



Spring 2024 Newsletter

THE NJ AEC in Action



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Message from the Executive Director...

“Why fly?”

Humans have always been fascinated by the idea of flying. The ability to fly has been a dream throughout history, and aviation has allowed us to travel vast distances relatively quickly. Flying allows for efficient transportation and has connected people and cultures worldwide.

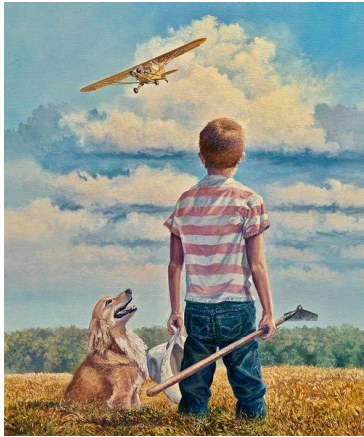
“Why fly?” might be a metaphor for pursuing ambitious goals or dreams. In this sense, it encourages people to aim high, reach for their aspirations, and not be afraid to take risks or venture into the unknown.

Flying can represent freedom and exploration. The sky has often been associated with limitless possibilities and the unknown. So, “Why fly?” could be a philosophical question about the human desire for exploration, pushing boundaries, and seeking new experiences.

In the context of environmental concerns, “Why fly?” might prompt reflection on the ecological impact of air travel. As concerns about climate change grow, there is increasing awareness of the need to find more sustainable modes of Transportation.

Go “**Above and Beyond**” and support AOPA, EAA, SSA, WAI, Ninety-Nines, Civil Air Patrol, Air Line Pilots Association, and Aviation Institute of Maintenance, just to name a few.

Remember: “If they can dream it, they can do it.”–



DREAMS DO COME TRUE!
NJ Aviation Education Council
aviationec.com

Michael Castania
Executive Director
NJ Aviation Education Council

Greatness...

Pilots and aviation greatness are intertwined with the history and progress of human flight. The field of aviation has seen remarkable achievements, breakthroughs, and individuals who have left a lasting impact. Pilots are often regarded as heroes and role models for various reasons. Their skills, courage, dedication, and professionalism make them admirable figures for people around the world.

"Boy, he sure is a great pilot." How often have we found ourselves echoing this sentiment, marveling at the prowess of fellow aviators, from the legends from the past to those we encounter at our local airfields? But what truly defines a "great pilot"? Is it innate talent, years of rigorous training, or perhaps something more intangible?

We believe greatness in aviation is a journey rather than a destination. It culminates with relentless dedication, continuous learning, and an unwavering commitment to excellence. Natural ability may set the stage, but the passion for flying, the mastery of the aircraft, and the wisdom gained from each flight transform a good pilot into a great one.

Whether it's the precise execution of maneuvers, the calm decision-making in the face of adversity, or the gentle touch on the controls, greatness is often recognized in moments of challenge. Yet, it's also in the everyday commitment to safety, proficiency, and the joy of flight.



But what exactly is a "great pilot" and how do you become one? Is it all about experience and training, or does it come down to natural ability? Does it have more to do with decision-making or stick and rudder skills? Or do you simply know it when you see it?

"The mark of a truly superior pilot is the use of his/her superior judgment to avoid situations requiring the use of his/her superior skills."

Pilots and aviation enthusiasts continue to contribute to the field's legacy, exploring new frontiers and pushing the limits of human achievement in the skies. Their dedication, skill, and courage continue to inspire future generations in the pursuit of aviation greatness.

Pilots are often considered heroes, their heroic qualities extend beyond the stereotypical image of a superhero.

"If you can dream it, you can do it!"

Captain Hussain Ferouze

Professional 747 Airline Pilot with over 28500 Hours of unblemished flight safety



Ret. Spirit Airlines Capt. Janis Blackburn, CFI, and United Airlines 787, 1st Officer
Beth Cameron

Runways and Airports in Antarctica.

By Janis Keown-Blackburn

Until I booked my trip to Antarctica and learned that we were going to fly in to meet our sailboat there, I never thought about airports there. Of course, I knew there was one at the US station way down near the pole, but I never gave it a thought of any others.

Before leaving Chile, I knew we would fly onto a dirt strip on King George's Island in the South Shetland Islands. It isn't truly Antarctica, but it's pretty close—it's south of the Drake Passage. I figured we'd use a turboprop because it was a dirt strip. Surprise, it was a Bae 146-200 four-engine jet aircraft. We were supposed to leave at 1 pm but got word that there had been fog in King George earlier, so all of the flights were backed up. This is pretty much a VFR airport. Because of the mountains, they need at least a 1500-foot ceiling. We arrived at the airport at 4 pm for a 6 pm departure. The flight took about 2 hours; we were served a nice boxed dinner and then the landing. Sure enough, we touched down on a 4239-foot gravel strip.

A small bus drove us a mile to the water's edge, where a zodiac awaited us to the Ocean Tramp sailboat, our home for the next two weeks. And, the adventure began. We sailed south, tucking into several islands just off the Antarctic peninsula. We would go ashore and explore penguin colonies or use the zodiacs or kayaks to investigate the area. We were constantly watching for AND SEEING whales, penguins, and seals. We landed on the peninsula, where we celebrated with champagne.



We sailed as far south as 64.3524S, which is the Antarctic Circle, at 66.335. On our way back north, we passed one of the 50 or so runways on top of a glacier. This one was built almost a hundred years ago.

Being so close to the penguins, seals, and whales—one humpback was within 2 to 3 feet of the zodiac I was in—was exciting, but being a pilot, I was excited when we

stopped at Deception Island. Deception Island has a natural harbor. The island surrounds a submerged active volcano. Because of the volcano, it has a black sand beach rather than the rocky shores on which we were now accustomed to landing. Until 1967, Chile owned a research center on the island. That year, The volcano's eruption buried the center with ash and rock, leaving several buildings standing. Deception was an important whaling center from 1912-1931. But why was stopping there exciting for the pilot in me? We learned about Hubert Wilkins, who had been on the Shackleton-Rovett expedition on the "Quest" in 1921-1922. Wilkins felt there was a better way to explore Antarctica than by sea, so he built a runway on Deception Island and, in 1928, used a Lockheed Vega to begin flying over the peninsula. That runway, which had an S turn in it, is no longer there, but the hangar survived the volcano's eruptions.

There was so much aviation history in New Jersey, and it was exciting to stand where other aviation history had taken place.

This was the trip of a lifetime in more ways than one. I had expected to see penguins, whales, seals, and lots of icebergs, but I never thought I'd learn a little aviation history.



Civil Air Patrol: Falcon Flight Academy



NFA Falcon Flight: Group photo taken by Joseph 'Trip' Podesta Sr.

C/1st Lt Sanjna Thoguru - Capt 'Bud' Jackson Composite Squadron, New Jersey Wing

“I’ve been to two different National Flight Academies within my time in Civil Air Patrol and they have been two of the best experiences I’ve had in the program. Nothing beats the supportive environment that National Flight Academies create for cadets who wish to fly.” ~ **Cadet Joshua Friedman, New Jersey Wing**

Aerospace Education In Civil Air Patrol

Civil Air Patrol (est. 1941) has been exposing teens and young adults to aerospace for the past 80 years. The CAP aerospace program not only spreads awareness of the importance of aerospace education, but it enables cadets to learn to fly and explore

exciting career opportunities. With well over 22K Orientation Flights, 92K Hours Flown, and 500K Students impacted, there is no doubt that the CAP aerospace education program is incredibly effective.

What is an NCSA?

One unique opportunity offered to cadets is CAP's NSCA(National Cadet Special Activities) program. NSCAs are competitive programs that require applications several months before the proposed activity. CAP offers NCSAs focused on emergency services, cybersecurity, leadership, and aerospace(and much more!). One of the more competitive NCSA programs is the National Flight Academy(NFA). These academies train cadets in a rigorous four-month ground school, allowing them to experience the wonder of flight firsthand while preparing them to be responsible pilots.



NFA Falcon Flight: Picture taken by Joseph Podesta Jr.
Flight Academy cadets preparing to head back to base after a day of flying

“The Flight Academy helped build the foundation needed to continue my flight training, it was challenging but also very rewarding” ~ **Cadet Sophia Kiraly, Connecticut Wing**

History of Falcon Flight Academy

Falcon Flight Academy was first established in 1970, the very first Falcon Flight was held the year after in 1971. Since then, Falcon Flight has held the tradition of selecting a distinguished graduate for each year they have funding to conduct the activity. The very first distinguished graduate, Edward Myzie, now has a generous scholarship donation in his memory courtesy of his wife, Amy Myzie, who shared his love for flying. This donation has helped countless cadets afford to attend the competitive flight school. In 2018, Falcon Flight officially became recognized as a national flight academy offering up to 14 cadets a year access to flight training.



NFA Falcon Flight: Picture taken by Joseph “Trip” Podesta Sr.

Cadet experiencing flight in a controlled environment using a flight simulator. Device allows individuals to familiarize themselves with different flight procedures.

“National Flight Academy was a great opportunity to meet new people, I loved that our flight instructors were so hands-on, and I learned a lot in a very short amount of time” ~

Cadet Priscilla Falcao, Maryland Wing.

Falcon Flight Academy: My Experience

During my time at Falcon Flight Academy, I was exposed to flying, unique planes, and the experiences of the CFIs and pilots who passed through Ocean County Airport. We

spent most of our days in the said airport, flying, studying, toying around on the simulator(as seen above), and socializing with each other and the many characters we met during our time there.

The immersive nature of the flight academy allowed us cadets to be surrounded by aerospace wonders for most of our stay. We toured multiple aircraft hangars at the airport, which held a plethora of old and modern planes. This allowed us to get up close and view the mechanisms of the past that aren't seen in many typical planes today.

We also had the opportunity to meet two experienced MedeVac Pilots who worked for RWBaranabas. They explained their jobs and allowed us to look inside the helicopter. Being inside the helicopter significantly differed from looking at it from the outside. The experience offered insight into how medical professionals use airpower to save lives.



NFA Falcon Flight: Picture taken by Joseph ‘Trip’ Podesta Sr.
Two cadets prepare to conduct a pre-flight inspection.

“Falcon flight was, without a doubt, the most exciting activity I have participated in within CAP. The instructors were experienced and made every difficult moment an exciting memory. If you have even the slightest interest in flying [...] any National Flight

Academy would be an amazing place to start.” ~ **Cadet Joshua Enberg, New Jersey Wing**

Final Thoughts:

Overall, the beliefs of others and myself reflect that the time we spent at New Jersey Wing’s Falcon Flight Academy was one of the most valuable experiences we shared in the Civil Air Patrol program. For me, it was one of the highlights of the 5 years I have been a part of CAP and an incredibly enriching experience that I doubt I would find anywhere else. Falcon Flight Academy was the first step in my flight training and, hopefully, future career, as I'm sure it is for others.

Sources:

<https://njwg.cap.gov/about/our-missions/aerospace-education/njwg-falcon-flight-academy>

https://www.gocivilairpatrol.com/media/cms/CAPFactSheetHR_2022_7E68A1373E6Do.pdf

<https://civilairpatrol.planmylegacy.org/supporters-like-you/myzie>

Quoted:

Cadet Sophia Kiraly -- CTWG

Cadet Priscilla Falcao -- MDWG

Cadet Jousua Freidman -- NJWG

Cadet Joshua Enberg -- NJWG



Aviation Career Night

On Monday, January 29, 2024, the Morris Hills Regional District hosted the first-ever Careers in Aviation event at Morris Hills High School. The event aimed to expose students and families to various career opportunities in aviation.

The event's attendees included students and families from Morris Knolls and Morris Hills and several neighboring districts that run aviation programs through the Aircraft Owners and Pilots Association (AOPA). The program featured interactions and conversations that led to career exploration and opportunity.

The event featured a diverse representation of aviation career paths. Representatives included Capitol Technology University, CAE, The Civil Air Patrol, The New Jersey State Police, The Denville Office of Emergency Management, Delta Airlines Tech Ops, FedEx, The American Institute of Aeronautics and Astronautics, Morristown Municipal Airport, and Jersey Ridge Soaring.

Additionally, a highlight of the program was the New Jersey State Police landing the NorthSTAR Air Medical Helicopter on the softball fields midway through the evening.



NJAEC Executive Director Michael Castania at the Morris Hills Aviation Career Night

The Morris Hills Regional District offers a unique program that focuses on career pathways in Aviation. As veteran pilots and aviation specialists retire, the country faces a critical industry shortage. Boeing predicts that 612,000 new pilots and 626,000 new aviation maintenance technicians will be needed in North America by 2040.

Morris Hills and Morris Knolls offer a sequence of classes focusing on two career pathways: piloted flight and unmanned aerial flight (UAS). Students in the program can earn their Part 107 credential and pass their written FAA ground test. By offering a hands-on curriculum paired with industry connections and relevant field experiences, Aviation students at the Morris Hills Regional District are poised to find success in the field.

For more information on the Aviation and Aerospace program, please contact Mr. Keith Bigora, District Supervisor of Career and Technical Education, at kbigora@mhrd.org



Attendees and career representatives at the Careers in Aviation Event held at Morris Hills High School on January 29, 2024

Atlantic County Institute of Technology: Preparing Tomorrow's Leaders through Aerospace Studies



At the Atlantic County Institute of Technology (ACIT), the motto "Pursue What You Love" encourages students to explore their passions through diverse academic programs, extracurricular activities, and athletic offerings. One standout program is Aviation Studies, designed to cultivate the next generation of industry leaders.

The Aviation Studies curriculum provides a comprehensive foundation in engineering and aeronautics principles during the freshman year. From sophomore year onward, students embark on a concurrent enrollment program in partnership with Embry-Riddle Aeronautical University, the world's largest accredited aviation and aerospace university institution. This innovative concurrent enrollment



partnership introduces high school students to rigorous STEM courses that prepare them for college success while paving a clear pathway toward graduation and high-paying careers in thrilling, dynamic industries. Students gain exposure to multiple career pathways within the aviation field, prepare and test for industry-recognized certifications, such as the Remote Pilot Airman Certificate with a small UAS Rating (Part 107) and/or Private Pilot Certification while earning up to 20 college credit hours. Additionally, students can participate in work-based learning opportunities during regular school hours. These experiences allow students to apply learned knowledge and skills in industry-related jobs to gain essential, hands-on experience.



Throughout the program, students maintain an academically rigorous schedule aligned with the New Jersey's high school graduation requirements. They develop quantitative knowledge and skills, apply scientific reasoning, become technically competent, and information literate, analyze situations from humanistic and historical perspectives and identify human factors impacting our world. Additionally, students build a solid comprehension of aviation sub-branches, from foundational principles to contemporary trends and career options.

Students have access to state-of-the-art technologies and equipment such as desktop X Plane, full-motion Redbird simulation systems, and an impressive multi-mission capable Uncrewed Aircraft System fleet. These latest technologies are just a few tools used to augment instruction and showcase the skills learned in class. Students attend daily instruction in modernized classrooms on the main campus and at the National Aerospace Research and Technology Park (NARTP). Here, students frequently liaise with industry professionals to learn about emerging technologies, stay abreast of dynamic changes to Federal Aviation Regulations and the National Airspace System, and be informed of real-time projects impacting the future of the aerospace industry. With the proximity to the William J. Hughes Technology Center, students can participate in an Aviation Monthly Mentorship Program (AMMP). AMMP modules provide students unique opportunities to engage with FAA aviation professionals in several laboratory environments. Experiences may include cockpit simulators, high-fidelity air traffic control laboratory simulations, and small and full-scale fire testing.

Through ACIT's Aviation Studies program, students are empowered to pursue their

passion for aviation and aerospace, gaining the knowledge, skills, and certifications necessary to soar as tomorrow's leaders in these dynamic fields.



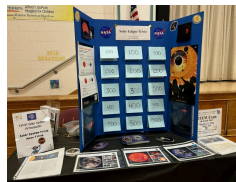
NJAEC in action



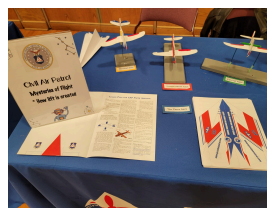
Recently, four NJ Aviation Education Council members, representing four aviation/aerospace organizations, supported the Dawes Ave Elementary School during their annual STEAM Night.



Michelle Riordan (NASA Solar System Ambassador), Andy Nebl (Atlantic County Institute of Technology's Aviation Studies Instructor), Kurt Stofko (EAA), and Michael Castania (NJWG Director of Aerospace Education) were able to introduce an exciting assortment of hands-on aviation/aerospace activities.



NJ Aviation Education Council membership comprises a diverse group of aviation professionals representing airline pilots, flight instructors, Civil Air Patrol, Experimental Aircraft Association, Aircraft Owners and Pilots Association, Engineers, school administrators, FAA, JROTC, NAVAIR, and more.



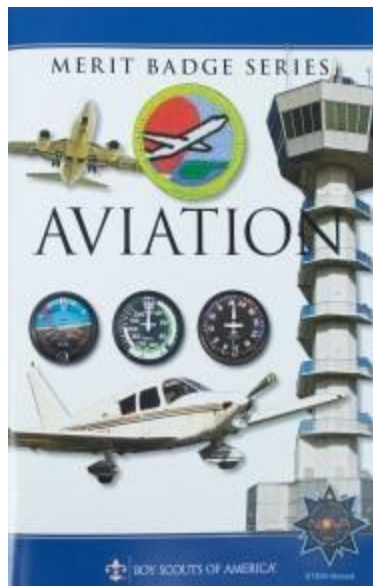
"If they can dream it, they can do it" - Walt Disney

Make Dreams come True...

NJAEC in Action

On Feb 24, council members Kurt Stofko (BSA Merit Badge Counselor) and Michael Castania (Executive Director) participated in the BSA Jersey Shore Merit Badge Academy held at NJ's Stockton University, where they presented necessary materials and activities required to allow scouts from around the state to earn their BSA Aviation Merit Badge.

Now, in their 4th or 5th year of collaboration, this isn't about recruiting scouts but promoting aviation through the scouting program. For most of history, people have dreamed of flying, imagining how it would feel to soar through the sky like an eagle or hover in midair like a hummingbird, to float on unseen currents, free of Earth's constant tug, able to travel great distances and to rise above any obstacle. Today, we can join the birds through aviation and fly farther, faster, and higher than they ever could. The NJ Aviation Education Council and the Civil Air Patrol are proud to be part of this dream.



Working together, they were able to:

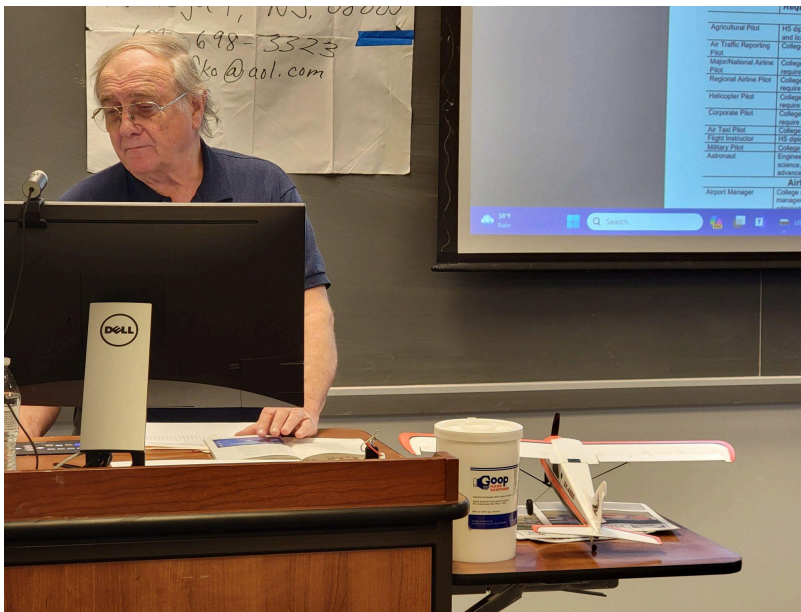
- Define "aircraft." Describe some kinds and uses of aircraft today. Explain the operation of piston, turboprop, and jet engines.
- Point out on a model airplane the forces that act on an airplane in flight.
- Explain how an airfoil generates lift, how the primary control surfaces (ailerons, elevators, and rudder) affect the airplane's attitude, and how a propeller produces thrust.
- Demonstrate how an airplane's control surfaces are used for takeoff, straight climb, level turn, climbing turn, descending turn, straight descent, and landing.
- Explain the purposes and functions of the various instruments found in a typical single-engine aircraft: attitude indicator, heading indicator, altimeter, airspeed indicator, turn and bank indicator, vertical speed indicator, compass, etc...

- Find out about aviation-related career opportunities.

This wasn't their "first rodeo," as Kurt's scouting and Michael's Civil Air Patrol Aerospace Education contacts made it possible for the NJ Aviation Education Council to promote aviation at several aviation/aerospace-related events each year throughout the state.

NJ Aviation Education Council's mission is to encourage and reinforce interest in aviation/aerospace subjects and careers and educate students about the value of the aviation and aerospace industries in the local, state, and national contexts.

Inspire the next generation of aviation, space, and cyber leaders through education. If you are a teacher in the classroom, homeschool educator, youth group leader, or after-school or enrichment program leader, the NJ Aviation Education Council will have something to help you!



Kurt Sofko

NJAEC in Action

On March 16, The Greater Delaware Valley Chapter of Women in Aviation, Inc. presented its 2024 Girls in Aviation Day at Philadelphia's Northeast Philadelphia Airport (PNE), organized by Aviation Influence and hosted by Atlantic Aviation. NETWORKING does not get any better...

This event allowed NJ Aviation Education Council members Kurt Stofko and Michael Castania to join forces with the PAWG and NJWG to represent CAP's Aerospace Education Member program, Cadet Programs, and Emergency Services. Next to the CAP exhibit was the NJ Aviation Education Council's table promoting a variety of aviation career pathways and, of course, free Young Eagle Flights, which was a huge hit with the attendees.

Those who follow our Facebook page know my thoughts and the benefits of Networking... Between the two CAP Wings representing CAP Membership and benefits, the NJ Aviation Education Council promoted a wealth of career pathways offered by our affiliation/partnership with the FAA, EAA, AOPA, NASA, BSA, and others.

Close to 400 young ladies accompanied by their parents were treated to motivational speeches by Women in Aviation role models, a huge aircraft static display outside of the Atlantic hangar, exhibitors galore promoting all aspects of aviation; hands-on activities, gifts, and treated to lunch.



NJAEC in Action

On Thursday, March 14th, the NJ Aviation Education Council and NJWG Aerospace Education Department again teamed up to participate in the Leeds Ave Elementary School's (Pleasantville, NJ), K-5 Family STEM Night. Over 300 parents, students, and community members attended, and the evening's theme centered on hands-on STEM-related activities.

We (Kurt Stofko & Michael Castania) were not expecting such a young audience. So much of what we had planned was an effort in futility. However, we scored huge points with the parents by promoting the EAA Young Eagle Flights (free airplane rides) for children ages 8-17. On the downside, do not bring your RC Mini Apprentice STEM kit to demonstrate the control surfaces and Newton's Third Law of Motion, as the term "Please do not touch" did not register with the little ones!



Resources

New Jersey Aviation Education Council



<https://aviationec.org/>

New Jersey STEM Pathways Network

Defining and guiding a STEM vision for cradle-to-career pathways in New Jersey.

-ALIGNS RESOURCES TO SCALE AND REPLICATES PROMISING PRACTICES.

-PROMOTES STEM CAREER PATHWAYS BY TRAINING STATE LEADERS AND CREATING DEEPER PUBLIC AWARENESS OF OPPORTUNITIES AVAILABLE IN THE 21ST CENTURY WORKFORCE.

-IDENTIFIES LEARNING OPPORTUNITIES BY CONVENING NEW JERSEY'S STEM EXPERTS.

Learn more: <https://njstempathways.org/>

NJWG Aerospace Education, along with the NJ Aviation Education Council, partnered with NJ STEM Pathways during Thursday's NJIT's Newark Ecosystem Revitalization, which targeted inner-city children who do not have equal learning opportunities. NJWG AE was one of dozens of STEM organizations participating in and supporting this program.

Networking Works: Share the Wealth

Learn more: New Jersey STEM Learning Ecosystems

<https://njstempathways.org/ecosystems/>

PD/Training Opportunities for Teachers:

- Space for Teacher, Embedded Teacher Program: <https://spaceforteachers.org/>



[Space for Teachers](#)

Embedded Teacher Program, parabolic flight, STEM, school space projects, space for teachers, microgravity professional development, space, students, zero-g
spaceforteachers.org

- Teacher aircamp <https://aircampusa.org/educator/>



[An Adventure in Teachers Education | Air Camp](#)

Teachers Air Camp experience is an exciting and rigorous adventure for all who participate. Participants remember why they became a teacher all over again.

aircampusa.org

- <https://usna.edu/STEM/applications.php?fbclid=IwARoJSS6xKgO9QOGSbto3mp2YgoQyjaChE7W76pRoASi7vxPD6YDYwD4zdwg#stem5>



[Applications](#)

Applications page for Science Technology Engineering and Mathematics at USNA.edu. Updated Tue Jan 30 10:49:41 EST 2024.

usna.edu

- SPACE 2024 - Conference for Educators
<https://www.amfcse.org/space-conference-for-educators>
- [YouthAstroNet - Join YouthAstroNet](#)
Join the YouthAstroNet Community
at youthastronet.sites.cfa.harvard.edu

Contest(s):

- www.faa.gov/adc

Drone License

Atlantic County Institute of Technology (ACIT) offers programs in a number of trades specifically designed with the adult learner in mind.

[\(ACIT Adult Education Programming\)](#)

Reinvent yourself today or learn a new skill. Courses are available in:

- Automotive
- Black Seal License
- CADD
- CPR
- Carpentry
- Culinary Arts
- Electrical
- EMT
- HVAC
- Dental
- **Drone Operations**
- Medical Assisting
- Phlebotomy
- Photography
- Plumbing
- Sewing
- Welding

DRONE OPERATIONS & PART 107 CERTIFICATION



Earn your Commercial Unmanned Aircraft System (UAS small) / Drone License, 14 CFR Part 107. To be eligible to get your Remote Pilot Certificate, you must be:

- At least 16 years old
- Able to read, write, speak, and understand English
- Be in a physical and mental condition to safely fly a UAS

This 8-week course will prepare you to pass the FAA licensing exam successfully and teach you what you need to know to operate your UAS legally within the National Airspace System comfortably. A fully licensed FAA instructor teaches this unique course and blends in-person instruction with the industry's most up-to-date test preparation

software. This hybrid style of instruction achieves amazing results, the latest class with a 100% pass rate on the licensing exam and 100+ UAS commercial operational hours safely completed.

Tuesday	5-7 pm	8 weeks (16 hours)
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Tuition is \$200, and administrative fees are \$55
Licensing exam is \$175 - not included in the tuition

Upcoming Events

- 12 Apr... NJ AGC Conference Center at Mercer County Community College
- 27 Apr... Career Carnival for Kids “Careers That Create Change”
Morristown & Morris Township Library 1:00 – 2:30 PM
- 2 May... Manchester Middle School “Blast Off” STEM Fair
- 4/5 May... Liberty Science Center Aviation Weekend
- 13/14 Aug... The [Atlantic City Airshow](#)

"A SALUTE TO THOSE WHO SERVE"



- 29/30 Aug & 1 Sep... Airfest Wildwood NAS

