Dead reckoning Team:

Completed Tasks:

Rich: Researched cpp code to calibrate/reset IMU to factory settings and manipulate onboard memory. Also found an example library for a cpp code used on a similar IMU model.

Brendan: Polished up midterm report in preparation for final report info and editing.

Current Tasks:

Ryan: Obtaining 12 different orientations of static tests to use for a bias calibration code.

Future Tasks:

Work on implementing the EKF and Bias control with the rest of our IMU position code to work together to get the most accurate position readings. Integrating the EKF and bias control into the position code. The data should be read through the bias control to eliminate gravity and bias, then run through the EKF to eliminate anomalies and estimate future position, then through our position code to output final position.

Pi Integration/GPS:

Completed Tasks:

Nick: Prepared code for a DroneKit test flight on Monday 11/16/19. Planning to have two automated scripts ready on Monday, one using the camera to land and another not dependent on the camera in case we have trouble integrating the camera and GPS on the same pi.