Advanced Air Mobility

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All material is DRAFT and some or all elements to the strategy could change at the government's sole discretion

Topic Overviews

- NASA's Role
- AAM Overview
- Community Integration
- Resources

NASA in the AAM Ecosystem

Far-Term

- Articulating a vision
- Transformational research
- Assessing new markets

Mid-Term

- Research to support policy development and standards
- Maturing technologies
- Market studies and analysis
- Concepts and demonstrations

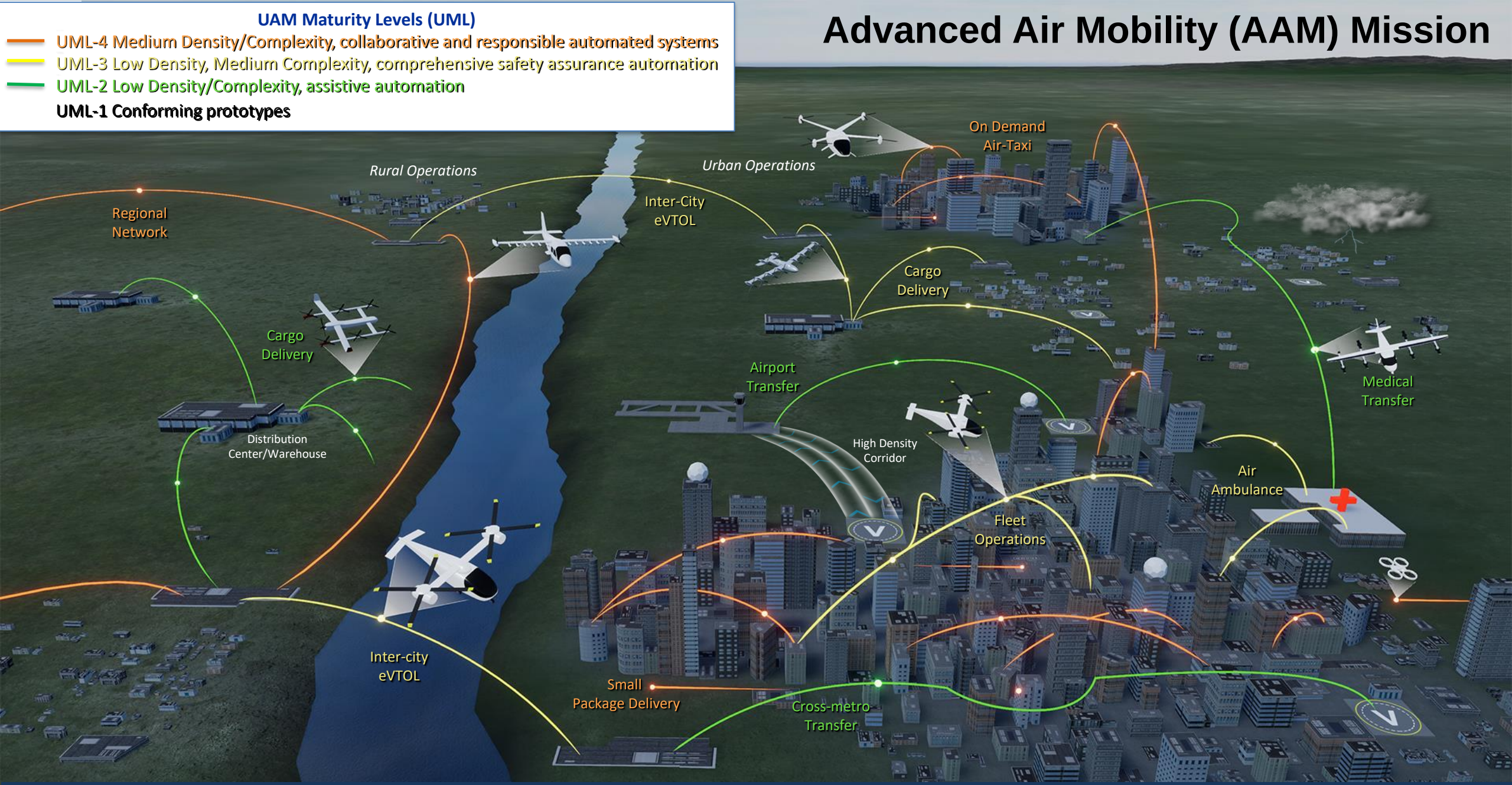
Near-Term

- Safety and efficiency enhancements
- Demonstrations
- Outreach & education

Advanced Air Mobility (AAM) Mission

UAM Maturity Levels (UML)

- UML-4 Medium Density/Complexity, collaborative and responsible automated systems
- UML-3 Low Density, Medium Complexity, comprehensive safety assurance automation
- UML-2 Low Density/Complexity, assistive automation
- **UML-1 Conforming prototypes**



Safe, sustainable, affordable, and accessible aviation for transformational local and intraregional missions

Community Integration Status

- Successful “Community Integration” efforts will implement approaches that are ecosystem wide, but have a critical focus around education, “vertiports” and public acceptance.
- FAA and DOT, state and local governments, industry, academia, community organizations and Standards Development Organizations are activity coordinating with NASA on research activities to break down community integration barriers.
- Challenges such as regulatory, noise acceptance, weather, and societal and economic factors make make community integration a significantly challenging barrier to Advanced Air Mobility.

AAM Ecosystem Working Groups

Industry, Professional, Community and Standard Development Organizations (SDO’s)

Local Communities

Resources

- FAA's AAM Webpage - https://www.faa.gov/uas/advanced_operations/urban_air_mobility/
  - UAM ConOps 1.0

- AEWG Recordings - https://nari.arc.nasa.gov/aam-portal/
  - National Airspace System "101" (3 presentations
  - UML-4 ConOps overviews (3 presentations)
  - Automated Vertiport ConOps Overview
  - Urban Aviation Weather Testbed
  - Public Acceptance

- NASA's Technical Reports Server - https://ntrs.nasa.gov/
  - NASA UAM UML-4 ConOps
  - UAM Market Studies
  - UML Overview
  - Technical Reports and Studies

- Other free and fee resources
  - Conferences
  - Webinars
  - Seminars
  - Workshops
  - Subject Matter Experts

Resources

Nancy Mendonca is currently the NASA Deputy in ARMD's Mission Integration Office (AMIO). The AMIO integrates ARMD's AAM efforts across the four ARMD Programs and with the AAM community. She served 24 years in the Navy flying H-46 helicopters. Between the Navy and NASA, she worked at the Missile Defense Agency, on the Marine Corps MRAP Program and at NTIA working on the Federal Strategic Spectrum Plan. She graduated from the U.S. Naval Academy with a B.S. in Aeronautical Engineering and subsequently eared M.S. degrees in Aeronautical Engineering and National Security and Strategic Studies. She is also a Certified Public Accountant and has currently prioritized rescuing Great Danes and riding horses over flying helicopters.

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