496 Quad-Copter Project

Weekly Report #1 [8/31/2014 ~ 9/6/2014]

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During this week, we had added in two closed PID loop to roll and pitch of the copter and added supporting code to have a wireless serial connection between the drone and a computer. After this framework, Evan started doing research on how to tune these new drivers and get the ideal values for an ideal flight. To get a better idea on what needs to be tuned and done, we conducted our first hover test. It ended early from a small crash, which did not damage the drone.

Our next agenda is to complete the tuning process of the PID loops and create some sort of testing rig to do future hover tests. I also have decided to build an analog controller in order to control the throttle wirelessly. We also need to do more research into how copters take off and the proper software sequence to safely launch everything.