496 Quad-Copter Project

Weekly Report 2 [9/7/2014 ~ 9/13/2014]

Steven Chen

This week, we worked on tuning the PID from scratch and used a resource guide that Evan had found online. For our first hover test of the week we had used a rig that Kent made for us, however the quad-copter quickly tangled the wires of the rig together forcing it to fly in a dangerous pattern. Our second hover test, we attempted to fly the copter without any rig at all. The quad-copter currently lacks a PID for the attitude control, which made it hard to control and rather dangerous. The last hover test that we conducted was with a rig that we developed with the help of people in the lab. We strung the copter from each of its arm up to the steel pipe and taped the pipe up from the floor and made sure that it had enough clearance to move around. I had to leave before I was able to see the results of the test, but I am pretty sure that Evan or Dee will have it included into their reports.

On a side note, we had to play with a lightweight quad-copter equipped with three different cameras. The flight looks smooth and the controls were very firm and stable. Gives us a good insight into how we should be designing our own control system and what type of flight features can help amateur controllers to use our drone without problems.