

Written Testimony of

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on

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Thank you Chairman Nehls, Ranking Member Carson, and the members of the Subcommittee on Aviation for the opportunity to testify on behalf of BETA Technologies at today's hearing titled "America Builds: The State of the Advanced Air Mobility (AAM) Industry."

The United States is at a pivotal moment in aviation history: new and emerging technologies present an unprecedented opportunity to cement American leadership in 21st-century aerospace innovation. AAM is more than a single aircraft — it's an entire ecosystem, one that BETA is actively shaping. We are building foundational components, infrastructure, and aircraft that will make the movement of medical supplies, cargo, and passengers safer, more affordable, and more accessible to communities around the world.

Success for our industry will result in safe, innovative products built right here in the U.S. and high-paying manufacturing jobs. At BETA, we have grown from an R&D company into a manufacturer. This progress is driven by American grit, a skilled workforce, and a largely domestic supply chain. The race is on for the U.S. to maintain its leadership in aerospace innovation, and meeting the challenge will require continued support from the federal government.

Background on BETA Technologies

BETA Technologies is a U.S. Original Equipment Manufacturer (OEM) based in Vermont with operations in New York, Washington, D.C. and North Carolina, working to redefine the aerospace industry. BETA's mission is to improve the lives of everyday Americans with practical, high-impact operations, including medical transport, organ delivery, emergency logistics, and regional passenger mobility. Our customers are eager to incorporate our products into their fleets, including:

- **Bristow**, a leader in vertical flight that provides transport for commercial and government customers, expects to use BETA's aircraft to safely and reliably move passengers and time-sensitive cargo between regions in Louisiana, Texas, Florida and beyond.
- **UPS** plans to use our aircraft for point-to-point logistics to drastically reduce complexity and cost for missions and enable more Premium Direct service to rural areas.
- **Ryan Air** expects to enhance its services in Alaska including the delivery of food and medical supplies to communities not served by roads.
- **United Therapeutics** plans to deliver organs safely and quickly, and **Metro Aviation** plans to provide various missions including inter-hospital patient transport.
- **Republic Airways** has partnered with BETA to integrate AAM into regional passenger air travel as the airline expands service and lowers the cost of air travel.

In addition to aircraft, BETA is designing and manufacturing the core technologies that will service civil and defense markets, both in the air and under the sea. We are taking a strategic, stepwise approach to the certification of these products, starting with our electric motors, then our fixed-wing airplane, and ultimately our vertical takeoff and landing (VTOL) aircraft. This portability of

technologies unlocks flexibility to innovate future generations of aircraft, which will bring important innovations to the U.S. aerospace industry. Additionally, we are taking a stepwise approach to both certification and market entry, recognizing where the regulatory readiness is today and what efforts need to be further developed to enable the future of AAM.

To this end, BETA has partnered with GE Aerospace to co-develop hybrid electric turbogenerators that we believe will bring significant enhancements to range, payload, speed, and lower cost of operations compared to existing aircraft. This complements our existing contracts with the U.S. Department of Defense to support operational needs through longer ranges, lower logistics dependency, and higher reliability.

U.S. Manufacturing & Supply Chain

Since our founding, BETA has grown to more than 900 employees across North America. In 2023, we opened a 188,000 square foot production facility, which is designed to support the production of more than 300 aircraft annually at maturity. Our supply chain is intentionally domestic: more than 85% of our sourcing is U.S.-based, and our suppliers support roughly 40,000 American jobs. BETA's products include:

Electric Motors (H500 series): A simple design featuring dual redundancy and significantly fewer parts than a comparable legacy aircraft engine. We sell our motors to established aerospace and defense OEMs, as well as new market entrants designing electric aircraft.

ALIA CTOL (CX300): Designed for all-weather operations, our fixed-wing aircraft transports six people or 200 cubic feet of cargo plus two crew members. It leverages existing airport infrastructure and flies in accordance with existing airspace procedures to enable rapid adoption. The CTOL is currently being certified under FAA Part 23 certification. Our backlog for this aircraft consists of 331 units, of which 131 units are for firm orders and 200 units for options. This represents an orderbook of over \$1.3B in aircraft, all contingent upon FAA certification. This backlog continues to grow.

ALIA VTOL (A250): Our VTOL enables operations from locations with or without runway access with lower operating costs. We believe our simple and efficient design enables a clear path to certification. The VTOL is being certified under Part 21.17(b). Our backlog for this aircraft consists of 560 units, of which 158 units are for firm orders and 402 units are for options. This represents a domestic and export order book of \$2.5B in aircraft. This backlog continues to grow.

ALIA Defense VTOL (MV250): The military variant of our VTOL enables long-range, low heat and noise signature, and the potential to operate autonomously. It is expected to carry up to one ton (approximately 2,000 pounds) with a range of over 250 nautical miles at a significantly lower

operating cost than existing helicopters. This will give the U.S. warfighter a definitive tactical advantage over our adversaries.

Larger Aircraft – We are developing a larger aircraft initially designed to carry up to 19 passengers. We believe this product will create new opportunities for operators to realize the economic and low noise benefits of electric aviation in large aircraft and bring increased access to communities who rely on Essential Air Service.

Charge Cube – This is the central component of BETA’s charging infrastructure. It utilizes the CCS-1 charging standard, allowing for compatibility with a broad range of electric aircraft. The Cube is certified by Underwriters Laboratories (“UL”) and is Buy America, Build America compliant for FAA Airport Improvement Program (AIP) funding.

Demonstrating Safe, Reliable Flight Operations for Modernization

Public acceptance is critical for AAM to meaningfully scale. To demonstrate the safety and reliability of electric flight, BETA has completed thousands of flights in 10 countries and on three continents, logging more than 100,000 nautical miles and landing at over 380 airports, including in Class B and C airspace. This includes the world’s first all-electric passenger flight into John F. Kennedy International Airport, as well as flights into Atlanta’s Hartsfield-Jackson International Airport and other major cities, showcasing seamless integration into the National Airspace System (NAS). Our ALIA CTOL opened the 2025 Paris Air Show in front of over 50,000 aerospace professionals with a demonstration of its quiet operation, performance, and agility.

The FAA’s mission is to maintain the safest airspace in the world, and as a company of aviators, we share that commitment. That’s why BETA is intensely focused on building the safest aircraft possible, recognizing that advancing technology strengthens both safety *and* U.S. leadership in a competitive global market. Advancements in energy density, thermal management, and battery monitoring enable longer, more reliable flights with lower risk of failure. By expanding the boundaries of battery design and testing, we enhance aircraft performance while adding redundancy and safeguards that make flight inherently safer. This demonstrates how safety and innovation together support America’s competitive advantage.

As the FAA advances efforts to modernize the NAS and air traffic control, BETA’s stepwise approach to AAM—beginning with a piloted, fixed-wing aircraft—provides real-world data and operational experience that inform these efforts. These early operations are helping the NAS evolve safely and efficiently to accommodate increasingly advanced aircraft.

Cost Efficiencies for Commercial & Government Customers

BETA's aircraft represent significant cost advantages over new conventional aircraft based on internal estimates. Our CTOL flight into JFK used roughly \$7 in energy costs, about a 95% savings compared to fuel costs of a combustion aircraft. Additional efficiencies come from substantially lower maintenance needs due to our simplified design.

In addition to our commercial customers, BETA has demonstrated the cost efficiencies of AAM to the federal government. We partnered with the Administration for Strategic Preparedness and Response (ASPR), an agency within the U.S. Department of Health and Human Services (HHS), to deploy enabling infrastructure that will support public health preparedness along the gulf coast, including in Mississippi, Georgia, Florida, Arkansas, and Alabama. This infrastructure will enable VTOLs to transport medicine, patients, and equipment in a disaster-response role in hurricane-prone areas and keep rural communities safe.

BETA is also partnering with U.S. Army Combat Capabilities Development Command (DEVCOM) to advance our flight capabilities and testing program, and further develop real-world, in-theater applications for this technology. This work comes on the heels of several aircraft deployments for DOD, in which BETA became the first AAM company to carry out a simulated CASEVAC and the first manned AAM aircraft to take part in a full-scale military exercise. Our flight demonstrations for DOD have showcased the ability to deliver military supplies while lowering the cost of transportation, all at a 100% dispatch rate.

We also have a subcontract with General Dynamics Applied Physical Sciences, manufacturing and delivering hardware and associated engineering services, in support of a Defense Advanced Research Projects Agency ("DARPA") program for undersea vehicles.

Revitalizing General Aviation Infrastructure

To support AAM entry into service, BETA has developed and is manufacturing infrastructure for our customers and other AAM OEMs, including Archer Aviation. This infrastructure uses an existing charging standard in use by other aircraft OEMs. Working with our customers and government partners – including states like Utah, Michigan, and Ohio – BETA is creating a network at airports across the country, with over 55 sites so far.

State and local governments play a critical role in this build-out: modest upgrades such as installing charging systems can prepare our nation's existing public airports for AAM operations and accelerate nationwide adoption, while also driving job growth, economic development, and expanded transportation options in rural communities.

Congress Charting the Course for Aviation Innovation

BETA applauds Congress for passing the bipartisan *FAA Reauthorization Act of 2024 (P.L. 118-63)* to bring safety improvements to aviation, invest in airport infrastructure, and promote innovation. For the first time ever, a FAA Reauthorization bill included a title dedicated to AAM, recognizing the importance of new technologies for enabling U.S. leadership in aviation.

The legislation contained notable provisions for our industry, including: providing for first time ever the ability for airports to utilize AIP funding for AAM infrastructure; expanding workforce development funding to prepare future pilots and maintainers; affirming the ability for VTOLs to utilize heliports; requiring the FAA to promulgate the powered-lift Special Federal Aviation Regulation (SFAR) in a timely manner; and, extending and expanding the BEYOND program.

Finally, the legislation ensured the FAA put rulemaking and policies in place to bring this innovation to market. We welcome this progress and remain committed to working with Congress and the FAA to ensure timely implementation.

FAA & DOT Progress to Bring AAM to Market

The current Administration has demonstrated strong support to enable the AAM industry, and a commitment to U.S. leadership in aviation. The eVTOL Integration Pilot Program (eIPP), established by U.S. Transportation Secretary Sean Duffy following the Executive Order titled “Unleashing American Drone Dominance,” will accelerate real-world operations for AAM. As a U.S. OEM partner, BETA is supporting state, local, tribal and territorial governments in their applications, alongside our customer-operators with proven safety records, to meaningfully demonstrate the wide range of AAM benefits to communities both urban and rural.

Additionally, the FAA has taken meaningful steps to improve the certification process and ensure entry into service for AAM applicants. This includes: timely promulgation of the SFAR and a straightforward path to pilot training with dual controls; the issuance of AC 21-17-4, Type Certification of Powered Lift, which removes the need to publish airworthiness criteria for each AAM applicant and expedites the certification basis for applicants; and, announcement of the National Aviation Authorities’ roadmap for AAM aircraft type certification, which aims to make a safer, more efficient path for domestic applicants.

Finally, we look forward to the release of the U.S. Department of Transportation’s (DOT) Interagency Working Group report. BETA has been pleased to collaborate with the DOT throughout the stakeholder engagement process, and we look forward to the recommendations in the report to ensure the successful scaling of the AAM industry.

Maintaining Global Leadership in Aerospace

U.S. market leadership in AAM is vital for our economic, national security, and global interests. At the same time, other countries, particularly China, are positioned to advance more quickly. With clear goalposts, stable policy, and adequate resourcing from the FAA, BETA's propulsion systems and aircraft will be certified here in the U.S. first, increasing the domestic supply chain and aerospace jobs. Without that, other nations will move ahead, and foreign competitors will fill the gap.

The greatest challenge for emerging technologies is the uncertainty around when and how policy and guidance is developed. When regulatory expectations shift without transparent rationale or a risk-proportionate basis, entry into service timelines inevitably slip, driving significant financial impacts across our businesses.

Likewise, certifying new technologies – including high energy-density batteries, high torque-density electric motors, distributed electric propulsion systems, and fly-by-wire flight controls – requires specialized expertise that is not yet widespread within the FAA. Given these workforce constraints, it is increasingly important for the FAA to use its technical resources effectively. The FAA's existing delegation system—intended to allow qualified, authorized industry experts to make compliance determinations on routine and low-risk activities—is not being fully applied to new technologies. New applicants are often asked to “build credibility” before receiving delegation, even when they employ experienced, FAA-authorized designees who meet all established qualification and oversight requirements. This lack of clarity creates delays for new OEMs without improving safety.

Conclusion

U.S. OEMs like BETA are leading this next generation of aviation and have the technology to bring our aviation system into the 21st century; now, we need the federal government's help to get it across the finish line. As Congress considers policy to ensure that the U.S. remains the safest airspace in the world while also maintaining its leadership positioning, BETA recommends the following:

- **More dynamic efforts to recruit, retain, and train** a highly skilled technical workforce to ensure the FAA can effectively evaluate and oversee innovative technologies;
- **Increased predictability and transparency** so that OEMs have clearer timelines for certification and entry into service; and,
- **More consistent use of delegation** to allow FAA specialists to focus their limited bandwidth on truly safety-critical issues, maintain rigorous oversight, and support timely certification of innovative U.S. products.

I appreciate the subcommittee's leadership and for the opportunity to testify and look forward to working with you to ensure that the promise of U.S. innovation in aviation becomes a reality.