Hi everyone, my name is Charlie Nitschelm and I am running for Chair of the board of directors. During my first year at the University of New Hampshire, I didn’t really connect with any of the engineering groups the college had to offer. I became part of some groups, but the work never excited me. However, during my winter break after my first semester, I witnessed a SpaceX booster landing on a drone ship from an orbital launch live. This was mid-January of 2017 or so.

I heard of SEDS shorty after my second semester began, and I instantly knew that this organization would help lay a framework for starting a local chapter at UNH.

By the start of my sophomore year, the club grew to 14 committed members spanning 5 different majors and years. When we were finally ready to get to work, we decided that we wanted to pursue the art of high power rocketry.

But, there was one little thing: not one of us had built a rocket before, excluding the little model rockets we did in elementary school. We decided right then that no matter how hard it is, we will compete in the SEDS USRC.

After countless flights, including burning a hole through our first launch pad, a G engine coming out of the engine tube, 2 tree landings, countless rocket lawn darts and one very unfortunate lake landing, I think I can finally say to the team here and back home, that we now know how to build a rocket. Starting this team has been the hardest, most rewarding thing I have done. I owe everything to SEDS.

I feel I have a unique experience to add to the board of directors. I have gone through, I think, every single struggle a new SEDS group could experience. If I am elected Chair, I could provide a different outlook on the struggles of new chapters to help their growth.

Although I have never held a position within the board of directors, I believe I have the ability to grow this nation-wide organization to touch more young minds to become inspired by space exploration.

I mean what is possibly a more exciting thought then going out at the start of your day among the stars. I can’t think of one…

For Submission:

When I entered my university as a mechanical engineering major, there were no aerospace organizations pushing the bounds of space technology. I started the University of New Hampshire's SEDS during the Fall of 2017 and the club has now grown to a membership of 30 students spanning 6 different majors. When we had our first meeting, it was unanimous that we would focus our engineering minds on expanding the art of high power rocketry. We entered the USRC for the 2018 competition determined to compete against other like-minded organizations. Not one member in the club had ever built a rocket before, so the first year was an incredible learning curve, with the majority of our lessons from pure failures. After one year as an organization, we finished our competition launch climbing a multi-stage carbon fiber rocket to 2,200 meters. Not only has UNH SEDS been the highlight of my college career, I feel I have created a community of individuals connected by the pursuit of space exploration. Although the club has gone through many (many) failures to get to where we are now, we continue to push onward to design and test a hybrid engine for the Team America Rocketry Competition in May of 2019. By experiencing the struggles of a new SEDS organization first hand, I feel I am in a position to apply my knowledge to help the SEDS community grow further, accelerating the race back to space and beyond. Ad astra, SEDS!

Throughout my college career so far, I have worked towards joining the space industry, and in particular, rockets. I started the University of New Hampshire’s SEDS during the Fall of 2017 and has now grown to one of the finest engineering organizations at the university. The 2017-2018 school year was 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 2020. We also attended SpaceVision 2018 hosted by UCSD which was an experience the whole team will cherish for a long time. I am running for Member at Large right now to get direct experience within the board and begin to provide my ideas/values to make SEDS the best it can be. I have experienced almost every barrier a new SEDS organization could encounter, and I believe I will be able to apply my experience to help expand SEDS to the largest college organization in the country. Space is unbelievable, and I only wish to spread my love for it to as many people as possible. I will also be spending my summer working at Rocket Lab as a manufacturing engineering intern in Huntington Beach California as a Matthew Isakowitz Fellow Class of 2019 which will let me get more exposure into the commercial aerospace industry.