NUAIR Major Efforts

National UAS Standardized Testing and Rating (NUSTAR)
- Accreditation
- Standards
- Certification
- Technology Development
- Regulatory Engagement

New York UAS Corridor / Test Range
FAA Designated Test Site

Engagement
- Services
- Consulting
- Training
- Education (STEM)

- UAS Traffic Management (UTM)
- Urban Air Mobility (UAM)
- Medium / High Altitude Capable
- Counter UAS, UAS Security
- State of the Art Operations Center
New York UAS Test Site
Griffiss Int’l Airport – Rome, NY

- State-of-the-art data collection, retention and analysis to support development of real-time UTM/UAM ecosystem safety assurance
- Current ground-based radar coverage for VLL airspace and above
  - Saab SR-3 X-band surface movement radar
  - SRC/Gryphon Sensors R1400 3-D tracking radar
- Synchronized multi-channel recording and playback of telemetry - detecting traffic and alerting operators about conflicts
- In process, connection with NASA for Live, Virtual, Constructive-Distributed Environment air traffic surveillance data exchange
GSS5 COA

- 6,700 square miles, from SFC to 10K MSL
- Basis for New York UTM Corridor Project
- Incorporates a range of very low level (VLL) controlled and uncontrolled airspace over both urban and rural areas
- Incorporates 12 public-use airports, including Syracuse International Airport (Class C) and Griffiss Int’l Airport
- Enables large-scale/high density, manned and unmanned BVLOS operations in Project U-SAFE (Unmanned Secure Autonomous Flight Environment) Phase II UTM Corridor
Syracuse SMART City and NUAIR

• TruWeather Solutions partnering with NUAIR Alliance as the weather SDSP
• Provides high resolution data defining micro-climate winds
• Analytics to determine the impacts on battery power consumption and the ability to re-route flight plans
• Syracuse future Urban SMART City Initiatives enhancing weather sensing capabilities
• Graphic (at right) depicts the hot zones for wind and turbulence
• UAM developers will have the opportunity for test flight urban scale operations

Future: Syracuse Urban Modeled Wind And Turbulence Hot Zones
Credit: NASA AMES Research Center, Dr. John Melton
Tiger Shark & Aurora Centaur Test Flights

- Large UAS operations at altitudes up to 10K MSL
- Syracuse and Rome NY Class C, D, E and G a/s
- Working with Syracuse TRACON and Griffiss Airport Traffic Control Tower
- Future VOIP voice comms with ATC
- Future “no chase” flights in Syracuse Class C

UAM-like Vehicle Flight Test Capabilities Already Demonstrated