

**Transformative Vertical Flight Concepts: Second Annual Joint Workshop on
Enabling New Flight Concepts through Novel Propulsion and Energy Architectures**

August 3rd Morning (8:00 am – 11:00 am)

8:00 am – 11:00 am **Optional Guided Tour:** [NASA Ames Research Center](#) (Reservation required, contact [Michael Tsairides](#))

August 3rd Afternoon (11:30 am – 6:00 pm)

11:30 am – 12:30 pm **Sign in / Open Discussion** (Sandwiches provided to those who paid)

12:30 pm – 12:45 pm **Welcome – Tom Edwards, NASA Ames Deputy Center Director**

12:45 pm – 1:15 pm **Workshop Roadmap Strategy for Transformative Vertiport Capable Flight**

- Workshop objectives, format, process and outcome expectations by Michael Dudley, [NASA Ames](#)

1:15 pm – 3:30 pm **Advanced Vertiport Capable Flight Concepts (Moderated by Michael Duffy)**

- Simulation of Electric Aircraft Components – Korbinian Petermaier, Siemens Technology
- Analysis and Full Scale Testing of Joby S4 Propulsion System – Alex Stoll, [Joby Aviation](#)
- Flight Test of [NASA GL-10](#) Distributed Electric Propulsion UAV – Bill Fredericks – [NASA Langley](#)
- Full-Scale Test of LEAPTech Wing – Andy Gibson – [ES Aero](#)
- LIFT! – Modular, Electric Vertical Lift – Michael Duffy, [The Boeing Company](#)

3:30 pm – 3:45 pm **Afternoon Break** (Soft Drinks and Snacks)

3:45 pm – 4:15 pm **Advanced Batteries Progress – Aron Newman, ARPA-E**

4:15 pm – 5:30 pm **Business and Market Opportunities (Moderated by Mark Moore)**

- Existing VTOL Operators Needs Perspective, Mark Moore, [NASA Langley](#)
- Market Drivers for Civil Vertical Lift– Rich Ouellette, [The Boeing Company](#)
- Silicon Valley Early Adopter CONOPs and Market Study – Kevin Antcliff, [NASA Langley](#)

5:30 pm – 6:00 pm **First Day Wrap Up: Michael Duffy, [The Boeing Company](#)**

7:00 pm – 9:00 pm **Optional AHS Dinner Meeting ([Michaels At Shoreline](#), Dan Newman)**
(Cost ~\$35 for non-members. \$30 for AHS members not included in food service fee.)

August 4th Morning (7:30 am – 12:00 pm)

7:30 am – 8:00 am Continental breakfast and networking

8:00 am – 10:30 am Electric Propulsion & Electric Energy Storage Technologies (Moderated by JoeBen Bevirt)

- Michael Sinkula, Envvia Systems
- Josh Buettner-Garrett, Solid Power
- Launchpoint 1 kW and 40 kW Hybrid-Electric Range Extender, Mike Ricci, [LaunchPoint Technologies](#)
- Metis 30 kW Turbine-Alternator Hybrid-Electric Range Extender– Rory Keogh, Metis
- SwissTurbine 7 kW and 75 kW Hybrid-Electric Turbine-Alternator Range Extender - Tim Moser, SwissTurbine
- Heavy-Fuel SOFC Fuel Cell – Nick Borer, NASA Langley

10:15 am – 10:45 am Morning Break (Drinks and Snacks)

10:45 am – 11:15 am Advances in Distributed Propulsor Acoustic Modeling, Steve Rizzi, NASA Langley

11:15 am – 12:00 pm Road Mapping Example for On-Demand Mobility, Ken Goodrich, [NASA Langley](#)

12:00 pm – 1:00 pm Lunch (Provided if you paid the \$75 food charge)

- Lunch Presentation: GoFlyUp HeroX \$2 Million Personal VTOL Prize – Gwen Lighter, Lighter Group

August 4th Afternoon (1:00 pm – 5:30 pm)

1:00 pm – 1:15 pm Breakout Sessions' Instructions (Michael Dudley)

1:15 pm – 2:30 pm Participant Perspectives (Rotating Breakout Sessions)

- Three @ 25-min each with group rotations / Progressive chart build-up with moderation
 - Missions/Operational Concepts – Moderator Mark Moore, NASA
 - Prioritized Technical Challenges – Moderator Brien German, Georgia Tech, Ken Goodrich, NASA
 - Regulatory Roadmap – Moderator Tom Gunnarson, Zee.Aero

2:30 pm – 3:00 pm Afternoon Break (Soft Drinks and Snacks)

Moderators Prepare Breakout topic summary reports

3:00 pm – 4:30 pm Draft Preliminary Roadmap Skeletal Framework (Combined Working Group)

- Moderator: Mike Dudley
- The three Breakout Session Moderators Report topic summaries
- What is the common vision? How do they come together? What needs to change?

4:30 pm – 5:30 pm Wrap-up / Where Do Have Consensus?

- **Closing Panel Discussion:** Where Do We Go From Here?

7:00 pm Meet for Dinner (Arranged No Host – not included in registration fee)

August 5th Morning (10:00 am – 2:00 pm)

Optional Tour: Hiller Aviation Museum (Individuals are responsible for arranging their own transportation.)