

**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

# K-12 STEM ENQUIRER

## WOW! Volunteer Spotlight

The Wizards of Wright program is in its 27th year, as a WPAFB Educational Outreach Program. It is a K-12 STEM program free to all teachers in the local area.

### In This Issue...

	Pg.
WOW! Volunteer spotlight	1
FTC tournament	2



### ...Join Us Next Month

- FLL Ohio Championship
- FRC Regional
- WPAFB Trade Show



*A Thank You note to Colonel Snyder from a student at Horace Mann Elementary School in Dayton.*

The roots of the program are found in the first of 4 Flights - WOW! in the Classroom. This flight offers WPAFB experts (WOW! volunteers) to visit area classrooms to present STEM demonstrations and hands-on activities. The goal is to help teachers meet STEM objectives in their curriculum, as well as introducing students to Air Force personnel and exciting STEM career ideas.

The program could not exist without its' many amazing volunteers. One of those special people is Colonel Chris Snyder.

Colonel Snyder is the Deputy Director of Engineering and Technical Management/Services, Air Force Life Cycle Management Center, Wright-Patterson Air Force Base, Ohio. The organization provides technical leadership for total life cycle management covering all Air Force aircraft, engines, munitions, and electronic systems.

Colonel Snyder has held a wide variety of engineering, acquisition, and leadership positions in the Air Force, ground test facility, open air range, and staff environments. He is a Distinguished Graduate of the U.S. Air Force Test Pilot School and has 250 flight hours as an experimental flight test engineer in 31 aircraft types. He has directed over 130 flight test missions including a Joint effort to counter Iraqi Improvised Explosive Devices, Navy F/A-18 radar and survivability testing, and developmental and operational tests of numerous U.S. and Allied Electronic Warfare systems. He has also led a Secretary of the Air Force-directed first-flight test program, Air Force/NASA wind tunnel testing of advanced flight controls, and a Secretary of Defense level acceptance test of a new electronic combat system.



*Colonel Snyder and 1st grade students at Ruskin Elementary School in Dayton.*

Colonel Snyder and his wife are the parents of 4 children. When asked about his reason for volunteering, Colonel Snyder said he "became aware of the need to excite kids with STEM when our own kids started to reach elementary school age. I witnessed how discouraged our own kids could get if they hadn't mastered a "simple" math or science concept, and then unfortunately, they apparently didn't feel comfortable enough to stop the teacher and make sure they understood before everyone else moved on. By that point, we started hearing things like "math is hard" or "I just don't like math/science", which was a surprise to us since our kids generally had a good affinity for both up until that point." He goes on to say that as he used this as an opportunity to be more involved in his children's schooling, "It's what also made me realize how necessary it is to simply keep our kids excited about science and math so they'll be able to "weather" the tough times in school and want to work through challenges to reach a larger goal."

The WOW! program is extremely lucky to have Colonel Snyder volunteering with us. He is a favorite visitor for many students, and shows such excitement when presenting. Colonel Snyder says, "Once I began volunteering, it became (about) seeing the joy & excitement on so many kids' faces when they see a visitor in their classroom, and then when they have that "lightbulb moment" on a subject or concept I'm demonstrating. Those alone totally make volunteering not only "worth it", but so enjoyable as well."

The WOW! program thanks Colonel Snyder for all he has done for us!

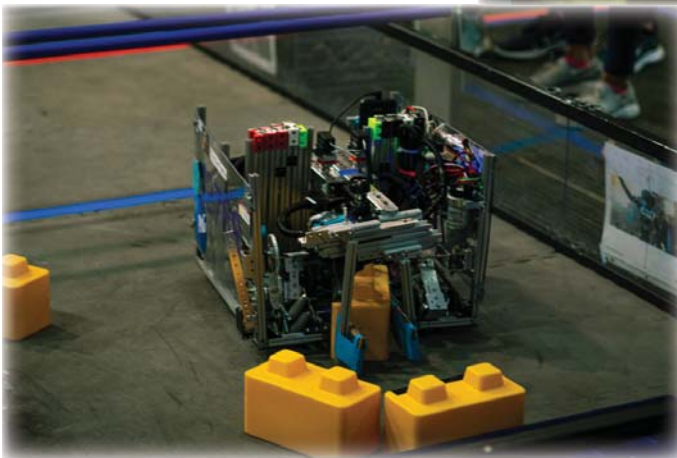


# FTC Tournament

January was a busy month for Ohio *FIRST*® Tech Challenge Teams. Although Ohio Qualifiers started in December, January boasted tournaments in Cleveland, Mahoning Valley, Dayton, Wapakoneta, Cincinnati, Kent and Van Wert. Ohio’s 111 teams have 10 local options for competition or they can apply to travel out of state to compete. In the 2019-2020 *FIRST*® Tech Challenge game “Skystone” teams of up to 15 7<sup>th</sup> through 12<sup>th</sup> grade students work to prototype, create, program and compete with robots that fit in an 18” cube. The robots compete on a 12’ x12’ playing field in ever rotating alliances of 2 teams vs 2 teams. The robots need to pick up, stack, move platforms, read visual targets, and end up in the correct area.

The top teams from each of the qualifiers will advance to the *FIRST*® Tech Challenge Ohio Championship in Loveland, Ohio on 13 and 14 March. Here 36 teams will compete to decide who will represent Ohio at the World Championship in Detroit at the end of April.

If you are interested in helping with a team or with the competitions in March, please contact the Educational Outreach office!



<https://www.facebook.com/wrightpatteo>



[wpafbstem.com](http://wpafbstem.com)



<https://twitter.com/wpafbeo>