

JANUARY DRONE PRODUCT DESCRIPTION AND SPECIFICATION

1/13/16

REVISION 2.0

PRODUCT DESCRIPTION

January is a smart drone. It's not only interfacing with remote control, but it's also developed to fly automatically and follow any object in an open field. It could be your best friend when you want to do outdoor activities. It will capture your moment when you go down a ski slope, or when you make a fancy move while dirt biking. Show off your skills and January will record it.

Commented [1]: January is the name of the drone for now. I couldn't think of anything at the moment.

MUST

- Implement GPS and WiFi on board
- Autonomously follow an object in an open field with image processing software on board
- Upload an image of an object for the drone to follow
- Keep it as simple as possible
- Ability to follow an object on clear and slightly cloudy days

SHOULD

- Follow an object within a maximum distance of 100 ft
- Fly at maximum altitude of 50 ft
- Able to follow an object with maximum speed of 25 mph
- Keep an appropriate distance within 100 ft
- Able to stop and change direction with respects to the object stopping and/or changing direction
- Minimum flight time of 30 minutes
- Track the object from behind
- Track and differentiate unique, specific object among a collection of possible similar objects

MAY

- If the drone loses track of an object, go back to initial starting position
- Application to connect to the drone
- Store video feed on SD card
- Have camera on a protective cover to protect from dust, moistures
- Add servos for the freedom of camera movement
- Scan a person via drone
- Status LEDs
- Throw drone up in the air for launch