3060-0678 Approved by OMB

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATIONEnter a description of this application to identify it on the main menu:

1. Applicant Name: SES Government Solutions, Inc. I DBA Name: The Sumrise Valley Drive I Street: 11700 Sumrise Valley Drive I
--

20191 Y_A

Zipcode:

Mr Joseph A O'Loughlin

Attention: Country:

State:

Suite 300 Reston USA

City:

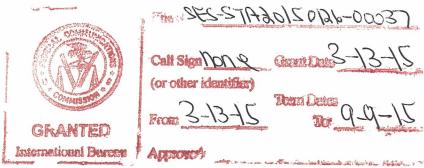
SESSTA-2012/0-0003 Call Sign Dath Grant 2-13-15 Deam Delles (or other identified) * Approved International Derent GRANTED

Applicant: SES Government Solutions, Inc.

File No.: SES-STA-20150126-00037

Call Sign: No Call Sign

Special Temporary Authority (STA)



SES Government Solutions, Inc. (SES Government Solutions) is granted STA for 180 days to operate a fixed satellite earth station with two 1.8 meter GD/Prodelin model GDST-1.8M antennas located at a facility in Bristow, Virginia (38 deg 47' 0.25" N.L./077 deg 34' 24.5" W.L.) to communicate with O3b's in-orbit NGSO FSS satellite system, licensed by the United Kingdom, in the: 17.852-18.068GHz, 18.112-18.328GHz, 18.372-18.588GHz, 18.801-19.017 GHz, 19.055-19.271GHz (space-to-Earth), and 27.652-27.868GHz, 27.912-28.128GHz, 28.172-28.388GHz, 28.601-28.817GHz, 28.855-29.071GHz (Earth-to-space) frequency bands under the following conditions:

- 1. This STA is limited to testing, satellite monitoring, and non-commercial demonstrations purpose. SES Government Solutions may not provide any commercial service under this STA.
- 2. Coordinated emission carriers will be 1M00G7D and 216MG7D. The total input power at the antenna flange for all carriers must not exceed 40 Watts and total output eirp for all carriers must not exceed 68.8 dBW. The associated maximum eirp per carrier for 1M00G7D is 48.6 dBW and for 216MG7D is 68.8 dBW. The associated maximum eirp density per carrier for 1M00G7D is 24.6 dBW/4kHz and for 216MG7D is 38.8 dBW/4kHz.
- 3. Operations in the 17.8-18.3 GHz band does not conform to the U.S. Table of Frequency Allocations, 47 C.F.R §2.106, but is being granted only at this location for the limited purposes of demonstrating the O3b system's capabilities to potential government customers and that grant of this STA is without prejudice to any determination that the Commission may make regarding authorizations for government or commercial fixed satellite service in the 17.8-18.3 GHz band within the U.S.
- 4. SES Government Solutions shall not cause harmful interference to, and shall not claim protection from, interference caused to it by any other lawfully operating station and it shall cease transmission(s) immediately upon notice of such interference.
- 5. Grant of this authorization is without prejudice to any determination that the Commission may make regarding any other pending or future application seeking to communicate with the O3b satellite systems.
- 6. Transmitter(s) must be turned off during antenna maintenance to ensure compliance with the FCC-specified safety guidelines for human exposure to radiofrequency radiation in the region between the antenna feed and the reflector. Appropriate measures must also be taken to restrict access to other regions in which the antennas' power flux-density levels exceed the specified guidelines.
- 7. This authorization does not constitute grant of Market Access for O3B's NGSO FSS system.
- 8. Operations under this authority are on a non-interference basis only.

- 9. Operations under this authority are on a non-protected basis only.
- 10. The power flux-density at the Earth's surface produced by emissions from O3b's NGSO FSS system for all methods of modulation shall not exceed the levels established in 47 C.F.R. § 25.308(c), (e) and Article 21 of the ITU Radio Regulations.
- 11. The operations of the O3b NGSO FSS satellite system must not exceed the EPFD limits in Nos. 22.5C, 22.5D, and 22.5F of the ITU Radio Regulations.
- 12. O3b satellite transmissions must be conducted in accordance with the coordination agreement between O3b and U.S. government systems signed on January 17, 2013 with the Department of Defense.
- 13. Transmissions authorized herein must comply with coordination agreements reached between the United Kingdom and other Administrations, including all coordination agreements reached between the United Kingdom and the United States.
- 14. In the event that there is a report of interference, SES Government Solutions must immediately terminate transmissions and notify the FCC in writing.
- 15. Any action taken or expense incurred as a result of operations pursuant to this special temporary authority is solely at SES Government Solutions 's own risk.
- 16. This action is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective immediately.

2. Contact				
Name:	Karis Hastings	Phone Number:	mber:	202-599-0975
Company:	SatCom Law LLC	Fax Number:	er:	
Street:	1317 F Street, N.W.	E-Mail:		karis@satcomlaw.com
	Suite 400			
City:	Washington	State:		DC
Country:	USA	Zipcode:		20004 -
Attention:		Relationship:	ıip:	Legal Counsel
(If your application is related to an application application. Please enter only one.) 3. Reference File Number or Submission ID	elated to an application filed wir only one.)	th the Commission	, enter either the file n	(If your application is related to an application filed with the Commission, enter either the file number or the IB Submission ID of the related application. Please enter only one.) 3. Reference File Number or Submission ID
4a. Is a fee submitter If Yes, complete an	4a. Is a fee submitted with this application? If Yes, complete and attach FCC Form 159. If No.	o, indicate reason f	for fee exemption (see	If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).
O Governmental Enti	O Governmental Entity O Noncommercial educational licensee	tional licensee		
Other(please explain):	n):			
4b. Fee Classification	CGX – Fixed Satellite Transmit/Receive Earth Station	it/Receive Earth St	tation	
5. Type Request		**************************************		
Use Prior to Grant	o	O Change Station Location	ation	Other
6. Requested Use Prior Date	Date			
7. CityBristow	· ·		8. Latitude (dd mm ss.s h) 38	47 0.25 N
	TANKS TO THE PARTY OF THE PARTY			

9. State VA	10. Longitude (dd mm ss.s h) 77 34 24.5 W
11. Please supply any need attachments. Attachment 1: STA Narrative Attachment 2:	Attachment 3:
12 Pression (164)	
12. Description. (If the complete description does not appear in this b	(If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)
SES Government Solutions seeks special temporary authority for a period of 180 days to operate an earth station in Bristow, VA, with the O3b U.Klicensed non-qeostationary	ernment Solutions seeks special temporary authority for a period of 180 days to an earth station in Bristow, VA, with the O3b U.Klicensed non-qeostationary Ka-
band satellite system for testing and demonstration purposes only.	ration purposes only.
13. By checking Yes, the undersigned certifies that neither applicant no subject to a denial of Federal benefits that includes FCC benefits nursus	certifies that neither applicant nor any other party to the application is Yes No The discludes FCC benefits nursuant 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.	or distribution of a controlled substance.
14. Name of Person Signing Joseph A. O'Loughlin	15. Title of Person Signing CTO
WILLFUL FALSE STATEMENTS MADE ON THIS FORM (U.S. Code, Title 18, Section 1001), AND/OR REV	WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT (U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION ATTHORIZATION
(U.S. Code, Title 47, Section 312(a)(1)), AND/OF	(U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

The public reporting for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you Federal Communications Commission, AMD-PERM, Paperwork Reduction Project (3060-0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to PRA@fcc.gov. PLEASE nave any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember - You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060-0678. THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104-13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.

REQUEST FOR SPECIAL TEMPORARY AUTHORITY

SES Government Solutions, Inc. ("SES-GS") respectfully requests special temporary authority ("STA") for a period of 180 days to use its earth station in Bristow, VA for communications with the O3b Ka-band non-geostationary orbit fixed-satellite service ("NGSO FSS") satellite fleet. SES-GS currently holds authority to communicate with O3b from the Bristow earth station site using the frequencies in O3b's beam 3¹ and was previously issued STAs to use the frequencies in O3b's beam 5 at this location. In order to maximize its flexibility given constraints on the availability of O3b capacity, SES-GS now seeks authority to use any band segment within the frequencies authorized for O3b's operations: 17.8-18.6 GHz, 18.8-19.3 GHz, 27.6-28.4 GHz, and 28.6-29.1 GHz. As with the prior STA grants, SES-GS seeks authority to communicate with O3b's constellation for demonstration purposes only and does not seek to provide commercial services to end users. Grant of the requested authority is in the public interest as it will allow SES-GS to conduct demonstrations of the O3b system's capabilities to potential government customers.

Complete technical information regarding the Bristow earth station was submitted to the Commission in support of the earlier SES-GS STA request for Bristow, File No. SES-STA-20131022-00887, and is incorporated by reference herein. In particular, that application included a Schedule B describing the applicable technical parameters, a complete set of antenna patterns, link budgets, and a radiation hazard analysis. Apart from seeking authority to use additional O3b frequencies, no changes from the specifications set forth in those materials are proposed here.

The Commission also has full details regarding the O3b space stations and recently granted U.S. market access for the O3b constellation to allow U.S.-

¹ See SES Government Solutions, Inc., File Nos. SES-STA-20131022-00888 (grant-stamped Jan. 6, 2014); SES-STA-20131022-00887 (grant-stamped Jan. 31, 2014); & SES-STA-20140612-00517 (grant-stamped July 29, 2014).

² See SES Government Solutions, Inc., File Nos. SES-STA-20140903-00694 (grant-stamped Sept. 5, 2014) & SES-STA-20141106-00843 (grant-stamped Nov. 25, 2014).

licensed earth stations to communicate with the O3b system.³ SES-GS has reviewed the O3b Market Access Grant and confirms that the operations proposed by SES-GS pursuant to the requested STA will fully comply with the terms and conditions set forth therein.

Granting STA is consistent with Commission precedent and will serve the public interest. As discussed above, the Commission has already reviewed the technical parameters of the SES-GS Bristow earth station in granting prior STAs for this location. Furthermore, the SES-GS Bristow earth station is located in close proximity to antennas operated by O3b that have been authorized to use all the O3b frequency segments.⁴

Consistent with the O3b Market Access Grant, the proposed SES-GS operations will provide the required protection to terrestrial operations and geostationary orbit ("GSO") satellites operating in the O3b spectrum. Specifically, SES-GS will not cause harmful interference to, or seek interference protection from, local multipoint distribution service ("LMDS") stations in the 27.6-28.35 GHz band, ⁵ GSO FSS networks

³ See O3b Limited, File Nos. SAT-LOI-20141029-00118 & SAT-AMD-20150115-00004, Call Sign S2935, grant-stamped Jan. 22, 2015 ("O3b Market Access Grant").

⁴ O3b has submitted a request for a permanent license at this site, File Nos. SES-LIC-20130618-00516, SES-AMD-20131122-01187, & SES-AMD-20140814-00653. Pending action on this application, the Commission has granted O3b temporary authority for operations at the Bristow location. *See* File Nos. SES-STA-20130617-00497 (grant-stamped Aug. 27, 2013) & SES-STA-20140514-00357 (grant-stamped June 30, 2014).

⁵ The Commission has previously indicated that secondary FSS operations in the 27.6-28.35 GHz band are "for the purpose of providing limited gateway-type service." *Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, First Report and Order and Fourth Notice of Proposed Rulemaking, 11 FCC Rcd 19005, 19025, ¶ 45 (1996). SES-GS believes that the focus of these Commission's statements has been on ensuring that FSS operations are compatible with LMDS by limiting the number and ubiquity of FSS terminals permitted to use the spectrum. The proposal by SES-GS to operate at a single site in Bristow, virtually colocated with an O3b facility, is clearly consistent with this underlying rationale. Furthermore, as noted above, LMDS systems in the vicinity of the site have been notified of the proposed SES-GS operations and have not objected. Accordingly, grant*

in the 18.3-18.6 GHz and 28.35-28.4 GHz bands, or terrestrial Fixed Service operations in the 17.8-18.3 GHz band. SES-GS and O3b have submitted evidence of the compatibility of their networks with terrestrial systems and GSO satellites, and SES-GS incorporates that information by reference herein. As noted above, the proposed SES-GS operations will also comply with the O3b Market Access Grant, which includes explicit conditions to ensure that primary services are not disrupted by communications with the O3b constellation. Furthermore, as noted above, O3b has been authorized to use its Bristow site to communicate with the O3b constellation using two segments of the O3b spectrum, and O3b has been operating a Bristow station in close proximity to the SES-GS terminals throughout the O3b spectrum. To SES-GS' knowledge no complaints of harmful interference have been raised in connection with those operations. SES-GS requests any necessary waiver of the Table of Allocations to permit its proposed use of spectrum in these bands on a non-harmful interference basis.

The requested STA will allow SES-GS to evaluate and demonstrate the O3b network's operational capabilities and will not result in harmful interference to other authorized spectrum users. Thus, grant of the STA will serve the public interest.

of the requested SES-GS STA will not undermine the primary spectrum rights of LMDS systems.

⁶ See SES Government Solutions, Inc., File No. SES-STA-20131022-00888, Narrative at 1-3 (showing regarding compatibility of proposed operations with LMDS systems and GSO operations) & Annex 2 (Comsearch reports regarding notification to 28 GHz common carrier, LTTS, and LMDS operators and with 18 GHz common carrier microwave networks). See also O3b Limited, File No. SES-LIC-20130618-00516, Exhibit 1 at 4-7 (demonstration of O3b's ability to share with primary terrestrial facilities and GSO satellites); & attached Comsearch reports on compatibility with 18 GHz and 28 GHz terrestrial systems.



SatCom Law LLC 1317 F St. NW, Suite 400 Washington, D.C. 20004 T 202.599.0975 www.satcomlaw.com

February 3, 2015

By Electronic Filing

Ms. Marlene H. Dortch Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

SES Government Solutions, Inc. STA Request to Communicate with O3b,

File No. SES-STA-20150126-00037

Dear Ms. Dortch:

SES Government Solutions, Inc. ("SES-GS"), by its attorney and pursuant to Section 1.65 of the Commission's rules, 47 C.F.R. § 1.65, hereby updates the record regarding the above-referenced SES-GS request for special temporary authority ("STA") to operate an earth station in Bristow, VA that will communicate with the O3b Ka-band non-geostationary orbit satellite fleet. Specifically, SES-GS confirms that the same emission designators and power levels that SES-GS identified in its initial STA request for operations with O3b beam 3 in File No. SES-STA-20131022-00887 apply to the current STA request, which seeks authority to communicate with O3b in any of its authorized spectrum.

For the Commission's convenience, SES-GS is attaching a Form 312 Schedule B that includes the emission designator and power information for each of the five O3b beams. SES-GS asks that the Commission update the record relating to the SES-GS STA request as outlined above. Please let me know if you have any questions regarding this matter.

Respectfully submitted,

/s/ Karis A. Hastings

Karis A. Hastings Counsel for SES Government Solutions, Inc. karis@satcomlaw.com

Attachment

CC:

Paul Blais

Trang Nguyen Towanda Bryant Approved by OMB 3060-0678

Date & Time Filed: File Number: ---Callsign/Satellite ID:

APPLICATION FOR EARTH STATION AUTHORIZATIONS

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:

Attachment to 1.65 Ltr for Bristow O3b Demo Feb 2015

1-8. Legal Name of Applicant

SES Government Solutions, Inc. Name:

Phone Number:

703-610-0906

DBA Name:

Fax Number:

703-610-1030

Street:

11790 Sunrise Valley Drive

E-Mail:

joe.oloughlin@ses-gs.com

Suite 300

Reston City:

State:

VA

USA Country:

Zipcode:

20191 -

Attention: Mr Joseph A O'Loughlin

9-16. Name of Contact Representative

Name:

Street:

Karis Hastings

1317 F Street, N.W.

Phone Number:

202-599-0975

Company: SatCom Law LLC

Fax Number:

E-Mail:

karis@satcomlaw.com

Suite 400

City:

Washington

State:

DC

Country:

USA

Zipcode:

20004-

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.

a1. Earth Station (N/A) a2. Space Station

- b1. Application for License of New Station
- b2. Application for Registration of New Domestic Receive-Only Station
- (N/A) b3. Amendment to a Pending Application
- (N/A) b4. Modification of License or Registration
- (N/A) b5. Assignment of License or Registration
- (N/A) b6. Transfer of Control of License or Registration
- (N/A) 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
- b10. Other (Please specify)
- 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.								
17c. Is a fee submitted with this application?									
If Yes, complete and attach FCC Form 159.									
If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).									
Governmental Entity Noncommercial educational licensee									
Other(please explain):	·								
17d.									
Fee Classification BAX - Fixe	ed Satellite Transmit/Receive Earth Station								
18. If this filing is in reference to 19. If this filing is an amendment to a pending application enter:									
an existing station, enter: (a) Date pending application was filed: (b) File number of pending application:									
(a) Call sign of station: Not Applicable Not Applicable Not Applicable									
TYPE OF SERVICE									
20. NATURE OF SERVICE: This filing is for an authorization to provide 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 nex	at to the applicable 22. If earth station applicant, check all that apply.								
status. Choose only one.	Using U.S. licensed satellites								
O Common Carrier Non-Comm	on Carrier Using Non-U.S. licensed satellites								
filings. Choose one. Are these facilit									
• Connected to a Public Switched	Network Not connected to a Public Switched Network N/A								
24. FREQUENCY BAND(S): Place	an "X" in the box(es) next to all applicable frequency band(s).								
a. C-Band (4/6 GHz). Db. Ku-E	and (12/14 GHz)								
c.Other (Please specify upper and									
Frequency Lower: 17800 Frequency Upper: 29100									
OF OT AGG OF GENERAL CI	TYPE OF STATION								
 	the button next to the class of station that applies. Choose only one.								
a. Fixed Earth Station									
b. Temporary-Fixed Earth Statio	on the state of th								
c. 12/14 GHz VSAT Network									
d. Mobile Earth Station (N/A) e. Geostationary Space Static	nn								
(N/A) f. Non-Geostationary Space Static									
• g. Other (please specify)									
26. TYPE OF EARTH STATION F.	ACILITY: Choose only one.								
Transmit/Receive Transmit-C									
	PURPOSE OF MODIFICATION								

27. The purpose of this proposed modification is to: (Place an 'X' in the box(es) next to all that apply.) Not Applicable

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.

ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aeronautical en route or aeronautical fixed radio station services are not required to respond to Items 30-34.

30-34.	
29. Is the applicant a foreign government or the representative of any foreign government?	O Yes ● No
30. Is the applicant an alien or the representative of an alien?	O Yes O No ● N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	O Yes O No ● 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?	O Yes O No ● 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?	O Yes O No ● 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	
Of Date 1 to 1	

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 • No
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.	O Yes ● 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 attempting 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	

fiduciary control, indicate the beneficiary(ies) or class of be addresses of the officers and directors of the Filer.	
41. By checking Yes, the undersigned certifies, that neither application is subject to a denial of Federal benefits that inc Section 5301 of the Anti-Drug Act of 1988, 21 U.S.C. Sect possession or distribution of a controlled substance. See 47 "party to the application" for these purposes.	ludes FCC benefits pursuant to ion 862, because of a conviction for ves No
42a. Does the applicant intend to use a non-U.S. licensed sa United States? If Yes, answer 42b and attach an exhibit pro 47 C.F.R. 25.137, as appropriate. If No, proceed to question	viding the information specified in
42b. What administration has licensed or is in the process of what administration has coordinated or is in the process of	·
43. Description. (Summarize the nature of the application ar Solutions seeks FCC authority to operate an earth U.Klicensed non-geostationary Ka-band satellite only.	station in Bristow, Virginia, with the O3b
43a. Geographic Service Rule Certification By selecting A, the undersigned certifies that the applicant service or geographic coverage requirements specified in 47	
By selecting B, the undersigned certifies that the applicant or geographic coverage requirements specified in 47 C.F.R. requirements.	
By selecting C, the undersigned certifies that the applicant or geographic coverage requirements specified in 47 C.F.R. such requirements because it is not feasible as a technical matechnically feasible, such services would require so many coperation as to make it economically unreasonable. A narra analysis demonstrating this claim are attached.	Part 25 and will not comply with natter to do so, or that, while compromises in satellite design and
CERTIF	ICATION
not cause the applicant to be in violation of the spectrum agg exhibits are a material part hereof and are incorporated here individually and for the applicant, hereby certifies that all stare true, complete and correct to the best of his or her knowled	is use of the same, whether by license or otherwise, and in The applicant certifies that grant of this application would gregation limit in 47 CFR Part 20. All statements made in in as if set out in full in this application. The undersigned, attements made in this application and in all attached exhibits edge and belief, and are made in good faith.
44. Applicant is a (an): (Choose the button next to applicable	e response.)
○ Individual	
Unincorporated Association	
Partnership	
Corporation Governmental Entity	
Other (please specify)	
45. Name of Person Signing	46. Title of Person Signing CTO
Joseph O'Loughlin	CIO

47. Please supply any need attachments.

Attachment 1:

Attachment 2:

Attachment 3:

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT

(U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION (U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).

SATELLITE EARTH STATION AUTHORIZATIONS FCC Form 312 - Schedule B:(Technical and Operational Description)

FOR OFFICIAL USE ONLY

Location of Earth Station Site			
E1: Site Identifier: WMP 1.8m Ka	E5. Call Sign:		•
E2: Contact Name Tim Kavanaugh	703-350-8665		
E3. Street: 8000 Gainsford Ct	Bristow		
	Prince William		
E4. State VA	20136		
E10. Area of Operation:			
E11. Latitude: 38 ° 47 ' 0.25 " N			
E12. Longitude: 77 ° 34 ' 24.5 " W			
E13. Lat/Lon Coordinates are:	●NAD-83	O _{N/A}	
E14. Site Elevation (AMSL):			
Section 25.209(a) and (b) as demonstrated by the man NO, provide as a technical analysis showing compliant E16. If the proposed antenna(s) do not operate in the operate in the Fixed Satellite Service (FSS) with nor proposed antenna(s) comply with the antenna gain p (b) as demonstrated by the manufacturer's qualificate E17. Is the facility operated by remote control? If Youmber of the control point.	g policy. S), or if they (es) the 25.209(a2) and Yes	No N/A No N/A es No	
E18. Is frequency coordination required? If	у О Ү	es • No	
coordination report as		- 110	
E19. Is coordination with another country rethe country(ies) and plot of coordination co	the name of • Y	es • No	
E20. FAA Notification - (See 47 CFR Par	25.113(c))		
Where FAA notification is required, have completed FCC Form 854 and or the FA hazard of the structure to aviation? FAILURE TO COMPLY WITH 47 CFR RESULT IN THE RETURN OF THIS A	of a ne potential • Y	es • No	

Satellite	N	ame:O3E	3-A (S	2935) O3B	-A Eq. N	۱G:	SO If you	se	lec	ted OTE	ΙE	ER, ple	ase enter	the
followir								· .							
E21. Co	mr	non Nan	ne:					E22	2.	IT	U Name	:			-
E23. Or	bit	Location	1:					E24	4.	Co	untry:				
				TION	(Destina	tion Points	<u>s)</u>		7		,				
		dentifier:		, ,											
L		non Nam	ne:						E	27	. Countr	y	•		
Site ID		E28. ntenna Id	E2		il	30. facturer	E:	31. Model	A	An	E32. tenna Size	(GainT	1/42. An Transmir leve(GI	nt and/or _dBi at
WMP 1.8m Ka	Ar	nt 1-2	2	-	GD/Pro	D/Prodelin		OST-1.8M						i at 18.56	
								٠.				52	.8 dBi	i at 28.36	2
E28. Antenn Id	ıa	E33/ Diam Minor/ (met	eter Major	. G	E35. Above Fround Level neters)	E36. Above Sea Level (meters		E37. Building Height Above Ground Level (meters)		P	38. Tota Input Power at Intenna flange (Watts)	t An Ho Ro		239. ximum tenna eight bove oftop eters)	E40. Total EIRP for al carriers (dBW)
Ant 1-2		0.0/0.0		2.4	1	89.0		0.0	40.0 0.0		0.0	68.8			
E28. Antenr Id	E43/44. E4		R Polarization E		E47. Emissi Designa	47. ission EIR		Maxi EIRI	E48. E49. Maxin ERIP Densit Carrier er(dBW) (dBW/4kI		ensity per irrier				
Ant 1-2		17852 1	8068	R	11	t Hand cular		1M00G7			0.0			0.0	
E50. M	odı	ılation ar	nd Serv	vices	Digital	Data					T	···			
Ant 1-2	-2 17852 18068 R Left Hand Circular		216MG7	G7D 0.0 0.0											
E50. Modulation and Services Digital Data															
Ant 1-2	nt 1-2 18112 18328 R Left Hand Circular			1M00G7D 0.0		0.0		0.0							
E50. Modulation and Services Digital Data															
Ant 1-2		18112 1	8328	R	- 11	t Hand cular		216MG7	'D		0.0			0.0	
E50. M	odı	ılation aı	nd Ser	vices	Digital	Data								-	
Ant 1-2	,	18372 1	8588	R	13	t Hand cular		1M00G7	'D		0.0			0.0	·
E50. M	odı	ulation ar	nd Ser	vices	Digital	Data						_			
 	E50. Modulation and Services Digital Data														

Ant 1-2	18372 18588	R	Left Hand Circular	216MG7D	0.0	0.0			
E50. Mod	lulation and Ser	vices Di	gital Data			·			
Ant 1-2	18801 19017	R	Left Hand Circular	1M00G7D	0.0	0.0			
E50. Mod	lulation and Ser	vices Di	gital Data						
Ant 1-2	18801 19017	R	Left Hand Circular	216MG7D	0.0	0.0			
E50. Mod	lulation and Ser	vices Di	gital Data	٠.					
Ant 1-2	19055 19271	R	Left Hand Circular	1M00G7D	0.0	0.0			
E50. Mod	ulation and Ser	vices Di	gital Data						
Ant 1-2	19055 19271	R	Left Hand Circular	216MG7D	0.0	0.0			
E50. Mod	ulation and Ser	vices Di	gital Data	*.					
Ant 1-2	27652 27868	Т	Right Hand Circular	1M00G7D	48.6	24.6			
E50. Mod	ulation and Ser	vices Di	gital Data						
Ant 1-2	2,7652 27868	T	Right Hand Circular	216MG7D	68.8	38.8			
E50. Modulation and Services Digital Data									
Ant 1-2	27912 28128	T	Right Hand Circular	1M00G7D	48.6	24.6			
E50. Mod	ulation and Ser	vices Di	gital Data						
Ant 1-2	27912 28128	$oldsymbol{\Gamma}$	Right Hand Circular	216MG7D	68.8	38.8			
E50. Mod	ulation and Ser	vices Di	gital Data	-					
Ant 1-2	28172 28388	Т	Right Hand Circular	1M00G7D	48.6	24.6			
E50. Mod	ulation and Ser	vices Di	gital Data						
Ant 1-2	28172 28388	T	Right Hand Circular	216MG7D	68.8	38.8			
E50. Mod	ulation and Ser	vices Di	gital Data	-		,			
Ant 1-2	28601 28817	Т	Right Hand Circular	1M00G7D	48.6	24.6			
E50. Modulation and Services Digital Data									
Ant 1-2	28601 28817	Τ .	Right Hand Circular	216MG7D	68.8	38.8			
E50. Mod	ulation and Ser	vices Di	gital Data	·		-			
Ant 1-2	28855 29071	Т	Right Hand Circular	1M00G7D	48.6	24.6			
E50. Mod	ulation and Ser	vices Di	gital Data						
Ant 1-2	28855 29071	T		216MG7D	68.8	38.8			

			Right Hand Circular		
	E50. Modi	ulation and Ser	vices Digital Data	•	
ī	EDECLIENC	CV COORDINAT	TION		

БЭО	E51. Satellite Orbit Type	E52/53.	E54/55. Range of Satellite Arc E/W Limit	Earth	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	Angle Western	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
I A mt I	Non- Geostationary	17800 18600	0.0/ 0.0	122.4	7.6	238.3	7.0	0.0
11	Non- Geostationary	18800 19300	0.0/ 0.0	122.4	7.6	238.3	7.0	0.0
	Non- Geostationary	27600 28400	0.0/ 0.0	122.4	7.6	238.3	7.0	38.8
	Non- Geostationary	28600 29100	0.0/ 0.0	122.4	7.6	238.3	7.0	38.8

REMOTE CONTROL POINT LOCATION
REMOTE CONTROL POINT LOCATION

E61. Call Sign	•,	E65. Phone Number	
NOTE: Please enter the callsign of the control which this application is being filed.	rolling station, not the callsign for		
E62. Street Address			
E63. City	E67. County	E64/68. State/Country /	E66. Zip Code

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