



To the William Engineering Award Committee,

I wanted to express my gratitude for the award I received last September. Since I received this award, I have continued our goal to increase inclusion and diversity in STEM through my founding of Mission SpaceWalker, an all-women's team that is flying our payload investigating robotics aboard a parabolic flight at the end of this February 2023 reading week. My teammates have developed many meaningful skills including soldering, PCB design, Arduino coding, and mechanical techniques like 3D printing and CAD. Our next mission is in partnership with an organization called Rokaboo and Parks Canada in Jasper, where we are developing a citizen research platform and net-zero emission base. The experiment is going to be centred on studying the changes in the Athabasca glacier and the greenhouse gases present.

On a personal note, many amazing things have occurred since our last correspondence. I was chosen as a Zenith Fellow as part of the first Canadian space fellowship class. Through this experience, I met so many amazing people including lifelong friends at my internships and idols including Shawna Pandya and Jeremy Hansen. I also had the chance to intern at Rocket Lab as an optical sensor engineer where I researched properties of startrackers and exponentially grew my experience in the space industry. Following this internship, I was offered a job at the Canadian Space Agency, where I redesigned our small stratospheric balloon gondola allowing near-space research to be conducted. I am still very close to this team and am so thankful for those opportunities.

Extracurricularly, I was inspired by my stratospheric balloon management position at both the Canadian Space Agency and SEDS (Students for the Exploration and Development of Space) that a few friends and I decided to invent a flight termination system to increase the reliability of the platform. The design is ongoing, and we entered the Young Space Entrepreneurship Competition (YspaceE) where we placed 1st and got so many more new amazing mentors. We hope to develop this invention by the end of this year.

My heart still lies in becoming an astronaut and exploring the unknown. I am so grateful to have such an amazing community and am committed to inspiring others to follow their dreams. Many of my Mission SpaceWalker team also want to be astronauts now, and proudly state their passion to shoot for the stars. This is what the Williams Engineering Award means to me, and I hope to continue inspiring the next generation through leadership and mentorship.



Interning at the Canadian Space Agency (Left), Meeting Jeremy Hansen with my Zenith Fellowship Class (Right)

With Gratitude,

Makenna Kuzyk