U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Aviation Rulemaking Committee Charter

Effective Date: 6/8/2021

SUBJECT: UAS Beyond Visual Line-of-Sight Operations Aviation Rulemaking Committee

1. **PURPOSE.** This charter establishes the Unmanned Aircraft Systems (UAS) Beyond Visual Line-of-Sight (BVLOS) Operations Aviation Rulemaking Committee (ARC), according to the Administrator's authority under Title 49 of the *United States Code* (49 U.S.C. § 106(p)(5)). The sponsor of the ARC is the Associate Administrator for Aviation Safety. This charter outlines the ARC's organization, responsibilities, and tasks.

2. **BACKGROUND.** In June 2016, the Federal Aviation Administration (FAA) issued Part 107 of Title 14 of the *Code of Federal Regulations* (14 CFR part 107), the final rule for "Operation and Certification of Small Unmanned Aircraft Systems." See 81 FR 42064. This rule set forth requirements for routine operation of small unmanned aircraft in the National Airspace System (NAS). It requires operators to obtain a Remote Pilot Certificate, but does not include requirements for UAS design, manufacturing, or production. Instead, it limits small unmanned aircraft operations to certain areas (e.g., at or below 400 feet in class G airspace) and conditions (e.g. operations within visual line-of-sight (VLOS)), with the intent to prevent UAS from interfering with other aircraft in flight or posing an undue hazard to people or property on the ground. This rule was a critical step toward normalizing low risk VLOS small UAS operations in the United States.

   Unmanned aircraft flying beyond an operator's visual line-of-sight present unique challenges to the FAA's existing regulatory framework. Most aviation regulations that would apply to UAS operations besides part 107 assume an aircraft with an onboard pilot who is responsible for avoiding other aircraft. Not only do UAS lack an *onboard* pilot, but even a *remote* pilot pushes the boundaries of the traditional regulatory role of a pilot. However, the UAS capability to fly without the pilot onboard, and indeed beyond the pilot's visual line-of-sight (BVLOS), is what offers the most economic and societal benefits. Today, companies, communities, and industrial sectors are eager to realize these benefits and have invested substantial resources developing UAS technologies. The FAA's existing regulatory framework must change to better support the long-term viability and sustainability of this evolving aviation sector. However, these are challenges the entire UAS community must confront together, because they have implications not only to safety, but also security and society at large.

   The FAA recognizes the significant safety, economic, and environmental value associated with BVLOS unmanned aircraft operations. Over the past five years, the FAA has engaged in multiple pilot programs and partnership arrangements – including the UAS Integration Pilot Program (IPP), Partnership for Safety Plans (PSPs), and currently BEYOND – to further both the Agency's and stakeholder community's collective understanding of the minimum performance criteria for safe BVLOS operations. The UAS BVLOS ARC will consider the various lessons and insights gained from these and other activities to inform the

FAA on performance-based criteria to enable safe, scalable, economically viable, and environmentally advantageous BVLOS operations in the NAS.

3. OBJECTIVES OF THE ARC. The UAS BVLOS ARC will provide recommendations to the FAA for performance-based regulatory requirements to normalize safe, scalable, economically viable, and environmentally advantageous UAS BVLOS operations that are not under positive air traffic control (ATC). This ARC will take a holistic approach in recommending a performance-based, technology agnostic regulatory framework for BVLOS operations.

At a minimum, the ARC's recommendations must clearly address requirements to support the following concept of operations: long-line linear infrastructure inspections, industrial aerial data gathering, small package delivery, and precision agriculture operations, including crop spraying. The ARC will not specifically address aircraft or operations carrying passengers or crew, nor will it address the integration of operations for which Air Traffic Services (ATS) are being provided.

4. TASKS OF THE ARC. The tasks of the ARC are:

A. Identify safety and environmental considerations for BVLOS UAS operations, accounting for the security needs of the U.S. Government. At a minimum, the ARC must consider:

i. Safety objectives of the unmanned aircraft operation and the risk it represents to other aircraft and people and property on the ground.

ii. Concepts of BVLOS UAS operations and their potential environmental impacts across environmental resource areas (*e.g.*, noise, emissions, endangered species, visual).

iii. Approaches to evaluating community response to UAS noise, and identification of concepts of operations that may have limited or no community noise exposure.

iv. Whether and how BVLOS UAS operations can enhance environmental justice.

v. Solutions that address security concerns related to BVLOS operations.

B. Identify societal benefits for BVLOS UAS operations. At a minimum, the ARC should consider economic, environmental, public health, and safety benefits of enabling BVLOS UAS operations within the scope of the ARC's objectives provided in Section 3.

C. Recommend requirements and provide rationale for such requirements to enable BVLOS UAS operations based on the recommendations from tasks 4A and 4B. At a minimum, these recommendations should:

i. Define the expected future market participants and their responsibilities in these operations.

ii. Consider the breadth of aircraft operations in low-altitude airspace, outside of areas designated for positive air traffic control (operations with and without persons on board).

iii. Enable routine operations of aircraft where no pilot is on-board with a visual reference, outside of Visual Flight Rules or Instrument Flight Rules.

iv. Recommend performance-based regulations that enable and reward continued improvements in technology.

v. Describe a regulatory framework for the FAA to oversee the integration of the UAS and the operation of the integrated UAS, including initial qualification and continued operational safety.

vi. Address the use of highly-automated UAS, for which the individual operating the UA defines the mission and initiates the operation but has no access to flight controls.

vii. Identify the level of FAA involvement in certification and oversight that is appropriate to address safety and environment.

viii. Determine whether and how to amend the current regulatory framework to include new BVLOS regulations.

ix. Identify potential incremental benefits, savings, and costs of recommendations where possible, including quantitative data and estimates, qualitative benefit-cost description, and compliance trade-offs.

D. Within 6 months from the first meeting after the effective date of the charter, submit a recommendation report. The FAA co-chair may task the ARC with subsequent recommendation reports with TBD deadlines prior to the ARC's sunset date.

i. The Industry Co-Chair(s) sends the recommendation report to the FAA Co-Chair and the Executive Director of the Office of Rulemaking.

ii. The FAA Co-Chair determines when the recommendation report and records, pursuant to paragraph (8), will be made available for public release.

5. ARC PROCEDURES.

a. The ARC acts solely in an advisory capacity by advising and providing written recommendations to the FAA Co-Chair.

b. The ARC may propose related follow-on tasks outside the stated scope of the ARC to the FAA Co-Chair.

c. The ARC may reconvene following the submission of the recommendation report for the purposes of providing advice and assistance to the FAA, at the discretion of the FAA Co-Chair, provided the charter is still in effect.

6. ARC ORGANIZATION, MEMBERSHIP, AND ADMINISTRATION. The FAA will set up a committee of members representing a diverse set of aviation stakeholders, to include the UAS industry. Members will be selected based on their familiarity and experience with UAS technologies and operations, especially as they relate to BVLOS operations, developing performance-based regulations and consensus standards, community integration of new technology, and privacy and security concerns related to UAS technologies. Membership will be balanced in viewpoints, interests, and knowledge of the committee's objectives and scope.

The provisions of the August 13, 2014 Office of Management and Budget (OMB) guidance, "Revised Guidance on Appointment of Lobbyists to Federal Advisory Committees, Boards, and Commissions" (79 FR 47482), continues the ban on registered lobbyists participating on Agency Boards and Commissions if participating in their "individual capacity." The revised guidance allows registered lobbyists to participate on Agency Boards and Commissions in a "representative capacity" for the "express purpose of providing a committee with the views of a nongovernmental entity, a recognizable group of persons or nongovernmental entities (an industry, sector, labor unions, or environmental groups, etc.) or state or local government." For further information, refer to the OMB Guidance at 79 FR 47482.

Membership is limited to promote discussion. Attendance, active participation, and commitment by members is essential for achieving the objectives and tasks. When necessary, the ARC may set up specialized and temporary working groups that include at least one ARC member and invited subject matter experts from industry and government.

The ARC will consist of members from the UAS stakeholder community, including state/local/tribal/territorial community representatives; privacy, noise, and environmental experts; UAS operators, manufacturers, and technology industry representatives; traditional aviation representatives; and security stakeholders. FAA and other U.S. Government subject matter experts as well as foreign civil aviation authorities may be requested to participate as Observers and to provide technical support to the ARC members.

a. At the request of the Sponsor, the Executive Director of the UAS Integration Office will function as the FAA Co-Chair and will:

    1) Select and appoint industry and the FAA participants as members,
    2) Select the Industry Co-Chair(s) from the membership of the ARC,
    3) Ensure FAA participation and support from all affected lines-of-business,
    4) Provide notification to the members of the time and place for each meeting, and
    5) Receive any status report and the recommendations report.

b. The Industry Co-Chair(s) will be appointed from the UAS stakeholder community. Once appointed, the Industry Co-Chair(s) will:

    1) Coordinate required ARC meetings in order to meet the objectives and timelines,
    2) Establish and distribute meeting agendas in a timely manner,
    3) Keep meeting notes, if deemed necessary,

4) Perform other responsibilities as required to ensure the objectives are met,
5) Provide status reports, as requested, in writing to the FAA Co-Chair, and
6) Submit the recommendation report to the FAA Co-Chair and the Executive Director of the Office of Rulemaking.

7. PUBLIC PARTICIPATION. Meetings are not open to the public. Persons or organizations outside the ARC who wish to attend a meeting must get approval in advance of the meeting from the Industry Co-Chair(s) and the FAA Co-Chair.

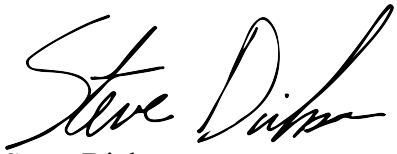
8. AVAILABILITY OF RECORDS. Consistent with the Freedom of Information Act, Title 5 U.S.C. § 552, records, reports, agendas, working papers, and other documents that are made available to or prepared for or by the ARC will be available for public inspection and copying at the UAS Integration Office, FAA Headquarters, 800 Independence Ave. SW, Washington, D.C. 20591. Fees will be charged for information furnished to the public according to the fee schedule published in Title 49 of the *Code of Federal Regulations*, part 7.

You can find this charter on the FAA Committee Database website at: http://www.faa.gov/regulations_policies/rulemaking/committees/documents/.

9. DISTRIBUTION. This charter is distributed to: Office of the Associate Administrator for Aviation Safety, Office of the Chief Operating Officer of the Air Traffic Organization, the Office of the Chief Counsel, the Office of Assistant Administrator for Policy, International Affairs, and Environment, Office of the Associate Administrator of Airports, Office of Security and Hazardous Materials Safety, and the Office of Rulemaking.

10. EFFECTIVE DATE AND DURATION. The ARC is effective upon issuance of this charter and will remain in existence for a maximum of 32 months, unless the charter is sooner suspended, terminated, or extended by the Administrator.

Issued in Washington, D.C. on June 8, 2021.



Steve Dickson
Administrator