



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
National Policy

ORDER
1110.150

04/10/08

SUBJ: Small Unmanned Aircraft System Aviation Rulemaking Committee

1. Purpose of this Order. This order creates the Small Unmanned Aircraft System (UAS) Aviation Rulemaking Committee (ARC) according to the Federal Aviation Administration (FAA) Administrator's authority under Title 49 of the United States Code (49 U.S.C.) § 106(p) (5). In it, we also outline committee organization, responsibilities and tasks.

2. Audience. We have written this order for FAA program managers and their staffs.

3. Where I can find this Order. You can find this order on the MyFAA Employee website: https://employees.faa.gov/tools_resources/orders_notices/ or the FAA Regulatory and Guidance Library website at <http://rgl.faa.gov>.

4. New Analysis of Small UAS is Needed.

a. Based on the relatively low initial cost of small UAS, plus their low operating expense, versatility for aerial photography, and other sensing applications, we expect that small UAS will experience the largest near-term growth in civil/commercial UAS. Another catalyst for growth is the interest of local law enforcement agencies in acquiring small UAS to either establish or augment their aviation capabilities.

b. The law enforcement and aerial photography industries, plus others conducting remote sensing activities, have mistakenly interpreted FAA advisory circular (AC) 91-57, *Model Aircraft Operating Standards*, for permission to operate small UAS for research or compensation or hire purposes. To promote safety while updating and clarifying guidance, we at the FAA will conduct a formal safety analysis of small UAS, and then promulgate federal regulations for their design, operation and registration.

Issues the FAA will study include:

- (1) Hazard and safety risk analysis,
- (2) Registration process,
- (3) Pilot training requirements,
- (4) Crew medical requirements,
- (5) Requirements for system certification and continuing airworthiness (includes both aircraft and control station components),
- (6) Economic impact,
- (7) International harmonization, and
- (8) Communications latency and vulnerability.

c. Recommendations from the Small UAS ARC will be important to us as we establish the regulatory basis allowing small UAS to operate in the National Airspace System (NAS) for compensation or hire, and clarify the definition of model aircraft.

5. Small UAS ARC Committee Organization and Administration. We will set up a committee of members of the aviation community, including the public, and or other federal government entities representing diverse viewpoints. FAA participation and support will come from all affected lines-of-business. Where necessary, the committee may set up specialized work groups that include at least one committee member and invited subject matter experts from industry and government.

a. The committee sponsor is the Associate Administrator for Aviation Safety, who:—

- (1) Has sole discretion to appoint members or organizations to the committee,
- (2) Will receive all committee recommendations and reports,
- (3) Selects industry and FAA co-chairs for the committee, and
- (4) Through the Aircraft Certification Service (AIR), is responsible for administrative support for the committee.

b. Co-chairs will:

- (1) Determine, (with other committee members) when a meeting is required, (A quorum is desirable at committee meetings, but not required.),
- (2) Arrange notification to all members of the time and place of each meeting,
- (3) Draft an agenda for each meeting and conduct the meeting, and
- (4) Keep meeting minutes.

6. Committee Membership.

a. The committee will consist of about 20 members, representing aviation associations, industry operators, manufacturers, employee groups or unions, FAA and other government entities, and other aviation industry participants.

b. Membership will be balanced in points of view, interests, and knowledge of the committee objectives and scope. Each committee member, or participant on the committee, should have the authority to speak for the sector they represent. Committee membership is limited to promote discussion. Active participation and commitment by members is essential for achieving committee objectives. Attendance is essential for continued membership on the committee. The committee may invite additional participants as subject matter experts to support specialized work groups.

7. Public Participation. Persons or organizations outside this committee who want to attend a meeting must get approval in advance of the meeting from the committee chair or designated federal representative.

8. Committee Procedures and Tasks.

a. The committee advises and makes recommendations to the Associate Administrator for Aviation Safety.

b. The committee's initial task will focus on the applicability of our proposed integration approach and related hazard/safety risk analysis. The committee will develop a work plan for each task or issue, and an implementation plan for each recommendation. Recommendations should take the forms of documented issue resolutions, recommended policy decisions, draft guidance material, or proposed rulemaking, as needed.

c. Committee tasks include, but are not limited to:

- (1) Reviewing the FAA's approach to integrating small UAS into the NAS,
- (2) Validating that approach or recommending an alternate,
- (3) Defining the risks and mitigations associated with small UAS operations,
- (4) Identifying the costs associated with a proposed small UAS regulation,
- (5) Identifying the economic and societal benefits of small UAS operations,
- (6) Recommending rulemaking necessary to meet objectives; and preparing a draft proposal,
- (7) Developing guidance and recommending the implementation processes,
- (8) Considering global harmonization issues and recommending approaches,
- (9) Documenting technical information to support recommendations,
- (10) Establishing specialized work groups, as needed, to research, document, and make recommendations on specific, assigned topics.

d. The committee will send written recommendations to the Administrator through the Associate Administrator for Aviation Safety, as appropriate.

9. Cost and Compensation. The estimated cost to the federal government of the Small UAS Aviation Rulemaking Committee is \$100,000 annually. Non-government representatives serve without government compensation and bear all costs of their committee participation.

10. Availability of Records. Under the Freedom of Information Act, 5 U.S.C. § 522, records, reports, agendas, working papers, and other documents made available to, or prepared for, or by, the committee will be available for public inspection and copying at the FAA Aircraft Certification Service, 800 Independence Avenue, SW., Washington, DC 20591. Fees will be charged for information furnished to the public according to the fee schedule in Title 49 of the Code of Federal Regulations (49 CFR) Part 7.

11. Committee Term. This committee becomes an entity on the effective date of this order. The committee will remain in existence for a term of 20 months unless its term is ended sooner or extended by the Administrator.

12. Distribution. Distribute this order to the director level in the Office of the Associate Administrator for Aviation Safety; the Office of the Chief Counsel; the Office of the Associate Administrator for Airports; the Air Traffic Organization; and the Office of the Assistant Administrator for Policy, Planning, and Environment.

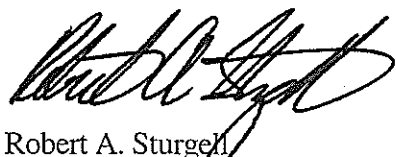
13. Background.

a. On February 13, 2007, the FAA published a *Notice of Policy for Unmanned Aircraft Systems* in the Federal Register. In it, we outlined the background of UAS development, highlighted the recent growth in requested operations, and reiterated our current policy. Part of that policy included AC 91-57, dating back to June 1981, which encouraged *recreational* users to voluntarily comply with guidelines for safely operating remotely controlled aircraft, also called "model" airplanes. The AC encouraged users to operate aircraft less than 400 ft above ground level and not closer than 3 miles from airports. Subsequently, the Academy of Model Aeronautics (AMA) National Safety Code defined model aircraft as weighing less than 55 lbs.

b. In the February 13, 2007, Federal Register Notice, we clarified our existing policies and regulations. We received significant public feedback: proponents operating small UAS for compensation or hire emphasized our need to issue minimally-restrictive regulation(s). At the same time, we received criticism for not having more restrictive regulations to deal with the increasing safety problems that small UAS may pose to general aviation. The Aircraft Owners and Pilots Association (AOPA), for example, urged us to develop rules for small UAS that require the same operational safety as manned aircraft.

14. Suggestions for Improvement. If you find deficiencies, need clarification, or want to suggest improvements on this order, send a copy of FAA Form 1320-19, Directive Feedback Information (written or electronically) to the Aircraft Certification Service, Planning and Financial Resources Management Branch, AIR-530, Attention: Directives Management Officer. You may also send a copy to the Aircraft Engineering Division, AIR-100, Attention: Comments to Order 1110.150. If you urgently need an interpretation, contact AIR-160 at (202) 385-4696. Always use Form 1320-19 to follow up each verbal conversation.

15. Records Management. For guidance on keeping and disposing of records, see FAA Orders 0000.1, FAA Standard Subject Classification System; 1350.14, Records Management, and 1350.15, Records, Organization, Transfer and Destruction Standards. Or, see your office Records Management Officer or Directives Management Officer.



Robert A. Sturgell
Acting Administrator