**Current 403 Project:** Finish Deliverables for Mini-Project including PCB design and the Stellaris working with the breadboard.

**Meeting Objective:** Discuss roles and responsibilities of each of our respective parts. Display information on researched topics and plan deliverables for next week.

**Cameron**: Discussed quadcopter designs. Phantom is one of the most common and popular designs. Was asked to find an example data set from radar that he can start building a processor for to remove noise and map an image. If he wanted to, he can use an arduino and wave it over a coke can to generate his own data. Lots of data is available online though if he chooses the downloadable route. The plan is to move away from MATLAB into other cheaper and friendly languages like C++ and Python. There is a full SAR imaging program written in

Deliverables: Learn Python. Contact Sam Carey about the translated C++ code (best way by email)

**Blade**: Discussed the different radar availabilities and the decision of using SAR over LiDAR. SAR is currently the most popular and easiest choice for implementation for the terrain mapping. inSAR may be best to remove obstacles such as trees. LiDAR is right out.

Deliverables: Research the differences in Ground Penetrating (GP) and SAR from a hardware and antenna perspective. Research TEM horn antennas. Look up transmitters/receivers for GP that can be purchased online. Some information can be found at smaller, local places like TTI. Goal is to be small,mountable.

**Lotanna**: Discussed his ideas for a solar charging platform (maybe checkerboard pattern). Did not discuss the option of using wind energy. Chamberland and Huff decided it would be best to break down the project into much smaller sections with very easily distinguishable deliverables. The goal now is to make a landing station, have the quadrotor disconnect from the battery, and charge the battery. Charging is the most important task at this moment

Deliverables: Purchase a rechargeable battery and an AC outlet charger from HEB or somewhere for very cheap. Build a structure. Attach an LED to a microcontroller and have it blink until it dies. Set it on the structure and start charging.

**Matthan**: Discussed the proper way of implementing the offload of data. Decided the best moment right now is to start developing a SQL database that will offload data onto a NUC when within range using the integrated wifi/bluetooth on the NUC.

Deliverables: Take the NUC “Geoffrey” and pick a distribution for him. Start building a SQL database. Keep track of all packages installed.