**DCA Meeting Minutes**

**EE/CpE 4813 – ECE Capstone Design 2**

**Spring 2023**

**Instructor: Johnathan Votion Ph.D. & Professor August Allo**

**Team name: Drone Conversion Appliances (DCA)**

**Team members: Ehab Afsoonko, Conrad Obeng, Lexi McMinn, Mark James Jr., Matthew Moubray**

**Description: Team meeting minutes that documents team meeting times and updates tasks.**

**January 26, 2023 — Meeting from 8:00pm - 9:10pm**

Team DCA went over the team contract and product requirements specification document and made the necessary adjustments.

* Made new group meeting times
* Changed group name from Drone2Rover (D2R) to Drone Conversion Appliances (DCA)
* Edited schedule requirements and created new gantt chart
* Signed and submitted team contract

**January 29, 2023 — Meeting from 3:00pm - 4:00pm**

Team DCA discussed the design of the frame for the new drone and start the process of ordering the necessary parts.

**January 30, 2023 — Meeting from 3:00pm - 3:45pm**

Team DCA continued discussing design frame of the new droneand the parts that will be needed.

* Assigned separate tasks to each team member for different parts
  + Conrad: Research 4 in 1 ESC compatible with pixhawk
  + Matthew: Research forward propeller motor and forward propeller ESC
  + Ehab: Compare existing motors for optimal performance
  + Lexi: Finalize servo count for fixed wing module
  + Mark: Find and pick out battery (min 100c and 4s)

**February 6, 2023 — Meeting from 3:00pm - 4:00pm**

Team DCA began to make the TSRP presentation slides

* Assigned different slides to team members

**February 8, 2023 — Meeting from 3:00pm - 4:00pm**

Team DCA finished and submitted TSRP presentation slides

**February 13, 2023 — Meeting from 3:00pm - 4:00pm**

Team DCA finalizes which VTOL design frame to use

* Order design frame
* Start working on design package

**February 20, 2023 — Meeting from 3:00pm - 4:00pm**

* Work on the design review package

**February 24, 2023 — Meeting from 11:30pm - 12:15pm**

Team DCA finished the the design review meeting with Prof. Votion & Allo

Feedback from meeting:

* Make a stiffer base (add columns, screws, etc)
* Get right propeller size for lift
* Look for some washers to lock in the bolts to prevent it from screwing loose(for the fasteners)
* Make a timeline with different testing stages for status report
* Get something to demo by the next status report
* Our initial goal should be to get the drone to hover with the VTOL airframe on

**February 27, 2023 — Meeting from 1:00pm - 4:00pm**

Team DCA make plans to reach goals by the end of the 5 weeks left

* Make new and revised Gantt chart