## **Thomas William Collins**

## **Portsmouth, NH 03801**

## **Mobile Phone: (603) 828-9643**

## **Email: twc1001@wildcats.unh.edu**

December 26th, 2019

**Dear Firefly,**

My name is Thomas Collins and I am a senior at the University of New Hampshire studying Engineering Physics with a concentration in Aerospace and a minor in Mechanical Engineering. I am applying to the Summer 2020 Engineering Internship position in hopes of joining the Firefly team. I would like to highlight two aspects of my resume as I feel they are of significance to the work I might preform as an Engineering Intern at Firefly.

Experience with respect to rocketry comes from my time as Vice President of my universities rocket team. UNH SEDS is a multidisciplinary rocket organization with the goal to launch a hybrid rocket at the Spaceport America Cup competition in June of 2020. Our organization consist of 40 member and 10 devoted to the frame team which I oversee. As the Vice President and Frame lead, I manage the student body of the organization and work with every engineering team to design the best rocket frame possible. 3D and 2D CAD have been critical to the structural design or our rocket, with designs reinforced with FEA and other simulations we are confident in our rocket body. Aside from frame, I have worked with our propulsion team for the past two years, iteratively testing and analyzing our hybrid engine, Runaway. Feel free to check out our website as we constantly update it with progress on our rocket and other club activities.

At TURBOCAM International, I work as an engineering intern on component design and quality. This includes ensuring design specifications have been met and creating new data analysis programs. These programs check quality and help find resolutions to problems in real time. Aside from this, I worked alongside other technicians in the production process of creating airflow components for commercial airline engines. This work brings together technical aspects of my education along with the personal management of being able to work efficiently in a team and prioritize multiple projects simultaneously.

Thank you for taking the time to read this letter. I look forward to hearing back from you. If you have any questions about my resume, TURBOCAM Inc, or UNH SEDS, please reach out to me and I would be happy to elaborate.

Website: *unhseds.org*

Sincerely,

Thomas William Collins