

# ACCESS YOUR BEST SELF!

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FOR KIDS

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“What do you want to be when you grow up?” Kids hear this question starting in preschool, and they usually answer with the career that their parents have, or something they saw on television. Some kids dream of being a doctor or an actor from the time they could talk, and others change their dream job daily. But what we should be asking is, “What do you want your life to be like when you grow up? What happens outside of your work?” Airway Science for Kids (ASK) strives to help students answer this question with the ACCESS program. ACCESS is an acronym which stands for Aerospace College and Career Exploration Selection Systems.

The ACCESS program started as the brainchild of Executive Director of Airway Science for

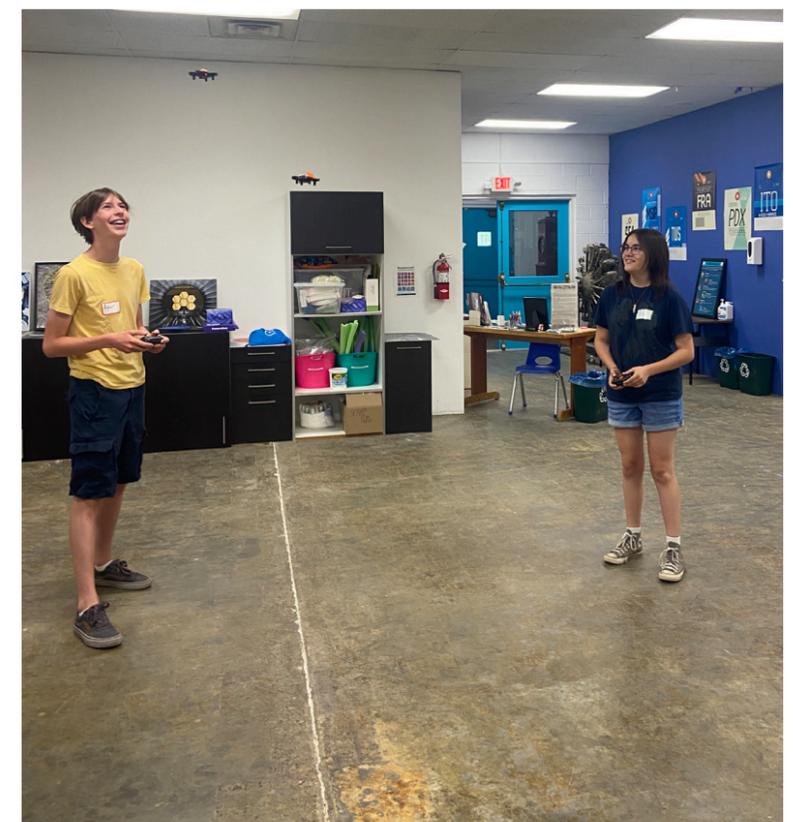


Kids, Julia Cannell. Julia’s father was an airline pilot, so she grew up with aviation from a very young age. She got her degree in flight technology and an MBA in aviation. Aviation is her entire world.

**“I GREW UP WITH AVIATION. LIKE, MY DAD WAS A PILOT ... WE FLEW FROM THE TIME I WAS LITTLE. I ALWAYS UNDERSTOOD THE COMMERCIAL AVIATION WORLD — HOW YOU BECAME A PILOT, HOW YOU DID ALL THESE THINGS — THAT, I COMPLETELY UNDERSTOOD. IT NEVER REALLY OCCURRED TO ME THAT IT WAS SOMETHING THAT NOT EVERYONE UNDERSTOOD.”**

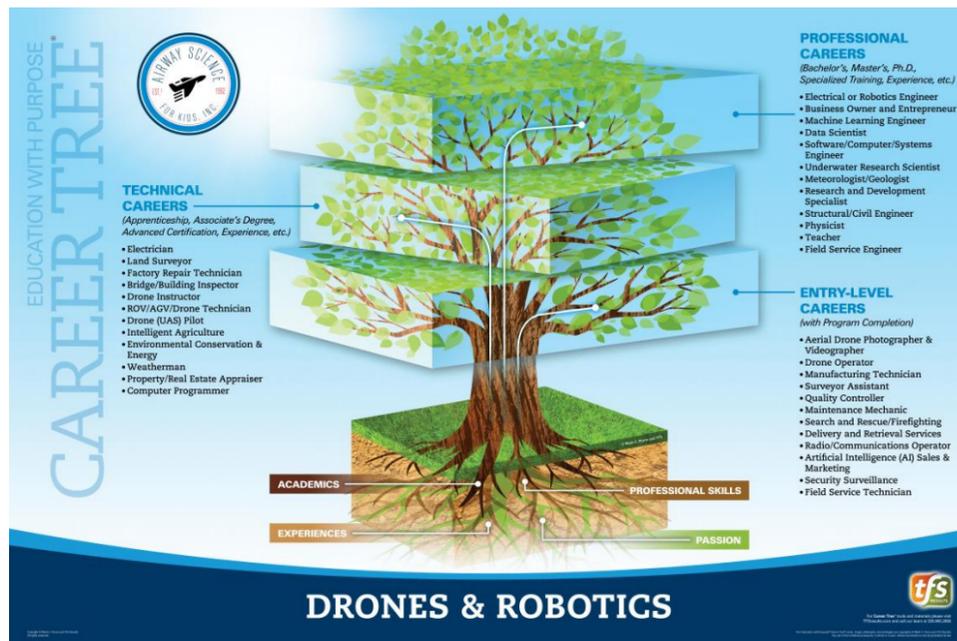
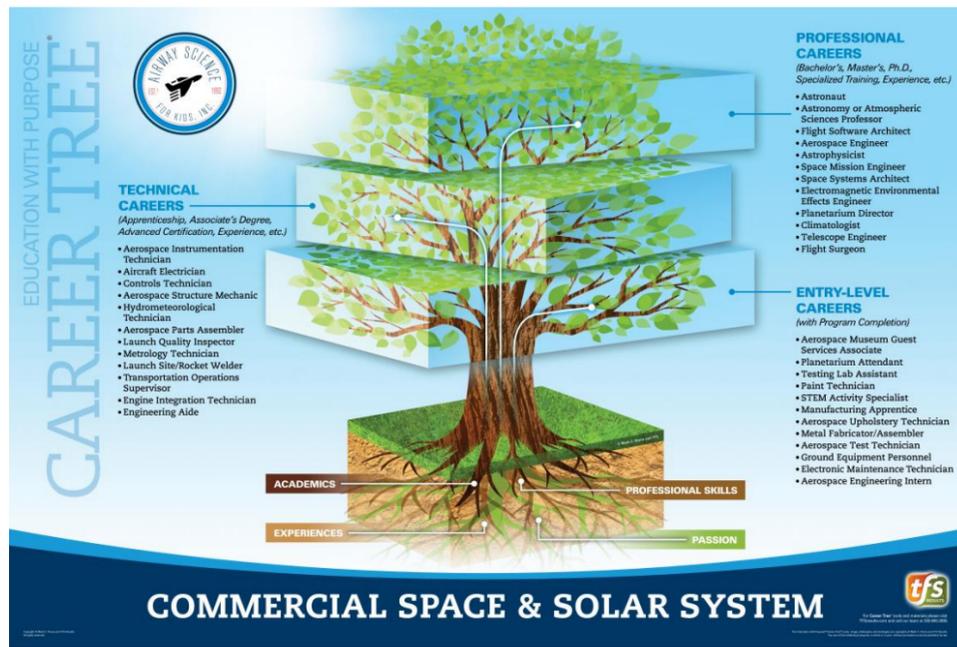
Ten years ago, when Julia was working at the Museum of Flight, in Tukwila, Washington, she met a woman named Ashley Stroupe, who drives the Mars rover, Curiosity. Julia was dumbfounded and an idea struck, “I wanted to be able to go! Here is all of the stuff you can do if you’re interested in airplanes: flying the planes, or working on the planes or commercial space. It changes so much that I just want kids to be able to get an idea and say ‘Oh I could do that.’ And it might not be what they stick with, but just to spark their imagination.”

Julia believes the best way to go about this is to introduce teenagers to six core topics in aerospace: Aeronautics; Airframe-Powerplant & Avionics; Solar System; Commercial Space Travel; Drones; and Robotics. ACCESS aims to introduce students to these topics by having them complete online modules and looking over careers using the Career Tree, a career exploration method developed by Mark C. Perna that encourages students to think about the lifestyle they want to live.

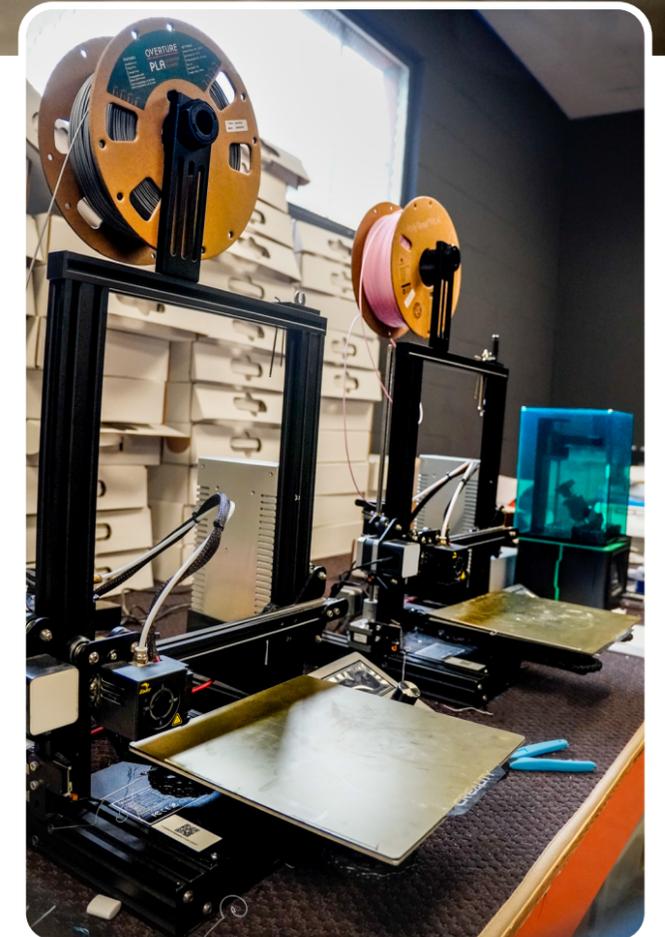
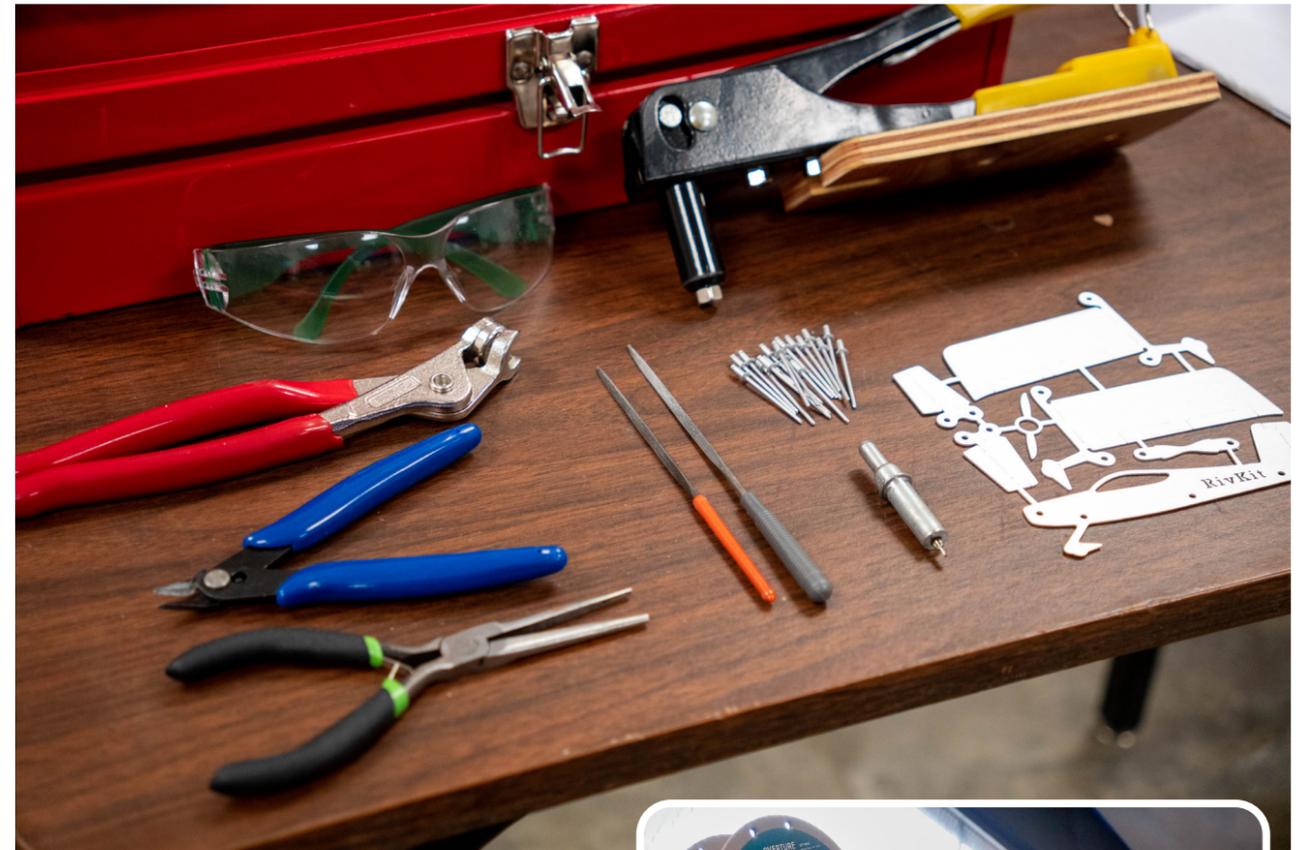


The Career Tree allows students to think using the “light at the end of the tunnel” method to envision their future. ACCESS is primarily about exploration, and the Career Tree method gives students the tools to explore and be flexible with their goals. During the ACCESS program, students spend eight weeks learning about the six aerospace topics using modules and discussing their career goals and interests with the student success coordinator. At the end of the eight weeks, the students put their name and desired career on a leaf sticker and attach it to the Career Trees mounted to the wall at the Aerospace Training Center (ATC). At any point during and after the program, the students can approach staff and receive help with resumes, finding internships, discussing career paths, or even just chatting about their interests.

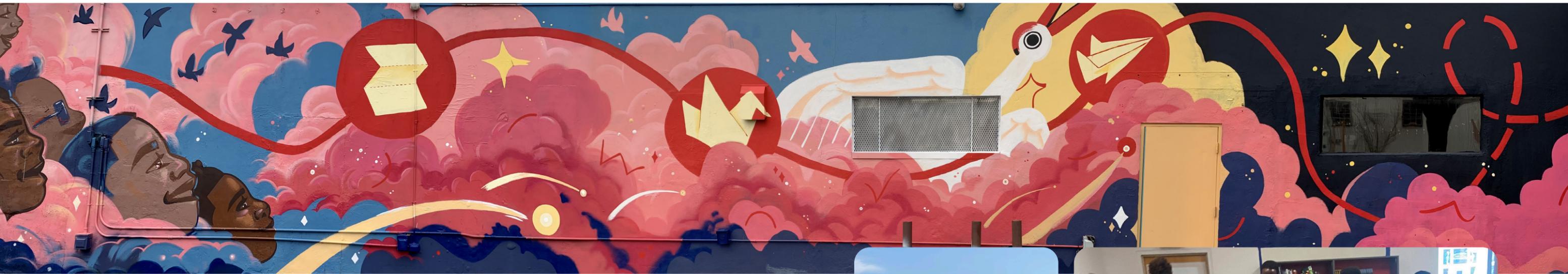
The students spend their time in the program listening to different speakers and career professionals. Over the course of the ACCESS program, Airway Science has recruited pilots, air traffic controllers, aerospace engineers, and a robotics software engineer. Some students haven’t entered the worlds of aviation and aerospace yet, while others know immediately what they want to do, even if they’re unsure of how to get there. Sixteen-year-old Toby knew precisely what he was looking for when he came into ACCESS. In his first meeting with the student success coordinator, Toby spent his time showing off his many models and explaining his interest in aircraft restoration and historic aircraft. Toby learned a lot in his eight weeks doing ACCESS.



**VIEW LARGER VERSIONS OF THESE CAREER TREE CHARTS**



**"IT OPENED MY EYES TO A LOT OF THINGS I WASN'T AWARE OF, MOSTLY THE WORLD OF AIRCRAFT MAINTENANCE AND REPAIR. I GUESS I ALREADY KNEW ABOUT THE LOGISTICS SIDE OF AVIATION BUT DEFINITELY NOT AS MUCH AS I DO NOW. IT WAS SURPRISING HOW MANY PEOPLE ARE INVOLVED IN JUST GETTING ONE PLANE OFF THE GROUND."**



ASK is now supporting Toby by helping with his applications to volunteer at museums with historic aircraft and facilitating meetings with organizations involved with World War II aircraft restoration. ASK will also support Toby in securing internships and first-hand experience to achieve his goals.

“I think the main thing it showed me was the variety in career options, and that having a career in aviation or space doesn’t necessarily mean being a pilot or aerospace engineer. There are so many unique options, and in a way it made me less sure of what job I want. But I view this as a good thing, since it shows me the importance of spending time to figure out what careers I would be interested in pursuing.”

The ACCESS program has expanded in the last year to include “Phase Two” workshops — workshops guided and focused around different specific topics in aerospace. The students will work individually and in teams with experts in the subject matter for each workshop.

After completing the workshops, the students will have the opportunity to add the experience to their resumes and will have gained a better understanding of what it may be like to work in a given career. The first such workshop to take place will be an Aircraft Accident Investigation workshop. This workshop will introduce students to the various elements involved in investigating aircraft accidents, including forensics, photography, crew resource management evaluation, weather research, mechanical malfunction investigation, and more. With this background, students will then work together in various teams to “solve” a hypothetical accident with the assistance of ASK staff and subject matter experts. This workshop is meant to introduce students to all the various factors involved in keeping aviation/aerospace focused on safety, while also protecting innovation; it is also an ideal introduction to the intricate connections between all areas of the industry.



Students will also have the opportunity to travel to the Moon! Working with ASK’s trusted partners at Kerbal Space Program, ASK introduces students to the challenges and technological advancements involved in sending humans back to the Moon. ASK staff will guide students to build and recreate the various space technologies and logistics that the upcoming Artemis missions have undergone over the past decade. Students will experience for themselves how to plan, design, test, and fly missions to the Moon and land there. Along the way, students learn the importance of how to learn from designs that do not work, setbacks, and unique problem-solving dilemmas that require patience, creative thinking, and teamwork.



As commercial aviation is the world’s largest and most impactful integrated industry, this program introduces students to the many layers involved in helping this industry run, grow, and innovate.

Beginning with a self-paced introduction to the history of commercial aviation and the current functioning and challenges facing the industry, this program then has students work individually and in small teams to build a hypothetical airline. Depending on their stated interests, students will collectively decide on elements like the airline’s name, fleet, routes, business models, livery, logo, colors, marketing plan, and more. Students will end up with a far more sophisticated introduction to the commercial aviation industry than most of their peers, giving them a leg up in any pursuit of career interests in the field.

With a shortage of pilots and generations of students who are asking, “Why does this even matter?” it has never been more important to expose youth to the beauty and excitement of aerospace. There are so many ways to plan for the future and be excited about the life you want to have; you just have to be brave enough to ACCESS it!