

19700 Janelia Farm Boulevard  
Ashburn, VA 20147  
(703) 726-5500



Fax (703) 726-5600 COMSEARCH®

<http://www.comsearch.com>

December 10, 2010

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\*\*\* CLIENT COPY \*\*\*  
\*\*\* PLEASE MAIL \*\*\*  
\*\*\* TO CUSTOMER \*\*\*

Re: Intelsat North America LLC  
Paumalu, Hawaii  
Call Sign: KA268  
C-Band Transmit-Receive Earth Station  
Job Number: 101210COMSJC02

\*\*\*\*\* INFORMATION-ONLY LETTER \*\*\*\*\*  
\*\*\*\*\* NO RESPONSE REQUESTED \*\*\*\*\*

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 information-only coordination data on behalf of Intelsat North America LLC to add new emissions to their existing C-band transmit/receive earth station (KA268) near Paumalu, Hawaii.

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 station(s).

Please update your database with the attached information.

This modification is being forwarded to add new emissions to earth station license KA268. These new emissions will have lower transmit power densities, than those emissions already licensed. Since this modification will not increase the potential for interference it is being forwarded for information purposes only and no response is requested.

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

Sincerely,

COMSEARCH

Jeffrey E. Cowles  
Engineer III, Telecommunications  
[jcowles@comsearch.com](mailto:jcowles@comsearch.com)

Enclosure(s)

**COMSEARCH****Earth Station Data Sheet**

19700 Janella Farm Boulevard, Ashburn, VA 20147  
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Date: 12/10/2010  
Job Number: 101210COMSJC02

**Administrative Information**

Status ENGINEER PROPOSAL  
Call Sign KA268  
Licensee Code INTNOA  
Licensee Name Intelsat North America LLC

**Site Information****PAUMALU, HAWAII**

Venue Name  
Latitude (NAD 83) 21° 40' 14.1" N  
Longitude (NAD 83) 158° 2' 6.1" W  
Climate Zone A  
Rain Zone 4  
Ground Elevation (AMSL) 144.8 m / 475.1 ft

**Link Information**

Satellite Type Geostationary  
Mode TR - Transmit-Receive  
Modulation Digital  
Satellite Arc 83° W to 233° West Longitude  
Azimuth Range 95.6° to 264.3°  
Corresponding Elevation Angles 5.2° / 5.3°  
Antenna Centerline (AGL) 9.8 m / 32.2 ft

**Antenna Information****Receive****Transmit**

Manufacturer	Vertex	Vertex
Model	9 KPC	9 KPC
Gain / Diameter	50.1 dBi / 9.0 m	53.5 dBi / 9.0 m
3-dB / 15-dB Beamwidth	1.00° / 2.00°	1.00° / 2.00°

256KG7W 36M0G7W 72M0G7W

Max Available RF Power	(dBW/4 kHz)	-6.0	-14.0	-17.0	
	(dBW/MHz)	12.1	10.0	7.0	
Maximum EIRP	(dBW/4 kHz)	47.5	39.5	36.5	
	(dBW/MHz)	65.6	63.5	60.5	
	(dBW)	65.6	79.0	79.1	
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)	256KG7W / 3700.0 - 4200.0	256KG7W / 5925.0 - 6425.0
	36M0G7W / 3700.0 - 4200.0	36M0G7W / 5925.0 - 6425.0
	72M0G7W / 3700.0 - 4200.0	72M0G7W / 5925.0 - 6425.0

Max Great Circle Coordination Distance	664.0 km / 412.5 mi	361.5 km / 224.6 mi
Precipitation Scatter Contour Radius	430.7 km / 267.6 mi	100.0 km / 62.1 mi

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<b>Coordination Values</b>		<b>PAUMALU, HI</b>			
Licensee Name		Intelsat North America LLC			
Latitude (NAD 83)		21° 40' 14.1" N			
Longitude (NAD 83)		158° 2' 6.1" W			
Ground Elevation (AMSL)		144.8 m / 475.1 ft			
Antenna Centerline (AGL)		9.8 m / 32.2 ft			
Antenna Model		Vertex 9 KPC			
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				-6.0 (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	95.62	-10.00	285.28	-10.00	156.55
5	0.00	90.64	-10.00	285.28	-10.00	156.55
10	0.00	85.66	-10.00	285.28	-10.00	156.55
15	0.00	80.68	-10.00	285.28	-10.00	156.55
20	0.00	75.70	-10.00	285.28	-10.00	156.55
25	0.00	70.72	-10.00	285.28	-10.00	156.55
30	0.00	65.75	-10.00	285.28	-10.00	156.55
35	0.00	60.77	-10.00	285.28	-10.00	156.55
40	0.00	55.80	-10.00	285.28	-10.00	156.55
45	0.00	50.83	-10.00	285.28	-10.00	156.55
50	0.00	45.87	-9.54	288.23	-9.54	158.22
55	0.30	40.88	-8.29	283.84	-8.29	152.54
60	0.00	35.97	-6.90	305.78	-6.90	169.88
65	0.30	30.99	-5.28	303.90	-5.28	163.64
70	0.64	26.02	-3.38	282.07	-3.38	142.98
75	0.91	21.07	-1.09	280.16	-1.09	138.07
80	1.16	16.15	1.80	288.84	1.80	139.88
85	1.17	11.38	5.60	319.61	5.60	155.44
90	1.81	6.59	11.53	345.04	11.53	163.30
95	1.97	3.32	18.98	663.98	18.98	361.52
100	2.61	5.08	14.35	343.19	14.35	156.56
105	2.69	9.61	7.43	280.46	7.43	127.89
110	2.84	14.15	3.23	244.59	3.23	109.20
115	3.32	18.51	0.32	214.61	0.32	100.00
120	3.08	23.13	-2.11	206.72	-2.11	100.00
125	2.95	27.67	-4.05	202.34	-4.05	100.00
130	3.22	31.98	-5.62	188.71	-5.62	100.00
135	3.01	36.42	-7.03	186.27	-7.03	100.00
140	2.62	40.83	-8.27	188.70	-8.27	100.00
145	2.03	45.21	-9.38	196.81	-9.38	100.00
150	2.29	49.02	-10.00	187.97	-10.00	100.00
155	2.02	52.83	-10.00	194.07	-10.00	100.00
160	2.26	55.99	-10.00	188.49	-10.00	100.00
165	2.47	58.63	-10.00	183.87	-10.00	100.00
170	2.23	60.84	-10.00	189.31	-10.00	100.00
175	2.18	62.06	-10.00	190.49	-10.00	100.00
180	2.16	62.45	-10.00	190.80	-10.00	100.00
185	1.94	62.29	-10.00	196.13	-10.00	100.00

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Antenna Model	Vertex 9 KPC				
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				-6.0 (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	1.75	61.22	-10.00	201.31	-10.00	100.00
195	1.51	59.27	-10.00	205.26	-10.00	100.00
200	1.44	56.47	-10.00	207.37	-10.00	100.00
205	0.85	53.43	-10.00	228.44	-10.00	114.55
210	0.55	49.85	-10.00	246.63	-10.00	128.43
215	0.30	45.99	-9.57	275.30	-9.57	147.78
220	0.00	41.97	-8.57	294.51	-8.57	161.80
225	0.00	37.69	-7.41	302.32	-7.41	167.91
230	0.00	33.31	-6.06	311.55	-6.06	173.13
235	0.00	28.87	-4.51	323.18	-4.51	179.16
240	0.00	24.36	-2.67	336.57	-2.67	186.27
245	0.00	19.82	-0.43	353.35	-0.43	194.88
250	0.00	15.24	2.42	375.49	2.42	205.75
255	0.00	10.72	6.25	406.12	6.25	219.50
260	0.00	6.83	11.13	449.36	11.13	241.68
265	0.00	5.33	13.83	662.74	13.83	361.19
270	0.00	7.75	9.77	436.94	9.77	235.21
275	0.00	11.89	5.12	396.66	5.12	214.77
280	0.00	16.51	1.55	368.64	1.55	202.44
285	0.00	21.30	-1.21	347.41	-1.21	191.87
290	0.00	26.17	-3.44	330.87	-3.44	183.27
295	0.00	31.08	-5.31	317.48	-5.31	176.06
300	0.00	36.00	-6.91	305.70	-6.91	169.84
305	0.00	40.95	-8.31	296.28	-8.31	162.81
310	0.00	45.90	-9.55	288.18	-9.55	158.19
315	0.00	50.87	-10.00	285.28	-10.00	156.55
320	0.00	55.83	-10.00	285.28	-10.00	156.55
325	0.00	60.80	-10.00	285.28	-10.00	156.55
330	0.00	65.78	-10.00	285.28	-10.00	156.55
335	0.00	70.75	-10.00	285.28	-10.00	156.55
340	0.00	75.73	-10.00	285.28	-10.00	156.55
345	0.00	80.71	-10.00	285.28	-10.00	156.55
350	0.00	85.69	-10.00	285.28	-10.00	156.55
355	0.00	90.66	-10.00	285.28	-10.00	156.55