

Aerial Surveillance Drone

A Thesis Paper

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A b s t r a c t

Aerial Surveillance Drone (ASD) is intended to farmers, to security personnel, to military commanders and to researches for carrying scientific instruments. ASD can capture still images, record, store and transmit live video to the screen. We used a wireless IP camera, a RC (radio Control) helicopter, wireless router with Laptop and voltage regulator with lithium polymer battery to power the IP camera.

We used Rapid application development (RAD) which uses minimal planning in favor of rapid prototyping. The ASD was in development for ten months. The 1st prototype version zero was too heavy and big for the RC helicopter to carry. The 2nd prototype version one it has a Styrofoam mount and limited battery life of the camera.

The team tested version zero it can't tilt the attached camera. Version one had a burnt camera. The proponents of the project use RAD methodology. The drone is flown by the user thru radio transmitter. It has a 2.4 GHz wireless IP camera; it stream and store captured photos into the computer. The research is viable to be pursued; the system can be improved, given the time and effort.