

# **Griffith School of Engineering**

# PROFESSIONAL PRACTICE CATEGORY A, B & C ACTIVITY LOG SHEET

# 1. PERSONAL DETAILS

Griffith identification Number

5 1 3 8 8 7 7

Other Names: Jessy

# 2. PROFESSIONAL PRACTICE ACTIVITY

CATEGORY (See Note 1) A Days (See Notes 2 & 3)

Week Beginning 20 / 2 / 2023 Week Ending 24 / 2 / 2023

Supervisor Name: Alex Forward Contact Ph: +61755492370

Organisation Name: Gilmour Space Technologies Email: alex.forward@gspace.com

Organisation Address: 5 Millenium Circuit Helensvale

# 3. ACTIVITY DESCRIPTION & REFLECTION

# Description of Activities Undertaken: (Approximately 50 words)

This week I was able to send my PCB to the manufacturer and open a professional engineering dialogue with their support team. This was a complex PCB, so the manufacturer was Australian based and required back-and-forth communication for issues faced with fabrication. I was also able to conduct integration testing for my first prototype on the microcontroller with a rocket battery and BMS in the Avionics HITL room and confirm the functionality of my software against my requirement criteria.

Discuss the Engineering Application Abilities Developed: (Approximately 50 words) (See Note 5) Testing my prototype electronics and software in the HITL room was my first major experience with integration testing and allowed me to evaluate the outcomes and effectiveness of my software against my criteria and software requirements. I learned a new skill called SSH in which I was able to use the CLion IDE to remote directly into my microcontroller and upload my applications wirelessly. I then setup the closed loop integration test and was able to verify that my software worked exactly as intended. I even used LCM viewer to plot live readings from the battery and was satisfied with the software design for the first prototype.

**Discuss the Professional and Personal Attributes Developed:** (Approximately 50 words) (See Note 5) Sending my PCB off to the manufacturer and discussing design requirements with them was my first major experience in professional conduct with a major engineering project. This was an experience that allowed me to gain insight into the communication standard used between high-level engineers and manufacturers and refined my approach to presenting myself with a professional image under all circumstances with relation to technical colleagues in different engineering professions.

# 4. STUDENT SIGNATURE

Student Signature: Jessy Barber Date: 25/2/2023

# Notes:

- 1. See the table provided in the Activity Log Guidelines for the definition of each category of professional practice.
- 2. For work experience paid on a casual hourly basis, a day of work is taken as 7.25 hours.
- 3. Only days between Monday and Friday can be counted for research undertaken at Griffith University in Category B Professional Practice, unless prior approval has been granted by the course convenor for 6008ENG.
- 4. At least one Activity Log Sheet must be provided with each Record Sheet for Professional Practice in categories A, B and C.
- 5. Refer to the Engineers Australia Stage 1 Competencies.