Griffith UNIVERSITY

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

Family Name: Barber

Other Names: Jessy

2. PROFESSIONAL PRACTICE ACTIVITY

CATEGORY (See Note 1): **A**

Days (See Notes 2 & 3): **5**

Week Beginning	6 / 2 / 2023	Week Ending	10 / 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 become familiar with mechanical CAD design for the purpose of training me to build an enclosure for my PCB. This was the next logical step in the engineering process for electronics and was greatly beneficial for me to add to my skillset. I was taught the basics of how to use a program called OnShape and started by mocking up enclosures for previous electronics. Finally, I was able to build an enclosure for remote data acquisition devices in a stack formation and get these fabricated.

Discuss the Engineering Application Abilities Developed: (Approximately 50 words) (See Note 5)
After becoming familiar with mechanical CAD design, I was able to put another engineering tool in my skillset. During the process of learning this software I was able to effectively apply an engineering tool to analyse and visualize a 3D design. The software involves gaining a grasp of 2D CAD drawings and extruding these drawings into 3D objects which involves having a firm grasp on mechanical design, measurements and structural design. Having a grasp on the structural design is important for designing enclosures so that they are capable of being fabricated or 3D printed.

Discuss the Professional and Personal Attributes Developed: (Approximately 50 words) (See Note 5)
Since learning this software involved a lot of self-learning, I had to adopt a creative demeanour in order to apply creative approaches to developing a 3D object. This included becoming more familiar with CAD drawing and thinking about the 3D object in my head to meet the safety requirements for installation on the rocket. The PCB had to fit perfectly in the enclosure, and multiple enclosures had to be stacked and secured together so I really had to think technically about the mechanical design from a thermal and electromagnetic perspective.

4. STUDENT SIGNATURE

Student Signature:

Date:

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.