

Narrative

Anduril Industries, Inc. seeks authority to modify its existing experimental authority¹ by adding three radars to the Capistrano Test Site in Orange County, California. The existing license authorizes Anduril to evaluate the Elta Systems EL/M-2026BF (“Elta”) radar using the 10.200-10.500 GHz band.² Anduril seeks authority to add (1) an Aerostar HiPointer150 (“Aerostar”) radar; (2) an SRC Hawk V(2) SRC2401C (“SRC Hawk”) radar; and (3) a Teledyne FLIR R20SS V2 (“Teledyne”) radar to this site. Authority to operate these radars at the Capistrano Test Site promise to yield improved location data and allow for better, more detailed performance evaluations of all on-site equipment.

1) Company Background

Anduril Industries, Inc. is headquartered in Irvine, California. Its address and FCC Registration Number are as follows:

Anduril Industries, Inc.
1375 Sunflower Avenue
Costa Mesa, CA 92626
FRN: 0028824514

Anduril is a private, for-profit engineering company devoted to technology development for security and defense applications by the U.S. Government. Approximately 80% of Anduril’s business is for the U.S. Government.

2) Need for Modifying Experimental Authority

Anduril seeks authority to modify its experimental authority by adding an Aerostar radar, an SRC Hawk radar, and a Teledyne radar to the Capistrano Test Site for improved evaluation of system performance. Anduril will evaluate the radars’ abilities to detect, track, and identify airborne targets and report target information to a local command-and-control system. Anduril requests to authorize one unit of each radar. The SRC Hawk has two mobile elements and one fixed element for its system.

Grant of experimental authority would allow Anduril to support observation, monitoring, and evaluation of the devices and operating parameters throughout the two-year duration of the experiment. A term of two years will offer flexibility should issues with inclement weather, variations in government travel requirements, or other logistical problems arise.

¹ Application of Anduril Industries, Inc., ELS File No. 1379-EX-CN-2022 (granted Feb. 1, 2023).

² See *id.*

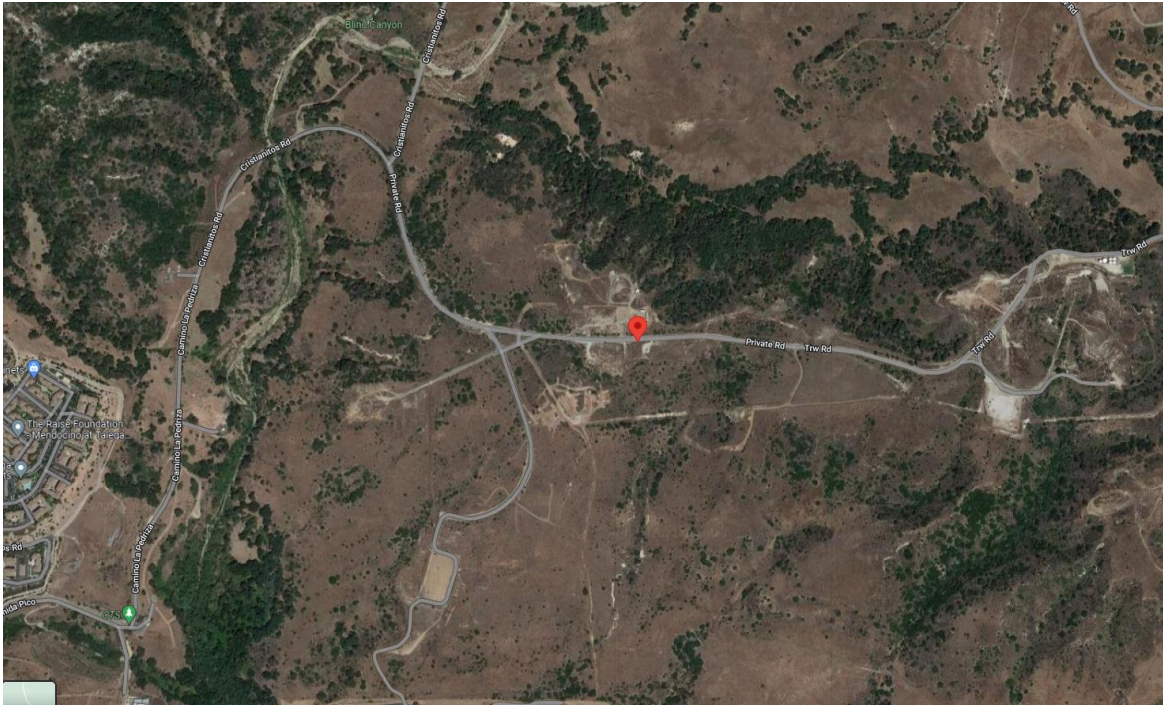
The following table summarizes the proposed frequencies of use and other key operating parameters that Anduril seeks authority to add to the existing experimental license.

Equipment	Frequency Range (MHz)	Station Class	Output Power / ERP	Frequency Tolerance	Emission Designators	Modulation Signal
Aerostar radar	9380-9700	Fixed	2825.9 W (ERP)	.003	70M0P0N	N/A
Teledyne radar	9300-9500	Fixed	25 W (Output Power)	.005	92M0F0N 46M0F0N	FM Continuous Wave
SRC Hawk radar	16210-16500	Mobile	9.332 kW (ERP)	.01	3M06Q3N 3M22Q3N 3M96Q3N 4M65Q3N 6M35P0N	FM Pulse
		Mobile	18.6 kW (ERP)	.01	5M00Q3N	FM Pulse
		Fixed	9.332 kW (Output Power)	.01	6M35Q3N	FM Pulse

3) Station Location

Anduril seeks authority to operate radiocommunication equipment at a test range at the Capistrano Test Site. The Capistrano Test Site is a remote, 2,700-acre research and development complex in southern Orange County, California. An image of the site appears below.

Station Location: 33°27'43.3"N 117°33'31.1"W



4) Request for Waiver of Station Identification Requirements

Anduril requests a waiver of the station identification requirements in section 5.115 of the Commission’s rules.³ Grant of the requested waiver will promote the public interest by allowing Anduril to determine the capabilities and most effective operating settings of the antennas and associated equipment involved in this experiment.

5) Frequencies Desired

Anduril seeks authority to use the 9300-9700 and 16210-16500 MHz band on a temporary, non-protected, non-interference basis within a 5 km radius of the site location.

6) Power Levels

Anduril will operate with the minimum necessary power to conduct its operations and will not exceed the power levels specified in this application.

³ See 47 C.F.R. § 5.115.

7) Type of Emission, Modulation Technique, and Bandwidth Required

Anduril will operate with the emissions, modulation techniques, and frequency ranges specified in this application. If other emission modes and modulation techniques are used, in no event will the emissions extend beyond the frequency bandwidths or bands requested.

8) Duty Cycle

Anduril will use all radars on an intermittent basis. Testing of the SRC Hawk, Aerostar, and Teledyne radars will occur for a period of 10 hours or less during any 24-hour period. Anduril understands that other stations may be licensed on the channels Anduril has requested. If any interference occurs, Anduril will operate on another authorized frequency, discontinue its operations, or take other immediate steps to resolve the interference.

9) Safety

Anduril will comply with all Federal Aviation Administration (“FAA”) and FCC rules and regulations regarding the installation and operation of antennas and their support structures. 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.

10) Interference Protection

Anduril recognizes that the operation of any equipment under experimental authority must not cause harmful interference to authorized facilities. Anduril also recognizes that its proposed operations may require coordination not only with the Interdepartment Radio Advisory Committee (“IRAC”) of the National Telecommunications and Information Administration (“NTIA”), but also with existing non-Federal government licensees authorized on the proposed frequencies of operation. Anduril will fully coordinate and operate on a non-interference, non-protected basis with anyone affected or reasonably likely to be affected by its proposed operations.

Anduril’s experimental operations are unlikely to cause interference. Anduril’s operations will be conducted on a limited basis in remote areas as described above. Anduril will also limit the power and transmitting times of the proposed operations to the minimum necessary to conduct its evaluations. Should interference occur, Anduril 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 will discontinue operation.

11) Restrictions on Operation

Anduril recognizes that permission to operate under FCC experimental authority confers no long-term rights.

Anduril does not propose to market, sell, or lease equipment to end users or conduct a market trial in conjunction with this test.

12) Technical and “Stop Buzzer” Contact Information

Troy Brown is the technical point of contact for this request, and he will serve as the “stop buzzer” if operations must be terminated because of any interference concerns. His contact information is as follows:

Troy Brown
Senior RF Systems Engineer
Anduril Industries, Inc.
1375 Sunflower Avenue
Costa Mesa, CA 92626
Telephone: [949-690-6342](tel:949-690-6342)
Email: tbrown@anduril.com