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February 3, 2015

## **By Electronic Filing**

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

## Re: 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 abovereferenced 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:

| APPLIC  | CATION FOR EAR                   | TH STATI                  | ION AU      | THORIZAT     | TIONS                    |  |  |  |  |  |
|---|----------------------------------|---------------------------|-------------|--------------|--------------------------|--|--|--|--|--|
|   |                                  | 312 MAIN FC<br>FICIAL USE |             |              | FCC Use Only             |  |  |  |  |  |
| APPLICA   | NT INFORMATIO                    | ON                        |             |              |                          |  |  |  |  |  |
| Enter a description of this application to identify it on the main menu:<br>Attachment to 1.65 Ltr for Bristow O3b Demo Feb 2015  |                                  |                           |             |              |                          |  |  |  |  |  |
|   |                                  | stow O3b De               | emo Feb     | 0 2015       |                          |  |  |  |  |  |
| 1-8. Legal Name of Applicant<br>Name: SES Government Solutions, Inc. Phone Number: 703-610-0906   |                                  |                           |             |              |                          |  |  |  |  |  |
| Name:   | SES Government Se                | olutions, Inc             | 2.          | Phone Number | r: 703-610-0906          |  |  |  |  |  |
| DBA<br>Name:  |                                  |                           |             | Fax Number:  | 703-610-1030             |  |  |  |  |  |
| Street:   | 11790 Sunrise Valle<br>Suite 300 | ey Drive                  |             | E-Mail:      | joe.oloughlin@ses-gs.com |  |  |  |  |  |
| City:   | Reston                           |                           |             | State:       | VA                       |  |  |  |  |  |
| Country:  | ry: USA                          |                           |             | Zipcode:     | 20191 -                  |  |  |  |  |  |
| Attention:  |                                  |                           |             |              |                          |  |  |  |  |  |
| 9-16. Name  | of Contact Representati          | ve                        |             |              |                          |  |  |  |  |  |
| Name:   | Name: Karis Hastings             |                           |             | lumber:      | 202-599-0975             |  |  |  |  |  |
| Company:  | SatCom Law LLC                   |                           | Fax Number: |              |                          |  |  |  |  |  |
| Street:   | 1317 F Street, N.W.              |                           | E-Mail:     |              | karis@satcomlaw.com      |  |  |  |  |  |
|   | Suite 400                        |                           |             |              |                          |  |  |  |  |  |
| City:   | Washington                       |                           | State:      |              | DC                       |  |  |  |  |  |
| Country:  | USA                              |                           | Zipcode:    |              | 20004-                   |  |  |  |  |  |
| Attention:  |                                  |                           | Relation    | ship:        | Legal Counsel            |  |  |  |  |  |
|   |                                  | CLASS                     | IFICAT      | ION OF FILI  | NG                       |  |  |  |  |  |
| <ul> <li>CLASSIFICATION OF FILING</li> <li>I7. 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.</li> <li>a.</li> <li>a.</li> <li>a.</li> <li>a. a.</li> <li>a. a.</li> <li>a. a.</li> <li>a. a.</li> <li>b.</li> <li>b. b.</li> <li>b. choose only one for 17a and only one for 17a and only one for 17b.</li> <li>a.</li> <li>a. b.</li> <li>a. a.</li> <li>a. a.</li> <li>b. b.</li> <li>b. choose only one for 17a and only one for 17b.</li> <li>a.</li> <li>a. a.</li> <li>a. a.</li> <li>a. a.</li> <li>b. b.</li> <li>b. choose of New Station</li> <li>(N/A) b3. Amendment to a Pending Application</li> <li>(N/A) b4. Modification of License or Registration</li> <li>(N/A) b5. Assignment of License or Registration</li> <li>(N/A) b6. Transfer of Control of License or Registration</li> <li>(N/A) b7. Notification of Minor Modification</li> <li>(N/A) b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite</li> <li>(N/A) b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in</li> </ul> |                                  |                           |             |              |                          |  |  |  |  |  |

http://licensing.fcc.gov/ibfsweb/ib.page.FetchForm?id\_app\_num=105596&form=P013\_101... 2/3/2015

b10. Other (Please specify)
b11. Application for Earth Station to Access a Non-U.S.satellite Not Currently

the United States

| 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 exempt   | tion (see 47 C.F.R.Section   | on 1.1114).         |  |  |  |  |  |  |  |
| • Governmental Entity • Noncom  |  |                     |  |  |  |  |  |  |  |
| • Other(please explain):  |  |                     |  |  |  |  |  |  |  |
| 17d.  |  |                     |  |  |  |  |  |  |  |
| Fee Classification BAX - Fixe   | ed Satellite Transmit  | /Receive Earth      | n Station                                |  |  |  |  |  |  |
| 18. If this filing is in reference to   | 19. If this filing is an a   | mendment to a pe    | ending application enter:                |  |  |  |  |  |  |
| an existing station, enter:   | (a) Date pending applie  | cation was filed:   | (b) File number of pending application:  |  |  |  |  |  |  |
| (a) Call sign of station:<br>Not Applicable   | Not Applicable   |                     | Not Applicable                           |  |  |  |  |  |  |
|   | TYPE OF  | SERVICE             |  |  |  |  |  |  |  |
|   | ling is for an authorizati   | ion to provide or   | use the following type(s) of service(s): |  |  |  |  |  |  |
| Select all that apply:  |  |                     |  |  |  |  |  |  |  |
|   |  |                     |  |  |  |  |  |  |  |
| <ul> <li>a. Fixed Satellite</li> <li>b. Mobile Satellite</li> </ul>                           |  |                     |  |  |  |  |  |  |  |
| C. Radiodetermination Satellite   |  |                     |  |  |  |  |  |  |  |
|   |  |                     |  |  |  |  |  |  |  |
| <ul> <li>d. Earth Exploration Satellite</li> <li>e. Direct to Home Fixed Satellite</li> </ul> |  |                     |  |  |  |  |  |  |  |
| f. Digital Audio Radio Service  |  |                     |  |  |  |  |  |  |  |
| g. Other (please specify)   |  |                     |  |  |  |  |  |  |  |
| 21. STATUS: Choose the button nex   | t to the applicable  | 22 If earth static  | on applicant, check all that apply.      |  |  |  |  |  |  |
| status. Choose only one.  | at to the applicable   |                     | censed satellites                        |  |  |  |  |  |  |
| Common Carrier Non-Comm   | on Carrier   | U                   | J.S. licensed satellites                 |  |  |  |  |  |  |
|   |  |                     | ce, see instructions regarding Sec. 214  |  |  |  |  |  |  |
| filings. Choose one. Are these facilit  |  |                     | , see mon reasons regarding 2000 211     |  |  |  |  |  |  |
| • Connected to a Public Switched  | Network 🔍 Not connec   | ted to a Public Sv  | witched Network  N/A                     |  |  |  |  |  |  |
| 24. FREQUENCY BAND(S): Place  | an "X" in the box(es) no   | ext to all applicab | le frequency band(s).                    |  |  |  |  |  |  |
| 🗖 a. C-Band (4/6 GHz) 🗖 b. Ku-B   | and (12/14 GHz)  |                     |  |  |  |  |  |  |  |
| c.Other (Please specify upper and   |  | IHz.)               |  |  |  |  |  |  |  |
| Frequency Lower: 17800 Frequency  | **   |                     |  |  |  |  |  |  |  |
| 1   |  | STATION             |  |  |  |  |  |  |  |
| 25. CLASS OF STATION: Choose t  | the button next to the cla   | ass of station that | applies. Choose only one.                |  |  |  |  |  |  |
|   | a. Fixed Earth Station   |                     |  |  |  |  |  |  |  |
| • b. Temporary-Fixed Earth Station  |  |                     |  |  |  |  |  |  |  |
| • c. 12/14 GHz VSAT Network   |  |                     |  |  |  |  |  |  |  |
| d. Mobile Earth Station   | 2  |                     |  |  |  |  |  |  |  |
| (N/A) e. Geostationary Space Statio<br>(N/A) f. Non-Geostationary Space S                     | (N/A) e. Geostationary Space Station<br>(N/A) f. Non-Geostationary Space Station |                     |  |  |  |  |  |  |  |
| g. Other (please specify)   | -  |                     |  |  |  |  |  |  |  |
| 26. TYPE OF EARTH STATION F.  | ACILITY: Choose only   | one                 |  |  |  |  |  |  |  |
| Transmit/Receive Transmit-C   |  |                     |  |  |  |  |  |  |  |
|   | PURPOSE OF N   |                     | ]  |  |  |  |  |  |  |

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. <u>A Radiation Hazard Study must accompany all</u> applications for new transmitting facilities, major modifications, or major amendments. ● Yes ● No

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.

| 29. Is the applicant a foreign government or the representative of any foreign government?   | O <sub>Yes</sub> ● <sub>No</sub>                  |
|--|---|
| 30. Is the applicant an alien or the representative of an alien?   | O <sub>Yes</sub> O <sub>No</sub> ● <sub>N/A</sub> |
| 31. Is the applicant a corporation organized under the laws of any foreign government?   | O <sub>Yes</sub> O <sub>No</sub> ● <sub>N/A</sub> |
| 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?   | • Yes • 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   |   |
| <ul><li>35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules?</li><li>If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.</li></ul>   | • 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 <sub>Yes</sub> ● <sub>No</sub>                  |
| 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 O 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 <sub>Yes</sub> ● <sub>No</sub>                  |
| 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 O 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.   |
| 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 <i>C.F.R.</i> 25.137, as appropriate. If No, proceed to question 43.   |
| 42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, what administration has coordinated or is in the process of coordinating the space station?United Kingdom   |
| 43. Description. (Summarize the nature of the application and the services to be provided). SES Government<br>Solutions seeks FCC authority to operate an earth station in Bristow, Virginia, with the O3b<br>U.Klicensed non-geostationary Ka-band satellite system for testing and demonstration purposes<br>only.   |
| 43a. Geographic Service Rule Certification<br>By selecting A, the undersigned certifies that the applicant is not subject to the geographic • A<br>service or geographic coverage requirements specified in 47 C.F.R. Part 25.   |
| 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. $\bullet$ 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.   |
| 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 applicable response.)  |
| <ul> <li>Individual</li> <li>Unincorporated Association</li> <li>Partnership</li> </ul>  |

Corporation

O Governmental Entity

• Other (please specify)

| 45. Name of Person Signing | 46. Title of Person Signing |  |
|----------------------------|-----------------------------|--|
| Joseph O'Loughlin          | СТО                         |  |

| 47. Please supply any ne   | eed attachments.   |   |  |                                   |  |  |  |  |  |
|--|--|---|--|-----------------------------------|--|--|--|--|--|
| Attachment 1:  | Attachment 1:   Attachment 2:   Attachment 3:  |   |  |                                   |  |  |  |  |  |
| WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR<br>IMPRISONMENT<br>(U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION<br>(U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503). |  |   |  |                                   |  |  |  |  |  |
|  | FELLITE EARTH<br>n 312 - Schedule B:(<br>FOR OF  |   |  |                                   |  |  |  |  |  |
|  | <u></u>  |   |  |                                   |  |  |  |  |  |
| Location of Earth Statio<br>E1: Site Identifier:   | n Site<br>WMP 1.8m Ka  | E5. Call Sign:  |  |                                   |  |  |  |  |  |
| E2: Contact Name   | Tim Kavanaugh  | E6. Phone Number:   | 703-350-80   | 565                               |  |  |  |  |  |
| E3. Street:  | 6  |   |  |                                   |  |  |  |  |  |
|  | E8. County: Prince Wil   |   |  |                                   |  |  |  |  |  |
| E4. State  | State VA E9. Zip Code 20136  |   |  |                                   |  |  |  |  |  |
| E10. Area of Operation   | E10. Area of Operation: Fixed  |   |  |                                   |  |  |  |  |  |
| E11. Latitude:   | 38 ° 47 ' 0.25 " N   |   |  |                                   |  |  |  |  |  |
| E12. Longitude:  | 77 ° 34 ' 24.5 " W   |   |  |                                   |  |  |  |  |  |
| E13. Lat/Lon Coordinat   | tes are:   | •NAD-27   | NAD-83   | 8 • N/A                           |  |  |  |  |  |
| E14. Site Elevation (AM  | ASL):  | 86.56 meters  |  |                                   |  |  |  |  |  |
| satellites, do(es) the proj<br>Section 25.209(a) and (t<br>NO, provide asa technic<br>E16. If the proposed ant<br>operate in the Fixed Sate<br>proposed antenna(s) con<br>(b) as demonstrated by t   | enna(s) operate in the Fixed<br>posed antenna(s) comply wit<br>b) as demonstrated by the ma<br>al analysis showing complian<br>enna(s) do not operate in the<br>ellite Service (FSS) with non<br>nply with the antenna gain pa<br>he manufacturer's qualificati<br>ated by remote control? If YF | h the antenna gain patterns<br>nufacturer's qualification m<br>nce with two-degree spacin<br>Fixed Satellite Service (FS<br>-geostationary satellites, do<br>atterns specified in Section<br>on measurements? | specified in<br>neasurement? If<br>g policy.<br>S), or if they<br>(es) the<br>25.209(a2) and | OmegaOmegaOmegaYesOmegaOmegaYesNo |  |  |  |  |  |
| 1  | bordination required? If   | VFS attach a frequence  | NV IIII  |                                   |  |  |  |  |  |
| coordination report  | , y  | • Yes • No  |  |                                   |  |  |  |  |  |
| I.   | with another country re  | equired? If YES, attach   | the name of  |                                   |  |  |  |  |  |
| the country(ies) and   |  | • Yes • No  |  |                                   |  |  |  |  |  |
| Where FAA notific<br>completed FCC Fo<br>hazard of the struc<br>FAILURE TO CO  | tion - (See 47 CFR Par<br>cation is required, have<br>rm 854 and or the FAA<br>ture to aviation?<br>MPLY WITH 47 CFR<br>RETURN OF THIS A<br>NICATION   | e you attached a copy<br>A's study regarding th<br>PARTS 17 AND 25 V  | of a<br>ne potential   | • Yes • No                        |  |  |  |  |  |

Satellite Name:O3B-A (S2935) | O3B-A | Eq. NGSO If you selected OTHER, please enter the following:

| E21. Common Name: |  |
|-------------------|--|
|-------------------|--|

E23. Orbit Location:

**POINTS OF COMMUNICATION (Destination Points)** 

E25. Site Identifier:

E26. Common Name:

E27. Country:

E22. ITU Name:

E24. Country:

| ANTENNA |  |
|---------|--|
|         |  |

| Site ID              |      | E28.<br>ntenna<br>Id            | E2<br>Quan    |                   | Ma                                    |                       | 30.<br>acturer                           | E3 | 51. Model  | Aı        | E32.<br>ntenna<br>Size   | E41/42. An<br>GainTransmir<br>Recieve(GH                                   |     |  |  |
|----------------------|------|---------------------------------|---------------|-------------------|---------------------------------------|-----------------------|--|----|--|-----------|--|--|-----|--|--|
| WMP<br>1.8m<br>Ka    | An   | t 1-2                           | 2             |                   | GD/                                   | /Pro                  | delin                                    | GE | OST-1.8M   | 1.8       | 2  | 49.1 dBi a   |     | at 18.562                                |  |
|                      |      |                                 |               |                   |                                       |                       |  |    |  |           | 4  | 52.8 c   | lBi | at 28.36                                 | 2  |
| E28.<br>Antenn<br>Id | a    | E33/<br>Diam<br>Minor/<br>(meta | eter<br>Major | G<br>G            | E35<br>Abov<br>Froui<br>Leve<br>neter | ve<br>nd<br>el        | E36.<br>Above<br>Sea<br>Level<br>(meters |    | E37.<br>Building<br>Height<br>Above<br>Ground<br>Level<br>(meters) |           | C38. Tota<br>Input<br>Power at<br>antenna<br>flange<br>(Watts) | al E39.<br>Maximum<br>Antenna<br>Height<br>Above<br>Roofton                |     | timum<br>tenna<br>eight<br>bove<br>oftop | E40.<br>Total<br>EIRP for<br>al<br>carriers<br>(dBW) |
| Ant 1-2              | 0    | 0.0/0.0                         |               | 2.4               | 1                                     |                       | 89.0                                     | 0  | ).0  | 4         | 0.0  | 0.0  |     |  | 68.8   |
| FREQUE               | NC   | Y                               |               |                   |                                       |                       |  |    |  |           | <b>.</b>   |  |     |  |  |
| E28.<br>Antenn<br>Id |      | E43/4<br>Freque<br>Bands(N      | ency          | E4:<br>T/I<br>Moe | R                                     | Pol                   | 5. Anteni<br>larizatio<br>I,V,L,R)       | n  | E47.<br>Emissic<br>Designat  |           | Maxi<br>EIRI   | E48. E49. Maxin<br>kimum ERIP Densit<br>RP per Carrier<br>er(dBW) (dBW/4kI |     | ensity per<br>rrier                      |  |
| Ant 1-2              | 1    | 7852 18                         | 3068          | R                 |                                       | Left<br>Circu         | Hand<br>ılar                             |    | 1M00G7I  | 00G7D 0.0 |  |  |     | 0.0                                      |  |
| E50. Mo              | odu  | lation an                       | d Serv        | vices             | Digi                                  | ital I                | Data                                     |    |  |           |  |  |     |  |  |
| Ant 1-2              | ]    | 7852 18                         | 8068          | R                 |                                       |                       | eft Hand<br>rcular                       |    | 216MG7D 0.0  |           | 0.0  | .0   |     | 0.0                                      |  |
| E50. Mo              | odu  | lation an                       | d Serv        | vices             | Digi                                  | ital I                | Data                                     |    |  |           |  |  |     |  |  |
| Ant 1-2              | ]    | 8112 18                         | 8328          | R                 |                                       | Left Hand<br>Circular |  |    | 1M00G7D  |           | 0.0  |  | 0.0 |  |  |
| E50. Mo              | odul | lation an                       | d Serv        | vices             | Digi                                  | ital I                | Data                                     |    |  |           |  |  |     |  |  |
| Ant 1-2              | ]    | 8112 18                         | 8328          | R                 |                                       | Left Hand<br>Circular |  |    | 216MG7D  |           | 0.0  |  |     | 0.0                                      |  |
| E50. Mo              | odu  | lation an                       | d Serv        | vices             | Digi                                  | tal I                 | Data                                     |    |  |           |  |  |     |  |  |
| Ant 1-2              | ]    | 8372 18                         | 8588          | R                 |                                       | Left<br>Circu         | Hand<br>ılar                             |    | 1M00G7D  |           | 0.0  | 0.0  |     | 0.0                                      |  |
| E50. Mo              | odu  | lation an                       | d Serv        | vices             | Digi                                  | tal I                 | Data                                     |    |  |           |  |  |     |  |  |
|                      |      |                                 | 1             |                   |                                       |                       |  | 1  |  |           |  |  |     |  |  |

| Ant 1-2  | 18372 18    | 8588    |           | Left Hand<br>Circular  | 216MG7D                               | 0.0  | 0.0  |
|----------|-------------|---------|-----------|------------------------|---------------------------------------|------|------|
| E50. Moo | dulation ar | nd Serv | vices Dig | gital Data             | •                                     | ·    | ·    |
| Ant 1-2  | 18801 19    | 9017    | R         | Left Hand<br>Circular  | 1M00G7D                               | 0.0  | 0.0  |
| E50. Moo | dulation ar | nd Serv | vices Dig | gital Data             |                                       | •    |      |
| Ant 1-2  | 18801 19    | 9017    | R         | Left Hand<br>Circular  | 216MG7D                               | 0.0  | 0.0  |
| E50. Moo | dulation ar | nd Serv | vices Dig | gital Data             |                                       |      |      |
| Ant 1-2  | 19055 19    | 9271    | R         | Left Hand<br>Circular  | 1M00G7D                               | 0.0  | 0.0  |
| E50. Moo | dulation ar | nd Serv | vices Dig | gital Data             |                                       |      |      |
| Ant 1-2  | 19055 19    | 9271    | R         | Left Hand<br>Circular  | 216MG7D                               | 0.0  | 0.0  |
| E50. Moo | dulation ar | nd Serv | vices Dig | gital Data             |                                       |      |      |
| Ant 1-2  | 27652 2     | 7868    | Т         | Right Hand<br>Circular | 1M00G7D                               | 48.6 | 24.6 |
| E50. Moo | dulation ar | nd Serv | vices Dig | gital Data             |                                       |      |      |
| Ant 1-2  | 27652 27    | 7868    | Т         | Right Hand<br>Circular | 216MG7D                               | 68.8 | 38.8 |
| E50. Moo | dulation ar | nd Serv | vices Dig | gital Data             |                                       |      |      |
| Ant 1-2  | 27912 28    | 8128    | Т         | Right Hand<br>Circular | 1M00G7D                               | 48.6 | 24.6 |
| E50. Moo | dulation ar | nd Serv | vices Dig | gital Data             | •                                     | ·    | ·    |
| Ant 1-2  | 27912 28    | 8128    | Т         | Right Hand<br>Circular | 216MG7D                               | 68.8 | 38.8 |
| E50. Mod | dulation ar | nd Serv | vices Dig | gital Data             |                                       |      |      |
| Ant 1-2  | 28172 28    | 8388    |           | Right Hand<br>Circular | 1M00G7D                               | 48.6 | 24.6 |
| E50. Moo | dulation ar | nd Serv | vices Dig | gital Data             |                                       |      |      |
| Ant 1-2  | 28172 28    | 8388    | Т         | Right Hand<br>Circular | 216MG7D                               | 68.8 | 38.8 |
| E50. Moo | dulation ar | nd Serv | vices Dig | gital Data             |                                       |      |      |
| Ant 1-2  | 28601 28    | 8817    |           | Right Hand<br>Circular | 1M00G7D                               | 48.6 | 24.6 |
| E50. Mod | dulation ar | nd Serv | vices Dig | gital Data             | •                                     | -    | ·    |
| Ant 1-2  | 28601 28    | 8817    |           | Right Hand<br>Circular | 216MG7D                               | 68.8 | 38.8 |
| E50. Mod | dulation ar | nd Serv | vices Dig | gital Data             |                                       |      |      |
| Ant 1-2  | 28855 29    | 9071    | Т         | Right Hand<br>Circular | 1M00G7D                               | 48.6 | 24.6 |
| E50. Moo | dulation ar | nd Serv | vices Dig | gital Data             | · · · · · · · · · · · · · · · · · · · |      |      |
| Ant 1-2  | 28855 29    | 9071    | Т         |                        | 216MG7D                               | 68.8 | 38.8 |

|  |                            |   | ight Hand<br>ircular                                       | l     |   |  |   |   |  |  |  |
|--|----------------------------|---|--|-------|---|--|---|---|--|--|--|
| E50. Modulation and Services Digital Data<br>FREQUENCY COORDINATION  |                            |   |  |       |   |  |   |   |  |  |  |
|  | E51 Satellite              | E52/53.<br>Frequency<br>Limits<br>(MHz) | E54/55.<br>Range<br>of<br>Satellite<br>Arc<br>E/W<br>Limit | Earth | E57.<br>Antenna<br>Elevation<br>Angle<br>Eastern<br>Limit | E58.<br>Earth<br>Station<br>Azimuth<br>Angle<br>Western<br>Limit | E59.<br>Antenna<br>Elevation<br>Angle<br>Western<br>Limit | E60.<br>Maximum<br>EIRP<br>Density<br>toward the<br>Horizon<br>(dBW/4kHz) |  |  |  |
| Ant 1-2  | Non-<br>Geostationary      | 17800<br>18600                          | 0.0/ 0.0   | 122.4 | 7.6   | 238.3  | 7.0   | 0.0   |  |  |  |
|  | Non-<br>Geostationary      | 18800<br>19300                          | 0.0/ 0.0   | 122.4 | 7.6   | 238.3  | 7.0   | 0.0   |  |  |  |
|  | Non-<br>Geostationary      | 27600<br>28400                          | 0.0/ 0.0   | 122.4 | 7.6   | 238.3  | 7.0   | 38.8  |  |  |  |
|  | Non-<br>Geostationary      | 28600<br>29100                          | 0.0/ 0.0   | 122.4 | 7.6   | 238.3  | 7.0   | 38.8  |  |  |  |
|  | CONTROL POI<br>CONTROL POI |   |  |       |   |  |   |   |  |  |  |
| E61. Call Sign       E65. Phone Number         NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.       E65. Phone Number |                            |   |  |       |   |  |   |   |  |  |  |
| E62. Street  | Address                    |   |  |       |   |  |   |   |  |  |  |

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E63. City

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E67. County

E64/68.

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