

## **Jan13 - Jan17 (Week 1)**

### **Team Updates:**

1. Mainboard V3 WIP
2. Batteryboard V3 WIP
3. Z+/- WIP
4. Power testing
5. Test plan for Mainboard and Batteryboard done

### **Individual Updates:**

Haoran Zheng

1. Reviewed the schematics and PCB to refresh my knowledge of previously assembled boards
2. Wrote test plans for Mainboard V3 and Batteryboard V3
3. Made up for the missing Milestone report

Haoen Li

1. Going over the most up-to-date Mainboard and Battery board schematics and PCB
2. Added potential testing aspects for the test plan
3. Worked out the milestones

Zhaonan Shi

1. Back to Campus on Thursday, catching up with the progress
2. Went over the testing plans with the team

Varun Rajesh

1. Over break: C Star Tracker implementation: [varun-rajesh/minLOST](https://github.com/varun-rajesh/minLOST)
2. XY board updates (schematic / layout)
3. Solar Panel MPPT implementation testing, debugging
4. Argus-2 GitHub setup + Transferred old library files

## **Jan20 - Jan24 (Week 2)**

### **Team Updates:**

1. Finished most of the tests on the main board.
2. XY and -Z board updated.
3. Prepared for Jetson board setup.
4. Cleaned up the workplace.

### **Individual Updates:**

Haoran Zheng

- Finalized the test procedure for the main board according to the test plan. The tests covered Power, MCU, IMU, SD Card, RTC, LoRa, and GNESS.
- Finished all the tests except the RTC test. The tests and problems encountered are recorded at [https://docs.google.com/document/d/1dLfZinXjN15gXkg2M0psen0700JuZKRfREY\\_Jox-RBM/edit?tab=t.0](https://docs.google.com/document/d/1dLfZinXjN15gXkg2M0psen0700JuZKRfREY_Jox-RBM/edit?tab=t.0)
- Kept track of remaining IC chips from last semester and put the information at <https://docs.google.com/spreadsheets/d/1cII2KFmEGeTdTmyNbYf18UauH-BO1i6k5SS3yulUe5o/edit?gid=0#gid=0>

Haoen Li

- Going over the testing procedure and tested most functionalities in Mainboard, including MCU communication and flash storage, hardware watchdog, power step down to 5V and 3.3V, I2C communication for IMU and SPI communication for SD card.
- Soldered connectors for Mainboard #1 and #4
- Cleaned up Avionics workstation and listed the current components

Zhaonan Shi

- Worked on mainboard testing, finishing up the testing procedure

- Finished most of the hardware testing, and wrote software circuitPython code for some of the ICs testing, including IMU and LoRa.
- Finalized the testing procedure, updated some details
- Cleaned workstation and sorted the components
- Check what boards are needed currently

#### Varun Rajesh

- Looking into setting up 4 MIPI/CSI cameras on Jetson
  - Lots of documentation reading
  - Understanding how to setup device tree overlays for this
- Handed off battery board for FSW testing
- Finished making updates to XY board
- Started + Finished updates to -Z board
  - New coil driver IC
  - Better protection circuits
  - New burnwire circuitry
- Start updates to +Z board
  - New sun sensor pyramid