

APPLICATION FOR EXPERIMENTAL AUTHORITY

Anduril Industries respectfully requests authority to operate 2 General Dynamics GPSRKL12G GPS retransmitters at a location in Pickaway County, Ohio.

The radios would use the bands: 1575.42 MHz. Experimental operation of the radios would allow Anduril Industries to conduct GPS receiver testing at an indoor location.

1. Company Background

Anduril Industries is a limited liability company specializing in technological innovation. This submission includes confidential and proprietary information related to technological advancements in radio communications. Anduril Industries' address of record and Registration Number are as follows:

Anduril Industries

1400 Anduril

Costa Mesa, CA 92626

FRN: 0028824514

2. Station Location

At Arsenal 1 (Pickaway County, Ohio), Anduril Industries will operate two retransmitters indoors.

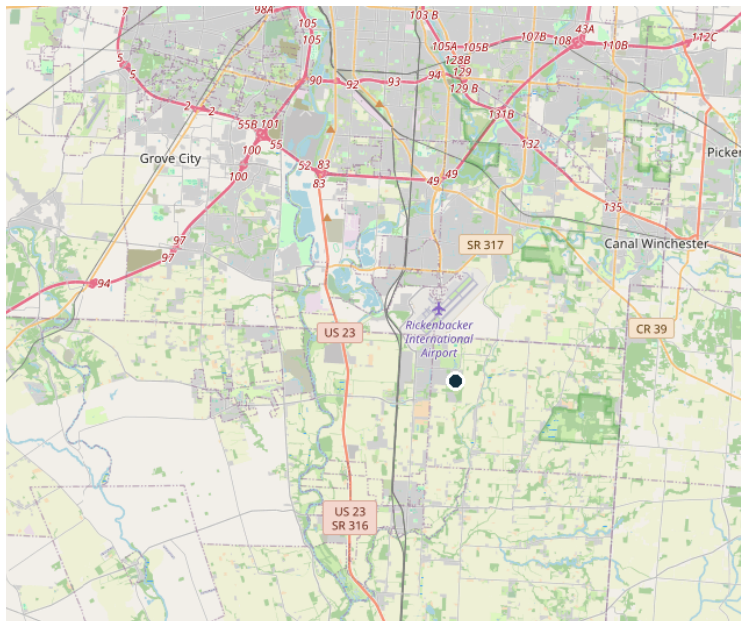
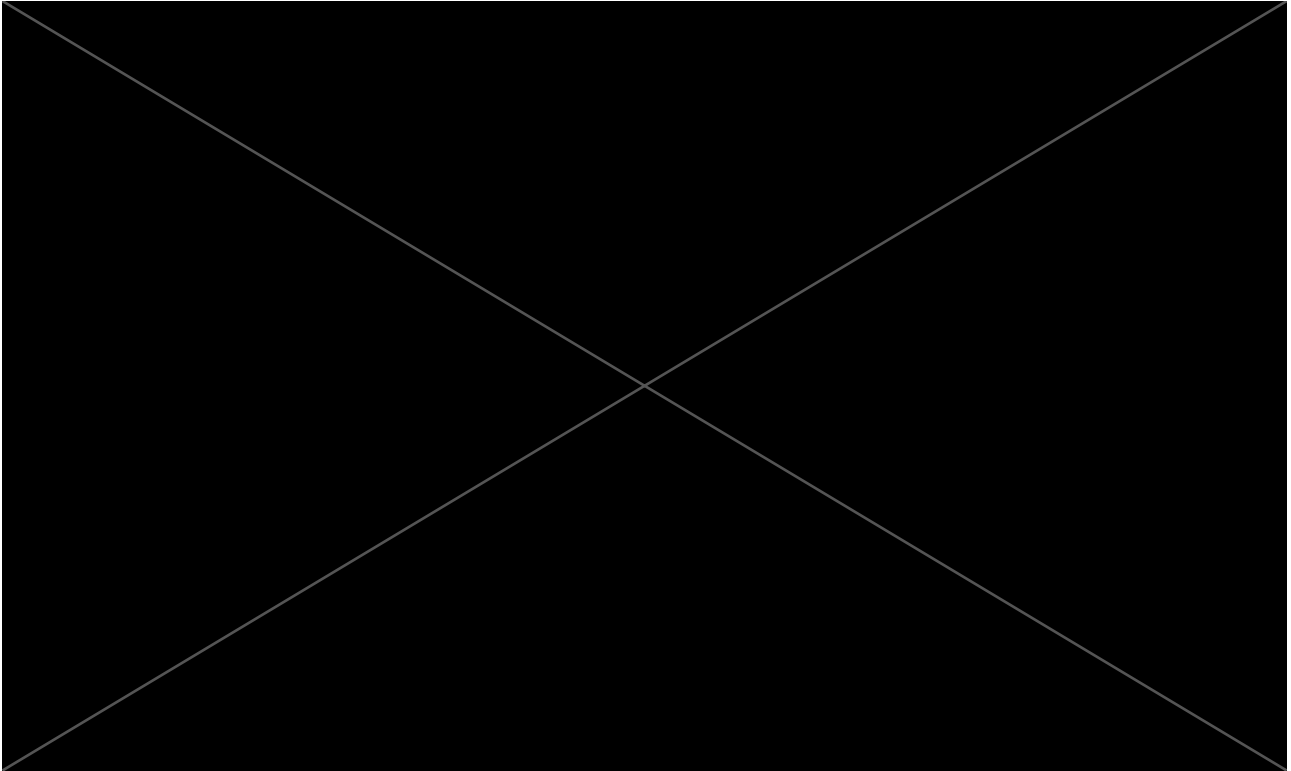


Figure 1 - Location of the Installation

¹ See 47 C.F.R. § 5.115.



3. Frequencies

The GPSRKL12G radio would use the following bands: 1575.42 MHz. Anduril Industries will comply with any limitations applied to non-Federal users in these bands pursuant to the FCC Table of Frequency Allocations located at 47 C.F.R. § 2.106. Anduril Industries will operate with the minimum necessary power to conduct its operations and will not exceed the power levels specified in this application and will operate with the emissions, modulation techniques, and frequency ranges specified in this application.

4. Safety

Anduril Industries will comply with FCC rules and regulations regarding the operation of transmitting antennas. All power levels will comply with the limits set forth in the FCC's rules, including those relating to human exposure to radiofrequency radiation. In addition, all personnel who will operate the equipment are knowledgeable as to the effects of radiofrequency energy and will have the ability to control their exposure.

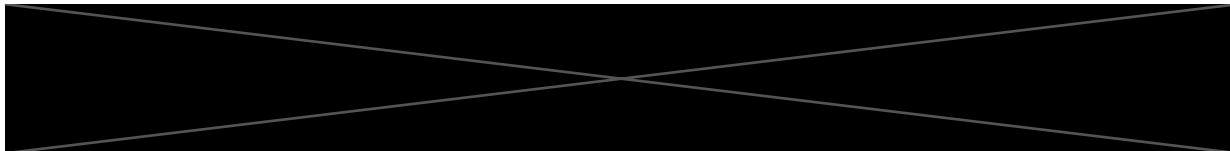
5. Interference Protection

To support FAA Level 1 GPS Re-Radiator pre-coordination, Anduril calculated the maximum received power level at the required 100-foot (30-meter) reference distance from the repeater, per NTIA Redbook Section 8.3.28(f) (limit: -140 dBm/24 MHz as received by an

¹ See 47 C.F.R. § 5.115.

isotropic antenna). Using free-space path loss at 1575.42 MHz and the unit's peak ERP of 19.2 pW (-77.17 dBm), the calculated received power at 30 meters is -143.10 dBm/24 MHz -- a 3.10 dB margin below the -140 dBm/24 MHz limit, indicating compliance. This calculation assumes a 0 dBi (isotropic) receive antenna and free-space propagation with no additional building attenuation credited.

The outside of the structure is steel, and we expect this would result in additional signal attenuation from the building.



Anduril Industries recognizes that the operation of any equipment under experimental authority must not cause harmful interference to authorized facilities. Anduril Industries also recognizes that its proposed operations may require coordination with existing licensees authorized on the requested frequencies.

Anduril Industries will fully coordinate and operate on a non-interference, non-protected basis with anyone affected or reasonably likely to be affected. Should interference occur, Anduril Industries will take immediate steps to resolve the interference. For instance, it will operate on another authorized frequency, provided such frequency is not within the restricted frequencies set forth in 47 C.F.R. § 15.205, or it will discontinue operation.

6. Restrictions on Operation

Anduril Industries recognizes that permission to operate under FCC experimental authority confers no long-term rights. Anduril Industries does not propose to market, sell, or lease equipment to end users or conduct a market trial in conjunction with these operations.

7. Request for Waiver of Station Identification Requirements

Anduril Industries requests a waiver of the station-identification requirements in section 5.115 of the Commission's rules.¹ Grant of the requested waiver will promote the public interest by allowing Anduril Industries to determine the most effective operating capabilities of the equipment as part of this operation.

8. Technical and "Stop Buzzer" Contact Information

If Anduril Industries must terminate operations due to any interference concerns, the technical and "stop buzzer" point of contact is as follows:

James Miller

¹ See 47 C.F.R. § 5.115.

Anduril Industries

1400 Anduril

Costa Mesa, California 92626

Telephone: (949) 827-4993

Email: spectrum@anduril.com

For these reasons, Anduril Industries respectfully requests approval of experimental authority.

¹ See 47 C.F.R. § 5.115.