Echodyne Corp. Application for Experimental License ELS File No. 0550-EX-CN-2021

NARRATIVE STATEMENT

Pursuant to Section 5.3(j) and Section 5.54 of the Federal Communications Commission's ("FCC") rules, Echodyne Corp. hereby respectfully requests a two year experimental license commencing August 1, 2021, to operate in the 24.45-24.65 GHz band.

In support of this request, the following is shown:

A. <u>Purpose of Operation and Need for Experimental License:</u>

The experimental license will enable tests of the EchoGuard radar to support the FAA in evaluating equipment. The EchoGuard radar uses frequency modulated continuous wave (FMCW) emissions to detect and track objects of interest on the air or on the ground.

B. <u>Location of Proposed Operation</u>:

Echodyne proposes to test the radar at two fixed locations within the area described below.

Location	Coordinates (NAD83)	Radius of Operation
San Jose, CA	37°21'06.3"N 121°55'25.2"W	10 Km

C. <u>Technical Specifications:</u>

1. Frequencies Desired

Echodyne requests authorization to operate in the 24.45-24.65 GHz band.

2. Effective Radiated Power

The units to be deployed operate at a peak maximum transmitter power output of 3.2W, and a peak maximum effective radiated power of 246W. Operations will be conducted to comply with rules relating to human exposure to radiation.

3. Modulation and Emissions

The radar operates using linear FM modulation. The emission designator is 45M0F3N. The emissions will not extend beyond the frequency bands requested.

4. Antenna Information

No antennas will be mounted in a fashion that will require approval under FAA and FCC rules and regulations.

5. Equipment To Be Used

Echodyne will conduct the testing with a maximum of 2 units.

D. <u>Protection Against Causing Interference:</u>

In the event that Echodyne receives a complaint of harmful interference from the proposed operation, Echodyne will take immediate action to address the interference. The company has designated Ms. Mo Hartney (contact information below) to act as the "stop buzzer" for this purpose.

E. <u>Restrictions on Operation</u>:

Echodyne recognizes that the operation of any equipment under experimental authority must not cause harmful interference to authorized facilities. Should interference occur, Echodyne will take immediate steps to resolve the interference, including discontinuing operations if necessary.

F. <u>Public Interest</u>:

Grant of an authorization will permit Echodyne to develop innovative radar equipment.

G. <u>Contact Information</u>:

For questions, please contact:

Mo Hartney, Director of Applications Engineering Echodyne Corp. 12112 115th Ave NE Kirkland, WA 98034 (410) 812-6340 mo@echodyne.com

In the unlikely event interference concerns should arise during the period of authorization requested by this application, please contact the company's "Stop Buzzer" identified below:

Mo Hartney Echodyne Corp. (410) 812-6340 mo@echodyne.com