E160083 SES-STA-20160524-00452 IB2016001163
RigNet SatCom, Inc.

Approved by OMB
3060–0678

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATIONEnter a description of this application to identify it on the main menu:
Request for Special Temporary Authority to operate a C–band T/R earth station prior to license grant

1. Applicant

Name:	RigNet SatCom, Inc.	**Phone Number:**	281–674–0150
DBA Name:		**Fax Number:**	281–674–0101
Street:	1880 S. Dairy Ashford Suite 300	**E–Mail:**	raul.magallanes@rig.net
City:	Houston	**State:**	TX
Country:	USA	**Zipcode:**	77077 –
Attention:	Mr Raul Magallanes		

GRANTED
International Bureau

File # SES-STA-20160524-00452
E160083
Call Sign _____ Grant Date 6-30-16
(or other identifier)
Term Dates
From: 6-30-16 To: 7-30-16
Approved: Paul E Blaes

Applicant: RigNet SatCom, Inc
Call Sign: E160083
File No.: SES-STA-20160524-00452
Special Temporary Authority (STA)

RigNet SatCom, Inc. is granted Special Temporary Authority, for 30 days to operate its fixed earth station (call sign E160083) in the Gulf of Mexico with SES-2 satellite (S2826) at 87°W.L. orbital location to provide communications support in 5925 – 6425 MHz (Earth-to-space) and 3700 – 4200 MHz, (space-to-Earth) on an oil drilling platform under the following conditions:

1. Grant of this STA is without prejudice to any determination that the commission may make regarding pending or future Intelsat License LLC applications.

2. All operations under this grant of STA shall be on an unprotected and non-harmful interference basis and RigNet SatCom, Inc, shall not cause harmful interference to, and shall not claim protection from interference caused to it by, any other lawfully operating radio communication system.

3. In the event of any harmful interference as a result of operations under this grant of STA, RigNet SatCom, Inc, shall cease operations immediately upon notification of such interference and shall immediately inform the Commission, in writing, of such an event.

4. Any action taken or expense incurred as a result of operations pursuant to this STA is solely at RigNet SatCom, Inc, risk.

This grant is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon release.

GRANTED
International Bureau

File # SES-STA-20160524-00452
Call Sign E160083 Grant Date 6/30/16
(or other identifier)
Term Dates
From: 6/30/16 To: 7/30/16
Approved: Paul E. Blais

2. Contact

Name:	Alexei Vederko	**Phone Number:**	281−674−0902
Company:	RigNet SatCom, Inc	**Fax Number:**	
Street:	1880 S. Dairy Ashford Suite 300	E−Mail:	Alexei.Vederko@rig.net
City:	Houston	**State:**	TX
Country:	USA	**Zipcode:**	77077 −
Attention:		**Relationship:**	

(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 IB2016001162

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 05/31/2016	
7. CityHIA−573	8. Latitude (dd mm ss.s h) 27 55 33.3 N

9. State	10. Longitude (dd mm ss.s h) 93 56 40.2 W

11. Please supply any need attachments.

Attachment 1: Coordination Report Attachment 2: Attachment 3:

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.)

Special Temporary Authority to operate a 2.4 meter C-band transmit/receive earth station in the Gulf of Mexico prior to license grant.

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 ( ) No

14. Name of Person Signing	15. Title of Person Signing
Mr Raul Magallanes	Associate General 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
RigNet SatCom, Inc.
HIA-573, Gulf of Mexico
Satellite Earth Station

Prepared By:
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147
May 24, 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.

The following companies reported potential great circle interference conflicts that did not meet the objectives on a line-of-sight basis. When over-the-horizon losses are considered on the interfering paths, sufficient blockage exists to negate harmful interference from occurring with the proposed transmit-receive earth station.

Company
RigNet SatCom, Inc

No other carriers reported potential interference cases.

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 05/19/2016.

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:	05/19/2016
Job Number:	160519COMSGE01

Administrative Information

Status	ENGINEER PROPOSAL
Call Sign	
Licensee Code	RIGNET
Licensee Name	RigNet SatCom, Inc.

Site Information — HIA-573, GM

Venue Name	
Latitude (NAD 83)	27° 55' 33.3" N
Longitude (NAD 83)	93° 56' 40.2" W
Climate Zone	B
Rain Zone	1
Ground Elevation (AMSL)	0.0 m / 0.0 ft

Link Information

Satellite Type	Geostationary
Mode	TR - Transmit-Receive
Modulation	Digital
Satellite Arc	60° W to 143° West Longitude
Azimuth Range	124.8° to 247.9°
Corresponding Elevation Angles	40.5° / 27.7°
Antenna Centerline (AGL)	24.08 m / 79.0 ft

Antenna Information		Receive - FCC32		Transmit - FCC32	
Manufacturer		GD Satcom		GD Satcom	
Model		2244		2244	
Gain / Diameter		38.2 dBi / 2.4 m		42.2 dBi / 2.4 m	
3-dB / 15-dB Beamwidth		2.20° / 4.90°		1.40° / 3.10°	
Max Available RF Power	(dBW/4 kHz)			-21.8	
	(dBW/MHz)			2.2	
Maximum EIRP	(dBW/4 kHz)			20.4	
	(dBW/MHz)			44.4	
Interference Objectives:	Long Term	-156.0 dBW/MHz	20%	-154.0 dBW/4 kHz	20%
	Short Term	-146.0 dBW/MHz	0.01%	-131.0 dBW/4 kHz	0.0025%

Frequency Information	Receive 4.0 GHz	Transmit 6.1 GHz
Emission / Frequency Range (MHz)	3M55G7D / 3700.0 - 4200.0	3M55G7D / 5925.0 - 6425.0
Max Great Circle Coordination Distance	492.0 km / 305.7 mi	138.9 km / 86.3 mi
Precipitation Scatter Contour Radius	564.1 km / 350.4 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	**HIA-573, GM**			
Licensee Name	RigNet SatCom, Inc.			
Latitude (NAD 83)	27° 55' 33.3" N			
Longitude (NAD 83)	93° 56' 40.2" W			
Ground Elevation (AMSL)	0.0 m / 0.0 ft			
Antenna Centerline (AGL)	24.08 m / 79.0 ft			
Antenna Model	GD Satcom 2.4 meter			
Antenna Mode	Receive 4.0 GHz		Transmit 6.1 GHz	
Interference Objectives: Long Term	-156.0 dBW/MHz	20%	-154.0 dBW/4 kHz	20%
Short Term	-146.0 dBW/MHz	0.01%	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power			-21.8 (dBW/4 kHz)	

			Receive 4.0 GHz		Transmit 6.1 GHz	
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	109.47	-10.00	412.20	-10.00	120.03
5	0.00	112.21	-10.00	412.20	-10.00	120.03
10	0.00	108.61	-10.00	412.20	-10.00	120.03
15	0.00	104.94	-10.00	412.20	-10.00	120.03
20	0.00	101.22	-10.00	412.20	-10.00	120.03
25	0.00	97.46	-10.00	412.20	-10.00	120.03
30	0.00	93.67	-10.00	412.20	-10.00	120.03
35	0.00	89.87	-10.00	412.20	-10.00	120.03
40	0.00	86.07	-10.00	412.20	-10.00	120.03
45	0.00	82.29	-10.00	412.20	-10.00	120.03
50	0.00	78.53	-10.00	412.20	-10.00	120.03
55	0.00	74.81	-10.00	412.20	-10.00	120.03
60	0.00	71.14	-10.00	412.20	-10.00	120.03
65	0.00	67.55	-10.00	412.20	-10.00	120.03
70	0.00	64.04	-10.00	412.20	-10.00	120.03
75	0.00	60.65	-10.00	412.20	-10.00	120.03
80	0.00	57.39	-10.00	412.20	-10.00	120.03
85	0.00	54.30	-10.00	412.20	-10.00	120.03
90	0.00	51.40	-10.00	412.20	-10.00	120.03
95	0.00	48.76	-10.00	412.20	-10.00	120.03
100	0.00	46.39	-9.66	416.42	-9.66	120.97
105	0.00	44.36	-9.18	422.56	-9.18	122.35
110	0.00	42.72	-8.77	427.80	-8.77	123.54
115	0.00	41.51	-8.45	431.84	-8.45	124.46
120	0.00	40.78	-8.26	434.38	-8.26	125.05
125	0.00	40.54	-8.20	435.21	-8.20	125.24
130	0.00	40.81	-8.27	434.26	-8.27	125.02
135	0.00	41.58	-8.47	431.62	-8.47	124.41
140	0.00	42.82	-8.79	427.48	-8.79	123.47
145	0.00	44.49	-9.21	422.17	-9.21	122.26
150	0.00	46.54	-9.70	415.99	-9.70	120.88
155	0.00	48.93	-10.00	412.20	-10.00	120.03
160	0.00	51.58	-10.00	412.20	-10.00	120.03
165	0.00	54.00	-10.00	412.20	-10.00	120.03
170	0.00	55.84	-10.00	412.20	-10.00	120.03
175	0.00	57.00	-10.00	412.20	-10.00	120.03
180	0.00	57.40	-10.00	412.20	-10.00	120.03
185	0.00	57.00	-10.00	412.20	-10.00	120.03

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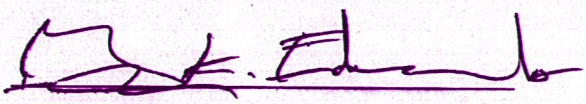
Antenna Model	GD Satcom 2.4 meter			
Antenna Mode	Receive 4.0 GHz		Transmit 6.1 GHz	
Interference Objectives: Long Term	-156.0 dBW/MHz	20%	-154.0 dBW/4 kHz	20%
Short Term	-146.0 dBW/MHz	0.01%	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power			-21.8 (dBW/4 kHz)	

			Receive 4.0 GHz		Transmit 6.1 GHz	
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	55.84	-10.00	412.20	-10.00	120.03
195	0.00	54.00	-10.00	412.20	-10.00	120.03
200	0.00	51.58	-10.00	412.20	-10.00	120.03
205	0.00	48.71	-10.00	412.20	-10.00	120.03
210	0.00	45.47	-9.44	419.16	-9.44	121.58
215	0.00	41.96	-8.57	430.33	-8.57	124.12
220	0.00	38.49	-7.63	442.65	-7.63	126.96
225	0.00	35.33	-6.70	455.24	-6.70	129.91
230	0.00	32.57	-5.82	466.89	-5.82	132.84
235	0.00	30.32	-5.04	477.97	-5.04	135.51
240	0.00	28.70	-4.45	486.65	-4.45	137.62
245	0.00	27.82	-4.11	491.63	-4.11	138.84
250	0.00	27.76	-4.09	492.00	-4.09	138.93
255	0.00	28.52	-4.38	487.69	-4.38	137.88
260	0.00	30.03	-4.94	479.50	-4.94	135.88
265	0.00	32.19	-5.69	468.70	-5.69	133.28
270	0.00	34.88	-6.56	457.17	-6.56	130.37
275	0.00	37.98	-7.49	444.59	-7.49	127.41
280	0.00	41.41	-8.43	432.20	-8.43	124.54
285	0.00	45.08	-9.35	420.35	-9.35	121.85
290	0.00	48.94	-10.00	412.20	-10.00	120.03
295	0.00	52.94	-10.00	412.20	-10.00	120.03
300	0.00	57.06	-10.00	412.20	-10.00	120.03
305	0.00	61.26	-10.00	412.20	-10.00	120.03
310	0.00	65.53	-10.00	412.20	-10.00	120.03
315	0.00	69.86	-10.00	412.20	-10.00	120.03
320	0.00	74.22	-10.00	412.20	-10.00	120.03
325	0.00	78.61	-10.00	412.20	-10.00	120.03
330	0.00	83.02	-10.00	412.20	-10.00	120.03
335	0.00	87.45	-10.00	412.20	-10.00	120.03
340	0.00	91.87	-10.00	412.20	-10.00	120.03
345	0.00	96.30	-10.00	412.20	-10.00	120.03
350	0.00	100.71	-10.00	412.20	-10.00	120.03
355	0.00	105.11	-10.00	412.20	-10.00	120.03

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: May 24, 2016