

**FEDERAL COMMUNICATIONS COMMISSION  
APPLICATION FOR SPECIAL TEMPORARY AUTHORITY**

Application File No: 1068-EX-ST-2021

Exhibit for Antenna Registration – Question 5.

Applicant Name

**Name of Applicant:** Cubic Corporation

Address

**Attention:** Alan Schumann

**Street Address:** 9233 Balboa Ave

**P.O. Box:**

**City:** San Diego

**State:** CA

**Zip Code:** 92123

**Country:**

**E-Mail Address:** alan.schumann@cubic.com

Best Contact

**Give the following information of person who can best handle inquiries pertaining to this application:**

**Last Name:** Schumann

**First Name:** Alan

**Title:** System Engineer

**Phone Number:** 858-810-5756

Information

**Callsign:**

**Class of Station:** FX

**Nature of Service:** Experimental

Requested Period of Operation

**Operation Start Date:** 08/01/2021

**Operation End Date:** 01/31/2022

	City	State	Latitude	Longitude	Mobile	Radius of Operation
	San Diego	California	North 32 49 11	West 117 7 49		0.50

**Datum:** NAD 83

**Is a directional antenna (other than radar) used?** Yes

**Exhibit submitted:** No

**(a) Width of beam in degrees at the half-power point:** 18.90

**(b) Orientation in horizontal plane:** 329.00

**(c) Orientation in vertical plane:** 0.10

**Will the antenna extend more than 6 meters above the ground, or if mounted on an existing building, will it extend more than 6 meters above the building, or will the proposed antenna be mounted on an existing structure other than a building?** Yes

**(a) Overall height above ground to tip of antenna in meters:** 10.00

**(b) Elevation of ground at antenna site above mean sea level in meters:** 127.00

**(c) Distance to nearest aircraft landing area in kilometers:** 0.60

**(d) List any natural formations of existing man-made structures (hills, trees, water tanks, towers, etc.) which, in the opinion of the applicant, would tend to shield the antenna from aircraft:** The horn antenna will be mounted to a 60 foot tower. There are six buildings of several stories in height within a 300m radius of the antenna tower.

Action	Frequency	Station Class	Output Power/ERP	Mean Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal
Modified	14.40000000-15.35000000 GHz	FX	32.000000 mW 1.930000 W	P	0.00001000 %	34M3G1D	OQPSK

The figures below show the antenna tower located at Lat/Lon previously noted where a radio antenna horn will be mounted to the tower.



Figure 1. Panoramic view from East to South to West of area near Antenna Tower.



Figure 2. Panoramic view from East to South to West of company campus.

There are five (5) buildings on the Cubic company campus as seen inside the white line border below. All antennas will be installed on building rooftops except for one on the tower, whose location is denoted by the yellow circle.



Figure 3. Google Earth View of Company Campus and Tower Location

In early 2021 construction of two new buildings was completed on the San Diego Cubic company campus. The antenna tower was installed as part of the new construction.

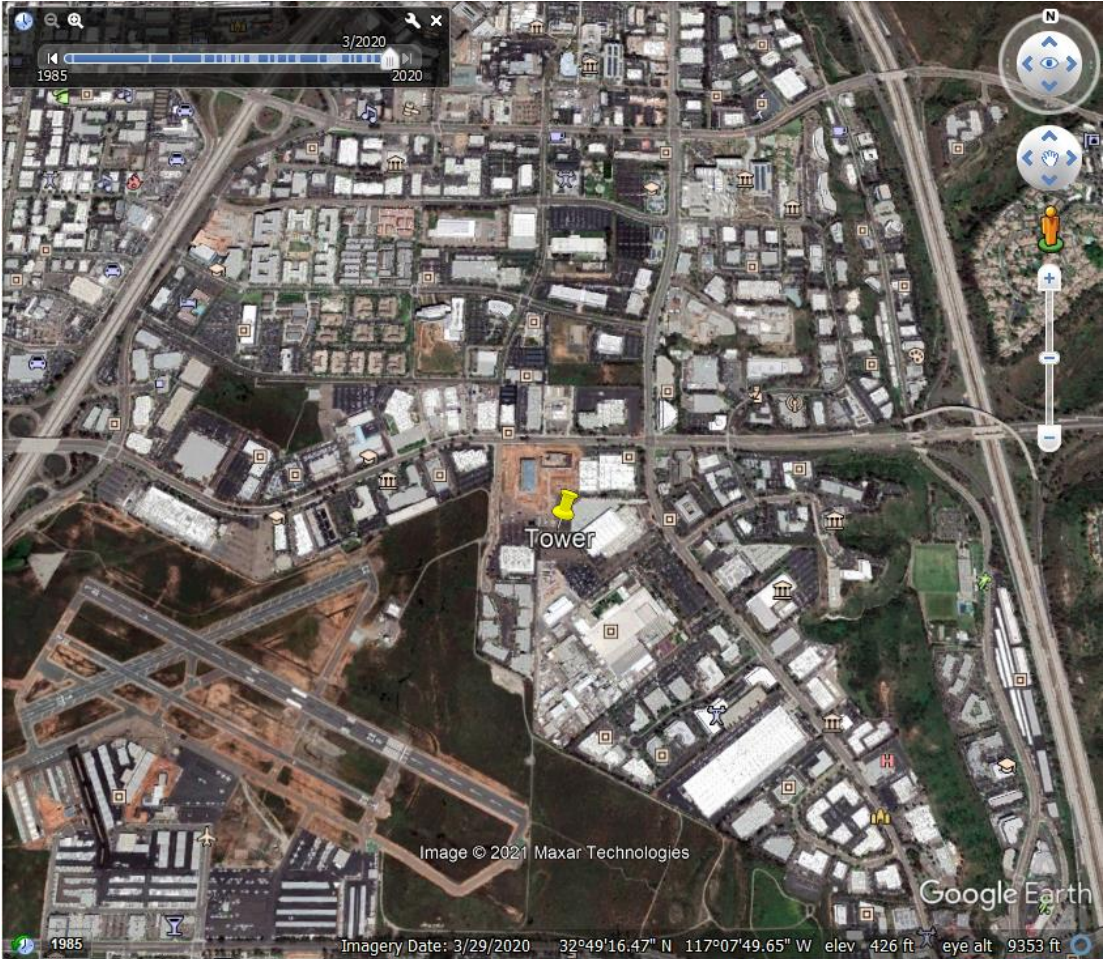


Figure 4. General Vicinity around company campus showing Montgomery Field Airport