

# Automated Surveying Drone

**Status:** Filled

**Group Members:** Jason Wallace, Van Stonehouse, Andrei Vulpe, Tom Wallis, Charlie Bennett

**Sponsor(s):**

**Supervisor(s):**

- Implemented safety protocols
  - Imminent battery failure
  - Loss of a motor
  - Component failure

Month 7.

- User is capable of easily program the drone
  - Pathing
  - Area Limits
  - Requested Data

Drone will be able to comply with all survey orders given to it.

Presentation

### Project Description

Land Surveying is a critical part of any form of construction, as the land must first be cleared before anything can be done to it. However, the actual process of surveying can be extremely long and tedious. This is because common practice is to do it entirely by hand, having the engineer roam the land in question measuring and observing the lay of the land. Many of the larger plots can take months, if not years to complete. A solution for this is to use an airborne drone. A flying drone will be able to circumvent all terrain, and use various sensors to gather the necessary data quickly, and effectively. This will undoubtedly speed up all land surveying, and relieve the engineers of having to spend months doing it by hand.