

ANNUAL REPORT

2024



Celebrating the unique
achievements in

**CENTRAL NEW YORK
& BEYOND**

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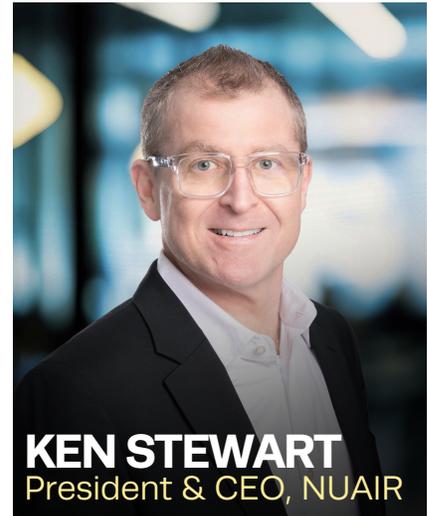
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A LETTER FROM THE CEO



Dear Stakeholders and Partners,

In a year defined by change and growth, NUAIR has remained steadfast in its mission to catalyze economic development, innovation, and leadership in the uncrewed aerial systems (UAS) and Advanced Air Mobility (AAM) sectors, not just in Central New York, but on the global stage. **Our progress over the last year demonstrates the depth of our commitment and the tremendous momentum we've built in positioning Central New York and New York State as a leader in this rapidly advancing field.** With the support and invaluable investment from Empire State Development, we are not only enabling technology and mobility innovation in New York but preparing it to take full advantage of future opportunities.

Key Achievements Against Our Land and Expand Grant:

We are proud to announce that NUAIR has achieved more than **\$60 Million** return on investment for our Land and Expand Grant from Empire State Development. Delivering a key objective **ahead of schedule and exceeding expectations by 300%**.

Our collaboration efforts and partnerships have also expanded our reach:

- **SMART Grant with NYSTA** – Closing out Stage 1 and leading into Stage 2 for \$14.8 Million.
- **ResilienX, Aloft, Hidden Level, TruWeather Solutions** – Secured AFWERX contract, demonstrating our growing influence in the defense and commercial sectors.
- **SRAA partnership** – C-UAS testing with Department of Homeland Security.
- **NEXA Capital** – Collaborating with the Kingdom of Saudi Arabia on AAM technology and regulatory strategy.

Our work with the FAA on their policy and regulation continues to be a critical pillar of our strategy:

- **Near Term Approval Process (NTAP)** – Nearing approval for 1 of 4 organizations moving through this process with the FAA. Commercialization of infrastructure with SUNY Upstate Medical Hospital as our champion operator and with ResilienX and Aloft (local Genius NY cohorts) as primary partners.

We continue to invest in human capital and workforce preparedness through **training, workforce development, and upskilling:**

- **Part 107 and NIST Certification** – In 2024, NUAIR trained over 400 individuals in Part 107, NIST standards, and various specialized areas.
- **Public Safety and Local Agencies** – Educating and upskilling state and local public safety personnel.
- **Partnerships with Educational Institutions** – Collaborating with Le Moyne and Syracuse Educational District to bring UAS-related curriculum and workforce development to the next generation of innovators.

The pace of **Regulatory Advancement** brings with it both **Challenges and Opportunities:**

- Delayed regulatory approvals continue to be a challenge, with the key NPRMs for Part 108 and Part 146 delayed beyond the September 16th deadline.
- Despite these challenges, NUAIR is uniquely positioned to overcome them. Our position in the NTAP process and close relationship with the FAA, gives us the unparalleled ability to accelerate our work and lead the charge well in advance of these regulations are formalized.

Emerging Opportunities: Even as we confront regulatory delays, new opportunities are emerging in the UAS ecosystem:

- **Expanded Strategic Partnerships** – Engagement with industry partners continues to grow, offering new avenues for collaboration.
- **DOD Efforts** – Our expanding work with the Department of Defense is yielding positive results, helping strengthen our presence in defense contracting and innovation.
- **Counter-UAS Testing Capabilities** – NUAIR's ability to support counter-UAS operations further enhances our strategic position in this crucial area of defense and security.

We are on the precipice of an exciting future, where the possibilities of AAM and UAS technology will redefine industries and revolutionize the way we live and work. As we take these next steps, we remain committed to innovation, leadership, and collaboration, ensuring that NUAIR continues to drive forward the future of aviation and economic growth in Central New York and beyond.

Thank you for your continued partnership and support as we embark on this transformative journey.

Sincerely,

Ken Stewart

Ken Stewart
President & CEO, NUAIR

“

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NUAIR OVERVIEW

NUAIR is a **nonprofit** driving **economic development** through innovations in **UAS and Advanced Air Mobility** to safely **integrate into the national airspace**.

Funded through the continued support from Empire State Development and the State of New York through grants focused on empowering and enabling the next generation of aviation. With guidance from inception to acceleration, we help our partners deliver advanced UAS commercial outcomes and build on a proven ecosystem of networks from incubators to investors and customers to partners. Together, we realize the harmonization needed to innovate airspace, advance aviation, and architect AAM in our communities from theory to reality with our team of experts.

OUR MISSION: ENABLE THE NEXT GENERATION OF AVIATION.

ECONOMIC IMPACT

Funded and supported by investment and grants from [Empire State Development](#), NUAIR is proud to play a critical role in fostering UAS and AAM innovation as well as maximizing the public benefit from this technology. With the Land & Expand Grant investment of \$21 Million, NUAIR has provided an **economic return on investment of 3:1 in just under two years**, impacting both the Central New York region and New York State as a whole.

Including the partnerships, investments, and shared projects from the NUAIR Alliance and State agencies, **the total economic impact to the State of New York comes out to over \$60 Million.** From UAS verification and validation operations to program development, workforce investment, ecosystem buildout, and more, the UAS and AAM industry in New York is growing faster than the national projection – positioning New York as a leader in the next generation of mobility and transportation.

The study methodology cited in this report follows the Federal Aviation Administration guidelines for estimating annual economic impact. The [IMPLAN Economic Impact Model](#) measures direct, indirect, and induced impacts.



DATA VERIFICATION

Gather data from strategic partners & primary operations

Assemble & validate data against industry standards

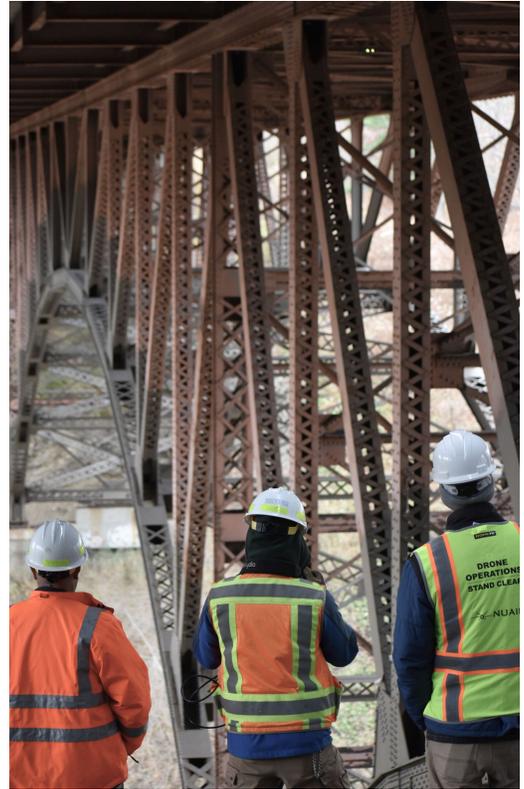
Calibrate IMPLAN Model Inputs

Run IMPLAN Model to calculate total economic impact

Summarize model outputs & results

NYSTA

NYSTA



NYS THRUWAY AUTHORITY

2024 was a year marked with incredible success and many firsts. With the help of NUAIR, the New York State Thruway Authority (NYSTA) was able to fully operationalize New York's first awarded SMART Grant to focus on technology optimization for infrastructure inspection. The Stage 1 \$1.5M award provided the funding necessary for safer inspection workflows, better predictive maintenance, and a more resilient highway system.

With this SMART Grant and the work from NYSTA and NUAIR, the team was able to **realize millions of dollars in savings and significantly reduce hazardous hours and incidents** in addition to the enhanced efficiency of the UAS operations. Archaic data input and flow was streamlined into a frictionless process and a critical foundation for future efforts was laid.

Not only was there significant ROI from an organizational standpoint, but the NYSTA and NUAIR team also spent intentional time building up the Central New York community with Educational Partner meetings and collaborative workshops to discuss the importance of workforce development and pipeline creation for this growing sector of technology and application.

The effort and incredible work of the team continues to pay off. In December of 2024, the US Department of Transportation awarded the very first Stage 2 SMART Grant to the New York State Thruway Authority. Where Stage 1 was dedicated to proving the value, the **\$14.8M Stage 2 Grant is now about realizing the comprehensive impact** of a streamlined process for data acquisition and management that will help not only keep NYSTA workers safer on the job, but also continue to benefit New York state roads, bridges, and other infrastructure management directly affecting congestion, carbon emissions, and more. NUAIR is honored to be able to work alongside the NYS Thruway Authority in realizing this incredible win for New York and looks forward to continuing the collaboration into 2025 and beyond!



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In an interview with CBS Albany, NYSTA Executive Director Frank Hoare said,

The grant allowed us to be able to further develop the existing Thruway program using UAS or drones to conduct operations on the Thruway. Mainly this enables us to do this more safely ... Every dollar we save in one area we then can refocus in our capital program and look at expanding other projects that need work.

”

NY POWER AUTHORITY



This year marked another first for New York with the successful launch of the first Beyond Visual Line of Sight (BVLOS) drone operations, part of an authority-wide initiative to modernize grid infrastructure to advance the efficient delivery of clean power statewide. Working in collaboration with NUAIR and Skydio, the New York Power Authority (NYPA) spent a year testing a new dock solution that allows for BVLOS operations to occur at a site without the presence of a physical pilot.



In a Press Release from NYPA, President & CEO Justin E. Driscoll said,

Drones will become an even more valuable tool as we expand our capability to detect infrastructure issues and support our mapping and land management responsibilities. Being able to capture images remotely, regardless of weather conditions or distances, will allow us to track and evaluate our assets more efficiently and safely.



The dock was installed at the Blenheim-Gilboa Reservoir Hydroelectricity Plant by NUAIR in August after 12 months of rigorous flight and weather testing to ensure that it was able to perform in the wind, snow, ice, etc. of Upstate New York. The deployment of this next generation of technology is one of many steps that NYPA and NUAIR have taken together over the past few years, and we look forward to continuing to support their robust UAS team and operations.



PUBLIC SAFETY

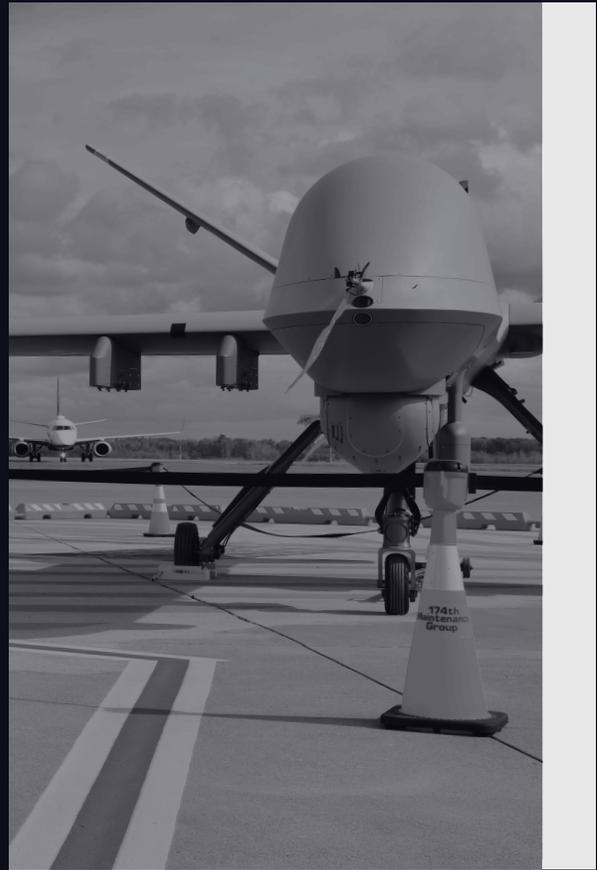
Maintaining a long-standing honor of supporting New York's finest, NUAIR continues to enable and operationalize public safety and first responder agencies across the state. In 2024, we helped over **27 NYS agencies acquire 110 Certificates of Waiver or Authorization (COAs)** that helped their UAS teams get off the ground with safe, sustainable, and compliant drone operations. These COAs are critical for public safety and other agents as they ensure first responders are able to deploy valuable tools to help with situational awareness and operational de-escalation.

In 2024, NUAIR was pleased to once again partner with the NYS Division of Homeland Security and Emergency Services to co-host the 6th Annual NYS Public Safety UAS Summit. This Summit – offered at no cost to NYS agents – provides two days of valuable case studies, best practices, regulatory updates, as well as up close and personal time with the latest tools available. **Nearly 280 first responders and public safety agents joined us** this year at The New York State Fairgrounds to hear from the FAA's Public Safety Liaison, Mike O'Shea, NYPD's Deputy Commissioner Kaz Daughtry, and other insightful speakers from the NYPD Transit Bureau, NYSP, NJSP, and Virginia State Police. **20 cutting-edge industry vendors** joined for the vendor expo to provide demonstrations and one on one-time for public agents to learn more about this game-changing technology.

“ A first responder from the NYS Public Safety UAS Summit shared, *It's borderline neglectful to not take advantage of this training opportunity to ensure one's program is on the right path, following best practices, and aware of what's going on in the field of public safety UAS operations.* ”

DEFENSE PROJECTS

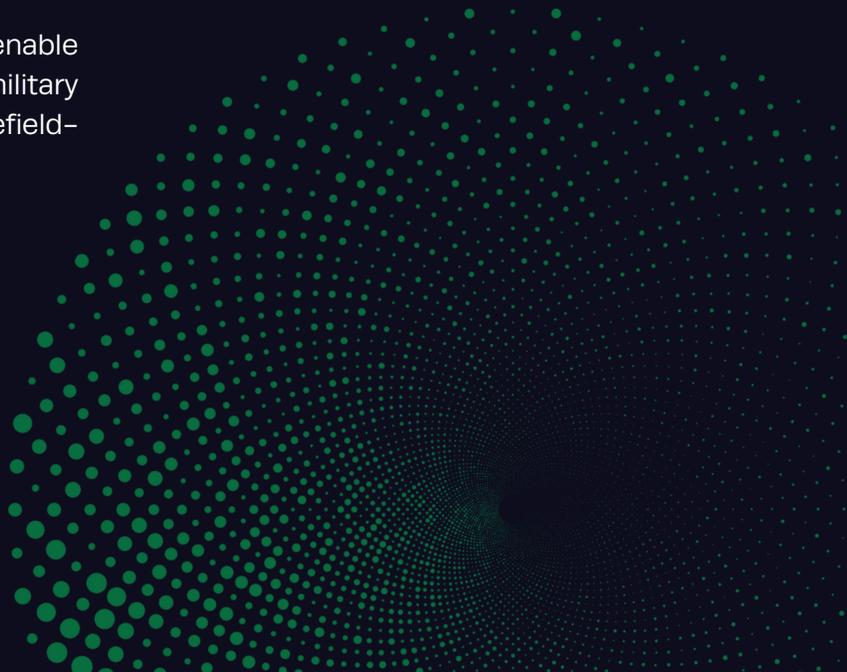
In the same way that UAS are revolutionizing civil and commercial operations, UAS technology is also changing the nature of military conflict. NUAIR is proud to support the U.S. military by helping to **redefine readiness for future conflict with our collaborative ecosystem and BVLOS-enabled range** providing unmatched opportunity to validate and verify technology needed for the battlefield.



COMMITTED TO MISSION-READY DEPLOYMENT

NUAIR conducted critical UAS platform testing for the Defense Innovation Unit (DIU) in 2024. These platforms are designed for autonomous operation in GPS-denied environments to protect combat forces. In one instance, NUAIR successfully tested three platforms within three weeks of notification. While military sites could potentially match this timeline, DIU's urgent needs required civilian testing capabilities. NUAIR's established UAS expertise, and controlled BVLOS airspace access ensured successful deployment-ready testing.

NUAIR's specialized airspace and expertise enable comprehensive UAS testing outside of military ranges – accelerating development of battlefield-ready technologies.



EDUCATION & WORKFORCE DEVELOPMENT

The future of any industry lies in those being educated and trained for it. With the rapidly growing UAS and AAM industries, opportunities abound for not only upcoming generations, but also the workforce of today. Aviation is a 10x job multiplier and at NUAIR we emphasize partnerships with local educators, national organizations, international standards, and advanced training that all help to boost the readiness and availability of qualified agents. In 2024, NUAIR hosted **over 225 training sessions for 400+ New York pilots from agencies and teams all over the state**. Investing in the proficiency of these teams means more efficiency, stronger standards, and, overall, an increase in capability for both technology and workforce.

Another celebratory milestone was the official ribbon cutting of NUAIR's new headquarters at Syracuse Hancock International Airport (cover photo). Joined by local legislature, representatives from the NY Governor, and members of Empire State Development, NUAIR opened its new office mid-summer immediately next to the NUAIR Center of Excellence for Advanced Air Mobility.

UAS Awareness Presentations with NYS Department of Homeland Security and Emergency Services



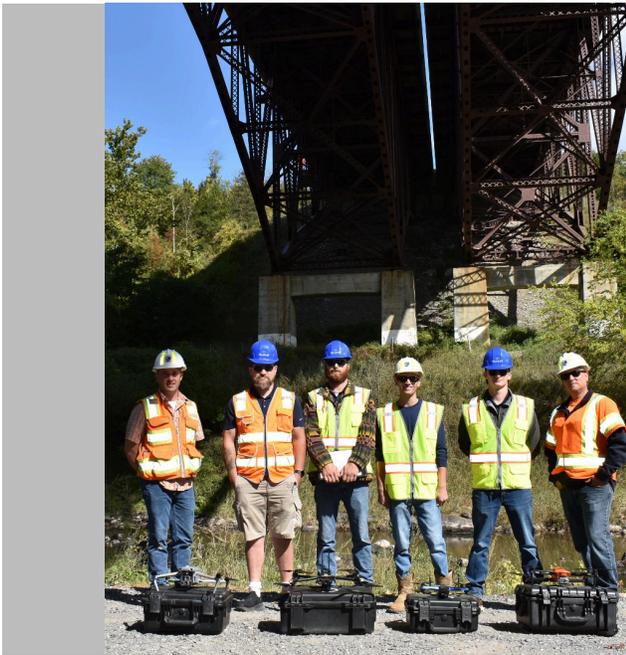
Girls in Aviation Day with the Soaring Eagle Chapter of WIA – inspiring young women to consider careers in the aviation field



NYS Department of Transportation Training Day with NUAIR at Operations Center



Keenan Center Drone Program graduating pilot corps through an ongoing partnership with NUAIR and Le Moyne College



FLIGHT OPERATIONS

Flight operations at NUAIR also reached a significant milestone in 2024 with the successful transition to our new Ops Center in Canastota, New York. This move allows for much greater flexibility – as the majority of our UAS operations now take place fully in uncontrolled airspace – and is opening up a wealth of opportunities to better serve our customers and drive forward the future of uncrewed aviation.

At the heart of our operations is our 240 sq miles of BVLOS operational airspace and integrated common operating picture, developed in collaboration with ResilienX, Aloft, Hidden Level, and TruWeather Solutions. This common operating picture enables NUAIR to perform **routine Beyond Visual Line of Sight (BVLOS) operations across both uncontrolled and controlled airspace**, in close coordination with tower and TRACON at Syracuse International Airport. This network and capabilities are foundational for the FAA NTAP program enabling commercial BVLOS operations and contributes to the broader development of Advanced Air Mobility.

In addition to supporting our New York agencies, NUAIR is continuously advancing its own capabilities and the broader commercial UAS industry. In 2024, we conducted **over 1,000 flights with 20 different aircraft types**, operating from our Canastota center, the Lake Oneida Airstrip within our BVLOS range, and remote locations tailored to customer needs.

All NUAIR pilots undergo rigorous training, certified at NIST Level III, and senior pilots trained to NIST Level V standards. With this approach, NUAIR continues to set a high bar in the industry with annual flight reviews, ensuring our pilots not only excel in direct UAS operation but are also well-versed in the broader procedures and regulations necessary for safe and compliant operations, including waivers and amendments. This continued focus on flexibility, innovation, and safety is helping NUAIR stay at the forefront of the UAS and aviation industry.

BEYOND NEW YORK

NUAIR’s work extended beyond New York in 2024 – both in the United States and abroad.

Domestic operations included working with the Utah Department of Transportation Division of Aeronautics on their Advanced Air Mobility (AAM) Technology Integration Study. The Study took into account the unique qualities of Utah and provided educated and experienced insights and suggestions from the full NUAIR Alliance. Considering everything from micro-weather data to data security, the Study resulted in a comprehensive report to help the Utah Division of Aeronautics plan for the next generation of aviation.

On the global scale, NUAIR worked in collaboration with NEXA Capital Partners, LLC to advise and establish the Advanced Air Mobility (AAM) plan for the Kingdom of Saudi Arabia. With the Kingdom aiming to be the regional leader in this next generation of transportation by 2030, the strategic insight provided by NUAIR and partners was critical to shaping the future of global air mobility in the Middle East.



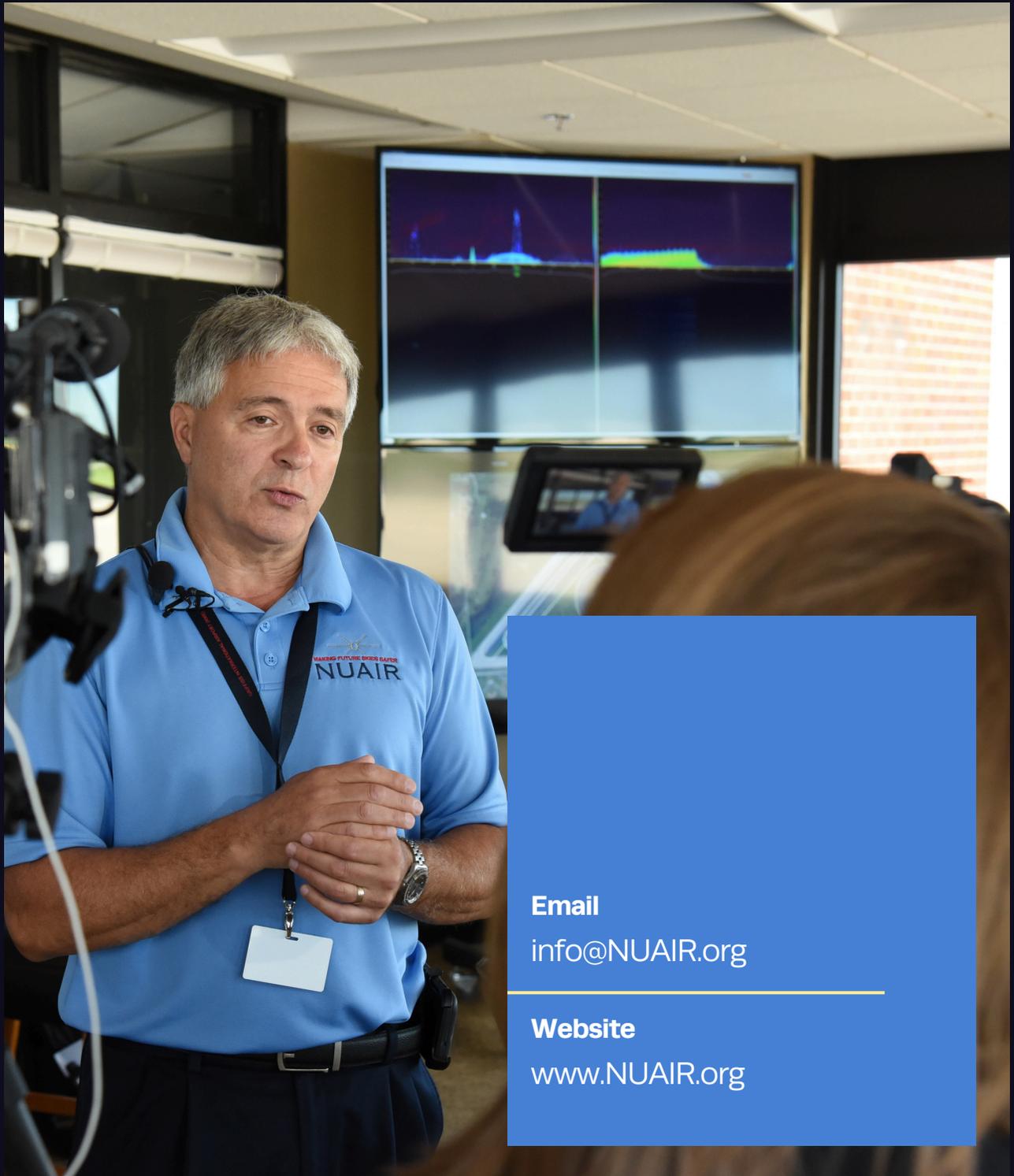
2025 LOOK AHEAD



As we look to the next year, NUAIR's focus is on accelerating growth and unlocking commercial potential:

- **Expanding DOD Services** – We will continue to deepen our partnerships with the Department of Defense, further cementing our role in the defense and aerospace sectors.
- **Completing Near Term Approval Process (NTAP) with the FAA** – Successfully concluding the NTAP process will position NUAIR and our partners to unlock new commercial opportunities in AAM and UAS.
- **Driving Customer Value** – Our ongoing work with our partners will remain a key focus, ensuring that we create greater value and economic opportunity for all stakeholders involved.

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