**How does international collaboration benefit space exploration?**

***Standing underneath the Discovery. Close Frame then zooms out at Space Shuttle Discovery.****For Captain James Cook’s last maiden voyage, he sailed the HMS Discovery from 1776-1779. What a fitting name for an exploration boat, where its purpose was to discover and map new lands so future generations could travel without trepidation. But in the last 70 years, a new frontier appeared before human eyes that emerged our innate desire to explore and learn. The universe was within grasp with the modern developments that came with the 20th century. Space Shuttle Discovery, NASA’s oldest and most travelled shuttle, has spent nearly a year in space.*

**Walking around the Discovery, maybe some closeup videos of the shuttle.***This magnificent achievement in space flight and initial reusability was not the work of one person, not one nation. It was teams from around the world that innovated to create the materials and technology to allow Discovery to make 39 safe space missions.*

**A video of me talking with the CanadaArm in the background or forefront. Close up videos of the Canada arm and it working in space would work great.***The Shuttle Remote Manipulator System, also known as the Canada Arm, was the work of Canadian engineers to allow the Discovery to maneuver and capture payloads. It allows astronauts to remain safely in the International Space Station when they would otherwise have to perform a spacewalk, arguably the most dangerous task of any space mission.*

**Find a hallway or room with pictures of scientists and engineers working on stuff. Maybe some cool physics stuff on the universe, cosmic microwave background radiation.***It is not only a no-brainer to include as many bright minded scientists and engineers from around the world to innovate and create the next technology in space exploration, but it is our responsibility to future generations of humans to continue to explore and ‘map’ the universe around us so they too, like Captain James Cook, can hold a map and not get lost.*

**Me standing in the coolest part of the museum.***My name is Charlie Nitschelm, I am 20 years old studying mechanical engineering at the University of New Hampshire and I believe I should be selected as the next Student Astronaut.*

**Zooms out, some quick clips of me doing stuff.**

*70 sec***How would this experience help launch your career in the space industry?**

**Me at a Coffee Shop with books on spaceflight. TV comes on with SpaceX landing, December 21st. Goes from part of the frame to full frame when the rocket engine turns on and lands.***It wasn’t until December 21st, 2016 when I figured out what I wanted to do. I was always intrigued by all the space movies but watching a 10-ton rocket booster plunge through the atmosphere, flip on its liquid engines and accelerate it to a complete stop precisely when it touches down, was nothing short of an incredible experience.*

**Goes to me talking somewhere.***I went from a mathematics major directly to mechanical engineering. I decided right then I wanted to join the aerospace industry and help get people to space.*

**Music video of I don’t think about you, me beat boxing part.***When I arrived as a freshman at UNH, I joined an all-male a Cappella group. Now this didn’t help me directly with my professional goals, but it taught me that things cannot be done by yourself. That goes with any project.*

**Me talking somewhere***A Cappella taught me how to work as a team. I looked for exciting engineering clubs at my school to join, but nothing caught my eye. That is why I started the coolest club I could think of, a rocket club.*

**SEDS videos begin. First failed launch, then multistage***Although all the people that joined have never built a rocket before, they were caught in the excitement of it all. After 9 launches during the 2017-2018 school year, we finally achieved a multistage launch with full recovery climbing to nearly 4,000 feet.*

**Me talking, maybe a scroll of books fly through if it can be done smoothly** *I also started reading more books, both on the physics and engineering of space. People really do underestimate the power of a good book. Endurance by Scott Kelly, a man who recently spent nearly a year in space, talked very highly of Star City, Russia, the birthing ground of cosmonauts.*

**Pictures of star city, cosmonauts training***What an incredible opportunity it would be to experience the rich space exploration history that city has seen over the last century. Becoming the Student astronaut would not only let me geek out in all the amazing programs still going on there, but it would let me experience first hand what it is like training to be a cosmonaut, and what are the main challenges that they all face to train for one of the hardest and most prestigious jobs in the world.*

**Cut to me talking, upper body at astronaut place at air and space***I don’t think the immense amount of knowledge and experience I am expecting these cosmonauts have will scare me away, it will only make me work harder to become the best person I can be for the job. This experience will help me achieve my goal to become an astronaut.*

**80 sec**

**Why do you think we should select you as our next Student Astronaut?**

**Starts with me at The Foundery, clips of me building, having fun smiling***A lot of students studying engineering now are really missing the drive to make something for really no reason but for fun. The majority of real engineering education is applying it to something.*

**Me talking upper body, project in background***To go through the process of designing, manufacturing and testing inventions really provides you with life-long skills. I think the next Student Astronaut should not just dream of going to space. That isn’t the right mindset.*

**Videos of me building, rockets flying, me talking to a group?***The next student astronaut needs to have a love for engineering, a love to make things, no matter how useless. They need to have the ability to share their love for space, encourage others to join the space community.*

**Me talking sincerely. Ending at the museum.***Any child has the potential to help make humans explore deeper into space, they just need inspiration. I owe it all to the people who lead by example and inspired me to become an engineer, and I hope to one day do my duty and also inspire the next generation of aerospace engineers and scientists to do the same.*

30 sec

**Videos**

SEDS stuff

Me welding

Me band sawing

Get a video working on propellers?

Get a video of me on CNC and Autodesk fusion

Funny video flying on bed

Skateboard stuff?

Rocket stuff