



Federal Aviation Administration

Memorandum

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To: See Distribution List

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Division, AIR-100

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Subject: Deviation to Federal Aviation Administration (FAA) Order 8130.34C
Authorizing Certain Designated Airworthiness Representatives (DAR) to Issue
Special Airworthiness Certificates in the Experimental Category at Unmanned
Aircraft System (UAS) Test Ranges Established by Public Law 112-95

Memo No.: AIR100-14-110-DM07

This memorandum allows appropriately authorized manufacturing Designated Airworthiness Representatives (DAR-F) and manufacturing UAS DARs to issue experimental certificates for UAS operations restricted to the six UAS test ranges established under Public Law 112-95 section 332, for research and development and crew training only. Specifically, this memo removes the restriction in Chapter 2, paragraph 1(b), of FAA Order 8130.34C, *Airworthiness Certification of Unmanned Aircraft Systems and Optionally Piloted Aircraft*.

Details for manufacturing inspection district offices (MIDOs) on how this new authority can be granted to existing DAR-F's is addressed in a concurrent deviation memo issued by AVS-1, against FAA Order 8100.8D, *Designee Management Handbook*, and Order 8000.95 *Designee Management Policy*. Details regarding the appointment and authorization of UAS DARs for this activity will be addressed in a separate FAA order, to be issued soon.

The certification process for unmanned aircraft systems is different than for manned aircraft. Most notable is the FAA headquarters involvement. AIR-113 leads the coordination of original UAS experimental certifications and serves as a single point of contact for communication between the applicant and FAA offices. AFS-80 provides UAS expertise in the roles of operations (AFS-84), air traffic and airspace (AFS-85/AJV-115), and engineering (AFS-86). For recurrent certifications, certain manufacturing aviation safety inspectors (ASI) from the certificate issuing office may lead the coordination process. This memorandum will explain coordination responsibilities for original and recurrent airworthiness certifications that include DAR participation.

This memorandum authorizes the following procedural changes to FAA Order 8130.34C that are applicable only at the six UAS test sites:

Note: All references to AIR-200 are outdated. Since the publication of Order 8130.34C, AIR-200 was re-organized into AIR-100.

Chapter 2, Section 2. Airworthiness Certificates

A) Paragraph 1b states, in part, “Representatives of the Administrator or delegated organizations authorized under 14 CFR part 183 are not permitted to issue experimental certificates to UASs, OPAs, or OPA/UASs.” This deviation authorizes MIDOs to appoint DAR-Fs and manufacturing UAS DARS to issue experimental certificates to UAS at the six test ranges.

B) Paragraph 4b states, “AIR-200 will coordinate the issuance of original experimental certificates and special flight permits for new aircraft models. AIR-200 will generate the operating limitations and make them available for review and comment to ASIs and specialists from the UAS Integration Office (AFS-80), the geographically responsible manufacturing inspection district office (MIDO)/manufacturing inspection satellite office (MISO) or certificate management office (CMO)/certificate management unit (CMU), and the geographic FSDO.” This deviation authorizes manufacturing ASIs, acting as managing specialists (or advisors) to DAR-Fs and manufacturing UAS DARS, to generate operating limitations and coordinate FAA Order 8130.34C requirements for original experimental certificates with other FAA offices for UAS operations at the six test ranges.

C) Paragraph 5b states, “A manufacturing ASI from the certificate issuing office will lead recurrent airworthiness certifications if the ASI has the following experience with the particular model of aircraft: (1) Attended the safety evaluation; (2) Issued the original or a recurrent experimental certificate; or (3) Assisted during the onsite activities of the original or a recurrent certification to include the inspection of the aircraft and control station.” This deviation authorizes manufacturing ASIs, acting as managing specialists (or advisors) to DAR-Fs and manufacturing UAS DARS, to lead recurrent airworthiness certifications for UAS at the six test ranges.

Chapter 3, Section 1. Procedural Requirements

A) Paragraph 3c states, in part, that “The applicant must submit their proposed flight area to AIR-200 before completing the program letter and safety checklist.” For UAS test ranges, this deviation allows applicants to submit their proposed flight area to the geographically responsible MIDO. The proposed flight area will then be provided to AFS-85/AJV-115 for assessment and feasibility determination. AFS-85/AJV-115 will notify the MIDO if the proposed flight area is feasible.

B) Paragraph 5b states, in part, that “The program letter must be submitted to AIR-200 for original certificate requests, and to the certificate issuing office for recurrent certificate requests.” For UAS test ranges, this deviation authorizes applicants to submit their program letter to the geographically responsible MIDO for original and recurrent certifications. The MIDO will distribute the program letter to the DAR, the three AFS-80 offices, and the geographic flight standards ASI.

C) Paragraph 6a states, in part, that “For original airworthiness certificate requests, the applicant must provide a completed safety checklist to AIR-200.” For UAS test ranges, this deviation allows

applicants to provide a completed safety checklist to the geographically responsible MIDO. The MIDO will distribute the safety checklist to the DAR, the three AFS-80 offices, and the geographic flight standards ASI.

D) Paragraph 8 describes the safety evaluation process. For UAS test ranges, this deviation allows the geographically responsible MIDO to arrange a teleconference with the three offices of AFS-80, the geographic flight standards ASI, and the DAR to discuss the feasibility of an applicant's program. If deemed feasible, the MIDO will invite the applicant to a safety evaluation. The MIDO will arrange the safety evaluation teleconference so that participants include the three offices of AFS-80, the geographic flight standards ASI, the DAR, and the applicant. The safety evaluation may be conducted at the office of a test range operator, an FAA office, or at a location acceptable to the FAA.

E) Paragraph 8c states, in part, that "If the applicant's program is found to pose acceptable risk, AIR-200 will schedule a site visit to the proposed flight test area within 30 to 60 days." For UAS test ranges, this deviation allows the geographically responsible MIDO to schedule the site visit. If AFS-80 or AIR-113 will attend the site visit, adequate time must be allowed to coordinate travel arrangements.

F) Paragraph 8d(4) states, in part, that "For the initial airworthiness certification, the applicant must provide FCC approval to AIR-200." For UAS test ranges, this deviation allows the applicant to provide their FCC approval to the geographically responsible MIDO.

G) Paragraph 10 states, in part, that "The onsite inspection for issuance of original airworthiness certificates will be scheduled by AIR-200." For UAS test ranges, this deviation allows onsite inspections to be scheduled by the geographically responsible MIDO.

If you have any questions, please contact the Airworthiness Certification Section, AIR-113 at 202-267-1575.

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