

CHANGE

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

8130.2E CHG 2

7/22/2003

SUBJ: AIRWORTHINESS CERTIFICATION OF AIRCRAFT AND RELATED PRODUCTS

- 1. PURPOSE.** This change is issued to clarify certain language in Federal Aviation Administration (FAA) Order 8130.2E, Airworthiness Certification of Aircraft and Related Products.
- 2. DISTRIBUTION.** This order is distributed to the Washington headquarters branch levels of the Aircraft Certification Service, Flight Standards Service, and the Regulatory Support Division; to the Aviation System Standards office; to the branch level in the Aircraft Certification Service directorates and regional Flight Standards Service divisions; to all aircraft certification offices; to all manufacturing inspection district offices and manufacturing inspection satellite offices; to all flight standards district offices; to the Aircraft Certification Branch and Flight Standards Branch at the FAA Academy; to the Brussels Aircraft Certification Division and Flight Standards staff; to applicable representatives of the Administrator; and to all international field offices.
- 3. EXPLANATION OF CHANGES.** Changes to paragraph 128 were made to clarify information regarding aircraft inspections. We also changed each “must” to “should” in paragraph 128a and reincorporated the note in paragraph 133d; each was incorrectly revised during revision E of Order 8130.2. Changes made to paragraph 134 clarify operating limitations. Finally, we changed the language in paragraph 237a(1)(c)(4) to reflect language in Advisory Circular 21-12B, Application for U.S. Airworthiness Certificate, FAA Form 8130-6.
- 4. DISPOSITION OF TRANSMITTAL.** Retain this transmittal sheet until the directive is canceled by a new directive.
- 5. PAGE CONTROL CHART.** See attached page control chart.

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
119	1/23/2003	119	1/23/2003
120 through 121	1/23/2003	120 through 121	7/22/2003
122	1/23/2003	122	1/23/2003
127 through 132	1/23/2003	127 through 132	7/22/2003
251	1/23/2003	251	1/23/2003
252	1/23/2003	252	7/22/2003

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i. Prototype Aircraft Produced by an Amateur-Built Aircraft Kit Manufacturer. When persons produce prototype aircraft to be used to prove their design for amateur-built purposes, even though the design is intended to be sold as plans and/or kits, such aircraft are considered to be produced as a furtherance of a business.

(1) These prototype aircraft are not produced by persons “solely for their own education or recreation,” and therefore cannot be certificated as amateur-built aircraft under § 21.191(g). An application to be certificated as amateur-built cannot be accepted for such aircraft, but the aircraft could qualify for the purpose of R&D under § 21.191(a). FAA inspectors may issue experimental certificates for the purpose of R&D as long as the applicant has a bona fide program of R&D.

(2) Following termination of an R&D program, such prototype aircraft may be eligible for an experimental certificate for the purpose(s) of exhibition and/or air racing with appropriate operating limitations issued for such purpose(s).

(3) Kit manufacturers also may be eligible to receive an experimental certificate (§ 21.191(f)) for the purpose of conducting market surveys, sales demonstrations, and customer crew training as provided in § 21.195(a). The airworthiness certificate may be issued ONLY after the applicant has satisfied the requirements of § 21.195(d). The following operating limitations will be added when issuing airworthiness certificates under § 21.191(f):

(a) Condition inspections must be performed in accordance with appendix D to part 43 at least every 90 days or 100 flight hours, whichever comes first. The inspections must be performed by an FAA-certificated mechanic with appropriate ratings as defined in § 43.3.

(b) Familiarization flights must be conducted only over sparsely populated areas. If aerobatics are involved, the applicant must inform the local FAA office and additional limitations may be imposed as necessary.

NOTE 1: “Customer crew training” means pilot familiarization with that aircraft rather than training the customer to become a pilot. The manufacturer will only be familiarizing an already qualified pilot with the novel characteristics of the aircraft, not training the customer to obtain a pilot’s certificate.

NOTE 2: This should not be construed to enlarge the scope of § 21.191(f) except as specifically provided. Amateur builders are not “manufacturers” for the purposes of §§ 21.191(f) and 21.195(a), and cannot obtain Form 8130-7 under § 21.191(f). In addition, a person who distributes kits or plans manufactured by another company would not qualify for Form 8130-7 under §§ 21.191(f) and 21.195(a).

128. CERTIFICATION PROCEDURES. The procedures in this chapter provide guidance material associated with airworthiness certification and the issuance of Form 8130-7.

- * **a. General.** The FAA airworthiness certification process consists of a general airworthiness inspection of the aircraft. It is accomplished after the aircraft is completed and prior to the issuance of an airworthiness certificate. During this inspection, the FAA may not request extensive disassembly of the aircraft if the builder can provide documented evidence of in-process inspections. These in-process inspections should be conducted by knowledgeable persons, for example, EAA technical counselors and certificated mechanics. The records should indicate what was inspected, by whom, and the date of the inspection. In addition, builders should document construction phases using photographs taken at appropriate times prior to covering or finishing. The photographs should clearly show the methods of construction and quality of workmanship. Such photographic records should be included with the builder's log or other construction records. The only time extensive disassembly should be requested is when there is a question of safety that would endanger the general public. When an aircraft fabricated from a kit is identified as meeting the major portion rule by the FAA, the FAA will review the applicant's documentation supplied with the kit to verify it agrees with the identification and description given in the FAA listing of eligible amateur-built kits. Deviations from the FAA-identified kit configuration will require the inspector to make an independent determination that the applicant fabricated and assembled the major portion of the aircraft. *

b. Record Inspection and Document Review. The FAA representative must—

- (1) Obtain from the applicant a properly executed Form 8130-6 and any other documents required for the certification.
- (2) Obtain from the applicant a program letter identifying the aircraft, the purpose of the certificate, the area over which the operations are to be conducted, and the duration of the program.
- (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 a denial letter exists for the particular aircraft. This may assist the inspector in determining aircraft eligibility.
- (5) Review the aircraft records to determine whether any required maintenance, inspections, etc., have been accomplished. Records must be complete.
- (6) Review the applicant's weight and balance data for accuracy and currency for the aircraft submitted.
- (7) Ensure there is a signed and dated statement from the owner in the aircraft records that the aircraft has had an inspection performed in accordance with appendix D to part 43, or other approved programs, and was found to be in a condition for safe operation. This statement will support the owner's inspection and airworthiness statement on block III of the Application for Airworthiness Certificate. The inspection described above will help reduce errors made during construction of the aircraft. (Appendix 1 of AC 90-89, as revised, may be used.)

NOTE: There is NO requirement for airframe and powerplant mechanics to sign off on amateur-built airworthiness inspections. The aircraft builder's signature on Form 8130-6, block III, attests to the airworthiness of the amateur-built aircraft.

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

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

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

(3) The aircraft nationality and registration marks are in accordance with part 45, subpart C.

(4) The flight control system, engine(s), propeller(s), pitot static system, and associated instruments operate properly.

(5) The cockpit instruments are appropriately marked, and needed placards are installed and placed for easy reference.

* (6) System controls (for example, fuel selector(s) and electrical switches/breakers) are appropriately placed, clearly marked, provide easy access and operation, and function as intended by the builder/owner. *

(7) An ELT is installed, if required (§ 91.207).

(8) All explosive devices used in ballistic parachutes are clearly marked and identified.

d. Certificate Issuance. Upon satisfactory completion of the airworthiness inspection and documentation review, the FAA will issue the special airworthiness certificate and the operating limitations for that aircraft. The operating limitations will be attached to Form 8130-7. The FAA must review the operating limitations with the applicant to ensure a clear understanding of the limitations. The ASI may elect to issue amateur-built airworthiness certificates on a one-time basis for determining compliance with § 91.319(b) and continued operation under § 21.191(g). When the airworthiness certificate is to be issued for an unlimited duration, the operating limitations may be prescribed in two phases in the same document as follows:

(1) For the phase I limitations, the FAA must prescribe all operating limitations appropriate for the applicant to demonstrate compliance with § 91.319(b) in the assigned flight test area. This includes a limitation requiring the owner/operator to endorse the aircraft logbook with a statement certifying that the prescribed flight hours have been completed and the aircraft has been shown to comply with § 91.319(b). The owner/operator may then operate in accordance with phase II.

(2) For the phase II limitations, the FAA must prescribe operating limitations for the operation of an amateur-built aircraft for an unlimited duration, as appropriate.

(3) Under § 91.319(e), the FAA may prescribe any additional limitations in phase I or II deemed necessary in the interest of safety.

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

(a) Make an aircraft logbook entry.

(b) Issue Form 8130-7.

(c) Complete sections V and VIII of Form 8130-6, 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.

(5) 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 Form 8130-6 and forward to AFS-750 to be made part of the aircraft record.

129. EVALUATION OF AMATEUR-BUILT AIRCRAFT/KITS.

a. The purpose of Form 8000-38 is to record the amount of fabrication and assembly accomplished by the kit manufacturer, and the fabrication and assembly necessary for the amateur builder to complete the aircraft.

b. Form 8000-38 may be used when—

(1) Determining whether an aircraft built from a kit would meet the major portion fabrication and assembly requirement of § 21.191(g).

(2) Settling any question with respect to the major portion requirement that may arise in the certification of an amateur-built aircraft in accordance with § 21.191(g).

NOTE: The use of this checklist is not necessary for an aircraft built from a kit previously found eligible for amateur-built certification or when the builder's records, data, and notarized statement provide ample proof that the builder fabricated and assembled the major portion of the aircraft.

(3) The aircraft was built from prefabricated major components that are readily available from aircraft parts suppliers.

(4) The aircraft was built using salvaged or used sections from type-certificated standard category aircraft.

(3) Following any major change, an amateur-built aircraft must be assigned to a flight test area for a minimum of 5 hours.

d. Operation Outside Flight Test Area. The procedures outlined under section 6, paragraph 126 of this order are applicable for amateur-built aircraft. During operation outside the flight test area, the following placard must be displayed in the aircraft in full view of all occupants: “NOTE: PASSENGER WARNING—THIS AIRCRAFT IS AMATEUR-BUILT AND DOES NOT COMPLY WITH FEDERAL SAFETY REGULATIONS FOR STANDARD AIRCRAFT.”

* **NOTE: This placard is not necessary for single-place aircraft.** *

134. ISSUANCE OF EXPERIMENTAL AMATEUR-BUILT OPERATING LIMITATIONS.

a. Operating limitations must be designed to fit the specific situation encountered. The ASI may impose any additional limitations deemed necessary in the interest of safety. The ASI and/or designee must review each imposed operating limitation with the applicant to ensure that the operating limitations are understood by the applicant.

* **b.** The following operating limitations shall be prescribed to experimental amateur-built aircraft: *

(1) No person may operate this aircraft for other than the purpose of meeting the requirements of § 91.319(b) during phase I flight testing, and for recreation and education after meeting these requirements as stated in the program letter (required by § 21.193) for this aircraft. In addition, this aircraft must be operated in accordance with applicable air traffic and general operating rules of part 91 and all additional limitations herein prescribed under the provisions of § 91.319(e). These operating limitations are a part of Form 8130-7, and are to be carried in the aircraft at all times and be available to the pilot in command of the aircraft.

(2) During phase I flight testing to meet the requirements of § 91.319(b), all flights must be conducted within the geographical area described as follows:

(a) The area must be described by radius, coordinates, and/or landmarks.

(b) The designated area must be over open water or sparsely populated areas having light air traffic.

(c) The size of the area must be that required to safely conduct anticipated maneuvers and tests, as appropriate.

NOTE: In the case of an airport surrounded by a densely populated area, refer to section 6, paragraph 125b(1) of this order.

(3) This aircraft must be operated for at least ____ hours in the assigned geographic area.

NOTE: The FAA requires a minimum of 25 hours of flight testing for an aircraft with a type-certificated engine and propeller combination installed. A minimum of 40 hours is required when a non-type-certificated engine, propeller, or engine/propeller combination is installed. ASIs may assign longer test hours when it is necessary to determine compliance with § 91.319(b).

(4) All test flights, at a minimum, must be conducted under VFR, day only. Guidance concerning the scope and detail of test flights can be found in AC 90-89. Following satisfactory completion of the required number of flight hours in the flight test area, the pilot must certify in the records that the aircraft has been shown to comply with § 91.319(b). Compliance with § 91.319(b) must be recorded in the aircraft records with the following, or a similarly worded, statement: **“I certify that the prescribed flight test hours have been completed and the aircraft is controllable throughout its normal range of speeds and throughout all maneuvers to be executed, has no hazardous operating characteristics or design features, and is safe for operation. The following aircraft operating data has been demonstrated during the flight testing: speeds V_{so} _____, V_x _____, and V_y _____, and the weight _____ and CG location _____ at which they were obtained.”**

(5) Except for takeoffs and landings, this aircraft may not be operated over densely populated areas or in congested airways.

NOTE: This limitation is applicable for phase 1 and 2 and should be issued in accordance with paragraphs 125b(1) and (2) of this order.

(6) This aircraft is prohibited from operating in congested airways or over densely populated areas unless directed by air traffic control, or unless sufficient altitude is maintained to effect a safe emergency landing in the event of a power unit failure, without hazard to persons or property on the ground.

NOTE: This limitation is applicable to the aircraft after it has satisfactorily completed all requirements for phase I flight testing, has the appropriate endorsement in the aircraft logbook, and is operating in phase II.

(7) This aircraft is to be operated under VFR, day only.

(8) After completion of phase I flight testing, unless appropriately equipped for night and/or instrument flight in accordance with § 91.205, this aircraft is to be operated under VFR, day only.

(9) Aircraft instruments and equipment installed and used under § 91.205 must be inspected and maintained in accordance with the requirements of part 91. Any maintenance or inspection of this equipment must be recorded in the aircraft maintenance records.

(10) During the flight-testing phase, no person may be carried in this aircraft during flight unless that person is essential to the purpose of the flight.

(11) No person may operate this aircraft for carrying persons or property for compensation or hire.

(12) The pilot in command of this aircraft must advise each passenger of the experimental nature of this aircraft, and explain that it does not meet the certification requirements of a standard certificated aircraft.

* (13) This aircraft must contain the placards, markings, etc., as required by § 91.9. In addition, the placards and markings must be inspected for legibility and clarity, and the associated systems inspected for easy access and operation, to ensure they function as intended by the builder/owner during each condition inspection. *

(14) This aircraft must display the word “EXPERIMENTAL” in accordance with § 45.23(b).

(15) This aircraft is prohibited from aerobatic flight, that is, an intentional maneuver involving an abrupt change in the aircraft’s attitude, an abnormal attitude, or abnormal acceleration not necessary for normal flight.

NOTE: If the builder states that the aircraft is capable of aerobatic flight, limitation 16 will be used in lieu of limitation 15.

(16) This aircraft may conduct aerobatic flight in accordance with the provisions of § 91.303. Aerobatics must not be attempted until sufficient flight experience has been gained to establish that the aircraft is satisfactorily controllable and in compliance with § 91.319(b). The aircraft may only conduct those aerobatic flight maneuvers that have been satisfactorily accomplished during flight testing and recorded in the aircraft maintenance records by use of the following, or a similarly worded, statement: **“I certify that the following aerobatic maneuvers have been test flown and that the aircraft is controllable throughout the maneuvers’ normal range of speeds, and is safe for operation. The flight-tested aerobatic maneuvers are _____, _____, _____, and _____.”**

NOTE: Aerobatic flights may be permitted in the assigned test area. The applicant should be advised that aerobatics or violent maneuvers should not be attempted until sufficient flight experience has been gained to establish that the aircraft is satisfactorily controllable. These operating limitations may be modified to include only those aerobatics/maneuvers that have been satisfactorily accomplished and recorded in the aircraft records during the flight test period. These aerobatic maneuvers should be permitted upon leaving the assigned test area. Appropriate limitations identifying the aerobatics/maneuvers and conditions under which they may be performed should be prescribed. The FAA may witness aerobatic maneuvers if deemed necessary.

(17) The pilot in command of this aircraft must hold an appropriate category/class rating. If required, the pilot in command also must hold a type rating in accordance with part 61, or a letter of authorization issued by an FAA Flight Standards Operations Inspector.

NOTE: This limitation applies to any turbojet/turbofan-powered aircraft, any aircraft with a maximum takeoff weight exceeding 12,500 pounds, and any other aircraft when deemed necessary. The Flight Standards inspectors should refer to FAA Order 8700.1, General Aviation Inspector's Handbook, for further guidance.

(18) The pilot in command of this aircraft must hold a pilot certificate or an authorized instructor's logbook endorsement. The pilot in command also must meet the requirements of § 61.31(e), (f), (g), (h), (i), and (j), as appropriate.

NOTE: This operating limitation applies to most amateur-built aircraft as a standard operating limitation (reference § 61.31(k)).

(19) After incorporating a major change as described in § 21.93, the aircraft owner is required to reestablish compliance with § 91.319(b) **and notify the geographically responsible FSDO of the location of the proposed test area. The aircraft owner must obtain concurrence from the FSDO as to the suitability of the proposed test area.** If the major change includes installing a different make and model of engine or propeller, the aircraft owner must fill out a revised Form 8130-6 to update the aircraft's file in the FAA Aircraft Registry. All operations must be conducted under day VFR conditions in a sparsely populated area. The aircraft must remain in flight test for a minimum of 5 hours or for the time the FSDO assigns. Persons nonessential to the flight must not be carried. The aircraft owner must make a detailed logbook entry describing the change before the test flight. Following satisfactory completion of the required number of flight hours in the flight test area, the pilot must certify in the records that the aircraft has been shown to comply with § 91.319(b). Compliance with § 91.319(b) must be recorded in the aircraft records with the following, or a similarly worded, statement: **"I certify that the prescribed flight test hours have been completed and the aircraft is controllable throughout its normal range of speeds and throughout all maneuvers to be executed, has no hazardous characteristics or design features, and is safe for operation. The following aircraft operating data has been demonstrated during the flight testing: speeds V_{so} _____, V_x _____, and V_y _____, and the weight _____, and CG location _____ at which they were obtained."**

(20) This aircraft must not be used for glider towing, banner towing, or intentional parachute jumping.

(21) This aircraft does not meet the requirements of the applicable, comprehensive, and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation. The owner/operator of this aircraft must obtain written permission from another CAA prior to operating this aircraft in or over that country. That written permission must be carried aboard the aircraft together with the U.S. airworthiness certificate and, upon request, be made available to an ASI or the CAA in the country of operation.

(22) No person must operate this aircraft unless within the preceding 12 calendar months it has had a condition inspection performed in accordance with the scope and detail of appendix D to part 43, or other FAA-approved programs, and was found to be in a condition for safe operation. As part of the condition inspection, cockpit instruments must be appropriately marked and needed placards installed in accordance with § 91.9. In addition, system-essential controls must be in good condition, securely mounted, clearly marked, and provide for ease of operation. This inspection will be recorded in the aircraft maintenance records.

(23) Condition inspections must be recorded in the aircraft maintenance records showing the following, or a similarly worded, statement: **“I certify that this aircraft has been inspected on [insert date] in accordance with the scope and detail of appendix D to part 43, and was found to be in a condition for safe operation.”** The entry will include the aircraft’s total time-in-service, and the name, signature, certificate number, and type of certificate held by the person performing the inspection.

NOTE: Limitations 24 and 25 will be issued in lieu of limitations 22 and 23 for turbine-powered amateur-built aircraft.

(24) This aircraft must not be operated unless it is inspected and maintained in accordance with an inspection program selected, established, identified, and used as set forth in § 91.409(e), (f), (g), and (h). This inspection must be recorded in the aircraft maintenance records.

(25) Inspections must be recorded in the aircraft maintenance records showing the following, or a similarly worded, statement: “I certify that this aircraft has been inspected on [insert date] in accordance with the scope and detail of the [identify program, title] FSDO-approved program dated _____, and found to be in a condition for safe operation.” The entry will include the aircraft’s total time-in-service (cycles if appropriate), and the name, signature, certificate number, and type of certificate held by the person performing the inspection.

(26) An experimental aircraft builder certificated as a repairman for this aircraft under § 65.104 or an appropriately rated FAA-certificated mechanic may perform the condition inspection required by these operating limitations.

(27) Application must be made to the geographically responsible FSDO or MIDO for any revision to these operating limitations.

(28) The pilot in command of this aircraft must notify air traffic control of the experimental nature of this aircraft when operating into or out of airports with an operational control tower. When filing instrument flight rules (IFR), the experimental nature of this aircraft must be listed in the remarks section of the flight plan.

135. RESERVED.

CHAPTER 8. PROCESSING FORMS, REPORTS, AND CERTIFICATION FILES

236. GENERAL.

a. This chapter describes the requirements for completion and processing of the various forms and certificates used for airworthiness certification. Information entered on these documents should be typewritten when possible. The use of pencil, erasures, strikeouts, etc., on airworthiness forms other than applications and Form 8050-72 is not permitted. Application forms may be corrected by the applicant or the FAA, provided the person making the changes initials beside the area of correction.

b. The signature of the ASI or designee on any FAA certificate or form must be made in permanent ink on the original and required copies. When the reverse side of the certificate is used, the statement "See Reverse Side" must be typed on the face of the certificate. Below the last line of information on a certificate, type the word "END" in the center of the page.

237. APPLICATION FOR AIRWORTHINESS CERTIFICATE. Form 8130-6 is required whenever an airworthiness certificate is requested, including any request for amendment or modification to a current airworthiness certificate, including operating limitations. AC 21-12 also provides instructions for completion of Form 8130-6.

a. **Instructions for Completing Form 8130-6.** The applicant or authorized agent must complete sections I through IV, as applicable, for the type of airworthiness certificate being requested. If the application is for a special flight permit only, sections II and VI, or II and VII, as applicable, must be filled out. The following instructions and explanations apply for entries that are not clearly self-explanatory:

(1) Section I. Aircraft Description. The FAA must verify the applicant's entries from the aircraft registration certificate, aircraft ID plate, TCDS, and/or aircraft specification sheet.

NOTE: This section is not completed when an application is being made for a special flight permit.

(a) Registration Mark. Enter the U.S. nationality designator (the letter "N") followed by the registration marks as shown on the aircraft registration certificate.

(b) Aircraft Builder's Name (Make). Enter the name of the builder or manufacturer as it appears on the aircraft ID plate in accordance with § 45.13(a)(1).

1 For aircraft built from spare and/or surplus parts, the aircraft make is that of the builder, not the manufacturer who holds the TC. When two or more persons are involved, enter only the name of the individual that is listed first on the aircraft ID plate.

2 For aircraft built from spare and/or surplus parts, the builder's name is that of the person who assembled the aircraft, not that of the TC owner/manufacturer who builds the same model of aircraft.

3 For surplus military aircraft (not assembled from spare and/or surplus parts), the builder's name must be as listed on the TCDS.

(c) Aircraft Model Designation. Enter the model designation as shown on the aircraft ID plate in accordance with § 45.13(a)(2). Trade names must not be used.

1 If the application is for a surplus military aircraft, enter the civil model designation and put the military model designation in parentheses. If the TC was issued under § 21.27, the military model designation becomes the civil model designation.

2 For aircraft built from spare and/or surplus parts, the model designation is that of the aircraft type design to which the applicant shows conformity.

3 For surplus military aircraft type-certificated under § 21.25(a)(2) in the restricted category, only the military designation will be used.

* *4* For amateur-built aircraft, the model may be any arbitrary designation as selected by the builder. If the aircraft was purchased as a kit, the model designation assigned by the kit manufacturer should be used. *

(d) Year of Manufacture. Enter the year of manufacture if shown on the aircraft ID plate or as reflected in the aircraft's records.

1 For aircraft eligible for standard airworthiness certificates, the year of manufacture is the date (entered by the manufacturer) in the inspection records that reflects when the aircraft was completed and met the FAA-approved type design data.

2 For aircraft other than the above, the year of manufacture is the date entered by the builder in the inspection records or logbook establishing that the aircraft is airworthy and eligible for the certificate requested.

(e) Aircraft Serial Number. Enter the serial number as shown on the aircraft ID plate in accordance with § 45.13(a)(3).

1 For surplus military aircraft, enter the manufacturer's civil serial number. The military serial number must be placed in parentheses following the civil serial number. If no civil serial number exists, enter the military number.

2 For aircraft built from spare and/or surplus parts, enter the serial number assigned by the builder. That number should not be confused with the serial number assigned by an original manufacturer who builds the same type of aircraft under a production approval. It is suggested that a letter prefix or suffix, such as the builder's name or initials, be used with the serial number to provide for positive identification.

3 For amateur-built aircraft, fabricated and assembled from plans or the builder's own design, the serial number may be any arbitrary number assigned by the builder. For any aircraft fabricated and assembled from a kit, the aircraft should be identified by the serial number assigned by the kit manufacturer or supplier.