

EXHIBIT D

Frequency Justification and Non-GPS Configuration Statement

File No.: 0809-EX-CN-2026

Applicant: Regulus Cyber, Inc.

Application: New Conventional Experimental Radio License, 47 CFR Part 5

1. Purpose

This exhibit provides justification for each of the eleven (11) requested frequencies, documents the applicant's exclusion of GPS-overlapping frequencies at the equipment configuration level, and cross-references the applicant's prior DD Form 1494 spectrum certification obtained through DoD channels.

2. Requested Frequencies - GNSS EW Module

The GNSS EW Module operates on six (6) discrete center frequencies spanning two receiving antenna assemblies. All frequencies correspond to signal center frequencies of non-GPS satellite navigation constellations. GPS L1 (1575.42 MHz), L2 (1227.6 MHz), and L5 (1176.45 MHz), and overlapping signals from other constellations that share the same center frequency as GPS, are excluded at the equipment configuration level and are not accessible under any operational mode of the licensed configuration.

2.1 L-Band Upper Antenna (1550-1650 MHz)

(a) 1561.098 MHz - BeiDou B1I

Center frequency of the BeiDou B1I navigation signal. Offset 14.3 MHz below GPS L1 (1575.42 MHz). No overlap with GPS-allocated frequencies. Requested for the purpose of denying BeiDou navigation to hostile UAS platforms that rely on the BeiDou constellation.

(b) 1601.71875 MHz - GLONASS L1

Approximate center of the GLONASS L1 FDMA channel plan (channels -7 through +6 span approximately 1598.0625 to 1605.375 MHz, with channel spacing of 0.5625 MHz). Offset 26.3 MHz above GPS L1. No overlap with GPS-allocated frequencies. Requested for the purpose of denying GLONASS navigation to hostile UAS platforms that rely on the GLONASS constellation.

2.2 L-Band Lower Antenna (1150-1300 MHz)

(a) 1207.14 MHz - Galileo E5b and BeiDou B2b

Common center frequency of the Galileo E5b and BeiDou B2b navigation signals. Offset 20.5 MHz below GPS L2 (1227.6 MHz) and 30.7 MHz above GPS L5 (1176.45 MHz). No overlap with GPS-allocated frequencies. A single carrier frequency serves both constellations, providing efficient denial coverage.

(b) 1245.78125 MHz - GLONASS L2

Approximate center of the GLONASS L2 FDMA channel plan (channels -7 through +6 span approximately 1242.9375 to 1248.625 MHz). Offset 18.2 MHz above GPS L2. No overlap with GPS-allocated frequencies.

(c) 1268.52 MHz - BeiDou B3I

Center frequency of the BeiDou B3I navigation signal. Offset 40.9 MHz above GPS L2. No overlap with GPS-allocated frequencies.

(d) 1278.75 MHz - Galileo E6

Center frequency of the Galileo E6 navigation signal. Offset 51.2 MHz above GPS L2. No overlap with GPS-allocated frequencies.

3. Requested Frequencies - RF Effector

The RF Effector operates on five (5) discrete frequency bands corresponding to the most common command-and-control, telemetry, and video downlink bands used by commercial and improvised unmanned aerial systems. Each band is served by a dedicated antenna assembly optimized for the band's propagation characteristics.

(a) 415-485 MHz - UHF C2 band

Used by long-range UAS command-and-control links and telemetry systems, including certain military and government UAS in export configurations that have been encountered in threat scenarios. Antenna gain 3 dBi; mean power 50 W; ERP 99.6 W.

(b) 850-930 MHz - 900 MHz ISM/UHF band

Used by long-range UAS C2 links operating under Part 15 unlicensed rules in the 902-928 MHz ISM band. Antenna gain 6 dBi; mean power 50 W; ERP 199.5 W.

(c) 2400-2500 MHz - 2.4 GHz ISM band

Primary consumer UAS C2, telemetry, and video downlink band. Includes DJI OcuSync, Wi-Fi-based UAS C2, and Bluetooth-based short-range UAS. Antenna gain 8 dBi; mean power 50 W; ERP 315 W.

(d) 5150-5350 MHz - 5 GHz U-NII lower band

Used by consumer and prosumer UAS video downlink and long-range C2 links, particularly DJI OcuSync and similar OFDM-based systems operating in U-NII-1 and U-NII-2A. Antenna gain 10 dBi; mean power 50 W; ERP 500 W.

(e) 5500-5900 MHz - 5 GHz U-NII upper band

Used by consumer and prosumer UAS video downlink and long-range C2 links operating in U-NII-2C and U-NII-3, including racing and FPV drones. Antenna gain 10 dBi; mean power 50 W; ERP 500 W.

4. Non-GPS Configuration Enforcement

The applicant certifies that the GNSS EW Module is configured at the equipment level - through firmware, filter selection, and frequency synthesizer channel restrictions - to preclude transmission on the following GPS and GPS-overlapping frequencies under any operational mode of the licensed configuration:

- GPS L1: 1575.42 MHz
- GPS L2: 1227.6 MHz
- GPS L5: 1176.45 MHz
- Galileo E1: 1575.42 MHz (overlaps GPS L1)
- BeiDou B1C: 1575.42 MHz (overlaps GPS L1)
- BeiDou B2a: 1176.45 MHz (overlaps GPS L5)
- Galileo E5a: 1176.45 MHz (overlaps GPS L5)

This exclusion is enforced through equipment-level configuration rather than operational procedures alone, providing the Commission with high confidence that no civilian GPS-based service will be affected by the licensed operations.

5. DoD Spectrum Certification Reference

The equipment described in this application has been characterized under DoD spectrum certification procedures and is documented in DD Form 1494 (J/F 12) issued by the Navy and Marine Corps Spectrum Center, Fort Meade, Maryland. The DD Form 1494 documents the equipment's transmitter and receiver characteristics, antenna characteristics, out-of-band emission mask, harmonic content, and spurious levels. A copy is available on request.

The DD Form 1494 authorizes operation on both GPS and non-GPS frequencies under the NTIA/DoD spectrum authority for use at DoD installations, but under this Part 5 application, only the non-GPS frequencies enumerated in Sections 2 and 3 above are being requested, consistent with the FCC's jurisdictional scope.

6. Interference Protection

The applicant will implement the following interference-protection measures throughout the experimental period:

- Antenna sector control and physical alignment to minimize emissions in directions where protected services are located.
- Coordination with the installation spectrum manager on a per-activation basis to identify active nearby spectrum users.
- Real-time monitoring of transmitter output and immediate cessation of operations in the event of any indication of harmful interference to authorized users.
- Post-operation review with the installation spectrum manager to verify no interference occurred and to refine future coordination.

- *End of Exhibit D* -