

WPAFB E.O.

NEWSLETTER

April 2025

WHAT'S HAPPENING?

Job Shadow Day

FIRST Championship: World
Festival

DAF LEGACY: Good News Story

WHAT'S COMING UP?

Xenia STEM Day

STEM Night

FIRST LEGO League Challenge:

- Team Registration begins
- Zoom Information Session

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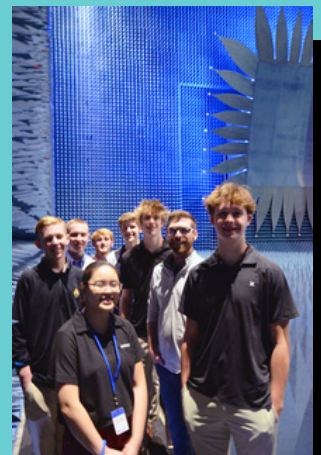
JOB SHADOW DAY PROGRAM

WPAFB Educational Outreach



OneRY Range West Tower

OneRY Range West Tower provides a lab space for maturing radio-frequency technologies to be developed in a real-world environment.



Anechoic Chamber

Students in the OneRY Range Anechoic Chamber, which serves as an in-house test center for antennas and radio frequency systems.



OneRY Range West Tower

The Wright-Patterson AFB Educational Outreach Office has been hosting the Job Shadow Day program for over 27 years. Job Shadow Day brings in high school juniors and seniors to spend their day with a mentor at WPAFB. This spring's Job Shadow Day hosted 67 students from 34 different high schools. The day was made possible by the help of the 42 mentors and co-mentors across many different STEM career fields. We had students shadowing many areas of engineering, Acquisitions, Legal, Flight Nurse, Environmental Management, Artificial Intelligence, and more.

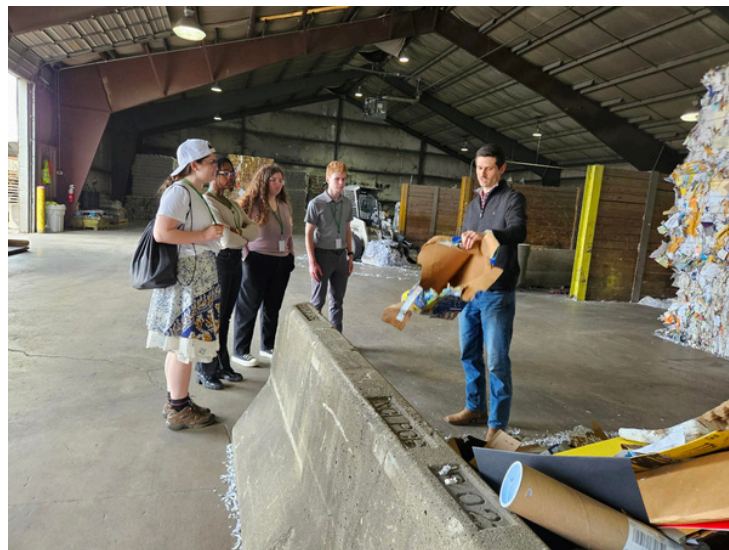
The next shadow day will be Thursday, 30 October 2025: [WPAFB Educational Outreach Office - Job Shadow Day \(wpafbstem.com\)](https://wpafbstem.com).

E.O. APRIL PROGRAM HIGHLIGHTS



HazWaste Storage

John Iker, Hazardous Waste PM, gave the kids a tour of the HazWaste Storage Facility.



Recycling Center

Tour of the Recycling Center with Chet Powers, the Solid Waste PM.



AFRRAD

Ryan Stahl of Air Force Radioactive Recycling and Disposal (AFRRAD) showing the kids his radioactive cabinet of curiosities.



German POW Mural

E.O. APRIL PROGRAM HIGHLIGHTS



MANSFIELD

Our final event for this season was the Mansfield FLL Explore Festival in early April. A total of 3 teams participated in exploring a challenge, learning about core values, creating a team model with coding, and designing a team poster. We are so thankful for the coaches, volunteers, family, and friends who attended and supported these amazing teams through their journey of collaboration and communication to explore, create, test, and share!

TRIAL AND ERROR



TRIAL AND ERROR



In mid-April, 40 FLL Explore teams, representing 17 countries, 19 states, and Canada presented their season accomplishments. FIRST LEGO League Explore Team 21437 Trial and Error represented Ohio in the FLL World Festival at FIRST Championship in Houston, TX. Lyra, Gabe, Anneheleen, and Calvin investigated concepts in a variety of ocean environments during the SUBMERGED season, and built ocean habitats, animals, vehicles, and places where research can be conducted. They also explored coding and motorizing parts of their team model.

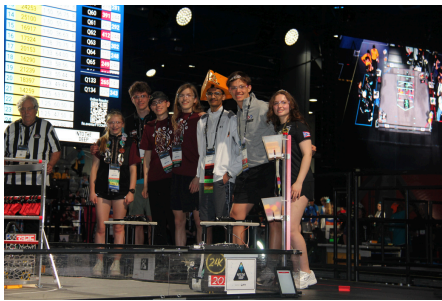
E.O. APRIL PROGRAM HIGHLIGHTS



160 FIRST LEGO League Challenge teams from over 70 countries gathered to compete at World Festival, part of FIRST Championship, in Houston last month. These teams represent the top 0.5% of teams worldwide and three Ohio teams were part of this impressive field of teams: 56740 Robocats, 56510 Innov8, and 37732 Power Pandas. At this competition, these young innovators presented to judges, showcasing their robot design and strategy, their research and innovation, and their teamwork skills. They also competed in head-to-head robot matches designed to test their robot performance. Team 56510 Innov8 was recognized during the awards ceremony for their Gracious Professionalism and their robot performance in an alliance match! All three teams did an amazing job of representing Ohio! Please join us as we celebrate their hard work and inspiring performances on this global stage.

World Festival did conclude with a teaser and theme reveal for next season. We are eager to see what teams discover and design during the UNEARTHED season! [Click here](#) to learn more about the season to come!

E.O. APRIL PROGRAM HIGHLIGHTS

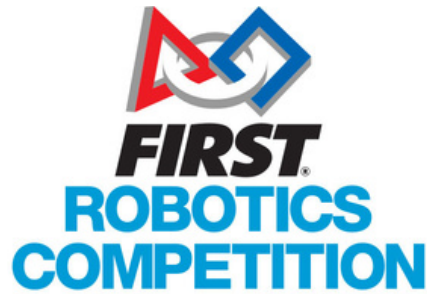


Three FIRST Tech Challenge Ohio teams travelled to Houston, Texas for the FIRST Championship. Teams gave presentations and participated in a Q&A session with judges from around the world. They also completed robot inspections, utilized practice fields, and networked with teams from over 50 countries in the pits. After 2 days of qualification matches and playoff matches, our teams showed great perseverance and innovation. In the Franklin Division, Team 23435 Gyrobotic Droids ended the qualification matches in the 13th ranked position and was selected as an alliance partner for the playoff matches. Teams 20744 & 22858 ranked 27th and 38th out of 64 teams in their respective divisions.

Ohio also advanced 3 students to FIRST Championship as Dean's List Award Finalists, Owen W., Melia K, and Lei S. They were celebrated at the event with a special ceremony.

We are so proud of these teams and students and are so happy they were celebrated on a global stage. We close out the INTO THE DEEP season and now start prepping for the DECODE season launching on September 6, 2025. Congratulations to all of our teams for a successful season.

E.O. APRIL PROGRAM HIGHLIGHTS



Six hundred FIRST Robotics Competition (FRC) teams from around the world were competing at FIRST Championship in Houston in April. The competition was fierce as these are the best teams in the world vying for awards and competing to have the strongest robot game alliance. Two of Ohio's FRC teams, supported by DoD STEM, were among these teams and they rose to the top!

Lakota Robotics, Team 1038 from the Paul George STEM Center in Cincinnati, is a community team comprised of students from several local school districts as well as homeschool families. Lakota Robotics won the Industrial Design Award which celebrates the team that demonstrates industrial design principles, striking a balance between form, function, and aesthetics. To be considered for this award, a team must be able to describe how their robot is elegant, efficient (simple/executable), and practical.

Gem City Gridrunners, Team 10011 from the Dayton Regional STEM School, won the Rookie All-Star Award which celebrates the rookie team exemplifying a young but strong partnership effort, as well as implementing the mission of FIRST to inspire students to learn more about science and technology. The team must excel with regards to leadership, community activities, vision, team spirit while also building a robot capable of accomplishing the game's challenges.

We are so proud of these two teams and their amazing accomplishments this season!

LEGACY GOOD NEWS STORY



Since the age of 11, Jr. Apprentice Savannah has been a part of the Department of the Air Force's Leadership Experience Growing Apprenticeships Committed to Youth (LEGACY) program. For five consecutive summers, she attended STEM-focused Craftsman Camps and has worked as a Jr. Apprentice at the United States Air Force Academy (USAFA) for the past two summers.

In the summer of 2023, Savannah worked in the Political Science Department at USAFA. She worked with Dr. Damon Coletta, Professor of Political Science, where she edited an edition of the Space and Defense Journal while also learning about publication applications. Savannah reflected on this experience by stating, "I researched and wrote a paper about the German Zeitenwende that I submitted for publication in Space and Defense at the end of the summer. Additionally, I helped with the USAFA BiP (Biotechnology Immersion Program) to set up, clean up, and assist the USAFA professors running the program."

The following year, in the summer of 2024, Savannah worked in the Biology Department at USAFA with Dr. Katherine Bates, Director of Health Professions Advising and Associate Professor, and Dr. Kimberly Little, Assistant Professor of the Biology Department. One project had her working with a fellow LEGACY Apprentice studying the mating behavior of fruit flies. "This required me to learn about fly husbandry, genetics, behaviors, and how to use animal behavior analysis software," Savannah stated. "The other project I worked on was troubleshooting a lab protocol for Dr. Bates, involving making a visual concentration gradient for a chemical produced by a specific bacteria."

Adding to Savannah's comments, Dr. Bates said, "Savannah was a wonderful LEGACY student. She learned so many valuable lessons about science and research: dedication, scientific rigor, independence, self-motivation, and most importantly, perseverance!" Dr. Little further added, "Savannah is an exceptional student, and we are very grateful for her contributions to multiple research efforts in the Biology Department at USAFA." Savannah also continued her work on revising her paper from the previous summer for publication in Space and Defense. Savannah's paper, "The German Zeitenwende: Turning Point or Blind Alley," was published in the Fall 2024 edition of Space and Defense in the Student Voices section.

Through this process, she has learned that each voice is important. Her mentor, Dr. Coletta, added, "The lead student contribution on the German Zeitenwende, or comprehensive defense buildup, after Russia's invasion of Ukraine shows that it is never too early for American students to engage in strategic thinking. In laying out her case for why the Zeitenwende placed Germany in a national security bind and why it would likely lead to the collapse of Chancellor Olaf Scholz's coalition government, Colorado Springs High School senior Savannah demonstrated her prescience in World Affairs and became the youngest contributor ever to this journal." She credits Mrs. Dixie Holmes, LEGACY Colorado Site Lead, and her mentor, Dr. Coletta, for reaffirming the value of what she has to say and the fact that everyone must start somewhere. She hopes that it will not be her last publication.

Outside of LEGACY, Savannah enjoys many extracurricular activities. She has been the captain of her high school's Science Olympiad team for 3 years. "I've really focused on maintaining our team and giving my peers the opportunity to explore their scientific interests. I personally have competed in a wide variety of events, from solving ciphers, to microbiology, to Earth science, to building a time-keeping device (which I had to do the day before our competition). We've qualified for state every year (so far), and I have won multiple top 3 placings at our regional tournament," Savannah explained.



LEGACY GOOD NEWS STORY CONTINUED:



Savannah received a license to host a TEDx event at her high school in March. "This is an event that I've been working on for almost a year now. It's a first-time event for my school district and is important to me as another way of uplifting student voices. I've also been dedicated to service and have volunteered over 150 hours throughout high school," said Savannah.

She also participates in the Speech and Debate Team at her school. "In speech, I've experienced a vast amount of personal growth. During my freshman year, I could barely give a speech without extreme nervousness, but because of the support I received from my team and my coaches,

I have become a confident public speaker," noted Savannah. She has qualified for the national tournament twice in World Schools Debate; was elected as a team captain; and earned the National Academic All-American Award, which only 2% of competitors receive. Savannah is the third-highest-ranked student in Southern Colorado.

Savannah began competing in pageants at age 5. In 2020, she was crowned National American Miss Colorado Teen Jr. She enjoys competing in pageants because it has provided her with so much confidence. Due to COVID, the 2020 pageant was online, but that didn't deter Savannah. She uploaded a resume, wrote an essay about a community service project of her choice, submitted a personal statement video, and went through a round-robin-style interview. Competing in pageants has been a very positive experience for her.

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When asked about the experience, Savannah said, "Because of the online experience, I had received notice of my selection before being officially crowned. I vividly remember that I received the email telling me I had won as my mom and I were frantically driving around trying to find my brother the right color tie for his senior prom." That summer, she went to the combined Miss Arizona, Miss Nevada, and Miss California pageant in Scottsdale, Arizona, to be officially crowned. "This was a really fantastic experience that actually allowed me to feel a part of pageant culture again. It felt like a very full-circle experience, like I was able to win for little kid me who felt like she never quite reached her goal. I actually almost started crying on stage because, as a kid, they always played the same song when a girl gets crowned ("What Dreams Are Made of" by Hilary Duff) and there's a shower of bubbles.



LEGACY GOOD NEWS STORY CONTINUED:

I didn't think that they were going to do the same thing for me because I was an auxiliary part of the pageant weekend, but they did. It might sound a little silly, but there's really nothing quite like it," said Savannah. "This year, I wrote and completed a speech about my experience in pageants with the goal of dismantling many of the negative stereotypes surrounding pageants and pageant competitors."

As a state queen, you are obligated to go to the national pageant in November. However, she was unfortunately sick during that time, and everyone needed to be extra cautious to keep everyone safe, so she was unable to attend. "That, combined with the restructuring that was happening internally at National American Miss, meant that I didn't have many resources or connections that would allow me to take full advantage of my title. Not taking the initiative to put myself out there and make the most of my title is one of my biggest regrets. But it has taught me to not take any opportunity for granted and the importance of uplifting myself and others as much as possible, even in small ways," mentioned Savannah.

In her free time, she enjoys reading all genres of books, loves to cook, and is attempting to get better at baking, despite the high altitude in Colorado. She loves supporting her school and going to all sporting events, band concerts, theater performances, and more. "Go Rangers!" Savannah added. She has five dogs, all Rhodesian Ridgebacks, and one cat. Her favorite food is steak, and she is what she thinks could be considered a Dr. Pepper fanatic.

When asked about DAF LEGACY, she said that she has had such a great experience working with DAF LEGACY and is incredibly grateful for the experiences it has and continues to afford her. "The best part of LEGACY has been getting the incredibly unique opportunity to get hands-on research experience, while making valuable connections within the Air Force. And also getting the opportunity to be a published author while still in high school," Savannah added. After graduation from high school, Savannah plans to go to college to study cognitive science and data science. She is still narrowing down colleges, but after graduation from college, her plan is to attend graduate school and conduct cognitive science research.

