



# WPAFB Educational Outreach



INSPIRING STUDENTS IN STEM

January 2021

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## K-12 STEM ENQUIRER

### FIRST® Virtual Tournaments

#### FIRST® Tech Challenge

It's tournament time and Ohio *FIRST*® Tech Challenge has gone fully remote for the 2020-2021 Ultimate Goal season! Ohio's first two remote qualifiers, the Flying Pig and OSU Scarlet and Gray Qualifiers took place January 23-30, 2021. Thirty-seven teams, approximately 350 kids, 75 coaches and mentors, and 50 volunteers, took part in the events. Every team participated in a remote judging interview where they presented their robot design and building process, programming, outreach efforts and more, to a panel of judges. Teams then had one week to run and score six (6) official matches for the robot game competition portion of the event. Both events culminated in remote closing ceremonies where teams came together to celebrate their accomplishments and were recognized for their achievements. While many teams have faced continued and unique challenges this season just to meet and build their robots, the grit and determination they have shown to be able to participate in the *FIRST* Tech Challenge program is beyond compare. We are extremely proud of every coach, mentor, and team who has worked tirelessly to get to this point in the season and we are excited that they chose to be a part of Ohio *FIRST* Tech Challenge. We can't wait to see what these teams do in the remaining six (6) remote qualifiers!

#### FIRST® LEGO League

*FIRST* LEGO League teams across the state have been working hard to accomplish this season's robot and innovation tasks with the added challenges of the pandemic. Many of the teams have yet to meet in-person this season, but all of the teams persevered and found a way to achieve their goals. In January, just over 100 teams made it to the remote competitions - submitting videos of their robot game runs and meeting with judges live on Zoom. We are absolutely impressed with what these teams were able to accomplish this year and overjoyed to have gotten to Zoom with them to learn about their team and their season.

Volunteers from around the state made these events possible by judging, refereeing, and providing real-time feedback to the teams to help them continue to improve. After it was all said and done, 57 teams qualified for the Ohio *FIRST* LEGO League Championship which will take place in February and March.

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#### ...Join Us Next Month

- Virtual TechFest
- WOW! Video

*TechFest is a yearly two-day family event organized and conducted by the Affiliate Societies Council of Dayton since 2003. The focus of TechFest is STEM - Science, Technology, Engineering and Math.*

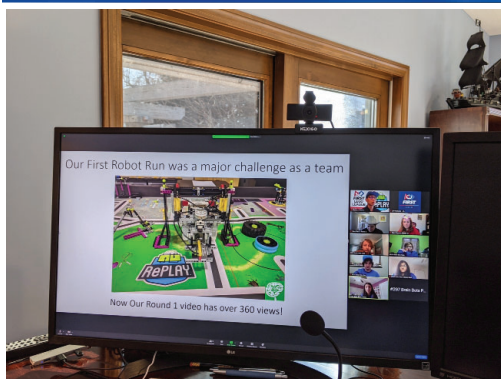
*Due to Covid-19, the TechFest Committee has decided to hold a virtual event this year. Exhibitors are creating virtual exhibits to share STEM experiences and learning.*

*Join the fun on February 13-14, 2021, for an amazing STEM learning opportunity for students, parents, teachers and STEM professionals.*

[www.techfestdayton.org](http://www.techfestdayton.org)



## FIRST® Virtual Tournaments (continued)



*A view from a judge's perspective meeting with an Ohio team" (left)*

*Team Spaghetti Slurpers from Northeast Ohio (right)*



*Team Growling Gears from Cincinnati (left)*

*FIRST alumni turned out in force to judge for the Scarlet & Gray qualifier (right)*



## STARBASE

Happy New Year! At STARBASE we are celebrating the new year by sharing our love of STEM with as many kids as possible. This month we are working with students from Beavercreek City Schools, Kettering City Schools, and Huber Heights City School Districts.

Most groups started the month with kids working remotely from their home. We set up Zoom meetings and engaged the kids with Scratch Coding lesson and demonstrations on a variety of topics including density, buoyancy, sound energy, and physical and chemical changes. Once those students returned to their classrooms we initiated STARBASE on Wheels, where we package and deliver materials for the lessons we plan to teach. We then used Zoom meetings to guide students through mini straw rocket experiments, engineering design process build, coding with Ozobots, nanotechnology, physical and chemical changes, and energy.



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