

FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for
Northwood Space Corp.
BISMARCK, ND
Satellite Earth Station

Prepared By:
COMSEARCH
21515 Ridgetop Circle, Suite 300
Sterling, VA 20166
November 25, 2025

TABLE OF CONTENTS

1. CONCLUSIONS	3
2. SUMMARY OF RESULTS	4
3. SUPPLEMENTAL SHOWING	5
4. EARTH STATION COORDINATION DATA.....	7
5. CERTIFICATION.....	11

1. CONCLUSIONS

An interference study considering all existing, proposed and prior coordinated microwave facilities within the coordination contours of the proposed earth station demonstrates that this site will operate satisfactorily with the common carrier microwave environment. Further, there will be no restrictions of its operation due to interference considerations.

2. SUMMARY OF RESULTS

A number of great circle interference cases were identified during the interference study of the proposed earth station. Each of the cases, which exceeded the interference objective on a line-of-sight basis, was profiled and the propagation losses estimated using NBS TN101 (Revised) techniques. The losses were found to be sufficient to reduce the signal levels to acceptable magnitudes in every case.

3. SUPPLEMENTAL SHOWING

Pursuant to Part 25.203(c) of the FCC Rules and Regulations, the satellite earth station proposed in this application was coordinated by Comsearch using computer techniques and in accordance with Part 25 of the FCC Rules and Regulations.

Coordination data for this earth station was sent to the below listed carriers with a letter dated 10/20/2025.

Company

3G Wireless, LLC
Aerial Video Systems
Alascom Inc
Ascent Media Network Services, LLC
Bellsouth Telecommunications, Inc.
Borgeson, Tom R.
Broadcast Sports Inc.
Carolina Telephone and Telegraph Co
Casper, John
CenturyTel of the Southwest, Inc.
Chicago Comnet Corp
Cincinnati Bell Wireless LLC
Citywide News Network, Inc.
Cowboys Stadium LP
DCI II, INC.
Direct Broadcast Services, Inc.
Frontier California Inc.
Global Telecom & Technology Americas, In
Goodyear Tire & Rubber Company
Gray Television Licensee, LLC
HF Enterprises, Inc
Hallco Unlimited, Inc.
Hawaiian Telecom Inc.
Heiden, William
Illinois Bell Telephone Company
Indiana Bell Telephone Company
Information & Display Systems, Inc.
Information Super Station, LLC
International Communications Group, Inc.
Kentucky RSA #3 Cellular General Partner
Kentucky RSA #4 Cellular General Partner
Lumen Technologies Inc
MERCURY COMMUNICATIONS
Michigan Bell Telephone Company
Moreen, Steven K
NEW ENGLAND DIGITAL DISTRIBUTION, INC.
NSM Surveillance
Navajo Communications Company
NorthWest Suburbs Community Access Corp
Ohio Bell GTelephone Company

Onboard Images
Pacific Bell Tel Com dba AT&T California
Penn Service Microwave Co., Inc.
Plateau Telecommunications, Inc.
Plum TV, LLC
Production & Satellite Services, Inc.
Quick Link Connections Inc.
Qwest Corporation
RCC Minnesota Inc. - MN NE ND SD
RF Central, LLC
RF Film, Inc
Radiofone, Inc.
Randy Hermes Production
Remote Broadcasts, Inc.
Remote Facilities Consulting Services
SayRabbit LLC
SBE Coordinator
Southwestern Bell Telephone L.P.
Speedshotz, Inc
TTWN Networks, LLC
United Telephone - Southeast
VERIZON SOUTH INC.
Verizon Maryland, Inc.
Verizon New England Inc.
Verizon New Jersey, Inc.
Verizon New York, Inc.
Verizon North Inc.
Verizon Northwest Inc.
Verizon Pennsylvania, Inc.
Verizon Virginia, Inc.
Verizon Washington DC, Inc.
Westar Satellite Services LP
Winged Vision Inc
Wisconsin Bell Telephone Company
Wolfe Air Aviation

4. EARTH STATION COORDINATION DATA

This section presents the data pertinent to frequency coordination of the proposed earth station that was circulated to all carriers within its coordination contours.

COMSEARCH

Earth Station Data Sheet

19700 Janelia Farm Boulevard, Ashburn, VA 20147
(703)726-5500 <http://www.comsearch.com>

Date: 11/25/2025
Job Number: 251020COMSGE01

Administrative Information

Status: ENGINEER PROPOSAL
Call Sign:
Licensee Code: NORSPC
Licensee Name: Northwood Space Corp.

Site Information BISMARCK, ND

Venue Name:
Latitude (NAD 83): 46° 52' 56.1" N
Longitude (NAD 83): 100° 48' 17.4" W
Climate Zone: A
Rain Zone: 5
Ground Elevation (AMSL): 591.04 m / 1939.1 ft

Link Information

Satellite Type: Low Earth Orbit
Mode: TO - Transmit-Only
Modulation: Digital
Minimum Elevation Angle: 5.0°
Azimuth Range: 0.0° to 360°
Antenna Centerline (AGL): 1.52 m / 5.0 ft

Antenna Information Transmit - FCC32

Manufacturer: Northwood Space
Model: NW24
Gain / Diameter: 32.7 dBi / 2.0 m
3-dB / 15-dB Beamwidth: 4.26° / 8.66°

Max Available RF Power (dBW/4 kHz): -12.4
(dBW/MHz): 11.6

Maximum EIRP (dBW/4 kHz): 20.3
(dBW/MHz): 44.3

Interference Objectives: Long Term: -154.0 dBW/4 kHz 20%
Short Term: -131.0 dBW/4 kHz 0.0025%

Frequency Information Transmit 2.0 GHz

Emission / Frequency Range (MHz): 1M50G7W / 2025.0 - 2110.0

Max Great Circle Coordination Distance: 215.0 km / 133.6 mi
Precipitation Scatter Contour Radius: 100.0 km / 62.1 mi

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Coordination Values

BISMARCK, ND

Licensee Name Northwood Space Corp.
Latitude (NAD 83) 46° 52' 56.1" N
Longitude (NAD 83) 100° 48' 17.4" W
Ground Elevation (AMSL) 591.04 m / 1939.1 ft
Antenna Centerline (AGL) 1.52 m / 5.0 ft
Antenna Model NW24
Antenna Mode Transmit 2.0 GHz
Interference Objectives: Long Term -154.0 dBW/4 kHz 20%
Short Term -131.0 dBW/4 kHz 0.0025%
Max Available RF Power -12.4 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 2.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	82.37	9.10	215.00
5	0.00	77.56	9.10	215.00
10	0.00	72.77	9.10	215.00
15	0.00	67.98	9.10	215.00
20	0.00	63.20	9.10	215.00
25	0.00	58.45	9.10	215.00
30	0.00	53.73	9.10	215.00
35	0.00	49.04	9.10	215.00
40	0.00	44.40	9.10	215.00
45	0.00	39.83	9.10	215.00
50	0.00	35.35	9.10	215.00
55	0.00	31.01	9.10	215.00
60	0.00	26.87	9.10	215.00
65	0.00	23.06	9.10	215.00
70	0.30	19.98	9.10	215.00
75	0.00	17.21	9.10	215.00
80	0.00	15.87	9.10	215.00
85	0.00	16.00	9.10	215.00
90	0.00	17.57	9.10	215.00
95	0.00	20.26	9.10	215.00
100	0.00	23.68	9.10	215.00
105	0.00	27.56	9.10	215.00
110	0.00	31.74	9.10	215.00
115	0.00	36.11	9.10	215.00
120	0.00	40.60	9.10	215.00
125	0.00	45.19	9.10	215.00
130	0.00	49.84	9.10	215.00
135	0.29	54.59	9.10	215.00
140	0.76	59.39	9.10	215.00
145	1.11	64.18	9.10	215.00
150	1.17	68.93	9.10	215.00
155	1.69	73.73	9.10	215.00
160	1.69	78.49	9.10	215.00
165	1.57	83.25	9.10	215.00
170	1.51	88.02	9.10	215.00
175	1.50	92.80	9.10	215.00
180	1.41	97.57	9.10	215.00
185	1.25	102.36	9.10	215.00

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Coordination Values

BISMARCK, ND

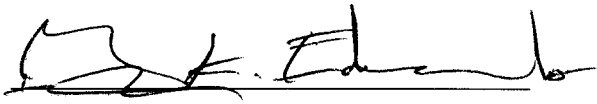
Licensee Name Northwood Space Corp.
Latitude (NAD 83) 46° 52' 56.1" N
Longitude (NAD 83) 100° 48' 17.4" W
Ground Elevation (AMSL) 591.04 m / 1939.1 ft
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Antenna Mode Transmit 2.0 GHz
Interference Objectives: Long Term -154.0 dBW/4 kHz 20%
Short Term -131.0 dBW/4 kHz 0.0025%
Max Available RF Power -12.4 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 2.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	1.10	107.14	9.10	215.00
195	1.09	111.89	9.10	215.00
200	2.59	116.40	9.10	215.00
205	2.75	121.03	9.10	215.00
210	2.87	125.63	9.10	215.00
215	2.94	130.18	9.10	215.00
220	3.04	134.65	9.10	215.00
225	2.37	139.32	9.10	215.00
230	2.15	143.75	9.10	215.00
235	1.82	148.10	9.10	215.00
240	1.99	151.97	9.10	215.00
245	1.95	155.61	9.10	215.00
250	1.24	159.28	9.10	215.00
255	1.26	161.64	9.10	215.00
260	1.36	162.79	9.10	215.00
265	1.40	162.62	9.10	215.00
270	1.25	161.31	9.10	215.00
275	1.22	158.80	9.10	215.00
280	1.47	155.35	9.10	215.00
285	1.72	151.47	9.10	215.00
290	1.78	147.42	9.10	215.00
295	1.49	143.30	9.10	215.00
300	1.37	138.93	9.10	215.00
305	1.01	134.52	9.10	215.00
310	0.81	129.97	9.10	215.00
315	0.61	125.34	9.10	215.00
320	0.00	120.74	9.10	215.00
325	0.00	115.98	9.10	215.00
330	0.00	111.20	9.10	215.00
335	0.00	106.41	9.10	215.00
340	0.00	101.61	9.10	215.00
345	0.00	96.81	9.10	215.00
350	0.00	91.99	9.10	215.00
355	0.00	87.18	9.10	215.00

5. CERTIFICATION

I HEREBY CERTIFY THAT I AM THE TECHNICALLY QUALIFIED PERSON RESPONSIBLE FOR THE PREPARATION OF THE FREQUENCY COORDINATION DATA CONTAINED IN THIS APPLICATION, THAT I AM FAMILIAR WITH PARTS 101 AND 25 OF THE FCC RULES AND REGULATIONS, THAT I HAVE EITHER PREPARED OR REVIEWED THE FREQUENCY COORDINATION DATA SUBMITTED WITH THIS APPLICATION, AND THAT IT IS COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BY: _



Gary K. Edwards
Senior Manager
COMSEARCH
21515 Ridgetop Circle, Suite 300
Sterling, VA 20166

DATED: November 25, 2025