

## U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

National Policy

N 8900.529

Effective Date: 11/13/19

Cancellation Date: 11/13/20

# SUBJ: Extended Unmanned Aircraft Systems Oversight

**1. Purpose of This Notice.** This notice outlines updated Unmanned Aircraft Systems (UAS) surveillance requirements for Flight Standards District Offices (FSDO) to immediately incorporate into their Fiscal Year (FY) 2020 National Work Program Guidelines (NPG) work plans. It also provides guidance for doing the necessary analysis and coordination that either trigger the requirements or help target the required activity.

**2.** Audience. The primary audience for this notice is the Flight Standards Service Office of General Aviation Safety Assurance (AFG) personnel planning and conducting surveillance of UAS operations and the personnel in the Safety Analysis and Promotion Division who will assist them. The secondary audience includes the Safety Standards and Foundational Business offices.

**3.** Where You Can Find This Notice. You can find this notice on the MyFAA employee website at https://employees.faa.gov/tools\_resources/orders\_notices. Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at http://fsims.avs.faa.gov. Operators can find this notice on the Federal Aviation Administration's (FAA) website at http://fsims.faa.gov. This notice is available to the public at http://www.faa.gov/regulations\_policies/orders\_notices.

**4. Applicability.** The guidance in this notice defines new policy and must be implemented into FSDO work plans for FY 2020. This is applicable to all FSDOs.

**5. Distribution.** This notice will be distributed to Flight Standards (FS) Safety Standards offices, AFG offices, and all FSDOs.

6. Background. To address the continued and increasing risk UAS pose to the National Airspace System (NAS), General Aviation (GA), and air transport, FS published Notice N 8900.504, Expanded Unmanned Aircraft Systems Oversight, dated February 28, 2019, as an additional requirement to FAA Order 1800.56S, National Flight Standards Work Program Guidelines, for FY 2019. N 8900.504 was incorporated into FAA Order 1800.56T, dated July 31, 2019, for FY 2020. In August 2019, FS conducted a semi-annual assessment of UAS data. The Safety Analysis and Promotion Division analyzed data from Planned Surveillance Work Activity (P-item) surveillance, UAS sightings, Program Tracking and Reporting Subsystem (PTRS)/Enforcement Information System (EIS) entries resulting from UAS investigations, and N 8900.504 to evaluate the current risk profile and surveillance metrics for

UAS. The analysis indicates an increase in UAS sightings that pose potential risks to air transport due to UAS sightings in communities bordering airport approach and departure paths. Additionally, potential risks identified from noncompliant operations and potential risk to firefighting, law enforcement, and emergency response efforts increased. In consideration of the increase of potential risks, strategic adjustments to the specific conditions, targeting mechanisms, and capturing of key UAS data incorporated into Order 1800.56T for FY 2020 were determined to be necessary in the risk-based approach to expanding UAS surveillance opportunities as part of a broader UAS oversight strategy.

## 7. Reference Documents (current editions):

- For additional information on the requirements for civil operations of small UAS (sUAS), refer to Title 14 of the Code of Federal Regulations (14 CFR) parts 91 and 107, found at https://www.ecfr.gov.
- To review the UAS P-items applicable to all FSDOs, refer to FAA Order 1800.56, National Flight Standards Work Program Guidelines, at https://www.faa.gov/regulations\_ policies/orders\_notices/index.cfm/go/document.information/documentID/1036509.
- For guidance on conducting UAS surveillance and investigations, refer to FAA Order 8900.1, Volume 16, Chapter 5, Surveillance/Compliance and Enforcement, at http://fsims.faa.gov.
- For guidance on conducting UAS accident, incident, and occurrence investigations, refer to Order 8900.1, Volume 7, Chapter 1, Accident and Incident Investigation and Reporting, at http://fsims.faa.gov.
- For information on recreational flying under Title 49 of the United States Code (49 U.S.C.) § 44809, refer to Advisory Circular (AC) 91-57, Exception for Limited Recreational Operations of Unmanned Aircraft, at https://www.faa.gov/regulations\_polici es/advisory\_circulars/index.cfm/go/document.information/documentID/1036029.

**8.** Action. Each FSDO will locally add the following Required Surveillance Work Activities (R-item) to their FY 2020 NPG work programs:

**a.** Conditional R-Item. Conduct one UAS site visit, either Operations (1623), Maintenance (3631), or Avionics (5631), for each 5 UAS actionable investigations<sup>1</sup> that occur within Class B, C, or D airspace, or for each 10 UAS actionable investigations that occur in any airspace. Do not enter an "X4XX" code for public aircraft operations (PAO), as that should be indicated in the "National Use" field. See reporting instructions in Appendix A, UAS Surveillance Item Procedures.

**Note:** Locally analyze the reports that trigger the required surveillance for root cause and common elements (e.g., locations, times, and events) that yield the best surveillance opportunities. Actionable investigations include occurrences, incidents, near midair collisions (NMAC), accidents, complaints, and Compliance and Enforcement (C&E) actions, but exclude non-actionable sightings. A report is

<sup>&</sup>lt;sup>1</sup> Investigations include occurrences, complaints, incidents, NMACs, accidents, C&E actions, and Mandatory Occurrence Reports (MOR), but exclude non-actionable sightings. (Non-actionable sightings are those reports with little or no tangible information that would lead to identifying a UAS or UAS operator.)

considered actionable if it contains information such as locations and times that show a pattern, and/or includes key information such as registration number, operator identity, etc., which would enable additional actions such as interviews, site visits, or compliance actions. Non-actionable sightings are those with little or no tangible information that would lead to identifying a UAS or UAS operator.

**b.** Targeted R-Item. Conduct one UAS site visit, either Operations (1623), Maintenance (3631), or Avionics (5631), when notified by the Safety Analysis and Promotion Division through quarterly generated reports of UAS sightings near U.S. airports. Do not enter an "X4XX" code for PAO, as that should be indicated in the "National Use" field. See reporting instructions in Appendix A.

**Note:** The Safety Analysis and Promotion Division provides a quarterly report to the FSDO manager that will include airports where UAS sightings are most frequently reported. The FSDO manager will assign UAS surveillance tasks near these identified airports. General data indicates surveillance should be planned along approach or departure corridors just outside of the airport. Airports with 10 or more sightings will be included on the report, and airports experiencing significant increase in the number of UAS sightings will be targeted for priority surveillance. FSDO personnel are encouraged to consult the Safety Analysis and Promotion Division for assistance in analyzing the data for potential surveillance areas if needed. AFG leadership will be copied on each notification to the FSDO manager provided by the Safety Analysis and Promotion Division.

c. R-Items Per Order 2150.3, FAA Compliance and Enforcement Program. Conduct a UAS site visit, either Operations (1623), Maintenance (3631), or Avionics (5631), when supporting enforcement actions against any UAS operations that interfere with wildfire, law enforcement, or emergency response. Do not enter an "X4XX" code for PAO, as that should be indicated in the "National Use" field. (See reporting instructions in Appendix A.) FSDO personnel will coordinate with Office of Security and Hazardous Materials Safety (ASH) Law Enforcement Assistance Program (LEAP) agents and local law enforcement for activities during wildfires and well-known rescue/emergency response efforts, to support as needed.

**9. PTRS Recording.** When reporting these UAS surveillance activities, it is extremely important for analysis purposes to properly record the type of operation that was observed. The PTRS records should contain the appropriate 14 CFR parts being used; airman name(s); related certificates, waivers, or exemptions held; a clear description of the action taken, to include location, start and end times of the surveillance; and the related enforcement investigative report (EIR) number when applicable.

**a.** "14 CFR" Field. Because there is not a code to mark recreational UAS operations at this time, note part 107 for all sUAS operations (under 55 pounds) that are not certificated operations in the "14 CFR" field. Distinguish between operations that are truly part 107 and those that are recreational by entering the code 44809 in the "Local Use" field to refer to recreational operations that would fall under 49 U.S.C. § 44809. Certificated operations should be coded with the correct regulation (e.g., 14 CFR part 91, 135, or 137).

**b.** "**Point of Departure**" **Field.** Investigations triggered by UAS sightings near airports should include the airport code of the reporting aircraft or tower.

**Note:** Part 107 does allow for recreational operations, so knowledge of the requirements for both regulations is required to properly counsel the operator and record the event.

**c.** "National Use" Field. Enter the codes as instructed below in the PTRS to properly document the type of R-item (Conditional R-item or Targeted R-item), the size of the UAS, and whether the UAS was used for public, civil, or military purposes, per Order 8900.1, Volume 3, Chapter 14, Section 1, General Information on Public Aircraft Operations, and Section 2, Public Aircraft Operations and Surveillance Government Aircraft Operations Versus Civil Aircraft Operations. Specifically, enter C for a Conditional R-item or T for a Targeted R-item, followed by a hyphen, UAS, followed by a hyphen, followed by the type of operator (Public (P), Civil (C), or Military (M), followed by a hyphen, followed by the size (Large (L) or Small (S)). For example:

- C-UAS-M-L = Conditional R-item, UAS, Military operator, Large aircraft (55 pounds and over).
- T-UAS-P-L = Targeted R-item, UAS, Public operator, Large aircraft.
- C-UAS-C-S = Conditional R-item, UAS, Civil operator, Small aircraft.
- T-UAS-U-S = Targeted R-item, UAS, Unknown operator, Small aircraft.

**d.** "Comments" Field. Inspectors must use the following format for entries in the "Comments" field of the PTRS record:

**LOCATION OF SURVEILLANCE:** (e.g., Northeast departure corridor of RWY 07 at XYZ Airport.)

CLASS OF AIRSPACE: (e.g., XYZ Airport is Class D Airspace.)

**DURATION OF SURVEILLANCE:** (e.g., Inspector arrived at 1430 to conduct surveillance on 06/24/2019 and ended at 1530.)

**OBSERVATION:** (e.g., UAS was observed operating at 500 AGL, over people, beyond visual line of sight, and within the lateral limits of the Class D Airspace.)

AIRMAN NAME AND CERTIFICATE: (if applicable.)

WAIVERS, or EXEMPTIONS HELD BY OPERATOR: (if applicable.)

SPECIFIC REGULATION VIOLATED: (e.g., § 107.39.)

**IDENTIFIED HAZARDS or INEFFECTIVE RISK CONTROLS:** (e.g., Operator flew beyond visual line of sight without required visual observer.)

**RESULT of ROOT CAUSE ANALYSIS:** (e.g., Operator lack of education/knowledge for required visual observer.)

**TYPE OF ACTION INITIATED:** (e.g., Enforcement, Counseling, Remedial Training, etc.)

e. No Activity Observed. If no activity is observed during a surveillance, note the time block (start and end time) of the surveillance and lack of UAS activity in the comments section.

**10. Non-Actionable Sightings Investigations PTRS Recording.** Enter code NON in the "Regional Use" field when a UAS sighting PTRS is opened and closed as a non-actionable sighting investigation. Non-actionable sightings are those with little or no tangible information that would lead to identifying a UAS or UAS operator.

**11. Deviations to This Notice.** It is necessary to adhere to procedures in this notice to achieve uniform administration of this directive material. The General Aviation and Commercial Division must approve any deviations to this notice.

**12. Suggestions or Comments.** The General Aviation and Commercial Division welcomes and considers all suggestions or comments regarding this notice. Please use FAA Form 1320-19, Directive Feedback Information. Please use the "Other Comments" block on FAA Form 1320-19 to provide a complete explanation of why the suggested change is necessary. You may correct, as necessary, a copy of the pertinent information, or provide a handwritten note for consideration. Send your suggestions or comments to 9-AFS-800-Correspondence@faa.gov.

**13. Disposition.** We will incorporate the information in this notice into Order 8900.1 before this notice expires. Direct questions concerning the information in this notice to the General Aviation and Commercial Division via email at 9-AFS-800-Correspondence@faa.gov.

Robert C. Carty Deputy Executive Director, Flight Standards Service

## Appendix A. UAS Surveillance Item Procedures

General Aviation and Commercial Division (AFS-800)	Safety Analysis and Promotion Division (AFS-900)	Air Traffic Organization Mission Support Services (AJV)	Office of Security and Hazardous Materials Safety (ASH)
9-afs-800- part107waivers@faa.gov	afs-930-only- uas@faa.gov	9-ajv-115- uasorganization@faa.gov	Assigned Law Enforcement Assistance Program (LEAP) Special Agent or leap@faa.gov
<b>Contact for:</b> Policy guidance, and checking waiver and exemption status for UAS operators.	<b>Contact for:</b> Data analysis questions and guidance for planning items.	<b>Contact for:</b> Information on approved UAS operations in local airspace.	<b>Contact for:</b> Obtaining registration information, assistance in working with local law enforcement.

### **Vital Contacts**

**Purpose of This Appendix.** The information in this appendix lays out processes for triggering and conducting the conditionally Required Inspection Items (RII) noted in subparagraphs 8a–c of this notice. All three items can be broken down into four phases per the instruction below. Guidance for the report section of each item is as follows:

### a) Conditional R-Item.

1) **Track.** The Flight Standards District Office (FSDO) UAS point of contact (POC) will keep a running tally of UAS actionable investigations conducted from FSDO personnel. When each 5 actionable investigations occur in Class B, C, or D airspace or when each 10 actionable investigations occur in any airspace, the FSDO POC will alert the FSDO manager that a Conditional R-item UAS surveillance is required. The Conditional R-item surveillance(s) will be conducted on the investigation(s) determined, by the FSDO manager, to be the highest risk to safety in the NAS of the actionable sighting investigation(s). The Conditional R-item surveillance(s) must be completed by the end of the quarter in which it was identified as a requirement.

**2) Plan.** The FS office UAS POC will review the 5 or 10 investigations that triggered the required surveillance to determine common elements among the investigations that suggest a surveillance opportunity. Similarities to look for include repeating operators, locations, types of operations, and hours of operation. FS office UAS POCs are encouraged to reach out to the Safety Analysis and Promotion Division for assistance with analyses if needed, and to consult Air Traffic Organization (ATO) Mission Support Services (AJV) for data on UAS authorizations in the area. Also, when surveillance is planned to target certain operators, the FS office UAS POC is expected to reach out to the

General Aviation and Commercial Division for assistance in tracking the operator and determining if the operator is in possession of a waiver or exemption.<sup>2</sup>

**3) Conduct.** The assigned personnel from the FSDO should conduct the surveillance activity as planned and according to guidance established in Order 8900.1, Volume 16, Chapter 5. The FAA Compliance Program should be applied as intended for all surveillance activities.

4) Report. See paragraph 9, PTRS Recording, of this notice.

#### b) Targeted R-Item.

1) **Track.** The Safety Analysis and Promotion Division will generate quarterly reports of UAS sightings near U.S. airports. When an airport experiences 10 or more UAS sightings in the quarter, the division will notify the responsible FSDO manager, who will in turn assign the surveillance to the FS office POC. One Targeted R-item surveillance is required for each 10 UAS sightings for each airport listed in the report. Targeted R-item surveillance must be completed by the end of the quarter in which the report was received. AFG leadership will be copied on each notification to the FSDO manager provided by the Safety Analysis and Promotion Division.

2) Plan. The FSDO UAS POC will consult with analysts from the Safety Analysis and Promotion Division and review Low Altitude Authorization and Notification Capability (LAANC) data to determine the best locations to establish surveillance opportunities near the targeted airport. The locations will be decided with available location data from the sightings reports and requested areas in LAANC. The surveillance areas are likely to be in community areas near approach and departure corridors for airports, not on the airports themselves, so no special access should be required to conduct the surveillance.

**3) Conduct.** The assigned personnel from the FSDO should conduct the surveillance activity as planned, and according to guidance established in Order 8900.1, Volume 16, Chapter 5. The FAA Compliance Program should be applied as intended for all surveillance activities.

4) **Report.** See paragraph 9 of this notice.

### c) Surveillance to Support FAA Order 2150.3.

1) **Track.** This item triggers when known emergency response, firefighting, and law enforcement operations are being conducted within the FSDO's area of responsibility.

**2) Plan.** The key component to this item is pre-coordination between ASH LEAP agents and local law enforcement/emergency response teams to establish awareness of the

<sup>&</sup>lt;sup>2</sup> The General Aviation and Commercial Division is working to put UAS registration and waiver data into the Safety Performance Analysis System (SPAS) to facilitate easier planning of surveillance. However, FSDO personnel are encouraged to work with the General Aviation and Commercial Division until the information is properly uploaded and consistently available.

FSDO's intention to support operations through direct enforcement on UAS operators. The FSDO UAS POC will need to work with ASH to brief local law enforcement/emergency response teams on the types of evidence needed to support investigations.

**3) Conduct.** Ideally, FAA personnel will not deploy to emergency response, law enforcement, and firefighting activities, as the FAA has no intention to cause additional coordination needs for these events. Noncompliant operators should be reported through ASH LEAP agents to the FSDO by local law enforcement and emergency response teams for investigation. FSDO personnel may be sent to the scene for surveillance upon request of the responsible incident commanders. All investigations resulting from on-scene surveillance still require ASH LEAP coordination.

4) **Report.** See paragraph 9 of this notice.