

Daniel J. Andrews
WPAFB K-12 STEM Coordinator
Engineering and Technical
Management Directorate, AFRL/EN
2261 Monahan Way, Bldg. 196
Wright-Patterson AFB, OH 45433
daniel.andrews.1@us.af.mil

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K-12 STEM ENQUIRER

WPAFB Educational Outreach Office Acquires *FIRST*® Tech Challenge Program in Ohio

WPAFB Educational Outreach is proud to be the new Affiliate Partner for *FIRST*® Tech Challenge in Ohio. The office also serves as the Affiliate Partner for the *FIRST*® LEGO League Explore and *FIRST*® LEGO League Challenge programs here in Ohio. It is an exciting prospect to now be able to offer a progression of fun and engaging robotics programs for children from Pre-K through 12th, all out of the same office.

FIRST® Tech Challenge is a robotics program for students in grades 7-12. Teams are guided by adult coaches and mentors to develop STEM skills, practice engineering principles, and learn the value of hard work and innovation! Teams are challenged to design, build, program, and operate a robot that they use to compete in head-to-head competitions in an alliance format.

The program will be managed by Sarah Heist, who previously managed the Ohio *FIRST*® LEGO League Explore program for 6-10 year olds. Sarah is excited for the opportunity to work with all the remarkable *FIRST*® Tech Challenge teams and volunteers here in Ohio and highlight all of the tremendous benefits that the program provides in order to garner new interest.

For more information about *FIRST*® Tech Challenge, you can visit the *FIRST*® website at: <https://www.firstinspires.org/robotics/ftc>

If you are interested in starting a team or would like more information about the program here in Ohio, you can contact Sarah Heist at sarah.heist.ctr@us.af.mil or visit our website at http://wpafbstem.com/pages/k12_FTC_overview.html.

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- FLL Rookie Camp





Virtual *FIRST*® Tech Challenge Season Wrap-Up

On Saturday, June 6th, the WPAFB Educational Outreach office hosted a virtual season wrap-up for Ohio *FIRST*® Tech Challenge teams. With some amazing creativity and help from *FIRST* Alumni & Robotics at Ohio State (FROS), and Ohio's *FIRST* Senior Mentors, they put together an event to celebrate the work and accomplishments of the many amazing volunteers, coaches, and FTC teams here in Ohio! While teams in Ohio were lucky enough to complete all their qualifying events this past season, the unprecedented arrival of COVID-19 had other plans for the State Championship which, unfortunately, was cancelled.

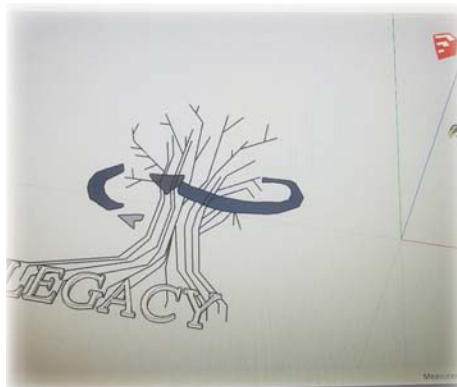
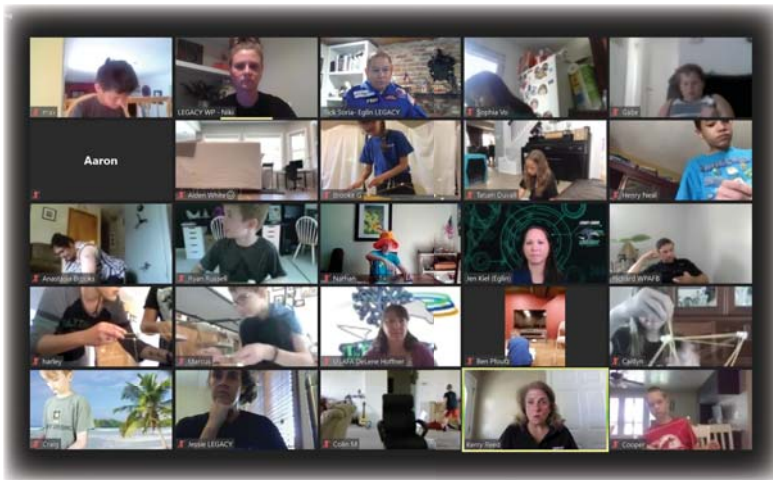
"Knowing all the time, hard work, and dedication that these kids put in during the season, we felt it was important to do what we could to still acknowledge their accomplishments and bring some much needed positive closure to those who might need or want it," said Sarah Heist, Ohio *FIRST* Tech Challenge Program Delivery Partner. The WPAFB Educational Outreach office was thrilled to be able to do something to highlight just how much these kids do and provide them with a sense of accomplishment and pride.

To view the virtual FTC season wrap-up event, you can visit our YouTube page: <https://youtu.be/14fi76bKU0s>



LEGACY Camps

This summer, 2020, LEGACY is running virtual camps for over 250 students ages 11-15 across the country typically at four different sites (Wright-Patterson AFB, Hill AFB, Eglin AFB, and United States Air Force Academy). Students are learning CAD, computer programming, engineering design process, and much more! During these camps, students are also working on public speaking skills and interview questions. Students work in small, virtual groups throughout the camps and are able to collaborate across sites!



Sixty rising 5th and 6th graders registered in March for STARBASE Wright-Patt's original 2-day summer camp, scheduled to be held at our facility in June. With the shutdown of the state due to the COVID 19 crisis, uncertainty how the camp would continue grew. When we got word that the AF was suspending all in-person outreach programs, we knew we wanted to provide something for these eager students and we came up with a plan! Since the rocketry theme would have to be shelved until a later date, we offered a day of engineering and a day of coding, all done live through a virtual tool called Webex. Out of the original 60 students who registered in March, half were retained, with 30 students participating over 4 days.

Day 1 of the camp had students creating air vortex cannons and Mars landers using mostly items that could easily be found within their homes. Many parents opted to find the suggested materials themselves, while others chose to pick up a materials kit provided by STARBASE. Day 2 of camp was a day of coding using Scratch and Python apps. While students were unable to work in the usual teams that STARBASE loves to promote, many of the students shared ideas and results through the virtual tool. While this was our first run at remote camp, STARBASE Wright-Patt looks forward to our rising 7th and 8th grade virtual engineering camp in July!

