

**EXHIBIT A**

**INTELSAT LICENSE LLC**

**30-DAY SPECIAL TEMPORARY AUTHORITY REQUEST**

**9.2 KA-BAND METER EARTH STATION**

**MAY 4, 2012**

## Exhibit A

### SECTIONS 25.137 AND 25.114

The legal and technical qualifications of the EchoStar XVII (f/k/a Jupiter-1 and SPACEWAY-4) satellite have already been approved by the Commission and are included herein by reference. Specifically, the legal information requested in Section 25.137 and the technical information requested in Section 25.114, including the Schedule S information, for the EchoStar XVII satellite can be found in the application filed by Hughes Network Systems, LLC resulting in said approval.<sup>1</sup>

To the extent necessary, however, Intelsat respectfully requests a waiver of the need to provide additional technical information under Section 25.114 of the Commission's rules for its proposed LEOP and temporary TT&C services.<sup>2</sup> The Commission may grant a waiver for good cause shown.<sup>3</sup> The Commission typically grants a waiver where the particular facts make strict compliance inconsistent with the public interest.<sup>4</sup> In granting a waiver, the Commission may take into account considerations of hardship, equity, or more effective implementation of overall policy on an individual basis.<sup>5</sup> Waiver is therefore appropriate if special circumstances warrant a deviation from the general rule, and such a deviation will serve the public interest.

In this case, good cause exists for a waiver of Section 25.114. Intelsat has provided in this STA request the technical information that is relevant to the LEOP and temporary TT&C services for which Intelsat seeks authorization. The remainder of the information sought by Section 25.114 is not required to determine potential harmful interference because Intelsat will perform the LEOP and temporary TT&C services on a non-interference basis. Moreover, as noted in the STA request, the LEOP and temporary TT&C operations will be coordinated with potentially affected operators. In light of the foregoing, waiver of the need to provide additional technical information under Section 25.114 serves the public interest.

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<sup>1</sup> See *Application of Hughes Network Systems, LLC*, File No. SAT-LOI-20091110-00119 (stamp-grant issued May 5, 2010 by Stephen J. Duall).

<sup>2</sup> 47 C.F.R. § 25.114.

<sup>3</sup> 47 C.F.R. §1.3.

<sup>4</sup> *N.E. Cellular Tel. Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990) (“*Northeast Cellular*”).

<sup>5</sup> *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969); *Northeast Cellular*, 897 F.2d at 1166.

**EXHIBIT B**

**INTELSAT LICENSE LLC**

**30-DAY SPECIAL TEMPORARY AUTHORITY REQUEST**

**9.2 KA-BAND METER EARTH STATION**

**MAY 4, 2012**

# **FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT**

Prepared for

**Intelsat License LLC  
Nuevo, California**

**Satellite Earth Station**

Prepared By:  
COMSEARCH

19700 Janelia Farm Boulevard  
Ashburn, Virginia 20147  
April 20, 2012

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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

None

No 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 March 19, 2012.

#### Company

ABC Holding Company Inc.  
AMERIQUEST MORTGAGE COMPANY  
ANAHEIM CITY PUBLIC UTILITY DEPARTMENT  
AT&T CORP  
AT&T California  
AT&T Nevada  
Aerionet, Inc.  
AirSites2000, LLC  
Airband Communications Inc  
Antilles Wireless LLC  
Aztech Cable  
BEAMSPEED LLC  
BEVERLY HILLS, CITY OF  
BNSF Railway Company  
BP West Coast Products LLC  
BURBANK CITY , OF  
Bakersfield, City of  
Bel Air Internet, LLC  
Bigelow Management Inc  
British American Communications Inc  
CARDIOLOGY ASSOCIATES MEDICAL GROUP, INC  
CARE COMMUNITY AMBULANCE SERVICES INC  
CARITAS TELECOMMUNICATIONS  
CASTAIC LAKE WATER AGENCY  
CBS Broadcasting Inc  
CNG Communications, Inc.  
COMMUNICATIONS SERVICES  
CR BRIGGS CORPORATION  
CULVER CITY, CITY OF  
California, State of  
Cellco Partnership - California  
Central Telephone Company of Nevada  
Chevron USA Inc.  
Children's Hospital Orange County (CHOC)  
Citizens Utilities Rural Company, Inc.



Company (Continued)

City of Corona  
City of Irvine Public Safety  
City of Newport Beach  
City of Pasadena, California  
City of Torrance  
City of Yuma  
Clearwave Communications, LLC  
Clearwire Spectrum Holdings II, LLC  
Clearwire Spectrum Holdings III, LLC  
Color BroadBand Inc.  
Community Memorial Health System  
Conterra Ultra Broadband, LLC  
Cox Communications California LLC  
Craig Wireless Palm Springs  
Cricket License Company, LLC  
Cricket Licensee Company, LLC  
DRS Technical Services  
EASTERN MUNICIPAL WATER DISTRICT  
ENTRAVISION HOLDINGS, LLC  
El Monte Police Department  
Emend Information & Management Solutions  
Energia Costa Azul S. de R.L. de C.V.  
Escuela de la Raza Unida  
Experior Networks, LLC  
FIRST FOURSQUARE CHURCH OF VAN NUYS  
FOX TELEVISION STATIONS, INC.  
Fireline Network Solutions Inc.  
Fixed Wireless Holdings, LLC  
Frontier Communications of the Southwest  
GLOBAL INTERACTIVE COMMUNICATIONS CORP.  
GTE Mobilnet of Santa Barbara LTD Ptnsh  
GULF-CALIFORNIA BROADCASTING  
Gila Electronics of Yuma, Inc  
Glendale, City of  
IBERDROLA Renewables  
INDYMAC BANK  
INLAND EMPIRE UTILITIES AGENCY  
IP Wireless, Inc.  
Imperial Irrigation District  
Intelecom Intelligent Telecommunications  
JOURNAL BROADCAST CORPORATION  
Jack In The Box Inc.  
KERN COUNTY SUPERINTENDENT OF SCHOOLS  
KERN SCHOOLS FEDERAL CREDIT UNION  
KTLA INC  
KVVU BROADCASTING CORPORATION  
Kern, County of  
Kings Canyon Unified School District  
Kings County Office of Education  
LAKE HAVASU CITY  
LEMON GROVE SCHOOL DISTRICT

Company (Continued)

LOS ANGELES CITY WATER & POWER  
LOS ANGELES UNIFIED SCHOOL DISTRICT  
LT-WR, LLC  
Las Virgenes Unified School District  
LasVegas.Net  
Long Beach City California  
Long Beach City Electronics Div.  
Los Angeles City Info Technology Agency  
Los Angeles County Dept of Public Works  
Los Angeles County FCC Licensing Section  
Los Angeles County Metro Transit Auth  
Los Angeles SMSA Ltd. Partnership  
Los Angeles, City of  
MOBILE RELAY ASSOCIATES INC  
MONTEBELLO CITY CALIFORNIA  
Mark Hopperton  
MetroConnect Inc  
MetroPCS California, LLC  
MetroPCS Networks California, LLC  
Metropolitan Water Dist of So California  
Mike Glaser  
Mohave Cooperative Services  
Moreno Valley City California  
Moulton Niguel Water District  
NBC Telemundo License Co - News Burbank  
NEVADA TRANSPORTATION DEPT  
Nevada Department of Transportation  
New Cingular Wireless PCS LLC - AZ  
New Cingular Wireless PCS - Los Angeles  
New Cingular Wireless PCS LLC - N CAL  
New Cingular Wireless PCS LLC - N Texas  
New Cingular Wireless PCS LLC -San Diego  
New Cingular Wireless PCS LLC- Las Vegas  
Nextel of California Inc.  
Nextlink Wireless, LLC  
Nextweb Inc  
PALM SPRINGS UNIFIED SCHOOL DISTRICT  
Pomona College - KSPC  
QUALCOMM INC.  
Quest Diagnostics Incorporated  
REGIONAL TRANS. COM. OF SE NEVADA/FAST  
REGIONAL TRANS. COMMISSION OF CLARK CO.  
RIVERSIDE CITY CALIFORNIA  
RIVERSIDE CITY CALIFORNIA  
Regents of the University of California  
Regents of the University of California  
Regional 3Cs  
Roomlinx, Inc.  
SAN DIEGO UNIVERSITY  
SAN DIEGO, CITY OF  
SIERRA SANDS UNIFIED SCHOOL DISTRICT  
SILVER STATE SCHOOLS CREDIT UNION

Company (Continued)

SKYLINK COMMUNICATIONS, L.P.  
ST. JOSEPH HEALTH SYSTEM  
STATION VENTURE OPERATIONS, LP  
San Bernardino County of California  
San Diego County  
San Diego County Water Authority  
San Diego Gas & Electric Company  
San Diego Unified School District  
San Diego, Port of - Harbor Police  
Santa Barbara Cellular Systems, Ltd.  
Santa Barbara, County of  
Scripps Media, Inc.  
Sky Valley Network LLC  
Skyriver Communications  
Smith Media License Holdings, LLC (KEYT)  
Southern California Edison Company  
Southern California Gas Company  
Southern California Telephone Company  
Southwestco Wireless L P -( AZ/NV)  
Sparkplug Las Vegas, Inc.  
Sparkplug Southwest, LLC  
Sprint Spectrum LP DBA Sprint PCS  
Sprint Telephony PCS, L.P.  
Sprintcom, Inc. Puerto Rico  
State of Nevada, Department of Info Tech  
T-MOBILE LIC LLC - VOICESTREAM PCS BTA I  
T-Mobile License LLC  
THUMS Long Beach Company  
TOM FADGEN  
Time Warner Cable LLC  
Time Warner NY Cable LLC  
Towerstream Corp  
Trango Systems, Inc.  
Trillion Partners, Inc.  
Turn Wireless, LLC  
UCSD Healthcare  
UNIVERSITY OF SOUTHERN CALIFORNIA  
UbiquiTel Leasing Company  
Union Pacific Railroad Company  
Vectus, Inc  
Ventura County Office of Education  
Verizon California Inc.  
Verizon Wireless (VAW) LLC (CA)  
Verizon Wireless(VAW) LLC-AZ/CO/NM/NV/UT  
Victor Valley College  
WEST COVINA, CITY OF  
WEST END COMMUNICATIONS AUTHORITY  
WT Consulting Group, LLC  
Wecom, Inc.  
WireFree Communications  
YUMA COUNTY WATER USERS ASSOCIATION  
unWired Broadband, 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: 04/20/2012  
Job Number: 120319COMSJC04

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### Administrative Information

Status ENGINEER PROPOSAL  
Call Sign  
Licensee Code INTELS  
Licensee Name Intelsat License LLC

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### Site Information

**NUEVO, CALIFORNIA**  
Venue Name  
Latitude (NAD 83) 33° 47' 42.7" N  
Longitude (NAD 83) 117° 5' 22.5" W  
Climate Zone A  
Rain Zone 4  
Ground Elevation (AMSL) 569.06 m / 1867.0 ft

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### Link Information

Satellite Type Low Earth Orbit  
Mode TR - Transmit-Receive  
Modulation Digital  
Minimum Elevation Angle 5.0°  
Azimuth Range 0.0° to 360°  
Antenna Centerline (AGL) 7.32 m / 24.0 ft

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### Antenna Information

	<b>Receive</b>	<b>Transmit</b>
Manufacturer	GD Satcom Technologies	GD Satcom Technologies
Model	9.2 Meter	9.2 Meter
Gain / Diameter	62.7 dBi / 9.2 m	65.4 dBi / 9.2 m
3-dB / 15-dB Beamwidth	0.12° / 0.24°	0.08° / 0.17°
Max Available RF Power (dBW/4 kHz)		-0.9
(dBW/MHz)		23.1
Maximum EIRP (dBW/4 kHz)		64.5
(dBW/MHz)		88.0
(dBW)		88.0
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%

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### Frequency Information

	<b>Receive 18.0 GHz</b>	<b>Transmit 28.0 GHz</b>
Emission / Frequency Range (MHz)	288KF2D / 19700.5 288KF2D / 19702.5	900KF2D / 28351.0 900KF2D / 28353.0
Max Great Circle Coordination Distance	465.6 km / 289.3 mi	347.9 km / 216.2 mi
Precipitation Scatter Contour Radius	100.0 km / 62.1 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

### NUEVO, CA

Licensee Name	Intelsat License LLC		
Latitude (NAD 83)	33° 47' 42.7" N		
Longitude (NAD 83)	117° 5' 22.5" W		
Ground Elevation (AMSL)	569.06 m / 1867.0 ft		
Antenna Centerline (AGL)	7.32 m / 24.0 ft		
Antenna Model	GD Satcom Technologies 9.1 Meter		
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	-0.9 (dBW/4 kHz)		

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 18.0 GHz		Transmit 28.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
0	0.53	76.34	-10.00	373.70	-10.00	256.40
5	1.94	72.35	-10.00	373.70	-10.00	256.40
10	1.78	68.17	-10.00	373.70	-10.00	256.40
15	2.17	64.18	-10.00	373.70	-10.00	256.40
20	2.46	60.28	-10.00	373.70	-10.00	256.40
25	2.87	56.56	-10.00	373.70	-10.00	256.40
30	3.57	53.15	-10.00	373.70	-10.00	256.40
35	3.22	49.41	-10.00	373.70	-10.00	256.40
40	3.30	46.08	-10.00	373.70	-10.00	256.40
45	3.23	42.89	-10.00	373.70	-10.00	256.40
50	2.85	39.77	-10.00	373.70	-10.00	256.40
55	2.53	37.01	-10.00	373.70	-10.00	256.40
60	2.62	35.03	-10.00	373.70	-10.00	256.40
65	3.44	34.31	-10.00	373.70	-10.00	256.40
70	3.11	33.12	-10.00	373.70	-10.00	256.40
75	3.08	32.87	-7.96	386.60	-7.96	269.20
80	3.84	34.07	-4.20	410.40	-4.20	292.90
85	3.21	34.55	0.77	441.80	0.77	324.20
90	3.14	36.16	4.53	465.60	4.53	347.90
95	2.62	37.92	4.53	465.60	4.53	347.90
100	2.76	40.67	4.53	465.60	4.53	347.90
105	3.44	44.11	4.53	465.60	4.53	347.90
110	3.74	47.51	4.53	465.60	4.53	347.90
115	3.69	50.90	4.53	465.60	4.53	347.90
120	3.81	54.56	4.53	465.60	4.53	347.90
125	3.60	58.21	4.53	465.60	4.53	347.90
130	4.12	62.25	4.53	465.60	4.53	347.90
135	3.76	66.07	4.53	465.60	4.53	347.90
140	4.07	70.16	4.53	465.60	4.53	347.90
145	3.98	74.20	4.53	465.60	4.53	347.90
150	2.84	78.14	4.53	465.60	4.53	347.90
155	3.91	82.42	4.53	465.60	4.53	347.90
160	4.44	86.59	4.53	465.60	4.53	347.90
165	4.56	90.73	4.53	465.60	4.53	347.90
170	5.68	94.79	4.53	465.60	4.53	347.90
175	6.32	98.77	4.53	465.60	4.53	347.90
180	6.88	102.68	4.53	465.60	4.53	347.90

# COMSEARCH

## Earth Station Data Sheet

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

### Coordination Values

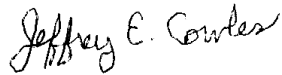
### NUEVO, CA

Licensee Name	Intelsat License LLC		
Latitude (NAD 83)	33° 47' 42.7" N		
Longitude (NAD 83)	117° 5' 22.5" W		
Ground Elevation (AMSL)	569.06 m / 1867.0 ft		
Antenna Centerline (AGL)	7.32 m / 24.0 ft		
Antenna Model	GD Satcom Technologies 9.2 Meter		
Antenna Mode	Receive 18.0 GHz		
Interference Objectives: Long Term	-156.0 dBW/MHz	20%	Transmit 28.0 GHz -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	-0.9 (dBW/4 kHz)		

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 18.0 GHz		Transmit 28.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
185	7.11	106.56	4.53	465.60	4.53	347.90
190	6.72	110.54	4.53	465.60	4.53	347.90
195	6.02	114.60	4.53	465.60	4.53	347.90
200	5.72	118.50	4.53	465.60	4.53	347.90
205	5.80	122.16	4.53	465.60	4.53	347.90
210	6.02	125.61	4.53	465.60	4.53	347.90
215	6.37	128.79	4.53	465.60	4.53	347.90
220	7.03	131.52	4.53	465.60	4.53	347.90
225	6.87	134.50	4.53	465.60	4.53	347.90
230	5.83	137.91	4.53	465.60	4.53	347.90
235	5.96	140.07	4.53	465.60	4.53	347.90
240	5.87	142.00	4.53	465.60	4.53	347.90
245	5.59	143.63	4.53	465.60	4.53	347.90
250	5.59	144.42	4.53	465.60	4.53	347.90
255	4.48	145.73	4.53	465.60	4.53	347.90
260	4.40	145.38	4.53	465.60	4.53	347.90
265	4.38	144.35	4.53	465.60	4.53	347.90
270	4.51	142.62	4.53	465.60	4.53	347.90
275	4.20	140.78	0.77	441.80	0.77	324.20
280	4.51	138.02	-4.20	410.40	-4.20	292.90
285	4.26	135.33	-7.96	386.60	-7.96	269.20
290	2.96	132.96	-10.00	373.70	-10.00	256.40
295	1.54	130.23	-10.00	373.70	-10.00	256.40
300	1.06	126.71	-10.00	373.70	-10.00	256.40
305	0.00	123.21	-10.00	373.70	-10.00	256.40
310	0.00	119.13	-10.00	373.70	-10.00	256.40
315	0.00	114.99	-10.00	373.70	-10.00	256.40
320	0.00	110.78	-10.00	373.70	-10.00	256.40
325	0.00	106.52	-10.00	373.70	-10.00	256.40
330	0.00	102.23	-10.00	373.70	-10.00	256.40
335	0.00	97.91	-10.00	373.70	-10.00	256.40
340	0.00	93.58	-10.00	373.70	-10.00	256.40
345	0.00	89.24	-10.00	373.70	-10.00	256.40
350	0.00	84.90	-10.00	373.70	-10.00	256.40
355	0.32	80.60	-10.00	373.70	-10.00	256.40

## 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.



Jeffrey E. Cowles  
Engineer III, Telecommunications  
COMSEARCH  
19700 Janelia Farm Boulevard  
Ashburn, Va. 20147

DATED: April 20, 2012



**EXHIBIT C**

**INTELSAT LICENSE LLC**

**30-DAY SPECIAL TEMPORARY AUTHORITY REQUEST**

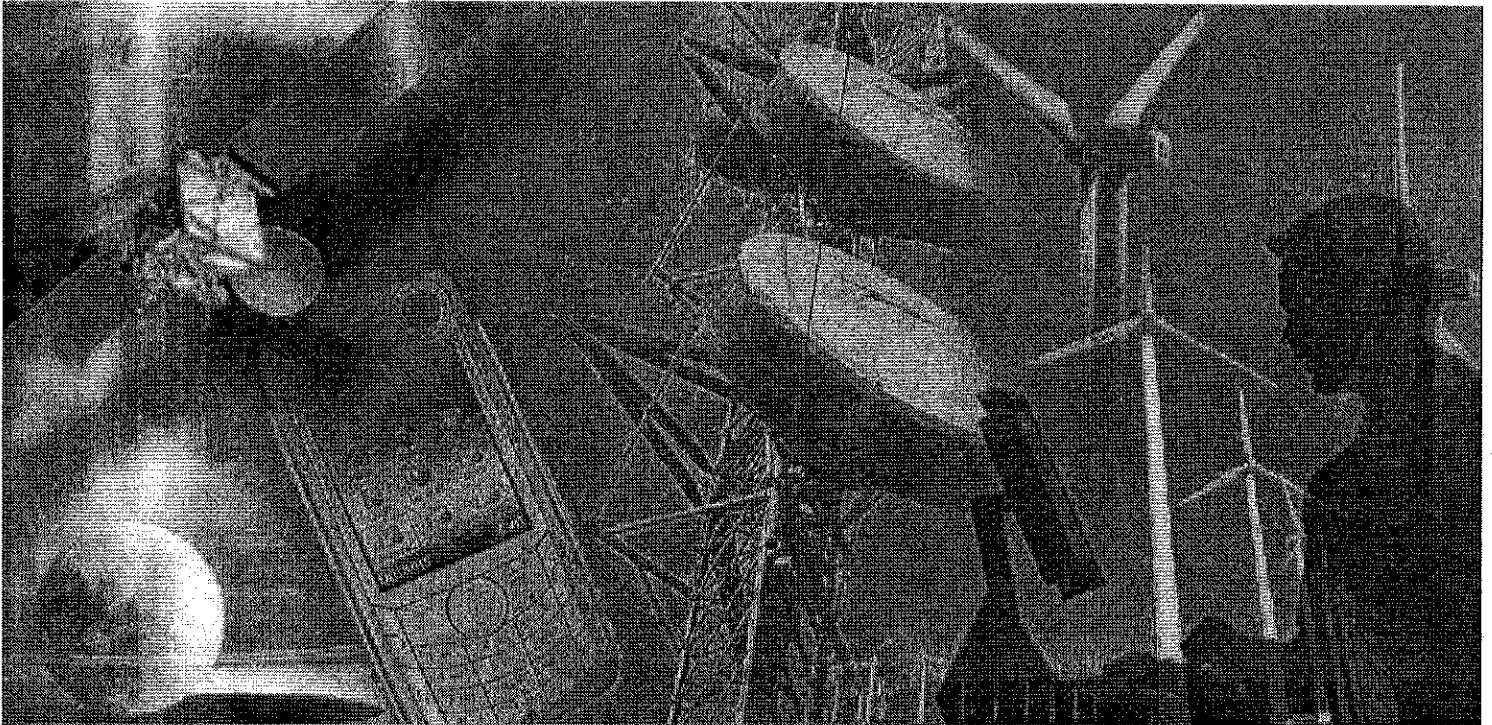
**9.2 KA-BAND METER EARTH STATION**

**MAY 4, 2012**

# Ka-Band Earth Station – Nuevo, CA

## Frequency Coordination Report

### 28 GHz



Prepared on Behalf of  
Intelsat License LLC

April 20, 2012





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## 1. Summary of Results

On behalf of Intelsat's proposed earth station transmitting at 28 GHz<sup>1</sup>, Comsearch performed a frequency search considering all existing and proposed terrestrial licenses within the coordination contours of the Ka-Band station in Nuevo, California. The search results identified licensees in the common carrier fixed microwave service and local television transmission service (LTTS). Prior notification letters were sent to the licensees and a copy of the notification data is provided in section three of this report. The earth station coordination was finalized on April 20, 2012.

No objections were received from any of the incumbent 28 GHz licensees.

## 2. 28 GHz Common Carrier and LTTS Coordination

In accordance with FCC Rules and Regulations, a Ka-Band earth station in Nuevo, CA was prior coordinated by Comsearch. The notification letters and datasheet for this earth station were sent to the following 28 GHz common carrier fixed microwave licensees on March 22, 2012. These licensees are authorized to operate temporary fixed operations from 27.5 – 29.5 GHz on a statewide or nationwide basis.

Licensee	Authorized Geographic Area
AT&T California	Statewide: California & Nevada
GTE Southwest Inc. dba Verizon Southwest	Continental US
M.U.T. Licensing, LLC	Statewide: California
Verizon California Inc.	Statewide: California

A notification letter and datasheet for the Ka-Band earth station in Nuevo, CA was also sent to the following 28 GHz local television transmission licensee on March 22, 2012. This licensee is authorized to operate temporary fixed operations from 27.5 – 29.5 GHz on a nationwide basis.

Licensee	Authorized Geographic Area
Information Super Station, LLC	Continental US

No objections were received from the common carrier or local television transmission service incumbents.

<sup>1</sup> The proposed earth station will operate in the 28,351 – 28,353 MHz portion of the Ka-Band.



### **3. Earth Station Coordination Data**

This section presents the data pertinent to the proposed Ka-Band earth station in Nuevo, CA. This data was circulated to all incumbent licensees in the 28 GHz shared frequency ranges.

**COMSEARCH**  
**Earth Station Data Sheet**  
 19700 Janelia Farm Boulevard, Ashburn, VA 20147  
 (703)726-5662 <http://www.comsearch.com>

Date: 03/20/2012

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**Administrative Information**

Status ENGINEER PROPOSAL  
 Call Sign  
 Licensee Code INTELS  
 Licensee Name Intelsat License LLC

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**Site Information** **NUEVO, CALIFORNIA**

Venue Name  
 Latitude (NAD 83) 33° 47' 42.7" N  
 Longitude (NAD 83) 117° 5' 22.5" W  
 Climate Zone A  
 Rain Zone 4  
 Ground Elevation (AMSL) 569.06 m / 1867.0 ft

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**Link Information**

Satellite Type Low Earth Orbit  
 Mode TR - Transmit-Receive  
 Modulation Digital  
 Minimum Elevation Angle 5.0°  
 Azimuth Range 0.0° to 360°  
 Antenna Centerline (AGL) 7.32 m / 24.0 ft

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**Antenna Information**

**Receive**  
 Manufacturer GD Satcom Technologies  
 Model 9.2 Meter  
 Gain / Diameter 62.7 dBi / 9.2 m  
 3-dB / 15-dB Beamwidth 0.12° / 0.24°

---

**Transmit**

GD Satcom Technologies  
 9.2 Meter  
 65.4 dBi / 9.2 m  
 0.08° / 0.17°

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

- 0.9  
 23.1

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

64.5  
 88.0  
 88.0

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

-151.0 dBW/4 kHz 20%  
 -128.0 dBW/4 kHz 0.0025%

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**Frequency Information**

Emission / Frequency Range (MHz)

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**Receive 18.0 GHz**

288KF2D / 19700.5  
 288KF2D / 19702.5

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**Transmit 28.0 GHz**

900KF2D / 28351.0  
 900KF2D / 28353.0

Max Great Circle Coordination Distance  
 Precipitation Scatter Contour Radius

465.6 km / 289.3 mi  
 100.0 km / 62.1 mi

347.9 km / 216.2 mi  
 100.0 km / 62.1 mi

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

19700 Janelia Farm Boulevard, Ashburn, VA 20147  
(703)726-5662 <http://www.comsearch.com>

<b>Coordination Values</b>		<b>NUEVO, CA</b>			
Licensee Name		Intelsat License LLC			
Latitude (NAD 83)		33° 47' 42.7" N			
Longitude (NAD 83)		117° 5' 22.5" W			
Ground Elevation (AMSL)		569.06 m / 1867.0 ft			
Antenna Centerline (AGL)		7.32 m / 24.0 ft			
Antenna Model		GD Satcom Technologies 9.1 Meter			
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		-0.9 (dBW/4 kHz)			

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 18.0 GHz		Transmit 28.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
0	0.53	76.34	-10.00	373.70	-10.00	256.40
5	1.94	72.35	-10.00	373.70	-10.00	256.40
10	1.78	68.17	-10.00	373.70	-10.00	256.40
15	2.17	64.18	-10.00	373.70	-10.00	256.40
20	2.46	60.28	-10.00	373.70	-10.00	256.40
25	2.87	56.56	-10.00	373.70	-10.00	256.40
30	3.57	53.15	-10.00	373.70	-10.00	256.40
35	3.22	49.41	-10.00	373.70	-10.00	256.40
40	3.30	46.08	-10.00	373.70	-10.00	256.40
45	3.23	42.89	-10.00	373.70	-10.00	256.40
50	2.85	39.77	-10.00	373.70	-10.00	256.40
55	2.53	37.01	-10.00	373.70	-10.00	256.40
60	2.62	35.03	-10.00	373.70	-10.00	256.40
65	3.44	34.31	-10.00	373.70	-10.00	256.40
70	3.11	33.12	-10.00	373.70	-10.00	256.40
75	3.08	32.87	-7.96	386.60	-7.96	269.20
80	3.84	34.07	-4.20	410.40	-4.20	292.90
85	3.21	34.55	0.77	441.80	0.77	324.20
90	3.14	36.16	4.53	465.60	4.53	347.90
95	2.62	37.92	4.53	465.60	4.53	347.90
100	2.76	40.67	4.53	465.60	4.53	347.90
105	3.44	44.11	4.53	465.60	4.53	347.90
110	3.74	47.51	4.53	465.60	4.53	347.90
115	3.69	50.90	4.53	465.60	4.53	347.90
120	3.81	54.56	4.53	465.60	4.53	347.90
125	3.60	58.21	4.53	465.60	4.53	347.90
130	4.12	62.25	4.53	465.60	4.53	347.90
135	3.76	66.07	4.53	465.60	4.53	347.90
140	4.07	70.16	4.53	465.60	4.53	347.90
145	3.98	74.20	4.53	465.60	4.53	347.90
150	2.84	78.14	4.53	465.60	4.53	347.90
155	3.91	82.42	4.53	465.60	4.53	347.90
160	4.44	86.59	4.53	465.60	4.53	347.90
165	4.56	90.73	4.53	465.60	4.53	347.90
170	5.68	94.79	4.53	465.60	4.53	347.90
175	6.32	98.77	4.53	465.60	4.53	347.90
180	6.88	102.68	4.53	465.60	4.53	347.90
185	7.11	106.56	4.53	465.60	4.53	347.90

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<b>Coordination Values</b>		<b>NUEVO, CA</b>			
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Antenna Model		GD Satcom Technologies 9.2 Meter			
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		-0.9 (dBW/4 kHz)			

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 18.0 GHz		Transmit 28.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
190	6.72	110.54	4.53	465.60	4.53	347.90
195	6.02	114.60	4.53	465.60	4.53	347.90
200	5.72	118.50	4.53	465.60	4.53	347.90
205	5.80	122.16	4.53	465.60	4.53	347.90
210	6.02	125.61	4.53	465.60	4.53	347.90
215	6.37	128.79	4.53	465.60	4.53	347.90
220	7.03	131.52	4.53	465.60	4.53	347.90
225	6.87	134.50	4.53	465.60	4.53	347.90
230	5.83	137.91	4.53	465.60	4.53	347.90
235	5.96	140.07	4.53	465.60	4.53	347.90
240	5.87	142.00	4.53	465.60	4.53	347.90
245	5.59	143.63	4.53	465.60	4.53	347.90
250	5.59	144.42	4.53	465.60	4.53	347.90
255	4.48	145.73	4.53	465.60	4.53	347.90
260	4.40	145.38	4.53	465.60	4.53	347.90
265	4.38	144.35	4.53	465.60	4.53	347.90
270	4.51	142.62	4.53	465.60	4.53	347.90
275	4.20	140.78	0.77	441.80	0.77	324.20
280	4.51	138.02	-4.20	410.40	-4.20	292.90
285	4.26	135.33	-7.96	386.60	-7.96	269.20
290	2.96	132.96	-10.00	373.70	-10.00	256.40
295	1.54	130.23	-10.00	373.70	-10.00	256.40
300	1.06	126.71	-10.00	373.70	-10.00	256.40
305	0.00	123.21	-10.00	373.70	-10.00	256.40
310	0.00	119.13	-10.00	373.70	-10.00	256.40
315	0.00	114.99	-10.00	373.70	-10.00	256.40
320	0.00	110.78	-10.00	373.70	-10.00	256.40
325	0.00	106.52	-10.00	373.70	-10.00	256.40
330	0.00	102.23	-10.00	373.70	-10.00	256.40
335	0.00	97.91	-10.00	373.70	-10.00	256.40
340	0.00	93.58	-10.00	373.70	-10.00	256.40
345	0.00	89.24	-10.00	373.70	-10.00	256.40
350	0.00	84.90	-10.00	373.70	-10.00	256.40
355	0.32	80.60	-10.00	373.70	-10.00	256.40





## **4. Contact Information**

For questions or information regarding the 28 GHz Frequency Coordination Report, please contact:

Contact person: Joanna Lynch  
Title: Manager, Spectrum & Data Solutions  
Company: Comsearch  
Address: 19700 Janelia Farm Blvd., Ashburn, VA 20147  
Telephone: 703-726-5711  
Fax: 703-726-5599  
Email: [jlynch@comsearch.com](mailto:jlynch@comsearch.com)  
Web site: [www.comsearch.com](http://www.comsearch.com)

**EXHIBIT D**

**INTELSAT LICENSE LLC**

**30-DAY SPECIAL TEMPORARY AUTHORITY REQUEST**

**9.2 KA-BAND METER EARTH STATION**

**MAY 4, 2012**

**FAA Notification Not Required**

Per Section 17.14 (a) of the FCC's rules, FAA notification is not required, as the antenna structure is located in an area with structures of equal or greater heights.