

# NEW HORIZONS



*Broward College offers first autism-friendly avionics training*

STORY BY CHRISTINE KNAUER

In December, Zachary Hopkins will graduate from what's likely the first initiative of its kind in the country – an autism-friendly avionics training program at Broward College in southern Florida. The new program exemplifies how the school celebrates diversity and inclusion and empowers students of all abilities by providing them with pathways to employment.

“Electronics was something I was interested in, but not airplanes specifically,” Hopkins said. “I was open to the idea and willing to see what the options were.”

In launching the program, Broward College partnered with a local organization called HAAPE (Helping Adults with Autism Perform and Excel), which creates, funds and nurtures employment programs by collaborating with companies and other organizations.

“HAAPE started in mid-2016 when several friends

**“FROM AN EMPLOYER’S POINT OF VIEW, EMPLOYEES ON THE AUTISM SPECTRUM TEND TO BE EXCEPTIONALLY LOYAL AND VERY HARD WORKERS.”**

**RUSSELL MCCAFFERY,**  
*Dean of Transportation at Broward College*

and I heard about the plight of autistic people, specifically our friend’s son who was 22 and aging out of high school,” said Dr. Larry Rothman, chairperson and co-founder of HAAPE (pronounced happy). “The situation was dire with no real support after high school and bleak employment prospects.”

For today’s workers, having a tangible and highly marketable skill is important. For adults with autism, it’s even more crucial.

To reach individuals with autism and their families, HAAPE partners with the Center for Autism and Related Disabilities, a nonprofit collaboration between the University of Miami and Nova Southeastern University, or UM/NSU CARD.

“When we met with the head of UM-NSU CARD, we learned that unemployment and underemployment rates for people with autism is 80% to 90%, and few organizations

support job seekers,” Rothman said. “Unfortunately, many people on the autism spectrum never leave their home. HAAPE was born with a focused mission to seek out employment for people on the spectrum.”

Rothman approached Broward College’s dean of transportation, Russell McCaffery, who immediately embraced the idea of tailoring specific coursework for people on the spectrum. Avionics repair was a natural choice since the repair process is structured, focused and repetitive – all abilities that people with autism excel at, according to Rothman.

McCaffery agreed, “Avionics is a great job for those who like to work in air-conditioned environments because so many aviation maintenance jobs are in un-air-conditioned hangars or on the ramp. Often, repair stations are nice, clean air-conditioned, well-lit environments. And, depending on the repair station and the components they specialize in, some of the jobs are very rote. They may specialize in one or half a dozen different components, and the job is to simply follow a checklist of five or 10 steps on a component and then move on to the next one. Those types of jobs might be really appropriate and attractive for someone on the autism spectrum.”

At Broward College, avionics students receive training at the school’s Aviation Institute adjacent to North Perry Airport north of Miami, Florida. With assistance from UM/NSU CARD, the school began the process of certifying its avionics program as autism-friendly.

“Experts from CARD looked at our curriculum, sat in on classes and made recommendations on how we can best serve students who have autism,” McCaffery said. “They looked at the pacing of the program and

the environmental conditions and provided strategies to instructors for keeping students engaged.

“Most of the program is taught in a classroom, but there are times when students go out to the hangar or onto the ramp, which may cause some anxiety. Understanding and preparing for that is important. Also, students with autism aren’t always good at self-advocating. They don’t raise their hand and say, I’m lost can you please help me.

CARD explained that the instructors need to check in with the students periodically to make sure they’re still on track.”

Like all avionics students, Hopkins was able to choose from two programs – a one-year technical certificate in avionics or a two-year associate degree in avionics. He chose the latter. Both programs are designed to prepare avionics students to successfully pass ASTM’s National Center for Aerospace & Transportation Technologies aircraft electronics technician certification exam.

Early this year, Hopkins offered this bit of advice for anyone interested in pursuing Broward College’s autism-friendly avionics training: “The first few sets of classes can be difficult,

but so long as you keep up with the work, you’ll do fine.”

### Expanding the program

Beyond working with avionics in an aircraft repair station or component repair facility, Broward College and HAAPE are expanding the training options to help students prepare for work with other types of employers, from large parts brokers to manufacturers that need software testers.



*After graduating with an associate degree in general studies from Broward College, Zachary Hopkins (left) stopped for a photo with Russell McCaffery, dean of transportation. In December 2021, Hopkins will earn his second degree – an associate degree in avionics.*

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“More recently, working again with Broward College, we introduced the supply chain and logistics certification program that allows for online training in eight different supply chain disciplines,” Rothman said. “This provides adults multiple opportunities to work in warehousing, distribution and supply management, areas where there’s significant demand for qualified people.”

Together with United Community Options, HAAPE built SPECTRUMTECH, a training and employment center that prepares and employs people on the spectrum to be software testers, quality assurance testers and ADA website compliance testers.

“Of course, every person with autism is different than the next, and no two have the same skill set,” McCaffery said. “But generally speaking, those who are on the autism spectrum tend to favor activities that are fairly predictable; in a more controlled environment. There are some avionics and supply chain jobs that fit that bill precisely.”

To close the loop with its avionics training, Broward College sought employers who may be interested in hiring graduates.

“Obviously, it doesn’t make sense for us to put this program together and put students through the program only to not get employed anyway,” McCaffery said. “The purpose of this whole program is employment. We’ve been working with a couple of employers locally who are willing to be part of the conversation. They’re not committing to hiring anyone, but they are willing to interview the candidates when the time comes.”

### Attracting students

To identify interested students for the program, McCaffery plans to continue working with both HAAPE and CARD. The college holds information sessions for students and their families to learn about the autism-friendly training programs and tour the school.

“Everybody, regardless of if you’re on the autism spectrum or not, likes to actually see things for themselves,” McCaffery said. “During the information session, they have the opportunity to come in with their family and see the facility, ask questions and get a sense for the environment, maybe even sit in on some courses.”

Being able to preview the program and the environment beforehand was incredibly helpful, according to Hopkin’s mom, Ania Krumenacker, as is having “real world” training.

“The training is very hands-on,” she said. “The setting and classes are very similar to what it will be like when Zach has a job. When it comes to autism, it’s very important for him to follow along and see examples. It makes it a lot easier to understand.

“People with autism have a special mind. Once they learn a skill, they can notice things that maybe other people wouldn’t have noticed and then perfect it. I think this is a great opportunity for an adult with autism to be part of a one- or two-year program and then be out there working. That’s really the key to success.”

Hopkins agreed and added, “I’m looking forward to the opportunities this brings me.” □