

sdmay18-33: AR enabled ground station

Week 6 Report

October 23 - October 29

Team MembersEthan Sabado — *Technical documentation*Jarrett Betke — *Scribe*Ryan Decker — *Communication Lead*Nicholas Behrens — *GitLab Master*Nicholas Pelland — *Deliverable Manager*Rilwan Faniyi — *Quality Control***Summary of Progress this Report**

This week we continued work on basic UI development for the google glass as well as began designing a more streamline way to intercept data coming from the drone simulation to the ground station software. We have also added the aspect of including LIDAR data to any drone.

Pending Issues

Cannot figure out how to prevent SD card from partitioning only 4GB when putting an OS on the operating system.

Trying to get a fast way to intercept the MIPS messages between the ground station and the simulation

We only have one Google Glass, which has hindered us from testing and developing on our own

Plans for Upcoming Reporting Period

Finish script to capture commands as they are being sent to QGroundControl

Play with the simulation more to streamline the testing

Plan LIDAR drone adaption with brush-less motor

Building the Bluetooth functionality for the Google Glass app

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Ethan Sabado	Fixed the Google glass drivers, in order to do testing. I fixed the gradle build errors. Finally got my git repository fixed	7	31
Jarrett Betke	Attempted a few different ways at allocating more memory on the SD card with the OS image. This did not work. It's reasoned that the specific OS image for the processor is the cause.	5	28
Ryan Decker	Worked on design for LIDAR system with Jarett, Worked on getting android studio	5	27

	correctly configured on everyone's device		
Nicholas Behrens	I worked with trying to figure out how the Mavlink parser works and seeing what modifications I could make to make it more helpful for us to use. I also looked into UDP protocol and different ways of connecting to already in use ports.	5	29
Nicholas Pelland	Updated simulation environment to make it easier to work in both the Windows and Linux at the same time. Began script to wait for QGroundControl to update and then capture useful data.	4	28
Rilwan Faniyi	connected the google glass with a device	5	25