

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

|   |                          |   |  |  |  |
|---|--------------------------|---|--|--|--|
| a. Space Station or Satellite Network Name:<br>INTELSAT 801 |                          | 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>56                                    |  | 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>2542 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                                   |
| 3625                  | M               | 4200                  | M               | T           | Fixed Satellite Service                                   |
| 14000                 | M               | 14500                 | M               | R           | Fixed Satellite Service                                   |
| 10950                 | M               | 11200                 | M               | T           | Fixed Satellite Service                                   |
| 11450                 | M               | 11700                 | M               | T           | Fixed Satellite Service                                   |
| 11700                 | M               | 11950                 | M               | T           | Fixed Satellite Service                                   |
| 12500                 | M               | 12750                 | M               | T           | Fixed Satellite Service                                   |

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

|   |              |  |  |   |  |  |  |
|---|--------------|--|--|---|--|--|--|
| a. Nominal Orbital Longitude (Degrees E/W):<br>29.5 W |              | b. Alternate Orbital Longitude (Degrees E/W):              |  | c. Reason for orbital location selection:<br><br>PROVIDE SERVICE TO THE VISIBLE PORTION OF NORTH AMERICA, SOUTH AMERICA, EUROPE, AFRICA AND THE VISIBLE PORTION OF ASIA |  |  |  |
| 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:                                       | 0.09 Degrees | 1.4 Degrees  |  |   |  | g. Westernmost:<br>h. Easternmost:   |  |
| e. Toward East:                                       |              | 0.09 Degrees   |  | i. Reason for service are selection (Optional):   |  |  |  |

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

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   |   | VISIBLE PORTION OF NORTH AMERICA, CENTRAL AMERICA, SOUTH AMERICA  |
| 3                   | S   |   | AFRICA, EUROPE, VISIBLE PORTION OF ASIA   |
| 4                   | S   |   | VISIBLE PORTION OF UNITED STATES AND CANADA   |
| 5                   | S   |   | NORTH AFRICA, EUROPE, VISIBLE PORTION OF ASIA   |
| 6                   | S   |   | SOUTHERN SOUTH AMERICA  |
| 7                   | S   |   | SOUTHERN AFRICA, VISIBLE PORTION OF MIDDLE EAST   |

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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 | (c) Isotropic Antenna 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                            |                                       |  |                       |                  |
|-------------------|--------------------|----------------------------|-------------------|---------------------------------------|---|---|--|---|------------------------|--------------------------------|--------------------------------------|------------------------------|------------------------------------|---------------------------------------|--|-----------------------|------------------|
|                   |                    | (c) Peak<br>(dBi)          | (d) Edge<br>(dBi) |                                       |   |   |  |   |                        | (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                  | 20                         | 16                | 0.3                                   | 0.3                                     | N   |  |   | 1                      |                                |                                      |                              | -8                                 | -93.7                                 | 22   | 1                     |                  |
| GBU               | R                  | 20                         | 16                | 0.3                                   | 0.3                                     | N   |  |   | 1                      |                                |                                      |                              | -8                                 | -94.3                                 | 22   | 1                     |                  |
| WHU               | R                  | 27.4                       | 21.4              | 0.3                                   | 0.3                                     | N   |  |   | 2                      |                                |                                      |                              | -0.5                               | -98.4                                 | 22   | 1                     |                  |
| EHU               | R                  | 25.1                       | 19.1              | 0.3                                   | 0.3                                     | N   |  |   | 3                      |                                |                                      |                              | -3                                 | -96.9                                 | 22   | 1                     |                  |
| NWU               | R                  | 34.3                       | 28.3              | 0.3                                   | 0.3                                     | N   |  |   | 4                      |                                |                                      |                              | 5                                  | -98.6                                 | 22   | 1                     |                  |
| NEU               | R                  | 30.7                       | 24.7              | 0.3                                   | 0.3                                     | N   |  |   | 5                      |                                |                                      |                              | 1.5                                | -91                                   | 22   | 1                     |                  |
| SWU               | R                  | 30.9                       | 24.9              | 0.3                                   | 0.3                                     | N   |  |   | 6                      |                                |                                      |                              | 2                                  | -99.6                                 | 22   | 1                     |                  |
| SEUL              | R                  | 31.2                       | 25.2              | 0.3                                   | 0.3                                     | N   |  |   | 7                      |                                |                                      |                              | 2.5                                | -100.5                                | 22   | 1                     |                  |
| S1UL              | R                  | 39                         | 33                | 0.3                                   | 0.3                                     | Y   |  |   | 0 1                    |                                |                                      |                              | 10                                 | -97.7                                 | 22   | 1                     |                  |
| S2UL              | R                  | 37.7                       | 31.7              | 0.3                                   | 0.3                                     | Y   |  |   | 90 1                   |                                |                                      |                              | 8.5                                | -98.4                                 | 22   | 1                     |                  |
| GAD               | T                  | 19.9                       | 15.9              | 0.3                                   | 0.3                                     | N   |  |   | 1                      |                                |                                      | 32.5                         |                                    |                                       |  |                       |                  |
| GBD               | T                  | 19.9                       | 15.9              | 0.3                                   | 0.3                                     | N   |  |   | 1                      |                                |                                      | 32.5                         |                                    |                                       |  |                       |                  |
| WHD               | T                  | 26                         | 20                | 0.3                                   | 0.3                                     | N   |  |   | 2                      |                                |                                      | 39.5                         |                                    |                                       |  |                       |                  |
| EHD               | T                  | 25.8                       | 19.8              | 0.3                                   | 0.3                                     | N   |  |   | 3                      |                                |                                      | 39.5                         |                                    |                                       |  |                       |                  |
| NWD               | T                  | 35                         | 29                | 0.3                                   | 0.3                                     | N   |  |   | 4                      |                                |                                      | 44                           |                                    |                                       |  |                       |                  |
| NED               | T                  | 30.8                       | 24.8              | 0.3                                   | 0.3                                     | N   |  |   | 5                      |                                |                                      | 41.5                         |                                    |                                       |  |                       |                  |
| SWD               | T                  | 32.3                       | 26.3              | 0.3                                   | 0.3                                     | N   |  |   | 6                      |                                |                                      | 43.8                         |                                    |                                       |  |                       |                  |
| SEDL              | T                  | 29.7                       | 23.7              | 0.3                                   | 0.3                                     | N   |  |   | 7                      |                                |                                      | 41                           |                                    |                                       |  |                       |                  |
| S1DL              | T                  | 37.8                       | 31.8              | 0.3                                   | 0.3                                     | Y   |  |   | 90 1                   |                                |                                      | 52                           |                                    |                                       |  |                       |                  |
| S2DL              | T                  | 36.9                       | 30.9              | 0.3                                   | 0.3                                     | Y   |  |   | 0 1                    |                                |                                      | 51                           |                                    |                                       |  |                       |                  |
| CMD               | R                  | 1.6                        | 0.6               | 0.3                                   | 0.3                                     | N   |  |   | 1                      |                                |                                      |                              | -25.7                              | -105.9                                |  |                       |                  |
| CMD               | R                  | 1.6                        | 0.6               | 0.3                                   | 0.3                                     | N   |  |   | 1                      |                                |                                      |                              | -25.9                              | -105.7                                |  |                       |                  |
| CMD               | R                  | 19.1                       | 16.5              | 0.3                                   | 0.3                                     | N   |  |   | 1                      |                                |                                      |                              | -31.3                              | -99.9                                 |  |                       |                  |
| TLMT              | T                  | 1.5                        | 0.5               | 0.3                                   | 0.3                                     | N   |  |   | 1                      |                                |                                      | 6.3                          |                                    |                                       |  |                       |                  |
| TLM               | T                  | 1.5                        | 0.5               | 0.3                                   | 0.3                                     | N   |  |   | 1                      |                                |                                      | 3.9                          |                                    |                                       |  |                       |                  |
| TLM               | T                  | 13.9                       | 11.3              | 0.3                                   | 0.3                                     | N   |  |   | 1                      |                                |                                      | 6.5                          |                                    |                                       |  |                       |                  |
| BNC               | T                  | 17.1                       | 14.5              | 0.3                                   | 0.3                                     | N   |  |   | 90 1                   |                                |                                      | 11                           |                                    |                                       |  |                       |                  |
| BNK1              | T                  | 20.6                       | 18                | 0.3                                   | 0.3                                     | N   |  |   | 1                      |                                |                                      | 13.6                         |                                    |                                       |  |                       |                  |
| BNK2              | T                  | 37.8                       | 27.8              | 0.3                                   | 0.3                                     | Y   |  |   | 90 1                   |                                |                                      | 19.8                         |                                    |                                       |  |                       |                  |

|      |   |      |      |     |     |  |   |  |    |  |  |      |  |  |  |  |
|------|---|------|------|-----|-----|--|---|--|----|--|--|------|--|--|--|--|
| BNK3 | T | 36.9 | 26.9 | 0.3 | 0.3 |  | Y |  | 01 |  |  | 18.9 |  |  |  |  |
|------|---|------|------|-----|-----|--|---|--|----|--|--|------|--|--|--|--|

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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                  |   | -29.5   |   | gaul.gxt   |  |            |            |            |            |
| GBU               | R                  |   | -29.5   |   | gbul.gxt   |  |            |            |            |            |
| WHU               | R                  |   | -29.5   |   | whul.gxt   |  |            |            |            |            |
| EHU               | R                  |   | -29.5   |   | ehul.gxt   |  |            |            |            |            |
| NWU               | R                  |   | -29.5   |   | nwul.gxt   |  |            |            |            |            |
| NEU               | R                  |   | -29.5   |   | neul.gxt   |  |            |            |            |            |
| SWU               | R                  |   | -29.5   |   | swul.gxt   |  |            |            |            |            |
| SEUL              | R                  |   | -29.5   |   | seul.gxt   |  |            |            |            |            |
| S1UL              | R                  |   | -29.5   |   | s1ul.gxt   |  |            |            |            |            |
| S2UL              | R                  |   | -29.5   |   | s2ul.gxt   |  |            |            |            |            |
| GAD               | T                  |   | -29.5   |   | gadl.gxt   | -160.8   | -160.7     | -160.5     | -160.4     | -160.3     |
| GBD               | T                  |   | -29.5   |   | gbdl.gxt   | -160.8   | -160.7     | -160.5     | -160.4     | -160.3     |
| WHD               | T                  |   | -29.5   |   | whdl.gxt   | -153.8   | -153.7     | -153.5     | -153.4     | -153.3     |
| EHD               | T                  |   | -29.5   |   | ehdl.gxt   | -153.8   | -153.7     | -153.5     | -153.4     | -153.3     |
| NWD               | T                  |   | -29.5   |   | nwdl.gxt   | -152   | -149.5     | -149       | -148.9     | -148.8     |
| NED               | T                  |   | -29.5   |   | nedl.gxt   | -152   | -151.7     | -151.5     | -151.4     | -151.3     |
| SWD               | T                  |   | -29.5   |   | swdl.gxt   | -152   | -149.5     | -149.2     | -149.1     | -149       |
| SEDL              | T                  |   | -29.5   |   | sedl.gxt   | -152.3   | -152.2     | -152       | -151.9     | -151.8     |
| S1DL              | T                  |   | -29.5   |   | s1dl.gxt   | -148   | -145.5     | -143       | -140.9     | -140.8     |
| S2DL              | T                  |   | -29.5   |   | s2dl.gxt   | -148   | -145.5     | -143       | -141.9     | -141.8     |
| CMD               | R                  |   | -29.5   |   | cmdt.gxt   |  |            |            |            |            |
| CMD               | R                  |   | -29.5   |   | cmde.gxt   |  |            |            |            |            |
| CMD               | R                  |   | -29.5   |   | cmdo.gxt   |  |            |            |            |            |
| TLMT              | T                  |   | -29.5   |   | tlmt.gxt   | -174.9   | -174.8     | -174.7     | -174.6     | -174.5     |
| TLM               | T                  |   | -29.5   |   | tlme.gxt   | -177.3   | -177.2     | -177.1     | -177       | -176.9     |
| TLM               | T                  |   | -29.5   |   | tlmo.gxt   | -174.7   | -174.6     | -174.5     | -174.4     | -174.3     |
| BNC               | T                  |   | -29.5   |   | bnc.gxt  | -160.2   | -160.1     | -160       | -159.9     | -159.8     |
| BNK1              | T                  |   | -29.5   |   | bnk1.gxt   | -157.6   | -157.5     | -157.4     | -157.3     | -157.2     |

|      |   |  |       |  |          |        |        |        |        |        |
|------|---|--|-------|--|----------|--------|--------|--------|--------|--------|
| BNK2 | T |  | -29.5 |  | bnk2.gxt | -151.4 | -151.3 | -151.2 | -151.1 | -151   |
| BNK3 | T |  | -29.5 |  | bnk3.gxt | -152.3 | -152.2 | -152.1 | -152   | -151.9 |

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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) |
|-----------------|------------------------------|--------------|----------------------------|-------------------------------|----------------------------------|
| HD2             | 72000                        | T            | 3825                       | L                             | C                                |
| HD3             | 34000                        | T            | 3886                       | L                             | C                                |
| HD4             | 34000                        | T            | 3924                       | L                             | C                                |
| HD6             | 72000                        | T            | 3995                       | L                             | C                                |
| HDA             | 36000                        | T            | 4055                       | L                             | C                                |
| ID1             | 72000                        | T            | 3745                       | L                             | C                                |
| ID2             | 72000                        | T            | 3825                       | L                             | C                                |
| ID3             | 34000                        | T            | 3886                       | L                             | C                                |
| ID4             | 34000                        | T            | 3924                       | L                             | C                                |
| ID6             | 72000                        | T            | 3995                       | L                             | C                                |
| IDA             | 36000                        | T            | 4055                       | L                             | C                                |
| GDE             | 77000                        | T            | 3742.5                     | L                             | C                                |
| JDE             | 77000                        | T            | 3742.5                     | L                             | C                                |
| HDE             | 77000                        | T            | 3742.5                     | L                             | C                                |
| IDE             | 77000                        | T            | 3742.5                     | L                             | C                                |
| ID5             | 72000                        | T            | 3905                       | L                             | C                                |
| S1D1            | 77000                        | T            | 10992.5                    | V                             | C                                |
| S1D2            | 72000                        | T            | 11075                      | V                             | C                                |
| S1D3            | 34000                        | T            | 11136                      | V                             | C                                |
| S1D4            | 34000                        | T            | 11174                      | V                             | C                                |
| S1D6            | 112000                       | T            | 11514                      | V                             | C                                |
| S1D7            | 112000                       | T            | 11638                      | V                             | C                                |
| U1D1            | 77000                        | T            | 10992.5                    | H                             | C                                |
| U1D2            | 72000                        | T            | 11075                      | H                             | C                                |
| U1D3            | 34000                        | T            | 11136                      | H                             | C                                |
| U1D4            | 34000                        | T            | 11174                      | H                             | C                                |
| U1D6            | 112000                       | T            | 11514                      | H                             | C                                |
| U1D7            | 112000                       | T            | 11638                      | H                             | C                                |
| S2D1            | 77000                        | T            | 12547.5                    | V                             | C                                |
| S2D2            | 72000                        | T            | 12630                      | V                             | C                                |

| (a) Transponder ID | (b) Transponder Gain (dB) | Receive Band    |             | Transmit Band   |             |
|--------------------|---------------------------|-----------------|-------------|-----------------|-------------|
|                    |                           | (c) Channel No. | (d) Beam ID | (e) Channel No. | (f) Beam ID |
| AAAA               | 123.6                     | AUA             | GAUL        | ADA             | GADL        |
| AABB               | 123.6                     | AUB             | GAUL        | ADB             | GADL        |
| AACC               | 123.6                     | AUC             | GAUL        | ADC             | GADL        |
| AADD               | 123.6                     | AUD             | GAUL        | ADD             | GADL        |
| AEEA               | 124.5                     | AUA             | GAUL        | EDA             | WHDL        |
| BBAA               | 124.2                     | BUA             | GBUL        | BDA             | GBDL        |
| BBBB               | 124.2                     | BUB             | GBUL        | BDB             | GBDL        |
| BBCC               | 124.2                     | BUC             | GBUL        | BDC             | GBDL        |
| BBDD               | 124.2                     | BUD             | GBUL        | BDD             | GBDL        |
| BFAA               | 125.3                     | BUA             | GBUL        | FDA             | EHDL        |
| EE00               | 121.8                     | EU0             | WHUL        | ED0             | WHDL        |
| EE11               | 121.8                     | EU1             | WHUL        | ED1             | WHDL        |
| EE22               | 121.8                     | EU2             | WHUL        | ED2             | WHDL        |
| EE33               | 121.8                     | EU3             | WHUL        | ED3             | WHDL        |
| EE44               | 121.8                     | EU4             | WHUL        | ED4             | WHDL        |
| EE66               | 121.8                     | EU6             | WHUL        | ED6             | WHDL        |
| EEAA               | 121.8                     | EUA             | WHUL        | EDA             | WHDL        |
| EF00               | 122                       | EU0             | WHUL        | FD0             | EHDL        |
| EF11               | 122                       | EU1             | WHUL        | FD1             | EHDL        |
| EF22               | 122                       | EU2             | WHUL        | FD2             | EHDL        |
| EF33               | 122                       | EU3             | WHUL        | FD3             | EHDL        |
| EF44               | 122                       | EU4             | WHUL        | FD4             | EHDL        |
| EF66               | 122                       | EU6             | WHUL        | FD6             | EHDL        |
| EFAA               | 122                       | EUA             | WHUL        | FDA             | EHDL        |
| EG11               | 117.3                     | EU1             | WHUL        | GD1             | NWDL        |
| EG22               | 117.3                     | EU2             | WHUL        | GD2             | NWDL        |
| EG33               | 117.3                     | EU3             | WHUL        | GD3             | NWDL        |
| EG44               | 117.3                     | EU4             | WHUL        | GD4             | NWDL        |
| EG66               | 117.3                     | EU6             | WHUL        | GD6             | NWDL        |
| EGAA               | 117.3                     | EUA             | WHUL        | GDA             | NWDL        |



|      |        |   |         |   |   |
|------|--------|---|---------|---|---|
| S2D3 | 34000  | T | 12691   | V | C |
| S2D4 | 34000  | T | 12729   | V | C |
| S2D6 | 112000 | T | 11514   | V | C |
| S2D7 | 112000 | T | 11638   | V | C |
| U2D1 | 77000  | T | 12547.5 | H | C |
| U2D2 | 72000  | T | 12630   | H | C |
| U2D3 | 34000  | T | 12691   | H | C |
| U2D4 | 34000  | T | 12729   | H | C |
| U2D6 | 112000 | T | 11514   | H | C |
| U2D7 | 112000 | T | 11638   | H | C |
| S3D1 | 77000  | T | 11747.5 | V | C |
| S3D2 | 72000  | T | 11830   | V | C |
| S3D3 | 34000  | T | 11891   | V | C |
| S3D4 | 34000  | T | 11929   | V | C |
| S3D6 | 112000 | T | 11514   | V | C |
| S3D7 | 112000 | T | 11638   | V | C |
| U3D1 | 77000  | T | 11747.5 | H | C |
| U3D2 | 72000  | T | 11830   | H | C |
| U3D3 | 34000  | T | 11891   | H | C |
| U3D4 | 34000  | T | 11929   | H | C |
| U3D6 | 112000 | T | 11514   | H | C |
| U3D7 | 112000 | T | 11638   | H | C |
| S1DD | 41000  | T | 11677.5 | V | C |
| U1DD | 41000  | T | 11677.5 | H | C |
| S1DC | 72000  | T | 10995   | V | C |
| S1DE | 72000  | T | 11495   | V | C |
| U1DC | 72000  | T | 10995   | H | C |
| U1DE | 72000  | T | 11495   | H | C |
| S2DD | 41000  | T | 11677.5 | V | C |
| U2DD | 41000  | T | 11677.5 | H | C |
| S2DC | 72000  | T | 12550   | V | C |
| S2DE | 72000  | T | 11495   | V | C |
| U2DC | 72000  | T | 12550   | H | C |
| U2DE | 72000  | T | 11495   | H | C |
| S3DD | 41000  | T | 11677.5 | V | C |
| U3DD | 41000  | T | 11677.5 | H | C |
| S3DC | 72000  | T | 11750   | V | C |
| S3DE | 72000  | T | 11495   | V | C |
| U3DC | 72000  | T | 11750   | H | C |

|      |       |     |      |     |      |
|------|-------|-----|------|-----|------|
| EJ11 | 119.6 | EU1 | WHUL | JD1 | SEDL |
| EJ22 | 119.6 | EU2 | WHUL | JD2 | SEDL |
| EJ33 | 119.6 | EU3 | WHUL | JD3 | SEDL |
| EJ44 | 119.6 | EU4 | WHUL | JD4 | SEDL |
| EJ66 | 119.6 | EU6 | WHUL | JD6 | SEDL |
| EJAA | 119.6 | EUA | WHUL | JDA | SEDL |
| EH11 | 119   | EU1 | WHUL | HD1 | NEDL |
| EH22 | 119   | EU2 | WHUL | HD2 | NEDL |
| EH33 | 119   | EU3 | WHUL | HD3 | NEDL |
| EH44 | 119   | EU4 | WHUL | HD4 | NEDL |
| EH66 | 119   | EU6 | WHUL | HD6 | NEDL |
| EHAA | 119   | EUA | WHUL | HDA | NEDL |
| EI11 | 119.8 | EU1 | WHUL | ID1 | SWDL |
| EI22 | 119.8 | EU2 | WHUL | ID2 | SWDL |
| EI33 | 119.8 | EU3 | WHUL | ID3 | SWDL |
| EI44 | 119.8 | EU4 | WHUL | ID4 | SWDL |
| EI66 | 119.8 | EU6 | WHUL | ID6 | SWDL |
| EIAA | 119.8 | EUA | WHUL | IDA | SWDL |
| EAAA | 120.9 | EUA | WHUL | ADA | GADL |
| FE00 | 122.6 | FU0 | EHUL | ED0 | WHDL |
| FE11 | 122.6 | FU1 | EHUL | ED1 | WHDL |
| FE22 | 122.6 | FU2 | EHUL | ED2 | WHDL |
| FE33 | 122.6 | FU3 | EHUL | ED3 | WHDL |
| FE44 | 122.6 | FU4 | EHUL | ED4 | WHDL |
| FE66 | 122.6 | FU6 | EHUL | ED6 | WHDL |
| FEAA | 122.6 | FUA | EHUL | EDA | WHDL |
| FF00 | 122.8 | FU0 | EHUL | FD0 | EHDL |
| FF11 | 122.8 | FU1 | EHUL | FD1 | EHDL |
| FF22 | 122.8 | FU2 | EHUL | FD2 | EHDL |
| FF33 | 122.8 | FU3 | EHUL | FD3 | EHDL |
| FF44 | 122.8 | FU4 | EHUL | FD4 | EHDL |
| FF66 | 122.8 | FU6 | EHUL | FD6 | EHDL |
| FFAA | 122.8 | FUA | EHUL | FDA | EHDL |
| FG11 | 118.1 | FU1 | EHUL | GD1 | NWDL |
| FG22 | 118.1 | FU2 | EHUL | GD2 | NWDL |
| FG33 | 118.1 | FU3 | EHUL | GD3 | NWDL |
| FG44 | 118.1 | FU4 | EHUL | GD4 | NWDL |
| FG66 | 118.1 | FU6 | EHUL | GD6 | NWDL |
| FGAA | 118.1 | FUA | EHUL | GDA | NWDL |

|      |       |   |        |   |   |
|------|-------|---|--------|---|---|
| U3DE | 72000 | T | 11495  | H | C |
| CMD1 | 1000  | R | 6173.7 | L | T |
| CMD2 | 1000  | R | 6176.3 | R | T |
| CMD3 | 1000  | R | 6173.7 | R | T |
| CMD4 | 1000  | R | 6176.3 | L | T |
| CMD5 | 1000  | R | 6173.7 | L | T |
| TLM1 | 500   | T | 3947.5 | R | T |
| TLM2 | 500   | T | 3948   | R | T |
| TLM3 | 500   | T | 3952   | R | T |
| TLM4 | 500   | T | 3952.5 | R | T |
| UPC1 | 25    | T | 3950   | V | T |
| UPK1 | 25    | T | 11198  | R | T |
| UPK2 | 25    | T | 11452  | R | T |
| UPK3 | 25    | T | 11701  | V | T |
| UPK4 | 25    | T | 11701  | V | T |
| UPK5 | 25    | T | 12501  | H | T |
| UPK6 | 25    | T | 12501  | H | T |
| AUA  | 36000 | R | 6280   | L | C |
| AUB  | 36000 | R | 6320   | L | C |
| AUC  | 36000 | R | 6360   | L | C |
| AUD  | 41000 | R | 6402.5 | L | C |
| BUA  | 36000 | R | 6280   | R | C |
| BUB  | 36000 | R | 6320   | R | C |
| BUC  | 36000 | R | 6360   | R | C |
| BUD  | 41000 | R | 6402.5 | R | C |
| EU0  | 72000 | R | 5890   | L | C |
| EU1  | 72000 | R | 5970   | L | C |
| EU2  | 72000 | R | 6050   | L | C |
| EU3  | 34000 | R | 6111   | L | C |
| EU4  | 34000 | R | 6149   | L | C |
| EU6  | 72000 | R | 6220   | L | C |
| EUA  | 36000 | R | 6280   | L | C |
| FU0  | 72000 | R | 5890   | L | C |
| FU1  | 72000 | R | 5970   | L | C |
| FU2  | 72000 | R | 6050   | L | C |
| FU3  | 34000 | R | 6111   | L | C |
| FU4  | 34000 | R | 6149   | L | C |
| FU6  | 72000 | R | 6220   | L | C |
| FUA  | 36000 | R | 6280   | L | C |

|      |       |     |      |     |      |
|------|-------|-----|------|-----|------|
| FJ11 | 120.4 | FU1 | EHUL | JD1 | SEDL |
| FJ22 | 120.4 | FU2 | EHUL | JD2 | SEDL |
| FJ33 | 120.4 | FU3 | EHUL | JD3 | SEDL |
| FJ44 | 120.4 | FU4 | EHUL | JD4 | SEDL |
| FJ66 | 120.4 | FU6 | EHUL | JD6 | SEDL |
| FJAA | 120.4 | FUA | EHUL | JDA | SEDL |
| FH11 | 119.8 | FU1 | EHUL | HD1 | NEDL |
| FH22 | 119.8 | FU2 | EHUL | HD2 | NEDL |
| FH33 | 119.8 | FU3 | EHUL | HD3 | NEDL |
| FH44 | 119.8 | FU4 | EHUL | HD4 | NEDL |
| FH66 | 119.8 | FU6 | EHUL | HD6 | NEDL |
| FHAA | 119.8 | FUA | EHUL | HDA | NEDL |
| FI11 | 120.6 | FU1 | EHUL | ID1 | SWDL |
| FI22 | 120.6 | FU2 | EHUL | ID2 | SWDL |
| FI33 | 120.6 | FU3 | EHUL | ID3 | SWDL |
| FI44 | 120.6 | FU4 | EHUL | ID4 | SWDL |
| FI66 | 120.6 | FU6 | EHUL | ID6 | SWDL |
| FIAA | 120.6 | FUA | EHUL | IDA | SWDL |
| FBAA | 121.7 | FUA | EHUL | BDA | GBDL |
| GE11 | 115.1 | GU1 | NWUL | ED1 | WHDL |
| GE22 | 115.1 | GU2 | NWUL | ED2 | WHDL |
| GE33 | 115.1 | GU3 | NWUL | ED3 | WHDL |
| GE44 | 115.1 | GU4 | NWUL | ED4 | WHDL |
| GE66 | 115.1 | GU6 | NWUL | ED6 | WHDL |
| GEAA | 115.1 | GUA | NWUL | EDA | WHDL |
| GF11 | 115.3 | GU1 | NWUL | FD1 | EHDL |
| GF22 | 115.3 | GU2 | NWUL | FD2 | EHDL |
| GF33 | 115.3 | GU3 | NWUL | FD3 | EHDL |
| GF44 | 115.3 | GU4 | NWUL | FD4 | EHDL |
| GF66 | 115.3 | GU6 | NWUL | FD6 | EHDL |
| GFAA | 115.3 | GUA | NWUL | FDA | EHDL |
| GGEE | 110.6 | GUE | NWUL | GDE | NWDL |
| GG22 | 110.6 | GU2 | NWUL | GD2 | NWDL |
| GG33 | 110.6 | GU3 | NWUL | GD3 | NWDL |
| GG44 | 110.6 | GU4 | NWUL | GD4 | NWDL |
| GG66 | 110.6 | GU6 | NWUL | GD6 | NWDL |
| GGAA | 110.6 | GUA | NWUL | GDA | NWDL |
| GJEE | 112.9 | GUE | NWUL | JDE | SEDL |
| GJ22 | 112.9 | GU2 | NWUL | JD2 | SEDL |

|     |        |   |         |   |   |
|-----|--------|---|---------|---|---|
| GU1 | 72000  | R | 5970    | R | C |
| GU2 | 72000  | R | 6050    | R | C |
| GU3 | 34000  | R | 6111    | R | C |
| GU4 | 34000  | R | 6149    | R | C |
| GU6 | 72000  | R | 6220    | R | C |
| GUA | 36000  | R | 6280    | R | C |
| GUE | 77000  | R | 5967.5  | R | C |
| JU1 | 72000  | R | 5970    | R | C |
| JU2 | 72000  | R | 6050    | R | C |
| JU3 | 34000  | R | 6111    | R | C |
| JU4 | 34000  | R | 6149    | R | C |
| JU6 | 72000  | R | 6220    | R | C |
| JUA | 36000  | R | 6280    | R | C |
| JUE | 77000  | R | 5967.5  | R | C |
| HU1 | 72000  | R | 5970    | R | C |
| HU2 | 72000  | R | 6050    | R | C |
| HU3 | 34000  | R | 6111    | R | C |
| HU4 | 34000  | R | 6149    | R | C |
| HU6 | 72000  | R | 6220    | R | C |
| HUA | 36000  | R | 6280    | R | C |
| HUE | 77000  | R | 5967.5  | R | C |
| HU5 | 72000  | R | 6130    | R | C |
| IU1 | 72000  | R | 5970    | R | C |
| IU2 | 72000  | R | 6050    | R | C |
| IU3 | 34000  | R | 6111    | R | C |
| IU4 | 34000  | R | 6149    | R | C |
| IU6 | 72000  | R | 6220    | R | C |
| IUA | 36000  | R | 6280    | R | C |
| IUE | 77000  | R | 5967.5  | R | C |
| SU1 | 77000  | R | 14042.5 | H | C |
| SU2 | 72000  | R | 14125   | H | C |
| SU3 | 34000  | R | 14186   | H | C |
| SU4 | 34000  | R | 14224   | H | C |
| SU6 | 112000 | R | 14314   | H | C |
| SU7 | 112000 | R | 14438   | H | C |
| UU1 | 77000  | R | 14042.5 | V | C |
| UU2 | 72000  | R | 14125   | V | C |
| UU3 | 34000  | R | 14186   | V | C |
| UU4 | 34000  | R | 14224   | V | C |

|      |       |     |      |     |      |
|------|-------|-----|------|-----|------|
| GJ33 | 112.9 | GU3 | NWUL | JD3 | SEDL |
| GJ44 | 112.9 | GU4 | NWUL | JD4 | SEDL |
| GJ66 | 112.9 | GU6 | NWUL | JD6 | SEDL |
| GJAA | 112.9 | GUA | NWUL | JDA | SEDL |
| GHEE | 112.3 | GUE | NWUL | HDE | NEDL |
| GH22 | 112.3 | GU2 | NWUL | HD2 | NEDL |
| GH33 | 112.3 | GU3 | NWUL | HD3 | NEDL |
| GH44 | 112.3 | GU4 | NWUL | HD4 | NEDL |
| GH66 | 112.3 | GU6 | NWUL | HD6 | NEDL |
| GHAA | 112.3 | GUA | NWUL | HDA | NEDL |
| GIEE | 113.1 | GUE | NWUL | IDE | SWDL |
| GI22 | 113.1 | GU2 | NWUL | ID2 | SWDL |
| GI33 | 113.1 | GU3 | NWUL | ID3 | SWDL |
| GI44 | 113.1 | GU4 | NWUL | ID4 | SWDL |
| GI66 | 113.1 | GU6 | NWUL | ID6 | SWDL |
| GIAA | 113.1 | GUA | NWUL | IDA | SWDL |
| JE11 | 120.1 | JU1 | SEUL | ED1 | WHDL |
| JE22 | 120.1 | JU2 | SEUL | ED2 | WHDL |
| JE33 | 120.1 | JU3 | SEUL | ED3 | WHDL |
| JE44 | 120.1 | JU4 | SEUL | ED4 | WHDL |
| JE66 | 120.1 | JU6 | SEUL | ED6 | WHDL |
| JEAA | 120.1 | JUA | SEUL | EDA | WHDL |
| JF11 | 120.3 | JU1 | SEUL | FD1 | EHDL |
| JF22 | 120.3 | JU2 | SEUL | FD2 | EHDL |
| JF33 | 120.3 | JU3 | SEUL | FD3 | EHDL |
| JF44 | 120.3 | JU4 | SEUL | FD4 | EHDL |
| JF66 | 120.3 | JU6 | SEUL | FD6 | EHDL |
| JFAA | 120.3 | JUA | SEUL | FDA | EHDL |
| JGEE | 115.6 | JUE | SEUL | GDE | NWDL |
| JG22 | 115.6 | JU2 | SEUL | GD2 | NWDL |
| JG33 | 115.6 | JU3 | SEUL | GD3 | NWDL |
| JG44 | 115.6 | JU4 | SEUL | GD4 | NWDL |
| JG66 | 115.6 | JU6 | SEUL | GD6 | NWDL |
| JGAA | 115.6 | JUA | SEUL | GDA | NWDL |
| JJEE | 117.9 | JUE | SEUL | JDE | SEDL |
| JJ22 | 117.9 | JU2 | SEUL | JD2 | SEDL |
| JJ33 | 117.9 | JU3 | SEUL | JD3 | SEDL |
| JJ44 | 117.9 | JU4 | SEUL | JD4 | SEDL |
| JJ66 | 117.9 | JU6 | SEUL | JD6 | SEDL |

|     |        |   |         |   |   |
|-----|--------|---|---------|---|---|
| UU6 | 112000 | R | 14314   | V | C |
| UU7 | 112000 | R | 14438   | V | C |
| SUF | 72000  | R | 14045   | H | C |
| SUG | 72000  | R | 14295   | H | C |
| SUH | 41000  | R | 14477.5 | H | C |
| TUF | 72000  | R | 14045   | V | C |
| TU2 | 72000  | R | 14125   | V | C |
| TU3 | 34000  | R | 14186   | V | C |
| TU4 | 34000  | R | 14224   | V | C |
| TUG | 72000  | R | 14295   | V | C |
| TU1 | 77000  | R | 14042.5 | V | C |
| TUH | 41000  | R | 14477.5 | V | C |
| ADA | 36000  | T | 4055    | R | C |
| ADB | 36000  | T | 4095    | R | C |
| ADC | 36000  | T | 4135    | R | C |
| ADD | 41000  | T | 4177.5  | R | C |
| EDA | 36000  | T | 4055    | R | C |
| BDA | 36000  | T | 4055    | L | C |
| BDB | 36000  | T | 4095    | L | C |
| BDC | 36000  | T | 4135    | L | C |
| BDD | 41000  | T | 4177.5  | L | C |
| FDA | 36000  | T | 4055    | R | C |
| ED0 | 72000  | T | 3665    | R | C |
| ED1 | 72000  | T | 3745    | R | C |
| ED2 | 72000  | T | 3825    | R | C |
| ED3 | 34000  | T | 3886    | R | C |
| ED4 | 34000  | T | 3924    | R | C |
| ED6 | 72000  | T | 3995    | R | C |
| FD0 | 72000  | T | 3665    | R | C |
| FD1 | 72000  | T | 3745    | R | C |
| FD2 | 72000  | T | 3825    | R | C |
| FD3 | 34000  | T | 3886    | R | C |
| FD4 | 34000  | T | 3924    | R | C |
| FD6 | 72000  | T | 3995    | R | C |
| GD1 | 72000  | T | 3745    | L | C |
| GD2 | 72000  | T | 3825    | L | C |
| GD3 | 34000  | T | 3886    | L | C |
| GD4 | 34000  | T | 3924    | L | C |
| GD6 | 72000  | T | 3995    | L | C |

|      |       |     |      |     |      |
|------|-------|-----|------|-----|------|
| JJAA | 117.9 | JUA | SEUL | JDA | SEDL |
| JHEE | 117.3 | JUE | SEUL | HDE | NEDL |
| JH22 | 117.3 | JU2 | SEUL | HD2 | NEDL |
| JH33 | 117.3 | JU3 | SEUL | HD3 | NEDL |
| JH44 | 117.3 | JU4 | SEUL | HD4 | NEDL |
| JH66 | 117.3 | JU6 | SEUL | HD6 | NEDL |
| JHAA | 117.3 | JUA | SEUL | HDA | NEDL |
| JIEE | 118.1 | JUE | SEUL | IDE | SWDL |
| JI22 | 118.1 | JU2 | SEUL | ID2 | SWDL |
| JI33 | 118.1 | JU3 | SEUL | ID3 | SWDL |
| JI44 | 118.1 | JU4 | SEUL | ID4 | SWDL |
| JI66 | 118.1 | JU6 | SEUL | ID6 | SWDL |
| JIAA | 118.1 | JUA | SEUL | IDA | SWDL |
| HE11 | 111.1 | HU1 | NEUL | ED1 | WHDL |
| HE22 | 111.1 | HU2 | NEUL | ED2 | WHDL |
| HE33 | 111.1 | HU3 | NEUL | ED3 | WHDL |
| HE44 | 111.1 | HU4 | NEUL | ED4 | WHDL |
| HE66 | 111.1 | HU6 | NEUL | ED6 | WHDL |
| HEAA | 111.1 | HUA | NEUL | EDA | WHDL |
| HF11 | 111.3 | HU1 | NEUL | FD1 | EHDL |
| HF22 | 111.3 | HU2 | NEUL | FD2 | EHDL |
| HF33 | 111.3 | HU3 | NEUL | FD3 | EHDL |
| HF44 | 111.3 | HU4 | NEUL | FD4 | EHDL |
| HF66 | 111.3 | HU6 | NEUL | FD6 | EHDL |
| HFAA | 111.3 | HUA | NEUL | FDA | EHDL |
| HGEE | 106.6 | HUE | NEUL | GDE | NWDL |
| HG22 | 106.6 | HU2 | NEUL | GD2 | NWDL |
| HG33 | 106.6 | HU3 | NEUL | GD3 | NWDL |
| HG44 | 106.6 | HU4 | NEUL | GD4 | NWDL |
| HG66 | 106.6 | HU6 | NEUL | GD6 | NWDL |
| HGAA | 106.6 | HUA | NEUL | GDA | NWDL |
| HJEE | 108.7 | HUE | NEUL | JDE | SEDL |
| HJ22 | 108.7 | HU2 | NEUL | JD2 | SEDL |
| HJ33 | 108.7 | HU3 | NEUL | JD3 | SEDL |
| HJ44 | 108.7 | HU4 | NEUL | JD4 | SEDL |
| HJ66 | 108.7 | HU6 | NEUL | JD6 | SEDL |
| HJAA | 108.7 | HUA | NEUL | JDA | SEDL |
| HHEE | 108.3 | HUE | NEUL | HDE | NEDL |
| HH22 | 108.3 | HU2 | NEUL | HD2 | NEDL |

|     |       |   |      |   |   |
|-----|-------|---|------|---|---|
| GDA | 36000 | T | 4055 | L | C |
| JD1 | 72000 | T | 3745 | L | C |
| JD2 | 72000 | T | 3825 | L | C |
| JD3 | 34000 | T | 3886 | L | C |
| JD4 | 34000 | T | 3924 | L | C |
| JD6 | 72000 | T | 3995 | L | C |
| JDA | 36000 | T | 4055 | L | C |
| HD1 | 72000 | T | 3745 | L | C |

|      |       |     |      |     |      |
|------|-------|-----|------|-----|------|
| HH33 | 108.3 | HU3 | NEUL | HD3 | NEDL |
| HH44 | 108.3 | HU4 | NEUL | HD4 | NEDL |
| HH66 | 108.3 | HU6 | NEUL | HD6 | NEDL |
| HHAA | 108.3 | HUA | NEUL | HDA | NEDL |
| HIEE | 109.1 | HUE | NEUL | IDE | SWDL |
| HI22 | 109.1 | HU2 | NEUL | ID2 | SWDL |
| HI33 | 109.1 | HU3 | NEUL | ID3 | SWDL |
| HI44 | 109.1 | HU4 | NEUL | ID4 | SWDL |
| HI55 | 109.1 | HU5 | NEUL | ID5 | SWDL |
| HI66 | 109.1 | HU6 | NEUL | ID6 | SWDL |
| HIAA | 109.1 | HUA | NEUL | IDA | SWDL |
| IE11 | 119.5 | IU1 | SWUL | ED1 | WHDL |
| IE22 | 119.5 | IU2 | SWUL | ED2 | WHDL |
| IE33 | 119.5 | IU3 | SWUL | ED3 | WHDL |
| IE44 | 119.5 | IU4 | SWUL | ED4 | WHDL |
| IE66 | 119.5 | IU6 | SWUL | ED6 | WHDL |
| IEAA | 119.5 | IUA | SWUL | EDA | WHDL |
| IF11 | 119.7 | IU1 | SWUL | FD1 | EHDL |
| IF22 | 119.7 | IU2 | SWUL | FD2 | EHDL |
| IF33 | 119.7 | IU3 | SWUL | FD3 | EHDL |
| IF44 | 119.7 | IU4 | SWUL | FD4 | EHDL |
| IF66 | 119.7 | IU6 | SWUL | FD6 | EHDL |
| IFAA | 119.7 | IUA | SWUL | FDA | EHDL |
| IGEE | 115   | IUE | SWUL | GDE | NWDL |
| IG22 | 115   | IU2 | SWUL | GD2 | NWDL |
| IG33 | 115   | IU3 | SWUL | GD3 | NWDL |
| IG44 | 115   | IU4 | SWUL | GD4 | NWDL |
| IG66 | 115   | IU6 | SWUL | GD6 | NWDL |
| IGAA | 115   | IUA | SWUL | GDA | NWDL |
| IJEE | 117.3 | IUE | SWUL | JDE | SEDL |
| IJ22 | 117.3 | IU2 | SWUL | JD2 | SEDL |
| IJ33 | 117.3 | IU3 | SWUL | JD3 | SEDL |
| IJ44 | 117.3 | IU4 | SWUL | JD4 | SEDL |
| IJ66 | 117.3 | IU6 | SWUL | JD6 | SEDL |
| IJAA | 117.3 | IUA | SWUL | JDA | SEDL |
| IHEE | 116.7 | IUE | SWUL | HDE | NEDL |
| IH22 | 116.7 | IU2 | SWUL | HD2 | NEDL |
| IH33 | 116.7 | IU3 | SWUL | HD3 | NEDL |
| IH44 | 116.7 | IU4 | SWUL | HD4 | NEDL |

|      |       |     |      |      |      |
|------|-------|-----|------|------|------|
| IH66 | 116.7 | IU6 | SWUL | HD6  | NEDL |
| IHAA | 116.7 | IUA | SWUL | HDA  | NEDL |
| IIEE | 117.5 | IUE | SWUL | IDE  | SWDL |
| II22 | 117.5 | IU2 | SWUL | ID2  | SWDL |
| II33 | 117.5 | IU3 | SWUL | ID3  | SWDL |
| II44 | 117.5 | IU4 | SWUL | ID4  | SWDL |
| II66 | 117.5 | IU6 | SWUL | ID6  | SWDL |
| IIAA | 117.5 | IUA | SWUL | IDA  | SWDL |
| SS11 | 117.4 | SU1 | S1UL | S1D1 | S1DL |
| SS12 | 117.4 | SU2 | S1UL | S1D2 | S1DL |
| SS13 | 117.4 | SU3 | S1UL | S1D3 | S1DL |
| SS14 | 117.4 | SU4 | S1UL | S1D4 | S1DL |
| SS16 | 117.4 | SU6 | S1UL | S1D6 | S1DL |
| SS17 | 117.4 | SU7 | S1UL | S1D7 | S1DL |
| SU11 | 117.3 | SU1 | S1UL | U1D1 | S2DL |
| SU12 | 117.3 | SU2 | S1UL | U1D2 | S2DL |
| SU13 | 117.3 | SU3 | S1UL | U1D3 | S2DL |
| SU14 | 117.3 | SU4 | S1UL | U1D4 | S2DL |
| SU16 | 117.3 | SU6 | S1UL | U1D6 | S2DL |
| SU17 | 117.3 | SU7 | S1UL | U1D7 | S2DL |
| US11 | 119.4 | UU1 | S2UL | S1D1 | S1DL |
| US12 | 119.4 | UU2 | S2UL | S1D2 | S1DL |
| US13 | 119.4 | UU3 | S2UL | S1D3 | S1DL |
| US14 | 119.4 | UU4 | S2UL | S1D4 | S1DL |
| US16 | 119.4 | UU6 | S2UL | S1D6 | S1DL |
| US17 | 119.4 | UU7 | S2UL | S1D7 | S1DL |
| UU11 | 119.3 | UU1 | S2UL | U1D1 | S2DL |
| UU12 | 119.3 | UU2 | S2UL | U1D2 | S2DL |
| UU13 | 119.3 | UU3 | S2UL | U1D3 | S2DL |
| UU14 | 119.3 | UU4 | S2UL | U1D4 | S2DL |
| UU16 | 119.3 | UU6 | S2UL | U1D6 | S2DL |
| UU17 | 119.3 | UU7 | S2UL | U1D7 | S2DL |
| SS21 | 117.4 | SU1 | S1UL | S2D1 | S1DL |
| SS22 | 117.4 | SU2 | S1UL | S2D2 | S1DL |
| SS23 | 117.4 | SU3 | S1UL | S2D3 | S1DL |
| SS24 | 117.4 | SU4 | S1UL | S2D4 | S1DL |
| SS26 | 117.4 | SU6 | S1UL | S2D6 | S1DL |
| SS27 | 117.4 | SU7 | S1UL | S2D7 | S1DL |
| SU21 | 117.3 | SU1 | S1UL | U2D1 | S2DL |

|      |       |     |      |      |      |
|------|-------|-----|------|------|------|
| SU22 | 117.3 | SU2 | S1UL | U2D2 | S2DL |
| SU23 | 117.3 | SU3 | S1UL | U2D3 | S2DL |
| SU24 | 117.3 | SU4 | S1UL | U2D4 | S2DL |
| SU26 | 117.3 | SU6 | S1UL | U2D6 | S2DL |
| SU27 | 117.3 | SU7 | S1UL | U2D7 | S2DL |
| US21 | 119.4 | UU1 | S2UL | S2D1 | S1DL |
| US22 | 119.4 | UU2 | S2UL | S2D2 | S1DL |
| US23 | 119.4 | UU3 | S2UL | S2D3 | S1DL |
| US24 | 119.4 | UU4 | S2UL | S2D4 | S1DL |
| US26 | 119.4 | UU6 | S2UL | S2D6 | S1DL |
| US27 | 119.4 | UU7 | S2UL | S2D7 | S1DL |
| UU21 | 119.3 | UU1 | S2UL | U2D1 | S2DL |
| UU22 | 119.3 | UU2 | S2UL | U2D2 | S2DL |
| UU23 | 119.3 | UU3 | S2UL | U2D3 | S2DL |
| UU24 | 119.3 | UU4 | S2UL | U2D4 | S2DL |
| UU26 | 119.3 | UU6 | S2UL | U2D6 | S2DL |
| UU27 | 119.3 | UU7 | S2UL | U2D7 | S2DL |
| SS31 | 117.4 | SU1 | S1UL | S3D1 | S1DL |
| SS32 | 117.4 | SU2 | S1UL | S3D2 | S1DL |
| SS33 | 117.4 | SU3 | S1UL | S3D3 | S1DL |
| SS34 | 117.4 | SU4 | S1UL | S3D4 | S1DL |
| SS36 | 117.4 | SU6 | S1UL | S3D6 | S1DL |
| SS37 | 117.4 | SU7 | S1UL | S3D7 | S1DL |
| SU31 | 117.3 | SU1 | S1UL | U3D1 | S2DL |
| SU32 | 117.3 | SU2 | S1UL | U3D2 | S2DL |
| SU33 | 117.3 | SU3 | S1UL | U3D3 | S2DL |
| SU34 | 117.3 | SU4 | S1UL | U3D4 | S2DL |
| SU36 | 117.3 | SU6 | S1UL | U3D6 | S2DL |
| SU37 | 117.3 | SU7 | S1UL | U3D7 | S2DL |
| US31 | 119.4 | UU1 | S2UL | S3D1 | S1DL |
| US32 | 119.4 | UU2 | S2UL | S3D2 | S1DL |
| US33 | 119.4 | UU3 | S2UL | S3D3 | S1DL |
| US34 | 119.4 | UU4 | S2UL | S3D4 | S1DL |
| US36 | 119.4 | UU6 | S2UL | S3D6 | S1DL |
| US37 | 119.4 | UU7 | S2UL | S3D7 | S1DL |
| UU31 | 119.3 | UU1 | S2UL | U3D1 | S2DL |
| UU32 | 119.3 | UU2 | S2UL | U3D2 | S2DL |
| UU33 | 119.3 | UU3 | S2UL | U3D3 | S2DL |
| UU34 | 119.3 | UU4 | S2UL | U3D4 | S2DL |

|      |       |     |      |      |      |
|------|-------|-----|------|------|------|
| UU36 | 119.3 | UU6 | S2UL | U3D6 | S2DL |
| UU37 | 119.3 | UU7 | S2UL | U3D7 | S2DL |
| SEF1 | 116.7 | SUF | S1UL | ED1  | WHDL |
| SE22 | 116.7 | SU2 | S1UL | ED2  | WHDL |
| SE33 | 116.7 | SU3 | S1UL | ED3  | WHDL |
| SE44 | 116.7 | SU4 | S1UL | ED4  | WHDL |
| SEG6 | 116.7 | SUG | S1UL | ED6  | WHDL |
| SFF1 | 116.9 | SUF | S1UL | FD1  | EHDL |
| SF22 | 116.9 | SU2 | S1UL | FD2  | EHDL |
| SF33 | 116.9 | SU3 | S1UL | FD3  | EHDL |
| SF44 | 116.9 | SU4 | S1UL | FD4  | EHDL |
| SFG6 | 116.9 | SUG | S1UL | FD6  | EHDL |
| SG1E | 112.2 | SU1 | S1UL | GDE  | NWDL |
| SG22 | 112.2 | SU2 | S1UL | GD2  | NWDL |
| SG33 | 112.2 | SU3 | S1UL | GD3  | NWDL |
| SG44 | 112.2 | SU4 | S1UL | GD4  | NWDL |
| SGG6 | 112.2 | SUG | S1UL | GD6  | NWDL |
| SJ1E | 114.5 | SU1 | S1UL | JDE  | SEDL |
| SJ22 | 114.5 | SU2 | S1UL | JD2  | SEDL |
| SJ33 | 114.5 | SU3 | S1UL | JD3  | SEDL |
| SJ44 | 114.5 | SU4 | S1UL | JD4  | SEDL |
| SJG6 | 114.5 | SUG | S1UL | JD6  | SEDL |
| SH1E | 113.9 | SU1 | S1UL | HDE  | NEDL |
| SH22 | 113.9 | SU2 | S1UL | HD2  | NEDL |
| SH33 | 113.9 | SU3 | S1UL | HD3  | NEDL |
| SH44 | 113.9 | SU4 | S1UL | HD4  | NEDL |
| SHG6 | 113.9 | SUG | S1UL | HD6  | NEDL |
| SI1E | 114.7 | SU1 | S1UL | IDE  | SWDL |
| SI22 | 114.7 | SU2 | S1UL | ID2  | SWDL |
| SI33 | 114.7 | SU3 | S1UL | ID3  | SWDL |
| SI44 | 114.7 | SU4 | S1UL | ID4  | SWDL |
| SIG6 | 114.7 | SUG | S1UL | ID6  | SWDL |
| SAHD | 115.8 | SUH | S1UL | ADD  | GADL |
| SBHD | 115.8 | SUH | S1UL | BDD  | GBDL |
| TEF1 | 118.7 | TUF | S2UL | ED1  | WHDL |
| TE22 | 118.7 | TU2 | S2UL | ED2  | WHDL |
| TE33 | 118.7 | TU3 | S2UL | ED3  | WHDL |
| TE44 | 118.7 | TU4 | S2UL | ED4  | WHDL |
| TEG6 | 118.7 | TUG | S2UL | ED6  | WHDL |



|      |       |     |      |      |      |
|------|-------|-----|------|------|------|
| TFF1 | 118.9 | TUF | S2UL | FD1  | EHDL |
| TF22 | 118.9 | TU2 | S2UL | FD2  | EHDL |
| TF33 | 118.9 | TU3 | S2UL | FD3  | EHDL |
| TF44 | 118.9 | TU4 | S2UL | FD4  | EHDL |
| TFG6 | 118.9 | TUG | S2UL | FD6  | EHDL |
| TG1E | 114.2 | TU1 | S2UL | GDE  | NWDL |
| TG22 | 114.2 | TU2 | S2UL | GD2  | NWDL |
| TG33 | 114.2 | TU3 | S2UL | GD3  | NWDL |
| TG44 | 114.2 | TU4 | S2UL | GD4  | NWDL |
| TGG6 | 114.2 | TUG | S2UL | GD6  | NWDL |
| TJ1E | 116.5 | TU1 | S2UL | JDE  | SEDL |
| TJ22 | 116.5 | TU2 | S2UL | JD2  | SEDL |
| TJ33 | 116.5 | TU3 | S2UL | JD3  | SEDL |
| TJ44 | 116.5 | TU4 | S2UL | JD4  | SEDL |
| TJG6 | 116.5 | TUG | S2UL | JD6  | SEDL |
| TH1E | 115.9 | TU1 | S2UL | HDE  | NEDL |
| TH22 | 115.9 | TU2 | S2UL | HD2  | NEDL |
| TH33 | 115.9 | TU3 | S2UL | HD3  | NEDL |
| TH44 | 115.9 | TU4 | S2UL | HD4  | NEDL |
| THG6 | 115.9 | TUG | S2UL | HD6  | NEDL |
| TI1E | 116.7 | TU1 | S2UL | IDE  | SWDL |
| TI22 | 116.7 | TU2 | S2UL | ID2  | SWDL |
| TI33 | 116.7 | TU3 | S2UL | ID3  | SWDL |
| TI44 | 116.7 | TU4 | S2UL | ID4  | SWDL |
| TIG6 | 116.7 | TUG | S2UL | ID6  | SWDL |
| TAHD | 117.8 | TUH | S2UL | ADD  | GADL |
| TBHD | 117.8 | TUH | S2UL | BDD  | GBDL |
| AS1D | 125.2 | AUD | GAUL | S1DD | S1DL |
| AU1D | 125.1 | AUD | GAUL | U1DD | S2DL |
| BS1D | 125.8 | BUD | GBUL | S1DD | S1DL |
| BU1D | 125.7 | BUD | GBUL | U1DD | S2DL |
| ES1C | 122.5 | EU1 | WHUL | S1DC | S1DL |
| ES12 | 122.5 | EU2 | WHUL | S1D2 | S1DL |
| ES13 | 122.5 | EU3 | WHUL | S1D3 | S1DL |
| ES14 | 122.5 | EU4 | WHUL | S1D4 | S1DL |
| ES1E | 122.5 | EU6 | WHUL | S1DE | S1DL |
| EU1C | 122.4 | EU1 | WHUL | U1DC | S2DL |
| EU12 | 122.4 | EU2 | WHUL | U1D2 | S2DL |
| EU13 | 122.4 | EU3 | WHUL | U1D3 | S2DL |

|      |       |     |      |      |      |
|------|-------|-----|------|------|------|
| EU14 | 122.4 | EU4 | WHUL | U1D4 | S2DL |
| EU1E | 122.4 | EU6 | WHUL | U1DE | S2DL |
| FS1C | 123.3 | FU1 | EHUL | S1DC | S1DL |
| FS12 | 123.3 | FU2 | EHUL | S1D2 | S1DL |
| FS13 | 123.3 | FU3 | EHUL | S1D3 | S1DL |
| FS14 | 123.3 | FU4 | EHUL | S1D4 | S1DL |
| FS1E | 123.3 | FU6 | EHUL | S1DE | S1DL |
| FU1C | 123.2 | FU1 | EHUL | U1DC | S2DL |
| FU12 | 123.2 | FU2 | EHUL | U1D2 | S2DL |
| FU13 | 123.2 | FU3 | EHUL | U1D3 | S2DL |
| FU14 | 123.2 | FU4 | EHUL | U1D4 | S2DL |
| FU1E | 123.2 | FU6 | EHUL | U1DE | S2DL |
| GS11 | 115.8 | GUE | NWUL | S1D1 | S1DL |
| GS12 | 115.8 | GU2 | NWUL | S1D2 | S1DL |
| GS13 | 115.8 | GU3 | NWUL | S1D3 | S1DL |
| GS14 | 115.8 | GU4 | NWUL | S1D4 | S1DL |
| GS1E | 115.8 | GU6 | NWUL | S1DE | S1DL |
| GU11 | 115.7 | GUE | NWUL | U1D1 | S2DL |
| GU12 | 115.7 | GU2 | NWUL | U1D2 | S2DL |
| GU13 | 115.7 | GU3 | NWUL | U1D3 | S2DL |
| GU14 | 115.7 | GU4 | NWUL | U1D4 | S2DL |
| GU1E | 115.7 | GU6 | NWUL | U1DE | S2DL |
| JS11 | 120.8 | JUE | SEUL | S1D1 | S1DL |
| JS12 | 120.8 | JU2 | SEUL | S1D2 | S1DL |
| JS13 | 120.8 | JU3 | SEUL | S1D3 | S1DL |
| JS14 | 120.8 | JU4 | SEUL | S1D4 | S1DL |
| JS1E | 120.8 | JU6 | SEUL | S1DE | S1DL |
| JU11 | 120.7 | JUE | SEUL | U1D1 | S2DL |
| JU12 | 120.7 | JU2 | SEUL | U1D2 | S2DL |
| JU13 | 120.7 | JU3 | SEUL | U1D3 | S2DL |
| JU14 | 120.7 | JU4 | SEUL | U1D4 | S2DL |
| JU1E | 120.7 | JU6 | SEUL | U1DE | S2DL |
| HS11 | 111.8 | HUE | NEUL | S1D1 | S1DL |
| HS12 | 111.8 | HU2 | NEUL | S1D2 | S1DL |
| HS13 | 111.8 | HU3 | NEUL | S1D3 | S1DL |
| HS14 | 111.8 | HU4 | NEUL | S1D4 | S1DL |
| HS1E | 111.8 | HU6 | NEUL | S1DE | S1DL |
| HU11 | 111.7 | HUE | NEUL | U1D1 | S2DL |
| HU12 | 111.7 | HU2 | NEUL | U1D2 | S2DL |

|      |       |     |      |      |      |
|------|-------|-----|------|------|------|
| HU13 | 111.7 | HU3 | NEUL | U1D3 | S2DL |
| HU14 | 111.7 | HU4 | NEUL | U1D4 | S2DL |
| HU1E | 111.7 | HU6 | NEUL | U1DE | S2DL |
| IS11 | 120.2 | IUE | SWUL | S1D1 | S1DL |
| IS12 | 120.2 | IU2 | SWUL | S1D2 | S1DL |
| IS13 | 120.2 | IU3 | SWUL | S1D3 | S1DL |
| IS14 | 120.2 | IU4 | SWUL | S1D4 | S1DL |
| IS1E | 120.2 | IU6 | SWUL | S1DE | S1DL |
| IU11 | 120.1 | IUE | SWUL | U1D1 | S2DL |
| IU12 | 120.1 | IU2 | SWUL | U1D2 | S2DL |
| IU13 | 120.1 | IU3 | SWUL | U1D3 | S2DL |
| IU14 | 120.1 | IU4 | SWUL | U1D4 | S2DL |
| IU1E | 120.1 | IU6 | SWUL | U1DE | S2DL |
| AS2D | 125.2 | AUD | GAUL | S2DD | S1DL |
| AU2D | 125.1 | AUD | GAUL | U2DD | S2DL |
| BS2D | 125.8 | BUD | GBUL | S2DD | S1DL |
| BU2D | 125.7 | BUD | GBUL | U2DD | S2DL |
| ES2C | 122.5 | EU1 | WHUL | S2DC | S1DL |
| ES22 | 122.5 | EU2 | WHUL | S2D2 | S1DL |
| ES23 | 122.5 | EU3 | WHUL | S2D3 | S1DL |
| ES24 | 122.5 | EU4 | WHUL | S2D4 | S1DL |
| ES2E | 122.5 | EU6 | WHUL | S2DE | S1DL |
| EU2C | 122.4 | EU1 | WHUL | U2DC | S2DL |
| EU22 | 122.4 | EU2 | WHUL | U2D2 | S2DL |
| EU23 | 122.4 | EU3 | WHUL | U2D3 | S2DL |
| EU24 | 122.4 | EU4 | WHUL | U2D4 | S2DL |
| EU2E | 122.4 | EU6 | WHUL | U2DE | S2DL |
| FS2C | 123.3 | FU1 | EHUL | S2DC | S1DL |
| FS22 | 123.3 | FU2 | EHUL | S2D2 | S1DL |
| FS23 | 123.3 | FU3 | EHUL | S2D3 | S1DL |
| FS24 | 123.3 | FU4 | EHUL | S2D4 | S1DL |
| FS2E | 123.3 | FU6 | EHUL | S2DE | S1DL |
| FU2C | 123.2 | FU1 | EHUL | U2DC | S2DL |
| FU22 | 123.2 | FU2 | EHUL | U2D2 | S2DL |
| FU23 | 123.2 | FU3 | EHUL | U2D3 | S2DL |
| FU24 | 123.2 | FU4 | EHUL | U2D4 | S2DL |
| FU2E | 123.2 | FU6 | EHUL | U2DE | S2DL |
| GS21 | 115.8 | GUE | NWUL | S2D1 | S1DL |
| GS22 | 115.8 | GU2 | NWUL | S2D2 | S1DL |

|      |       |     |      |      |      |
|------|-------|-----|------|------|------|
| GS23 | 115.8 | GU3 | NWUL | S2D3 | S1DL |
| GS24 | 115.8 | GU4 | NWUL | S2D4 | S1DL |
| GS2E | 115.8 | GU6 | NWUL | S2DE | S1DL |
| GU21 | 115.7 | GUE | NWUL | U2D1 | S2DL |
| GU22 | 115.7 | GU2 | NWUL | U2D2 | S2DL |
| GU23 | 115.7 | GU3 | NWUL | U2D3 | S2DL |
| GU24 | 115.7 | GU4 | NWUL | U2D4 | S2DL |
| GU2E | 115.7 | GU6 | NWUL | U2DE | S2DL |
| JS21 | 120.8 | JUE | SEUL | S2D1 | S1DL |
| JS22 | 120.8 | JU2 | SEUL | S2D2 | S1DL |
| JS23 | 120.8 | JU3 | SEUL | S2D3 | S1DL |
| JS24 | 120.8 | JU4 | SEUL | S2D4 | S1DL |
| JS2E | 120.8 | JU6 | SEUL | S2DE | S1DL |
| JU21 | 120.7 | JUE | SEUL | U2D1 | S2DL |
| JU22 | 120.7 | JU2 | SEUL | U2D2 | S2DL |
| JU23 | 120.7 | JU3 | SEUL | U2D3 | S2DL |
| JU24 | 120.7 | JU4 | SEUL | U2D4 | S2DL |
| JU2E | 120.7 | JU6 | SEUL | U2DE | S2DL |
| HS21 | 111.8 | HUE | NEUL | S2D1 | S1DL |
| HS22 | 111.8 | HU2 | NEUL | S2D2 | S1DL |
| HS23 | 111.8 | HU3 | NEUL | S2D3 | S1DL |
| HS24 | 111.8 | HU4 | NEUL | S2D4 | S1DL |
| HS2E | 111.8 | HU6 | NEUL | S2DE | S1DL |
| HU21 | 111.7 | HUE | NEUL | U2D1 | S2DL |
| HU22 | 111.7 | HU2 | NEUL | U2D2 | S2DL |
| HU23 | 111.7 | HU3 | NEUL | U2D3 | S2DL |
| HU24 | 111.7 | HU4 | NEUL | U2D4 | S2DL |
| HU2E | 111.7 | HU6 | NEUL | U2DE | S2DL |
| IS21 | 120.2 | IUE | SWUL | S2D1 | S1DL |
| IS22 | 120.2 | IU2 | SWUL | S2D2 | S1DL |
| IS23 | 120.2 | IU3 | SWUL | S2D3 | S1DL |
| IS24 | 120.2 | IU4 | SWUL | S2D4 | S1DL |
| IS2E | 120.2 | IU6 | SWUL | S2DE | S1DL |
| IU21 | 120.1 | IUE | SWUL | U2D1 | S2DL |
| IU22 | 120.1 | IU2 | SWUL | U2D2 | S2DL |
| IU23 | 120.1 | IU3 | SWUL | U2D3 | S2DL |
| IU24 | 120.1 | IU4 | SWUL | U2D4 | S2DL |
| IU2E | 120.1 | IU6 | SWUL | U2DE | S2DL |
| AS3D | 125.2 | AUD | GAUL | S3DD | S1DL |

|      |       |     |      |      |      |
|------|-------|-----|------|------|------|
| AU3D | 125.1 | AUD | GAUL | U3DD | S2DL |
| BS3D | 125.8 | BUD | GBUL | S3DD | S1DL |
| BU3D | 125.7 | BUD | GBUL | U3DD | S2DL |
| ES3C | 122.5 | EU1 | WHUL | S3DC | S1DL |
| ES32 | 122.5 | EU2 | WHUL | S3D2 | S1DL |
| ES33 | 122.5 | EU3 | WHUL | S3D3 | S1DL |
| ES34 | 122.5 | EU4 | WHUL | S3D4 | S1DL |
| ES3E | 122.5 | EU6 | WHUL | S3DE | S1DL |
| EU3C | 122.4 | EU1 | WHUL | U3DC | S2DL |
| EU32 | 122.4 | EU2 | WHUL | U3D2 | S2DL |
| EU33 | 122.4 | EU3 | WHUL | U3D3 | S2DL |
| EU34 | 122.4 | EU4 | WHUL | U3D4 | S2DL |
| EU3E | 122.4 | EU6 | WHUL | U3DE | S2DL |
| FS3C | 123.3 | FU1 | EHUL | S3DC | S1DL |
| FS32 | 123.3 | FU2 | EHUL | S3D2 | S1DL |
| FS33 | 123.3 | FU3 | EHUL | S3D3 | S1DL |
| FS34 | 123.3 | FU4 | EHUL | S3D4 | S1DL |
| FS3E | 123.3 | FU6 | EHUL | S3DE | S1DL |
| FU3C | 123.2 | FU1 | EHUL | U3DC | S2DL |
| FU32 | 123.2 | FU2 | EHUL | U3D2 | S2DL |
| FU33 | 123.2 | FU3 | EHUL | U3D3 | S2DL |
| FU34 | 123.2 | FU4 | EHUL | U3D4 | S2DL |
| FU3E | 123.2 | FU6 | EHUL | U3DE | S2DL |
| GS31 | 115.8 | GUE | NWUL | S3D1 | S1DL |
| GS32 | 115.8 | GU2 | NWUL | S3D2 | S1DL |
| GS33 | 115.8 | GU3 | NWUL | S3D3 | S1DL |
| GS34 | 115.8 | GU4 | NWUL | S3D4 | S1DL |
| GS3E | 115.8 | GU6 | NWUL | S3DE | S1DL |
| GU31 | 115.7 | GUE | NWUL | U3D1 | S2DL |
| GU32 | 115.7 | GU2 | NWUL | U3D2 | S2DL |
| GU33 | 115.7 | GU3 | NWUL | U3D3 | S2DL |
| GU34 | 115.7 | GU4 | NWUL | U3D4 | S2DL |
| GU3E | 115.7 | GU6 | NWUL | U3DE | S2DL |
| JS31 | 120.8 | JUE | SEUL | S3D1 | S1DL |
| JS32 | 120.8 | JU2 | SEUL | S3D2 | S1DL |
| JS33 | 120.8 | JU3 | SEUL | S3D3 | S1DL |
| JS34 | 120.8 | JU4 | SEUL | S3D4 | S1DL |
| JS3E | 120.8 | JU6 | SEUL | S3DE | S1DL |
| JU31 | 120.7 | JUE | SEUL | U3D1 | S2DL |

|      |       |     |      |      |      |
|------|-------|-----|------|------|------|
| JU32 | 120.7 | JU2 | SEUL | U3D2 | S2DL |
| JU33 | 120.7 | JU3 | SEUL | U3D3 | S2DL |
| JU34 | 120.7 | JU4 | SEUL | U3D4 | S2DL |
| JU3E | 120.7 | JU6 | SEUL | U3DE | S2DL |
| HS31 | 111.8 | HUE | NEUL | S3D1 | S1DL |
| HS32 | 111.8 | HU2 | NEUL | S3D2 | S1DL |
| HS33 | 111.8 | HU3 | NEUL | S3D3 | S1DL |
| HS34 | 111.8 | HU4 | NEUL | S3D4 | S1DL |
| HS3E | 111.8 | HU6 | NEUL | S3DE | S1DL |
| HU31 | 111.7 | HUE | NEUL | U3D1 | S2DL |
| HU32 | 111.7 | HU2 | NEUL | U3D2 | S2DL |
| HU33 | 111.7 | HU3 | NEUL | U3D3 | S2DL |
| HU34 | 111.7 | HU4 | NEUL | U3D4 | S2DL |
| HU3E | 111.7 | HU6 | NEUL | U3DE | S2DL |
| IS31 | 120.2 | IUE | SWUL | S3D1 | S1DL |
| IS32 | 120.2 | IU2 | SWUL | S3D2 | S1DL |
| IS33 | 120.2 | IU3 | SWUL | S3D3 | S1DL |
| IS34 | 120.2 | IU4 | SWUL | S3D4 | S1DL |
| IS3E | 120.2 | IU6 | SWUL | S3DE | S1DL |
| IU31 | 120.1 | IUE | SWUL | U3D1 | S2DL |
| IU32 | 120.1 | IU2 | SWUL | U3D2 | S2DL |
| IU33 | 120.1 | IU3 | SWUL | U3D3 | S2DL |
| IU34 | 120.1 | IU4 | SWUL | U3D4 | S2DL |
| IU3E | 120.1 | IU6 | SWUL | U3DE | S2DL |

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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                  | 112MG7W                 | 112000                       | 4                 | 76436                        | 0.5                                  |                               | 3.36                                     | 15.1                                |
| D2                  | 77M0G7W                 | 77000                        | 4                 | 52550                        | 0.5                                  |                               | 3.36                                     | 19.2                                |
| D3                  | 72M0G7W                 | 72000                        | 4                 | 49138                        | 0.5                                  |                               | 3.36                                     | 20.2                                |
| D4                  | 41M0G7W                 | 41000                        | 4                 | 27981                        | 0.5                                  |                               | 3.36                                     | 22.6                                |
| D5                  | 36M0G7W                 | 36000                        | 4                 | 24575                        | 0.5                                  |                               | 3.36                                     | 14.9                                |
| D6                  | 10M3G7W                 | 10300                        | 4                 | 6000                         | 0.5                                  |                               | 3.87                                     | 19.6                                |
| D7                  | 100KG7W                 | 100                          | 4                 | 64                           | 0.5                                  |                               | 2.99                                     | 18.9                                |
| D8                  | 1M45G7W                 | 1450                         | 2                 | 512                          | 0.5                                  |                               | 3.4                                      | 13.9                                |
| D9                  | 400KG7W                 | 400                          | 2                 | 128                          | 0.5                                  |                               | 3.4                                      | 12.7                                |

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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                              |   |                                       |                                    |                                | NTSC  | 15.6                                     | 1.5  |  | 10  | 26.3   |



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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. |   |                                |
| AAAA   | IU3E |                         | A1                     | 1                            | 36000                     | IS801 SCHEDU                           | 4000                                 | 58.4                                    | 18.2                                | 22.2     | 28.5                               | 32.5     | -159.6                                  | 34.5                           |
| AAAA   | IU3E | D5                      |                        | 1                            | 36000                     | NOTE.txt                               |                                      | 51                                      | 20.6                                | 24.6     | 28.5                               | 32.5     | -168.4                                  | 26.2                           |
| AAAA   | IU3E | D6                      |                        | 2                            | 10300                     | NOTE.txt                               |                                      | 51                                      | 17.1                                | 21.1     | 21.3                               | 25.3     | -169.1                                  | 26.6                           |
| AAAA   | IU3E | D7                      |                        | 258                          | 100                       | NOTE.txt                               |                                      | 51                                      | -3.3                                | 0.7      | 0.9                                | 4.9      | -170                                    | 26.6                           |
| AAAA   | IU3E |                         | A1                     | 1                            | 36000                     | NOTE.txt                               | 4000                                 | 55.4                                    | 19.2                                | 23.2     | 33.5                               | 39.5     | -152.6                                  | 26.2                           |
| AAAA   | IU3E | D5                      |                        | 1                            | 36000                     | NOTE.txt                               |                                      | 51                                      | 19.6                                | 23.6     | 33.5                               | 39.5     | -161.4                                  | 19.2                           |
| AAAA   | IU3E | D6                      |                        | 2                            | 10300                     | NOTE.txt                               |                                      | 51                                      | 12.1                                | 16.1     | 26.3                               | 32.3     | -162.1                                  | 19.2                           |
| AAAA   | IU3E | D7                      |                        | 257                          | 100                       | NOTE.txt                               |                                      | 51                                      | -8.3                                | -4.3     | 5.9                                | 11.9     | -163                                    | 19.2                           |
| AAAA   | IU3E |                         | A1                     | 1                            | 36000                     | NOTE.txt                               | 4000                                 | 58.4                                    | 19.2                                | 23.2     | 45                                 | 51       | -141.1                                  | 25                             |
| AAAA   | IU3E | D4                      |                        | 1                            | 41000                     | NOTE.txt                               |                                      | 58.4                                    | 19.2                                | 23.2     | 43.4                               | 49.4     | -152.1                                  | 18.8                           |
| AAAA   | IU3E | D6                      |                        | 2                            | 10300                     | NOTE.txt                               |                                      | 51                                      | 9.8                                 | 13.8     | 35.3                               | 41.3     | -153.1                                  | 22.3                           |
| AAAA   | IU3E | D7                      |                        | 309                          | 100                       | NOTE.txt                               |                                      | 51                                      | -10.5                               | -6.5     | 15                                 | 21       | -153.9                                  | 22.3                           |
| AAAA   | IU3E |                         | A1                     | 1                            | 36000                     | NOTE.txt                               | 4000                                 | 58.4                                    | 17.1                                | 23.1     | 28.5                               | 32.5     | -159.6                                  | 34.5                           |
| AAAA   | IU3E | D5                      |                        | 1                            | 36000                     | NOTE.txt                               |                                      | 51                                      | 18.5                                | 24.5     | 28.5                               | 32.5     | -168.4                                  | 26.2                           |
| AAAA   | IU3E | D6                      |                        | 2                            | 10300                     | NOTE.txt                               |                                      | 51                                      | 16                                  | 22       | 21.3                               | 25.3     | -169.1                                  | 26.6                           |
| AAAA   | IU3E | D7                      |                        | 260                          | 100                       | NOTE.txt                               |                                      | 51                                      | -4.5                                | 1.5      | 0.9                                | 4.9      | -170                                    | 26.6                           |
| AAAA   | IU3E |                         | A1                     | 1                            | 36000                     | NOTE.txt                               | 4000                                 | 54.1                                    | 18.4                                | 24.4     | 33.5                               | 39.5     | -152.6                                  | 26.2                           |
| AAAA   | IU3E | D5                      |                        | 1                            | 36000                     | NOTE.txt                               |                                      | 51                                      | 15.5                                | 21.5     | 33.5                               | 39.5     | -161.4                                  | 19.2                           |
| AAAA   | IU3E | D6                      |                        | 2                            | 10300                     | NOTE.txt                               |                                      | 51                                      | 10.9                                | 16.9     | 26.2                               | 32.2     | -162.2                                  | 19.2                           |
| AAAA   | IU3E | D7                      |                        | 263                          | 100                       | NOTE.txt                               |                                      | 51                                      | -9.5                                | -3.5     | 5.8                                | 11.8     | -163.1                                  | 19.2                           |
| AAAA   | IU3E |                         | A1                     | 2                            | 36000                     | NOTE.txt                               | 4000                                 | 55.4                                    | 17.9                                | 23.9     | 38.8                               | 44.8     | -147.3                                  | 33.1                           |
| AAAA   | IU3E | D2                      |                        | 1                            | 77000                     | NOTE.txt                               |                                      | 51                                      | 17.5                                | 23.5     | 45                                 | 51       | -153.2                                  | 22.3                           |
| AAAA   | IU3E | D6                      |                        | 5                            | 10300                     | NOTE.txt                               |                                      | 51                                      | 8.1                                 | 14.1     | 32.8                               | 38.8     | -155.6                                  | 25                             |
| AAAA   | IU3E | D7                      |                        | 558                          | 100                       | NOTE.txt                               |                                      | 51                                      | -12.2                               | -6.2     | 12.4                               | 18.4     | -156.5                                  | 25                             |
| AAAA   | IU3E |                         | A1                     | 1                            | 36000                     | NOTE.txt                               | 4000                                 | 56.4                                    | 18.1                                | 24.1     | 35                                 | 41       | -151.1                                  | 23.6                           |
| AAAA   | IU3E | D5                      |                        | 1                            | 36000                     | NOTE.txt                               |                                      | 51                                      | 15.5                                | 21.5     | 35                                 | 41       | -159.9                                  | 19.2                           |
| AAAA   | IU3E | D6                      |                        | 2                            | 10300                     | NOTE.txt                               |                                      | 51                                      | 9.7                                 | 15.7     | 27.5                               | 33.5     | -160.9                                  | 19.2                           |
| AAAA   | IU3E | D7                      |                        | 277                          | 100                       | NOTE.txt                               |                                      | 51                                      | -10.7                               | -4.7     | 7.1                                | 13.1     | -161.8                                  | 19.2                           |
| AAAA   | IU3E |                         | A1                     | 1                            | 36000                     | NOTE.txt                               | 4000                                 | 56.9                                    | 17.6                                | 23.6     | 28.5                               | 32.5     | -159.6                                  | 28.4                           |

|      |      |    |    |     |        |          |      |      |       |       |      |      |        |      |
|------|------|----|----|-----|--------|----------|------|------|-------|-------|------|------|--------|------|
| AAAA | IU3E | D4 |    | 1   | 41000  | NOTE.txt |      | 56.9 | 17.6  | 23.6  | 28.5 | 32.5 | -169   | 23.6 |
| AAAA | IU3E | D6 |    | 2   | 10300  | NOTE.txt |      | 56.9 | 1.3   | 7.3   | 20.6 | 24.6 | -169.8 | 23.6 |
| AAAA | IU3E | D7 |    | 280 | 100    | NOTE.txt |      | 56.9 | -18.7 | -12.7 | 0.5  | 4.5  | -170.4 | 23.6 |
| AAAA | IU3E |    | A1 | 2   | 36000  | NOTE.txt | 4000 | 56.9 | 12.8  | 18.8  | 27.5 | 33.5 | -158.6 | 31   |
| AAAA | IU3E | D3 |    | 1   | 72000  | NOTE.txt |      | 56.9 | 16.6  | 22.6  | 33.5 | 39.5 | -164.4 | 21   |
| AAAA | IU3E | D6 |    | 4   | 10300  | NOTE.txt |      | 56.9 | 6.1   | 12.1  | 23.3 | 29.3 | -165.1 | 20.9 |
| AAAA | IU3E | D7 |    | 480 | 100    | NOTE.txt |      | 56.9 | -14   | -8    | 3.2  | 9.2  | -165.7 | 20.9 |
| AAAA | IU3E |    | A1 | 3   | 36000  | NOTE.txt | 4000 | 56.9 | 16.6  | 22.6  | 36.7 | 42.7 | -149.4 | 36.6 |
| AAAA | IU3E | D1 |    | 1   | 112000 | NOTE.txt |      | 56.9 | 15.6  | 21.6  | 45   | 51   | -154.8 | 22.3 |
| AAAA | IU3E | D6 |    | 7   | 10300  | NOTE.txt |      | 56.9 | 2.5   | 8.5   | 31   | 37   | -157.4 | 25   |
| AAAA | IU3E | D7 |    | 825 | 100    | NOTE.txt |      | 56.9 | -17.8 | -11.8 | 10.7 | 16.7 | -158.2 | 25   |
| AAAA | IU3E | D8 |    | 51  | 1450   | NOTE.txt |      | 56.9 | -5.7  | 0.3   | 22.8 | 28.8 | -158.2 | 25   |
| AAAA | IU3E | D9 |    | 280 | 400    | NOTE.txt |      | 49   | -10.3 | -4.3  | 10.3 | 16.3 | -164.7 | 33.1 |
| AAAA | IU3E |    | A1 | 2   | 36000  | NOTE.txt | 4000 | 56.9 | 13.8  | 19.8  | 29   | 35   | -157.1 | 29.4 |
| AAAA | IU3E | D2 |    | 1   | 77000  | NOTE.txt |      | 56.9 | 16.6  | 22.6  | 35   | 41   | -163.2 | 19.2 |
| AAAA | IU3E | D6 |    | 5   | 10300  | NOTE.txt |      | 56.9 | -1.2  | 4.8   | 24.5 | 30.5 | -163.9 | 21   |
| AAAA | IU3E | D7 |    | 524 | 100    | NOTE.txt |      | 56.9 | -21.4 | -15.4 | 4.3  | 10.3 | -164.6 | 21   |
| AAAA | IU3E |    | A1 | 1   | 36000  | NOTE.txt | 4000 | 58.4 | 18    | 24    | 33.5 | 39.5 | -152.6 | 23.6 |
| AAAA | IU3E | D5 |    | 1   | 36000  | NOTE.txt |      | 51   | 16.4  | 22.4  | 33.5 | 39.5 | -161.4 | 19.2 |
| AAAA | IU3E | D6 |    | 2   | 10300  | NOTE.txt |      | 51   | 10.8  | 16.8  | 26.2 | 32.2 | -162.2 | 19.2 |
| AAAA | IU3E | D7 |    | 266 | 100    | NOTE.txt |      | 51   | -9.7  | -3.7  | 5.8  | 11.8 | -163.1 | 19.2 |
| AAAA | IU3E |    | A1 | 2   | 36000  | NOTE.txt | 4000 | 54.1 | 18.1  | 24.1  | 38.8 | 44.8 | -147.3 | 33.1 |
| AAAA | IU3E | D2 |    | 1   | 77000  | NOTE.txt |      | 51   | 17.4  | 23.4  | 45   | 51   | -153.2 | 22.3 |
| AAAA | IU3E | D6 |    | 5   | 10300  | NOTE.txt |      | 51   | 8     | 14    | 32.7 | 38.7 | -155.7 | 25   |
| AAAA | IU3E | D7 |    | 569 | 100    | NOTE.txt |      | 51   | -12.4 | -6.4  | 12.4 | 18.4 | -156.5 | 25   |
| AAAA | IU3E |    | A1 | 1   | 36000  | NOTE.txt | 4000 | 55.4 | 18    | 24    | 35   | 41   | -151.1 | 23.6 |
| AAAA | IU3E | D5 |    | 1   | 36000  | NOTE.txt |      | 51   | 16.4  | 22.4  | 35   | 41   | -159.9 | 19.2 |
| AAAA | IU3E | D6 |    | 2   | 10300  | NOTE.txt |      | 51   | 8.9   | 14.9  | 27.8 | 33.8 | -160.6 | 19.2 |
| AAAA | IU3E | D7 |    | 259 | 100    | NOTE.txt |      | 51   | -11.5 | -5.5  | 7.4  | 13.4 | -161.5 | 19.2 |

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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                               | 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 checked="" 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 checked="" 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> |                                     |     |                          |    |                                     |     |