Flight Ground Control Communication Voice Control for Quad-Copter

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INTRODUCTION

Ubiquity Interface specializes in developing quad-copters. The user interface for the quad-copter is for it to be flown with a 2.4 Ghz controller to basically vertically take off, ascend, cruise, descend, and land[1,2]. To increase market share in sales of multirotor aircrafts, Ubiquity Interface Inc., an Arlington, Texas based corporation is currently researching how to add intelligence to the multirotor aircraft.

VOICE CONTROL OF QUADCOPTERS

One of the two features planned is to add user interface for the drone to be able to be controlled with intelligence programmed into multirotor flight controller to enable the pilot of the quad-copter to use voice for two way communication; the quad-copter informs the pilot of the health of the quad-copter and communicates GPS information including landmarks as the quad-copter fly over a scenery, ask for information about where it should fly to. The pilot is able to use touch screen command and voice command via natural language programmed into the quad-copter and the ground station to fly the quad-copter.

The second feature is to convert normal communication of Bluetooth between flight controller and drone. Bluetooth used by flight controller to control drone only enable short range for line of sight flight. With the new regulation FAA is working on and might heed to the calls from Amazon, Google and other corporations that wants to use quad- copter for delivery will make drone maker to innovate the design and communication used to control drone.

The potential economic benefit associated with the development of new quadcopter with LiDAR is very promising. The global UAV industry is expanding at an unprecedented pace. On the contrary, the development of quadcopter communication platform has been sluggish. There is therefore a clear gap in the market that needs addressing by developing advanced quadcopter flight control technology that is reliable and superior to exiting multi-copter technology. Revenue for companies doing research and development work in advanced communication features for multirotor aircrafts will be generated by selling the device to tens of thousands prospective UAV owners. Also of interest to this author are research institutions which are developing applications to advance hybrid control mechanisms that incorporate Wi-Fi and voice control to multirotor aircrafts. Our estimates of the revenue potential are of millions of dollars, since every commercial and military UAV operator will want to use a multirotor aircraft with considerably enhanced performance and safety of operation. This research focuses on Wi-Fi features to allow beyond line of sight flight and voice control of multirotor aircraft flight. This will enable the drone to be able to be control from anywhere in the world. Telecommunication will be used to revolutionize quad-copter in order to increase sales of quad-copters.

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2. **Osemwengie O**. (2017). *Theory and practice in developing advanced small multi rotor aircraft.* Marques Aviation Ltd. London, UK.