Full Committee Meeting

Texas AAM Advisory Committee

Meeting #4, April 30, 2024

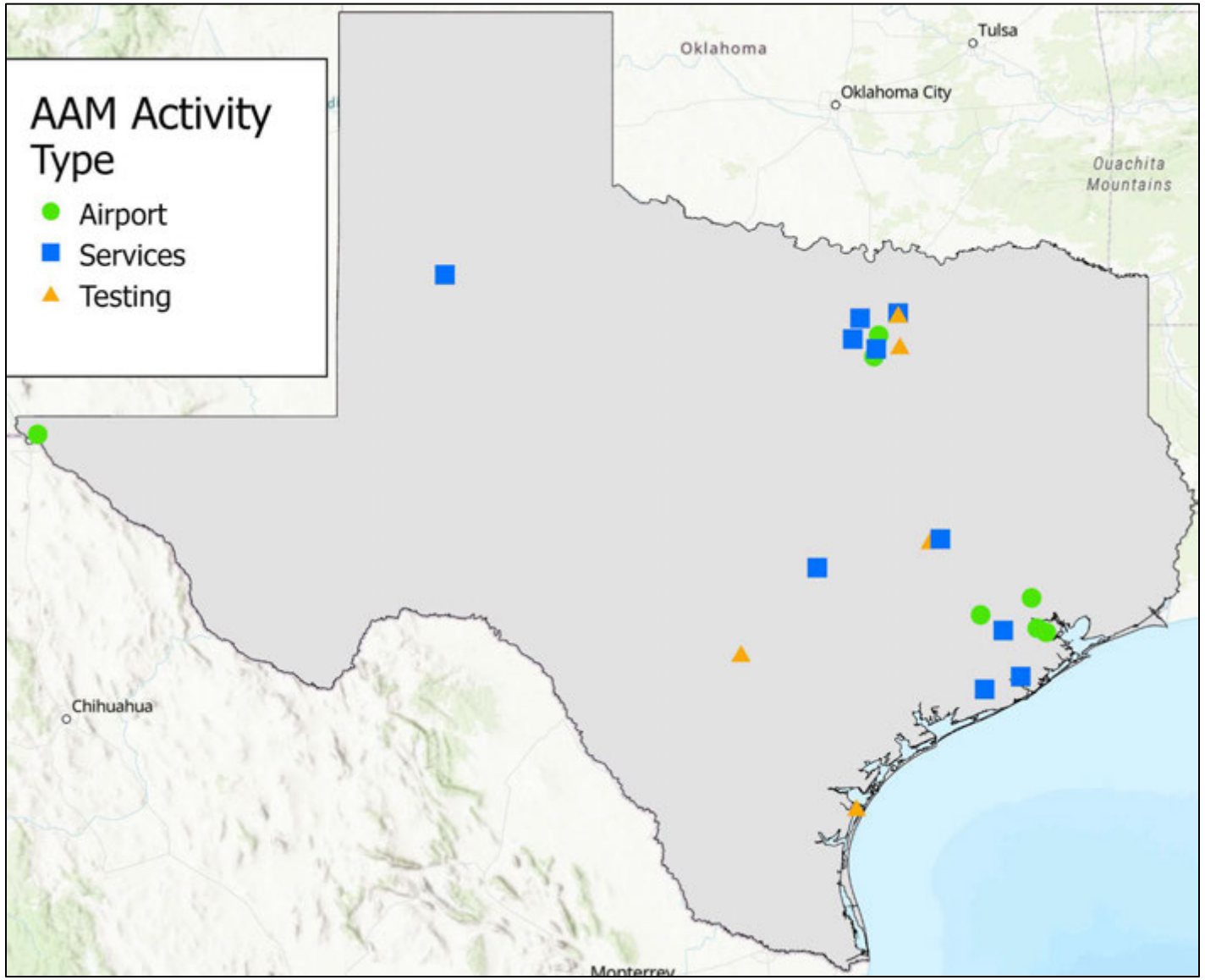
Agenda

1. Convene
2. Roll call
3. Chair and Vice Chair comments
4. Presentations on AAM activities in Texas
5. Discussion regarding Legislative recommendations
6. Committee member comments
7. Public comments
8. Adjourn

Housekeeping

- 16 speakers - 5 minutes each
  - Visual or auditory alert at 4 minutes and end of time
- Questions at the very end, except for outside guests
  - Please put questions in the Chat
- Speakers are divided into three categories:
  - Services
  - Airports
  - Testing
- No formal breaks, so take a personal break as needed

AAM Activity in Texas



AAM Activity in Texas Speakers

Services	Airports	Testing
Dan Dalton – Wisk	Tony Nevarez – El Paso Airport	Mike Sanders – Lone Star UAS Center
Amanda Nelson – Bristow Group	Paul Pupolo – DFW Airport	Jim Perschbach – Port San Antonio
Jason Day – Texas DPS	Saba Abashawl – Houston Airport Systems	Eric Mueller – Joby
Kendal Prosack – Wing		Patrick Yee – A&M RELLIS Campus
Cristian Maury – Manna		
Nerissa Perkins and Nick Dryer – BNSF		
Ernest Huffman – NCTCOG		
Andrew Chang – United Airlines		
Tom Anderson – Archer		

Services

Dan Dalton

Wisk

Vice President - Global Partnerships , Commercial Pilot

Dan Dalton - Wisk Aero (uncrewed eVTOL)

- AAM activity in Texas: **Autonomous air taxi services**
- Where in Texas: **Major metropolitan areas**
- Start date:
  - **Infrastructure and ecosystem development now**
  - **Autonomous air taxi services by end of this decade**
- Partners: **Many across regulatory, state/local, & commercial**
- Funding source/amount: **The Boeing Company**
- Lessons learned: **On the ground engagement (eg, MPOs, Utilities), community engagement & finding a champion are critical to AAM success**

Wisk: Delivering safe flight for everyone

Amanda Nelson

Bristow

Director, Business Development, Advanced Air Mobility

Bristow

Mandy Nelson

Headquartered in Houston, TX Bristow Group is the leader in global vertical flight solutions. With over 75 years of operating experience, we provide helicopter offshore energy transportation and search and rescue service to civil and government organization worldwide.

We see AAM as a natural extension of our core competencies, a key component of the future of mobility, and a powerful opportunity to increase accessibility to vertical flight and support various end markets both in Texas and around the globe.

AAM activity in Texas

- Point to point cargo logistics solutions; middle-mile for existing industrial customer base

Where in Texas

- Existing energy corridors (Houston, Galveston, Gulf Coast etc.)

Start date

- Limited cargo operations as early 2026 (scaling 2030 and beyond)

AAM activity in Texas

- Regional cargo and passenger connectivity; New markets; White label Part 135 operations

Where in Texas

- Connecting into and throughout the Texas Triangle. Extending out along the Gulf Coast

Start date

- Limited cargo operations as early 2026 (scaling 2030 and beyond)

Bristow's Partners: BETA Technologies, Elroy Air, Electra.aero, Eve, Lilium, Vertical, Volocopter

Funding source/amount: Private

Thesis :
Early stage AAM operations should focus on a business-to-business model supporting a logistics network in an industrial area operating within a limited range. Operations should scale in density and complexity only once safe, efficient and reliable operations have been clearly demonstrated and established.

Jason Day

Texas DPS

Director of UAS

DPS

- **AAM activity in Texas:** Accident reconstruction, Border operations, Tactical overwatch, Fire mapping, Search & Rescue, Tower inspections, Infrastructure inspections/photogrammetry, Training documentation
- **Start date:** 1990 (First evidence of Unmanned Aircraft being utilized by DPS), 2017 (Current UAS program established)
- **Operation statistics:**
  - 159,217 flights [2017-Present]
  - 51,674 total flights; 994 flights per week [2023]
  - 12,344 total flight hours; 8,736 hours in a year [2023]
  - 325 Remote pilots; 368 Unmanned aircraft
- **Funding source/amount:**
  - $2.3 million (Fleet value)
  - $1.0 million (UAS software)
  - $350,000 (cUAS technologies)
  - Department general funds & state grant programs
- **Operation results:**
  - Suspects located: 11,464 [2023]
  - Arrests made: 2,886 [2023]
  - Border Patrol assists: 3,387 [2023]
  - Recovered in seized drugs & assets: $4,400,000 [2023]

Kendal Prosack

Wing

Local Policy and Community Affairs Lead

Wing and Walmart

- **AAM activity in Texas:** Drone delivery
- **Where in Texas:** DFW Metroplex
- **Start date:** April 2023
- **Partners:** Walmart
- **Lessons learned:** City and community education

Cristian Maury

Manna Drone Delivery

Project Manager

Manna Drone Delivery

- **AAM activity in Texas:**
  - Last mile delivery focused on hot food items.
  - Members of UTM Key Site; Industry led effort for UTM.
- **Where in Texas:** Northlake, TX
- **Start date:** October 27th, 2023
- **Partners:** Hillwood, Alliance MIZ, Coca-Cola, FAA, IAA, EASA
- **Funding source/amount:** $25,000,000 Series A Raise
- **Lessons learned:**
  - Establish good relationships with regulatory bodies (EASA, IAA, FAA)
  - Fast Iteration
  - Community outreach is crucial for acceptance of service and service adoption.

Nerissa Perkins and Nick Dryer

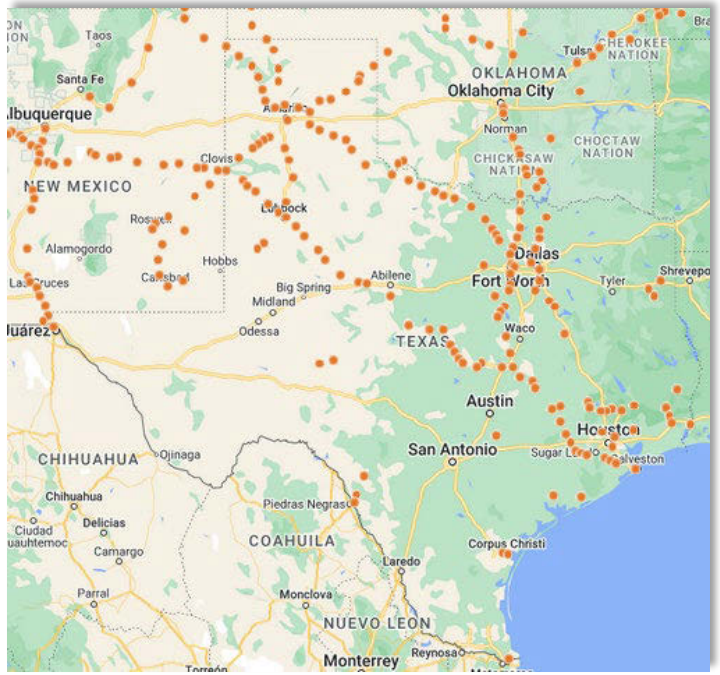
Burlington Northern and Santa Fe Railway (BNSF)

Nerissa: UAS Operations Manager

Nick: Sr Manager UAS – Technology Services

BNSF

- **AAM activity in Texas:** Rail infrastructure
- **Where in Texas:** Each dot represents a Texas project
- **Start date:** October 2013
- **Partners:** FAA, AUVSI, Matador Consortium
- **Funding source/amount:** BNSF self funded
- **Lessons learned:**
    - UAS technology while it has made significant improvements over the last decade, the reliability is still not where we hoped it would be. We continue to push the envelope with manufacturers and are inching our way closer though.
    - To be successful you must be rigidly fluid.



Ernest Huffman

NCTCOG

Aviation Planning and Education Program Manager

North Texas Airspace Awareness Program

- **AAM activity in Texas:** The North Texas Airspace Awareness Pilot Program began with 20 local governments and three Drone Service Provider (DSP) partners. Each city received a license for a browser-based platform to visualize and monitor airspace, aiding in safe flying for residents and businesses. Through live data, the program provides insights on risks, local events, and flight planning features. It plays a vital role in informing the community about regulations and hazards affecting the UAS community.

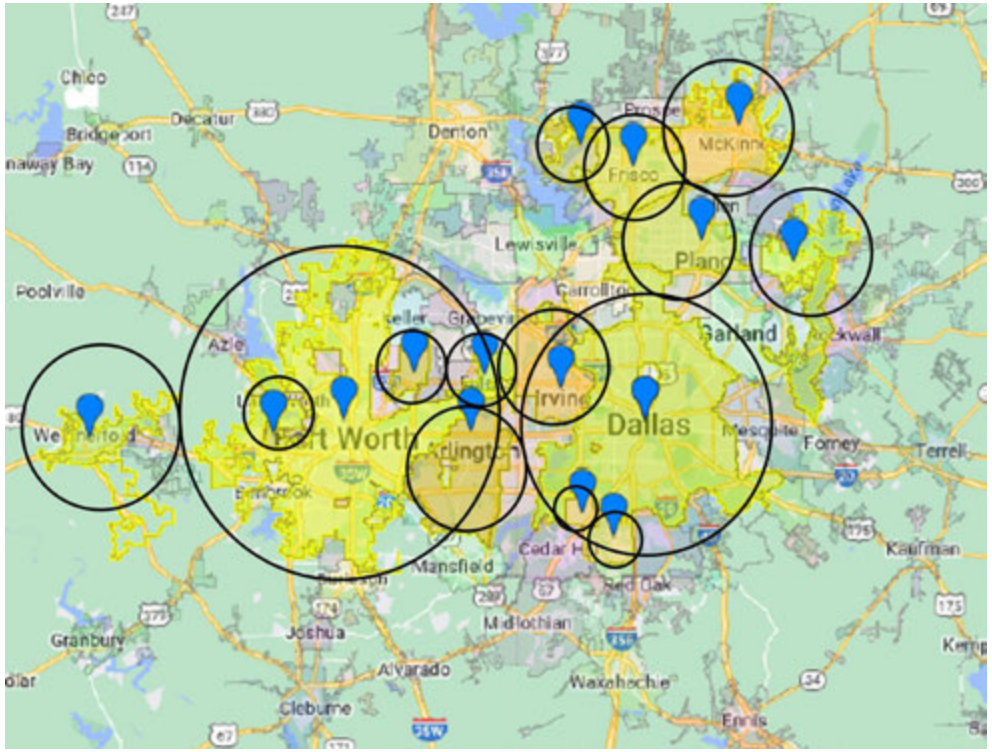
- **Cities included**: Addison, Allen, Arlington, Carrollton, Colleyville, Dallas, Denton, Desoto ,Duncanville, Euless, Fort Worth, Frisco, Garland, Grand Prairie, Irving, Lancaster, Lewisville, Little Elm, Mansfield, McKinney, Mesquite, North Richland Hills, Plano, Richardson, Waxahachie, Weatherford, White Settlement and Wylie

- **Project dates:** November 2023- November 2025

- **Partners:** Airspace Link, Aloft AI, and ATA Aviation

- **Funding source/amount:** Grant or Self Funded/Estimated $250,000 Annually*

- **Lessons learned:** Still in Phase 1 of the pilot, in which we determine the viability of the initial program concept. Final report will be created at the end of phase 1.



UAS Unmanned Aircraft Systems Safety + Integration

North Central Texas Council of Governments

Airports

Tony Nevarez

El Paso International Airport

Director

El Paso Airport

- **Modifications needed to accommodate AAM:**
  - Infrastructure Upgrades
  - Airspace Management
  - Charging and Maintenance Facilities
- **Start date:** Depend on various factors, including regulatory approvals, technological readiness, and industry partnerships.
- **Funding source/amount:** Federal grants, public-private partnerships, airport revenue, and state or local government investments.
- **Community integration:**
  - Concerns about privacy, noise, safety, and environmental impact.
  - Airports need to conduct outreach and education campaigns to involve residents and stakeholders in the planning process and address any potential issues proactively.
- **Workforce changes:**
  - The introduction of AAM at Texas airports may necessitate changes in the workforce, including training for air traffic controllers, maintenance technicians, and other airport personnel to accommodate the new technology.
  - New programs may be needed to ensure that the workforce is prepared for the transition to AAM.

Paul Puopolo

DFW International Airport

Executive Vice President of Innovation & Enterprise Analytics

DFW Airport

- **Modifications needed to accommodate AAM:**
  - Passenger: Initial location will leverage existing infrastructure of corporate aviation to include: FATO/TLOF, Electrical Charging, Holding Pads, and Passenger Facilities; coordination with local FAA on routes/ siting
  - Cargo: West side cargo facilities; pending business partner interest
- **Start date:** Underway; initial strategy and planning started in 2022; expected delivery end of FY25 early CY26
- **Funding source/amount:** TBD, early investment will be only for Phase I location
- **Community integration:** Working with NCTCOG UAS Task Force; meetings with city councils as requested
- **Workforce changes:** None to date; anticipate third party operation of eVTOL services

Saba Abashawl

Houston Airport System, City of Houston

Deputy Director, Global Industry & Government Affairs and Business Development

Houston Airport Systems

- **Modifications needed to accommodate AAM:**
  - Incorporate AAM requirements & considerations into the overall airport development and potential facility
  - Planning processes to minimize possibility of compromised site selection for AAM or modifications to master plan Concept of Operations
  - Addressing (a) airspace (b) Business (c) Energy & Fueling (d) Financial Strategy (e) mobility (f) Cybersecurity (g) environmental Sustainability (h) Policy & Community
- **Implementation Phases:** 0-5 y: Cargo, 5-10 y: ground access augmentation, 10+ y: Regional Mobility

  Airline Plan: *not harmonized with FAA*
  - **PHASE I 2026** b/w IAH and EFD, SGR & Houston Executive
    - 4 aircraft, 9 flights/day/aircraft = 33 daily flights = 26,000/y pax
  - **PHASE II:** 16 aircraft, 251K/y pax
  - **PHASE III**: 32 aircraft, 16 vertiports **650 flights/da**y = 661K annual pax
- **Funding source:** Federal, State, Private, Public/Private Partnerships
- **Community integration:**
  - Serve up to 53.9% of the population
  - Recover up to $582.5 million per year in total time savings for consumers
  - Support the 3.6-6.6% of metropolitan residents who lack access to a vehicle
  - Help 22,000 people with mobility challenges to obtain their prescription medication
  - Generate up to $284,000 per year in new annual sales for a participating local business
  - Avoid up to 294 million miles per year in road use and up to **580 car crashes per year**
  - Reduce up to 113,900 tons per year of CO2 emissions
- **Workforce changes:**
  - Evaluating workforce development and education opportunities
  - In the U.S. alone, Deloitte estimates the AAM market may reach US 115b annually by 2035, creating more than 280,000 high-paying jobs.

Testing

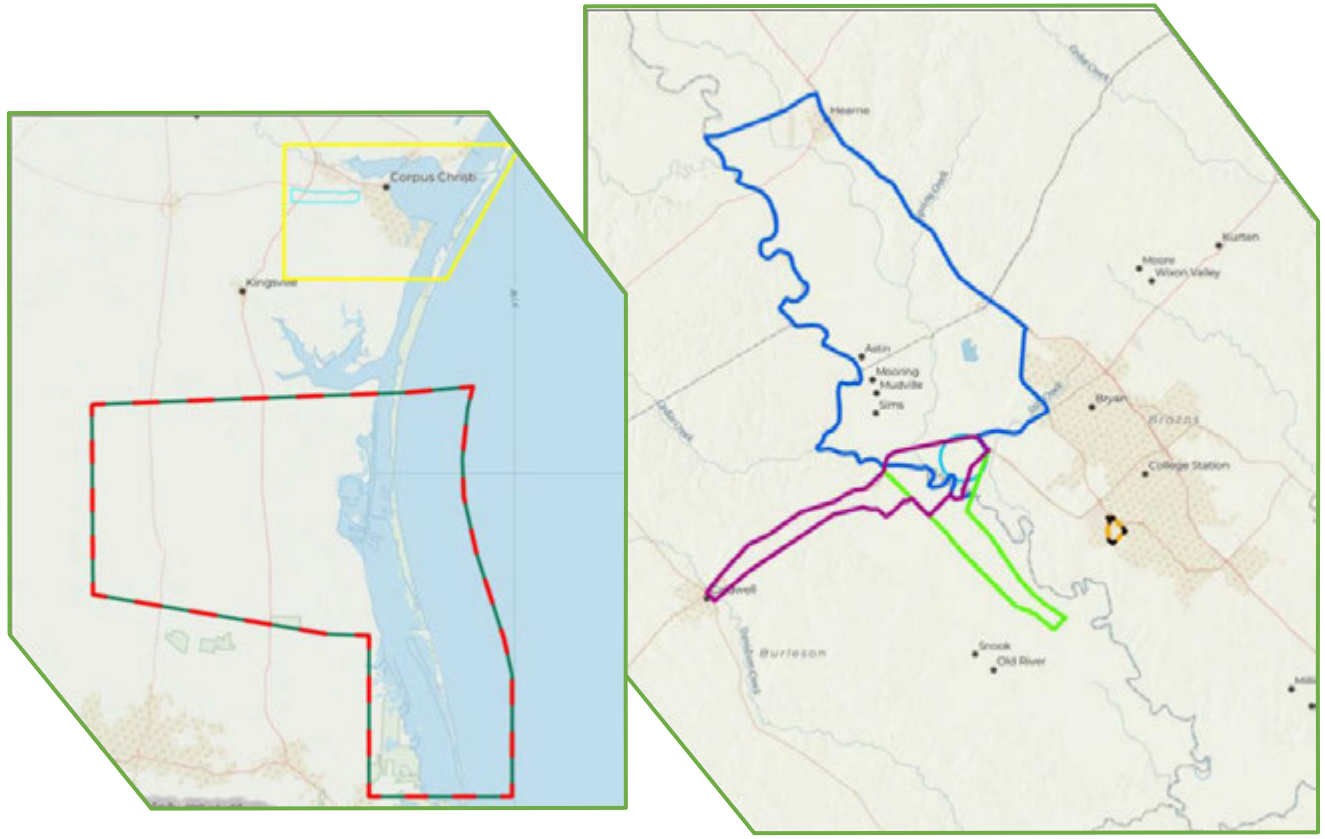
Mike Sanders

Lone Star UAS Center of Excellence & Innovation, TAMU-CC

Executive Director

Lone Star Unmanned Aircraft System Center of Excellence and Innovation

- **Certifications/capabilities:**
  - Real-world application of UTM and UAS Ecosystem providers
  - Operational Assessment of NASA's Urban Traffic Management (UTM) concept
  - Supporting NextGen development of AAM demonstrations and evaluations
- **Start date:** Certified by FAA in 2014
- **Partners:** BVLOS flight enablers



LSUASC Certificates of Authorization

Andrew Chang

United Airlines

Managing Director - United Airlines Ventures, Corporate Development at United Airlines

United Airlines

Urban Air Mobility will transform the way we travel

Urban air mobility (UAM) complements our United Next strategy in becoming the best airline in our hub markets

Community integration is an important consideration to UAM success

- United is leveraging our capabilities as a responsible corporate citizen in local communities and relationships with business groups
- Collaboration with internal ATC and Real Estate teams to identify airspace procedures and ground infrastructure locations at our hub airports
- Internal working group has been stood up within United to set up future UAM activities

We envision our UAM operation to be United branded and operated by a FAA approved third-party operator

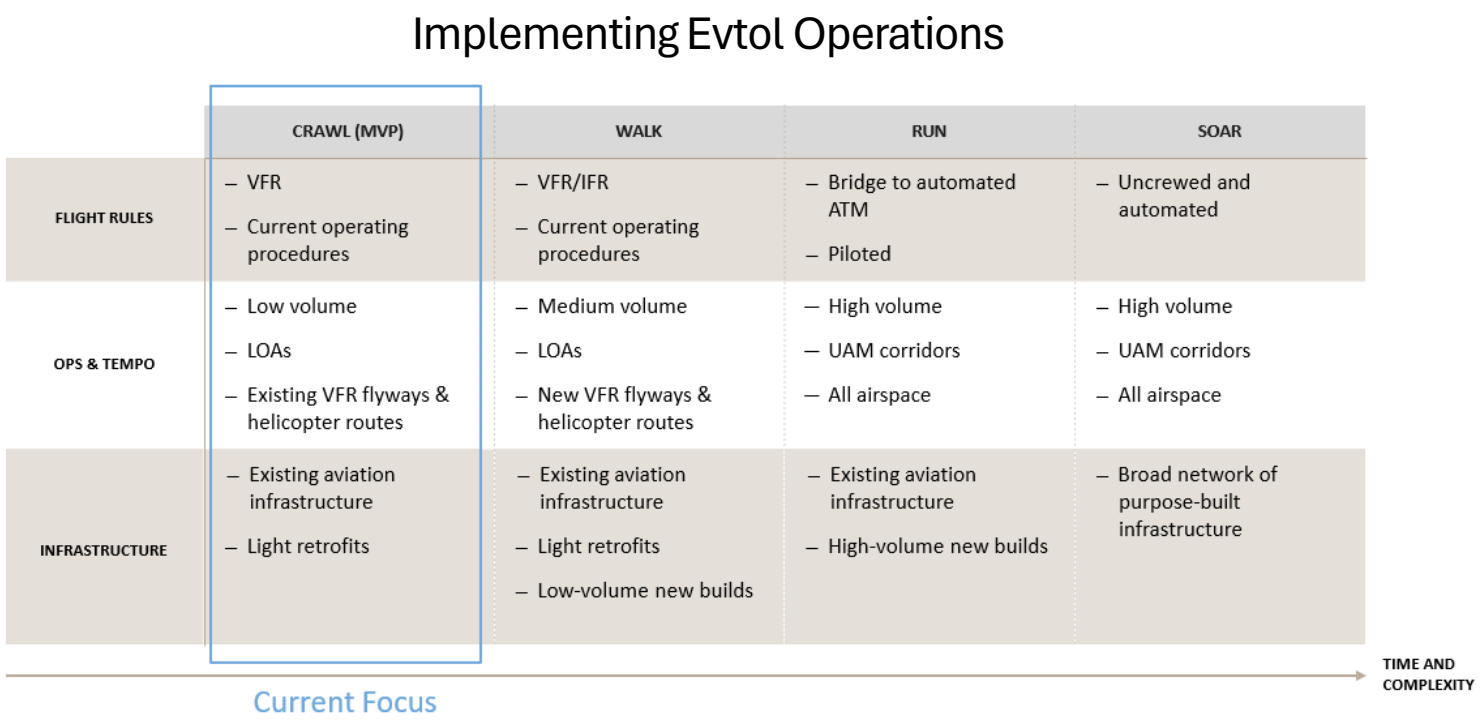
Tom Anderson

Archer

Chief Operating Officer, Urban Air Mobility

Archer

- **AAM activity in Texas:** None, facilities in California and manufacturing facility being built in Georgia
- **Start date:** Targeting commencement of operations in 2025
- **Funding source:** Raised ~$1.2 billion of capital
- **Value Proposition:** One of only two companies with Airworthiness Criteria for its eVTOL aircraft published by FAA in the Federal Register



Jim Perschbach

Port San Antonio

CEO, President

Port San Antonio

- **Certifications/capabilities:**
  - 1,900-acre campus is largest technology hub in South Texas
  - Site includes residential, commercial, and industrial facilities as well as the Boeing Center at Tech Port, San Antonio Museum of Science and Technology, and Capital Factory
  - Direct access to Kelly Field (SKF)

- **Start date:** 2024

- **Investment:** Planned vertiport
  - Creates real-world test site
  - Supports growth and connectivity between partner industries, community

Eric Mueller

Joby Aviation

Airspace Engineer

Joby

- **Project Description:** Multi-Year Airspace and Air Traffic Control Study. NASA and Joby conducted an air traffic control simulation in consultation with the FAA to develop a network of urban aviation operations in the Dallas-Fort Worth (DFW) area. The objective of the effort was to evaluate the extent to which flights are possible in the current National Airspace System and identify whether existing approaches to expanding aviation operations will work for the proposed operations. The study evaluated the tempo of operations that eVTOLs could fly in highly controlled, Class B airspace that involves complex conventional air traffic procedures and operations. It also recommends approaches to achieving high tempo operations at busy airports, including DFW and Dallas Love. Participants in the simulation included eight recently retired tower air traffic controllers from DFW and DAL.

- **Start date:** Current simulation started Fall 2022, data collection September 2023, report publication summer 2024. Preliminary simulations conducted 2018 to 2022, current simulation conducted 2022-2023 (approx 10 months)

- **Partners:** NASA, DFW, FAA

- **Lessons Learned:** The trials showed that dozens of aircraft per hour could operate to and from existing airport terminals, including those that require a runway crossing. These new operations do not affect the operations of existing commercial airline traffic at either airport. The air traffic solutions evaluated in the simulation are expected to be transferrable to other Class B airports.

Patrick Yee

RELLIS, Texas A&M

Deputy Director of Operations

RELLIS Campus

- **Certifications/capabilities:**
  - 12-mile BVLOS Corridor
  - 2 additional Part 91 COAs (at or below 1000’, and over 55lbs)
- **Start date:** Approved 14 NOV 23
- **Investment:** Proof of Concept cost - $5,000 plus 6 months planning and admin time
- **Partners:** TAMUS Members, Censys Technologies
- **Restrictions:** Public Aircraft only, Visual Observers, at or below 400’ except when inside CLL Class D

Legislative Recommendations

Housekeeping

- Recommendation details came from Subcommittees
- Slides grouped
  - Priority 1 – Most discussions or new ideas (9)
  - Priority 2 – (12)
  - Priority 3 – Least controversial (3)
- Comment if you object or want to make a revision or delete
- If nothing is said, we will assume general support

Discussion Priority 1

9 recommendations

Recommendation

AAM Definition

Recommendation: Include drones and UAS in Texas AAM definition

Who: Texas Legislature

Funding source: N/A

How much: $0

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Slide 1

Federal AAM Definition

AAM is a transportation system that moves people and property by air between two points in the United States (U.S.) using aircraft with advanced technologies, including electric aircraft, or electric vertical takeoff and landing (eVTOL) aircraft, in both controlled and uncontrolled airspace.

Suggestion to clearly include drones for Texas AAM definition

AAM Coordination and Leadership Act (P.L. 117-203, 136 Stat. 2227), October 17, 2022

AAM Definitions

- FAA Website
  - Advanced Air Mobility (AAM) is an umbrella term for aircraft that are likely highly automated and electric. These aircraft are often referred to as air taxis or electric Vertical Takeoff and Landing (eVTOL) aircraft. AAM aircraft could also be used to transport cargo and passengers, help with firefighting, and provide search and rescue operations. It also has the potential to connect underserved and rural communities.
- Texas AAM Bill (SB 2144)
  - Sec. 21.072. ADVANCED AIR MOBILITY. (a) In this section, "advanced air mobility" means an aviation transportation system that uses highly automated aircraft, which may be manned or unmanned, to operate and transport passengers or cargo at lower altitudes for commercial, public service, private, or recreational purposes.
- AUVSI, AAM Prepared
  - AAM is an air transportation system primarily utilizing electric aircraft, including eVTOL and eCTOL aircraft to carry passengers, cargo, or provide services in an urban or regional setting, with a gross takeoff weight of 300 lbs. or more.

Recommendation

Economic Impact Study

Recommendation: Fund a preliminary economic impact study to determine the cost benefit analysis for ~~two takeoff and landing locations for AAM.~~

Who:

Funding source: industry and local partners

How much: $500,000. 25% local match

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Slide 2

Port San Antonio Economic Impact

- We have added over 8,000 positions to our campus in the past 7 years and expect to add 12,000 to 18,000 in the next 7-10 years. This is placing strain on both our parking and our transportation infrastructure. Being able to move even 1 to 2,000 people per day eliminates the need to build multiple parking garages at about $30M each. This is true even if the transportation is simply using existing VIA Metropolitan Transit (San Antonio's metropolitan transportation agency) park and ride infrastructure located relatively close to our campus. Ultimately we envision a regional network, but in the short term the KEL-LAC facility located on US90 between our campus and JBSA-Lackland would limit the need to overfly most private property limiting some of the "taking" issues raised by some in our committee meetings. We believe that our campus includes many early adopters given the heavy aerospace and military presence here.
- We are looking to connect job opportunities as well as educational opportunities on our campus with people throughout the region. Ironically there are thousands of people that live within view of our hangars that are not able to easily connect since they live on the other side of the UP Classification yard. There is a 4 lane bridge, but it does not provide for pedestrian or bicycle access. AAM would connect these people to our campus easily and without the substantial costs required to build a bridge over a rail classification yard.
- In the short term – but probably also into the longer term – we have a major airfield user (Boeing) that operates a full civil a massive sustainment, modification, and upgrade center here. They frequently transport materials from one end of the campus to the other. Cargo AAM would provide the ability to simplify this transport and limit the need to move out of and back into the aeronautical area. While there is a plan for a more useful airside transit lane, this is currently complicated by existing USAF restricted areas and the need to use an operational taxiway to avoid them.
- All of this is on top of the ability to use our campus as a 1,900 acre living test site with residential, commercial, and industrial facilities as well as the Boeing Center at Tech Port, San Antonio Museum of Science and Technology, and Capital Factory providing a place to easily showcase the technology and use.

Recommendation

Statewide AAM Plan

Recommendation: TxDOT develop a statewide plan for Texas AAM in conjunction with industry, similar to other AAM leader states

Who: industry, state

Funding source: industry

How much: ?

Timeline:

*

FL, OH, VA AAM Plan Themes

- **Overview**
  - Definition of AAM
  - Summary of the type of aircraft involved in AAM
  - Statewide use cases and AAM activity
  - Existing infrastructure
  - Need for an AAM executive state leader
  - Institutions supporting AAM in the state
- **Economic impact**
  - Estimated passenger demand
  - Tax revenue
  - State and municipality specific economic gain/investment
  - Workforce development
- **Infrastructure/operations**
  - Route planning
  - Vertiport design
  - Fuel type
- **Timelines**
  - Infrastructure development
  - AAM adoption

Recommendation

~~State Standards~~

~~Recommendation:~~ ~~Develop State standards for infrastructure consistency~~

Who:

Funding source:

How much:

Recommendation

Flexible Regulatory Framework

~~**Recommendation:** Create a flexible regulatory scheme for AAM efforts~~

Who: Tx Legislature

Funding source:

How much: $0

Recommendation

Data Capture and Analysis

Recommendation: Coordinate collaborative mechanism for capturing and analyzing existing public data on airspace integration and from drone detection companies to enhance air safety, especially for public safety uses.

Who: TxDOT? Texas Comptroller model

Funding source: state

How much:

Recommendation

AAM Office

Recommendation: Create an office at TxDOT to increase adoption and awareness of AAM (through demonstration day coordination, conference presentations, etc.)

Who: TxDOT

Funding source: Exception request or rider

How much: Program Manager 5 salary range, plus 3 staff, and travel

Recommendation

~~Statewide Plan for Vertiports~~

Recommendation: Assess all existing Texas airports to determine their potential for vertiports, including electrical capacity

Who: TxDOT, AAM office

Funding source: federal, state, general, rider

How much: $300,000

Recommendation

Mitigation of Cybersecurity Risks

Recommendation: Develop a statewide certification process to ensure good cybersecurity practices are adhered to for autonomous AAM technologies for services to be purchased by the state and connected to state systems

Who: DIR, NIST, CISA

Funding source: general, federal, industry

How much:

Discussion Priority 2

12 recommendations

Recommendation

Vertiport Construction Matching Program

Recommendation: Create a state matching program for new public good/public use vertiport construction

Who: TxDOT, AAM office

Funding source: general, rider, federal

How much: $100M

*

Florida bill to fund new vertiport construction

As part of the Supply Chain Innovation Grant Program

“The Department of Commerce and the Department of Transportation shall also consider applications for funding submitted by public and private entities seeking to develop and establish vertiports in this state. Each award made for vertiport development shall be matched dollar-for-dollar by nonstate funds. For purposes of this subsection, the term "vertiport" means a system or infrastructure with supporting services and equipment used for landing, ground handling, and takeoff of manned or unmanned vertical takeoff and landing (VTOL) aircraft.”

https://www.flsenate.gov/Session/Bill/2024/1301/BillText/c3/PDF

Recommendation

Ancillary Off-airport Infrastructure

Recommendation: Increase TxDOT aviation funds and allow funds to be used on or off-airport to construct infrastructure to enhance the aviation system.

Who: TxDOT, OOG, AAM office

Funding source: federal, state, general, rider

How much:

Recommendation

Vertiports at Existing Airports

Recommendation: Modify Chapter 21 of the Transportation Code to enable existing airports to function as vertiports and increase available funding if the vertiport meets public use/public good standard.

Who: legislature

Funding source: N/A

How much: $?

Recommendation

Electrical Infrastructure

Recommendation: Provide matching funding to improve electrical capacity on or near Texas airports for airborne and ground vehicles.

Who: TxDOT, AAM office, ERCOT

Funding source: general, federal, rider, PPP

How much:

Recommendation

AAM Public Awareness

Recommendation: Provide funds to create communication materials targeted to the public, decision makers, and recreational drone users that can be implemented as appropriate.

Who: Texas Economic Development, TxDOT, Program Manager

Funding source: general fund, rider, industry funds (advertising campaign), federal funds

How much: $500,000 annually each from state and industry

Recommendation

AAM Rep on TxDOT Aviation Committee

Recommendation: Add AAM representation to the existing 9-member TxDOT Aviation Advisory Committee.

Who: Legislature

Funding source: TxDOT

How much: $0

Recommendation

AAM Advisory Committee

Recommendation: Continue the AAM Advisory Committee

Who: TxDOT

Funding source: TxDOT state funding or general funds

How much: $120,000 bi-annual

Recommendation 15

AAM Workforce – K-12

Recommendation: Direct the TEA to integrate AAM into K-12 curriculum (e.g., NASA toolkit) and coordinate with TWC on developing AAM apprenticeship programs at high schools.

Who: TEA, TWC

Funding source: state

How much: $2M

Recommendation

AAM Workforce – Higher Education

Recommendation: Support education and workforce development for AAM by providing funds and resources for state universities, community colleges, and vocational schools to develop and offer programs and courses related to AAM.

Who: workforce solutions, TWC, THECB, TSTC

Funding source: federal (DOD), state, general

How much: $10M annually (for a set period of time)

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TWC Apprenticeship Programs

- Awards funds to employers to secure Department of Labor apprenticeship registration and help with costs relating to curricula development, instruction or training for apprentices, training supplies, etc. **(Private entities apply for funding directly)**
- Critical Skills Apprenticeships
  - $4,000,000 available in funding
  - Maximum Award: $500,000
  - Funding Length: 18 months

Workforce Innovation & Opportunity Act Program

- **Services**
  - WorkInTexas
  - Job Training - Texas Workforce Commission
  - Find Education - Texas Workforce Commission
- The U.S. Department of Labor's Employment & Training Administration (DOLETA) funds WIOA through grants.
- **WIOA authorizes the following core programs under the workforce development system:**
  - Title I - Workforce development programs, including:
    - Adult and Dislocated Worker Program
    - WIOA Youth Program
  - Title II - Adult Education and Literacy programs
  - Title III - Wagner-Peyser Employment Service
  - Title IV - Vocational Rehabilitation state grant programs

Texas Industry Partnership Program

A match grant program that supports training for high demand jobs.

Current target industries:

- Advanced Manufacturing
- **Aerospace, Aviation and Defense**
- Energy
- Information Technology

Allowable Activities

- Participant recruitment
- Skills assessment
- Job search
- Job referral
- Equipment
- Training /Mentoring (specified list of “training related costs” is on TWC website)
- Support services

Recommendation

AAM Research and Development

Recommendation: Support research and development for AAM technologies, products, and services in Texas by creating a program for state universities (e.g., developing UTM systems) which could be used as matching funds for federal grants and a minimum percentage of community or industry match.

Who: TxDOT

Funding source: general

How much: $40M bi-annually

Recommendation

First Responder Training

Recommendation: Provide a funding mechanism to help with first responder training

Who: AAM office, Texas DPS, TDEM, TEEX, TCOLE

Funding source: general, federal (DOJ, homeland security, FEMA)

How much: $2M annually

Recommendation (combine with economic impact rec.)

Revenue Streams for AAM

Recommendation: Develop and recommend a list of revenue streams to educate the legislature on their options

Who: legislature

Funding source: N/A

How much: $0

Discussion Priority 3

3 recommendations

Recommendation

AAM IWG Workshop

Recommendation: Ask the Governor's Office to request an AAM interagency working group (IWG) workshop for the state of Texas

Who: TxDOT to draft request to Governor's Office

Funding source: NA

How much: $0

Recommendation

Disallowed AAM Uses

Recommendation: List of ways that AAM will not be used and encouragement of liberal use when applicable (e.g., use on state land)

Who:

Funding source:

How much: $0

*

The UAS program will not be used to:

- Conduct random surveillance activities
- Target a person based solely on individual characteristics, such as race, color, ethnicity, national origin, sex, sexual orientation, age, gender, religion, or disability
- Harass, intimidate, or discriminate against any individual or group
- Conduct personal business or any other unauthorized use
- Support any facial or license plate recognition technology
- Carry or deploy any types of weapons
- Monitor traffic for the purpose of issuing traffic citations
- Intercept and collect Wi-Fi data

Use of Unmanned Aircraft

GOVERNMENT CODE CHAPTER 423. USE OF UNMANNED AIRCRAFT (texas.gov)

Recommendation

State Agency Information Sharing

Need: Legislation governing information sharing among agencies using AAM during disasters (HB2340-89R)

Recommendation: update legislation (HB2340-89R) to include AAM aircraft

Who: legislature

Funding source: N/A

How much: $0

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TX HB 2340 2019 (R) Sec. 418.055

Information Sharing Working Group

a) In this section, "work group" means the work group established under this section.

b) The division shall establish a work group of state agencies involved in disaster management. The work group consists of members appointed by the chief of the division who represent:

   1) the comptroller's office;

   2) the Department of State Health Services;

   3) the Texas Department of Transportation;

   4) the General Land Office;

   5) the Health and Human Services Commission;

   6) institutions of higher education; and

   7) to the extent practicable, appropriate federal agencies.

c) The work group shall develop recommendations for improving the manner in which electronic information is stored by and shared among state agencies and between state agencies and federal agencies to improve the capacity of the agencies to:

   1) respond to a disaster; and

   2) coordinate the agencies' responses to a disaster.

d) Not later than November 1 of each even-numbered year, the work group shall submit the group's recommendations to the governor.