

**Technical Data for Special Temporary Authority Request**

Location (City, State, Coordinates)	Bismarck, ND Latitude: 46° 51' 5.7" N Longitude: 100° 46' 48.7" W
Site Elevation	581.6 meters
Antenna Diameter	8.1m
Height Above the Ground	8.3m
Antenna Gain Transmit	65.2 dB
Antenna Gain Receive	65.2 dB
Total Input Power at antenna flange	Up to 6 dBW (4 watts)
Total EIRP for all carries (dBW)	71.2 dBW
Transmit Frequency	29.6875 GHz
Receive Frequency Range	19.7-20.2 GHz
Transmit antenna polarization	Left Hand Circular
Receive antenna polarization	Right Hand Circular
Maximum Bandwidth	4kHz
Maximum EIRP per carrier (dBW)	71.2 dBW
Maximum EIRP Density per Carrier (dBW/4kHz)	71.2 dBW/4kHz
Transmit Modulation	Continuous Wave (CW)
Receive Modulation	Continuous Wave (CW)
Range of Satellite Arc E/W Limit	85° W.L to 121° W.L.
Earth Station Azimuth Angle Eastern Limit	158.8°
Antenna Elevation Angle Eastern Limit	33.9°
Earth Station Azimuth Angle Western Limit	206.8°
Antenna Elevation Angle Western Limit	32.6°
Maximum EIRP Density toward the Horizon	0.17 dBW/4kHz
Will the tests be operated by remote?	No