

**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:          | Bismark                          | E5: Call Sign:    |                |
| E2: Contact Name:             | Catherine Kuersten               | E6: Phone Number: | 1-310-961-9329 |
| E3: Street:                   | 7116 Sonora Way                  | E7: City:         | Bismarck       |
| E4: State:                    | 5fcb838adb6d66008e0b75131f96199c | E8: County:       | Burleigh       |
|                               |                                  | E9: Zip Code:     | 58503          |
| E10: Area of Operation:       | Bismarck, North Dakota           |                   |                |
| E11: Latitude:                | 46° 52' 56.1"                    |                   |                |
| E12: Longitude:               | 100° 48' 17.4"                   |                   |                |
| E13: Lat/Lon Coordinates are: | nad-83                           |                   |                |
| E14: Site Elevation (AMSL):   | 591                              |                   |                |

|                                                                                                                                                                                                                                                                                                                                                                            |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 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. | N/A |
| 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?                                                                                                                                                                                                                                                                                                                                        | Yes |
| Is coordination with another country required?                                                                                                                                                                                                                                                                                                                             | No  |
| Is FAA notification required?                                                                                                                                                                                                                                                                                                                                              | No  |
| Is facility operated by remote control?                                                                                                                                                                                                                                                                                                                                    | Yes |

**POINTS OF COMMUNICATION**

## 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) |
|---------|-----------------|---------------|----------------------|------------|----------------------------|-----------------------------------------------------------|
| Bismark | BSMRK           | 6             | Northwood Space Corp | NW24       | 2.4                        | 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) |
|-----------------|---------------------------------------|----------------------------------|-------------------------------|--------------------------------------------------|--------------------------------------------------|----------------------------------------------------|----------------------------------------|
| BSMRK           | 0/0                                   | 3                                | 594                           | 0                                                | 20                                               | 0                                                  | 45.71                                  |

## 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) |
|-----------------|-------------------------------|---------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------------------------------|
| BSMRK           | 2025<br>2110                  | T             | null                                | 1M50DID                  | 45.71                               | 19.96                                            |

## E50. Modulation and Services

DID

| 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) |
|-----------------|-------------------------------|---------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------------------------------|
| BSMRK           | 8025<br>8400                  | R             | null                                | 25M0DID                  | 0                                   | 0                                                |

## E50. Modulation and Services

DID

| 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) |
|-----------------|-------------------------------|---------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------------------------------|
| BSMRK           | 8450<br>8500                  | R             | null                                | 25M0DID                  | 0                                   | 0                                                |

**E50. Modulation and Services**

DID

| 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) |
|-----------------|-------------------------------|---------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------------------------------|
| BSMRK           | 2200<br>2290                  | R             | null                                | 1M50DID                  | 0                                   | 0                                                |

**E50. Modulation and Services**

DID

**FREQUENCY COORDINATION**

| E28. Antenna Id | E51. Satellite Orbit Type | E52/53. Frequency Limits(MHz) | E54/55. Range of Satellite Arc E/W Limit | E56. Earth Station Azimuth Angle Eastern/Western Limit | E57. Antenna Elevation Angle Eastern/Western Limit | E60. Maximum EIRP Density toward the Horizon (dBW/4kHz) |
|-----------------|---------------------------|-------------------------------|------------------------------------------|--------------------------------------------------------|----------------------------------------------------|---------------------------------------------------------|
| BSMRK           | Non-Geostationary         | 2025<br>2110                  | 0 / 0                                    | 0 / 360                                                | 5 / 5                                              | 16.26                                                   |

BSMRKNon-Geostationary8025

84000 / 00 / 3605 / 5-999BSMRKNon-Geostationary8450

85000 / 00 / 3605 / 5-999BSMRKNon-Geostationary2200

22900 / 00 / 3605 / 5-999

**REMOTE CONTROL POINT LOCATION**

|                 |                                          |
|-----------------|------------------------------------------|
| E61. Call Sign: | E65. Phone Number:<br><br>1-310-961-9329 |
|-----------------|------------------------------------------|

|                                                |                                 |                                                     |                             |
|------------------------------------------------|---------------------------------|-----------------------------------------------------|-----------------------------|
| E62. Street Address:<br><br>20701 Manhattan Pl |                                 |                                                     |                             |
| E63. City:<br><br>Torrance                     | E67. County:<br><br>Los Angeles | E64/68. State/Country:<br><br>undefined / undefined | E66. Zip Code:<br><br>90501 |

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