RECOVERY TEAM REPORT

Week 5

Tasks Done: Week 5

-Design of 3D printed piston #43

-Correction of the flight computer PCB #28

-GPS uplink test #6

Tasks Done: Week 5

-Design and implementation of another test to determine amount of force to push the nose cone

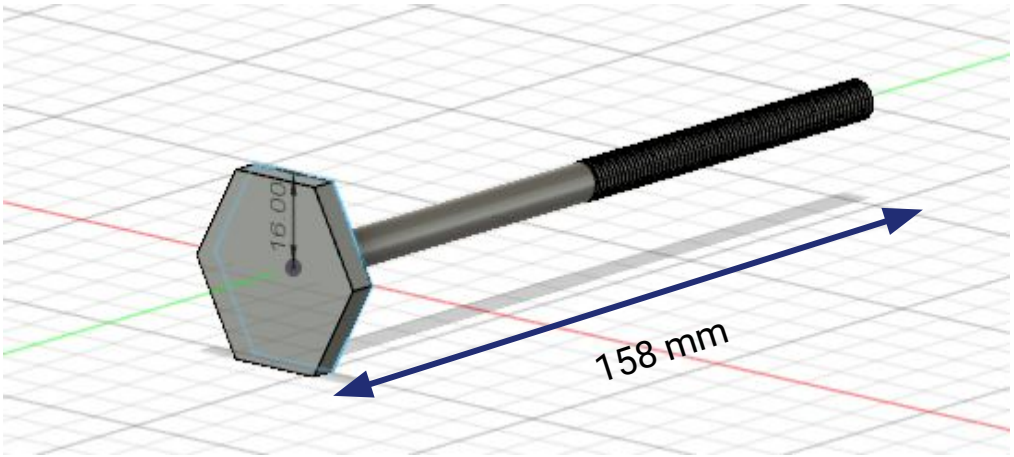
-Correction of pcb and etching

-3d printing of the piston

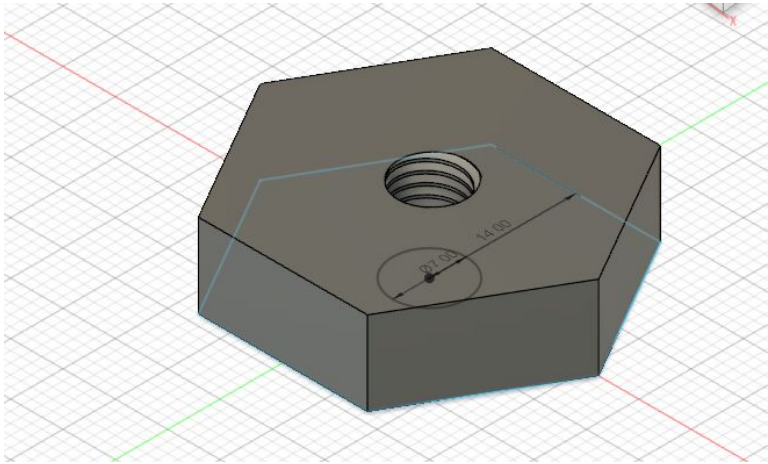
-Writing and testing code for kalman filter

Design of 3D printed piston #43

Rod



nut

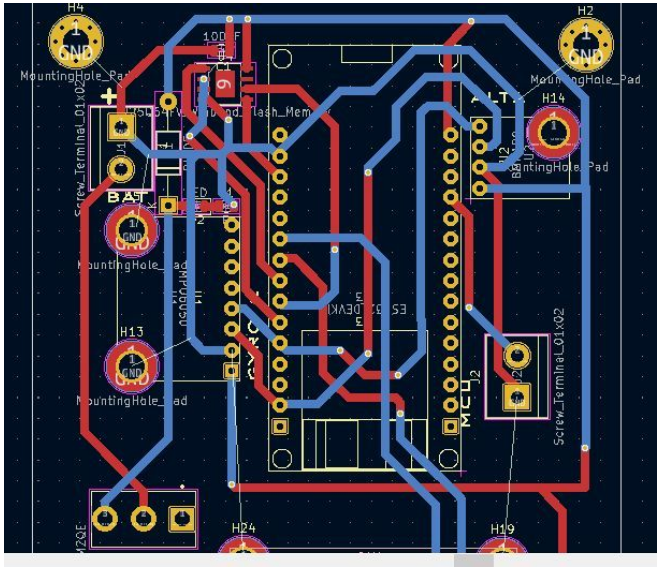


Current mass(PLA) =TBD

Previous mass(steel)=102g

Correction of the flight Computer PCB #28

- Replaced Node MCU footprint to fit our microcontroller
- Relabelling of nets



GPS Uplink Test #6

```
Number of satellites = 7
Latitude = -1.095600 Longitude = 37.012431
Speed in m/s: 0.12
Number of satellites = 7
Latitude = -1.095598 Longitude = 37.012432
Speed in m/s: 0.05
Number of satellites = 7
Latitude = -1.095598 Longitude = 37.012432
Speed in m/s: 0.05
Number of satellites = 7
Latitude = -1.095595 Longitude = 37.012433
Speed in m/s: 0.10
Number of satellites = 7
Latitude = -1.095595 Longitude = 37.012433
Speed in m/s: 0.10
Number of satellites = 7
```

The data is sent to a web app that hosts the map of Kenya which we will use to locate the position of the rocket after landing.

Challenges

- 3D printers at ipic are broken.

Tasks to be done next week

- Finalize on the 3D printing of piston #43
- Fabricate the PCB
- Design and fabricate the mechanism to hold the piston

THANK YOU