Team Members
Kenneth Lange – Team Lead
Alain Njipwo – Chief Hardware Developer
Luke Bell – Chief Interface Developer
Daniil Olshanskyi – Chief Software Developer
Max Medberry – Chief Backend Developer

Past Week Accomplishments
- **Debug Jetson SoC and Pixhawk Controller connection** (Daniil)
  - Tested connection with different implementations of MavLink protocol
  - Decided that incompatibility is most likely due to firmware
  - Prepared to flash and set up compatible firmware version
- **ROS – Zed Camera integration** (Luke)
  - Created a new ROS package
  - Created a publisher node that reads data from the Zed Camera, does necessary conversion/calculation and publish to ROS topic
- **Jetson TX2 – Zed Camera connection** (Alain)
  - Attempted to diagnose issues with Jetson TX2
  - Discovered the fan broke on the TX2
  - Researched libraries to facilitate connection between 2 components
- **Create new AirSim training environments** (Kenneth)
  - Worked on rebuilding AirSim on returned training PC
  - Recreated previous drone training simulation environments that were lost
  - Created new "easy" level environment with only standard 3D shapes as obstacles
- **AirSim-ROS integration** (Max)
  - Researched AirSim library in ROS
  - Created a ROS node to read input from a ROS topic using Twist messages
  - Made API calls in AirSim to control drone in simulation

Pending Issues
- ROS node does not appropriately control drone in AirSim
- Pixhawk and Jetson connection still has not been established
- Jetson TX2 currently out of order

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Kenneth Lange	Created and recreated AirSim training environments	12	28
Daniil Olshanskyi	Debugged connections between Pixhawk Controller and Jetson SoC	16	32
Luke Bell	Created ROS nodes to publish Zed images in ROS	12	28
Max Medberry	Read published ROS topic messages in a node and forwarded to AirSim API	14	30
Alain Njipwo	Diagnosed issues with Jetson TX2 when trying to connect with Zed	12	28

Plans for Upcoming Week

- **Alain** – Order replacement Jetson TX2
- **Kenneth** – Create more training environments for drone simulation
- **Daniil** – Flash and setup Pixhawk Controller with compatible firmware
- **Luke** – Finalize ROS node to publish Zed Camera images, begin creating subscriber node
- **Max** – Correctly convert messages from ROS topic into AirSim API to fly drone correctly