

PUBLIC INTEREST STATEMENT

1. Introduction

By the instant request (“Application”), General Dynamics Armament and Technical Products, Inc. (“GDATP”) requests that the Commission grant to GDATP a two year experimental license to operate the facilities (the “Facilities”) specified in the instant Application.

2. Purpose and Nature of the Operation

The testing specified in this Application will be conducted by General Dynamics Armament and Technical Products (GDATP), a business unit of General Dynamics. The purpose of this experiment is to respond to Department of Defense (DoD) requirements for fully digital data links for small UAS to allow for higher concentrations of UAVs operating in the same battle space. Additionally, the new data link is compatible with ground based Remote Video Terminals (ROVER) allowing for real time reception of critical video imagery by ground troops. GDATP is performing this IR&D activity to develop systems to meet these critical needs. Transmissions on the L and S bands will originate from the ground and the air, in two locations – South Carolina and Vermont - as follows:

South Carolina

Ground-Based Transmissions:

Temporary-fixed locations within a 1 km radius around the centerpoint coordinates of: 34-1-1 N.Lat.; 080-43-13 W.Long. (NAD 83) (“Centerpoint Coordinates”) (Centerpoint Coordinates located at Ft. Jackson in Eastover, SC)

Airborne Transmissions:

Mobile area of operations will originate from an unmanned aerial surveillance aircraft, with an area of operations specified as within a 20 km radius around the Centerpoint Coordinates. Maximum flight planned is 1219.2 m above ground level. Ground elevation above sea level is 101.19 m at the Centerpoint Coordinates. Because the Centerpoint Coordinates are located at Ft. Jackson, 1km is specified as the “distance to nearest aircraft landing area.” The flight boundary will be defined as an area up to 20 km West and 10 km North of the Centerpoint Coordinates.

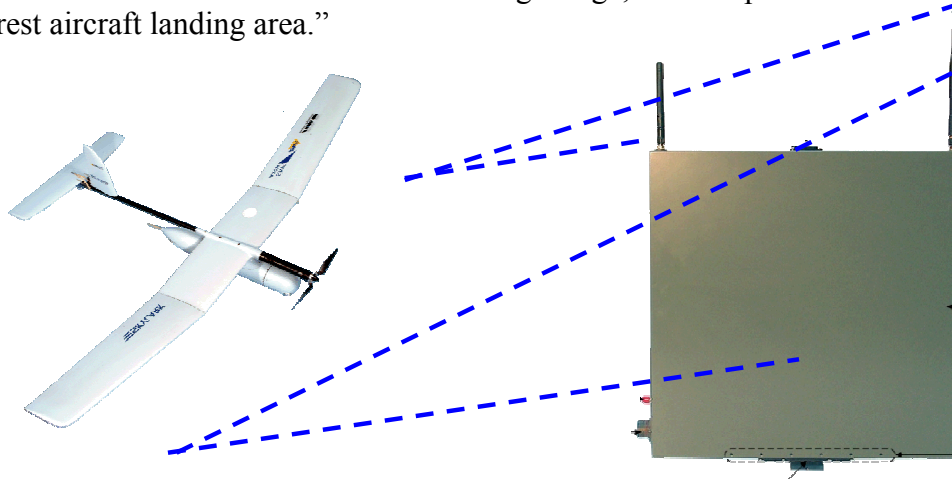
Vermont

Ground-Based Transmissions:

Temporary-fixed locations within a 1 km radius around the centerpoint coordinates of: 44-28-42 N.Lat.; 072-56-57 W.Long. (NAD 83) (“Centerpoint Coordinates”) (Centerpoint Coordinates located at Ethan Allen Firing Range in Jericho, VT)

Airborne Transmissions:

Mobile area of operations will originate from an unmanned aerial surveillance aircraft, with an area of operations specified as within a 7 km radius around the Centerpoint Coordinates. Maximum flight planned is 1219.2 m above ground level. Ground elevation above sea level is 303.89 m at the Centerpoint Coordinates. Because the Centerpoint Coordinates are located at Ethan Allen Firing Range, 1km is specified as the “distance to nearest aircraft landing area.”



3. **Stop Buzzer** – GDATP hereby advises that Mr. Jason Brach will be available by wireless telephone at 802.578.1487 and will act as a “stop buzzer” if any issues regarding interference arise during testing.

4. **Directionality of Ground-Based Antenna Transmissions**

The Antenna Registration for the ground-based transmissions specifies “Yes” in response to the question: “Is a directional antenna used?”. This is to clarify that for such ground-based transmissions, one of 3 different antennas may be used. Of those 3 potential antennas, one is directional, namely the following dual band sector panel antenna operating on both the L and S bands:

Antenna	Gain (Nominal)	Width of Beam in Degrees at half-power point	Orientation in Vertical Plane	Orientation in Horizontal Plane
Dual Band Sector Panel Antenna	13 dBi	25° in Horizontal Plane 60° in Vertical Plane	-10° to +50°	0° to 359°

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