

**FEDERAL COMMUNICATIONS COMMISSION  
SATELLITE SPACE STATION AUTHORIZATIONS  
(Technical and Operational Description)**

**S1. GENERAL INFORMATION** Complete for all satellite applications.

|   |                          |   |  |  |  |
|---|--------------------------|---|--|--|--|
| a. Space Station or Satellite Network Name:<br>INTELSAT 602 |                          | e. Estimated Date of Placement into Service:                              |  | i. Will the space station(s) operate on a Common Carrier Basis:<br>N   |  |
| b. Construction Commencement Date:                          |                          | f. Estimated Lifetime of Satellite(s):<br>Years                           |  | j. Number of transponders offered on a common carrier basis:   |  |
| c. Construction Completion Date:                            |                          | g. Total Number of Transponders:<br>50                                    |  | k. Total Common Carrier Transponder Bandwidth:<br>MHz  |  |
| d1. Est Launch Date Begin:                                  | d2. Est Launch Date End: | h. Total Transponder Bandwidth (no. transponders x Bandwidth)<br>3272 MHz |  | i. Orbit Type: Mark all boxes that apply:<br><input checked="" type="checkbox"/> GSO <input type="checkbox"/> NGSO |  |

**S2. OPERATING FREQUENCY BANDS** Identify the frequency range and transmit/receive mode for all frequency bands in which this station will oper  
Also indicate the nature of service(s) for each frequency band.

| Frequency Band Limits |                 |                       |                 | e. T/R Mode | f. Nature of Service(s): List all that apply to this band |
|-----------------------|-----------------|-----------------------|-----------------|-------------|---|
| Lower Frequency (.Hz) |                 | Upper Frequency (.Hz) |                 |             |   |
| a. Numeric            | b. Unit (K/M/G) | c. Numeric            | d. Unit (K/M/G) |             |   |
| 5850                  | M               | 6425                  | M               | R           | Fixed Satellite Service                                   |
| 14000                 | M               | 14500                 | M               | R           | Fixed Satellite Service                                   |
| 3625                  | M               | 4200                  | M               | T           | Fixed Satellite Service                                   |
| 10950                 | M               | 11200                 | M               | T           | Fixed Satellite Service                                   |
| 11450                 | M               | 11700                 | M               | T           | Fixed Satellite Service                                   |

**S3. ORBITAL INFORMATION FOR GEOSTATIONARY SATELLITES ONLY:**

|  |              |  |  |  |  |
|--|--------------|--|--|--|--|
| a. Nominal Orbital Longitude (Degrees E/W):<br>157 E |              | b. Alternate Orbital Longitude (Degrees E/W):              |  | c. Reason for orbital location selection:<br>Provide C and Ku-band service to East Asia, Australia, the Pacific Ocean region and Alaska with similar coverage to that from 150 E.L., where the satellite was previously located. |  |
| Longitudinal Tolerance or E/W Station-Keeping:       |              | f. Inclination Excursion or N/S Station-Keeping Tolerance: |  | Range of orbital are in which adequate service can be provided (Optional):<br>Degrees      E/W   |  |
| d. Toward West:                                      | 0.05 Degrees | e. Toward East:  |  | g. Westernmost:<br>h. Easternmost:   |  |
|  |              | 4.9 Degrees  |  |  |  |
| i. Reason for service are selection (Optional):      |              |  |  |  |  |

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S4. ORBITAL INFORMATION FOR NON-GEOSTATIONARY SATELLITES ONLY

S4a. Total Number of Satellites in Network or System:

S4c. Celestial Reference Body (Earth, Sun, Moon, etc.):

S4b. Total Number of Orbital Planes in Network or System:

S4d. Orbit Epoch Date:

For each Orbital Plane Provide:

| (e) Orbital Plane No. | (f) No. of Satellites in Plane | (g) Inclination Angle (degrees) | (h) Orbital Period (Seconds) | (i) Apogee (km) | (j) Perigee (km) | (k) Right Ascension of the Ascending Node (Deg.) | (l) Argument of Perigee (Degrees) | Active Service Arc Range (Degrees) |               |           |
|-----------------------|--------------------------------|---------------------------------|------------------------------|-----------------|------------------|--|-----------------------------------|------------------------------------|---------------|-----------|
|                       |                                |                                 |                              |                 |                  |  |                                   | (m) Begin Angle                    | (n) End Angle | (o) Other |
|                       |                                |                                 |                              |                 |                  |  |                                   |                                    |               |           |

S5. INITIAL SATELLITE PHASE ANGLE For each satellite in each orbital plane, provide the initial phase angle.

| (a) Orbital Plane No. | (b) Satellite Number | (c) Initial Phase Angle (Degrees) |
|-----------------------|----------------------|-----------------------------------|
|                       |                      |                                   |

**NO NGSO DATA FILED**

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S6. SERVICE AREA CHARACTERISTICS for each service area provide:

| (a) Service Area ID | (b) Type of Associated Station (Earth or Space) | (c) Service Area Diagram File Name (GXT File) | (d) Service Area Description. Provide list of geographic areas (state postal codes or ITU 3-ltr codes), satellites or Figure No. of Service Area Diagram. |
|---------------------|---|---|---|
| 1                   | S   |   | Global  |
| 2                   | S   |   | East Asia and Australia   |
| 3                   | S   |   | Pacific Ocean Region  |
| 4                   | S   |   | China and surrounding region  |
| 5                   | S   |   | Australia, Indochina-Indonesia-Philippines region   |
| 6                   | S   |   | Global Steerable  |

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S7. SPACE STATION ANTENNA BEAM CHARACTERISTICS For each antenna beam provide:

| (a)<br>Beam<br>ID | (b)<br>T/R<br>Mode | Isotropic Antenna<br>Gain |                  | (e)<br>Pointing<br>Error<br>(Degrees) | (f)<br>Rotational<br>Error<br>(Degrees) | (g) Min.<br>Cross-<br>Polar Iso-<br>lation (dB) | (h) Polar-<br>ization<br>Switch-<br>able?<br>(Y/N) | (i) Polarization<br>Alignment Rel.<br>Equatorial<br>Plane (Degrees) | (j) Service<br>Area ID | Transmit                       |                                      |                              | Receive                            |                                       |  |                       |
|-------------------|--------------------|---------------------------|------------------|---------------------------------------|---|---|--|---|------------------------|--------------------------------|--------------------------------------|------------------------------|------------------------------------|---------------------------------------|--|-----------------------|
|                   |                    |                           |                  |                                       |   |   |  |   |                        | (k)<br>Input<br>Losses<br>(dB) | (l) Effective<br>Output<br>Power (W) | (m)<br>Max.<br>EIRP<br>(dBW) | (n)<br>System<br>Noise<br>Temp (k) | (o) G/T<br>Max.<br>Gain Pt.<br>(dB/K) | (p) Min.<br>Saturation<br>Flux Density<br>(dBW/m2) | Input Attenuator (dB) |
|                   |                    | (q) Max.<br>Value         | (r) Step<br>Size |                                       |   |   |  |   |                        |                                |                                      |                              |                                    |                                       |  |                       |
| GAU               | R                  | 19.3                      | 15.3             |                                       |   |   | N  |   | 1                      |                                |                                      |                              | -9.3                               | -85.7                                 | 11.8   | 7.4                   |
| GBU               | R                  | 19.3                      | 15.3             |                                       |   |   | N  |   | 1                      |                                |                                      |                              | -9.3                               | -85.7                                 | 11.8   | 7.4                   |
| WHU               | R                  | 23.5                      | 19.5             |                                       |   |   | N  |   | 2                      |                                |                                      |                              | -4.5                               | -86.7                                 | 14.9   | 10.4                  |
| EHU               | R                  | 24.4                      | 20.4             |                                       |   |   | N  |   | 3                      |                                |                                      |                              | -3.6                               | -86.5                                 | 14.8   | 10.3                  |
| NWU               | R                  | 32.8                      | 28.8             |                                       |   |   | N  |   | 4                      |                                |                                      |                              | 4.2                                | -86.9                                 | 14.9   | 10.4                  |
| NEU               | R                  | 31.3                      | 27.3             |                                       |   |   | N  |   | 3                      |                                |                                      |                              | 2.8                                | -86.8                                 | 15.2   | 10.6                  |
| SWU               | R                  | 26.7                      | 22.7             |                                       |   |   | N  |   | 5                      |                                |                                      |                              | -1.5                               | -87.4                                 | 14.9   | 10.5                  |
| SEUL              | R                  | 26                        | 22               |                                       |   |   | N  |   | 3                      |                                |                                      |                              | -2.2                               | -86.9                                 | 15   | 10.5                  |
| ESUL              | R                  | 38.1                      | 34.1             |                                       |   |   | N  |   | 6                      |                                |                                      |                              | 8.5                                | -87.3                                 | 10.6   | 5.7                   |
| WSU               | R                  | 37.3                      | 33.3             |                                       |   |   | N  |   | 6                      |                                |                                      |                              | 7.9                                | -88.1                                 | 10.9   | 5.8                   |
| GAD               | T                  | 19.2                      | 15.2             |                                       |   |   | N  |   | 1                      |                                | 29.4                                 |                              |                                    |                                       |  |                       |
| GBD               | T                  | 19.2                      | 15.2             |                                       |   |   | N  |   | 1                      |                                | 29.4                                 |                              |                                    |                                       |  |                       |
| WHD               | T                  | 25                        | 21               |                                       |   |   | N  |   | 2                      |                                | 35.6                                 |                              |                                    |                                       |  |                       |
| EHD               | T                  | 26.1                      | 22.1             |                                       |   |   | N  |   | 3                      |                                | 36.7                                 |                              |                                    |                                       |  |                       |
| NWD               | T                  | 34.7                      | 30.7             |                                       |   |   | N  |   | 4                      |                                | 36.8                                 |                              |                                    |                                       |  |                       |
| NED               | T                  | 33.1                      | 29.1             |                                       |   |   | N  |   | 3                      |                                | 37.2                                 |                              |                                    |                                       |  |                       |
| SWD               | T                  | 28                        | 24               |                                       |   |   | N  |   | 5                      |                                | 37.1                                 |                              |                                    |                                       |  |                       |
| SEDL              | T                  | 28.8                      | 24.8             |                                       |   |   | N  |   | 3                      |                                | 37.7                                 |                              |                                    |                                       |  |                       |
| ESDL              | T                  | 37.2                      | 33.2             |                                       |   |   | N  |   | 6                      |                                | 48.9                                 |                              |                                    |                                       |  |                       |
| WSD               | T                  | 37.6                      | 33.6             |                                       |   |   | N  |   | 6                      |                                | 48.8                                 |                              |                                    |                                       |  |                       |
| CMD               | R                  | 15                        | 13               |                                       |   |   | N  |   | 1                      |                                |                                      |                              | -16.1                              | -95                                   |  |                       |
| CMD               | R                  | 2.6                       | 0.6              |                                       |   |   | N  |   | 1                      |                                |                                      |                              | -27.9                              | -99.9                                 |  |                       |
| TLM               | T                  | 15                        | 13               |                                       |   |   | N  |   | 1                      |                                | 7.7                                  |                              |                                    |                                       |  |                       |
| TLM               | T                  | 1.3                       | -0.7             |                                       |   |   | N  |   | 1                      |                                | 7.2                                  |                              |                                    |                                       |  |                       |
| ULP               | T                  | 18.8                      | 16.8             |                                       |   |   | N  |   | 1                      |                                | 7.5                                  |                              |                                    |                                       |  |                       |

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S8. ANTENNA BEAM DIAGRAMS For each beam pattern provide the reference to the graphic image and numerical data:  
 Also provide the power flux density levels in each beam that result from the emission with the highest power flux density.

| (a)<br>Beam<br>ID | (b)<br>T/R<br>Mode | (c) Co-or<br>Cross<br>Polar<br>Mode ("C"<br>or" X") | (d) GSO<br>Ref.<br>Orbital<br>Longitude<br>(Deg. E/W) | (e) NGSO Antenna Gain<br>Contour Description<br>(Figure/Table/ Exhibit) | (f) GSO Antenna<br>Gain Contour Data<br>(GXT File) | Max. Power Flux Density (dBW/M2/Hz)                                  |            |            |            |            |
|-------------------|--------------------|---|---|---|--|--|------------|------------|------------|------------|
|                   |                    |   |   |   |  | At Angle of Arrival above horizontal (for emission with highest PFD) |            |            |            |            |
|                   |                    |   |   |   |  | (g) 5 Deg  | (h) 10 Deg | (i) 15 Deg | (j) 20 Deg | (k) 25 Deg |
| GAU               | R                  | C   | 157   |   | gaul.gxt   |  |            |            |            |            |
| GBU               | R                  | C   | 157   |   | gbul.gxt   |  |            |            |            |            |
| WHU               | R                  | C   | 157   |   | whul.gxt   |  |            |            |            |            |
| EHU               | R                  | C   | 157   |   | ehul.gxt   |  |            |            |            |            |
| NWU               | R                  | C   | 157   |   | nwul.gxt   |  |            |            |            |            |
| NEU               | R                  | C   | 157   |   | neul.gxt   |  |            |            |            |            |
| SWU               | R                  | C   | 157   |   | swul.gxt   |  |            |            |            |            |
| SEUL              | R                  | C   | 157   |   | seul.gxt   |  |            |            |            |            |
| ESUL              | R                  | C   | 157   |   | esul.gxt   |  |            |            |            |            |
| WSU               | R                  | C   | 157   |   | wsul.gxt   |  |            |            |            |            |
| GAD               | T                  | C   | 157   |   | gadl.gxt   | -163.9   | -163.8     | -163.6     | -163.5     | -163.4     |
| GBD               | T                  | C   | 157   |   | gbdl.gxt   | -163.9   | -163.8     | -163.6     | -163.5     | -163.4     |
| WHD               | T                  | C   | 157   |   | whdl.gxt   | -157.7   | -157.6     | -157.4     | -157.3     | -157.2     |
| EHD               | T                  | C   | 157   |   | ehdl.gxt   | -156.6   | -156.5     | -156.3     | -156.2     | -156.1     |
| NWD               | T                  | C   | 157   |   | nwdl.gxt   | -156.5   | -156.4     | -156.2     | -156.1     | -156       |
| NED               | T                  | C   | 157   |   | nedl.gxt   | -156.1   | -156       | -155.8     | -155.7     | -155.6     |
| SWD               | T                  | C   | 157   |   | swdl.gxt   | -156.2   | -156.1     | -155.9     | -155.8     | -155.7     |
| SEDL              | T                  | C   | 157   |   | sedl.gxt   | -155.6   | -155.5     | -155.3     | -155.2     | -155.1     |
| ESDL              | T                  | C   | 157   |   | esdl.gxt   | -150   | -147.5     | -145       | -144       | -143.9     |
| WSD               | T                  | C   | 157   |   | wsdl.gxt   | -150   | -147.5     | -145       | -144.1     | -144       |
| CMD               | R                  | C   | 157   |   | cmdg.gxt   |  |            |            |            |            |
| CMD               | R                  | C   | 157   | cmdb.pdf  |  |  |            |            |            |            |
| TLM               | T                  | C   | 157   |   | tlmg.gxt   | -174.1   | -174       | -173.9     | -173.8     | -173.7     |
| TLM               | T                  | C   | 157   | tlmb.pdf  |  | -174.6   | -174.5     | -174.4     | -174.3     | -174.2     |
| ULP               | T                  | C   | 157   |   | ulpc.gxt   | -159.8   | -159.6     | -159.5     | -159.4     | -159.3     |

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S9. SPACE STATION CHANNELS For each frequency channel provide: S10. SPACE STATION TRANSPONDERS For each transponder provide:

| (a) Channel No. | (B) Assigned Bandwidth (kHz) | (c) T/R Mode | (d) Center Frequency (MHz) | (e) Polarization (H, V, L, R) | (f) TTC or Comm Channel (T or C) |
|-----------------|------------------------------|--------------|----------------------------|-------------------------------|----------------------------------|
| UA9             | 36000                        | R            | 6280                       | L                             | C                                |
| UA10            | 36000                        | R            | 6320                       | L                             | C                                |
| UA11            | 36000                        | R            | 6360                       | L                             | C                                |
| UA12            | 41000                        | R            | 6402.5                     | L                             | C                                |
| UB9             | 36000                        | R            | 6280                       | R                             | C                                |
| UB10            | 36000                        | R            | 6320                       | R                             | C                                |
| UB11            | 36000                        | R            | 6360                       | R                             | C                                |
| UB12            | 41000                        | R            | 6402.5                     | R                             | C                                |
| UEH1            | 72000                        | R            | 5890                       | L                             | C                                |
| UEH2            | 72000                        | R            | 5970                       | L                             | C                                |
| UEH3            | 72000                        | R            | 6050                       | L                             | C                                |
| UEH4            | 72000                        | R            | 6130                       | L                             | C                                |
| UEH5            | 72000                        | R            | 6220                       | L                             | C                                |
| UEH9            | 36000                        | R            | 6280                       | L                             | C                                |
| UWH1            | 72000                        | R            | 5890                       | L                             | C                                |
| UWH2            | 72000                        | R            | 5970                       | L                             | C                                |
| UWH3            | 72000                        | R            | 6050                       | L                             | C                                |
| UWH4            | 72000                        | R            | 6130                       | L                             | C                                |
| UWH5            | 72000                        | R            | 6220                       | L                             | C                                |
| UWH9            | 36000                        | R            | 6280                       | L                             | C                                |
| UNW2            | 72000                        | R            | 5970                       | R                             | C                                |
| UNW3            | 72000                        | R            | 6050                       | R                             | C                                |
| UNW4            | 72000                        | R            | 6130                       | R                             | C                                |
| UNW5            | 72000                        | R            | 6220                       | R                             | C                                |
| UNW9            | 36000                        | R            | 6280                       | R                             | C                                |
| USW2            | 72000                        | R            | 5970                       | R                             | C                                |
| USW3            | 72000                        | R            | 6050                       | R                             | C                                |
| USW4            | 72000                        | R            | 6130                       | R                             | C                                |
| USW5            | 72000                        | R            | 6220                       | R                             | C                                |
| USW9            | 36000                        | R            | 6280                       | R                             | C                                |

| (a) Transponder ID | (b) Transponder Gain (dB) | Receive Band    |             | Transmit Band   |             |
|--------------------|---------------------------|-----------------|-------------|-----------------|-------------|
|                    |                           | (c) Channel No. | (d) Beam ID | (e) Channel No. | (f) Beam ID |
| AA9                | 113.9                     | UA9             | GAUL        | DA9             | GADL        |
| AA10               | 113.9                     | UA10            | GAUL        | DA10            | GADL        |
| AA11               | 113.9                     | UA11            | GAUL        | DA11            | GADL        |
| BB9                | 113.9                     | UB9             | GBUL        | DB9             | GBDL        |
| BB10               | 113.9                     | UB10            | GBUL        | DB10            | GBDL        |
| BB11               | 113.9                     | UB11            | GBUL        | DB11            | GBDL        |
| AA12               | 113.9                     | UA12            | GAUL        | DA12            | GADL        |
| BB12               | 113.9                     | UB12            | GAUL        | DB12            | GBDL        |
| EHEH1              | 110                       | UEH1            | EHUL        | DEH1            | EHDL        |
| EHEH2              | 110                       | UEH2            | EHUL        | DEH2            | EHDL        |
| EHEH3              | 110                       | UEH3            | EHUL        | DEH3            | EHDL        |
| EHEH4              | 110                       | UEH4            | EHUL        | DEH4            | EHDL        |
| EHEH5              | 110                       | UEH5            | EHUL        | DEH5            | EHDL        |
| EHWH1              | 110                       | UEH1            | EHUL        | DWH1            | WHDL        |
| EHWH2              | 110                       | UEH2            | EHUL        | DWH2            | WHDL        |
| EHWH3              | 110                       | UEH3            | EHUL        | DWH3            | WHDL        |
| EHWH4              | 110                       | UEH4            | EHUL        | DWH4            | WHDL        |
| EHWH5              | 110                       | UEH5            | EHUL        | DWH5            | WHDL        |
| WHEH1              | 111.1                     | UWH1            | WHUL        | DEH1            | EHDL        |
| WHEH2              | 111.1                     | UWH2            | WHUL        | DEH2            | EHDL        |
| WHEH3              | 111.1                     | UWH3            | WHUL        | DEH3            | EHDL        |
| WHEH4              | 111.1                     | UWH4            | WHUL        | DEH4            | EHDL        |
| WHEH5              | 111.1                     | UWH5            | WHUL        | DEH5            | EHDL        |
| WHWH1              | 111.1                     | UWH1            | WHUL        | DWH1            | WHDL        |
| WHWH2              | 111.1                     | UWH2            | WHUL        | DWH2            | WHDL        |
| WHWH3              | 111.1                     | UWH3            | WHUL        | DWH3            | WHDL        |
| WHWH4              | 111.1                     | UWH4            | WHUL        | DWH4            | WHDL        |
| WHWH5              | 111.1                     | UWH5            | WHUL        | DWH5            | WHDL        |
| EHEH9              | 110                       | UEH9            | EHUL        | DEH9            | EHDL        |
| EHWH9              | 110                       | UEH9            | EHUL        | DWH9            | WHDL        |

|      |        |   |         |   |   |
|------|--------|---|---------|---|---|
| UNE2 | 72000  | R | 5970    | R | C |
| UNE3 | 72000  | R | 6050    | R | C |
| UNE4 | 72000  | R | 6130    | R | C |
| UNE5 | 72000  | R | 6220    | R | C |
| UNE9 | 36000  | R | 6280    | R | C |
| USE2 | 72000  | R | 5970    | R | C |
| USE3 | 72000  | R | 6050    | R | C |
| USE4 | 72000  | R | 6130    | R | C |
| USE5 | 72000  | R | 6220    | R | C |
| USE9 | 36000  | R | 6280    | R | C |
| UE2  | 77000  | R | 14042.5 | H | C |
| UE3  | 72000  | R | 14125   | H | C |
| UE4  | 72000  | R | 14205   | H | C |
| UE5  | 72000  | R | 14295   | H | C |
| UE13 | 150000 | R | 14418.5 | H | C |
| UW2  | 77000  | R | 14042.5 | V | C |
| UW3  | 72000  | R | 14125   | V | C |
| UW4  | 72000  | R | 14205   | V | C |
| UW5  | 72000  | R | 14295   | V | C |
| UW13 | 150000 | R | 14418.5 | V | C |
| DA9  | 36000  | T | 4055    | R | C |
| DA10 | 36000  | T | 4095    | R | C |
| DA11 | 36000  | T | 4135    | R | C |
| DA12 | 41000  | T | 4177.5  | R | C |
| DB9  | 36000  | T | 4055    | L | C |
| DB10 | 36000  | T | 4095    | L | C |
| DB11 | 36000  | T | 4135    | L | C |
| DB12 | 41000  | T | 4177.5  | L | C |
| DEH1 | 72000  | T | 3665    | R | C |
| DEH2 | 72000  | T | 3745    | R | C |
| DEH3 | 72000  | T | 3825    | R | C |
| DEH4 | 72000  | T | 3905    | R | C |
| DEH5 | 72000  | T | 3995    | R | C |
| DEH9 | 36000  | T | 4055    | R | C |
| DWH1 | 72000  | T | 3665    | R | C |
| DWH2 | 72000  | T | 3745    | R | C |
| DWH3 | 72000  | T | 3825    | R | C |
| DWH4 | 72000  | T | 3905    | R | C |
| DWH5 | 72000  | T | 3995    | R | C |

|       |       |      |      |      |      |
|-------|-------|------|------|------|------|
| WHEH9 | 111.1 | UWH9 | WHUL | DEH9 | EHDL |
| WHWH9 | 111.1 | UWH9 | WHUL | DWH9 | WHDL |
| EHES2 | 111.1 | UEH2 | EHUL | DE2  | ESDL |
| EHES3 | 111.1 | UEH3 | EHUL | DE3  | ESDL |
| EHES4 | 111.1 | UEH4 | EHUL | DE4  | ESDL |
| EHES5 | 111.1 | UEH5 | EHUL | DE5  | ESDL |
| EHWS2 | 110.6 | UEH2 | EHUL | DW2  | WSDL |
| EHWS3 | 110.6 | UEH3 | EHUL | DW3  | WSDL |
| EHWS4 | 110.6 | UEH4 | EHUL | DW4  | WSDL |
| EHWS5 | 110.6 | UEH5 | EHUL | DW5  | WSDL |
| WHES2 | 112.2 | UWH2 | WHUL | DE2  | ESDL |
| WHES3 | 112.2 | UWH3 | WHUL | DE3  | ESDL |
| WHES4 | 112.2 | UWH4 | WHUL | DE4  | ESDL |
| WHES5 | 112.2 | UWH5 | WHUL | DE5  | ESDL |
| WHWS2 | 111.7 | UWH2 | WHUL | DW2  | WSDL |
| WHWS3 | 111.7 | UWH3 | WHUL | DW3  | WSDL |
| WHWS4 | 111.7 | UWH4 | WHUL | DW4  | WSDL |
| WHWS5 | 111.7 | UWH5 | WHUL | DW5  | WSDL |
| EHNW2 | 101.5 | UEH2 | EHUL | DNW2 | NWDL |
| EHNW3 | 101.5 | UEH3 | EHUL | DNW3 | NWDL |
| EHNW4 | 101.5 | UEH4 | EHUL | DNW4 | NWDL |
| EHNW5 | 101.5 | UEH5 | EHUL | DNW5 | NWDL |
| EHSW2 | 108.5 | UEH2 | EHUL | DSW2 | SWDL |
| EHSW3 | 108.5 | UEH3 | EHUL | DSW3 | SWDL |
| EHSW4 | 108.5 | UEH4 | EHUL | DSW4 | SWDL |
| EHSW5 | 108.5 | UEH5 | EHUL | DSW5 | SWDL |
| EHNE2 | 103.5 | UEH2 | EHUL | DNE2 | NEDL |
| EHNE3 | 103.5 | UEH3 | EHUL | DNE3 | NEDL |
| EHNE4 | 103.5 | UEH4 | EHUL | DNE4 | NEDL |
| EHNE5 | 103.5 | UEH5 | EHUL | DNE5 | NEDL |
| EHSE2 | 108.3 | UEH2 | EHUL | DSE2 | SEDL |
| EHSE3 | 108.3 | UEH3 | EHUL | DSE3 | SEDL |
| EHSE4 | 108.3 | UEH4 | EHUL | DSE4 | SEDL |
| EHSE5 | 108.3 | UEH5 | EHUL | DSE5 | SEDL |
| WHNW2 | 102.6 | UWH2 | WHUL | DNW2 | NWDL |
| WHNW3 | 102.6 | UWH3 | WHUL | DNW3 | NWDL |
| WHNW4 | 102.6 | UWH4 | WHUL | DNW4 | NWDL |
| WHNW5 | 102.6 | UWH5 | WHUL | DNW5 | NWDL |
| WHSW2 | 109.6 | UWH2 | WHUL | DSW2 | SWDL |

|      |        |   |         |   |   |
|------|--------|---|---------|---|---|
| DWH9 | 36000  | T | 4055    | R | C |
| DNW2 | 72000  | T | 3745    | L | C |
| DNW3 | 72000  | T | 3825    | L | C |
| DNW4 | 72000  | T | 3905    | L | C |
| DNW5 | 72000  | T | 3995    | L | C |
| DNW9 | 36000  | T | 4055    | L | C |
| DSW2 | 72000  | T | 3745    | L | C |
| DSW3 | 72000  | T | 3825    | L | C |
| DSW4 | 72000  | T | 3905    | L | C |
| DSW5 | 72000  | T | 3995    | L | C |
| DSW9 | 36000  | T | 4055    | L | C |
| DNE2 | 72000  | T | 3745    | L | C |
| DNE3 | 72000  | T | 3825    | L | C |
| DNE4 | 72000  | T | 3905    | L | C |
| DNE5 | 72000  | T | 3995    | L | C |
| DNE9 | 36000  | T | 4055    | L | C |
| DSE2 | 72000  | T | 3745    | L | C |
| DSE3 | 72000  | T | 3825    | L | C |
| DSE4 | 72000  | T | 3905    | L | C |
| DSE5 | 72000  | T | 3995    | L | C |
| DSE9 | 36000  | T | 4055    | L | C |
| DE2  | 77000  | T | 10992.5 | V | C |
| DE3  | 72000  | T | 11075   | V | C |
| DE4  | 72000  | T | 11155   | V | C |
| DE5  | 72000  | T | 11495   | V | C |
| DE13 | 150000 | T | 11618.5 | V | C |
| DW2  | 77000  | T | 10992.5 | H | C |
| DW3  | 72000  | T | 11075   | H | C |
| DW4  | 72000  | T | 11155   | H | C |
| DW5  | 72000  | T | 11495   | H | C |
| DW13 | 150000 | T | 11618.5 | H | C |
| TLM1 | 500    | T | 3947.5  | R | T |
| TLM2 | 500    | T | 3952.5  | R | T |
| TLM3 | 500    | T | 3948.0  | V | T |
| TLM4 | 500    | T | 3952.0  | V | T |
| CMD1 | 1000   | R | 6176.3  | H | T |
| CMD2 | 1000   | R | 6173.7  | H | T |
| UPC1 | 10     | T | 11198   | R | T |
| UPC2 | 10     | T | 11452   | R | T |

|       |       |      |      |      |      |
|-------|-------|------|------|------|------|
| WHSW3 | 109.6 | UWH3 | WHUL | DSW3 | SWDL |
| WHSW4 | 109.6 | UWH4 | WHUL | DSW4 | SWDL |
| WHSW5 | 109.6 | UWH5 | WHUL | DSW5 | SWDL |
| WHNE2 | 104.6 | UWH2 | WHUL | DNE2 | NEDL |
| WHNE3 | 104.6 | UWH3 | WHUL | DNE3 | NEDL |
| WHNE4 | 104.6 | UWH4 | WHUL | DNE4 | NEDL |
| WHNE5 | 104.6 | UWH5 | WHUL | DNE5 | NEDL |
| WHSE2 | 109.4 | UWH2 | WHUL | DSE2 | SEDL |
| WHSE3 | 109.4 | UWH3 | WHUL | DSE3 | SEDL |
| WHSE4 | 109.4 | UWH4 | WHUL | DSE4 | SEDL |
| WHSE5 | 109.4 | UWH5 | WHUL | DSE5 | SEDL |
| EHNW9 | 101.5 | UEH9 | EHUL | DNW9 | NWDL |
| EHSW9 | 108.5 | UEH9 | EHUL | DSW9 | SWDL |
| EHNE9 | 103.5 | UEH9 | EHUL | DNE9 | NEDL |
| EHSE9 | 108.3 | UEH9 | EHUL | DSE9 | SEDL |
| WHNW9 | 102.6 | UWH9 | WHUL | DNW9 | NWDL |
| WHSW9 | 109.6 | UWH9 | WHUL | DSW9 | SWDL |
| WHNE9 | 104.6 | UWH9 | WHUL | DNE9 | NEDL |
| WHSE9 | 109.4 | UWH9 | WHUL | DSE9 | SEDL |
| NWEH2 | 102   | UNW2 | NWUL | DEH2 | EHDL |
| NWEH3 | 102   | UNW3 | NWUL | DEH3 | EHDL |
| NWEH4 | 102   | UNW4 | NWUL | DEH4 | EHDL |
| NWEH5 | 102   | UNW5 | NWUL | DEH5 | EHDL |
| NWWH2 | 102   | UNW2 | NWUL | DWH2 | WHDL |
| NWWH3 | 102   | UNW3 | NWUL | DWH3 | WHDL |
| NWWH4 | 102   | UNW4 | NWUL | DWH4 | WHDL |
| NWWH5 | 102   | UNW5 | NWUL | DWH5 | WHDL |
| SWEH2 | 108.6 | USW2 | SWUL | DEH2 | EHDL |
| SWEH3 | 108.6 | USW3 | SWUL | DEH3 | EHDL |
| SWEH4 | 108.6 | USW4 | SWUL | DEH4 | EHDL |
| SWEH5 | 108.6 | USW5 | SWUL | DEH5 | EHDL |
| SWWH2 | 108.6 | USW2 | SWUL | DWH2 | WHDL |
| SWWH3 | 108.6 | USW3 | SWUL | DWH3 | WHDL |
| SWWH4 | 108.6 | USW4 | SWUL | DWH4 | WHDL |
| SWWH5 | 108.6 | USW5 | SWUL | DWH5 | WHDL |
| NEEH2 | 103.4 | UNE2 | NEUL | DEH2 | EHDL |
| NEEH3 | 103.4 | UNE3 | NEUL | DEH3 | EHDL |
| NEEH4 | 103.4 | UNE4 | NEUL | DEH4 | EHDL |
| NEEH5 | 103.4 | UNE5 | NEUL | DEH5 | EHDL |



|       |       |      |      |      |      |
|-------|-------|------|------|------|------|
| NEWH2 | 103.4 | UNE2 | NEUL | DWH2 | WHDL |
| NEWH3 | 103.4 | UNE3 | NEUL | DWH3 | WHDL |
| NEWH4 | 103.4 | UNE4 | NEUL | DWH4 | WHDL |
| NEWH5 | 103.4 | UNE5 | NEUL | DWH5 | WHDL |
| SEEH2 | 108.8 | USE2 | SEUL | DEH2 | EHDL |
| SEEH3 | 108.8 | USE3 | SEUL | DEH3 | EHDL |
| SEEH4 | 108.8 | USE4 | SEUL | DEH4 | EHDL |
| SEEH5 | 108.8 | USE5 | SEUL | DEH5 | EHDL |
| SEWH2 | 108.8 | USE2 | SEUL | DWH2 | WHDL |
| SEWH3 | 108.8 | USE3 | SEUL | DWH3 | WHDL |
| SEWH4 | 108.8 | USE4 | SEUL | DWH4 | WHDL |
| SEWH5 | 108.8 | USE5 | SEUL | DWH5 | WHDL |
| NWEH9 | 102   | UNW9 | NWUL | DEH9 | EHDL |
| NWWH9 | 102   | UNW9 | NWUL | DWH9 | WHDL |
| SWEH9 | 108.6 | USW9 | SWUL | DEH9 | EHDL |
| SWWH9 | 108.6 | USW9 | SWUL | DWH9 | WHDL |
| NEEH9 | 103.4 | UNE9 | NEUL | DEH9 | EHDL |
| NEWH9 | 103.4 | UNE9 | NEUL | DWH9 | WHDL |
| SEEH9 | 108.8 | USE9 | SEUL | DEH9 | EHDL |
| SEWH9 | 108.8 | USE9 | SEUL | DWH9 | WHDL |
| NWES2 | 103.1 | UNW2 | NWUL | DE2  | ESDL |
| NWES3 | 103.1 | UNW3 | NWUL | DE3  | ESDL |
| NWES4 | 103.1 | UNW4 | NWUL | DE4  | ESDL |
| NWES5 | 103.1 | UNW5 | NWUL | DE5  | ESDL |
| NWWS2 | 102.6 | UNW2 | NWUL | DW2  | WSDL |
| NWWS3 | 102.6 | UNW3 | NWUL | DW3  | WSDL |
| NWWS4 | 102.6 | UNW4 | NWUL | DW4  | WSDL |
| NWWS5 | 102.6 | UNW5 | NWUL | DW5  | WSDL |
| SWES2 | 109.7 | USW2 | SWUL | DE2  | ESDL |
| SWES3 | 109.7 | USW3 | SWUL | DE3  | ESDL |
| SWES4 | 109.7 | USW4 | SWUL | DE4  | ESDL |
| SWES5 | 109.7 | USW5 | SWUL | DE5  | ESDL |
| SWWS2 | 109.2 | USW2 | SWUL | DW2  | WSDL |
| SWWS3 | 109.2 | USW3 | SWUL | DW3  | WSDL |
| SWWS4 | 109.2 | USW4 | SWUL | DW3  | WSDL |
| SWWS5 | 109.2 | USW5 | SWUL | DW5  | WSDL |
| NEES2 | 104.5 | UNE2 | NEUL | DE2  | ESDL |
| NEES3 | 104.5 | UNE3 | NEUL | DE3  | ESDL |
| NEES4 | 104.5 | UNE4 | NEUL | DE4  | ESDL |

|       |       |      |      |      |      |
|-------|-------|------|------|------|------|
| NEES5 | 104.5 | UNE5 | NEUL | DE5  | ESDL |
| NEWS2 | 104   | UNE2 | NEUL | DW2  | WSDL |
| NEWS3 | 104   | UNE3 | NEUL | DW3  | WSDL |
| NEWS4 | 104   | UNE4 | NEUL | DW4  | WSDL |
| NEWS5 | 104   | UNE5 | NEUL | DW5  | WSDL |
| SEES2 | 109.9 | USE2 | SEUL | DE2  | ESDL |
| SEES3 | 109.9 | USE3 | SEUL | DE3  | ESDL |
| SEES4 | 109.9 | USE4 | SEUL | DE4  | ESDL |
| SEES5 | 109.9 | USE5 | SEUL | DE5  | ESDL |
| SEWS2 | 109.4 | USE2 | SEUL | DW2  | WSDL |
| SEWS3 | 109.4 | USE3 | SEUL | DW3  | WSDL |
| SEWS4 | 109.4 | USE4 | SEUL | DW4  | WSDL |
| SEWS5 | 109.4 | USE5 | SEUL | DW5  | WSDL |
| NWNW2 | 93.5  | UNW2 | NWUL | DNW2 | NWDL |
| NWNW3 | 93.5  | UNW3 | NWUL | DNW3 | NWDL |
| NWNW4 | 93.5  | UNW4 | NWUL | DNW4 | NWDL |
| NWNW5 | 93.5  | UNW5 | NWUL | DNW5 | NWDL |
| NWSW2 | 100.5 | UNW2 | NWUL | DSW2 | SWDL |
| NWSW3 | 100.5 | UNW3 | NWUL | DSW3 | SWDL |
| NWSW4 | 100.5 | UNW4 | NWUL | DSW4 | SWDL |
| NWSW5 | 100.5 | UNW5 | NWUL | DSW5 | SWDL |
| NWNE2 | 95.5  | UNW2 | NWUL | DNE2 | NEDL |
| NWNE3 | 95.5  | UNW3 | NWUL | DNE3 | NEDL |
| NWNE4 | 95.5  | UNW4 | NWUL | DNE4 | NEDL |
| NWNE5 | 95.5  | UNW5 | NWUL | DNE5 | NEDL |
| NWSE2 | 100.3 | UNW2 | NWUL | DSE2 | SEDL |
| NWSE3 | 100.3 | UNW3 | NWUL | DSE3 | SEDL |
| NWSE4 | 100.3 | UNW4 | NWUL | DSE4 | SEDL |
| NWSE5 | 100.3 | UNW5 | NWUL | DSE5 | SEDL |
| SWNW2 | 100.1 | USW2 | SWUL | DNW2 | NWDL |
| SWNW3 | 100.1 | USW3 | SWUL | DNW3 | NWDL |
| SWNW4 | 100.1 | USW4 | SWUL | DNW4 | NWDL |
| SWNW5 | 100.1 | USW5 | SWUL | DNW5 | NWDL |
| SWSW2 | 107.1 | USW2 | SWUL | DSW2 | SWDL |
| SWSW3 | 107.1 | USW3 | SWUL | DSW3 | SWDL |
| SWSW4 | 107.1 | USW4 | SWUL | DSW4 | SWDL |
| SWSW5 | 107.1 | USW5 | SWUL | DSW5 | SWDL |
| SWNE2 | 102.1 | USW2 | SWUL | DNE2 | NEDL |
| SWNE3 | 102.1 | USW3 | SWUL | DNE3 | NEDL |

|       |       |      |      |      |      |
|-------|-------|------|------|------|------|
| SWNE4 | 102.1 | USW4 | SWUL | DNE4 | NEDL |
| SWNE5 | 102.1 | USW5 | SWUL | DNE5 | NEDL |
| SWSE2 | 106.9 | USW2 | SWUL | DSE2 | SEDL |
| SWSE3 | 106.9 | USW3 | SWUL | DSE3 | SEDL |
| SWSE4 | 106.9 | USW4 | SWUL | DSE4 | SEDL |
| SWSE5 | 106.9 | USW5 | SWUL | DSE5 | SEDL |
| NENW2 | 94.9  | UNE2 | NEUL | DNW2 | NWDL |
| NENW3 | 94.9  | UNE3 | NEUL | DNW3 | NWDL |
| NENW4 | 94.9  | UNE4 | NEUL | DNW4 | NWDL |
| NENW5 | 94.9  | UNE5 | NEUL | DNW5 | NWDL |
| NESW2 | 101.9 | UNE2 | NEUL | DSW2 | SWDL |
| NESW3 | 101.9 | UNE3 | NEUL | DSW3 | SWDL |
| NESW4 | 101.9 | UNE4 | NEUL | DSW4 | SWDL |
| NESW5 | 101.9 | UNE5 | NEUL | DSW5 | SWDL |
| NENE2 | 96.9  | UNE2 | NEUL | DNE2 | NEDL |
| NENE3 | 96.9  | UNE3 | NEUL | DNE3 | NEDL |
| NENE4 | 96.9  | UNE4 | NEUL | DNE4 | NEDL |
| NENE5 | 96.9  | UNE5 | NEUL | DNE5 | NEDL |
| NESE2 | 101.7 | UNE2 | NEUL | DSE2 | SEDL |
| NESE3 | 101.7 | UNE3 | NEUL | DSE3 | SEDL |
| NESE4 | 101.7 | UNE4 | NEUL | DSE4 | SEDL |
| NESE5 | 101.7 | UNE5 | NEUL | DSE5 | SEDL |
| SENW2 | 100.3 | USE2 | SEUL | DNW2 | NWDL |
| SENW3 | 100.3 | USE3 | SEUL | DNW3 | NWDL |
| SENW4 | 100.3 | USE4 | SEUL | DNW4 | NWDL |
| SENW5 | 100.3 | USE5 | SEUL | DNW5 | NWDL |
| SESW2 | 107.3 | USE2 | SEUL | DSW2 | SWDL |
| SESW3 | 107.3 | USE3 | SEUL | DSW3 | SWDL |
| SESW4 | 107.3 | USE4 | SEUL | DSW4 | SWDL |
| SESW5 | 107.3 | USE5 | SEUL | DSW5 | SWDL |
| SENE2 | 102.3 | USE2 | SEUL | DNE2 | NEDL |
| SENE3 | 102.3 | USE3 | SEUL | DNE3 | NEDL |
| SENE4 | 102.3 | USE4 | SEUL | DNE4 | NEDL |
| SENE5 | 102.3 | USE5 | SEUL | DNE5 | NEDL |
| SESE2 | 107.1 | USE2 | SEUL | DSE2 | SEDL |
| SESE3 | 107.1 | USE3 | SEUL | DSE3 | SEDL |
| SESE4 | 107.1 | USE4 | SEUL | DSE4 | SEDL |
| SESE5 | 107.1 | USE5 | SEUL | DSE5 | SEDL |
| NWNW9 | 93.5  | UNW9 | NWUL | DNW9 | NWDL |

|       |       |      |      |      |      |
|-------|-------|------|------|------|------|
| NWSW9 | 100.5 | UNW9 | NWUL | DSW9 | SWDL |
| NWNE9 | 95.5  | UNW9 | NWUL | DNE9 | NEDL |
| NWSE9 | 100.3 | UNW9 | NWUL | DSE9 | SEDL |
| SWNW9 | 100.1 | USW9 | SWUL | DNW9 | NWDL |
| SWSW9 | 107.1 | USW9 | SWUL | DSW9 | SWDL |
| SWNE9 | 102.1 | USW9 | SWUL | DNE9 | NEDL |
| SWSE9 | 106.9 | USW9 | SWUL | DSE9 | SEDL |
| NENW9 | 94.9  | UNE9 | NEUL | DNW9 | NWDL |
| NESW9 | 101.9 | UNE9 | NEUL | DSW9 | SWDL |
| NENE9 | 96.9  | UNE9 | NEUL | DNE9 | NEDL |
| NESE9 | 101.7 | UNE9 | NEUL | DSE9 | SEDL |
| SENW9 | 100.3 | USE9 | SEUL | DNW9 | NWDL |
| SESW9 | 107.3 | USE9 | SEUL | DSW9 | SWDL |
| SENE9 | 102.3 | USE9 | SEUL | DNE9 | NEDL |
| SESE9 | 107.1 | USE9 | SEUL | DSE9 | SEDL |
| EE2   | 105.4 | UE2  | ESUL | DE2  | ESDL |
| EW2   | 104.9 | UE2  | ESUL | DW2  | WSDL |
| WE2   | 107   | UW2  | WSUL | DE2  | ESDL |
| WW2   | 106.5 | UW2  | WSUL | DW2  | WSDL |
| EE3   | 105.4 | UE3  | ESUL | DE3  | ESDL |
| EE4   | 105.4 | UE4  | ESUL | DE4  | ESDL |
| EE5   | 105.4 | UE5  | ESUL | DE5  | ESDL |
| EW3   | 104.9 | UE3  | ESUL | DW3  | WSDL |
| EW4   | 104.9 | UE4  | ESUL | DW4  | WSDL |
| EW5   | 104.9 | UE5  | ESUL | DW5  | WSDL |
| WE3   | 107   | UW3  | WSUL | DE3  | ESDL |
| WE4   | 107   | UW4  | WSUL | DE4  | ESDL |
| WE5   | 107   | UW5  | WSUL | DE5  | ESDL |
| WW3   | 106.5 | UW3  | WSUL | DW3  | WSDL |
| WW4   | 106.5 | UW4  | WSUL | DW4  | WSDL |
| WW5   | 106.5 | UW5  | WSUL | DW5  | WSDL |
| EE13  | 105.4 | UE13 | ESUL | DE13 | ESDL |
| EW13  | 104.9 | UE13 | ESUL | DW13 | WSDL |
| WE13  | 107   | UW13 | WSUL | DE13 | ESDL |
| WW13  | 106.5 | UW13 | WSUL | DW13 | WSDL |
| ESEH2 | 104.3 | UE2  | ESUL | DEH2 | EHDL |
| ESEH3 | 104.3 | UE3  | ESUL | DEH3 | EHDL |
| ESEH4 | 104.3 | UE4  | ESUL | DEH4 | EHDL |
| ESEH5 | 104.3 | UE5  | ESUL | DEH5 | EHDL |

|       |       |     |      |      |      |
|-------|-------|-----|------|------|------|
| ESWH2 | 104.3 | UE2 | ESUL | DWH2 | WHDL |
| ESWH3 | 104.3 | UE3 | ESUL | DWH3 | WHDL |
| ESWH4 | 104.3 | UE4 | ESUL | DWH4 | WHDL |
| ESWH5 | 104.3 | UE5 | ESUL | DWH5 | WHDL |
| WSEH2 | 105.9 | UW2 | WSUL | DEH2 | EHDL |
| WSEH3 | 105.9 | UW3 | WSUL | DEH3 | EHDL |
| WSEH4 | 105.9 | UW4 | WSUL | DEH4 | EHDL |
| WSEH5 | 105.9 | UW5 | WSUL | DEH5 | EHDL |
| WSWH2 | 105.9 | UW2 | WSUL | DWH2 | WHDL |
| WSWH3 | 105.9 | UW3 | WSUL | DWH3 | WHDL |
| WSWH4 | 105.9 | UW4 | WSUL | DWH4 | WHDL |
| WSWH5 | 105.9 | UW5 | WSUL | DWH5 | WHDL |
| ESNW4 | 95.8  | UE4 | ESUL | DNW4 | NWDL |
| ESNW5 | 95.8  | UE5 | ESUL | DNW5 | NWDL |
| ESSW4 | 102.8 | UE4 | ESUL | DSW4 | SWDL |
| ESSW5 | 102.8 | UE5 | ESUL | DSW5 | SWDL |
| ESNE4 | 97.8  | UE4 | ESUL | DNE4 | NEDL |
| ESNE5 | 97.8  | UE5 | ESUL | DNE5 | NEDL |
| ESSE4 | 102.6 | UE4 | ESUL | DSE4 | SEDL |
| ESSE5 | 102.6 | UE5 | ESUL | DSE5 | SEDL |
| WSNW4 | 97.4  | UW4 | WSUL | DNW4 | NWDL |
| WSNW5 | 97.4  | UW5 | WSUL | DNW5 | NWDL |
| WSSW4 | 104.4 | UW4 | WSUL | DSW4 | SWDL |
| WSSW5 | 104.4 | UW5 | WSUL | DSW5 | SWDL |
| WSNE4 | 99.4  | UW4 | WSUL | DNE4 | NEDL |
| WSNE5 | 99.4  | UW5 | WSUL | DNE5 | NEDL |
| WSSE4 | 104.2 | UW4 | WSUL | DSE4 | SEDL |
| WSSE5 | 104.2 | UW5 | WSUL | DSE5 | SEDL |

**FEDERAL COMMUNICATIONS COMMISSION**  
**SATELLITE SPACE STATION AUTHORIZATIONS**  
**FCC Form 312 - Schedule S: (Technical and Operational Description)**

S11. DIGITAL MODULATION PARAMETERS For each digital emission provide:

| (a) Digital Mod. ID | (b) Emission Designator | (c) Assigned Bandwidth (kHz) | (d) No. of Phases | (e) Uncoded Data Rate (kbps) | (f) FEC Error Correction Coding Rate | (g) CDMA Processing Gain (dB) | (h) Total C/N Performance Objective (dB) | (i) Single Entry C/I Objective (dB) |
|---------------------|-------------------------|------------------------------|-------------------|------------------------------|--------------------------------------|-------------------------------|--|-------------------------------------|
| D1                  | 128MG7W                 | 128000                       | 4                 | 98000                        | 0.5                                  |                               | 3.1                                      | 11.6                                |
| D2                  | 65M5G7W                 | 65530                        | 4                 | 50328                        | 0.5                                  |                               | 3.1                                      | 11.4                                |
| D3                  | 61M3G7W                 | 61276                        | 4                 | 47060                        | 0.5                                  |                               | 3.1                                      | 11                                  |
| D4                  | 60M3G7W                 | 60266                        | 4                 | 73726                        | 0.75                                 |                               | 6.1                                      | 14.4                                |
| D5                  | 30M6G7W                 | 30638                        | 4                 | 23530                        | 0.5                                  |                               | 3.1                                      | 12                                  |
| D6                  | 30M1G7W                 | 30133                        | 4                 | 36863                        | 0.75                                 |                               | 6.1                                      | 12.6                                |
| D7                  | 6M77G7W                 | 6771.1                       | 4                 | 6000                         | 0.5                                  |                               | 3.9                                      | 8.6                                 |
| D8                  | 75K4G7W                 | 75.4                         | 4                 | 64                           | 0.5                                  |                               | 3  | 7.7                                 |
| D9                  | 1M23G7W                 | 1229                         | 2                 | 512                          | 0.5                                  |                               | 3.4                                      | 10.9                                |
| D10                 | 307KG7W                 | 307                          | 2                 | 128                          | 0.5                                  |                               | 3.4                                      | 10.1                                |

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**Page 8: Analog Modulation**

S12. ANALOG MODULATION PARAMETERS For each analog emission provide:

| (a)<br>Analog<br>Mod. ID | (b) Emission<br>Designator | (c)<br>Assigned<br>Bandwidth<br>(kHz) | (d) Signal<br>Type | (e)<br>Channels<br>per Carrier | Multi-channel Telephony                         |                                       |                                    |                                | (j) Video<br>Standard<br>NTSC,<br>PAL, etc. | (k) Video<br>Noise-<br>Weighting<br>(dB) | (l) Video<br>and<br>SCPC/FM<br>Modulation<br>Index | (m) SCPC/FM<br>Compander,<br>Preemphasis,<br>and Noise<br>Weighting (dB) | (n) Total C/N<br>Performance<br>Objective<br>(dB) | (o) Single<br>Entry C/I<br>Objective<br>(dB) |
|--------------------------|----------------------------|---------------------------------------|--------------------|--------------------------------|---|---------------------------------------|------------------------------------|--------------------------------|---|--|--|--|---|--|
|                          |                            |                                       |                    |                                | (f) Ave.<br>Companded<br>Talker Level<br>(dBm0) | (g) Bottom<br>Baseband<br>Freq. (MHz) | (h) Top<br>Baseband<br>Freq. (MHz) | (i) RMS<br>Modulation<br>Index |   |  |  |  |   |  |
| A1                       | 36M0F3F                    | 36000                                 | TV/FM              | 1                              |   |                                       |                                    |                                | PAL   | 15.6                                     | 1.5  |  | 10  | 17.6   |

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S13. TYPICAL EMISSIONS For each planned type of emission provide:

| Associated Transponder ID Range<br>(a) Start (b) End |       | Modulation ID           |                        | (e) Carriers per Transponder | (f) Carrier Spacing (kHz) | (g) Noise Budget Reference (Table No.) | (h) Energy Dispersal Bandwidth (kHz) | Receive Band (Assoc. Transmit Stn)      |                                     |          | Transmit Band (This Space Station) |          |   |                                |
|--|-------|-------------------------|------------------------|------------------------------|---------------------------|--|--------------------------------------|---|-------------------------------------|----------|------------------------------------|----------|---|--------------------------------|
|  |       | (c) Digital (Table S11) | (d) Analog (Table S12) |                              |                           |  |                                      | (i) Assoc. Stn. Max. Antenna Gain (dBi) | Assoc. Station Transmit Power (dBW) |          | EIRP (dBW)                         |          | (n) Max. Power Flux Density (dBW/m2/Hz) | (o) Assoc. Stn Rec. G/T (dB/K) |
|  |       |                         |                        |                              |                           |  |                                      |   | (j) Min.                            | (k) Max. | (l) Min.                           | (m) Max. |   |                                |
| NWEH2  | SEWH5 |                         | A1                     | 2                            | 36000                     | IS602_LINK_B                           | 4000                                 | 56.3                                    | 16.2                                | 20.2     | 27.2                               | 31.2     | -160.9                                  | 30.8                           |
| NWEH2  | SEWH5 | D4                      |                        | 1                            |                           | IS602_NOTE.tx                          |                                      | 56.3                                    | 19.2                                | 23.2     | 31.6                               | 35.6     | -168.3                                  | 23.4                           |
| NWEH2  | SEWH5 | D7                      |                        | 6                            | 10300                     | IS602_NOTE.tx                          |                                      | 50.9                                    | 11.4                                | 15.4     | 19.9                               | 23.9     | -170.5                                  | 23.4                           |
| NWEH2  | SEWH5 | D8                      |                        | 720                          | 100                       | IS602_NOTE.tx                          |                                      | 50.9                                    | -9                                  | -5       | -0.5                               | 3.5      | -171.4                                  | 23.4                           |
| NWEH9  | SEWH9 |                         | A1                     | 1                            |                           | IS602_NOTE.tx                          | 4000                                 | 56.3                                    | 19.2                                | 23.2     | 31.6                               | 35.6     | -156.5                                  | 47.3                           |
| NWEH9  | SEWH9 | D6                      |                        | 1                            |                           | IS602_NOTE.tx                          |                                      | 56.3                                    | 19.2                                | 23.2     | 31.6                               | 35.6     | -165.3                                  | 23.4                           |
| NWEH9  | SEWH9 | D7                      |                        | 6                            | 10300                     | IS602_NOTE.tx                          |                                      | 50.9                                    | 15.9                                | 19.9     | 24.4                               | 28.4     | -166                                    | 20.8                           |
| NWEH9  | SEWH9 | D8                      |                        | 259                          | 100                       | IS602_NOTE.tx                          |                                      | 50.9                                    | -4.5                                | -0.5     | 4                                  | 8        | -166.9                                  | 20.8                           |
| NWES2  | SEWS5 |                         | A1                     | 2                            | 36000                     | IS602_NOTE.tx                          | 4000                                 | 56.3                                    | 16.2                                | 20.2     | 40.5                               | 44.5     | -147.6                                  | 30.5                           |
| NWES2  | SEWS5 | D4                      |                        | 1                            |                           | IS602_NOTE.tx                          |                                      | 56.3                                    | 15.5                                | 19.5     | 43.8                               | 47.8     | -156.1                                  | 24.5                           |
| NWES2  | SEWS5 | D7                      |                        | 6                            | 10300                     | IS602_NOTE.tx                          |                                      | 50.9                                    | 8.3                                 | 12.3     | 31.7                               | 35.7     | -158.7                                  | 24.5                           |
| NWES2  | SEWS5 | D8                      |                        | 720                          | 100                       | IS602_NOTE.tx                          |                                      | 50.9                                    | -12.1                               | -8.1     | 11.3                               | 15.3     | -159.6                                  | 24.5                           |
| NWES2  | SEWS5 | D9                      |                        | 46                           | 1450                      | IS602_NOTE.tx                          |                                      | 50.9                                    | 0                                   | 4        | 23.4                               | 27.4     | -159.6                                  | 24.5                           |
| NWES2  | SEWS5 | D10                     |                        | 180                          | 400                       | IS602_NOTE.tx                          |                                      | 41.8                                    | -3.2                                | 0.8      | 11.1                               | 15.1     | -165.9                                  | 34.1                           |
| NWEH2  | SEWH5 |                         | A1                     | 2                            | 36000                     | IS602_NOTE.tx                          | 4000                                 | 56.3                                    | 16.2                                | 20.2     | 27.2                               | 31.2     | -160.9                                  | 30.8                           |
| NWEH2  | SEWH5 | D4                      |                        | 1                            |                           | IS602_NOTE.tx                          |                                      | 56.3                                    | 19.2                                | 23.2     | 31.6                               | 35.6     | -168.3                                  | 23.4                           |
| NWEH2  | SEWH5 | D7                      |                        | 6                            | 10300                     | IS602_NOTE.tx                          |                                      | 50.9                                    | 11.4                                | 15.4     | 19.9                               | 23.9     | -170.5                                  | 23.4                           |
| AA9  | BB11  |                         | A1                     | 1                            |                           | IS602_NOTE.tx                          | 4000                                 | 56.6                                    | 20.6                                | 24.6     | 25.4                               | 29.4     | -162.7                                  | 33.4                           |
| AA9  | BB11  | D5                      |                        | 1                            |                           | IS602_NOTE.tx                          |                                      | 56.6                                    | 20.6                                | 24.6     | 25.4                               | 29.4     | -171.6                                  | 26.6                           |
| AA9  | BB11  | D7                      |                        | 2                            | 10300                     | IS602_NOTE.tx                          |                                      | 51.2                                    | 17.1                                | 21.1     | 18                                 | 22       | -172.4                                  | 26.6                           |
| AA9  | BB11  | D8                      |                        | 269                          | 100                       | IS602_NOTE.tx                          |                                      | 51.2                                    | -3.3                                | 0.7      | -2.4                               | 1.6      | -173.3                                  | 26.6                           |
| AA12   | BB12  |                         | A1                     | 1                            |                           | IS602_NOTE.tx                          | 4000                                 | 56.6                                    | 20.6                                | 24.6     | 25.4                               | 29.4     | -162.7                                  | 31.4                           |
| AA12   | BB12  | D6                      |                        | 1                            |                           | IS602_NOTE.tx                          |                                      | 56.6                                    | 20.6                                | 24.6     | 25.4                               | 29.4     | -171.5                                  | 26.6                           |
| AA12   | BB12  | D7                      |                        | 3                            | 10300                     | IS602_NOTE.tx                          |                                      | 51.2                                    | 15.4                                | 19.4     | 16.3                               | 20.3     | -174.1                                  | 26.6                           |
| AA12   | BB12  | D8                      |                        | 403                          | 100                       | IS602_NOTE.tx                          |                                      | 51.2                                    | -5.1                                | -1.1     | -4.2                               | -0.2     | -175.1                                  | 26.6                           |
| EHEH1  | WHWH1 |                         | A1                     | 2                            | 36000                     | IS602_NOTE.tx                          | 4000                                 | 56.3                                    | 16.9                                | 20.9     | 27.2                               | 31.2     | -160.9                                  | 30.8                           |
| EHEH1  | WHWH1 | D4                      |                        | 1                            |                           | IS602_NOTE.tx                          |                                      | 56.3                                    | 19.9                                | 23.9     | 31.6                               | 35.6     | -168.3                                  | 23.4                           |
| EHEH1  | WHWH1 | D7                      |                        | 6                            | 10300                     | IS602_NOTE.tx                          |                                      | 50.9                                    | 11.9                                | 15.9     | 19.7                               | 23.7     | -170.7                                  | 23.4                           |
| EHEH1  | WHWH1 | D8                      |                        | 720                          | 100                       | IS602_NOTE.tx                          |                                      | 50.9                                    | -8.5                                | -4.5     | -0.7                               | 3.3      | -171.6                                  | 23.4                           |



|       |       |     |    |     |       |               |      |      |       |       |      |      |        |      |
|-------|-------|-----|----|-----|-------|---------------|------|------|-------|-------|------|------|--------|------|
| EHEH2 | WHWH5 |     | A1 | 2   | 36000 | IS602_NOTE.tx | 4000 | 56.3 | 16.9  | 20.9  | 27.2 | 31.2 | -160.9 | 30.8 |
| EHEH2 | WHWH5 | D4  |    | 1   |       | IS602_NOTE.tx |      | 56.3 | 19.9  | 23.9  | 31.6 | 35.6 | -168.3 | 23.4 |
| EHEH2 | WHWH5 | D7  |    | 6   | 10300 | IS602_NOTE.tx |      | 50.9 | 12.2  | 16.2  | 20   | 24   | -170.4 | 23.4 |
| EHEH2 | WHWH5 | D8  |    | 717 | 100   | IS602_NOTE.tx |      | 50.9 | -8.3  | -4.3  | -0.5 | 3.5  | -171.4 | 23.4 |
| EHEH9 | WHWH9 |     | A1 | 1   |       | IS602_NOTE.tx | 4000 | 56.3 | 19.9  | 23.9  | 31.6 | 35.6 | -156.5 | 26.4 |
| EHEH9 | WHWH9 | D6  |    | 1   |       | IS602_NOTE.tx |      | 56.3 | 19.9  | 23.9  | 31.6 | 35.6 | -165.3 | 23.4 |
| EHEH9 | WHWH9 | D7  |    | 2   | 10300 | IS602_NOTE.tx |      | 50.9 | 16.6  | 20.6  | 24.4 | 28.4 | -166   | 20.8 |
| EHEH9 | WHWH9 | D8  |    | 257 | 100   | IS602_NOTE.tx |      | 50.9 | -3.8  | 0.2   | -0.5 | 3.5  | -171.4 | 20.8 |
| EHES2 | WHWS5 |     | A1 | 2   | 36000 | IS602_NOTE.tx | 4000 | 56.3 | 16.9  | 20.9  | 40.5 | 44.5 | -147.6 | 30.5 |
| EHES2 | WHWS5 | D4  |    | 1   |       | IS602_NOTE.tx |      | 56.3 | 16.2  | 20.2  | 43.8 | 47.8 | -156.1 | 24.5 |
| EHES2 | WHWS5 | D7  |    | 6   | 10300 | IS602_NOTE.tx |      | 50.9 | 9.1   | 13.1  | 31.8 | 35.8 | -158.6 | 24.5 |
| EHES2 | WHWS5 | D8  |    | 708 | 100   | IS602_NOTE.tx |      | 50.9 | -11.2 | -7.2  | 11.5 | 15.5 | -159.4 | 24.5 |
| EHES2 | WHWS5 | D9  |    | 44  | 1450  | IS602_NOTE.tx |      | 50.9 | 0.8   | 4.8   | 23.5 | 27.5 | -159.5 | 24.5 |
| EHES2 | WHWS5 | D10 |    | 180 | 400   | IS602_NOTE.tx |      | 41.8 | -1.8  | 2.2   | 11.8 | 15.8 | -165.2 | 34.1 |
| EHNW2 | WHSE5 |     | A1 | 2   |       | IS602_NOTE.tx | 4000 | 53.3 | 19.9  | 23.9  | 28.4 | 32.4 | -159.7 | 29.2 |
| EHNW2 | WHSE5 | D4  |    | 1   |       | IS602_NOTE.tx |      | 56.3 | 19.9  | 23.9  | 32.8 | 36.8 | -167.1 | 23.4 |
| EHNW2 | WHSE5 | D7  |    | 4   | 10300 | IS602_NOTE.tx |      | 50.9 | 13.6  | 17.6  | 22.6 | 26.6 | -167.8 | 20.7 |
| EHNW2 | WHSE5 | D8  |    | 466 | 100   | IS602_NOTE.tx |      | 50.9 | -6.4  | -2.4  | 2.6  | 6.6  | -168.3 | 20.8 |
| EHNW9 | WHSE9 |     | A1 | 1   |       | IS602_NOTE.tx | 4000 | 56.3 | 19.9  | 23.9  | 32.8 | 36.8 | -155.3 | 26   |
| EHNW9 | WHSE9 | D6  |    | 1   |       | IS602_NOTE.tx |      | 56.3 | 19.9  | 23.9  | 32.8 | 36.8 | -164.1 | 20.7 |
| EHNW9 | WHSE9 | D7  |    | 3   | 10300 | IS602_NOTE.tx |      | 50.9 | 15.5  | 19.5  | 24.5 | 28.5 | -165.9 | 20.8 |
| EHNW9 | WHSE9 | D8  |    | 332 | 100   | IS602_NOTE.tx |      | 50.9 | -4.9  | -0.9  | 4.1  | 8.1  | -166.8 | 20.8 |
| NWEH2 | SEWH5 | D8  |    | 720 | 100   | IS602_NOTE.tx |      | 50.9 | -9    | -5    | -0.5 | 3.5  | -171.4 | 23.4 |
| NWEH9 | SEWH9 |     | A1 | 1   |       | IS602_NOTE.tx | 4000 | 56.3 | 19.2  | 23.2  | 31.6 | 35.6 | -156.5 | 26.4 |
| NWEH9 | SEWH9 | D6  |    | 1   |       | IS602_NOTE.tx |      | 56.3 | 19.2  | 23.2  | 31.6 | 35.6 | -165.3 | 23.4 |
| NWEH9 | SEWH9 | D7  |    | 2   | 10300 | IS602_NOTE.tx |      | 50.9 | 15.9  | 19.9  | 24.4 | 28.4 | -166   | 20.8 |
| NWEH9 | SEWH9 | D8  |    | 259 | 100   | IS602_NOTE.tx |      | 50.9 | -4.5  | -0.5  | 4    | 8    | -166.9 | 20.8 |
| NWNW2 | SESE5 |     | A1 | 2   | 36000 | IS602_NOTE.tx | 4000 | 56.3 | 16.2  | 20.2  | 28.4 | 32.4 | -159.7 | 29.2 |
| NWNW2 | SESE5 | D4  |    | 1   |       | IS602_NOTE.tx |      | 56.3 | 19.2  | 23.2  | 32.8 | 36.8 | -167.1 | 23.4 |
| NWNW2 | SESE5 | D7  |    | 4   | 10300 | IS602_NOTE.tx |      | 50.9 | 12.8  | 16.8  | 22.5 | 26.5 | -167.9 | 20.7 |
| NWNW2 | SESE5 | D8  |    | 472 | 100   | IS602_NOTE.tx |      | 50.9 | -7.1  | -3.1  | 2.6  | 6.6  | -168.3 | 20.8 |
| NWNW9 | SESE9 |     | A1 | 1   |       | IS602_NOTE.tx | 4000 | 56.3 | 19.2  | 23.2  | 32.8 | 36.8 | -155.3 | 26   |
| NWNW9 | SESE9 | D6  |    | 1   |       | IS602_NOTE.tx |      | 56.3 | 19.2  | 23.2  | 32.8 | 36.8 | -164.1 | 20.7 |
| NWNW9 | SESE9 | D7  |    | 3   | 10300 | IS602_NOTE.tx |      | 50.9 | 14.8  | 18.8  | 24.5 | 18.5 | -165.9 | 20.8 |
| NWNW9 | SESE9 | D8  |    | 335 | 100   | IS602_NOTE.tx |      | 50.9 | -5.7  | -1.7  | 4    | 8    | -166.9 | 20.8 |
| EE2   | WW2   |     | A1 | 2   | 36000 | IS602_NOTE.tx | 4000 | 58.1 | 16.6  | 20.6  | 37.3 | 41.3 | -150.8 | 36.1 |
| EE2   | WW2   | D2  |    | 1   |       | IS602_NOTE.tx |      | 58.1 | 16.1  | 20.1  | 44.2 | 48.2 | -156.1 | 21.8 |
| EE2   | WW2   | D7  |    | 5   | 10300 | IS602_NOTE.tx |      | 58.1 | 3.3   | 7.3   | 33.9 | 37.9 | -156.5 | 24.5 |
| EE2   | WW2   | D8  |    | 566 | 100   | IS602_NOTE.tx |      | 58.1 | -16.8 | -12.8 | 13.8 | 17.8 | -157.1 | 24.5 |

|       |       |     |    |      |       |               |      |      |       |      |      |      |        |      |
|-------|-------|-----|----|------|-------|---------------|------|------|-------|------|------|------|--------|------|
| EE2   | WW2   | D9  |    | 35   | 1450  | IS602_NOTE.tx |      | 58.1 | -4.8  | -0.8 | 25.8 | 29.8 | -157.2 | 24.5 |
| EE2   | WW2   | D10 |    | 192  | 400   | IS602_NOTE.tx |      | 49   | -6.3  | -2.3 | 15.2 | 19.2 | -161.8 | 34.1 |
| EE3   | WW5   |     | A1 | 2    | 36000 | IS602_NOTE.tx | 4000 | 58.1 | 19.5  | 23.5 | 40.5 | 44.5 | -147.6 | 32.6 |
| EE3   | WW5   | D3  |    | 1    |       | IS602_NOTE.tx |      | 58.1 | 15.8  | 19.8 | 43.9 | 47.9 | -156.1 | 21.8 |
| EE3   | WW5   | D7  |    | 4    | 10300 | IS602_NOTE.tx |      | 58.1 | 7.8   | 11.8 | 33.3 | 37.3 | -157.1 | 24.5 |
| EE3   | WW5   | D8  |    | 498  | 100   | IS602_NOTE.tx |      | 58.1 | -12.5 | -8.5 | 13   | 17   | -157.9 | 24.5 |
| EE3   | WW5   | D9  |    | 31   | 1450  | IS602_NOTE.tx |      | 58.1 | -0.5  | 3.5  | 25   | 29   | -158   | 24.5 |
| EE3   | WW5   | D10 |    | 180  | 400   | IS602_NOTE.tx |      | 49   | -4.1  | -0.1 | 12.3 | 16.3 | -164.7 | 34.1 |
| EE13  | WW13  |     | A1 | 4    | 36    | IS602_NOTE.tx | 4000 | 58.1 | 13.6  | 17.6 | 34   | 38   | -154.1 | 41.5 |
| EE13  | WW13  | D1  |    | 1    |       | IS602_NOTE.tx |      | 58.1 | 16.7  | 20.7 | 44.8 | 48.8 | -158.4 | 24.5 |
| EE13  | WW13  | D7  |    | 9    | 10300 | IS602_NOTE.tx |      | 58.1 | 6.6   | 10.6 | 31.4 | 35.4 | -159   | 26.2 |
| EE13  | WW13  | D8  |    | 1026 | 100   | IS602_NOTE.tx |      | 58.1 | -13.6 | -9.6 | 11.2 | 15.2 | -159.7 | 26.2 |
| EE13  | WW13  | D9  |    | 64   | 1450  | IS602_NOTE.tx |      | 58.1 | -1.6  | 2.4  | 23.2 | 27.2 | -159.8 | 26.2 |
| EE13  | WW13  | D10 |    | 375  | 400   | IS602_NOTE.tx |      | 49.7 | -4.3  | -0.3 | 12.1 | 16.1 | -164.9 | 34.1 |
| ESEH2 | WSWH5 |     | A1 | 2    | 36000 | IS602_NOTE.tx |      | 58.1 | 19.5  | 23.5 | 27.2 | 31.2 | -160.9 | 32.8 |
| ESEH2 | WSWH5 | D3  |    | 1    |       | IS602_NOTE.tx |      | 58.1 | 16.7  | 20.7 | 31.6 | 35.6 | -168.4 | 23.4 |
| ESEH2 | WSWH5 | D7  |    | 5    | 10300 | IS602_NOTE.tx |      | 58.1 | 7.3   | 11.3 | 18.4 | 22.4 | -172   | 28.2 |
| ESEH2 | WSWH5 | D8  |    | 554  | 100   | IS602_NOTE.tx |      | 58.1 | -12.9 | -8.9 | -1.8 | 2.2  | -172.7 | 28.2 |
| ESNW4 | WSSE5 |     | A1 | 2    | 36000 | IS602_NOTE.tx |      | 62.3 | 21.4  | 25.4 | 29.4 | 33.4 | -158.7 | 29.2 |
| ESNW4 | WSSE5 | D3  |    | 1    |       | IS602_NOTE.tx |      | 58.1 | 16.7  | 20.7 | 32.8 | 36.8 | -167.2 | 20.7 |
| ESNW4 | WSSE5 | D7  |    | 4    | 10300 | IS602_NOTE.tx |      | 58.1 | 7.9   | 11.9 | 20.2 | 24.2 | -170.2 | 26.4 |
| ESNW4 | WSSE5 | D8  |    | 490  | 100   | IS602_NOTE.tx |      | 58.1 | -12.4 | -8.4 | -0.1 | 3.9  | -171   | 26.4 |

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Page 10: TT and C

S14. Is the space station(s) controlled and monitored remotely? If Yes, provide the location and telephone number of the TT and C control point(s): Yes

**Remote Control (TT C) Location(s):**

|   |               |  |                          |
|---|---------------|--|--------------------------|
| S14a: Street Address:<br>3400 International Drive, N.W. |               |  |                          |
| S14b. City:<br>Washington, D.C.                         | S14c. County: | S14d. State/Country<br>DC                            | S14e. Zip Code:<br>20008 |
| S14f. Telephone Number:<br>202-944-7701                 |               | S14g. Call Sign of Control Station (if appropriate): |                          |

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**Page 11:  
Characteristics and  
Certifications**

S15. SPACECRAFT PHYSICAL CHARACTERISTICS:

S16. SPACECRAFT ELECTRICAL CHARACTERISTICS:

S17. CERTIFICATIONS:

|   |                          |     |                          |   |    |                          |   |     |
|---|--------------------------|-----|--------------------------|---|----|--------------------------|---|-----|
| a. Are the power flux density limits of § 25.208 met?:  | <input type="checkbox"/> | YES | <input type="checkbox"/> | # | NO | <input type="checkbox"/> | # | N/A |
| b. Are the appropriate service area coverage requirements of § 25.143(b)(ii) and (iii), or § 25.145(c)(1) and (2) met?  | <input type="checkbox"/> | YES | <input type="checkbox"/> | # | NO | <input type="checkbox"/> | # | N/A |
| c. Are the frequency tolerances of § 25.202(e) and the out-of-band emission limits of § 25.202(f)(1), (2) and (3) met?  | <input type="checkbox"/> | YES | <input type="checkbox"/> | # | NO | <input type="checkbox"/> | # | N/A |
| <b>In addition to the information required in this Form, the space station applicant is required to provide all the information specified in Section 25.114 of the Commission's rules, 47 C.F.R § 25.114.</b> |                          |     |                          |   |    |                          |   |     |