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An AvSTEM 'Journey' for Tech Center Ambassadors

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The setup of a “drone cage” is among the challenges awaiting a New Jersey-based team of aviation education enthusiasts this week in the nation’s capital.



Employees at the William J. Hughes Technical Center in Atlantic City have prepared educational and technological displays for their first visit to the USA Science & Engineering Festival Expo, hosted April 7-8 in Washington, D.C. Organizers describe the event as the nation's largest celebration of science, technology, engineering and mathematics (STEM).

"We have definitely been in crunch time here," said team member Holly

Cyrus, a project manager for the Airport Safety R&D Section. "It has been a journey — a real fast journey." She traveled with her colleagues — Team Lead Chris Dumont, Peter D'Amico, Cuong Nguyen, Marybeth Moschouris, Miguel Jimenez, Maryfaith Rodgers, and Scott Doucett.

The fifth biannual festival — themed "STEM Can Take You" — is projected to draw hundreds of thousands of attendees over three days at the Walter E. Washington Convention Center. A Sneak Peek event will be open to invited guests on Friday with full access for the public to activities scheduled for Saturday and Sunday. The facility will hold 3,000 hands-on exhibits, 30 stage shows, and other activities geared toward students in kindergarten through twelfth grade.



From l to r: Matthew Mariani, Scott Doucett, Maryfaith Rodgers, Holly Cyrus, Chris Dumont, Ian Johnson, Peter D'Amico, and Miguel Jimenez.

The FAA's displays will feature a WILD (Weather Information Latency Demonstrator) Flight Simulator, a Storyboard, and a Drone Zone in which volunteers will fly six quadcopters inside a netted cage. The storyboard is an animated tool that provides graphic models of capabilities and functions related to the National Airspace System. (*Learn more about the NAS Storyboard [here](https://my.faa.gov/focus/articles/2017/09/Tech_Center_Team_Tur.html) (https://my.faa.gov/focus/articles/2017/09/Tech_Center_Team_Tur.html).*)

"The Drone Cage will be used to draw people into the booth and then we will talk with them about the storyboard and flight simulator," Cyrus said. Her teammates, also known as Aviation STEM

(AvSTEM) Ambassadors, have devoted time to performing aviation-related STEM outreach activities, from participation in school science fairs to hosting visits from local students to the Tech Center. The Tech Center now counts more than 50 employees among its outreach ambassadors.



A look inside the FAA booth's drone cage.

“Our goal is to help the next generation become engineers and scientists,” Cyrus said. Along with the displays, the volunteers will also distribute storyboard magnets, storyboard cards, AvSTEM doorbell cards, AvSTEM tri-folds, and paper airplanes to booth visitors.



From l to r: Cuong Nguyen, Mary Beth Moschouris, Miguel Jimenez, and Peter D'Amico of the Tech Center Storyboard Team.

The STEM expo is one of the Tech Center's AvSTEM initiatives, said AvSTEM Program Manager Lyndsay Digneo. In February, Headquarters representatives asked for the Tech Center to take the lead in planning the agency's booth for the event. Last month, Aerospace Engineer Chris Dumont took the lead in organizing the exhibits.

“It’s the first time around,” Digneo said. “We had to prepare quickly. We’re happy with what we were able to design and take down.”

The Tech Center’s AvSTEM Program was established in September 2016 and one of its milestones was the creation of an Aviation STEM Council (https://my.faa.gov/focus/articles/2017/02/Creating_a_Tech_Cent.html), which aimed to enhance the Tech Center’s educational initiatives. In fiscal 2017, the program supported 45 events and reached nearly 5,000 students in grades ranging from elementary to graduate school.

In fiscal 2018, the program has broadened its programs to students in the southern New Jersey region, Digneo said. In partnership with The Ohio State University, volunteers are planning an aviation STEM curriculum workshop for regional teachers during Aviation STEM Day at the Tech Center on May 14. Educators are invited to attend the event along with their students.



Headquarters Volunteer Ian Johnson shows children the WILD Flight Simulator.

“That’s sort of a big bang,” Digneo said. “You’ll get the echo effect of teaching teachers and then they’ll teach their students. It has a broader impact.”

The Tech Center also coordinates efforts with other regions through the FAA’s national STEM Aviation and Space Education (AVSED) Program (https://my.faa.gov/tools_resources/training_learning/stem-avsed.html). Volunteers have high expectations for this weekend’s STEM festival expo.

“It was a big effort,” Digneo said. “It’s going to be a success.”

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Vanessa

Balgobin

2 years ago

My 8-year-old son had a great time flying FAA's flight simulator at the Expo. Thanks to everyone who worked to make this such a successful event!

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