



NEXT IN FLIGHT

AEROX TAKES FLIGHT IN NORTH CAROLINA

2022 ANNUAL REPORT

“By moving early to position our region as a leader in AAM, we can attract innovative companies that will grow all sectors of our economy and provide high-value jobs for local talent.”

AEROX TAKES FLIGHT

AeroX board member and pilot David Mounts sees the economically distressed communities surrounding Smith Reynolds Airport every time he takes off and lands.

Mounts and his AeroX colleagues aim to change that by leveraging emerging technologies in unmanned aviation to build a new, vibrant and inclusive regional economy with jobs for local talent – particularly from communities historically marginalized.

Advanced air mobility (AAM) is an emerging air transportation system for moving cargo and, ultimately, people between local, regional, intraregional and urban locations using revolutionary new aircraft that are only now becoming possible.

Competition is heating up across the country as states and

communities recognize AAM's potential. By moving early to position our region as a leader in AAM, we can attract innovative companies that will grow all sectors of our economy and provide high-value jobs for local talent.

AeroX's strategic plan calls for business, government, academic and community partners to advance regional AAM by:

- > Creating an organization to lead the effort.
- > Building America's first urban, advanced unmanned aviation system.
- > Growing the AAM innovation ecosystem.

AeroX has taken major steps forward to achieve those goals, including:

- > Identifying the technologies

and securing vendors to begin building the infrastructure to enable AAM, thanks to a \$5 million grant from the N.C. General Assembly.

- > Forming a partnership with Elizabeth City State University and Piedmont Flight Training to begin preparing local talent for jobs in our growing AAM economy.
- > Assisting Forsyth County Sheriff's Office in launching North Carolina's first drones-as-first-responders program, using AAM technologies to support public safety.

This annual report highlights how AeroX and its partners are turning the region's AAM vision into reality.

We invite you to join this growing community of innovators as we work together to move our AAM economy forward.

AeroX Board of Directors

Michael Baughan,
Board Chair &
Secretary

Basil Yap
President

Kyle Mounts
Treasurer

Karen Barnes
Board Member

David Mounts
Board Member

Create the organization.

> Nonprofit formed > Staff hired > Funds raised > Engagement launched

Strategic Priorities



INFRASTRUCTURE BUILDOUT

Building America's First Urban AAM System

Invest in infrastructure that allows the AAM sector to grow, including using state funds to develop an urban UAS traffic management system.



TALENT DEVELOPMENT

Workforce Development/
Diversity + Inclusion

Collaborate with workforce partners to develop talent – the number one requirement for business and industry in every sector.



REGULATORY IMPACT

Advocacy

Gain regulatory approvals that enable scalable commercial AAM operations and educate lawmakers on the economic impact of AAM.



ECOSYSTEM CREATION

Connectivity

Attract and convene AAM stakeholders to promote networking, community building, partnership and knowledge sharing.

Results to Date

Organization Created

- > AeroX begins operations as a 501(c)(6) industry association
- > AeroX Foundation forms as 501(c)(3) to advance workforce development and other initiatives
- > Office space secured
- > Employees hired
- > Website and communications launched to support partner/funder engagement

Funds Pursued + Raised

- > N.C. General Assembly awards \$5 million to build AAM infrastructure
- > Membership campaign launches; raising \$100,000 plus a \$50,000 in-kind donation for operations and programs
- > Twin City Development Foundation provides \$20,000 to purchase drones for STEM camps
- > Partner Smith Reynolds Airport secures \$3,000 grant from N.C. Department of Transportation for its 2022 Aviation Career Education (ACE) Academy for middle and high school students
- > AeroX prepares and submits proposal for \$1 million Type-1 National Science Foundation Regional Innovation Engine grant

Next Steps

- > Expand operational funding through annual memberships
- > Identify and secure grants to fund strategic initiatives
- > Implement National Science Foundation Regional Innovation Engine proposal, if grant is awarded, and prepare Type-2 (\$15 million) grant proposal
- > Identify incubator space at or near the airport to support AAM startups

Winston-Salem Chamber of Commerce study calls for leveraging Smith Reynolds Airport for economic development



AeroX founded; Forsyth County Commission funds AAM strategic plan

2017

2018

2019

2020

Smith Reynolds Airport's *Future of Aviation* report calls for AAM innovation



Partner Novant Health and Zipline launch drone medical deliveries in North Carolina



Build America's first urban, unmanned air traffic management system.

> Unmanned traffic management system conceived > Vendors secured > Drones-as-first-responders program launched

AAM requires a new system of infrastructure – particularly unmanned air traffic management – to unleash its full potential for business and government use. AeroX's Project ATLAS (for Air Traffic Low Altitude Surveillance) launched in 2022 with a \$5 million grant from the N.C. General Assembly to develop a model unmanned traffic management system for enabling regional AAM and expanding it statewide. The system includes radar to detect small aircraft flying at low altitudes, data on weather

that affects their flights and a communication system for sharing aircraft and weather data among all users.

AeroX will use the system to help companies expand package delivery, public safety and infrastructure inspection operations in the region, provide manufacturers and operators data for validating new detect-and-avoid systems and inform AAM forecasting and planning.



Results to Date

- > Urban unmanned traffic management system conceived; vendors secured to build it
- > Partners secured for package delivery (UPS Flight Forward, Atrium Health Wake Forest Baptist), public safety (Forsyth County Sheriff's Department) and infrastructure inspections (Duke Energy)
- > Statewide AAM weather impact study launched to assess industry needs and locations for sensors
- > Forsyth County Sheriff's Office launches North Carolina's first drones-as-first-responders program

Next Steps

- > Deploy low-altitude unmanned air traffic management system and begin serving customers
- > Expand drones-as-first-responders service to other N.C. locations
- > Deploy drone identification system for government agency customers

AEROX MILESTONES

Partner Atrium Health Wake Forest Baptist and UPS Flight Forward launch drone medical deliveries in North Carolina



2021

AeroX Ventures forms to invest in AAM startups

AeroX Strategic Plan approved; nonprofit formed

N.C. General Assembly grants AeroX \$5 million to build model urban unmanned traffic management system

Build the AAM ecosystem.

> Advisory Council created > Workforce partnerships formed > AAM investment recruited

Results to Date

- > Advisory Council of community and industry stakeholders created to inform and support ecosystem development
- > Partnership formed with Elizabeth City State University and Piedmont Flight Training to offer exclusive local flight training for ECSU's new online four-year aviation sciences degree program. The NC Promise university offers in-state tuition of only \$500 per semester
- > Smith Reynolds Airport hosts Jim Shaw Aviation Career Education (ACE) Academy summer camp for middle and high school students, funded in part by the N.C. Department of Transportation
- > Workforce partners begin shaping AAM talent development strategy
- > AeroX markets region to AAM innovators at AUVSI XPONENTIAL and AeroX Industry Day; completes five recruiting missions with major AAM companies

Next Steps

- > Develop AAM talent development strategy
- > Develop Workforce Apprentice Skills Program (WASP) to provide work experience in drone operations for high school students that prepares them for careers
- > Expand ACE Academy summer camps for underserved youth



Frontier Precision Unmanned donates \$50,000 in drones for AeroX workforce programs.

AEROX ADVISORY COUNCIL

AeroX

Michael Baughan, Chair

Agile City

Karen Barnes

Atrium Health Wake Forest Baptist

Terry Hales

Cassandra Klebig

Crown Castle

Nancy Chrisman

Duke Energy

Jackson Rollins

Elizabeth City State University

Dr. Kuldeep Rawat

Forsyth County Sheriff's Office

Bobby Kimbrough Jr.

Novant Health

Angela Yochem

Piedmont Flight Training

David Mounts

Smith Reynolds Airport Board

Tom McKim

UPS Flight Forward

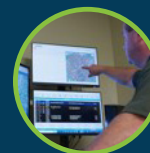
Jeff Lockett

AeroX launches Project ATLAS, designs and contracts with vendors to build unmanned traffic management system



AeroX, Elizabeth City State University, Piedmont Flight Operations workforce partnership formed

Forsyth County Sheriff's Office launches North Carolina's first drones-as-first-responders program



2022

JOIN AEROX

AeroX members gain first-mover access to opportunities shaping our mobility future and these value-add benefits.



FIRST MOVER ACCESS

Participate in Project ATLAS (advancing UTM infrastructure) and related research



ADVOCACY

Connect with public officials and advocate for a forward-moving legislative agenda



TALENT

Access talent through high school, community college and university partnerships



VISIBILITY

Build brand and gain market exposure through AeroX marketing opportunities

MEMBERSHIP LEVELS

Founding Member

\$50,000

Professional Partner

\$25,000

Academic + Nonprofit

\$2,500

Entrepreneurs

(Pre-revenue startups)

Call to discuss

ncaerox.com/join

AeroX is creating an advanced air mobility ecosystem where companies thrive by developing and leveraging unmanned aircraft technologies

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