



PROJECT SNAPSHOT

eLIFT-NC

Electric Logistics and Integrated Flight Testing

Overview

North Carolina’s healthcare system faces mounting challenges, including rising costs, workforce shortages, and growing patient demand. Rural communities face additional healthcare access and quality of care challenges, particularly after emergencies and natural disasters. As healthcare providers seek innovative solutions, Electric Vertical Take-off and Landing (eVTOL) aircraft technology can shorten time-to-care by moving equipment, clinical teams, and patients to facilities quickly.

The North Carolina Department of Transportation’s (NCDOT) Electric Logistics and Integrated Flight Testing (eLIFT) initiative will establish a statewide aviation network connecting hospitals, airports, and rural communities to transform healthcare access and quality of care while meeting rigorous federal standards for safety, infrastructure, and community integration.



eLIFT-NC Vision

Develop a statewide Advanced Air Mobility (AAM) network by creating a connected aviation ecosystem for healthcare mobility and disaster logistics creating a national model for safe, scalable AAM integration while maintaining NC’s position as a leader in aviation innovation.



Mission Objective

NC’s mission is to build safe, efficient, resilient, and sustainable extensions of today’s aviation system that will transform access to healthcare through new and novel multimodal options, while reducing costs for transportation infrastructure development and maintenance.

Benefits



Improves quality of care and patient mobility: Cuts response times to rural areas, improves access to high-quality care, and enables care from individuals with mobility challenges.



Infrastructure planning: Enable planning and evaluation of vertiports, charging systems, and digital infrastructure required for scalable AAM operations.



Facilitates AAM Commercialization: Grows collaboration with original equipment manufacturers, operators, and healthcare systems to validate and enable AAM business models.



Advances National AAM Leadership: Delivers vital data to inform Federal Aviation Administration (FAA) policies and strategies and establishes a replicable blueprint for safe eVTOL and AAM commercialization.

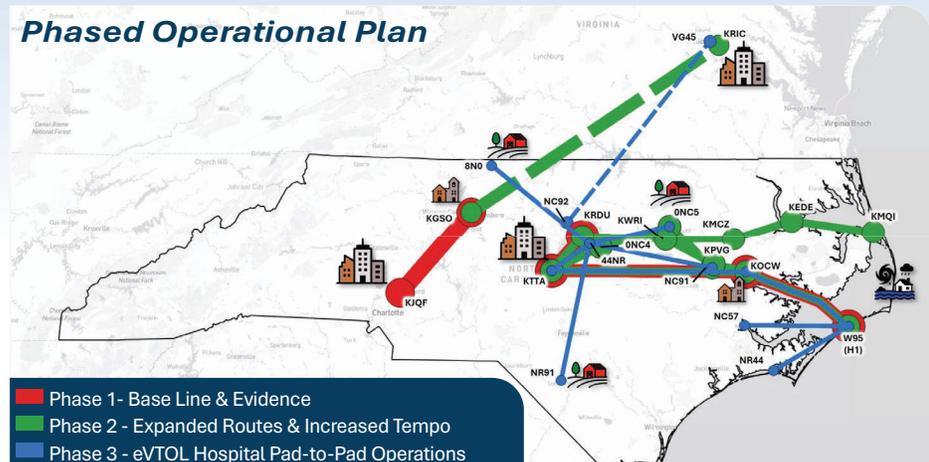


Long-Term Return on Investment: For every \$1 invested, NC could realize \$3–\$5 in benefits over the next decade through healthcare savings and economic development.

Project Scope

Phases 1, 2, and 3 are part of the eVTOL Integration Pilot Program (eIPP), while Phase 4 is expected to occur following the completion of the pilot. In **Phase 1**, the program will establish daily service on core routes, expand to additional airport pairs, build a safety case under varied conditions, and engage local communities. **Phase 2** will scale operations with longer routes, diverse cargo, and introduce experimental eVTOL flights to refine multi-modal AAM logistics. By **Phase 3**, eLIFT-NC will add hospital pad-to-pad eVTOL missions for critical medical deliveries and explore passenger demonstrations with the Joby S4, creating a blended AAM network and laying the foundation for a permanent, industry-driven ecosystem that strengthens emergency response, healthcare logistics, and rural connectivity. **Phase 4** (post pilot) focuses on commercialization, as well as national and industry standardization.

Phased Operational Plan



NC is Poised for Success

eLIFT-NC leverages NC's robust aviation infrastructure, strong history of aviation innovation, and prior success in FAA integration programs to pioneer safe, scalable AAM operations.

NC is **"First in Flight"**



NC has **72** airports throughout the state



NC is a **leader** in **both FAA** programs:



NC is already **investing** in **AAM**



Support & Partnerships

eLIFT-NC builds on strong existing public-private partnerships.

The project unites leading healthcare and aviation innovators with strong public-sector and academic support, including but not limited to:

- Aircraft Original Equipment Manufacturers (OEMs):** BETA Technologies (ALIA CX300 & A250), Joby Aviation (S208 & S4)
- Part 135 Operators:** Metro Aviation, Causey Aviation
- Healthcare:** WakeMed, UNC Health
- Logistics:** UPS Flight Forward
- Service Providers:** URBANPORT, Climavision, AI Virtual Towers
- Academia:** NC State, NC A&T, ECSU (dedicated AAM Center of Excellence)
- Public Sector:** Local airports, utilities, communities and public safety/first responders, as needed
- Post Award Program Support:** Crown, AECOM



eLIFT-NC Aligns With the AAM National Strategy & Program Criteria

Integration Priorities & How eLIFT-NC Delivers

Criterion

How eLIFT-NC Delivers

<p>Airspace</p>  <p>Supports safe integration of AAM aircraft into the NAS through structured procedures, coordinated flight operations, and robust data sharing.</p>	<p>1 U.S.-Based Aircraft & Technology</p>	<ul style="list-style-type: none"> Team of US incorporated companies Attestation confirms status Active FAA certification underway 90 day readiness GA to GA airport
<p>Infrastructure</p>  <p>Enables planning and evaluation of vertiports, charging systems, and digital infrastructure required for scalable AAM operations.</p>	<p>2 Overall Economic & Geographic Representation & Proposed Models of Public-Private Partnership</p>	<ul style="list-style-type: none"> Statewide healthcare ecosystem Expansion of existing public-private partnerships Urban & rural coverage
<p>Security</p>  <p>Implements rigorous cybersecurity, operational security, and physical security measures aligned with federal guidance.</p>	<p>3 Overall Representation of Operations to be Conducted</p>	<ul style="list-style-type: none"> Phase 1: Training & initial operations (eCTOL) Phase 2: Routes & network foundation development (eCTOL/eVTOL) Phase 3: Scaling (eVTOL) Phase 4: Post-program commercialization (eCTOL/eVTOL)
<p>Community Engagement</p>  <p>Builds community trust through transparent outreach, equitable planning, and noise, privacy, and land use considerations.</p>	<p>4 Policy/Regulatory Insight Potential</p>	<ul style="list-style-type: none"> AAM National Strategy alignment Aircraft certification advancement Infrastructure & utility insights Future AAM policy assistance
<p>Workforce</p>  <p>Fosters partnerships that strengthen the regional aviation workforce and prepare personnel for emerging AAM roles.</p>	<p>5 Aircraft & Operational Readiness</p>	<ul style="list-style-type: none"> Certification pathway data Commercialization flight hours Charging infrastructure planning
<p>Automation & Overarching Recommendations</p>  <p>Supports safe adoption of advanced automation, contribute operational insights for FAA rulemaking, and implement cross agency best practices for long-term integration.</p>	<p>6 Support For Operations</p>	<ul style="list-style-type: none"> Statewide airport support (NCAA) AAM Center of Excellence (R&D) Expert program governance Healthcare industry & legislative backing