

EXHIBIT A
HNS License Sub, LLC
Amendment to
Modification of License Application
File No. SES-MFS-20110912-01066
September 2011

NARRATIVE STATEMENT

HNS License Sub, LLC (“Hughes”) hereby amends its application in File No. SES-MFS-20110912-01066 to add a new 9.2m TT&C antenna to its Ka-band transmit/receive earth station license in Fillmore, CA.

Hughes modifies and corrects the point of communication information on the Schedule B for all new antennas to reference Jupiter 1/UKSAT-14 rather than SPACEWAY 3/UKSAT-10. Hughes emphasizes that the point of communication of SPACEWAY 3/USASAT 700 remains accurate for the existing antenna on this license.

Next, Hughes provides a coordination report from Comsearch for the proposed new 9.2m antenna that was inadvertently omitted from the application. See Attachment to this Exhibit A.

Finally, Hughes corrects the frequency coordination information provided in the Schedule B for the maximum EIRP density toward the horizon for the 9.2 meter antenna to specify a lower figure.

All other information in the application is unchanged by this amendment (including information resubmitted in the Schedule B to enable the application on IBFS to be validated).

ATTACHMENT



COMSEARCH
A CommScope Company

July 27, 2011

Re: HUGHES NETWORK SYSTEMS LIMITED
FILLMORE, CA
Ka-Band Transmit-Receive Earth Station
Job Number: 110727COMSGE09

Dear Frequency Coordinator:

This notice is being provided in accordance with Section 25.203(c) of the FCC Rules and Regulations. We are forwarding the attached coordination data on behalf of HUGHES NETWORK SYSTEMS LIMITED, 11717 Exploration Lane Germantown, MD 20876 for a Ka-Band Transmit-Receive Earth Station to be located in FILLMORE, CA.

The coordination notice is being circulated to the owners (or their protection agents) of all existing or proposed terrestrial facilities operating in a shared frequency band within the coordination contours of the proposed station(s).

We respectfully request that you examine this data for its interference potential with your system(s). In the event that your analysis identifies potential interference cases that have not been resolved, please contact us by August 31, 2011.

If there are any questions concerning this coordination notice, please contact Comsearch.

Sincerely,

COMSEARCH

Gary K. Edwards
Senior Manager
gedwards@comsearch.com

Enclosure(s)

Date: 07/20/2011
Job Number: <PCNJobCode>

Administrative Information

Status ENGINEER PROPOSAL
Call Sign <PCNCallSign>
Licensee Code HUNESY
Licensee Name HUGHES NETWORK SYSTEMS LIMITED

Site Information **FILLMORE, CA**

Venue Name
Latitude (NAD 83) 34° 24' 16.7" N
Longitude (NAD 83) 118° 53' 39.2" W
Climate Zone A
Rain Zone 4
Ground Elevation (AMSL) 292.0 m / 958.0 ft

Link Information

Satellite Type Geostationary
Mode TR - Transmit-Receive
Modulation Digital
Satellite Arc 80° W to 120° West Longitude
Azimuth Range 125.0° to 182.0°
Corresponding Elevation Angles 32.6° / 50.0°
Antenna Centerline (AGL) 5.49 m / 18.0 ft

Antenna Information

		Receive - FCC32	Transmit - FCC32
Manufacturer		FCC REFERENCE	FCC REFERENCE
Model		32-25LOG(THETA)	32-25LOG(THETA)
Gain / Diameter		63.2 dBi / 9.2 m	66.3 dBi / 9.2 m
3-dB / 15-dB Beamwidth		0.12° / 0.29°	0.08° / 0.19°
Max Available RF Power	(dBW/4 kHz) (dBW/MHz)		-0.3 23.7
Maximum EIRP	(dBW/4 kHz) (dBW/MHz)		66.0 90.0
Interference Objectives:	Long Term Short Term	-156.0 dBW/MHz -146.0 dBW/MHz	20% 0.01%
			-151.0 dBW/4 kHz 20% -128.0 dBW/4 kHz 0.0025%

Frequency Information

	Receive 18.0 GHz	Transmit 28.0 GHz
Emission / Frequency Range (MHz)	70K0G7W - 200KG7W / 19700.25 - 19700.5 300KG7W / 19700.25 - 19700.5 NON / 20199.5	1M00F2D / 28351.0 - 28353.0
Max Great Circle Coordination Distance	136.2 km / 84.6 mi	129.6 km / 80.5 mi
Precipitation Scatter Contour Radius	100.0 km / 62.1 mi	100.0 km / 62.1 mi

Coordination Values		FILLMORE, CA			
Licensee Name		HUGHES NETWORK SYSTEMS LIMITED			
Latitude (NAD 83)		34° 24' 16.7" N			
Longitude (NAD 83)		118° 53' 39.2" W			
Ground Elevation (AMSL)		292.0 m / 958.0 ft			
Antenna Centerline (AGL)		5.49 m / 18.0 ft			
Antenna Model		FCC Reference 32-25LOG(THETA)			
Antenna Mode		Receive 18.0 GHz		Transmit 28.0 GHz	
Interference Objectives:	Long Term	-156.0 dBW/MHz	20%	-151.0 dBW/4 kHz	20%
	Short Term	-146.0 dBW/MHz	0.01%	-128.0 dBW/4 kHz	0.0025%
Max Available RF Power		-0.3 (dBW/4 kHz)			

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 18.0 GHz		Transmit 28.0 GHz		Coordination Distance (km)
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)	
0	9.72	121.90	-10.00	100.00	-10.00	100.00	100.00
5	9.63	117.41	-10.00	100.00	-10.00	100.00	100.00
10	10.92	113.13	-10.00	100.00	-10.00	100.00	100.00
15	10.89	108.53	-10.00	100.00	-10.00	100.00	100.00
20	11.00	103.93	-10.00	100.00	-10.00	100.00	100.00
25	10.85	99.29	-10.00	100.00	-10.00	100.00	100.00
30	11.05	94.66	-10.00	100.00	-10.00	100.00	100.00
35	11.15	90.01	-10.00	100.00	-10.00	100.00	100.00
40	11.32	85.35	-10.00	100.00	-10.00	100.00	100.00
45	10.49	80.75	-10.00	100.00	-10.00	100.00	100.00
50	9.07	76.29	-10.00	100.00	-10.00	100.00	100.00
55	8.95	71.76	-10.00	100.00	-10.00	100.00	100.00
60	10.05	67.04	-10.00	100.00	-10.00	100.00	100.00
65	10.03	62.52	-10.00	100.00	-10.00	100.00	100.00
70	8.95	58.32	-10.00	100.00	-10.00	100.00	100.00
75	7.52	54.42	-10.00	100.00	-10.00	100.00	100.00
80	8.58	49.79	-10.00	100.00	-10.00	100.00	100.00
85	8.55	45.63	-9.48	100.00	-9.48	100.00	100.00
90	7.30	42.24	-8.64	100.00	-8.64	100.00	100.00
95	6.08	39.23	-7.84	100.00	-7.84	100.00	100.00
100	6.09	35.84	-6.86	100.00	-6.86	100.00	100.00
105	5.02	33.64	-6.17	100.00	-6.17	100.00	100.00
110	3.62	32.37	-5.75	100.00	-5.75	100.00	100.00
115	3.17	30.97	-5.27	100.00	-5.27	100.00	100.00
120	1.62	31.38	-5.42	100.00	-5.42	100.00	100.00
125	1.72	30.92	-5.26	100.00	-5.26	100.00	100.00
130	3.17	29.85	-4.87	100.00	-4.87	100.00	100.00
135	2.58	31.53	-5.47	100.00	-5.47	100.00	100.00
140	2.96	32.94	-5.94	100.00	-5.94	100.00	100.00
145	2.88	35.33	-6.70	100.00	-6.70	100.00	100.00
150	3.04	37.96	-7.48	100.00	-7.48	100.00	100.00
155	3.69	40.05	-8.07	100.00	-8.07	100.00	100.00
160	3.51	42.41	-8.69	100.00	-8.69	100.00	100.00
165	3.71	44.01	-9.09	100.00	-9.09	100.00	100.00
170	3.53	45.45	-9.44	100.00	-9.44	100.00	100.00
175	3.62	46.14	-9.60	100.00	-9.60	100.00	100.00
180	2.59	47.43	-9.90	100.00	-9.90	100.00	100.00
185	2.69	47.39	-9.89	100.00	-9.89	100.00	100.00

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Max Available RF Power		-0.3 (dBW/4 kHz)			

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 18.0 GHz		Transmit 28.0 GHz		Coordination Distance (km)
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)	
190	2.54	47.98	-10.00	100.00	-10.00	100.00	100.00
195	1.01	50.26	-10.00	100.00	-10.00	100.00	100.00
200	0.75	51.64	-10.00	103.75	-10.00	100.00	100.00
205	1.42	52.50	-10.00	100.00	-10.00	100.00	100.00
210	1.10	54.54	-10.00	100.00	-10.00	100.00	100.00
215	1.38	56.35	-10.00	100.00	-10.00	100.00	100.00
220	0.00	59.59	-10.00	136.18	-10.00	129.55	129.55
225	0.00	61.98	-10.00	136.18	-10.00	129.55	129.55
230	0.00	64.55	-10.00	136.18	-10.00	129.55	129.55
235	0.00	67.27	-10.00	136.18	-10.00	129.55	129.55
240	0.00	70.11	-10.00	136.18	-10.00	129.55	129.55
245	0.00	73.06	-10.00	136.18	-10.00	129.55	129.55
250	0.00	76.10	-10.00	136.18	-10.00	129.55	129.55
255	0.00	79.20	-10.00	136.18	-10.00	129.55	129.55
260	0.00	82.35	-10.00	136.18	-10.00	129.55	129.55
265	0.00	85.54	-10.00	136.18	-10.00	129.55	129.55
270	0.00	88.74	-10.00	136.18	-10.00	129.55	129.55
275	1.11	92.00	-10.00	100.00	-10.00	100.00	100.00
280	1.10	95.28	-10.00	100.00	-10.00	100.00	100.00
285	2.71	98.81	-10.00	100.00	-10.00	100.00	100.00
290	3.95	102.41	-10.00	100.00	-10.00	100.00	100.00
295	3.90	105.75	-10.00	100.00	-10.00	100.00	100.00
300	4.70	109.31	-10.00	100.00	-10.00	100.00	100.00
305	4.08	112.29	-10.00	100.00	-10.00	100.00	100.00
310	3.68	115.19	-10.00	100.00	-10.00	100.00	100.00
315	2.82	117.64	-10.00	100.00	-10.00	100.00	100.00
320	3.56	120.83	-10.00	100.00	-10.00	100.00	100.00
325	3.98	123.70	-10.00	100.00	-10.00	100.00	100.00
330	4.70	126.64	-10.00	100.00	-10.00	100.00	100.00
335	5.17	129.21	-10.00	100.00	-10.00	100.00	100.00
340	6.28	132.09	-10.00	100.00	-10.00	100.00	100.00
345	8.32	134.28	-10.00	100.00	-10.00	100.00	100.00
350	8.67	130.26	-10.00	100.00	-10.00	100.00	100.00
355	8.99	126.08	-10.00	100.00	-10.00	100.00	100.00