Team Name: sdmay23-17 Team Members:

- Rian Lamarque
- David Wolfe
- Joseph Hunter
- Elijah Hanson
- Thomas Ruminski

Report Period: 4/7 - 4/21

Summary of Progress

IoT Infrastructure

- Documented build and connection process for new base station and sensors. Took useful screenshots/pictures for operations manual.
- Downlink functionality completed
- Assembled and registered the new basestation and sensors
- AWS Architecture
 - Performed security testing, continued permission scoping, and added downlink functionality

Mobile App Development

• Added downlink functionality from the app so that users can change the rate at which the sensors send data.

Pending Issues

- IoT Infrastructure
 - Waiting to deploy second set of sensors
- AWS Architecture
 - No outstanding issues
- Mobile App Development
 - No outstanding issues

Plans for upcoming report period

- IoT Infrastructure
 - Deploy basestation and sensors to field
- AWS Architecture
 - Remove old roles and policies, continue ensuring full functionality
 - Fix API key vulnerability
- Mobile App Development
 - Finish testing, and create write-ups for how to set up dev environments for the app

Contributions by person

- Tom Ruminski
 - Team Role: IoT Infrastructure
 - Contributions: Created a lambda function in AWS to publish downlink messages to the sensors (this enabled integration with the mobile app). Registered the new sensors to our system and verified uplink/downlink functionality.
 - Hours: 7
- David Wolfe
 - Team Role: IoT/Mobile App Development.
 - Contributions: Patched critical basestation vulnerability. Built second basestation. Connected frontend downlink form to AWS API
 - Hours: 5
- Rian Lamarque
 - Team Role: AWS Infrastructure
 - Contributions: Perform Attack Plan test and document them. Remove old roles and policies.
 - Hours:4
- Elijah Hanson
 - Team Role: AWS Infrastructure
 - Contributions: Identified potential vulnerabilities in static source code given to users when downloading the application
 - Hours: 4
- Joe Hunter
 - Team Role: Mobile App Development
 - Contributions: Added a downlink feature to the app, and continued to work on testing the app.
 - Hours: 6