

Over The Edge Restricted Airspace Policy

Prepared by: Robert Pitkin, SPRAT L3

OVERVIEW

The recommended flight exclusion zone extends 250' from the rappel site horizontally and includes the entire airspace from ground level to 400' above. Any approval of small unmanned aerial systems for flight in this area will require the pilot in charge to provide to Over The Edge with their:

1. Pilots Certificate
2. General Liability Insurance Policy in excess of 1 million dollars
3. Flight path and time, as agreed by the lead tech for the event
4. A communication plan, as agreed by the lead tech for the event

Due to the concern of unauthorized pilots seeing other sUAS in the area, the OTE staff at the event site must also be alert for such and aware of how to react.

INTRODUCTION

It is the purpose of this document to outline our company's (Over The Edge) policy on small Unmanned Aircraft System (sUAS or drone) usage at an event site. This document will make references to other materials, mainly from the Federal Aeronautics Association (FAA, a division of the Department of Transportation), the Academy of Model Aeronautics (AMA) and our own records of drone interactions on event sites. While Over The Edge makes no move to enforce laws in any jurisdiction, we will use these documents to show accepted best practices from authoritative sources.

Originally, the FAA prohibited commercial use of drones for any reason without a 'Section 333' waiver. The regulation of drones has matured in the last few years and while recreational drone usage is still self-policed by the aeronautic modelling community, there are clear rules set forth for commercial drone flights under 'Section 107.' With the growing business of drone-based photography, Over The Edge needs a more nuanced approach to working with drone pilots.

For drones that show up at events without prior discussion, the original policy stands, see below

The Policy for unknown drones:

1. Over the Edge prohibits the use of unknown drones at the event site during the event, including but not limited to the following areas:
 - a. The rooftop and rigging area for any training or main rappels
 - b. The exclusion zone of any ongoing rappel, including the vertical space above such exclusion zones
 - c. Any area within 250ft of spectators for the event
 - d. Any other area determined by the on-site staff to require restricted airspace

2. If any unknown sUAS is witnessed operating in the restricted zones, the Site Safety Supervisor is to be notified.
3. The Site Safety Supervisor will then decide on the appropriate action to be taken, which may include but is not limited to:
 - a. Clearing the ropes until the drone has vacated the restricted zones
 - b. Clearing the roof until the drone has vacated the restricted zones
 - c. Clearing the exclusion zone (landing area) until the drone has vacated the restricted zones
 - d. Stopping the event until the drone has vacated the restricted zones
 - e. Any other action deemed necessary by the on-site staff
4. Over the Edge understands that not all sUAS that appear will be known to the client and that the Pilot in Command (PIC) may not be under jurisdiction of the client. A good faith best effort is expected from the client to help resolve these incidents of unknown flyers
5. To prevent the perception that sUAS operation at the event is accepted, all incidents are to be treated equally and resolved in as quick a manner as safely possible. This is to reduce the chances of other sUAS operators from entering the airspace under the assumed acceptance of these platforms

REQUIREMENTS FOR APPROVED COMMERCIAL DRONE OPERATORS AT EVENTS

Just as Over The Edge follows industry best practices and operates with appropriate insurance coverage to protect the participants, we expect our partners to do so.

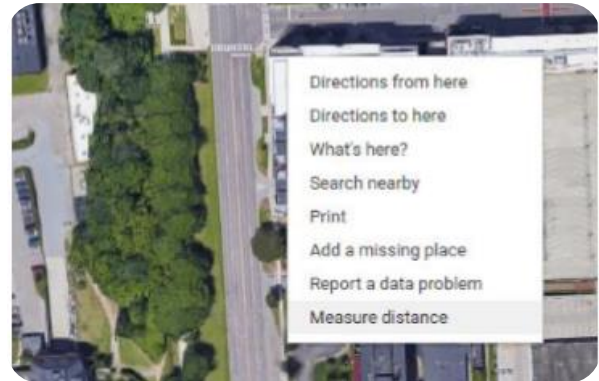
Our staff our certified Ropes Access Technicians and provide their membership ID as proof. We ask that the Pilot in Command (PIC) for the drone is also licensed in accordance with Section 107. This proof can be a photo or scan of the license and transmitted to OTE by email. An example is pictured below:



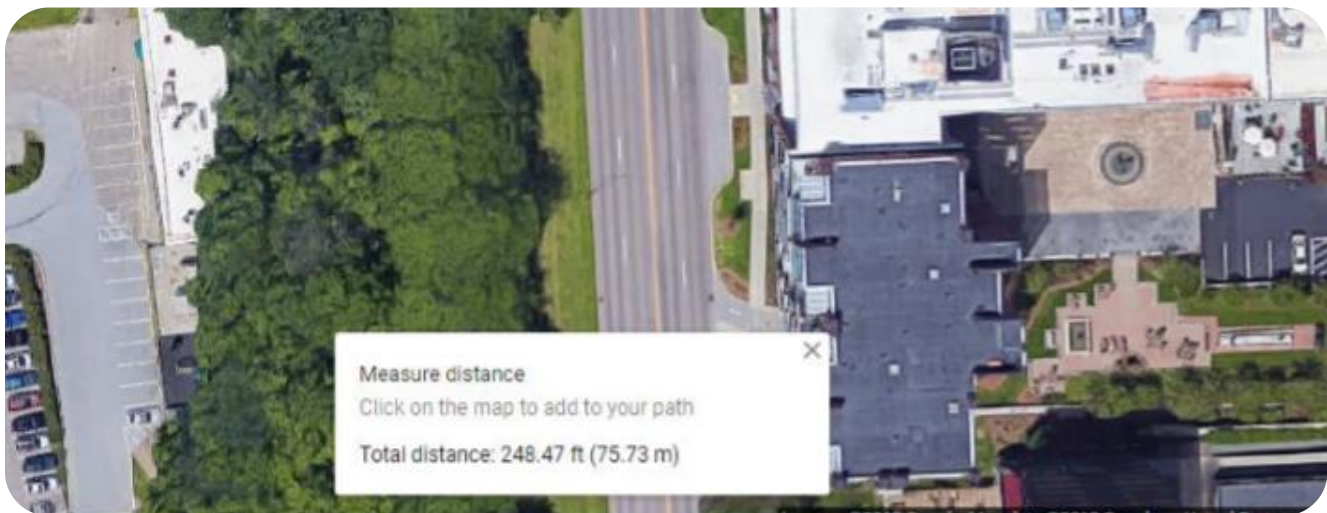
The client already is required to have insurance for the event by contract, and if we are to work with a 3rd party, we also expect them to be insured. OTE carries liability insurance for each event of \$10million. We are asking that a aerial photographer on site show proof of \$1million general liability insurance as well.

USING GOOGLE MAPS TO DISCUSS FLIGHT AREAS AND PATHS

When discussing with an aerial photographer the restricted areas or flight paths to be used it is helpful to have a map of the area with the rough determination of the event restricted zone. Google maps has a 'measure' feature that can be helpful in this pursuit. With Google maps set to "terrain" you can right-click on the landing area of the event to pull up this context menu:



When you select "Measure distance" you can then click away from the landing area to find how far ~250ft is. This may take a few tries to get correct.

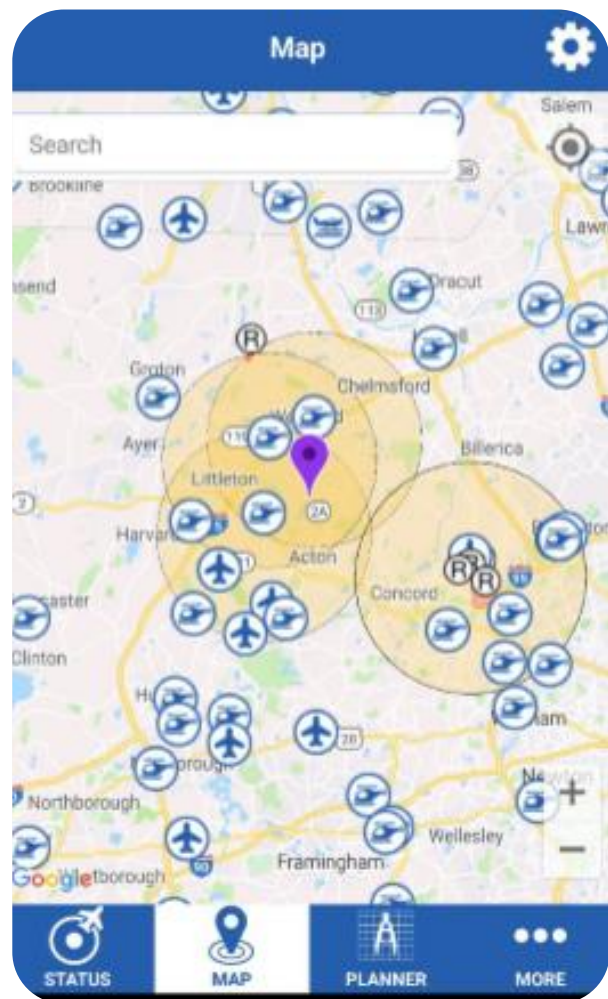
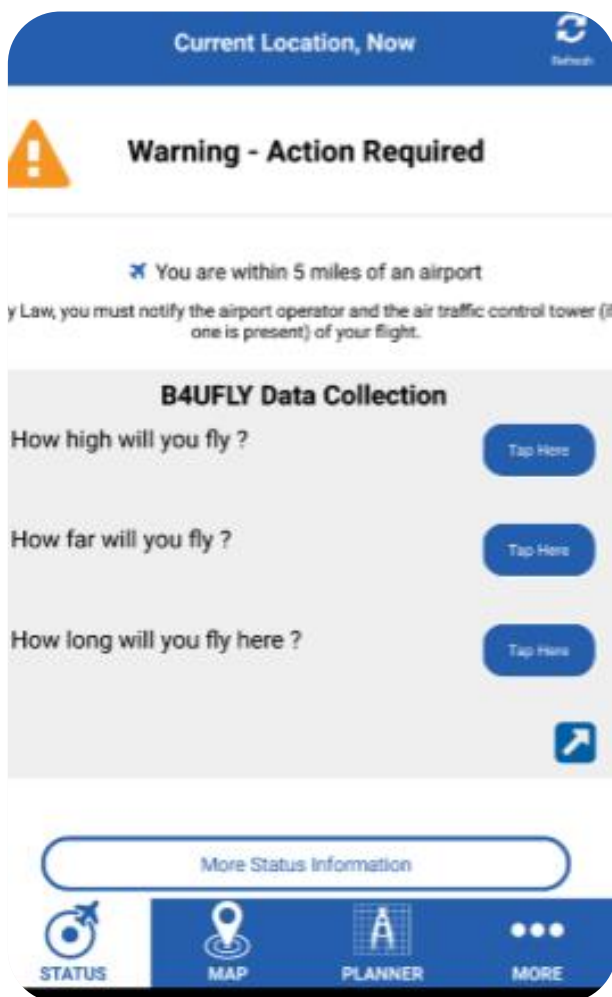


Finally, using a graphics program like Paint or LibreOffice Draw, complete a circle with that as it's radius to indicate the 'drone free area' for the event.



USING THE “B4UFLY” SMARTPHONE SOFTWARE TO DISCUSS FLIGHT PATHS

The FAA has published software for drone pilots under the name B4UFLY. This software, with screenshots below, provides real-time information to drone pilots of the airspace restrictions around them, using the phone’s location data and the FAA databases. The screenshots below show the warning upon starting the software, and examples of its different functions, which include maps and planning. This information can be useful for the techs on the ground interacting with pilots.



COMMUNICATION ON EVENT

There are unforeseen occurrences every day, and event days are no different. The drone flights and the rappel can both be affected by outside forces like weather. If the drone is flying when something unforeseen occurs, the OTE team and pilot must work together to ensure everyone's safety and the integrity of the event. The lead tech for the event will work out a communication plan that is confirmed during the event's safety meeting. Ideally, the plan will also include a backup method and agreed upon terminology, for example in reference to the face of the building the ropes are on and the exclusion zone. A plan with a backup could be as simple as short-range radio communication, and sharing of cell phone numbers in case there is radio interference.

SAFETY MISSION OF PROFESSIONAL ROPE ACCESS TECHNICIANS AND OVER THE EDGE

There are inherent risks when working at height and a large part of the job Rope Access Professionals do is mitigate those risks. It is industry practice to classify the work area in terms of these risks, being the Safe Zone, Hazard Zone, and Access Zone (see diagram below for examples). To mitigate risks in these areas the on-site technicians must be able to control access to the zones and as many factors as possible (understanding there will always be unforeseeable risks in any situation, i.e. Acts of God). By allowing sUAS operation at the Event Site (work site) there is an uncontrollable factor added to the work site, nullifying the ability of the technicians to mitigate risks.

By having drones in the area, the fear is that they can become an uncontrolled drop hazard or crash into the participants or ropes. We at OTE believe that the above outlined procedures will protect our clients, participants and staff during events.



REFERENCES Websites

<http://www.faa.gov/uas/>

https://www.faa.gov/uas/where_to_fly/b4ufly/

Code of Federal Regulations; Title 14: Aeronautics and Space; Part 107 Small Unmanned Aircraft Systems

[https://www.ecfr.gov/cgibin/retrieveECFR?](https://www.ecfr.gov/cgibin/retrieveECFR?gp=1&SID=dcf7ddb5f58f33726d33d7bc50a36d72&ty=HTML&h=L&mc=true&r=PART&n=pt14.2.107)

[gp=1&SID=dcf7ddb5f58f33726d33d7bc50a36d72&ty=HTML&h=L&mc=true&r=PART&n=pt14.2.107](https://www.ecfr.gov/cgibin/retrieveECFR?gp=1&SID=dcf7ddb5f58f33726d33d7bc50a36d72&ty=HTML&h=L&mc=true&r=PART&n=pt14.2.107)

<http://www.modelaircraft.org/>

<http://knowbeforeyoufly.org/>