

RADIO STATION AUTHORIZATION

Name: Intelsat License LLC Call Sign: E020314

Authorization Type: Renewal of License File Number: SES-RWL-20171026-01212

Non Common Carrier Grant date: 01/02/2018 Expiration Date: 01/21/2033

Nature of Service: Fixed Satellite Service

Class of Station: Fixed Earth Stations

A) Site Location(s)

# Site ID	Address	Latitude	Longitude	Elevation (Meters)	Special Provisions NAD (Refer to Section H)
1) IPC6A	22401 Juniper Flats Road	33°47'46.0"N	117°5'14.0"W	548.61	83

Subject to the provisions of the Communications Act of 1934, The Communications Satellite Act of 1962, subsequent acts and treaties, and all present and future regulations made by this Commission, and further subject to the conditions and requirements set forth in this license, the grantee is authorized to construct, use and operate the radio facilities described below for radio communications for the term beginning January 21, 2018 (3 AM Eastern Standard Time) and ending January 21, 2033 (3 AM Eastern Standard Time). The required date of completion of construction and commencement of operation.

B) Particulars of Operations

The General Provision 1010 applies to all receiving frequency bands.

The General Provision 1900 applies to all transmitting frequency bands.

For the text of these provisions, refer to Section H.

#	Frequency (MHz)	Polarization Code	Emission	Tx/Rx Mode	Max EIRP /Carrier (dBW)	Max EIRP Density /Carrier (dBW/4kHz)	Associated Antenna	Special Provisions (Refer to Section H)	Modulation/ Services
1) 5	925.0000-6425.0000	H, V, L, R 4	3K8G7W -	Tx	66.70	56.30	16.4		Digital Traffic, Various Modulation, FEC Rates and Data Rates. Various Combinations of Information.
2) 5	925.0000-6425.0000	H, V, L, R 7	2M0G7W	Tx	86.00	43.50	16.4		Digital Traffic, Various Modulation, FEC Rates and Data Rates. Various Combinations of Information.
3) 5	925.0000-6425.0000	H, V, L, R 3	6M0F3F	Tx	86.00	59.00	16.4		Standard Video with Associated Audio Subcarriers
4) 5	925.0000-6425.0000	H,V,L,R 7	⁷ 2M0G7W	Tx	86.00	56.30	16.4		Digital Viedo, Voice and Data

(page 1 of 5) FCC Form 488



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Tot the text of these provisions, refer to section 11.				Max EIRP	Max EIRP		Special Provisions				
#	Frequency (MHz)	Polarization Code	Emission	Tx/Rx Mode	/Carrier	Density /Carrier (dBW/4kHz)	Associated Antenna	(Refer to Section H)	Modulation/ Services		
5) 59	25.0000-6425.0000	H, V, L, R 4	13K8G7W	Tx	86.00	56.30	16.4		Digital Video, Data	Voice	and
6) 59	25.0000-6425.0000	H,V,L,R3	36M0F3F	Tx	86.00	59.00	16.4		Analog Video		
7) 59	25.0000-6425.0000	H,V,L,R8	300KFXD	Tx	77.00	54.00	16.4		TT&C Carrier		
8) 58	50.0000-5925.0000	H, V, L, R 7	72M0G7W	Tx	86.00	56.30	16.4		Digital Video, Data	Voice	and
9) 58	50.0000-5925.0000	H, V, L, R 4	13K8G7W	Tx	86.00	56.30	16.4		Digital Video, Data	Voice	and
10) 58	50.0000-5925.0000	H, V, L, R 3	36M0F3F	Tx	86.00	59.00	16.4		Analog Video		
11) 37	700.0000-4200.0000	H, V, L, R 4	13K8G7W -	Rx			16.4		Digital Traffic Modulation, FEC Data Rates. Combinations Information.		and
12) 37	00.0000-4200.0000	H, V, L, R 7	72M0G7W	Rx			16.4		Digital Traffic Modulation, FEC Data Rates. Combinations Information.		and
13) 37	700.0000-4200.0000	H, V, L, R 3	36M0F3F	Rx			16.4		Standard Vide Associated Subcarriers		th udio
14) 37	00.0000-4200.0000	H, V, L, R 7	72M0G7W	Rx			16.4		Digital Video, Data	Voice	and
15) 37	700.0000-4200.0000	H, V, L, R 4	13K8G7W	Rx			16.4		Digital Video, Data	Voice	and
16) 37	700.0000-4200.0000	H, V, L, R 3	36M0F8F	Rx			16.4		Analog Video		
17) 37	700.0000-4200.0000	H, V, L, R 3	350KFXD	Rx			16.4		TT&C Carrier		
18) 36	25.0000-3700.0000	H, V, L, R 7	72M0G7W	Rx			16.4		Digital Video, Data	Voice	and
19) 36	25.0000-3700.0000	H, V, L, R 4	13K8G7W	Rx			16.4		Digital Video, Data	Voice	and
20) 36	25.0000-3700.0000	H, V, L, R 3	36M0F8F	Rx			16.4		Analog Video		

FCC Form 488



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C) Frequency Coordination Limits

#	Frequency Limits (MHz)	Satellite Arc (Deg. Long.) East West Limit Limit	Elevation (Degrees) East West Limit Limit	Azimuth (Degrees) East West Limit Limit	110112011	ssociated ntenna(s)
1)	3700.0000-4200.0000	50.0W-186.0W	10.3-08.8	103.2-257.9	0 16.4	
2)	5925.0000-6425.0000	50.0W-186.0W	10.3-08.8	103.2-257.9	14.99 16.4	
3)	5850.0000-5925.0000	50.0W-190.0W	10.3-05.5	103.2-260.3	31.5 16.4	
4)	5925.0000-6425.0000	50.0W-190.0W	10.3-05.5	103.2-260.3	31.5 16.4	
5)	3625.0000-3700.0000	50.0W-190.0W	10.3-05.5	103.2-260.3	16.4	
6)	3700.0000-4200.0000	50.0W-190.0W	10.3-05.5	103.2-260.3	16.4	
7)	5925.0000-6425.0000	50.0W-190.0W	10.3-05.5	103.2-260.3	26.49 16.4	
8)	3700.0000-4200.0000	50.0W-190.0W	10.3-05.5	103.2-260.3	16.4	

D) Points of Communications

The following stations located in the Satellite orbits consistent with Sections B and C of this Entry:

- 1) IPC6A to Permitted Space Station List
- 2) IPC6A to INTELSAT 29e (S2913) @ 50.0 degrees W.L. (U.S.-licensed)
- 3) IPC6A to INTELSAT 23 (S2831) @ 53 degrees W.L. (U.S.-licensed)
- 4) IPC6A to INTELSAT 34 (S2915) @ 55.5 degrees W.L. (U.S.-licensed)
- 5) IPC6A to INTELSAT 18 (S2817) @ 180 degrees E.L. (U.S.-licensed)

E) Antenna Facilities

Sit II		Units	Diameter (meters)	Manufacturer	Model number	Site Elevation (Meters)	Max Antenna Height (Meters)	Special Provisions (Refer to Section H)
IPC6A	16.4	1	16.4	Vertex	THC	548.61	17.4 AGL/ 566 AMSL	_
	Max Gains(s):	54.8	dBi @	3.9500 GHz	59.0 dBi @ 6.175	0 GHz		
	Maximum total input	power	at anteni	na flange (Watts)	= 1,000.00			
	Maximum aggregate o	utput	EIRP for a	all carriers (dBW)	= 89.00			

G) Antenna Structure marking and lighting requirements:

None unless otherwise specified under Special and General Provisions

(page 3 of 5) FCC Form 488



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H) Special and General Provisions

A) This RADIO STATION AUTHORIZATION is granted subject to the following special provisions and general conditions:

- 4 --- Licensee must ensure that a current listing of the name, title, mailing address, email address, and telephone number of the responsible point of contact are on file at the FCC. Any changes must be filed electronically in the International Bureau Filing System (IBFS) in the "Other Filings" tab within 10 days of the change.
- 5 --- Licensee must notify the Commission when an earth station is no longer operational or when it has not been used to provide any service during any 6-month operation.
- 6 --- Licensee must comply with the license modification and notification requirements of 47 CFR § 25.118 to change the coordinates of its authorized earth station.
- 90398 --- Changes to previously authorized transmitting facilities, operations and devices regulated by the Commission that may have significant environmental impact, and are not excluded by §1.1306, require the preparation of an Environmental Assessment (EA) by the licensee. (See 47 C.F.R. §§1.1307, 1.1308 and 1.1311)
- 90399 --- The licensee shall, at all times, take all necessary measures to ensure that operation of this (these) authorized earth station(s) does not create potential exposure of humans to radiofrequency radiation in excess of the FCC exposure limits defined in 47 CFR §§ 1.1307(b) and 1.1310. Physical measures must be taken to ensure compliance with limits for both occupational/controlled exposure and for general population/uncontrolled exposure, as defined in these rule sections. Compliance can be accomplished in most cases by appropriate restrictions, such as fencing. Requirements for restrictions can be determined by predictions based on calculations, modeling, or by field measurements. The FCC's OET Bulletin 65 (available on-line at www.fcc.gov/oet/rfsafety) provides information on predicting exposure levels and on methods for ensuring compliance, including the use of warning and alerting signs and protective equipment for workers.
- 900407 --- The Permitted Space Station List (Permitted List) is a list of all geostationary space stations providing fixed-satellite service pursuant to a Commission license or grant of U.S. market access. The Permitted List currently includes the following frequency bands per §25.103 and §25.115(k)(1):

3600-4200 MHz (space-to-Earth)

5850-6725 MHz (Earth-to-space)

10.95-11.2 GHz (space-to-Earth)

11.45-12.2 GHz (space-to-Earth)

13.75-14.5 GHz (Earth-to-space)

18.3-18.8 GHz (space-to-Earth)

19.7-20.2 GHz (space-to-Earth)

24.75-25.25 GHz (Earth-to-space)

28.35-28.6 GHz (Earth-to-space)

29.25-30.0 GHz (Earth-to-space).

Earth stations with "Permitted List" designated as a point of communication may access any space station on the Permitted List, provided the operations comply with the applicable "routine" uplink and downlink limits, are within the specific frequency bands authorized in the earth station license, have completed coordination with terrestrial stations pursuant to §25.203, and otherwise comply with all terms and conditions of both the earth station license and the space station grant.

900411 --- In accordance with US245, the applicant is aware of the potential allocation and electromagnetic compatibility issues in 5850-5925 MHz band, and agrees to accept this potential for unacceptable interference. Additionally and these fixed-satellite service operations are limited to international inter-continental satellite systems.



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B) This RADIO STATION AUTHORIZATION is granted subject to the additional conditions specified below:

This authorization is issued on the grantee's representation that the statements contained in the application are true and that the undertakings described will be carried out in good faith.

This authorization shall not be construed in any manner as a finding by the Commission on the question of marking or lighting of the antenna system should future conditions require. The grantee expressly agrees to install such marking or lighting as the Commission may require under the provisions of Section 303(q) of the Communications Act. 47 U.S.C. § 303(q).

Neither this authorization nor the right granted by this authorization shall be assigned or otherwise transferred to any person, firm, company or corporation without the written consent of the Commission. This authorization is subject to the right of use or control by the government of the United States conferred by Section 706 of the Communications Act. 47 U.S.C. § 706. Operation of this station is governed by Part 25 of the Commission's Rules. 47 C.F.R. Part 25.

This authorization shall not vest in the licensee any right to operate this station nor any right in the use of the designated frequencies beyond the term of this license, nor in any other manner than authorized herein.

This authorization is issued on the grantee's representation that the station is in compliance with environmental requirements set forth in Section 1.1307 of the Commission's Rules. 47 C.F.R. § 1.1307.

This authorization is issued on the grantee's representation that the station is in compliance with the Federal Aviation Administration (FAA) requirements as set forth in Section 17.4 of the Commission's Rules. 47 C.F.R.§ 17.4.

The following condition applies when this authorization permits construction of or modifies the construction permit of a radio station.

This authorization shall be automatically forfeited if the station is not ready for operation by the required date of completion of construction unless an application for modification of authorization to request additional time to complete construction is filed by that date, together with a showing that failure to complete construction by the required date was due to factors not under control of the grantee.

Licensees are required to pay annual regulatory fees related to this authorization. The requirement to collect annual regulatory fees from regulates is contained in Public Law 103-66, "The Omnibus Budget Reconciliation Act of 1993." These regulatory fees, which are likely to change each fiscal year, are used to offset costs associated with the Commission's enforcement, public service, international and policy and rulemaking activities. The Commission issues a Report and Order each year, setting the new regulatory fee rates. Receive only earth stations are exempt from payment of regulatory fees.

(page 5 of 5) FCC Form 488