

NARRATIVE STATEMENT

Pursuant to Section 5.3(j) and Section 5.54(a)(1) of the Federal Communication Commission (“FCC”) Rules, KMB Telematics Inc. (“KMB”) hereby respectfully requests a two-year conventional 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. Purpose of Operation and Need for Experimental License

KMB Telematics, headquartered in Arlington, VA, is engaged in the development of modern radar systems for customers within the U.S. government and a variety of other market segments.

An experimental license is requested to allow ground-based testing of a prototype radar system that is being designed to provide airborne detect and avoid capability for small unmanned aerial vehicles (UAVs) as well as ground-based radionavigation and radiolocation capabilities.

A waiver of the station identification requirements of Section 5.115(a) is respectfully requested.

B. Locations of Proposed Operation

KMB proposes to test the radar at temporary fixed locations within the areas described below.

Location	Coordinates (NAD83)	Radius of Operation
Mt Rainier, MD	38° 56' 29" N 76° 57' 54" W	15 km
Aliso Viejo, CA	33° 34' 36" N 117° 43' 51" W	22 km
Foster City, CA	37° 34' 15" N 122° 17' 05" W	27 km

Devices under test will be placed on the ground on a 5 ft tripod with the radar antenna pointed at any azimuth orientation relative to North.

C. Technical Specifications

1. Frequencies Desired

KMB 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 2.5W, and a peak maximum effective radiated power of 5W. 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 200M0F3N. 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

KMB will conduct the testing with a maximum of three units.

D. Protection Against Causing Interference

If KMB receives a complaint of harmful interference from the proposed operation, KMB will take immediate action to address the interference. The company has designated Mr. Bryan Cattle (contact information below) to act as the “stop buzzer” for this purpose.

E. Restrictions on Operation

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

F. Public Interest

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

G. Contact Information

For questions, please contact:

Bryan Cattle, Director of Testing
KMB Telematics Inc.
2111 Wilson Blvd., suite 700
Arlington, VA 22201
(703) 783-3377
fcc@kmb.ac

If concerns about interference should arise during the period of authorization, please contact KMB's "Stop Buzzer" identified below:

Bryan Cattle
(703) 783-3377
fcc@kmb.ac

H. Conclusion

For the foregoing reasons, KMB respectfully submits that approval of this Application is in the public interest, convenience, and necessity.