

Group Meeting Minutes

Taken by Dylan Humber

November 1, 2016

Members Present

1. Dylan Humber
2. Lucas Doucette

Presentation Feedback

1. Naze32
 - A great option for a controller.
 - Not in spirit of the project, as it is all inclusive. Client desires us to build from the ground up and to solve the control issues ourselves.
2. FreeRTOS and other real-time operating system options.
 - This would enable us to use a single chip.
 - Functionality of the MCU would be moved to the CPU.
 - Project group has no experience with real time operating systems on Advanced RISC Machine processors.
 - In the opposite direction: Further development time could lead to the operations of the CPU migrating to the MCU.
 - Implementation could potentially be out of scope of our project as it is an issue of hardware optimization and not of the control system.
3. Network Security
 - Client desires Wi-Fi communications which would directly yield security features of any Wi-Fi network
 - WPA-2 Personal will most likely be used.
 - Network password should not be uploaded to public version control repositories.
4. Disturbance Tolerances

- Soft value that may be programmed.
- Minimum will be subject to tolerances of implemented sensors.

5. Pixar Controller

- Investigated, confirming with Dr. El-Sankary that we examined what he was talking about.
- If we are correct it is an a;; encompassing drone that utilizes DJI's A2 controller (predecessor to the A3 etioned during the presentation)

Test Planning

Discussed planning of the testing for next week. Outline of testing should be e-ail to Dr. Rhinelanders by noon tomorrow. As well the simulation should be progressed as per the details discussed in our meeting with him last friday.