

# NOTICE

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION  
Air Traffic and Aviation Safety Organizational Policy

N JO 7210.732

**Effective Date:**  
January 15, 2010

**Cancellation Date:**  
January 14, 2011

**SUBJ:** Air Traffic Organization and Aviation Safety Certificate of Waiver or Authorization (COA)  
Safety Evaluations and Audits for Unmanned Aircraft Systems (UAS) Operations

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**1. Purpose of This Notice.** This notice provides specific processes and procedures for conducting safety evaluations and audits of UAS operational approvals and oversight jointly conducted by the Flight Standards Unmanned Aircraft Program Office and the Air Traffic Organization (ATO) Unmanned Aircraft System Office. This notice provides guidance to evaluators and other personnel when the Flight Standards Unmanned Aircraft Program Office or the ATO Unmanned Aircraft System Office is evaluating compliance with the provisions and limitations set forth in a COA or as part of the Operating Limitations of a Special Airworthiness Certificate - Experimental Category.

**2. Audience.** This notice applies to Flight Standards organizations; the following ATO service units: En Route and Oceanic, Terminal, and System Operations Services; and the Office of Safety.

**3. Where Can I Find This Notice?** This notice is available on the MYFAA employee Web site at [https://employees.faa.gov/tools\\_resources/orders\\_notices/](https://employees.faa.gov/tools_resources/orders_notices/) and on the air traffic publications Web site at [http://www.faa.gov/air\\_traffic/publications](http://www.faa.gov/air_traffic/publications).

**4. Safety Evaluations and Audits.**

**a. Scope.** The safety evaluation is designed to gather data about UAS operations conducted throughout the United States by various entities. The scope of site visits is primarily focused on air traffic control facilities including terminal, en route, and oceanic. This provides an internal Federal Aviation Administration mechanism to evaluate the effectiveness of UAS operational mitigations and procedures and to verify operational compliance with rules, procedures, and limitations set forth in the COA. Site visits to proponent facilities will also be conducted if deemed necessary and will follow FAA Order JO 7010.1T, Air Traffic Safety Evaluations and Audits, and appropriate protocols used for typical aviation surveillance and inspection activities already established under the Flight Standards Service.

**b. Focus of Safety Evaluations and Audits.** The purpose of UAS operational safety evaluations and audits is threefold:

(1) To ensure that each UAS operator is conforming to all general, safety, standard, and special provisions of its COA or Operating Limitations in actual operations.

(2) To assess the impact of authorized UAS operations on servicing air traffic control facilities and the airspace for which they are responsible and compliance with all provisions contained within a COA or Operating Limitations.

(3) To ensure that risk mitigations provided for in UAS operational approvals are neither unduly burdensome nor insufficient in ensuring the safety of UAS operations.

**c. Special Interest Items.** The following items should be used to help tailor evaluation/audit visit activities, desired outcomes, and the composition of each UAS visit team. Teams will consist of

personnel from both the ATO and the Associate Administrator for Aviation Safety organization. Each organization must provide the appropriate expertise as applicable to include, but not be limited to, air traffic control specialists, aviation safety inspectors, Office of Safety designee, and aircraft certification engineers. The Flight Standards Unmanned Aircraft Program Manager and the ATO Unmanned Aircraft System Manager must provide teams consisting of personnel from each organization with questionnaires sufficiently detailed to permit adequate exploration of all of the following issues and requirements:

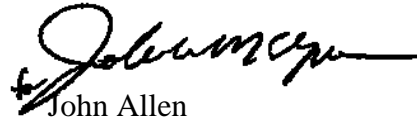
- (1) Impact of UAS activity on air traffic operations (surface and airborne).
- (2) Effectiveness of communications:
  - (a) Between pilots and air traffic control.
  - (b) Between pilots and observers and any other crewmembers.
- (3) Verify the visual range as stipulated in the COA:
  - (a) By observers (ground or airborne).
  - (b) By air traffic controllers.
- (4) Issues related to visual line of sight as a method of clearing flight path:
  - (a) Qualifications and training of observers.
  - (b) Effectiveness of observers as measured by number of safety alerts that were issued by air traffic or a near midair collision report was filed.
- (5) Hazards identified in safety risk management documents appropriate to the airspace controlled by the visited facility and the effectiveness of alternate/multiple mitigations used to address specific hazards.
- (6) Controller knowledge of UAS capabilities/limitations.
- (7) Lost link procedures, system logic, and performance of each UAS operated in the visited facility's airspace.
- (8) Added controller workload driven by UAS operations.
- (9) Impact on manned aircraft operations.
- (10) Compliance of all provisions in the COA.
- (11) Air traffic management security impacts or concerns.
- (12) Other airspace-related impacts or concerns.

**5. Distribution.** This notice is distributed to the following ATO service units: En Route and Oceanic, Terminal, and System Operations Services, including Flight Services Program Operations and the David J. Hurley Air Traffic Control System Command Center; the Office of Safety; the Flight Standards Service's divisions at FAA Washington headquarters and international field offices; the Washington Operations Center Complex; the Regional Operations Centers; the William J. Hughes Technical Center; the Mike Monroney Aeronautical Center; international aviation field offices; Department of Defense offices; selected Federal and State offices; and the interested aviation public.

**6. Background.** The ATO's COA process evolved primarily to serve limited duration or one-time requirements. This process has been adapted to serve as one of the two mechanisms supporting the operation of UAS in the National Airspace System (NAS). The increase in UAS operations has resulted in an emerging need for greater oversight of UAS operations in the NAS. The national implications of UAS operations in the NAS make it clear that such oversight must be conducted as an FAA headquarters ATO and Flight Standards Service activity to ensure proper baselining of issues and dissemination of lessons learned.



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