Charlie Nitschelm

Member at Large Platform

May 2019 – November 2019

Throughout my college career so far, I have worked towards joining the space industry, and in particular, working on rockets. I started the University of New Hampshire's SEDS chapter during the fall of 2017, my sophomore year as a mechanical engineering major, and has now grown to the largest, most interdisciplinary engineering organization at the college. The 2017-2018 school year was purely dedicated to learning basic rocket building techniques: simulating, launching and optimizing rockets using off-the-shelf solid engines. Once we understood the basic systems required to make a rocket, we moved toward designing our own hybrid engine, which we rightfully named Runaway, for the Spaceport America Cup in June 2020 (right after I graduate from UNH). 16 of our members (around ½ the organization) also travelled to San Diego to attend SpaceVision 2018 hosted by SEDS UCSD which was an experience that we will all cherish for a long time. During that conference, I ran for President of SEDS USA with the experience of what it takes to start and run a SEDS engineering and outreach chapter. The opportunity of becoming a Member at Large for SEDS USA will allow me to work with the Board of Directors, the entire SEDS community and outside sponsors to make SEDS USA stronger and the individual chapters better equipped and capable of making a greater impact at their university.

Although many projects I will start and lead will spawn from understanding the current state of SEDS USA and its chapters, I have three ideas that I think would make a big difference in the little guys (Individual chapters). The first idea/project and the one I am most excited about is to schedule a strongly encouraged meeting with a member or two of each SEDS chapter with myself or another Board of Director. This will allow a close, one on one conversation on how their chapter is doing, and what else SEDS USA can do for them. The second idea/project, which is focused on the business side of SEDS chapters, is to disperse the business knowledge (proven tactics and documents for sponsorship, etc.) of veteran SEDS organizations as polished templates that will immediately give all the SEDS chapters a leg up in financing initiatives and any other pertinent business tactics. The third idea/project, which is focused on the engineering side of SEDS Chapters, is based on the assumption that most of the engineering projects SEDS chapters are engaged in are roughly the same (rockets, engines, weather balloons, CubeSat's, etc.). That being said, with proper organization, an online engineering community could be created that immediately connects rookie and veteran students together, enabling cross learning for the entire SEDS engineering community on any project a chapter might be tackling.

Lastly, I will be spending my summer working at Rocket Lab as a manufacturing engineering intern in Huntington Beach, California as a Matthew Isakowitz Fellow. This experience in the commercial space industry and being a member of a growing community of future space leaders will better equip me to enact greater change as Member at Large of SEDS USA.