

2nd On-Demand Mobility and Emerging Aviation Technology Roadmapping Workshop

March 8th 8:00 – 11:30 On-Demand Mobility Market Opportunity

- NASA Welcome (Rohn/NASA HQ) 10 min
- FAA Welcome (Ryan/FAA Small Airplane Directorate), 10 min
- Kansas City Workshop Summary (Finelli/ NASA Langley) 10 min
- Arlington Workshop Objectives (Goodrich/ NASA Langley) 15 min
- ODM Strategy (Moore/ NASA Langley) 15 min
- Simplified Vehicle Operation Vision (Duerksen) 15 min
- ODM Unmet Demand (Holmes/NextGen) 15 min
- Break: 15 min
- AHS/AIAA/SAE Professional Society Perspective (Hirschberg/AHS) 15 min
- GAMA Perspective (Hennig/GAMA) 15 min
- FAA Regulatory Path to Enable ODM (Ryan/FAA) 15 min
- **Working Group Reports** 45 min (15 min each)
 - Simplified Vehicle Operations / Airspace Integration (Goodrich/ NASA Langley)
 - Electric Propulsion and Configuration Integration (Moore/ NASA Langley)
 - Integrated Structure and Manufacturing Processes (Patterson/ NASA Langley)

11:15 – 11:30 Pick up lunches

11:30 – 12:15 Lunch Presentation X-Prize Urban 2-4 Passenger VTOL Air-Taxi Prize 45 min, Barton-Wander/X-Prize

12:15 – 12:30 Break

March 8th 12:30 – 5:30 Missions and Operator Perspectives

- Afternoon Welcome (Pearce) 5 min
- **Thin-Haul Reference Mission** (3 hours)
 - Existing User Perspectives on Future Needs
 - CapeAir (Dan Wolf) 20 min
 - SurfAir (Jim Sullivan) 20 min
 - Imaginair (Ben Hamilton) 20 min
 - Ongoing Studies
 - Thin-Haul CONOPs Study (German/Georgia Tech) 15 min
 - Thin-Haul Concepts Study (Bevirt/Joby Aviation) 15 min
 - Pilot Training Requirements Hampton/Embry-Riddle 15 min
 - Break (15 min)
 - Relevant Current NASA Project Investments
 - NASA SCEPTOR/SOFC Electric Relevance (Borer/ NASA Langley) 15 min
 - NASA AATT BLI (Patterson/ NASA Langley) 15 min
 - NASA CAS High Voltage/Multi-Functional Batteries (Welch/NASA Glenn) 15 min
 - NASA RCO Project Relevance (Crew Systems/ NASA Langley) 15 min
 - Scale-Up Regional Turboprop Mission (Antcliff/ NASA Langley) 15 min
- Break 15 min
- **Urban Air-Taxi VTOL Reference Mission** (1 hours 30 min)
 - Ongoing NASA Studies
 - NASA Silicon Valley Study (Moore/ NASA Langley) 15 min
 - Urban VTOL Study (Vascik/MIT) 15 min
 - Close Proximity Community Noise Acceptability (Josephson) 15 min
 - Scale-Down sUAS Package Delivery Mission (Brian German/Georgia Tech) 15 min
 - Relevant Current NASA Project Investments
 - NASA UTM Airspace Project (Jung/NASA Ames) 15 min
 - NASA CAS DELIVER Design Tools (Theodore/NASA Ames) 15 min
- Dinner 6:30 – 9:00 (Ted's Montana Grill, right across from Lockheed facility)

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March 9th 8:00 – 11:30 Industry and Working Group Perspectives

- **Relevant Industry Research and Future Technology Needs Perspectives** (15 min each) 105 min
 - E-Volo, Stephan Wolf
 - Eviation, Omer Bar-Yohay
 - Aurora, Dan Cottrell
 - KARI Autonomous VTOL UAVs, Wanggu Kang
 - BRS, Boris Popov
 - JAXA FEATHER, Akira Nishizawa
 - SmartSky Networks, Ryan Stone
- Break 15 min
- **Working Group Breakout Discussions** (3 groups/3 rooms) 75 min
 - Review tech data sheets submitted
 - Introduce additional tech data content
 - Prioritize tech data sheets

11:15 – 11:30 Pick up lunches

11:30 – 12:15 Lunch Presentation **The GoFly Single Passenger VTOL \$2M Prize** (Lighter/HeroX) 45 min Prize

12:15 – 12:30 Break

March 9th 12:30 – 5:30 ODM Investment Leveraging

- **Working Group Reports** (15 min each) 60 min
- **FAA Investment Leveraging** 45 min
 - Additive Manufacturing Certification (Kabbara/FAA) 15 min
 - ASTM Committee on Non-Deterministic System/EVAA (Skoog/AFRC) 15 min
 - FAA Q&A for Adaptive Flight Control (Ryan/FAA) 15 min
- Break 10 min
- **NASA Roadmaps (30 min)**
 - Electric Propulsion (Wahls/NASA HQ) 15 min
 - Autonomy (Graves/NASA Langley) 15 min
- **DARPA Investment Leveraging (40 min)**
 - ALIAS (Edwards/DARPA) 20 min
 - Manufacturing (Margiotta/DARPA) 20 min
- Break 15 min
- **International Investment Leveraging (90 min)**
 - EU P-Plane Project (LeTallec) 20 min
 - EU MyCopter Project (Venrooij) 20 min
 - EU Clean Sky/SAT Project (Goulain) 20 min
 - EASA Electric Propulsion Certification (Reichel) 30 min
- Break 10 min
- **Final Discussion on Moving ODM Techs Forward** 30 min