



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

# Advisory Circular

---

**Subject:** Identification and Registration Marking

**Date:** 10/01/15

**AC No:** 45-2E

**Initiated By:** AIR-100

---

## 1 PURPOSE.

- 1.1 This advisory circular (AC) provides information about Title 14, Code of Federal Regulations (14 CFR), part 45, Identification and Registration Marking. This AC is not mandatory and does not constitute a regulation. This AC describes an acceptable means, but not the only means, to comply with the requirements for identifying aircraft and aircraft engines with identification plates, identification marking requirements for propellers, and marking aircraft with nationality and registration marks. However, if you use the means described in the AC, you must follow it in all important respects.
- 1.2 A list of other related sections of 14 CFR and related publications, and definitions pertinent to this AC are located in the appendixes to this AC.

## 2 AUDIENCE.

- 2.1 This AC affects—
1. Builders of civil aircraft, aircraft engines, and propellers. (For the purpose of this AC, the term “aircraft” includes powered parachutes and balloons.)
  2. All production approval holders (PAH), including persons who export their products to the United States under the provisions of an agreement between the United States and another country or jurisdiction.
  3. Repair stations operating under 14 CFR part 145 and air carriers operating N-numbered aircraft (see appendix C to this AC for the definition of “N-number”).
- 2.2 The discussion of nationality and registration marks applies to owners and operators of civil aircraft, including aircraft operated as public aircraft.
- 2.3 The discussion of marking requirements applies to all PAHs and manufacturers producing under type certificate (TC) only.

**3 EFFECTIVE DATE.**

This AC is effective 10/01/2015.

**4 EXPLANATION OF CHANGES.**

This revision—

1. Excludes fixed-pitch wooden propellers from the § 45.11(c) fireproof marking requirement.
2. Clarifies that a fireproof identification plate is one acceptable method for fireproof marking propellers, propeller blades, or propeller hubs, but is not a required method.
3. Incorporates the current AC formatting policy.

**5 CANCELLATION.**

This AC cancels, as of its effective date, AC 45-2D.

**6 IDENTIFICATION OF AIRCRAFT, AIRCRAFT ENGINES, AND PROPELLERS.****6.1 Information to Be Included as Identification.**

Under § 45.11, aircraft propellers, propeller blades, and propeller hubs must display certain information using an approved fireproof method, such as a plate, stamping, engraving, or etching. Fixed-pitch wooden propellers must also display the following information, but are not required to use a fireproof method. Section 45.13 describes the information a manufacturer must display:

1. The builder's name, which may be the name of an individual, firm, co-partnership, corporation, company, association, or joint-stock association.
2. Model designation.
3. Builder's serial number.
4. TC number, if any.
5. Production certificate (PC) number, if any.
6. For aircraft engines, the established rating.
7. For aircraft engines, the date of manufacture, that is, month (two digits)/year (four digits).
8. For aircraft engines, the engine's approved 14 CFR part 34 designation. (Part 34 discusses fuel venting and exhaust emission requirements for turbine engine-powered airplanes.) Approved designations include "comply," "exempt," and "non-U.S." for engines specified in part 34, manufactured on or after January 1, 1984.

9. Section 45.13(a) requires an identification plate to include, among other things, any information the FAA finds appropriate. For any product manufactured under a design data licensing agreement between an FAA TC and PC holder, the manufacturer should include the following information on the product's identification plate (See § 45.13(a)(8)):

*Manufactured by (insert PC holder's name) under a licensing agreement program with (insert TC holder's name)*

**Note:** Design approval holders should include identification plates as part of each product's approved design data. This data usually takes the form of an engineering drawing describing such factors as material, size, required information entries, and mounting location. If requested by the manufacturer, the FAA may permit the inclusion of a corporate logo or registered trademark on an identification plate, after review and approval by the FAA.

## 6.2 **Type and Placement of Identification Plate.**

The identification is required to be located on a fireproof plate, placed on a surface where it is not likely to be defaced or removed during normal service. The identification cannot be placed on an inspection plate, removable fairing, or access cover. Refer to Table 1 for additional identification plate location information.

**Table 1. Identification Plate Location**

<b>Aircraft or Equipment</b>	<b>Location</b>	<b>Comments</b>
Aircraft (to include light-sport aircraft), except for balloons	<p>(1) Outside the aircraft so that it is legible from the ground, either just behind and next to the rear-most entrance door or on the side or bottom of the fuselage near the tail surface.</p> <p>(2) The following aircraft are excluded from the requirement to display identification information on the aircraft exterior: Aircraft operated under part 121; commuter aircraft; gliders that operate under a Federal Aviation Administration (FAA) -approved continuous airworthiness maintenance program; and all aircraft manufactured for export.</p> <p>(3) If the aircraft was manufactured before March 7, 1988, some other interior or exterior location near an entrance, so that it is legible from the ground, either just behind and next to the rear-most entrance door or on the underside of the fuselage near the tail surface. The model and serial numbers also are required to be displayed on the fuselage exterior.</p>	The FAA accepts locations where you have to open a door or remove items, such as baggage or carry-on items, to make the plate visible. The plate may be covered or enclosed if it can be uncovered without using tools or removing aircraft components.
Powered parachute and weight-shift-control aircraft	On the fuselage exterior so that it is legible from the ground.	
Balloons	On the balloon envelope and where it is legible to the operator when the balloon is inflated.	Mark the basket and heater assembly with the manufacturer's name, part number (or equivalent), and serial number (or equivalent).
Engines	At an accessible place where it will not likely be lost or destroyed in an accident.	
Propellers, propeller blades, or propeller hubs	On a non-critical surface where it will not likely be lost or destroyed in an accident. If possible, where it is visible without disassembly of the propeller.	

### 6.3 **Manufacturer-Installed Identification Plate.**

- 6.3.1 The FAA has previously approved factory-installed identification plates on the fuselage exterior near the tail surface on some models. These models do not need an additional plate.
- 6.3.2 The manufacturer-installed identification plate on some models may not follow the guidance in this AC; however, the FAA may have previously determined the identification plate to be acceptable. In all cases, it is important that the manufacturer comply with the guidance in § 45.13, Identification data, that requires FAA approval for the removal of an identification plate, except as required during maintenance operations. If those models do not follow the guidance in this AC, do not remove the identification plate without written approval from the FAA.

### 6.4 **Identification Plate Requirements for Aircraft Built from Spare or Surplus Parts.**

Information to be displayed as identification is described in paragraph 6.1. In addition, the following guidelines should be followed:

- 6.4.1 You should use the builder's name as your name (the person who assembled the aircraft), not the name of the manufacturer who builds the same model of aircraft.
- 6.4.2 You may assign any serial number if it is clear that the manufacturer who builds the same model of aircraft did not assign an identical number. You should add a letter prefix or suffix, such as your name or initials, to the serial number to provide positive identification.

### 6.5 **Removing an Identification Plate During Maintenance.**

If necessary, you may remove an identification plate for performing maintenance in accordance with methods, techniques, and practices acceptable to the FAA. However, once you complete the maintenance, you are required to reinstall the identification plate on the same product—

- At the same location, using the original means of attachment, or
- In another location and/or by using another means of attachment in accordance with FAA-approved technical data, including Instructions for Continued Airworthiness.

### 6.6 **Acquiring a New Identification Plate From the Manufacturer.**

- 6.6.1 The owner or owner's authorized representative is required to obtain a new identification plate from the manufacturer when an identification plate is lost, stolen, or damaged during maintenance operations. The owner or owner's authorized representative should contact the appropriate Flight Standards District Office (FSDO) or Manufacturing Inspection District Office (MIDO) to get FAA assistance and approval for obtaining the replacement.

- 6.6.2 You do not need to get FAA approval as described in paragraph 6.6.1 when—
- A new or additional identification plate is required as a result of rebuilding or alteration action under 14 CFR part 43, Maintenance, Preventive Maintenance, Rebuilding, and Alteration; and
  - Instructed by specific FAA-approved maintenance procedures contained in manufacturers' manuals, letters, or bulletins.

**6.7 Changing Identification Plate Information.**

You may change the identification data required by § 45.13(a) only when such changes comply with specific FAA-approved or -accepted data (for example, design data, maintenance procedures, and rebuilding or alteration procedures contained in manufacturers' manuals, letters, bulletins).

**Note:** When an aircraft has been modified to conform to another model of the same make, a new identification plate is required to be attached as close as physically possible to the original identification plate. The original identification plate is not to be removed or altered in any manner.

**6.8 Acquiring an Identification Plate from Somewhere Other Than the Manufacturer.**

- 6.8.1 You are required to have the FAA's approval to remove, change information on, or install an identification plate for other than maintenance.
- 6.8.2 You are prohibited from using an identification plate from a scrapped or destroyed aircraft or aircraft engine.
- 6.8.3 You are required to buy identification plates from an approved source after going through the process described in paragraph 6.6.
- 6.8.4 If you install an identification plate without the FAA's approval, you are in violation of § 45.13(b), (c), and/or (e).

**7 NATIONALITY AND REGISTRATION MARKING REQUIREMENTS FOR AIRCRAFT (THE N-NUMBER).**

The FAA Civil Aviation Registry issues the aircraft N-number. To get an available N-number, you may contact the Civil Aviation Registry at (405) 954-4206 or use the online services at [http://www.faa.gov/licenses\\_certificates/aircraft\\_certification/aircraft\\_registry/n\\_numbers/](http://www.faa.gov/licenses_certificates/aircraft_certification/aircraft_registry/n_numbers/).

**7.1 Placing Other Text or Graphics between the Two Parts of an N-Number.**

- 7.1.1 You may not place any text or graphic between any of the letters or numbers in the N-number unless the aircraft is an antique aircraft.

7.1.2 You may insert the symbol (“C,” standard; “R,” restricted; “L,” limited; or “X,” experimental or provisionally certificated) appropriate to the airworthiness certificate of the three types of aircraft listed below. The symbol may be placed between the nationality designation and the registration number, for example, *NX1234*.

1. A U.S.-registered aircraft built at least 30 years ago,
2. A U.S.-registered aircraft with the same external configuration as an aircraft built at least 30 years ago that is operating under a special airworthiness certificate as an exhibition aircraft, or
3. An amateur-built aircraft with the same external configuration as an aircraft built at least 30 years ago.

## 7.2 **Placing Text or Graphics Elsewhere on the Aircraft.**

You may put text or graphics on areas of the aircraft other than those reserved for the N-number. Ask a local FAA inspector to ensure that the text or graphic does not impede or degrade the legibility of the N-number.

## 7.3 **N-Number Legibility.**

The N-number is required to be legible and written in capital Roman style letters without any ornamentation. You may use shading or a border only if it makes the number more legible. Use the following guidelines:

7.3.1 Make sure the color contrasts sufficiently with the color of the fuselage to make it easy to read. Be especially careful when the background is highly decorated, as in checkering. Consider applying the requirements of 14 CFR 23.811(c)(7)(ii) or 14 CFR 25.811(f)(2), Emergency exit marking, as a test of whether the color of the N-number contrasts sufficiently with the background.

7.3.2 Check the reflectance of external markings. Using electro-optical instruments or photometer card sets is an acceptable means of verifying reflectance, but these instruments are not required to establish reflectance. The FAA considers a 12-inch number legible if you can read it from 500 feet away, in a horizontal line, and perpendicular to the side of the aircraft during daylight hours, without using an optical aid such as binoculars.

7.3.3 If you question whether an N-number is legible, because of either color or reflectance, check with your local FAA inspector.

## 7.4 **Applying the N-Number on Aircraft.**

7.4.1 You are required to apply the N-number in a permanent way. Use paint that needs thinners or strippers to remove it, or use decals. Do not use tape that can be peeled off and do not use water-soluble paint, such as poster paint.

7.4.2 You may use removable materials if the aircraft—

1. Has a temporary nationality designation and registration number.
2. Is intended for immediate delivery to a non-U.S. purchaser.
3. Will be flown into an Air Defense Identification Zone or a Distant Early Warning Identification Zone and does not have permanent markings.

7.5 **Displaying the N-Number on Aircraft.**

Except as provided in Table 3, Exceptions to Displaying the N-Number, mark aircraft in accordance with Table 2 below.

**Table 2. Displaying the N-Number on an Aircraft**

<b>Aircraft Type or Category</b>	<b>Minimum Height</b>	<b>Location</b>	<b>Orientation</b>	<b>Comments</b>
Airships	3 inches	(1) On the upper surface of the right horizontal stabilizer and on the under surface of the left horizontal stabilizer, with the top of the marks toward the leading edge of each stabilizer, and (2) On each side of the bottom half of the vertical stabilizer.	Horizontal	
Antique aircraft	2 inches	(1) On both sides of the fuselage between the trailing edge of the wing and the leading edge of the horizontal stabilizer, or (2) On the vertical tail surface, either over or under the horizontal stabilizer.	Horizontal or Vertical	You may display the category symbol between the nationality designation and the registration number. You may not display any other mark beginning with the nationality designation elsewhere on the aircraft. Antique aircraft registered as N-numbered aircraft may display markings as they were applied at the time of initial certification.



**Table 2. Displaying the N-Number on an Aircraft**

<b>Aircraft Type or Category</b>	<b>Minimum Height</b>	<b>Location</b>	<b>Orientation</b>	<b>Comments</b>
Experimental aircraft—exhibition, amateur-built, and light-sport aircraft with a maximum cruising speed of 180 knots or less	3 inches (with exceptions as shown in Table 3)	(1) On both sides of the fuselage between the trailing edge of the wing and the leading edge of the horizontal stabilizer, or (2) On both sides of the vertical tail surface.	Horizontal (with exceptions as shown in Table 3)	No markings are required on certain exhibition aircraft, if the registration marks would be inconsistent with exhibition of that aircraft. Operations without markings are limited to those operations and procedures listed in § 45.22, Exhibition, antique, and other aircraft: Special rules. Each flight is required to receive prior approval. See details in Table 3.
Fixed-wing aircraft	12 inches (with exceptions as shown in Table 3)	(1) On both surfaces of a single vertical tail or on the outer surfaces of a multi-vertical tail, or (2) On the fuselage surfaces, on both sides of the fuselage between the trailing edge of the wing and the leading edge of the horizontal stabilizer. If engine pods or other equipment are located in this area and are an integral part of the fuselage side surfaces, you may place the marks on those pods or equipment.	Horizontal	
Gliders	3 inches	(1) On both surfaces of a single vertical tail or on the outer surfaces of a multi-vertical tail, or (2) On the fuselage surfaces, on both sides of the fuselage between the trailing edge of the wing and the leading edge of the horizontal stabilizer.	Horizontal or Vertical  Horizontal	

**Table 2. Displaying the N-Number on an Aircraft**

<b>Aircraft Type or Category</b>	<b>Minimum Height</b>	<b>Location</b>	<b>Orientation</b>	<b>Comments</b>
Non-spherical balloons	3 inches	On each side near its maximum cross-section, and immediately above either the rigging band or the points of attachment of the basket or cabin suspension cables.	Horizontal	
Spherical balloons, powered parachutes, and weight-shift-control aircraft	3 inches	In two places diametrically opposite on any fuselage structural member and near the maximum horizontal circumference.	Horizontal	
Rotorcraft	12 inches (with exceptions as shown in Table 3)	<p>Both external side surfaces: Engine nacelles, roof structure, and fixed surfaces visible from 500 feet away, in a horizontal line. Also, perpendicular to the side of the aircraft during daylight hours, without using an optical aid such as binoculars.</p> <p>Allowable locations include—</p> <p>(1) The cabin or fuselage, including the roof structure, and hinge or sliding doors, but not where the N-number will be covered by doors that can be opened in flight. The appropriate controls should be in place to prevent the loss of the required identification when the door panels are replaced.</p> <p>(2) Boom. Side surfaces.</p> <p>(3) Tail. Outboard surfaces of the vertical tail(s), if the rotor blade, guards, or other equipment do not obstruct the display.</p>	Horizontal	If none of the approved surfaces are large enough for 12-inch letters, make them as large as practicable and put them on the largest of the authorized surfaces.

### 7.6 N-Numbers as Part of the Type Design of an Aircraft.

N-numbers are not design requirements. The FAA does not approve them as part of the type design, although they may appear in type design drawings and data as points of reference. The N-number is required to comply with the requirements specified in part 45.

### 7.7 Exceptions to Displaying the N-Number.

There are exceptions to how and where you display your N-number. Table 3 below lists the circumstances and explains the exceptions.

**Table 3. Exceptions to Displaying the N-Number**

Circumstance	Exception
Displaying an N-number on an exhibition aircraft	<p>If displaying the N-number is inconsistent with the purpose of the exhibition (for example, during the taping of a motion picture or television production, or during an airshow), you may operate the aircraft without displaying the N-number.</p> <p>(1) You may operate unmarked exhibition aircraft only—</p> <ul style="list-style-type: none"> <li>(a) For practice and test flights necessary for exhibition,</li> <li>(b) At the exhibition,</li> <li>(c) Between exhibition locations, or</li> <li>(d) Between those locations and the base of operations of the aircraft.</li> </ul> <p>(2) For each flight in the United States, you are required to either—</p> <ul style="list-style-type: none"> <li>(a) File a flight plan under 14 CFR part 91, General Operating and Flight Rules, § 91.153 or § 91.169, or</li> <li>(b) Get prior approval from the FSDO if the flight is within the lateral boundaries of the surface areas of class B, class C, class D, or class E airspace designated for the takeoff airport; or within 4.4 nautical miles of that airport if it is within class G airspace.</li> </ul>
Displaying an N-number on a limited or restricted category aircraft or experimental or provisionally certificated aircraft	<p>Unless you've included the aircraft's category letter in the N-number between the nationality designation and the registration number (for example, <i>NR1234</i> for a restricted aircraft), the aircraft is required to display near each entrance to the cabin or cockpit the term "limited," "restricted," "experimental," or "provisional airworthiness," as appropriate. The term should be visible to anyone entering the aircraft and should be 2 to 6 inches high.</p>
Displaying an N-number on an aircraft with multiple airworthiness certificates	<p>You may use a removable category placard for the term "limited," "restricted," "experimental," and "provisional airworthiness," as appropriate. The term should be 2 to 6 inches high.</p>

**Table 3. Exceptions to Displaying the N-Number**

<b>Circumstance</b>	<b>Exception</b>
Displaying nationality and registration marks on an aircraft intended for export	<p>(1) If you manufactured an aircraft, are preparing that aircraft for export, and the aircraft is registered in the United States, you may mark the aircraft with the nationality and registration marks assigned by the country you will be delivering it to. You may operate the aircraft in the United States with that number to transport it to the purchaser or, for a limited time, for test or demonstration flights.</p> <p>(2) If the aircraft is already registered in the importing country, you may not display an N-number during operations in the United States. You are required to display the nationality and registration marks of the importing country and obtain a special flight authorization under § 91.715, Special flight authorizations for foreign civil aircraft, to operate the aircraft in the United States.</p> <p>(3) You may not display the marks of the United States and those of other countries at the same time. This could cause confusion as to the correct marks.</p>
Displaying a minimum-height N-number on a fixed-wing aircraft	On an aircraft displaying 2-inch marks before November 1, 1981, and on aircraft manufactured between November 2, 1981, and January 1, 1983, you may display those marks until the aircraft is repainted or the marks are repainted, restored, or changed. Once the aircraft is repainted or the marks are repainted, restored, or changed, the N-number is required to be 12 inches high.
Displaying a minimum-height N-number on a rotorcraft	On a rotorcraft manufactured and marked before December 31, 1983, you may display those marks until the rotorcraft is repainted or the marks are repainted, restored, or changed. Once the rotorcraft is repainted or the marks are repainted, restored, or changed, the N-number is required to be 12 inches high.
Displaying a minimum-height N-number on exhibition, amateur-built, or light-sport aircraft with a maximum cruising speed of 180 knots or less	<p>(1) If you display N-numbers on each side of the vertical tail surface, the minimum height for a newly painted mark is 3 inches, except for antique aircraft, or aircraft with the same external configuration as an aircraft built at least 30 years ago. Details are found in § 45.22(b)(1), Exhibition, antique, and other aircraft: Special rules.</p> <p>(2) If you display N-numbers vertically, follow the requirements of § 45.25(b)(1), Location of marks on fixed-wing aircraft.</p>
Displaying required marks on a surface not large enough to meet size requirements	<p>(1) If one of the surfaces authorized for displaying required marks is large enough to display marks meeting the size requirement, and the other authorized surface is not large enough, you are required to display full-size marks on the larger surface.</p> <p>(2) If neither authorized surface is large enough for full-size marks, you are required to display marks as large as practicable on the largest authorized surface.</p>
Displaying an N-number on an aircraft, but not as specified in this AC	You may ask the FAA for authority to display the number in some other way. Contact your local FSDO or MIDO for assistance.

8 **WHERE TO FIND THIS AC.**

8.1 You can find this AC at [http://www.faa.gov/regulations\\_policies/advisory\\_circulars/](http://www.faa.gov/regulations_policies/advisory_circulars/).

8.2 If you have any suggestions for improvements or changes, you may use the template provided at the end of this AC.



Susan J. M. Cabler  
Acting Manager, Design, Manufacturing, &  
Airworthiness Division  
Aircraft Certification Service

## Appendix A. Related Sections of 14 CFR

### A.1 14 CFR PART 1, DEFINITIONS AND ABBREVIATIONS.

Part 1 defines the words and terms used in subchapters A through K of chapter 1 of 14 CFR.

### A.2 14 CFR PART 21, CERTIFICATION PROCEDURES FOR PRODUCTS, ARTICLES, AND PARTS.

Part 21 sets forth rules for the issuance of and change to TCs, and issuance of PCs, airworthiness certificates, and export airworthiness approvals. It also sets forth the rules governing the holders of these certificates and the approval of certain products and articles.

### A.3 14 CFR PART 23, AIRWORTHINESS STANDARDS: NORMAL, UTILITY, ACROBATIC, AND COMMUTER CATEGORY AIRPLANES.

Part 23 sets forth airworthiness standards for the issuance of TCs and changes to those certificates for normal, utility, acrobatic, and commuter category airplanes.

### A.4 14 CFR PART 25, AIRWORTHINESS STANDARDS: TRANSPORT CATEGORY AIRPLANES.

Part 25 sets forth airworthiness standards for the issuance of TCs and changes to those certificates for transport category airplanes.

### A.5 14 CFR PART 27, AIRWORTHINESS STANDARDS: NORMAL CATEGORY ROTORCRAFT.

Part 27 sets forth the airworthiness standards for issuance of TCs and changes to those certificates for normal category rotorcraft.

### A.6 14 CFR PART 29, AIRWORTHINESS STANDARDS: TRANSPORT CATEGORY ROTORCRAFT.

Part 29 sets forth airworthiness standards for the issuance of TCs and changes to those certificates for transport category rotorcraft.

### A.7 14 CFR PART 31, AIRWORTHINESS STANDARDS: MANNED FREE BALLOONS.

Part 31 sets forth airworthiness standards for the issuance of TCs and changes to those certificates for manned free balloons.

**A.8 14 CFR PART 33, AIRWORTHINESS STANDARDS: AIRCRAFT ENGINES.**

Part 33 sets forth airworthiness standards for the issuance of TCs and changes to those certificates for aircraft engines.

**A.9 14 CFR PART 34, FUEL VENTING AND EXHAUST EMISSION REQUIREMENTS FOR TURBINE ENGINE POWERED AIRPLANES.**

Part 34 provides for the approval or acceptance by the FAA or the Administrator of the Environmental Protection Agency of testing and sampling methods, analytical techniques, and related equipment not identical to those specified in part 34.

**A.10 14 CFR PART 35, AIRWORTHINESS STANDARDS: PROPELLERS.**

Part 35 sets forth airworthiness standards for the issuance of TCs and changes to those certificates for propellers.

**A.11 14 CFR PART 43, MAINTENANCE, PREVENTIVE MAINTENANCE, REBUILDING, AND ALTERATION.**

Part 43 sets forth rules for maintenance, preventive maintenance, rebuilding, and alteration.

**A.12 14 CFR PART 45, IDENTIFICATION AND REGISTRATION MARKING.**

Part 45 sets forth rules for the display of nationality and registration marks; display of special airworthiness classification marks; identification plates for aircraft, aircraft engines, and propellers; and identification of certain replacement and critical aircraft parts and components.

**A.13 14 CFR PART 47, AIRCRAFT REGISTRATION.**

Part 47 sets forth the requirements for registering aircraft.

**A.14 14 CFR PART 91, GENERAL OPERATING AND FLIGHT RULES.**

Part 91 prescribes rules governing the operation of aircraft within the United States, and prescribes flight rules governing the operation of aircraft within the United States and within 12 nautical miles from the coast of the United States.

**A.15 14 CFR PART 121, OPERATING REQUIREMENTS: DOMESTIC, FLAG, AND SUPPLEMENTAL OPERATIONS.**

Part 121 sets forth operating requirements for domestic, flag, and supplemental operations.

**A.16 14 CFR PART 135, OPERATING REQUIREMENTS: COMMUTER AND ON DEMAND OPERATIONS AND RULES GOVERNING PERSONS ON BOARD SUCH AIRCRAFT.**

Part 135 sets forth operating requirements for commuter and on-demand operations and rules governing persons aboard such aircraft.



## Appendix B. Related Reference Material

### B.1 ADVISORY CIRCULARS.

#### B.1.1 U.S. Department of Transportation, Federal Aviation Administration, AC 20-62, *Eligibility, Quality, and Identification of Aeronautical Replacement Parts*, current edition.

AC 20-62 provides information on how to determine the quality, eligibility, and traceability of aeronautical parts and materials intended for installation on U.S. type-certificated products.

#### B.1.2 U.S. Department of Transportation, Federal Aviation Administration, AC 20-65, *U.S. Airworthiness Certificates and Authorizations for Operation of Domestic and Foreign Aircraft*, current edition.

AC 20-65 provides general information on issuing airworthiness certificates and special flight authorizations for certain aircraft.

#### B.1.3 U.S. Department of Transportation, Federal Aviation Administration, AC 45-3A, *Installation, Removal, or Change of Identification Data and Identification Plates on Aircraft Engines*, current edition.

AC 45-3 provides information concerning installing, removing, or changing identification data and identification plates on aircraft engines.

## Appendix C. Definitions

### C.1 ANTIQUE AIRCRAFT.

Paragraphs 1 through 3 below define antique aircraft. Paragraphs 2 and 3 below include restored or replica aircraft even if the aircraft is not identical to the original in every detail. Minor differences in configuration due to modern equipment and components are acceptable. Examples of such differences include using a tail wheel instead of a tailskid, main wheel brakes, or a modern type propeller.

1. A U.S.-registered aircraft built at least 30 years ago,
2. A U.S.-registered aircraft possessing a special airworthiness certificate in the experimental category for the purpose of exhibition with the same external configuration as an aircraft built at least 30 years ago, or
3. A U.S.-registered aircraft possessing a special airworthiness certificate in the experimental category for the purpose of operating an amateur-built aircraft with the same external configuration as an aircraft built at least 30 years ago.

### C.2 ARTICLE.

A material, part, component, process, or appliance.

### C.3 BUILDER.

Includes amateur-builders and manufacturers of aircraft, aircraft engines, and propellers.

### C.4 FIREPROOF.

As stated in § 1.1, General definitions, the capacity to withstand the heat associated with fire at least as well as steel.

### C.5 LIGHT-SPORT AIRCRAFT.

A category of simple, very basic, small lightweight, low performance aircraft. It is an aircraft other than a helicopter or powered-lift. Also see definition in § 1.1.

### C.6 N-NUMBER.

An identifier unique to each aircraft. The letter prefix designates the country where the aircraft is registered. The United States is “N,” which is why this number is commonly called the “N-number.” The rest of the number is the aircraft’s individual registration number, for example, N1234, or a combination of numbers and letter suffixes as described in § 47.15(b), Identification number.

**C.7 POWERED PARACHUTE.**

A powered aircraft comprised of a flexible or semi-rigid wing connected to a fuselage so that the wing is not in position for flight until the aircraft is in motion. The fuselage of a powered parachute contains the aircraft engine and a seat for each occupant, and is attached to the aircraft's landing gear.

**C.8 PRODUCT.**

An aircraft, aircraft engine, or propeller.

**C.9 TEXT OR GRAPHIC.**

Includes any company name, decoration, emblem, symbol, trademark, or unique paint scheme.

**C.10 WEIGHT-SHIFT-CONTROL AIRCRAFT.**

A powered aircraft with a framed pivoting wing and a fuselage controllable only in pitch and roll by the pilot's ability to change the aircraft center of gravity with respect to the wing. Flight control of the aircraft depends on the wing's ability to flexibly deform rather than the use of control surfaces.

**Appendix D. Advisory Circular Feedback Form**

If you find an error in this AC, have recommendations for improving it, or have suggestions for new items/subjects to be added, you may let us know by (1) emailing this form to 9-AWA-AVS-AIR500-Coord@faa.gov or (2) faxing it to the attention of the AIR Directives Management Officer at 202-267-3983.

Subject: \_\_\_\_\_

Date: \_\_\_\_\_

*Please check all appropriate line items:*

An error (procedural or typographical) has been noted in paragraph \_\_\_\_\_ on page \_\_\_\_\_.

Recommend paragraph \_\_\_\_\_ on page \_\_\_\_\_ be changed as follows:

In a future change to this AC, please cover the following subject:  
*(Briefly describe what you want added.)*

Other comments:

I would like to discuss the above. Please contact me.

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_