Haras Development Application for Special Temporary Authority Narrative Statement

Pursuant to Sections 5.51, 5.54(a)(2), and 5.61 of the rules¹ of the Federal Communications Commission ("Commission"), Haras Development ("Haras") hereby respectfully requests special temporary authority for an experimental license for radar operations in the 9.3-9.5 GHz band for a period of six months to generate realistic aircraft location data for a customer demonstration. In support of its request, Haras provides the following information required by Section 5.61:

(1) Name, address, phone number (also email address and facsimile number, if available) of the applicant.

Stop Buzzer Contact: Operations Center

(206) 399-1834

FCC Contact: Henry Gola

WILEY REIN LLP 2050 M Street NW Washington, DC 20036

(202) 719-7561 hgola@wiley.law

(2) Explanation of why an STA is needed.

Haras seeks special temporary authority to perform testing of radar solutions to generate realistic aircraft location data. Haras seeks to commence testing as soon as possible, by Nov. 27, 2023.

(3) Description of the operation to be conducted and its purpose.

Haras proposes to mount a Simrad HALO24 radar on the roof of an existing building to test the ability of the radar and cloud solutions to generate aircraft location data. Testing will be conducted at 12900 Worldgate Drive, Herndon, VA 20170.

(4) Time and dates of proposed operation.

Haras requests special temporary authority for a 180-day period and seeks to commence testing Nov. 27, 2023. Testing will occur for periodic demonstrations each lasting approximately two hours. Haras expects to complete approximately one to two demonstrations per week during this testing period.

¹ 47 C.F.R. §§ 5.51, 5.54(a)(2), 5.61.

(5) Class(es) of station (e.g., fixed, mobile, or both) and call sign of station (if applicable).

The station is a fixed station with no call sign.

(6) Description of the location(s) and, if applicable, geographical coordinates of the proposed operation.

Haras proposes to operate in Herndon, VA at the following coordinates: 38° 57' 20.7354" N, 77° 23' 46.788" W. Testing will be conducted on the rooftop of a building located at 12900 Worldgate Drive, Herndon, VA 20170.

Haras recognizes that experimental operations must not cause harmful interference to authorized facilities. Should interference occur, Haras will take immediate steps to resolve the interference and provides a stop buzzer point of contact in Section (1) above.

(7) Equipment to be used, including name of manufacturer, model and number of units.

Manufacturer	Model Number	Experimental	Number of units
Navico Inc.	Simrad Halo24	No	1

(8) Frequency (or frequency bands) requested.

9.3-9.5 GHz

(9) Minimum and maximum effective radiated power (ERP) and output power.

Frequency Band(s)	Maximum ERP (W)	Output Power (W)
9.3-9.5 GHz	3040.5 W	25.0 W

(10) Emission designator or describe emission (bandwidth, modulation, etc.).

Frequency Band(s)	Emission Designator	Modulating Signal	Frequency Tolerance (%)
9.3-9.5 GHz	100MP0N	Unmodulated Pulse	0.0560111%

(11) Overall height of antenna structure above the ground.

3 meters above the roof on which it is mounted and 37 meters above ground level.

(12) Width of the beam in degrees at the half power point.

Antenna	Beam Width (degrees)
Halo24	Horizontal: 3.9
	Vertical: 22

(13) Orientation in horizontal plane (degrees).

Antenna	Horizontal/Azimuth Range of Boresight Operation
Halo24	360 degrees

(14) Orientation in vertical plane (degrees).

Antenna	Vertical/Elevation Range of Boresight Operation
Halo24	0 degrees