EE/CprE/SE 491 WEEKLY REPORT 01 Sept 8th, 2024 – Sept 14th 2024 Group number: 25-34 Project title: Laser Scan Readings for Propeller Measurement Client &/Advisor: Linden Propeller (Gary Linden) / Dr. Mani Mina

Team Members/Role

| Name: | Role: |
|----------------|-----------------------------|
| Alan Whitehead | Testing |
| Elias Colsch | Client interaction |
| Spencer Rudin | Schematic Design |
| Denny Dang | Individual Component Design |

Past Week Accomplishments

| Name | Past Contributions |
|----------------|--------------------|
| Alan Whitehead | NA |
| Elias Colsch | NA |
| Spencer Rudin | NA |
| Denny Dang | NA |

Weekly Summary:

This past week, we had our first meeting with Gary Linden, the owner of Linden Propeller. Elias Colsch and Alan Whitehead had an initial meeting to test Microsoft Teams for meeting purposes and to get a better understanding of what the project entails and what was expected of us. The next day was the official meeting, which all group members and Mani Mina attended. We discussed constraints after catching all group members up on what the project deliverables were. We then started to discuss solutions, and we decided to start researching IR sensors.

| Name | Individual Contributions | Hours this week | HOURS Cumulative |
|----------------|--|-----------------|------------------|
| Alan Whitehead | Helped set up meetings and looked at specific IR sensors to meet project specifications. | 3 | 3 |
| Elias Colsch | Set up meetings with Gary Linden and Mani Mina. Attended meetings and took notes. Started preliminary research on IR sensors | 3 | 3 |
| Spencer Rudin | Worked on laser solution with teammates, overall brainstorming, and ideas involving using IR sensor and what that would mean as a measuring tool. | 2 | 2 |
| Denny Dang | Provided concept ideas for measurement device replacements. Provided information on current IR sensor technology. | 2 | 2 |

Plans for the upcoming week

| Name | Future Contributions |
|----------------|---|
| Alan Whitehead | Will be looking into IR sensors. Email James Heise to get background on what he did on this project and potentially set up a meeting. |
| Elias Colsch | Discuss industrial IR sensors with ETG, research-recommended IR sensors, and other options |
| Spencer Rudin | Look into potential IR sensor designs to solve the offset issue. IE. different setups for the sensor, and how the laser might reflect off the propeller depending on the setup involved. |
| Denny Dang | Research internal parts of IR sensors to get a better grasp on the technology we will be using. |