near-term use of Permitted List satellites to accommodate the capacity adjustment and ensure there is no lapse in vital satellite communication services. Given the near-term commencement of the proposed operations and that they have been fully coordinated, expedited processing of this STA request is warranted and will ensure properly authorized temporary operations while the Commission reviews Harris CapRock's modification application.

Grant of the requested authority will serve the public interest by allowing the near-term use of the terminal on the Neptune Spar to communicate with Permitted List satellites, which will greatly benefit employees and personnel and accelerate the expansion of C-band satellite communications services. Accordingly, Harris CapRock respectfully submits that the public interest will be served by grant of the requested STA no later than January 20, 2016.

#### **IV. CONCLUSION**

In view of the foregoing, Harris CapRock respectfully requests that the Commission grant its 60-day STA request to allow the Sea Tel 9797 terminal to communicate with satellites on the Permitted List in the C-band on the Neptune Spar no later than January 20, 2016.

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<sup>4</sup> See *Modification Application*.