



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

**ORDER
8130.2H**

02/04/2015

National Policy

SUBJ: Airworthiness Certification of Products and Articles

This order establishes procedures for accomplishing original and recurrent airworthiness certification of aircraft and related products and articles. The procedures contained in this order apply to Federal Aviation Administration (FAA) manufacturing aviation safety inspectors (ASI), to FAA airworthiness ASIs, and to private persons or organizations delegated authority to issue airworthiness certificates and related approvals.

Suggestions for improvement of this order may be submitted using the FAA Office of Aviation Safety (AVS) directive feedback system at <http://avsdfs.avs.faa.gov/default.aspx>, or FAA Form 1320-19, Directive Feedback Information, found in appendix I to this order.

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Chapter 4. Special Airworthiness Certification

Section 1. General Information

400. General. The procedures in this chapter provide guidance material associated with airworthiness certification and the issuance of FAA Form 8130-7. Part 21, subpart H, Airworthiness Certificates, and subpart I prescribe the procedural requirements for airworthiness certification for restricted, multiple, limited, primary category aircraft (PCA), light-sport, experimental purposes, and provisional. Procedures also are provided for issuance of special flight permits.

401. Application for Airworthiness Certificate. FAA Form 8130-6 is required whenever an airworthiness certificate is issued or amended. This includes changes to operating limitations that may have been prescribed. The application for a U.S. airworthiness certificate must be made by the registered owner or an authorized agent who has a notarized letter of authorization from the registered owner. The applicant or authorized agent must complete the appropriate sections and sign the application. A program letter must also be submitted to the FAA with any other document(s) required for the requested certification. Additional documentation that may be necessary for a particular special airworthiness certificate are listed in the appropriate sections within this chapter. Refer to paragraph 444 and appendix B of this order for additional guidance on program letters.

402. Certification Procedures. The following procedures are common for issuance of FAA Form 8130-7, consistent with any other specific procedures that may be prescribed in other paragraphs dealing with individual airworthiness categories. In no case may any aircraft be operated unless there is an appropriate and valid airworthiness certificate issued for that aircraft. The FAA must conduct any inspections necessary to verify the certification procedures listed below, including any other inspections found appropriate for that certification. For amateur-built aircraft, refer to paragraph 454 of this order; for LSA, refer to paragraphs 434 and 449 of this order; for experimental former military aircraft, refer to paragraph 465 of this order.

a. Aircraft Familiarization. The FAA representative should become familiar with the aircraft type and its operational history, if any, before initiating the record and aircraft inspection.

(1) Identify the aircraft model and/or series, as well as the type of engine(s), propellers, and other systems installed, as appropriate.

(2) Review existing, if any, FAA airworthiness and registration files and Program Tracking and Reporting Subsystem (PTRS) records to identify any modifications, safety issues, incidents, and accidents for the specific aircraft.

(3) Review accident and incident data for the aircraft type. Data can be retrieved from the NTSB, the FAA, and other international and military sources.

(4) Review available aircraft type club information.

(5) Review the ownership history of the aircraft, if applicable. This may provide information on how the aircraft was previously operated and maintained, which may have implications for the airworthiness inspection. The current ownership status may also affect the operation of the aircraft (for example, leasing agreements).

b. Records Inspection. The FAA representative must do the following:

(1) Obtain from the applicant a properly executed FAA Form 8130-6 and any other documents required for the certification. (Refer to chapter 8, table 8-2 of this order.)

(2) For experimental certification, obtain from the applicant a program letter that incorporates the appropriate requirements of § 21.193. Refer to paragraph 444 and appendix B of this order for additional information.

(3) Review the documentation provided by the applicant to determine that the registration requirements of part 47 have been met, and ensure the aircraft is marked in accordance with part 45.

(4) Check with AFS-750 to determine if an application for airworthiness certification has been denied for the particular aircraft. This may assist the ASI in determining aircraft eligibility.

(5) Review the aircraft records to determine that any required maintenance and inspections have been accomplished. Records should be complete and reflect no unsafe design changes.

(6) Arrange to review any inspection or technical data needed to establish conformity to type design.

(7) Review the applicant's weight and balance data for accuracy and currency for the aircraft submitted.

(8) Determine that the aircraft has been flight tested, if required. If it has not been flight tested, issue an appropriate FAA Form 8130-7, for showing compliance with the airworthiness regulations (§§ 21.189(a)(2), 21.185(d), and 91.319(b)). The flight test must be recorded in the aircraft records and certify that the requirements of § 91.319(b) have been met. Flight test time is included as "time-in-service," as defined by part 1.

(9) Determine the aircraft complies with all applicable ADs.

Note: Each AD contains an applicability statement specifying the product to which it applies. ADs, unless specifically limited, apply to the make and model set forth in the applicability statement regardless of category. The TC and airworthiness certification categories are used to identify the product affected. For further guidance refer to AC 39-7, *Airworthiness Directives*.

(10) Establish that all required documentation and records have been provided for the aircraft, that is, an up-to-date approved flight manual, equipment list, and maintenance records and manuals as required by certain airworthiness parts of the CFR.

c. Aircraft Inspection. The FAA must arrange with the applicant to make the aircraft available for inspection to determine the following:

(1) The aircraft is eligible by make and model using the TCDS, aircraft specification, or aircraft listing, as applicable. This applies to primary, restricted, limited, and light-sport category aircraft and applications under § 21.195(b) and (c).

(2) The ID plate meets the requirements of § 45.11, as applicable.

(3) The information on the ID plate is correct, matches the information on FAA Form 8130-6, and is in accordance with § 45.13, as applicable.

(4) The aircraft nationality and registration marks are in accordance with part 45.

(5) The flight control system operates properly.

(6) The engine(s), propeller(s), and associated instruments operate in accordance with the manufacturer's instructions.

(7) The pitot static system and associated instruments operate properly.

(8) The instruments are marked in accordance with the approved flight manual or any other data used for aircraft involved in a type certification program.

(9) All modifications have been inspected and recorded, and are in a condition for safe operation.

(10) An Emergency Locator Transmitter (ELT) is installed, as required in accordance with § 91.207.

d. Certificate Issuance.

(1) If the aircraft meets the requirements for the certification requested, the FAA must—

(a) Make an aircraft logbook entry.

(b) Issue FAA Form 8130-7.

(c) Complete sections V and VIII of FAA Form 8130-6, as appropriate, in accordance with the instructions contained in chapter 8 of this order.

(d) Examine, review, and route the certification file in accordance with the instructions contained in chapter 8 of this order.

(2) If the aircraft does not meet the requirements for the certification requested, and the airworthiness certificate is denied, the FAA must—

(a) Write a letter to the applicant stating the reason(s) for denying the airworthiness certificate.

(b) Attach a copy of the denial letter to FAA Form 8130-6 and forward to AFS-750 to be made part of the aircraft record.

403. Special Airworthiness Certificates.

a. FAA Form 8130-7 is used for all aircraft that are certificated in categories other than *standard*.

b. An experimental certificate for R&D, showing compliance with regulations, crew training, or market surveys is effective for 1 year or less after the date of issuance.

c. The duration of amateur-built, exhibition, air racing, light-sport category, and LSA experimental certificates will be unlimited unless the FAA finds good cause that a specific period should be established. For example, an aircraft with unusual flight control or propulsion systems may warrant a limited duration certificate. Any other necessary operating limitations will be attached to this form; refer to appendix C to this order.

d. Operating limitations generally applicable to nonstandard aircraft are printed on the reverse side of FAA Form 8130-7 (figure 4-1 of this order). The FAA also may prescribe additional operating limitations deemed necessary for the special purpose involved. The additional limitations will be enumerated on a separate sheet, dated, signed, and attached to FAA Form 8130-7. Refer to the applicable sections of this chapter and appendix C to this order for information regarding additional operating limitations.

e. The first page of the operating limitations should be typed on FAA-branded paper.

Note: FAA-branded paper or a template may be provided to FAA designees for the specific purpose of issuing aircraft operating limitations. It is imperative that the FAA designee understand that the FAA-branded paper is to be used for issuing operating limitations only and will be signed using the designee's name (typed and signed) and title as an FAA designee.

404. Reserved.

Section 2. Restricted Airworthiness Certification

405. General. The procedures in this section provide guidance for the issuance of FAA Form 8130-7 for aircraft type certificated in the restricted category in accordance with § 21.25, § 21.29, or Civil Air Regulation (CAR) 8.