

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of	)	Call Sign(s):	WA9XWE
	)		WA9XWC
Northwood Space Corp.	)		WA9XWB
	)		WA9XVX
Application for Conventional	)		WA9XVW
Experimental Radio License	)		
	)	File No.	0843-EX-CN-2026

APPLICATION FOR CONVENTIONAL EXPERIMENTAL RADIO LICENSE

Pursuant to Sections 5.54(a)(1) and Section 5.61(c) of the Federal Communications Commission's (FCC or Commission) rules, Northwood Space Corp. (Northwood) hereby requests a conventional experimental radio license to enable the short-term testing and development of Northwood ground station service in partnership with Turion Space Corp. (Turion) for two (2) years.

In this application and an accompanying application filed by Turion, Northwood and Turion seek conventional authority for the same operations on the same conditions previously authorized in Special Temporary Authority (STA) File Nos. 0363-EX-ST-2026, 0362-EX-ST-2026, 0361-EX-ST-2026, 0360-EX-ST-2026, and 0358-EX-ST-2026 (Northwood), and 0427-EX-ST-2026 (Turion).

A. Description of the Test

Under this experimental license, Northwood will conduct short duration testing to confirm on-orbit compatibility of Northwood ground stations located at the following locations:

<u>Location</u>	<u>State</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Altitude</u>
Ventura	California	34° 18' 52.3"N	119° 06' 14.3"W	58 m
Brewster	Washington	48° 08' 46.9"N	119° 41' 59.8"W	383 m
Loring	Maine	46° 56' 00.9"N	067° 54' 34.0"W	207 m
Bismark	North Dakota	46° 52' 56.1"N	100° 48' 17.4"W	509 m
Talkeetna	Alaska	62° 20' 00.7"N	150° 02' 15.8"W	146 m

The tests will enable Northwood to characterize Prism antenna signal acquisition and tracking performance (e.g., carrier-to-noise ratios, signal-to-noise ratios, bit error rate performance, and antenna pointing accuracy) against operational Turion LEO satellites across realistic tracking geometries, from the 5° minimum earth-station elevation angle up to overhead passes.

Specifically, Turion's DRIOD.002 spacecraft will seek to connect with the Northwood Ground Station up to three times per day, with each connection lasting approximately 10 minutes. All operations will be on a strict non-interference basis and will be terminated in the event of an interference event reported to the following stop buzzer contact below:

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20701 Manhattan Place
Torrance, CA 90501
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This test will only be conducted within the United States on the frequencies and technical parameters set forth in Table 1, below.

Table 1. Experimental License Test Frequencies

<u>Operator</u>	<u>Frequency</u>	<u>Bandwidth</u>	<u>EIRP</u>	<u>Beam Name</u>
Turion	8210.0 MHz	70 MHz	11.7 dBW	XTX
Northwood	2057.0 MHz	128 kHz	46.0 dBW	SRX3

B. Ground Segment

Northwood is developing a new Ground Station as a Service model that will enable worldwide high-performance, distributed satellite ground capacity for government and commercial missions. This experimental license will provide Northwood with the ability to test and demonstrate initial operations.

Northwood will operate all transmissions from the sites in accordance with the licensed frequency and bandwidth of the DRIOD.002 SRX3 beam. Northwood will only enable emissions while tracking the DRIOD.002 spacecraft during a pass over the Northwood Ground Station, and will cease upon reaching below 5-degree elevation pointing.¹ The Northwood Ground Station antenna conforms to the ITU-R 465-6 standard to ensure that sidelobe characteristics are not causing harmful interference, and total radiated power will meet Commission requirements limiting maximum power for Earth stations.²

C. Space Segment

Turion has an existing STA (File No. 0427-EX-ST-2026) authorizing downlink transmission from the DRIOD.002 spacecraft for communication with these Northwood ground stations. Turion has filed a companion application for a conventional experimental license seeking the same operations with the same sites and on the same terms. Operations under this experimental license will occur only to the extent authorized for both the Turion satellite and Northwood sites.

¹ See 47 CFR § 25.205 “Minimum antenna elevation angle”

² See 47 CFR § 25.204 “Power and out-of-band emission limits for earth stations”

D. License Period

Northwood requests a license period of two (2) years in order to accommodate any delays in testing. Northwood will notify the Commission in the event of a permanent discontinuance of the station prior to the license expiration date.

E. NTIA Coordination

The requested operations were recently coordinated through NTIA through the processing of Turion STA File No. 0427-EX-ST-2026 (granted on April 21, 2026) and Northwood STA File Nos. 0363-EX-ST-2026, 0362-EX-ST-2026, 0361-EX-ST-2026, 0360-EX-ST-2026, and 0358-EX-ST-2026 (granted April 23, 2026). Given the recent coordination of these exact same operations, Northwood has not requested pre-coordination in an effort to minimize duplicative coordination burdens on the agencies. Northwood understands that this application will be subject to coordination through NTIA. Northwood reiterates that it does not seek any changes to the previously coordinated STA operating parameters and conditions in this conventional license application.

F. Other Documentation

In support of this Application, Northwood provides the following supporting documentation, which it also provided in support of the granted STAs:

- (1) Northwood has coordinated the proposed frequency usage with existing terrestrial users and with applicants for terrestrial station authorizations with previously filed applications in accordance with the procedure outlined in 47 CFR §25.203(c).

Reports for each site are attached to this application.

(2) Northwood has performed a Radiation Hazard analysis of the site and intended operations for this experimental license in accordance with the procedure outline in OET Bulletin 65. Reports for each site are also attached to this application.

G. Previous Authorizations

As stated, Northwood received STAs covering the same experimental operations sought in this conventional license application (File Nos. 0363-EX-ST-2026, 0362-EX-ST-2026, 0361-EX-ST-2026, 0360-EX-ST-2026, and 0358-EX-ST-2026). As grant of this application would serve to replace these existing STAs on the same terms and conditions and with no increase in interference potential to authorized services, this application is also intended to serve as a continuance of these Northwood STAs pending action on this application pursuant to Section 5.61(c) of the Commission's rules. Northwood understands that such continuance applies solely to the operations as authorized and conditioned under the STAs.

Respectfully submitted,

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