

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

**Location of Earth Station Site**

|                               |                                               |                   |               |
|-------------------------------|-----------------------------------------------|-------------------|---------------|
| E1: Site Identifier:          | 1                                             | E5: Call Sign:    |               |
| E2: Contact Name:             | Sheldon R. Bentley                            | E6: Phone Number: | (253)657-6713 |
| E3: Street:                   | PO Box 3707 Frequency Management M/C<br>3U-AJ | E7: City:         | Seattle       |
| E4: State:                    | 978e209fdbbd22008e0b75131f9619b1              | E8: County:       | King          |
|                               |                                               | E9: Zip Code:     | 98124         |
| E10: Area of Operation:       |                                               |                   |               |
| E11: Latitude:                | 47° 25' 8.49"                                 |                   |               |
| E12: Longitude:               | 122° 15' 10.1"                                |                   |               |
| E13: Lat/Lon Coordinates are: | nad-83                                        |                   |               |
| E14: Site Elevation (AMSL):   | 6                                             |                   |               |

|                                                                                                                                                                                                                                                                                                                                                                            |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement? If NO, provide a technical analysis showing compliance with two-degree spacing policy. | Yes |
| If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS) or if they operate in the Fixed Satellite Service (FSS) with non-geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement?                     | Yes |
| Is Frequency Coordination required?                                                                                                                                                                                                                                                                                                                                        | No  |
| Is coordination with another country required?                                                                                                                                                                                                                                                                                                                             | No  |
| Is FAA notification required?                                                                                                                                                                                                                                                                                                                                              | No  |
| Is facility operated by remote control?                                                                                                                                                                                                                                                                                                                                    | No  |

## POINTS OF COMMUNICATION

|                                  |                               |
|----------------------------------|-------------------------------|
| Satellite Name: PERMITTED LIST   |                               |
| E21. Common Name: PERMITTED LIST | E22. ITU Name: PERMITTED LIST |
| E23. Orbit Location: GSO         | E24. Country:                 |

## ANTENNA

| Site ID | E28. Antenna Id | E29. Quantity | E30. Manufacturer | E31. Model   | E32. Antenna Size (meters) | E41/42. Antenna Gain Transmit and/or Recieve (dBi at GHz) |
|---------|-----------------|---------------|-------------------|--------------|----------------------------|-----------------------------------------------------------|
| 1       | 1               | 1             | Andrews Corp.     | ES46MPJ-4124 | 4.6                        | undefined at 0                                            |

| E28. Antenna Id | E33/34. Diameter Minor/Major (meters) | E35. Above Ground Level (meters) | E36. Above Sea Level (meters) | E37. Building Height Above Ground Level (meters) | E38. Total Input Power at Antenna Flange (Watts) | E39. Maximum Antenna Height Above Rooftop (meters) | E40. Total EIRP for all carriers (dBW) |
|-----------------|---------------------------------------|----------------------------------|-------------------------------|--------------------------------------------------|--------------------------------------------------|----------------------------------------------------|----------------------------------------|
| 1               | 0/0                                   | 6                                | 12                            | 0                                                | 316                                              | 0                                                  | 79.7                                   |

## FREQUENCY

| E28. Antenna Id | E43/44. Frequency Bands (MHz) | E45. T/R Mode | E46. Antenna Polarization (H,V,L,R) | E47. Emission Designator | E48. Maximum EIRP per Carrier (dBW) | E49. Maximum ERIP Density per Carrier (dBW/4kHz) |
|-----------------|-------------------------------|---------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------------------------------|
| 1               | 11700<br>12200                | R             | null                                | 24M3G7D                  | 0                                   | 0                                                |

## E50. Modulation and Services

OQPSK Data

| E28. Antenna Id | E43/44. Frequency Bands (MHz) | E45. T/R Mode | E46. Antenna Polarization (H,V,L,R) | E47. Emission Designator | E48. Maximum EIRP per Carrier | E49. Maximum ERIP Density per Carrier (dBW/4kHz) |
|-----------------|-------------------------------|---------------|-------------------------------------|--------------------------|-------------------------------|--------------------------------------------------|
|-----------------|-------------------------------|---------------|-------------------------------------|--------------------------|-------------------------------|--------------------------------------------------|

|                                     |                |   |      |         |       |      |
|-------------------------------------|----------------|---|------|---------|-------|------|
|                                     |                |   |      |         | (dBW) |      |
| 1                                   | 14000<br>14500 | T | null | 32M4G7D | 79.7  | 40.6 |
| <b>E50. Modulation and Services</b> |                |   |      |         |       |      |
| OQPSK Data                          |                |   |      |         |       |      |

## FREQUENCY COORDINATION

| E28.<br>Antenna<br>Id | E51.<br>Satellite<br>Orbit Type | E52/53.<br>Frequency<br>Limits(MHz) | E54/55.<br>Range<br>of<br>Satellite<br>Arc<br>E/W<br>Limit | E56. Earth<br>Station Azimuth<br>Angle<br>Eastern/Western<br>Limit | E57. Antenna<br>Elevation Angle<br>Eastern/Western<br>Limit | E60.<br>Maximum<br>EIRP<br>Density<br>toward the<br>Horizon<br>(dBW/4kHz) |
|-----------------------|---------------------------------|-------------------------------------|------------------------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------|
| 1                     | Geostationary                   | 11700<br>12200                      | 93 / 137                                                   | 142.7 / 199.7                                                      | 28.5 / 33.6                                                 | 0                                                                         |

1Geostationary14000  
1450093 / 137142.7 / 199.728.5 / 33.6-23.4

## REMOTE CONTROL POINT LOCATION

|                      |              |                                                 |                |
|----------------------|--------------|-------------------------------------------------|----------------|
| E61. Call Sign:      |              | E65. Phone Number:                              |                |
| E62. Street Address: |              |                                                 |                |
| E63. City:           | E67. County: | E64/68. State/Country:<br>undefined / undefined | E66. Zip Code: |

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