

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
AC BidCo LLC)	File No. SES-MOD-_____
)	Call Sign E120106
Modification to Blanket License for)	
Operation of Aeronautical Ku-Band Transmit/Receive)	
Earth Stations in Motion)	

MODIFICATION

AC BidCo LLC (“AC BidCo”) hereby requests a modification of its blanket license to operate aeronautical Ku-band transmit/receive earth stations in motion (“ESIMs”) on domestic and international flights.¹ AC BidCo requests that the Commission modify the AC BidCo License to add the Canadian-licensed Anik F1R satellite at 107.3° W.L as an authorized point of communication; increase the number of ThinKom model 2Ku antennas designated as AES2 on the AC BidCo License from 1,000 to 2,500; and make associated technical changes.

A narrative description of the relevant changes is provided here, and AC BidCo is attaching an FCC Form 312 with the updated information. Pursuant to Section 25.117(c) of the Commission’s rules, AC BidCo is providing herein information that is changing as a result of the modification. AC BidCo certifies that the remaining information provided in support of the AC BidCo License has not changed.²

¹ See Call Sign E120106, File No. SES-MFS-20190304-00227, granted July 22, 2019 (the “AC BidCo License”).

² For the Commission’s convenience, AC BidCo has attached as Annex 1 hereto a table listing the information required pursuant to Part 25 of the Commission’s rules and providing a cross-reference to the necessary information. This table reflects the updated ESIMs regulatory regime adopted by the Commission in September of 2018. *See Amendment of Parts 2 and 25 of the Commission’s Rules to Facilitate the Use of Earth Stations in Motion Communicating with Geostationary Orbit Space Stations in Frequency Bands Allocated to the Fixed-Satellite Service,*

AC BidCo requests modification of its license to add the Anik F1R satellite as a point of communication for both the AeroSat antennas designated as AES1 on the AC BidCo License and the ThinKom model 2Ku antennas designated as AES2 on the license. Updated tables listing the satellites to be used and the associated ground stations are provided in Annex 2 hereto.

Anik F1R is a Canadian-licensed satellite which has been authorized to serve the U.S. at 107.3° W.L.,³ and complete technical information regarding the satellite is therefore already on file with the Commission.⁴ AC BidCo seeks authority to use Anik F1R capacity for ESIMs operations on a primary basis in the 14-14.5 GHz uplink spectrum and the 11.7-12.2 GHz downlink spectrum, consistent with the Anik F1R Authorization and as permitted under the ESIMs Order.

Anik F1R will provide coverage of North America. In support of the Anik F1R STA, AC BidCo provided a letter confirming that operation of the AC BidCo terminals is consistent with coordination agreements with satellites operated within six degrees of Anik F1R, and a copy of that letter is included in the attached Annex 3 for the Commission's convenience. AC BidCo's operations with Anik F1R will also conform to the terms of its agreements with the National Aeronautics and Space Administration and the National Science Foundation.

In addition to adding Anik F1R, AC BidCo is seeking modification of its license to increase the number of authorized AES2 terminals to 2,500 and to add a wider bandwidth

Report and Order and Further Notice of Proposed Rulemaking, 33 FCC Rcd 9327 (2018) (“ESIMs Order”).

³ Call Sign S2674, File No. SAT-PPL-20050504-00094, granted June 8, 2018, as corrected July 21, 2005 (the “Anik F1R Authorization”).

⁴ AC BidCo has already commenced operations with Anik F1R in the conventional Ku-band spectrum pursuant to a grant of Special Temporary Authority. *See AC BidCo LLC*, File No. SES-STA-20190802-01016, granted Aug. 12, 2019 (“Anik F1R STA”). AC BidCo's request to extend the Anik F1R STA is pending, File No. SES-STA-20191023-01360.

transmit emission designator for that terminal. These changes will enable AC BidCo to respond to growing demand for in-flight connectivity services.

AC BidCo respectfully requests that the Commission modify the AC BidCo License to reflect the changes described herein.

Respectfully submitted,

AC BIDCO LLC

By: /s/ Marguerite Elias

Of Counsel

Karis A. Hastings
SatCom Law LLC
1317 F Street, N.W., Suite 400
Washington, D.C. 20004
(202) 599-0975

Marguerite Elias
Executive Vice President & General Counsel
AC BidCo LLC
111 North Canal Street
Chicago, IL 60606
(202) 870-7220

Dated: November 12, 2019

ANNEX 1: Table of Information Required by Commission Rules

Regulatory Requirement	Citation to Information Provided
25.115(m)(2), 25.228(a)	Target satellite operator certifications pursuant to Section 25.220 are in Annex 3 attached.
25.115(m)(3)(i), 25.228(b) & (c)	AC BidCo has previously demonstrated that its system will comply with coordination agreements and requirements to cease transmissions if applicable limits are exceeded.
25.115(m)(3)(ii)	The ESAA network will operate in U.S. airspace, foreign airspace, and in the airspace over international waters. Coverage areas for the specific satellites to be used in the ESAA network are described in the table found in Annex 2 attached.
25.115(m)(3)(iii), 25.228(g)(1)	The 24/7 point of contact information remains the same. The phone number is +1 866-943-4662 and the e-mail address is noc@gogoair.com . The street address is: AC BidCo Network Operations Center, 111 North Canal Street, Chicago, IL, 60606, as specified in Form 312 Schedule B, Items E2-E9.
25.115(m)(3)(iv)	No change to previously filed Radiation Hazard analyses.
25.228(j)(1)	AC BidCo's coordination agreement with NASA was filed February 1, 2013 in File Nos. SES-LIC-20120619-00574 <i>et al.</i>
25.228(j)(3)	AC BidCo's coordination agreement with NSF was included as Amendment Exhibit B in File No. SES-AMD-20120731-00709.

**ANNEX 2:
Updated Spacecraft and Teleport Tables**

Satellite	Location	Beam Coverage Area	Tx (GHz)	Rx (GHz)	Use in US airspace?	Satellite Operator
AMC-1¹	130.9W	North America, Pacific Ocean	14-14.5	11.7-12.2	Yes	SES
AMC-4²	134.9W	North America, Pacific Ocean	14-14.5	11.45-11.7; 11.7-12.2	Yes	
AMC-6	83W	North America	14-14.5	11.45-11.7; 11.7-12.2	Yes	
AMC-21	124.9W	United States	14-14.5	11.7-12.2	Yes	
ASTRA 4A	4.8E	Europe	14-14.25	11.7-12.2; 12.2-12.75	No	
SES-1	101W	North America	14-14.5	11.7-12.2	Yes	
SES-3	103W	North America	14-14.5	11.7-12.2	Yes	
SES-4	22W	Europe	14-14.5	12.5-12.75	No	
SES-6	40.5W	East Atlantic Ocean	14-14.5	10.95-11.2; 11.45-11.7	No	
		West Atlantic Ocean	14-14.5	10.95-11.2; 11.45-11.7	Yes	
SES-10	67W	North and Central America, the Gulf of Mexico, and the Caribbean	14-14.5	10.95-11.2; 11.45-11.7; 11.7-12.2	Yes	
SES-14	47.5W	North America	14-14.5	10.95-11.2; 11.45-11.7; 11.7-12.2	Yes	
SES-15	129.15W	North America, Pacific Ocean	14-14.5	10.7-11.7 11.7-12.2	Yes	

¹ This satellite is only used for communications with the Aerosat antenna system, designated AES1.

² This satellite is only used for communications with the ThinKom 2Ku antenna system, designated AES2.

Satellite	Location	Beam Coverage Area	Tx (GHz)	Rx (GHz)	Use in US airspace?	Satellite Operator
Galaxy 17	91W	North America	14-14.5	11.7-12.2	Yes	Intelsat
Galaxy 28	89W	Brazil	14-14.5	11.7-12.2	No	
IS-14	45W	North and South America excludes Brazil	14-14.5	11.7-12.2	Yes	
IS-18	180E	South Pacific	14-14.5	12.25-12.75	No	
IS-19	166E	Northeast Pacific	14-14.5	12.25-12.75	Yes	
		Northwest Pacific	14-14.5	12.25-12.75	No	
		Australia				
		Southwest Pacific				
IS-20	68.5E	Middle East	14-14.5	10.95-11.2; 11.45-11.7; 12.5-12.75	No	
IS-21	58W	Brazil	14-14.5	11.7-12.2	No	
		South Atlantic Ocean	14-14.5	11.45-11.7	No	
IS-22	72.1E	Mobility from Mideast to Japan and to Australia	14-14.5	12.25-12.5	No	
IS-29e	50W	United States	14-14.5	10.95-11.7; 11.7-12.2	Yes	
IS-33e	60E	Africa, Asia, and Europe	14-14.5	10.95-11.2; 11.45-11.7; 11.7-12.2; 12.5-12.6	No	
IS-37e	18W	Europe	14-14.5	10.95-11.7; 12.5-12.75	No	
IS-904	60E	Spot 1 - Western Russia	14-14.5	10.95-11.2; 11.45-11.7	No	
IS-907	27.5W	East Pacific	14-14.5	10.95-11.2; 11.45-11.7	Yes	
Horizons 3e	169E	Asia Pacific	14-14.5	10.95-11.7 12.2-12.75	Yes	

Satellite	Location	Beam Coverage Area	Tx (GHz)	Rx (GHz)	Use in US airspace?	Satellite Operator
Eutelsat 115WB	114.9W	North America	14-14.5	11.7-12.2	Yes	Eutelsat
Eutelsat 117WA	116.8W	Central and South America	14-14.5	11.7-12.2	Yes	
E172B¹	172E	North Pacific and Northeastern Russia	14-14.5	10.95-11.2; 11.45-11.7; 12.2-12.75	No	
Anik F1R	107.3W	North America	14-14.5	11.7-12.2	Yes	Telesat
T-11N	37.5W	Africa	14-14.5	10.95-11.2; 11.45-11.7; 12.5-12.75	No	
		Atlantic	14-14.5	11.45-11.7	No	
Telstar 12V	15W	Brazil	14-14.5	11.7-12.2	No	
Telstar 18/ Apstar 5	138E	Asia	14-14.5	12.2-12.75	No	
Telstar 18V	138E	Australia, New Zealand, Indonesia, and Malaysia	14-14.5	11.45-11.7	No	
JCSAT-2B	154E	South Pacific	14-14.5	11.45-11.7; 12.25-12.75	Yes	JSAT
JCSAT-3A	128E	Japan	14-14.5	12.2-12.75	No	
JCSAT-5A¹	132E	Japan	14-14.5	12.25-12.75	No	
JCSAT-110A²	110E	Indian Ocean	14-14.5	12.2-12.75	No	
Yamal 300K	177W	North Pacific Ocean	14-14.5	10.95-11.2; 11.45-11.7; 12.5-12.75	Yes	Gazprom Space Systems
Yamal 401	90E	Russia	14-14.5	10.95-11.2; 11.45-11.7; 12.5-12.75	No	
AsiaSat 7	105.5E	China	14-14.5	12.25-12.75	No	AsiaSat
AsiaSat 9	122E	China	14-14.5	10.95-12.75	No	
ARSAT-2	81W	North America	14-14.5	11.7-12.2	Yes	Empresa Argentina de Soluciones Satelitales S.A.
Optus D2	152E	Australia	14-14.5	12.25-12.75	No	Optus
ABS-3A	3W	North and South America	14-14.25	10.95-11.2	Yes	ABS Global
APSTAR-6C	134E	Asia	14-14.5	12.25-12.75	No	APT Mobile Satcom Limited
Amazonas-2	61W	North America	14-14.5	10.95-11.2 11.7-12.2	Yes	Hispar Satellite S.A.

¹ These satellites are only used for communications with the Aerosat antenna system, designated AES1.

² This satellite is only used for communications with the ThinKom 2Ku antenna system, designated AES2.

ANNEX 3: Satellite Company Letter

Satellite	Teleport Location	FCC Call Sign
AMC-1	Woodbine, MD	E900448
AMC-4	Brewster, WA	E120043
AMC-6	Perris, CA	E940448
AMC-21	Woodbine, MD	E900448
ASTRA 4A	Betzdorf, Luxembourg	N/A
SES-1	Woodbine, MD	E920698
SES-3	Woodbine, MD	E140059
SES-4	Bristow, VA	E020071
	Bristow, VA	E000696
SES-6	Betzdorf, Luxembourg	N/A
SES-10	Perris, CA	E940448
SES-14	Woodbine, MD	E170197
	Port St. Lucie, FL	E170198
SES-15	Woodbine, MD	E170138
	South Mountain, CA	E170139
Galaxy 17	Atlanta, GA ATL-K26	E990214
Galaxy 28	Rio de Janeiro, Brazil	N/A
IS-14	ATL teleport ATL-C06	E940333
	ATL teleport ATL-K15	E090093
IS-18	Napa teleport NAP-K22	E990224
IS-19	Perth, Australia	N/A
	Napa teleport NAP-K31	E980460
	Napa teleport NAP-C30	E980467
IS-20	Fuchsstadt, Germany	N/A
IS-21	Rio de Janeiro, Brazil	N/A
	Mobility: MTN teleport MTN-K02	E030051
IS-22	Kumsan, Korea	N/A
IS-29e	Hagerstown, MD	E030103
IS-33e	Fuchsstadt, Germany	N/A
	Moscow, Russia	N/A
IS-37e	Hagerstown, MD	E040414
IS-904	Moscow, Russia	N/A
IS-907	Hagerstown, MD	E030103
Horizons 3e	Napa teleport NAP-C21	E950307

ANNEX 3: Satellite Company Letter

Satellite	Teleport Location	FCC Call Sign
Eutelsat 115WB	Brewster, WA	E120043
Eutelsat 117WA	Brewster, WA	E060416
E172B	Khabarovsk, Russia	N/A
Anik F1R	Brewster, WA	E960222
T-11N	Aflenz, Austria	N/A
Telstar 12V	Rio de Janeiro, Brazil	N/A
Telstar 18/Apstar 5	China	N/A
Telstar 18V	Sydney, Australia	N/A
JCSAT-2B	Kapolei, HI	E010236
JCSAT-3A	Yokohama, Japan	N/A
JCSAT-5A	Yokohama, Japan	N/A
JCSAT-110A	Perth, Australia	N/A
Yamal 300K	Brewster, WA BRW-05C	E120043
Yamal 401	Moscow, Russia	N/A
AsiaSat-7	Beijing, China	N/A
AsiaSat-9	Beijing, China	N/A
ARSAT-2	Brewster, WA	E120043
Optus D2	Belrose, Australia	N/A
ABS-3A	Macaé, Brazil	N/A
APSTAR 6C	Beijing, China	N/A
Amazonas-2	Brewster, WA	E891020 ¹

ANNEX 3: Satellite Company Letter



160 Elgin Street, Suite 2100
Ottawa, ON, Canada K2P 2P7
Tel: 613-748-8700

12 July 2019

Federal Communications Commission
International Bureau
445 12th Street, S.W.
Washington, D.C. 20554

Re: AC BidCo LLC Application for earth stations aboard aircraft ("ESAA") terminals

To Whom It May Concern:

This letter certifies that Telesat is aware that AC BidCo LLC ("AC BidCo") is planning to seek authorization from the Federal Communications Commission ("FCC") to operate Ku-band transmit/receive terminals AES1 and AES2 for the provision of Aeronautical Mobile Satellite Service (Call Sign E120106) and that AC BidCo seeks additional authorization for these aeronautical Ku-band earth stations to utilize the Anik F1R satellite at 107.3°W orbital location under the current FCC rules for Earth Stations Aboard Aircraft ("ESAA"), including Section 25.227.

Based on the information provided by AC BidCo, Telesat (i) certifies that the use of the ESAA transmit/receive terminals AES1 and AES2 by AC BidCo, installed and operated in accordance with the AC BidCo application and the above conditions, is consistent with the existing coordination agreements with all adjacent satellite operators within +/- 6 degrees from Anik F1R; and (ii) confirms that if the FCC authorizes the operations proposed by AC BidCo, Telesat will take into consideration the power density levels associated with such operations in future satellite network coordination with adjacent satellite operators.

Yours Sincerely,

A handwritten signature in black ink, appearing to be "B. Borna", written over a horizontal line.

BAHRAM BORNA
Senior Systems Engineer
Telesat