

The team met with the client (Dr. Jones) and he outlined the project's short, medium and long-term goals (see the Client Expectations document). Other items from the meeting are as follows...

General Thoughts and Questions

- Need a receiver and a mixer to get new chassis flying
 - We will be programming the ZyBO to do the mixing. An intermediate step is looking at the quad that Jones will [perhaps] be getting for us. There is a delay for funding from Dr. Elia, so that is why nothing has happened yet.
- Initially bring new chassis online using 4-channel RF transmissions (RC controller)
 - Transition to sending commands via Bluetooth and Wi-Fi
- High level overview of PWM/PPM signal pathway
 - PC GUI commands → PC command prompt → tabletop FPGA board → transmission from RC ground controller → onboard receiver → ZyBO board → mixer → signal to individual motors
- Check how large of an SD card we can use in the Zybo and purchase one
 - May already have one in the 488/288 lab to use
- Use only one core of the on-board processor and then incorporate the second core once we complete the basic project goals
- Controls will be mostly in the software on the board (table-top FPGA/mixer) with a long-term plan to move the controls to the onboard hardware (Zybo).
- A suggestion was made to perform some “market research” by looking into other programs. Dr. Jones recommended we look at:
 - University of Pennsylvania
 - Stanford University
- Currently, runtime is 10 minutes
 - Can we improve operational time?
- Dr. Jones said the “golden version” will use MultiWii for the PID
 - The PC currently performs the PID (?)
- Study MultiWii online to get an overview of the PID
- Review previous team's mission statements for help drafting ours

Things to do

- Continue with learning old system thoroughly
- Begin basic programming of Zybo
- Begin chassis assembly
- Other initial tasks listed on the Group Assignments list