Kimberly Lewis

Engineering Design 2 : EGN 4952

Task List

1. Weigh and Measure Parts:   
     
   The first task was to gather all components for the Child Drone and make sure that the measurements are consistent with the specifications given online. Battery: 105 grams, 1 motor: 10 grams, ESC: 55 grams, Voltage Regulator: 10 grams, CrazyFlie: 5 grams, Vegetation with USB: 20 grams, 3D printed prototype frame: 110 grams.
2. Proper Design:   
     
   Currently, the 3D printed prototype Child Drone Frame has 70% filament as well has 4 rectangular extrusions on each leg, 16 in total, and 4 on the center rectangular. Modifications need to be made including extrusions on the end of the legs for stand-up purposes. Other modifications include decreasing filament and possibly cross hatching of current extrusions.
3. Propellers:   
     
   Now that most of the parts have been received, research must go into selecting the correct propellers.
4. Testing:   
     
   It is anticipated that in the following couple of weeks, we will have reached a milestone at which we can properly test the Child Drone.
5. Mother Drone Integration:   
     
   Once flight has been achieved, the custom framing may need to be reviewed and altered in order to connect to the Mother Drone. Further discussion with the Mother Drone team will be done for this but in all likeliness, there may need to be modifications to the Child drone frame to achieve attachment and detachment.