S2368 SAT-MOD-20160219-00019 Intelsat License LLC INTELSAT 1R

IB2016000491

Call Sign 5 2368 Grant Date 05/05/16 (or other identifier) GRANTED *

Term Dates From 05/05/16

Approved:

File # SAT-MOD-20160219-00019

Approved by OMB 3060-0678

Date & Time Filed: Feb 19 2016 4:12:51:580PM

File Number: SAT-MOD-20160219-00019

* see conditions

International Bureau

Satellite Policy Branch

08/31/2023

FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD - MAIN FORM

FCC Use Only

FCC 312 MAIN FORM FOR OFFICIAL USE ONLY

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu: Modification to Relocate and Operate Intelsat 1R at 50.1 W.L. (S2368)

1-8.	Legal	Name	of An	plicant
	LUCA	Timitio	OLLEP	PILOUILE

Name:

Intelsat License LLC

Phone Number:

703-559-7848

DBA

Fax Number:

703-559-8539

Name: Street:

c/o Intelsat Corporation

E-Mail:

susan.crandall@intelsat.com

-5972

7900 Tysons One Place

City:

McLean

State:

VA

Country:

USA

Zipcode:

22102

Attention: Susan H. Crandall

IBFS File No(s):	SAT-MOD-20160219-00019	GRANTED-				
Licensee/Grantee:	Intelsat Licensee LLC	With Conditions				
Call Sign:	S2368					
Satellite Name:	Intelsat 1R	COMMUNICAL				
Orbital Location:	50.1° W.L.					
(required station-	± 0.05 degrees east/west)					
keeping tolerance)		COMMISSION				
Administration:	U.S.					
Nature of Service:	Fixed-Satellite Service (FSS)	International Bureau				
		Satellite Division				
Scope of Grant:	Intelsat Licensee is authorized to operate the Intelsat 1R s					
	the 50.1° W.L. orbital location, and to operate the commu					
	move from 50° W.L, its prior authorized orbital location.					
	Intelsat 1R is extended from June 24, 2016 through August 31, 2023.					
Service Area(s):	United States, Central and South America, Europe, and Africa. See Schedule S, S6.					
-						
Frequencies:	3700-4200 MHz (space-to-Earth)					
	5925-6425 MHz (Earth-to-space)					
	10.95-11.20 GHz (space-to-Earth)					
	11.45-11.95 GHz (space-to-Earth)					
	13.75-14.50 GHz (Earth-to-space)					
	Telemetry, Tracking, and Command frequencies:					
	13:995 GHz (horizontal and vertical polarization) (Earth-to-space)					
	14.4985 GHz (left-hand circular polarization) (Earth-to-space)					
	11.696 GHz (horizontal, vertical, and left-hand circular polarization) (space-to-Earth)					
	11.697 GHz (horizontal, vertical and left-hand circular polarization) (space-to-Earth)					

Operations under this grant must comport with the legal and technical specifications set forth by the applicant or petitioner and with Federal Communication Commission's rules not waived herein. This grant is also subject to the following conditions:

- 1. Intelsat is authorized to use the following frequencies to conduct telemetry, tracking, and command (TT&C) operations necessary to drift Intelsat 1R from its currently authorized orbital location of 50° W.L. to the 50.1° W.L. orbital location: 13995 MHz, 14498.5 MHz (Earth-to-space) and 11696 MHz, 11697 MHz (space-to-Earth).
- 2. Intelsat must operate the Intelsat 1R space station at the 50.1° W.L. orbital location in compliance with all existing for future coordination agreements for that location.
- 3. In connection with the provision of any service to any particular country, Intelsat is obligated to comply with the applicable laws, regulations, rules, and licensing procedures of that country.
- 4. Intelsat must operate its earth stations in the 10.95-11.20 GHz and 11.45-11.70 GHz bands that provide domestic service on an unprotected, non-interference basis relative to fixed stations, and as such, Intelsat may not cause harmful interference to, or claim protection from, fixed stations to which frequencies in the 10.95-11.20 GHz and 11.45-11.70 GHz bands have either already assigned or may be assigned at later date.
- 5. Intelsat is required to inform its customers, in writing, including end-users receiving service from resellers accessing capacity on the Intelsat 1R space station, that domestic service in the 10.95-11.20 GHz and 11.45-11.70 GHz bands is being provided on an uncoordinated basis, and that the potential exists that future-licensed fixed stations may cause harmful interference to these unprotected earth stations.

- 6. Intelsat's use of the 10.95-11.20 GHz and 11.45-11.70 GHz bands is subject to footnote US211 to the United States Table of Frequency Allocations, 47 CFR § 2.106, US211, which urges applicants for airborne or space station assignments to take all practicable steps to protect radio astronomy observations in the adjacent bands from harmful interference, consistent with footnote US74.
- 7. In the 13.75-14.00 GHz band, receiving space stations in the fixed-satellite service shall not claim protection from radiolocation transmitting stations operating in accordance with the United States Table of Frequency Allocations.
- 8. Pursuant to footnote US337 of the United States Table of Frequency Allocations, 47 CFR § 2.106, any earth station in the United States and its possessions communicating with the Intelsat 1R space station in the 13.75-14.0 GHz band is required to coordinate through the National Telecommunications and Information Administration's (NTIA's) Interdepartment Radio Advisory Committee's (IRAC's) Frequency Assignment Subcommittee (FAS) to minimize interference to the National Aeronautics and Space Administration Tracking and Data Relay Satellite System, including manned space flight.
- 9. Operations of any earth station in the United States and its possessions communicating with the Intelsat 1R space station in the 13.75-14.0 GHz band must comply with footnote US356 to the United States Table of Frequency Allocations, 47 CFR §2.106, US356, which specified a mandatory minimum antenna diameter of 4.5 meters and a non-mandatory minimum and maximum equivalent isotropically radiated powers (e.i.r.p.). Operations of any earth station located outside of the United States and its possessions communicating with the Intelsat 1R space station in the 13.75-14.00 GHz band must be consistent with footnote 5.502 to the ITU Radio Regulations, which allows a minimum antenna diameter of 1.2 meters for earth stations of geostationary satellite orbit network and specifies mandatory power limits.
- 10. Operations of any earth station in the United States and its possessions communicating with the Intelsat 1R space station in the 13.77-13.78 GHz band shall comply with footnote US357 to the United States Table of Frequency Allocations, 47 CFR § 2.106, US357, which specifies that a required maximum e.i.r.p. density of emissions not exceed 71 dBW in any 6 MHz band for communications with a space station in geostationary-satellite orbit. Operations of any earth station located outside the United States and its possessions communicating with the Intelsat 1R space station in the 13.77-13.78 GHz band shall comply with footnote 5.503 to the ITU Radio Regulations, which specifies a required maximum e.i.r.p. density of emissions (limit is dependent on antenna diameter) for communications with a space station in geostationary orbit.
- 11. Intelsat's request for a continued waiver of Section 2.106, Footnote NG52 to the U.S. Table of Frequency Allocations, 47 CFR § 2.106, and footnote 2 of Section 25.202(a)(1) of the Commission's rules, 47 CFR § 25.202(a)(1), to provide domestic service using earth stations that receive in the 10.95-11.20 GHz and 11.45-11.70 GHz band is GRANTED. Waiver of these rule provisions was previously granted for the Intelsat 1R space station at 50°W.L. and we find that the same public interest considerations continue to apply for operations of Intelsat 1R at 50.1° W.L. See IBFS File Nos. SAT-MOD-20090720-00073, SAT-AMD-20090820-00091, and SAT-AMD-20091113-00122 (granted Aug. 5, 2010) (Intelsat Grant for 50 W.L.).
- 12. Intelsat's request for a continued waiver of Sections 25.114(d)(14)(ii) and 25.283(c) of the Commission's rules, 47 CFR 24.114(d)(14)(ii) and 25.283(c) is GRANTED. These rules require an applicant to demonstrate that all stored energy will be vented at the spacecraft's end of life. The Intelsat 1R is a Boeing model 702 spacecraft that is not designed to vent all of its pressurized systems. The spacecraft was launched November 16, 2000 prior to the adoption of these rules, and compliance would require direct retrieval of the spacecraft.
- 13. Intelsat is granted continued waivers of Sections 25.210(a)(3), 25.211(a), and 25.202(g) of the Commission's rules, 47 CFR §§ 25.210(a)(3), 25.211(a), and 25.202(g). Intelsat was granted waivers of

¹ Footnote US357 places a restriction on FSS earth station operations to protect government operations in the band, including manned space flight. 47 CFR § 2.106, US357.

these rules in its authorization to operate at the 50° W.L. orbital location and did not seek continued waivers based on recent modifications or deletions of these rules as part of the Commission's order streamlining the Part 25 rules governing satellite communications.² Although the rule changes are not yet in effect, the public interest rationale for modifying or eliminating the rules justifies a waiver in this instance.

- 14. Intelsat is granted a continued waiver of Section 25.114(c)(4)(vi)(A) of the Commission's rules. 47 CFR §25.114(c)(4)(vi)(A). Intelsat was previously granted a waiver of 25.114(d)(3), which was re-designated as Section 25.114(c)(4)(vi)(A). See Comprehensive Review of Licensing and Operating Rules for Satellite Services, Report and Order, 28 FCC Rcd 12403, 12434 (2013). We find that the same public interest considerations continue to apply for operations of Intelsat 1R at 50.1° W.L. See IBFS File Nos. SAT-MOD-20090720-00073, SAT-AMD-20090820-00091, and SAT-AMD-20091113-00122 (granted Aug. 5, 2010).
- 15. Intelsat must notify the Chief, Satellite Division, in writing, within five days of any anomaly experienced by the xenon ion propulsion system (XIPS) that results in the cessation of XIPS operations, or that might reasonably be expected to result in cessation of XIPS operations, or that might otherwise compromise the reliability of end-of-life disposal using XIPS. Within 15 days following any such anomaly, Intelsat shall submit a revised post-mission disposal plan for the spacecraft, and provide full information with respect to the standard chemical propulsion system, including fuel reserved for end-of-life operations and methods for addressing fuel gauging uncertainty of that system.
- 16. Intelsat's operation of the 3700-4200 MHz, 5925-6425 MHz, 10.95-11.20 GHz, 11.45-11.90 GHz, and 13.75 GHz frequency bands at the 50.1° W.L. orbital location is subject to the following condition:
 - a. Intelsat shall remain a signatory to the Public Services Agreement between Intelsat and the International Telecommunications Satellite Organization (ITSO) that was approved by the ITSO Twenty-fifth Assembly of Parties, as amended.
 - b. No entity shall be considered a successor-in-interest to Intelsat under the ITSO Agreement for licensing purposes unless it has undertaken to perform the obligations of the Public Services Agreement approved by the Twenty-fifth Assembly of the Parties, as amended.
- 17. Intelsat must notify the Commission when Intelsat 1R goes into inclined orbit, pursuant to 47 CFR § 25.280.
- 18. Intelsat's request for an extension of license term for the Intelsat 1R space station through August 31, 2023 is GRANTED.

Licensee/grantee is afforded thirty (30) days from the date of release of this action to decline the grant as conditioned. Failure to respond within this period will constitute formal acceptance of the grant as conditioned.

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

Station licenses are subject to the conditions specified in Section 309(h) of the Communications Act of 1934, as amended, 47 U.S.C. § 309(h).

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Action	05/05/2016	
Date:		
Term Dates	From: 05/05/2016	To: 08/31/2023

² Comprehensive Review of Licensing and Operating Rules for Satellite Services, Second Report and Order, 30 FCC Rcd 14713 (2015) (not yet published in the Federal Register).

Approved:

Stephen J. Duall Chief, Satellite Policy Branch

9–16. Name of Contact Representative

Name: J

Jennifer D. Hindin

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202-719-4975

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Wiley Rein LLP

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E-Mail:

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City:

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State:

DC

Country:

USA

Zipcode:

20006-3006

Attention:

Relationship:

Legal Counsel

CLASSIFICATION OF FILING

17. Choose the button next to the classification that applies to this filing for both questions a. and b. Choose only one for 17a and only one for 17b.

al. Earth Station

a2. Space Station

(N/A) b1. Application for License of New Station

(N/A) b2. Application for Registration of New Domestic Receive-Only Station

6 b3. Amendment to a Pending Application

6 b4. Modification of License or Registration

b5. Assignment of License or Registration

b6. Transfer of Control of License or Registration

6 b7. Notification of Minor Modification

(N/A) b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite

(N/A) b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States

(N/A) b10. Other (Please specify)

(N/A) b11. Application for Earth Station to Access a Non-U.S.satellite Not Currently Authorized to Provide the Proposed Service in the Proposed Frequencies in the United States

(N/A) b12. Application for Database Entry

6 b13. Amendment to a Pending Database Entry Application

o b14. Modification of Database Entry

17c. Is a fee submitted with this applicate of If Yes, complete and attach FCC Form	ion? 159. If No, indicate reason for fee exemption	on (see 47 C.F.R.Section 1.1114).					
Governmental Entity Noncomme	Governmental Entity Noncommercial educational licensee						
Other(please explain):	•						
17d.							
Fee Classification BFY – Space Station M	Iodification(Geostationary)						
18. If this filing is in reference to an existing station, enter:	19. If this filing is an amendment to a pending modification please enter only the file numb	ng application enter both fields, if this filing is a per:					
(a) Call sign of station:	(a) Date pending application was filed:	(b) File number:					
S2368		SATMOD2009072000073					

TYPE OF SERVICE

20. NATURE OF SERVICE: This filing is for an authorization to provid	e or use the following type(s) of service(s): Select all that apply:
a. Fixed Satellite	
b. Mobile Satellite	
c. Radiodetermination Satellite	
d. Earth Exploration Satellite	
e. Direct to Home Fixed Satellite	•
f. Digital Audio Radio Service	
g. Other (please specify)	
21. STATUS: Choose the button next to the applicable status. Choose	22. If earth station applicant, check all that apply.
only one.	Using U.S. licensed satellites
O Common Carrier Non-Common Carrier	Using Non–U.S. licensed satellites
23. If applicant is providing INTERNATIONAL COMMON CARRIER s facilities:	ervice, see instructions regarding Sec. 214 filings. Choose one. Are these
O Connected to a Public Switched Network O Not connected to a	Public Switched Network N/A
24. FREQUENCY BAND(S): Place an 'X' in the box(es) next to all a	pplicable frequency band(s).
a. C-Band (4/6 GHz) b. Ku-Band (12/14 GHz)	
c.Other (Please specify upper and lower frequencies in MHz.)	
Frequency Lower: Frequency Upper: (Please specify addition	nal frequencies in an attachment)

TYPE OF STATION

25. CLASS OF STATION: Choose the button next to the class of station that applies. Choose only one.
••
o a. Fixed Earth Station
o b. Temporary-Fixed Earth Station
o c. 12/14 GHz VSAT Network
d. Mobile Earth Station
e. Geostationary Space Station
of. Non-Geostationary Space Station
og. Other (please specify)
26. TYPE OF EARTH STATION FACILITY:
Transmit/Receive Transmit-Only Receive-Only N/A
"For Space Station applications, select N/A."

PURPOSE OF MODIFICATION

27. The purpose of this proposed modification is to: (Place an 'X' in the box(es) next to all that apply.)
a — authorization to add new emission designator and related service
b — authorization to change emission designator and related service
c — authorization to increase EIRP and EIRP density
d — authorization to replace antenna
e — authorization to add antenna
f — authorization to relocate fixed station
g — authorization to change frequency(ies)
h — authorization to add frequency
i — authorization to add Points of Communication (satellites & Double
j — authorization to change Points of Communication (satellites & amp; countries)
k — authorization for facilities for which environmental assessment and
radiation hazard reporting is required
I — authorization to change orbit location
m — authorization to perform fleet management
n — authorization to extend milestones
o Other (Please specify)

ENVIRONMENTAL POLICY

28. Would a Commission grant of any proposal in this application or amendment have a significant environmental impact as defined by 47 CFR 1.1307? If YES, submit the statement as required by Sections 1.1308 and 1.1311 of the Commission's rules, 47 C.F.R. 1.1308 and 1.1311, as an exhibit to this application. A Radiation Hazard Study must accompany all applications for new transmitting facilities, major modifications, or major amendments.	0	Yes	®	No		
ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aerona aeronautical fixed radio station services are not required to respond to Items 30–34.	autic	al en	rou	te or		
29. Is the applicant a foreign government or the representative of any foreign government?	0	Yes	•	No		
30. Is the applicant an alien or the representative of an alien?	0	Yes	•	No	0	N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	0	Yes	•	No	0	N/A
32. Is the applicant a corporation of which more than one—fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	0	Yes	0	No	0	N/A

33. Is the applicant a corporation directly or indirectly controlled by any other corporation of which more than one—fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	● Yes ○	No O N/A
34. If any answer to questions 29, 30, 31, 32 and/or 33 is Yes, attach as an exhibit an identification of the aliens or foreign entities, their nationality, their relationship to the applicant, and the percentage of stock they own or vote.		
BASIC QUALIFICATIONS		
35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules? If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.	• Yes	O No
	EngineeringS	tatement
36. Has the applicant or any party to this application or amendment had any FCC station authorization or license revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explination of circumstances.	⊚ Yes	O No

37. Has the applicant, or any party to this application or amendment, or any party directly or indirectly controlling the applicant ever been convicted of a felony by any state or federal court? If Yes, attach as an exhibit, an explination of circumstances.	O Yes	⊚ No
38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attemptiing unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement or any other means or unfair methods of competition? If Yes, attach as an exhibit, an explanation of circumstances	O Yes	⊚ No
39. Is the applicant, or any person directly or indirectly controlling the applicant, currently a party in any pending matter referred to in the preceding two items? If yes, attach as an exhinit, an explanation of the circumstances.	O Yes	⊚ No
40. If the applicant is a corporation and is applying for a space station license, attach as an exhibit the names, address, and citizenship of those stockholders owning a record and/or voting 10 percent or more of the Filer's voting stock and the percentages so held. In the case of fiduciary control, indicate the beneficiary(ies) or class of beneficiaries. Also list the names and addresses of the officers and directors of the Filer.		

41. 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	O No
42a. Does the applicant intend to use a non-U.S. licensed satellite to provide service in the United States? If Yes, answer 42b and attach an exhibit providing the information specified in 47 C.F.R. 25.137, as appropriate. If No, proceed to question 43.	O Yes	⊚ No
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, w coordinated or is in the process of coordinating the space station?	hat administr	ation has

43. Description. (Summarize the nature of the application and the services to be provided). (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Intelsat License LLC, pursuant to Section 25.117 of the rules of the Federal Communications Commission, hereby seeks to modify the authorization for the Intelsat 1R (Call Sign S2368) satellite to relocate to, and operate the satellite at, 50.1 W.L. Intelsat also seeks to extend the license term of this satellite through August 31, 2023.

Narrative & Exhibits

43a. Geographic Service Rule Certification By selecting A, the undersigned certifies that the applicant is not subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25.	A
By selecting B, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will comply with such requirements.	O B
By selecting C, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will not comply with such requirements because it is not feasible as a technical matter to do so, or that, while technically feasible, such services would require so many compromises in satellite design and operation as to make it economically unreasonable. A narrative description and technical analysis demonstrating this claim are attached.	o c

CERTIFICATION

The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. The applicant certifies that grant of this application would not cause the applicant to be in violation of the spectrum aggregation limit in 47 CFR Part 20. All statements made in exhibits are a material part hereof and are incorporated herein as if set out in full in this application. The undersigned, individually and for the applicant, hereby certifies that all statements made in this application and in all attached exhibits are true, complete and correct to the best of his or her knowledge and belief, and are made in good faith.

44. Applicant is a (an): (Choose the button next to appl	icable response.)
 Individual Unincorporated Association Partnership Corporation Governmental Entity Other (please specify) 	
45. Name of Person Signing Susan H. Crandall —>	46. Title of Person Signing Assoc. General Counsel, Intelsat Corporation
(U.S. Code, Title 18, Section 10	ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT 001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION (a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).

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