

NJAEC Aviation Newsletter

Fall 2023

Get the Word Out!!



**The Future of Aviation starts with a conversation.
Who will you speak to next?**

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Get the Word Out!

Message from the Executive Director

"Man's quest for flight" refers to the enduring and relentless pursuit of human beings to achieve the ability to fly. This quest has a long and fascinating history, marked by numerous innovations, experiments, and breakthroughs that have ultimately led to the development of various forms of flight, from ancient myths and legends to the modern aviation industry.

"Imagination takes flight" is a poetic expression that suggests the power of imagination to transport us to new and creative realms. It implies that when we engage our imaginations, we can break free from the constraints of reality and explore limitless possibilities. This phrase is often used to encourage creativity, innovation, and the pursuit of imaginative thinking.

Like the opening of a new eye, aviation allows humans to reach untouched places and extend their limits, furthering their perspectives about the world.

Imagination is a powerful tool that has driven human progress in various fields, from art and literature to science and technology. It allows us to dream, invent, and envision things that do not yet exist. When our imagination takes flight, it can lead to the creation of new ideas, works of art, inventions, and solutions to complex problems.

We have come a long way from a time when people gazed enviously upon the birds in flight. Today, we look upon our planet from afar and feel a new tenderness for the tiny and fragile Earth. For we know now, that even as we walk upon the ground, we are ever in-flight through the universe. And so, we begin to realize that human destiny has ever been, and always must be, to fly!

"Man's quest for flight" symbolizes the human spirit of exploration, curiosity, and innovation. It reflects our enduring desire to overcome the limitations of gravity and take to the skies, whether for practical purposes or the sheer thrill of soaring through the air. This quest has not only revolutionized transportation but has also expanded our understanding of the world and the universe.

"Man's Quest for Flight" along with *"Imagination Takes Flight"* encourages us to embrace and nurture imaginative abilities, recognize them as a source of inspiration, and promote innovation in young minds.



Get the Word Out!



Go Above and Beyond, support: AOPA's Aviation Curriculum, EAA's Young Eagles Flights, WAI's Girls in Aviation Day, Civil Air Patrol's Cadet Programs, and the NJ Aviation Education Council's Mission Statement just to name a few.

Remember:

"If you can dream it, you can do it" – Walt Disney

Signed,

Michael Castania
Executive Director
NJ Aviation Education Council



Get the Word Out!

Message from the Editor

“Get the Word Out!”

Each year, I get more excited by aviation education. I am seeing more schools inquiring about our aviation programs and how they can implement them in their schools. Our first graduates of the program are nearing the end of their post-secondary education and will be looking for jobs in the aviation industry. But its not enough. We must do more.

The next step is to “Get the Word Out!” As a reader of this newsletter, I urge you to talk with your schools, colleagues, and industry experts to “Get the Word Out!” There are plenty of students who want to learn about aviation in high school. They just need the opportunity to experience it in their own schools. The best thing we can do for these future aviators is “Get the Word Out!”

I hope you enjoy this edition of the newsletter. There are plenty of articles. Feel free to share this with anyone you know who may be interested.

Please check out the Careers in Education Flyer on Page 5. It is the first time this event is being offered through our high schools. It is another excellent opportunity for our future aviators. If you are interested, please click on the QR code to present at the event.

Thank you for your interest in aviation education.

Stay Strong, Stay Healthy.



Get the Word Out!



THE MORRIS HILLS REGIONAL
DISTRICT AVIATION PROGRAM
IS PROUD TO PRESENT

Careers in Aviation

Open to the public, our
career-fair style event
will feature
representation from a
wide-range of aviation-
focused professions.

Morris Hills High School
January 29, 2024
7:00PM - 8:30PM



Get the Word Out!

I Learned About Flying From That!

It almost sounds like something right out of the pages of Flying Magazine. However, soon after getting my private pilot ticket, the urge to fly sailplanes (gliders) grabbed my soul. Taking advice from a friend, I traveled to Tocks Island Soaring (now Jersey Ridge Soaring) based at Blairstown Airport (N12), not far from the Delaware Water Gap, to begin my journey.

Flying conditions in northwest Sussex County are ideal: patchwork farmland, bright sunshine, and plenty of soaring possibilities courtesy of the nearby Kittatinny Ridge. Not only were the flying conditions ideal, but the wide-open countryside below offered plenty of room to set a ship down just in case an inexperienced pilot suddenly ran out of lift.

Henry Scarborough (owner, operator, CFGI), a man of many gifts, introduced me to soaring. I was immediately hooked after that first flight. Henry and I spent our early training in his Schweizer 2-33 sailplane. I sat in front while Henry sat directly behind me. During those first lessons, I confidently progressed through steep turns, slow flights, aero tows, take-offs, and landings without too much trouble. What was all the fuss; after all, I already possessed my private powered rating and had accomplished those maneuvers before. Throughout my transition to sailplanes, Henry was always there in the aft seat to correct my mistakes with a gentle, but firm rap on the back of my head with his rather large ring that called attention to and corrected the errors of my transgressions!

Before being allowed to fly solo, Henry introduced me to spins, something I only talked about during my powered training in a Piper Cherokee 140! It was quite exciting once we climbed to a safe altitude: stick back, full rudder in the desired direction as the aircraft stalled, and away we went.

Recovery: ailerons neutral, opposite rudder until the rotation stops, rudder neutral, then gently but firmly pull back on the stick to ease out of the dive. After what seemed like endless hours of practice, this fledgling sailplane pilot was ready to solo. From here, things progressed on schedule. I was out on my own, logging each solo flight and gaining experience in preparation for my eventual check ride.

One day, as I pre-flighted the 2-33, Henry asked, “Are you ready to fly the 1-26”? I could not believe my ears. To me, the Schweizer 1-26 was the sexiest bird on the ramp.



Get the Word Out!

A single-place sailplane, I knew I would feel like a fighter pilot strapping in for the first time into his F-18. This was the moment I had been waiting for... I was ready!

After a brief conversation with the tow pilot, I eagerly climbed into the 1-26 cockpit and adjusted my seatbelts. Reminding me that I would be all alone up there, Henry stressed the importance of avoiding PIO (pilot-induced oscillations) during tow. “Gotcha” was my eager reply as I reviewed my take-off and subsequent release @ 3,000’ AGL (above ground level) out over Route 80, where the cumulus clouds were building. Take-off was uneventful as my heart raced as we broke the surly bonds of earth.

At 2,800’ AGL, I encountered a solid thermal that stood the variometer (indicates the aircraft’s rate of climb or descent) straight up. Not wanting to miss the opportunity to soar like an eagle, I pulled the tow release and began my climbing turn to the right as the surprised tow pilot descended to the left. I planned to come around 270 degrees to the right and re-enter the thermal, riding it upward as the houses below grew smaller. Then, it happened, I was not paying close attention to what I was supposed to do. I allowed my airspeed to slow dangerously while I was in an uncoordinated skidding turn. Suddenly, without warning, I began to spin, going down fast, and Henry was not in the backseat, rapping me on the back of my head, all the while admonishing me for poor airmanship!

Suddenly, my seemingly endless spin training made sense: opposite rudder controls neutral, pull back gently (or something like that). Okay, I must have performed at least most of the maneuver correctly; suddenly, I was climbing vertically, yanking the stick back into my stomach. Forget about the “G” forces that I must have placed upon the aircraft’s wings; this is where I learned firsthand all about accelerated stalls (an aircraft can stall at any airspeed at any attitude). I broke the spin, but in my terror, I elevated my status to that of “TEST PILOT” having just executed the perfect textbook accelerated stall while confronted with the image of the farm, where I was about to plant myself, grow bigger in the canopy.

For a brief moment, Henry must have been with me in spirit, for it felt like something hit me in the back of my head, reminding me to pull back on the stick SLOWLY. I somehow managed to recover with enough altitude to safely, but shaken, to return to the airport.

Henry watched my stunning aerobatics from the ground; in the meantime, I had already resolved to give up flying altogether once the aircraft rolled to a complete stop

on the grass. Somehow, Henry managed to rap me soundly on the head before I could release myself and climb out of the cockpit, then sent me back into the air to complete that solo flight.

All of this took place forty-five years ago, and I learned several valuable lessons that day. I continued to fly afterwards, which I owe to Henry Scarborough thanks to his patience, instruction, and those memorable raps on my head.



Lt Col Michael Castania in the 1-26 flown for this article

Reflections From an Aviation Mechanic

Harry Aschoff, retired mechanic Pan American, KIWI, Airborne Express
airlines

To look back on my career at Pan Am, KIWI, and Airborne Express, the one thing that stands out is the importance of the job and the safety of the people that fly with us.

But, when I began my career as an airline mechanic, I could not have foreseen the adventures the job would bring. I knew that I would be working on large aircraft all the way up to the B747, I knew that my job was an important one, and I knew that it would be a good job.



Now retired, I can look back and reflect on many aspects of it. First, along with the pilots, air traffic controllers, and dispatchers, I also was in charge of the safety of all of those passengers. I never took that responsibility lightly. There was an incident while I was at Pan American Airlines when a B747 flew in from Europe. Upon touchdown, all four engines shut down. It had just run out of fuel. No one knew why it did not have the 45-minute reserve of fuel on board. Was it wrong fueling in Europe? Or stronger than expected headwinds? Or were the fuel quantity gauges in error? I was asked to recalibrate the gauges. It was a nine-hour job. At the completion of it, I made the logbook entry and signed my name and license number. The aircraft was towed to a gate, loaded with passengers, fueled, and sent back to Europe. Although I knew I had done a good job, I was still concerned until it reached its destination.

I had a chance to work on the Concorde, the Pope's airplane, and the one the Beatles flew in on.



Get the Word Out!

Although I did other maintenance work, I was an avionics specialist and on occasion, I would be called by mechanics at Teterboro Airport to come and work a problem on a corporate aircraft. While working on Faberge's aircraft, I met Farrah Fawcett on several occasions.

I had the opportunity to put all new radios and a compass system into a historic 1940 Howard aircraft. The owner wanted it upgraded from its original almost nothing. I found it extremely exciting to work on an aircraft from that age. Speaking of old airplanes, a pilot from KIWI Airlines owned a 1942 Grumman Goose amphibian. He invited me to visit him in Florida, and we flew it. We first had to fuel it using 5-gallon gas cans, climbing on top of the wings to do so. Doing the preflight checks and then bringing water up from the lake it was parked at to harden the sand to be able to push it into the water. Once in the plane, he invited me to sit up front and, once airborne, had me fly the "old gal", this airplane still flies.

One of the most exciting opportunities was while at KIWI. Any time a charter was flown, a mechanic went along with the aircraft. We had a charter from Washington, DC, to Tennessee. President and Mrs. Clinton, Vice-president and Mrs. Gore were heading down to visit the churches that had been burned. Our aircraft carried the press while the families were in Air Force 1 and Air Force 2. After landing in Tennessee, the flight crew and I all had the chance to meet and take pictures with the Clintons and Gores. Once they and the press left to visit the churches, we were escorted onto Air Force 1 by the Secret Service for a tour.

If I had not chosen to go to school to become an aircraft mechanic, I would never have had the experiences I did. I know that my chosen profession is an important one. I always kept the passengers in mind while working on an aircraft. Their safety was my first concern.



Get the Word Out!

The New Jersey Aviation Education Council

The New Jersey Aviation Education Council (NJAECE) is a non-profit statewide organization that provides a network for students, educators, the aviation/aerospace industry, and the government to interact and share knowledge and resources to promote the exciting opportunities available in the world of aviation and space.

Our Mission:

To encourage and reinforce interest in aviation/aerospace subjects and careers and to educate students about the value of the aviation and aerospace industries in the local, state, and national economies, as well as in the security and recreational environments.

“Informing, inspiring, and engaging aviation's next generation” –

Pathways to Aviation

Promoting aviation career pathways is important for several reasons, as it benefits individuals and contributes to the growth and development of the aviation industry and the broader economy. Here are some compelling reasons why we should promote aviation career pathways:

-Economic Growth: Aviation plays a significant role in economic development by facilitating the movement of people and goods. A strong aviation industry generates jobs and stimulates economic growth through airport operations, airline services, aircraft manufacturing, and related industries.

-Job Opportunities: Aviation offers a wide range of job opportunities, from pilots and flight attendants to air traffic controllers, aircraft maintenance technicians, engineers, and aviation management professionals. Promoting these career pathways can help address unemployment and provide individuals with stable, well-paying jobs.

-Technological Advancements: The aviation industry is at the forefront of technological innovation, driving advancements in aircraft design, navigation systems, and aviation-related software. Promoting aviation careers encourages individuals to pursue STEM (Science, Technology, Engineering, and Mathematics), contributing to technological progress.

-Global Connectivity: Aviation is a key driver of global connectivity, fostering cultural exchange, tourism, and international trade. By promoting aviation careers, we can



Get the Word Out!

support the continued expansion of air travel and its positive impact on international relations and cooperation.

-Safety and Efficiency: Well-trained aviation professionals are crucial for ensuring the safety and efficiency of air travel. Promoting aviation career pathways emphasizes the importance of rigorous training, safety protocols, and continuous improvement in the industry.

-Environmental Responsibility: Promoting aviation careers can also encourage innovation in sustainable aviation practices. As concerns about environmental impact grow, the industry needs professionals who can develop and implement more eco-friendly technologies and practices.

-Diversity and Inclusion: The aviation industry has historically lacked diversity, but promoting aviation career pathways can help address this issue by encouraging people from diverse backgrounds to pursue careers in aviation. This can lead to a more inclusive and representative workforce.

-National Defense: Aviation is critical in national defense, including military aircraft, surveillance, and logistics. Encouraging individuals to pursue aviation careers supports national security efforts.

-Education and Training: Promoting aviation career pathways involves investing in education and training programs, which can benefit those pursuing aviation careers and the broader education sector. High-quality training programs can equip individuals with valuable skills that are transferable to other industries.



-Inspiration for Future Generations: By “*showcasing*” the excitement and opportunities in aviation, we can inspire the next generation to pursue careers in STEM fields and foster a passion for aviation and aerospace.

In conclusion, promoting aviation career pathways is essential for economic growth, job creation, technological advancement, and global connectivity. It also contributes to safety, environmental responsibility, diversity, and national defense. Encouraging individuals to explore and pursue careers in aviation can positively impact individuals, communities, and the industry as a whole.

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

The aviation world as we know it is a big industry. It has a huge network of players playing their role to ensure we make the most of the chartered routes of the sky. To get the best out of this world, connecting with other professionals, enthusiasts, and stakeholders in the industry is important. You never can tell when the need for information, expertise, or even special help might arise.

Support:

Aircraft Owners & Pilots Association’s (AOPA) four-year high school curriculum

Experimental Aviation Association’s (EAA) Young Eagle Flights

Civil Air Patrol’s Cadet Programs (CAP)

Women in Aviation International’s (WIA) Girls in Aviation

Air Line Pilots Association’s (ALPA) Cleared to Dream

Pathways to Aviation

Ninety-Nines

Professional Aviation Maintenance Association (PAMA)

NJ Aviation Education Council





Captain David Sarkisian “selling” aviation to our future aviators

Today, we are recognized by a number of aviation organizations, including but not limited to:

- Civil Air Patrol
- Bergen County Technical School Advisory Board
- ACIT Aviation Advisory Board
- Atlantic Cape Community College Aviation Advisory Board
- Ocean County College Engineering and Technology Partner
- Air Victory Museum Advisory Board
- Aviation Hall of Fame Museum of NJ
- Aircraft Owners Pilots Association Advocates
- Soaring Society of America
- Academy of Model Aeronautics
- Egg Harbor Township PAL
- Egg Harbor Township School District
- BSA (Aviation Merit Badge pgm)
- JB MDL DOD Starbase Youth Program .
- Air & Space Force Association
- Atlantic County Economic Alliance
- Smart Airport and Aviation Partnership
- National Aerospace Research & Technology Park
- NJ Aviation Tech Hub Consortium Partner



Get the Word Out!

- NJDOT (Aviation Division)???

The NJAES has been represented at:

- NJ Association for Gifted Children
- NJ Association of School Administrators
- NJ School Board Association
- NJ Parent Teacher Association
- NJ Association of Library Assistants
- NJ Education Association
- Educational Technology Computer Conference Montclair Uni.
- JB MDL Open House
- NAS Wildwood AirFest
- BSA Jamborees
- Girls in Aviation Day
- Juvenile Probation Career Fair Rider University
- New Jersey STEM Pathways Network
- Career Carnival for Kids
- 16 participating schools: AOPA's HS Aviation Curriculum
- Middle & High School Career Days
- And the list goes on and on...



The NJAEC in action (K. Sofko & M Miller)



Help us to “Get the Word Out!!

From NJWG Aerospace Education Facebook page (Civil Air Patrol)

Simply put, networking means building connections with other professionals. Networking should always be beneficial to both parties. The reasons why networking is important include a better reputation, increased visibility, a stronger support network, improved business growth, and more impactful connections. NJ AEC offers it all and more.

Over the Labor Day Weekend, members of the NJ Aviation Education Council, alongside members of CAP's NJWG/AE program preached the gospel of aviation career pathways during NAS Wildwood's AirFest!

Kurt Stofko (Council Member, EAA Advocate, BSA Aviation Merit Badge Counselor, AOPA Advocate) along with Mike Miller (Council Member, Hazlet School District's HS Science Administrator, AOPA Advocate) promoted AOPA's (FREE) four-year high school aviation curriculum, EAA's (FREE) Young Eagle Flights, and our (NJ Aviation Education Council's Aviation Resource Website (aviationec.org) while Maj. Rob McClellan (NJWG Recruiting/Retention Officer) and Lt Col Castania (NJWG DAE & NJ AEC member) promoted the benefits of CAP Membership (Senior, Cadet, and AEMs) to a multitude of attendees as they dropped by our corner of NAS Wildwood Hangar.

Needless to say, this was a win/win scenario as our two organizations worked hand and hand in promoting aviation across a wide range of programs and opportunities. I'm pretty sure we recruited potential cadets, senior members, and AEMs, along with promoting a multitude of aerospace and aviation career pathways.

Build your aviation connections and share the wealth... "If they can dream it, they can do it" as the sky is no longer the limit.



Get the Word Out!

Raritan High School Students Take Flight!

By Mike Miller, Nicholas Snyder, and Thomas Trank

This year marks the fourth year of Raritan High School's participation in AOPA's High School aviation program. We started our aviation program in the middle of the COVID-19 pandemic. Despite this, our program has grown from approximately two students to a current enrollment of forty-eight students! I sat down with our two seniors to discuss their experience with the aviation program and their post-graduate plans.

1. What got you interested in aviation?

Nicholas: What made me interested in Aviation was how often I flew to Florida to see my dad. Due to my parents being divorced and my dad living in Florida, I would have to fly by myself to see him. While doing this, I would wonder how the plane flew, I became more and more interested in it until the point when I would ask the pilots about things about the plane. A class in my school allowed me to satiate my appetite for knowledge about this subject.

Thomas: When I was in middle school, I visited the high school and in the principal's introduction, he talked about a new aviation class that was being introduced. I got home and told my parents about it, and they said that they would definitely want me to become a pilot and that they even have friends that are pilots. Then in the summer of eighth grade, my parents arranged for me to go up in a plane with one of their friends. I was very excited, to say the least but when I got up in the sky I knew that that is what I wanted to do for a job. Now I am a senior in high school with 36 hours in a plane, a 92 percent on the PAR exam, and I'm going to get my private pilot's license before I graduate high school.



Get the Word Out!



Simulator Training

2. What field of aviation do you want to pursue?

Nicholas: I would want to pursue a career as an aeronautical engineer because working on the planes and understanding what makes them tick is the most interesting thing to me about aviation.

Thomas: The field of aviation that I would like to pursue is commercial aviation. I would like to fly for a passenger airline, but in order to do this I would have to spend a lot more hours flying. I plan to do that after high school. I want to go to a flight school and just practice flying all the time. This summer, I went down to Pompano Beach, Florida, and took a tour of the American Flyers Airline Academy. I am interested in this because it would get me to be a CFI in a year. I am also looking at a closer alternative, which is Mercer County Community College.

3. How did your math, science, and aviation classes prepare you to reach your career goals?

Nicholas: My math, science, and aviation classes prepared me to reach my career goals. AP physics allowed me to have a better understanding of the elements that affect the plane. It helped me, along with my math classes, to calculate the variables I would need to know to determine what is affecting the plane when flying. My aviation classes



Get the Word Out!

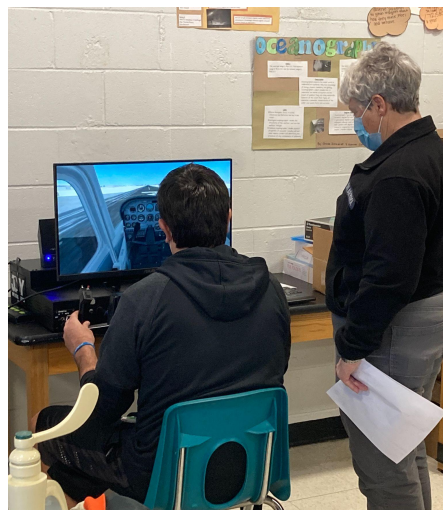
gave me a better understanding of how the plane may react to the elements and how such variables relate to each other to keep the aircraft airborne.

Thomas: My aviation classes have prepared me because they introduced the material that I have to learn in a manner that I can understand. There are many examples of when I was doing ground training, and having been exposed to the material made my training easier.

4. What advice would you give to freshmen entering into the aviation program?

Nicholas: Pay attention to what is being taught to you, and if you have an interest in getting an aviation career, know what you want to do earlier and focus on that to enhance your skills in that field.

Thomas: A piece of advice that I would give to freshmen entering the aviation program is to not think of it as an easy class. I say this because I was one of those students, and then when I got in the classroom, I found out that it was not just another elective, but I would actually have to apply myself and pay attention if I wanted to do well. Another piece of advice I would give to the freshmen is that if they like the course, go out and take flight training because this course is just ground work, but to really feel like a pilot and know what you want to do, you should fly in real life.



The Smart Airport Aviation Partnership



The Smart Airport Aviation Partnership is building an aviation ecosystem across New Jersey, one fabulous innovation at a time.

SAAP is a public-private partnership whose members hail from industry, government and academia. It's located at the National Aerospace Research and Technology Park (NARTP) in Galloway Township, where it works with NARTP, the Atlantic County Economic Alliance (ACEA), and the National Institute of Aerospace to build a regional network of aviation stakeholders.

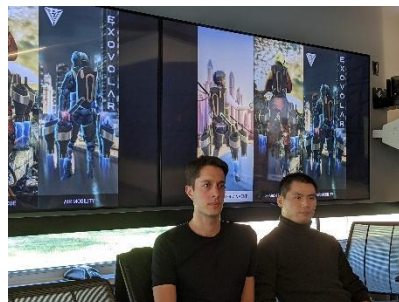
Yes, New Jersey is growing a vibrant aviation innovation ecosystem! To help, SAAP hosts multiple programs and events each year open to innovators and aviation leaders from throughout the region. A partial description follows; for the latest updates and event schedule, check out smartaviation.org



Accelerator graduates span many industry segments

Business Acceleration – Since 2020, SAAP has hosted flightPlan, the Aviation Business Accelerator, helping innovative aviation companies reach their full potential through general business training, 1:1 mentorship, and introductions to aviation leaders from both industry and the nationally renowned FAA William J. Hughes Technical Center. Graduates have come from across the U.S. and, in several instances, from around the world. The group reflects the global and interconnected nature of aviation. More information here: smartaviation.org/flightplan-accelerator

Economic Development – SAAP supports its partners at NARTP and the ACEA in aviation business attraction efforts and research, including facilitation of technology demonstrations to stakeholders. Pictured at right are Andrea Giannini and Hao Wu of ExoVolar, meeting with innovators in the NARTP Thunder Room to present their concept for the future of vertical flight technology. (Think full flying garb!) If you're an innovator with a prototype or an idea and looking to move forward, SAAP may be able to help.



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Counties.

Education and Training - Public Safety UAS - SAAP supports annual test flights to promote the use of UAS by First Responders following natural disasters. SAAP recently facilitated one of the largest Emergency Management Exercises in the Mid-Atlantic Region involving the largest public utility operator in North America, the Federal Aviation Administration, NJ State Police, and local public safety professionals from Atlantic, Cape May, and Somerset

Innovation Forums - Meet monthly with aviation leaders from Government, Private Industry, and Academia at NJ's premier location for aviation technology. Typically, at this four-hour event, a subject matter expert will lead a discussion on a forward-leaning aviation. Over lunch, attendees are invited to describe the aviation technologies on which they're currently working.



RSVP here: smartaviation.org/upcoming-events

Learn more:

SAAP – www.smartaviation.org

Atlantic County Economic Alliance -- <https://www.aceanj.com/>

National Aerospace Research & Technology Park -- <https://www.nartp.com/>

National Institute of Aerospace -- <https://www.nianet.org/>

Partners - <https://www.smartaviation.org/partners-advisory-council>



Get the Word Out!

Press Release

FOR IMMEDIATE RELEASE

AVIATION SCHOLARSHIP OPPORTUNITY PRESENTED TO ROCKAWAY RESIDENT BY LOCAL EAA CHAPTER 501

Award part of annual \$1.8 million Ray Aviation Scholarship program

Lincoln Park, NJ — October 11, 2023 — REVA MATHANKAR OF ROCKAWAY, NJ, a senior at the Academy for Math, Science & Engineering located at MORRIS HILLS HIGH SCHOOL, has received a unique full-scholarship opportunity for flight training, thanks to EAA Chapter 501 of Lincoln Park, NJ and the Ray Aviation Scholarship program administered by the Experimental Aircraft Association in Oshkosh, Wisconsin.

The Ray Aviation Scholarship program provides up to \$11,000 scholarships to young people who are seeking to learn to fly. The Ray Foundation has provided \$1.8 million to fund the scholarship program, which seeks to improve the flight training success rate from the current industry standards of 20 percent to 80 percent for program participants. Local EAA chapters are responsible for identifying youth for the Ray Aviation Scholarship program and mentoring them through flight training. The Ray Foundation is furthering the legacy of James C. Ray, an EAA lifetime member who was dedicated to aviation and youth education.

Since its introduction in 2019, the EAA Ray Aviation Scholarship program has allowed over 350 youths to complete their flight training and receive their pilot licenses. The program has been consistently meeting and exceeding its expected 80% success rate each year.

REVA will be training at AERO SAFETY TRAINING based at LINCOLN PARK AIRPORT IN LINCOLN PARK NJ. The scholarship is designed to support a flight student through both written and practical segments of flight training that are part of successful FAA pilot certification.

EAA chapters play a critical role in the success of the Ray Aviation Scholarship program. Chapters interested in participating are prequalified by EAA through an application process. If selected, they mentor and support the scholarship recipient throughout their flight training journey. Once selected as a Ray Aviation Scholarship participant, candidates also commit to volunteer service with the local EAA chapter.

EAA Chapter 501 is one of 900 local chapters of the Experimental Aircraft Association, the world's largest organization for recreational flying. It meets at AERO SAFETY



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TRAINING on THE SECOND WEDNESDAY OF THE MONTH. More information on EAA Chapter 501 is available at <https://www.eaa501.org>.

About EAA

EAA embodies the spirit of aviation through the world's most engaged community of aviation enthusiasts. EAA's 250,000 members and 900 local chapters enjoy the fun and camaraderie of sharing their passion for flying, building and restoring recreational aircraft. For more information on EAA and its programs, call 800-JOIN-EAA (800-564-6322) or go to www.eaa.org. For continual news updates, connect with www.twitter.com/EAA.

For more information contact:

David L Jones
Scholarship Coordinator
delj107@gmail.com



Reva getting ready for her next flight

Networking and Collaboration:

Civil Air Patrol and Police Activities League Egg Harbor Twp., & Atlantic County (PAL) Rocketry & Aviation STEM Camp

During two weeks this summer, Lt. Col. Michael Castania, Director of Aerospace Educator, and Michelle Riordan, PAL STEM Director/NASA Solar System Ambassador/Professional Photographer, collaborated for the PAL Rocketry & Aviation STEM camp activities.

Rocketry & Aviation STEM Camp activities included, NASA Subject Matter Expert (SME) talks, NASA Wingin' It challenge, FPG gliders, straw rockets, and Soda bottle water rockets. Topics discussed included fin design, center of mass, inertia, powerless flight, four forces of flight, yaw, pitch, and roll. Aviation history covered Icarus, DaVinci, Cayley, Bernoulli, Newton, Lilienthal, and the Wright brothers. Another great STEM collaboration project covered in previous years is the NASA Moon Survival Exercise.

This isn't the first time the two have collaborated. Michelle and Michael have worked closely together since Michelle joined CAP as an AEM in 2019. But when COVID-19 threw everyone for a loop, they found a way to collaborate on making gliders via Zoom. Building on their commitment for youth STEM programs Michael recruited Michelle to join the New Jersey Aviation Education Council. For the past couple of years, CAP has participated in the PAL STEM Expo. PAL hosts the STEM Expo at their facility in Egg Harbor Township, NJ in celebration of NJ STEM Month, to highlight science, technology, engineering, math and innovation throughout southern New Jersey. The FREE STEM Expo is open to the public and brings together STEM organizations to share fun, exciting hands-on STEM activities. Together Michelle and Michael share resources and continue to build their STEM Ecosystem. Their next endeavor is creating professional development opportunities for teachers and organizations interested in strengthening their STEM programs.

Civil Air Patrol brings to the table K-12 Aerospace Education STEM kits, books, and activities to inspire and engage students.

Join as an Aerospace Education Member of the Civil Air Patrol and enjoy many free aerospace/STEM educational opportunities, like various K-12 curriculum materials and STEM Kits. This unique educator membership category was made for aerospace/STEM education in classrooms, homeschools, museums, libraries, or other youth organizations.

The Civil Air Patrol's Aerospace Education STEM Kit program provides hands-on, inquiry-based learning resources. The STEM Kit program has provided a selection of



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kits to CAP Unit Aerospace Education Officers and CAP educator members since 2013 to educate the next-generation STEM workforce.

The kits come at no cost to recipients, are designed to enhance the current CAP educational curriculum and programs, and will be ready for immediate implementation. CAP Unit AE

Officers or commanders, as well as CAP members who are educators, including AFJROTC instructors, can select one kit from the available options.

[Available Kits For Selection | Civil Air Patrol National Headquarters](#)

The Egg Harbor Township Police Athletic League was established in 1989 as a non-profit 501(c)(3) youth organization by several young officers of the Egg Harbor Township Police Department. These officers sought to create a better relationship and understanding between our youth, the police and the communities we served.

Over the last 3 decades we have grown from a small organization serving a few dozen children a year and working out of our police cars, to one serving thousands of children every year with a 35 acre campus and nearly 47,000 square feet of building space.

Today with a new name to better represent our expanded role, the **Police Activities League of Egg Harbor Township and Atlantic County (PAL)**, in partnership with numerous police agencies, a variety of community groups, all levels of government and the private sector, we continue to serve the entire South Jersey Community. Our programs now range from STEM robotics workshops, teams and research to numerous arena sports and summer camps.

In 34 years we have served 32,000 plus children and our mission has remained the same... [Programs | EHT PAL](#)

Mission Statement

- To improve Police/Youth/Community Relations
- To promote and advance the needs and welfare of our children
- To actively participate in constructive endeavors for the promotion and safeguarding of the interest and general welfare of our children
- To provide a meeting place where children may enjoy educational, social and athletic activities under competent supervision and excellent role models.

To find out more about some of these amazing STEM programs, contact

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Get the Word Out!



Flight for Thought

Aviation and Time Travel as a Means for Developing Critical Thinking

by Charles Burke

As a Private Pilot, it can be said with unwavering certainty that while piloting an aircraft, your attention is riveted to the banks of gauges and controls surrounding you. But with a vast extended view of the terrain below you, the ever-changing scenes are fascinating to glance at. This action sometimes provokes an unexpected connection, such as one that occurred recently after I happened to read a book on the breakup of Pangea 200 million years ago. This was further cemented during a subsequent flight down the Jersey coastline to Cape May Airport.

While gliding along, my imagination kicked in a bit, and I began to wonder what I would have seen if my flight had taken place 200 million years ago! This prompted the creation of an article that is becoming a series in the Monmouth County Flying Club's newsletter. The column is a series of time machine travels that can be revealed through science and other studies such as history.

Because of the interest this column has created, it is hoped that you will find that it has ignited a desire within you to try doing a few of your own time travel flights, even if they take place only in your imagination.

A Look Down and Back:

With the Jersey coastline being a great path to follow, especially in a small aircraft, the view of the Atlantic Ocean can be breathtakingly beautiful. But this scenic view, that we often take for granted, would have looked much different if we could turn the clock back about 200 million years. Flying along back at that time there would not be an ocean, only land for as far as you could see in all directions.

According to most geologists, 200 million years ago there was no Atlantic Ocean, just a vast landmass called Pangea that was about to be fractured into what would become the continents. One of these fractures (fault lines) in the Earth's crust began to force the separation between North America and northwestern Africa. As the two began to separate, water seeped into



Get the Word Out!

the crack that widened and eventually formed the Atlantic Ocean. Actually, the separation is still taking place at a rate of about 1 cm per year! So what does this have to do with New Jersey? Basically, what is now New Jersey, all the way out to the continental shelf, would have been connected to Africa. What is interesting is that the process of pulling a landmass apart is like trying to stretch taffy. The more you pull, the thinner and thinner the center area becomes until full separation takes place. So let us get back to our coastal NJ flight. If you head north along the existing coastline and fly over Newark International Airport, and could look down about five miles, you would see the land that was once attached to Africa. The crust had been pulled thin then during the millions of years that followed, gravel, sand and rocks filled the basin that the airport now sits on. So the next time you have an opportunity to fly along the New Jersey Coastline, try to imagine what you would be seeing in those occasional glances 200 million years ago.

Links



EAA
<https://www.eaa.org/eea>



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<https://vermontaviators.org/>



<https://youcanfly.aopa.org/>

