U. S. DEPARTMENT OF COMMERCE

DANIEL C. ROPER, Secretary

BUREAU OF AIR COMMERCE

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# CIVIL AIR REGULATIONS

## 01.—AIRCRAFT CERTIFICATES
## 02.—AIRCRAFT IDENTIFICATION MARK

As Amended to May 31, 1938

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# CIVIL AIR REGULATIONS

Pursuant to the authority contained in the Air Commerce Act of 1926 (44 Stat. 568) as amended by the Act of February 28, 1929 (45 Stat. 1404), the Act of June 19, 1934 (48 Stat. 1113), the Act of June 19, 1934 (48 Stat. 1116), and Sections 11 and 12 of the Act of June 12, 1934 (48 Stat. 933, 937), the following Civil Air Regulations are hereby made, prescribed, and issued to be known as—

Part 00. Aircraft Registration Certificate.
Part 01. Aircraft Certificates.
Part 02. Aircraft Identification Mark.
Part 03. Aircraft Title Transfer.
Part 04. Airplane Airworthiness.
Part 13. Aircraft Engine Airworthiness.
Part 14. Aircraft Propeller Airworthiness.
Part 15. Aircraft Equipment Airworthiness.
Part 18. Repair and Alteration of Aircraft.
Part 20. Pilot Rating.
Part 21. Airline Pilot Rating.
Part 23. Ground Instructor Rating.
Part 24. Mechanic Rating.
Part 25. Parachute Rigger Rating.
Part 26. Airport Control Tower Operator Rating.
Part 27. Airline Dispatcher Rating.
Part 40. Scheduled Airline Certification (Interstate and Intra-Territorial).
Part 50. Flying School Rating.
Part 52. Aircraft Repair Station Rating.
Part 60. Air Traffic Rules.
Part 61. Scheduled Airline Rules (Interstate).
Part 90. Air Mail.
Part 91. Aircraft Accident Investigations.
Part 92. Hearings Upon Certificates (Issued, Renewed, Denied, Suspended or Revoked).
Part 93. Evidence.
Part 94. Penalties.
Part 95. Imposition, Remission and Mitigation of Penalties.
Part 96. Authorization to Act for the Secretary.
Part 98. Definitions.
Part 99. Mode of Citation of Regulations.

Any and all rules and regulations heretofore made, prescribed, and issued by the Secretary of Commerce pursuant to the authority first above stated are hereby repealed.

Approved May 31, 1938.

[SEAL]

DANIEL C. ROPER,
*Secretary of Commerce.*

# PART 01.—AIRCRAFT CERTIFICATES


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**01.0 Provision for issuance.** Pursuant to the provisions of the Air Commerce Act requiring the Secretary of Commerce to provide for the rating of aircraft as to their airworthiness, the Secretary will issue aircraft certificates in accordance with the following provisions.

**01.1 Definitions.**

**01.10 Certificated aircraft.** The term "certificated aircraft" means any aircraft for which an aircraft certificate other than a registration certificate has been issued.

**01.11 Airworthy.** As used herein the term "airworthy" when applied to a particular aircraft or component thereof denotes the ability of such aircraft or component thereof to perform its function satisfactorily throughout a range of operations determined by the Secretary in rating the aircraft or component thereof.

**01.12 Experimental.** As used herein, the term "experimental" when applied to an aircraft denotes that such aircraft is certificated for experimentation in flight with a view to determining or improving

its characteristics or those of its components or equipment, and that inspection has disclosed no unairworthy feature of such aircraft with respect to structural integrity, workmanship or flight characteristics.

**01.13 Airworthiness certificate.** An airworthiness certificate is hereby defined as a document issued by the Secretary to the registered owner of an aircraft, certifying that the aircraft in question is airworthy when operated and maintained in accordance with the terms of said certificate.

**01.14 Experimental certificate.** An experimental certificate is hereby defined as a document which may be issued by the Secretary to the registered owner of an aircraft, certifying that the aircraft in question is an experimental aircraft and specifying such operation limitations as are deemed necessary by the Secretary.

**01.15 Type certificate.** A type certificate is hereby defined as a document issued by the Secretary to a manufacturer or designer of aircraft or certain components thereof (See Parts 13, 14 and 15), certifying that the type of aircraft or component, as represented by authenticated data in the form of specifications, descriptions, and drawings on file in the Office of the Secretary, has been found to be suitable as a basis for the manufacture of airworthy aircraft or components constructed in accordance with such data.

**01.16 Production certificate.** A production certificate is hereby defined as a document issued by the Secretary to a manufacturer of aircraft or certain components thereof (See Parts 13, 14 and 15), for which a type certificate has been granted, certifying that said manufacturer has complied with the requirements of § 01.5 for the production of aircraft or components thereof in quantities of an exact similarity of type, structure, materials, assembly and workmanship with the specifications, descriptions and drawings forming the basis for said type certificate.

**01.17 Aircraft.** The term "aircraft" as defined in the Air Commerce Act means any contrivance now known or hereinafter invented, used or designed for navigation of or flight in the air, except a parachute or other contrivance designed for such navigation but used primarily as safety equipment. For the purpose of these regulations aircraft are further classified in the following paragraphs.

**01.170 Airplane.** A mechanically driven fixed-wing aircraft, heavier than air, which is supported by the dynamic reaction of the air against its wings.

**01.171 Glider.** An aircraft heavier than air, similar to an airplane but without a powerplant.

**01.172 Rotorplane.** A form of aircraft whose support in the air is chiefly derived from the vertical component of the force produced by rotating airfoils.

**01.173 Aerostat (lighter-than-air aircraft).** An aircraft whose support is chiefly due to buoyancy derived from aerostatic forces. Aerostats are further classified as balloons and airships.

**01.2 Airworthiness certificates.**

**01.20 Eligibility for airworthiness certificate.** Application for an airworthiness certificate may be made by the owner of any aircraft eligible for registration as an aircraft of the United States, or by the

alien owner of any aircraft not registered in a foreign country, including, in addition to those aircraft for which such certificate is required as provided in Part 60, the following:

(*a*) Aircraft used solely for pleasure or non-commercial purposes.

(*b*) Aircraft belonging to the United States.

(*c*) Aircraft belonging to any State, Territory or possession of the United States or to a political subdivision thereof, and used exclusively in the governmental service.

**01.21 Application for airworthiness certificate.** Application for an airworthiness certificate shall be made to the Secretary on a form supplied for the purpose.

**01.22 Kinds of airworthiness certificates.** Airworthiness certificates are classified by the symbols C and R, for the meaning of which see Part 02. Airworthiness certificates are further classified and modified by means of operation limitations which will appear on the certificate.

**01.220 Classification of airworthiness certificates for airplanes.** Airworthiness certificates for airplanes are classified as to one or more operations as follows:

(*a*) Non-airline carrier use.
(*b*) Airline carrier use (Goods).
(*c*) Airline carrier use (Passengers).
(*d*) Visual-contact flying.
(*e*) Instrument flying.
(*f*) Day flying.
(*g*) Night flying.[1]
(*h*) No passengers to be carried at any time.
(*i*) Flights to be confined to 100 miles from fixed base.
(*j*) Special industrial operations.

**01.221 Classification of airworthiness certificates for gliders.** Airworthiness certificates for gliders are classified as to operation as follows:

(*a*) Aerobatic flying.
(*b*) Airplane towing.
(*c*) Auto towing.
(*d*) Shock launching.
(*e*) Commercial use.
(*f*) Non-commercial use.
(*g*) Day flying.
(*h*) Night flying.
(*i*) No passengers to be carried at any time.

**01.222 Classification of airworthiness certificates for rotorplanes.** Airworthiness certificates for rotorplanes are classified as to operation as outlined in § 01.220 for airplanes.

**01.223 Classification of airworthiness certificates for aerostats.** Airworthiness certificates for aerostats are classified as to operation as outlined in § 01.220 for airplanes.

**01.23 Requirements for issuance of airworthiness certificates.**

**01.230 Airworthiness requirements.** For certain classes of aircraft and for definite types of operation the requirements for airworthiness

[1] To be further classified on aircraft certificate if the radio equipment specified in § 04.512 (*e*) is not installed, as follows: *Night flying (except in a control zone).*

hereinafter specified shall be complied with. They are set forth in the following:

| | |
|---|---|
| Airplanes | Part 04 |
| Gliders | Part 05 |
| Rotorplanes | Part 06 |
| Aerostats | Part 07 |

**01.2300** A new aircraft manufactured subsequent to the effective date of these regulations and in accordance with an approval previously issued will be eligible for airworthiness certification after inspection showing compliance with the terms of the current Aircraft Specification previously issued therefor.

**01.2301** Aircraft holding a valid commercial license will be eligible for airworthiness certification on expiration of such license and after inspection showing continued airworthiness and compliance with the terms of the current Aircraft Specification previously issued therefor.

**01.231 Inspection of aircraft.** Each individual aircraft for which an airworthiness certificate is desired shall be presented for inspection to a designated representative of the Secretary for the purpose of determining the airworthiness of the aircraft.

**01.2310** The registered owner of any aircraft shall offer full cooperation with respect to any inspection which may be made of said aircraft upon proper demand by any authorized representative of the Secretary prior or subsequent to the issuance of an airworthiness certificate.

**01.232 Display of identification data.** To facilitate inspection of the aircraft and for purposes of identifying the aircraft with the documents accepted as the basis of the airworthiness certificate, certain manufacturer's and other data shall be displayed as follows, so far as applicable to the type of aircraft involved:

**01.2320** (*a*) An aircraft identification mark in accordance with the provisions of Part 02.

**01.2321** (*b*) The identification plate and other identifying information required under the pertinent airworthiness requirements of Parts 04, 05, 06 or 07, as the case may be.

**01.24 Issuance.** Upon application duly made and proofs submitted, an airworthiness certificate will be issued in an appropriate form.

**01.240 Temporary certificate.** Pending the issuance of a certificate either upon application for an original certificate or for its renewal, a Bureau inspector may issue a temporary airworthiness certificate.

**01.25 Display.** An airworthiness certificate which has been issued for an aircraft shall be carried therein at all times and shall be posted therein where it may be readily seen by passengers, and any such certificate shall be presented for inspection upon the demand of any passenger, any authorized representative of the Bureau and any State or municipal official charged with enforcing local laws or regulations involving Federal compliance, or upon the reasonable request of any other person.

**01.26 Duration, renewal and non-transferability.**

**01.260 Duration.** An airworthiness certificate will remain in force for a period of one year from date of issuance unless specifically limited to a shorter period, or until sooner suspended, revoked or canceled in accordance with the provisions of § 01.27.

**01.261 Renewal.** The term of an airworthiness certificate may be renewed for additional periods of one year, or for shorter periods, on application of the registered owner to the Secretary or to a designated Bureau inspector, provided proof is made satisfactorily to show

(*a*) that the aircraft is still airworthy, and

(*b*) that the ownership is still as registered.

**01.262 Non-transferability.** An airworthiness certificate is not transferable. However, such certificate may be reissued to an owner other than the original holder thereof provided such other owner meets all the requirements pertaining thereto and makes proper application and proofs therefor in accordance with the provisions of Part 03.

**01.27 Suspension, revocation, cancellation and surrender.**

**01.270 Suspension or revocation.** An airworthiness certificate may be suspended by a duly authorized Bureau inspector or by the Secretary or revoked by the Secretary by reason of any of the following on the part of the holder thereof:

**01.2700** (*a*) The making of any false statement in an application for such certificate, or in any information accompanying such application, or in any report required by the Secretary.

**01.2701** (*b*) Failure to make any report required by the Secretary.

**01.2702** (*c*) Using or displaying such airworthiness certificate for a fraudulent purpose or using or displaying any airworthiness certificate or identification mark in any manner contrary to the public safety or interest.

**01.2703** (*d*) Moral irresponsibility.

**01.2704** (*e*) Violation, or permitting violation, of any provision of the Air Commerce Act or any rule or regulation duly issued thereunder.

**01.2705** (*f*) Operating, or permitting the operation of, the aircraft in violation of any of the terms of its airworthiness certificate.

**01.2706** (*g*) Failure to maintain the aircraft in an airworthy condition in accordance with § 01.72.

**01.271 Automatic suspension.**

**01.2710** (*a*) When an aircraft possessed of a valid airworthiness certificate is removed from the continental limits of the United States for the purpose of air navigation wholly within a foreign country, such certificate automatically becomes invalid, and may be suspended by a duly authorized Bureau inspector or by the Secretary or revoked by the Secretary unless prior approval has been received from the Secretary.

**01.2711** (*b*) When an aircraft possessed of a valid airworthiness certificate has been damaged, such certificate automatically becomes invalid until the aircraft has been repaired, inspected and re-rated in accordance with the provisions of Part 18.

**01.272 Cancellation.** An airworthiness certificate issued to the registered owner of an aircraft will be canceled upon the written request of such owner.

**01.273 Surrender.** Upon notice from a duly authorized Bureau inspector of the suspension of an airworthiness certificate by such inspector or by the Secretary, and upon demand of either of the same

for the surrender of such certificate, or upon notice from the Secretary of the revocation or cancellation of such certificate, the holder thereof shall immediately surrender such certificate to such inspector or immediately return such certificate to the Secretary, as the case may be. In case of revocation or cancellation of an airworthiness certificate, notwithstanding any failure or refusal to surrender such certificate, it shall be deemed canceled and of no further force or effect.

**01.3 Experimental Certificates.**

**01.30 Eligibility for experimental certificate.** Application for an experimental certificate may be made by the registered owner of the following aircraft:

(*a*) Aircraft used solely for experimental purposes as defined in § 01.12 herein.

(*b*) Aircraft belonging to the United States.

(*c*) Aircraft belonging to any State, Territory or possession of the United States or to a political subdivision thereof, and used exclusively in the governmental service.

**01.31 Application for experimental certificate.** Application for an experimental certificate shall be made to the Secretary upon a form supplied for the purpose.

**01.32 Kinds of experimental certificates.** Experimental certificates are classified by the symbol X, for the meaning of which see Part 02. Experimental certificates are further classified and modified by means of operation limitations which will appear on the certificate.

**01.33 Requirements for issuance of experimental certificates.**

**01.330 Minimum requirements.** Applicant shall show that the aircraft is to be used for experimental purposes as defined in § 01.12 and the aircraft shall satisfactorily undergo the inspection required by § 01.331.

**01.331 Inspection of aircraft.** An aircraft for which an experimental certificate is desired shall be presented for inspection to a designated representative of the Secretary for the purpose of determining that it is an experimental aircraft as defined in § 01.12 and that no unairworthy feature with respect to structural integrity, workmanship or flight characteristics is evident. After inspection, such representative will establish suitable operation limitations for incorporation in the certificate when issued.

**01.3310** The registered owner of any aircraft shall offer full cooperation with respect to any inspection which may be made of said aircraft upon proper demand by any authorized representative of the Secretary prior or subsequent to the issuance of an experimental certificate.

**01.332 Display of identification data.** To facilitate inspection and for purposes of identifying the aircraft as an experimental aircraft, certain data shall be displayed as follows:

**01.3320** (*a*) An aircraft identification mark in accordance with the provisions of Part 02.

**01.3321** (*b*) A metal plate permanently affixed in a visible location in the pilot's cockpit or compartment bearing the date of manufacture and the name of manufacturer, the manufacturer's serial number, and the model designation.

**01.34 Issuance.** Upon approval of application duly made and proofs submitted, an experimental certificate will be issued in appropriate form.

**01.340 Temporary certificate.** Pending the issuance of a certificate either upon application for an original certificate or for its renewal, a Bureau inspector may issue a temporary experimental certificate.

**01.35 Display.** An experimental certificate which has been issued for an aircraft shall be carried therein at all times and shall be posted therein where it may be readily seen, and any such certificate shall be presented for inspection upon the demand of any authorized representative of the Bureau and any State or municipal official charged with enforcing local laws or regulations involving Federal compliance, or upon the reasonable request of any other person.

**01.36 Duration, renewal and non-transferability.**

**01.360 Duration.** An experimental certificate will remain in force for such a period from date of issuance as specifically stated thereon, or until sooner suspended, revoked or canceled in accordance with the provisions of §01.37.

**01.361 Renewal.** The term of an experimental certificate may be renewed for additional periods on application of the registered owner to the Secretary or to a designated Bureau inspector, provided proof is made satisfactorily to show:

(*a*) that the aircraft is still being used for experimental purposes as set forth in § 01.330, and

(*b*) that the ownership is still as registered.

**01.362 Non-transferability.** An experimental certificate is not transferable. However, such certificate may be reissued to an owner other than the original holder thereof provided such other owner meets all the requirements pertaining thereto and makes proper application and proofs therefor in accordance with the provisions of Part 03.

**01.37 Suspension, revocation, cancellation and surrender.**

**01.370 Suspension or revocation.** An experimental certificate may be suspended by a duly authorized Bureau inspector or by the Secretary or revoked by the Secretary by reason of any of the following on the part of the holder thereof:

**01.3700** (*a*) The making of any false statement in an application for such certificate, or in any information accompanying the application, or in any report required by the Secretary.

**01.3701** (*b*) Using or displaying such experimental certificate for a fraudulent purpose, or using or displaying any experimental certificate or identification mark in any manner contrary to the public safety or interest.

**01.3702** (*c*) Moral irresponsibility.

**01.3703** (*d*) Violation, or permitting violation, of any provision of the Air Commerce Act or any rule or regulation duly issued thereunder.

**01.3704** (*e*) Operating, or permitting the operation of, the aircraft in violation of any of the terms of its experimental certificate.

**01.371 Cancellation.** An experimental certificate issued to the registered owner of an aircraft will be canceled upon the written request of such owner.



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hereinafter specified shall be complied with. They are set forth in the following:

| | |
|---|---|
| Airplanes | Part 04 |
| Gliders | Part 05 |
| Rotorplanes | Part 06 |
| Aerostats | Part 07 |

**01.2300** A new aircraft manufactured subsequent to the effective date of these regulations and in accordance with an approval previously issued will be eligible for airworthiness certification after inspection showing compliance with the terms of the current Aircraft Specification previously issued therefor.

**01.2301** Aircraft holding a valid commercial license will be eligible for airworthiness certification on expiration of such license and after inspection showing continued airworthiness and compliance with the terms of the current Aircraft Specification previously issued therefor.

**01.231 Inspection of aircraft.** Each individual aircraft for which an airworthiness certificate is desired shall be presented for inspection to a designated representative of the Secretary for the purpose of determining the airworthiness of the aircraft.

**01.2310** The registered owner of any aircraft shall offer full cooperation with respect to any inspection which may be made of said aircraft upon proper demand by any authorized representative of the Secretary prior or subsequent to the issuance of an airworthiness certificate.

**01.232 Display of identification data.** To facilitate inspection of the aircraft and for purposes of identifying the aircraft with the documents accepted as the basis of the airworthiness certificate, certain manufacturer's and other data shall be displayed as follows, so far as applicable to the type of aircraft involved:

**01.2320** (*a*) An aircraft identification mark in accordance with the provisions of Part 02.

**01.2321** (*b*) The identification plate and other identifying information required under the pertinent airworthiness requirements of Parts 04, 05, 06 or 07, as the case may be.

**01.24 Issuance.** Upon application duly made and proofs submitted, an airworthiness certificate will be issued in an appropriate form.

**01.240 Temporary certificate.** Pending the issuance of a certificate either upon application for an original certificate or for its renewal, a Bureau inspector may issue a temporary airworthiness certificate.

**01.25 Display.** An airworthiness certificate which has been issued for an aircraft shall be carried therein at all times and shall be posted therein where it may be readily seen by passengers, and any such certificate shall be presented for inspection upon the demand of any passenger, any authorized representative of the Bureau and any State or municipal official charged with enforcing local laws or regulations involving Federal compliance, or upon the reasonable request of any other person.

**01.26 Duration, renewal and non-transferability.**

**01.260 Duration.** An airworthiness certificate will remain in force for a period of one year from date of issuance unless specifically limited to a shorter period, or until sooner suspended, revoked or canceled in accordance with the provisions of § 01.27.

certificate was issued, upon proof that the article in question conforms exactly with the authenticated data forming a part of said type certificate; *provided, however,* that each article shall satisfactorily pass such inspections as to workmanship, installation, assembly and flight characteristics as the Secretary may deem necessary.

**01.440** The manufacturer shall furnish with each aircraft or component an affidavit that the article in question has been manufactured in accordance with the authenticated data forming a part of said type certificate except for any deviations therefrom, which shall be listed and described. In the case of aircraft such affidavit shall also certify the weight empty.

**01.45 Display.** Any type certificate, including such papers and data as may be a part thereof, shall be presented for inspection upon the demand of any authorized representative of the Bureau and of any State or municipal official charged with enforcing local laws or regulations involving Federal compliance.

**01.46 Duration, transfer and license.**

**01.460 Duration.** A type certificate will be issued for an indeterminate period of time and shall remain effective so long as the type of aircraft or component for which such type certificate is issued is certificated as airworthy, or until sooner suspended or revoked by the Secretary, or canceled upon the written request of the holder thereof.

**01.461 Transfer and license.** A type certificate is transferable and the benefits of such certificate may be extended by licensing arrangements.

**01.47 Suspension, revocation, cancellation and surrender.**

**01.470 Suspension or revocation.** A type certificate may be suspended by a duly authorized representative of the Secretary or by the Secretary or revoked by the Secretary in the event of unsatisfactory or unsafe performance in service of aircraft, engines, propellers or other aeronautical equipment for which such type certificate has been issued, and by reason of any of the following on the part of the holder thereof:

**01.4700** (*a*) The making of any false statement in an application for said certificate, or in any information accompanying the application, or in any report required by the Secretary.

**01.4701** (*b*) Failure to make any report required by the Secretary.

**01.4702** (*c*) Use or display of any type certificate or other official notification from the Bureau for a fraudulent purpose; or misrepresentation of any certificated product; or use or display of any type certificate or other official notification from the Bureau in any manner contrary to the public safety or interest.

**01.4703** (*d*) Alteration of the basic design or specifications of an aircraft, engine, propeller or other aeronautical equipment for which a type certificate has been issued, without first having such alteration approved by the Secretary.

**01.4704** (*e*) Refusal to submit to inspection upon proper demand by an authorized representative of the Secretary or to render any reasonable assistance in connection therewith.

**01.4705** (*f*) Moral irresponsibility.

**01.4706** (*g*) Violation of the Air Commerce Act or any rule or regulation duly issued thereunder.

**01.471 Cancellation.** A type certificate will be canceled on the request of the holder thereof.

**01.472 Surrender.** Upon notice from a duly authorized representative of the Secretary of the suspension of a type certificate by such representative or by the Secretary, and upon demand of either of the same for the surrender of such certificate, or upon notice from the Secretary of the revocation or cancellation of such certificate the holder thereof shall immediately surrender such certificate to such representative or immediately return such certificate to the Secretary, as the case may be. In case of revocation or cancellation of a type certificate, notwithstanding any failure or refusal to surrender such certificate, it shall be deemed canceled and of no further force or effect.

**01.48 Confidential nature of data.** Technical data furnished by manufacturers or designers of aircraft, engines, propellers or other aeronautical equipment, in compliance with the procedure established for the issuance of a type certificate therefor, will be treated as confidential by all employees of the Department of Commerce for such time as the certificate is in force; *provided, however,* that the Secretary may at his discretion make such use of the confidential data as is required in the interests of public safety.

**01.5 Production certificates.**

**01.50 Application for production certificate.** Application for a production certificate for any aircraft, engine, propeller, or other aeronautical equipment shall be made to the Secretary upon a form supplied for the purpose.

**01.51 Kinds of production certificates.** Production certificates are classified as to type of aircraft or component for which issued.

**01.52 Requirements for issuance of production certificates.**

**01.520 Type certificate required.** As one requisite to the issuance of a production certificate the applicant therefor shall hold a type certificate for the type of article to be manufactured or shall have secured the rights to manufacture such article under an existing type certificate.

**01.521 Production facilities.** The applicant for a production certificate shall demonstrate to the satisfaction of the Secretary the adequacy of his production facilities, including qualified personnel, for the manufacture, in quantities, of aircraft or components which such production certificate is to cover. The production facilities shall be such as to insure the reproduction of articles of an exact similarity of type, structure, materials, and workmanship with the specifications and other data forming the basis of the type certificate or type certificates for which the production certificate is issued.

**01.522 Inspection of facilities.** The applicant for a production certificate shall offer full cooperation in respect of any inspection of facilities which may be made upon proper demand by any authorized representative of the Secretary prior and subsequent to the issuance of such production certificate.

**01.523 Inspection of aircraft.** If the applicant for a production certificate is not the manufacturer of the aircraft which was subjected to the inspections and tests conducted in the fulfillment of the requirements for the type certificate issued, the first article manufactured by

him under each production certificate shall satisfactorily undergo the inspection and flight tests required for the issuance of a type certificate.

**01.53 Issuance.** Upon approval of an application duly made and proofs submitted a production certificate, specifying the type certificate numbers for which the production certificate is valid and whatever detailed inspection procedure may be required prior to the issuance of airworthiness certificates for aircraft manufactured under said production certificate, will be issued in an appropriate form.

**01.54 Certification under production certificate.** Aircraft or component parts manufactured under a production certificate and in accordance with the terms thereof may be certificated as airworthy on the basis of the airworthiness rating of the original article of the type represented by the type certificate for which said production certificate was issued; *provided, however,* that each article shall satisfactorily undergo such inspections as may be required under the terms of said production certificate.

**01.55 Display.** Any production certificate, including such papers and data as may be a part thereof, shall be presented for inspection upon the demand of any authorized representative of the Bureau and of any State or municipal official charged with enforcing local laws or regulations involving Federal compliance.

**01.56 Duration and non-transferability.**

**01.560 Duration.** A production certificate will be issued for an indeterminate period of time and shall remain effective so long as the aircraft or components for which it is issued are being manufactured in accordance with terms of such certificate and so long as manufacturing facilities and personnel are continuously maintained at the standards which formed the basis for issuance of such certificate and so long as the aircraft or components for which it is issued are certificated as airworthy, or until said certificate is sooner suspended or revoked, or canceled upon the written request of the holder thereof.

**01.561 Non-transferability.** A production certificate is not transferable. However, such certificate may be reissued to a manufacturer other than the original holder thereof provided such other manufacturer meets all the requirements pertaining thereto.

**01.57 Suspension, revocation, cancellation and surrender.**

**01.570 Suspension or revocation.** A production certificate may be suspended by a duly authorized representative of the Secretary or by the Secretary or revoked by the Secretary in the event of unsatisfactory or unsafe performance in service of aircraft, engines, propellers or other aeronautical equipment manufactured under a production certificate, and by reason of any of the following on the part of the holder thereof:

**01.5700** (*a*) The making of any false statement in an application for said certificate, or in any information accompanying the application, or in any report required by the Secretary.

**01.5701** (*b*) Failure to make any report required by the Secretary.

**01.5702** (*c*) Use or display of any production certificate or other official notification from the Bureau for a fraudulent purpose; or misrepresentation of any certificated product; or use or display of any

**01.471 Cancellation.** A type certificate will be canceled on the request of the holder thereof.

**01.472 Surrender.** Upon notice from a duly authorized representative of the Secretary of the suspension of a type certificate by such representative or by the Secretary, and upon demand of either of the same for the surrender of such certificate, or upon notice from the Secretary of the revocation or cancellation of such certificate the holder thereof shall immediately surrender such certificate to such representative or immediately return such certificate to the Secretary, as the case may be. In case of revocation or cancellation of a type certificate, notwithstanding any failure or refusal to surrender such certificate, it shall be deemed canceled and of no further force or effect.

**01.48 Confidential nature of data.** Technical data furnished by manufacturers or designers of aircraft, engines, propellers or other aeronautical equipment, in compliance with the procedure established for the issuance of a type certificate therefor, will be treated as confidential by all employees of the Department of Commerce for such time as the certificate is in force; *provided, however,* that the Secretary may at his discretion make such use of the confidential data as is required in the interests of public safety.

**01.5 Production certificates.**

**01.50 Application for production certificate.** Application for a production certificate for any aircraft, engine, propeller, or other aeronautical equipment shall be made to the Secretary upon a form supplied for the purpose.

**01.51 Kinds of production certificates.** Production certificates are classified as to type of aircraft or component for which issued.

**01.52 Requirements for issuance of production certificates.**

**01.520 Type certificate required.** As one requisite to the issuance of a production certificate the applicant therefor shall hold a type certificate for the type of article to be manufactured or shall have secured the rights to manufacture such article under an existing type certificate.

**01.521 Production facilities.** The applicant for a production certificate shall demonstrate to the satisfaction of the Secretary the adequacy of his production facilities, including qualified personnel, for the manufacture, in quantities, of aircraft or components which such production certificate is to cover. The production facilities shall be such as to insure the reproduction of articles of an exact similarity of type, structure, materials, and workmanship with the specifications and other data forming the basis of the type certificate or type certificates for which the production certificate is issued.

**01.522 Inspection of facilities.** The applicant for a production certificate shall offer full cooperation in respect of any inspection of facilities which may be made upon proper demand by any authorized representative of the Secretary prior and subsequent to the issuance of such production certificate.

**01.523 Inspection of aircraft.** If the applicant for a production certificate is not the manufacturer of the aircraft which was subjected to the inspections and tests conducted in the fulfillment of the requirements for the type certificate issued, the first article manufactured by

**01.701** No aircraft certificated as experimental shall be flown, or authorized to be flown, in violation of the operating or other terms of its certificate, nor in violation of any provision of Part 60.

**01.702** No person shall be carried in flight in any aircraft certificated in the classification R or X (See §§ 02.111 and 02.112) except such members of the crew as are necessary for the operation thereof in accordance with the limitations stated in the pertinent certificate.

**01.703** The registered owner or the operator of a certificated aircraft shall not permit it to be flown by any person other than one possessed of a pilot certificate valid for the type of aircraft and operation involved.

**01.71 Operation of damaged or altered certificated aircraft.**

**01.710** No flight of a certificated aircraft which has been damaged or altered shall be made, or authorized to be made, until the aircraft has been re-rated as to airworthiness in accordance with the provisions of Part 18, or has been re-rated as an experimental aircraft.

**01.711** When a certificated aircraft has undergone repairs or alterations as set forth in §§ 18.11, 18.12, 18.23 or 18.24, or when a new, old or re-conditioned engine has been installed therein, such aircraft shall be test flown before any passenger is carried therein.

**01.72 Maintenance of airworthiness.**

**01.720** After an airworthiness certificate has been issued to the owner of an aircraft, and between the times that it is inspected by a Bureau inspector for airworthiness and for conformity with approved specifications, the owner shall be charged with the duty of maintaining the aircraft in a good and proper state of repair and flying condition so that it shall continue at all times to be airworthy and to conform with such specifications.

**01.721 Line inspection.** The owner of a certificated aircraft (other than an aircraft engaged in scheduled interstate or foreign passenger airline carrier operation for which inspection and maintenance requirements are provided elsewhere in these regulations) shall be charged with the duty of having such aircraft given a line inspection by a person possessed of a valid private, limited commercial or commercial pilot or airplane and engine mechanic certificate, at least once in 7 days preceding flight, *provided, however,* that there shall be at least one inspection for each 25 hours of flying time. The result thereof shall be entered in the aircraft log-book over the signature of the person making such inspection. The line inspection so required shall be made to ascertain the working condition and state of repair of the following:

**01.7210** (*a*) open control wires, all control wires and pulleys open to inspection through apertures, and all hinges on control surfaces;

**01.7211** (*b*) landing gear structure, wheels, fittings, and shock absorbers;

**01.7212** (*c*) fuselage parts open to visual inspection;

**01.7213** (*d*) main plane external bracing, including fittings and struts, external wires, cables, turnbuckles, and fabric or covering;

**01.7214** (*e*) control surface fabric or covering;

**01.7215** (*f*) engine exhaust manifolds and exhaust-pipe extensions (the engine shall be given a warming-up test, during which the proper functioning of the engine instruments shall be ascertained);

**01.7216** (*g*) carburetors and fuel-feed lines open to visual inspection, to insure proper functioning;

**01.7217** (*h*) cooling system and connections;

**01.7218** (*i*) cowling, to insure that the cowlings are properly secured and safetied, and

**01.7219** (*j*) propellers, as to condition.

**01.722 Periodic inspection.** The owner of a certificated aircraft shall be charged with the duty, after each 100 hours of flight of the aircraft and also immediately prior to presentation for inspection for renewal of certificate, of having such aircraft given a periodic inspection by a person or persons possessed of a valid and appropriate mechanic certificate and the result thereof shall be entered in the aircraft log-book by the person or persons making such inspection. The periodic inspection shall be made to ascertain the working condition and state of repair of the following:

**01.7220** (*a*) powerplant installation,

**01.7221** (*b*) control systems throughout,

**01.7222** (*c*) propeller alignment,

**01.7223** (*d*) fuselage fittings open or openable to inspection, and

**01.7224** (*e*) all items specified in § 01.7210 through § 01.7219.

**01.723** The Bureau inspector or other authorized representative of the Secretary shall be permitted by the owner, operating agency or pilot of any certificated aircraft to inspect it at any time and place for the purpose of determining its flying condition and state of repair. For such purposes, the owner, operating agency or pilot shall give to such inspector or representative free and uninterrupted access to the aircraft, the aircraft and engine log-books and to the area or shelter where the aircraft is located.

**10.7230** Upon the presentation for inspection of an aircraft for renewal of its airworthiness certificate, all inspection plates and cowlings shall have been removed and all parts cleaned. The aircraft and engine log-books, in current form, and the aircraft certificate shall be presented at the same time.

**01.73 Log-books.**

**01.730 Aircraft log.** The registered owner of a certificated aircraft shall maintain an aircraft log-book therefor and shall be responsible for recording in such log-book current reports of line and periodic inspections, the flight time of the aircraft, rigging changes in the aircraft, and damage, repairs and alterations of the aircraft structure and of the propeller.

**01.731 Engine log.** The registered owner of a certificated aircraft shall maintain an engine log-book for each engine installed therein and shall be responsible for recording in such log-book current reports of line and periodic imspections, the duration of the running time of the engine both on the ground and in the air, changes in the engine installation, and of the overhaul and alteration of, and damage to, the engine.

**01.732** The log-books required in § 01.730 and § 01.731 shall be carried in such aircraft at all times when it is away from the landing area regularly used as its base of operations, *provided, however*, that log-books for certificated airline aircraft may be maintained and kept at terminals. Log-books shall be bound records and the entries shall be accurate, legible, in ink or indelible pencil, and so arranged as to facilitate easy reference thereto. These log-books shall be presented for inspection, upon demand and reasonable notice, to any authorized representative of the Department of Commerce or State or municipal officer enforcing local regulations or laws involving Federal compliance.

**01.74 Aircraft flight reports.**

**01.740** The registered owner of a certificated aircraft engaged in flying (as other than a scheduled airline carrier) shall, on the first day of January and of July of each year, transmit to the Secretary the following information:

**01.7400** (*a*) A navigation summary report showing the hours flown in each kind of nonscheduled operation during the 6 months immediately preceding the rendering of the report, and

**01.7401** (*b*) such other data as may be specified from time to time on forms provided for such purpose by the Secretary.

**01.741** When a certificated aircraft is not flown during any semiannual period ending on the last day of December or of June in any year, such fact shall be reported to the Secretary immediately on the termination of such period.

**01.75 Accident reports.** When serious injury to a person or to property is suffered or when death results by virtue of the operation of a certificated aircraft, the registered owner or the pilot of such aircraft shall immediately report, by telephone or telegraph, to the Secretary as to the identification mark of the aircraft and the time and place of the accident. All accidents occurring in the operation of certificated aircraft which result in damage to the aircraft shall be immediately reported to the Secretary by the registered owner or the pilot on a form supplied for the purpose, except that this shall not apply in the case of gliders unless serious injury or death results to persons.

**01.76 Production reports.** A manufacturer to whom a type, an approved type, or a production certificate has been issued shall file his affidavit with the Secretary on January 1 and July 1 of each year showing the number of aircraft, engines, propellers or other equipment, as the case may be, constructed in exact accordance with the terms of such certificate during the preceding 6 months. This report shall include the serial numbers or other identification marks of all the articles involved, the dates of manufacture and any other pertinent information.

# PART 02.—AIRCRAFT IDENTIFICATION MARK


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**02.0 Provision for issuance.** Pursuant to the provisions of the Air Commerce Act declaring that the Government of the United States has, to the exclusion of all foreign nations, complete sovereignty of the airspace over the lands and waters of the United States, including the Canal Zone, and requiring the Secretary of Commerce to establish air traffic rules for the navigation, protection, and identification of aircraft, the following regulations are prescribed for the assignment, approval, issuance and display of identification marks.

**02.1 Character.** An aircraft identification mark will consist of one or more Roman capital letters, or other symbol or symbols hereinafter specified, and a number.

**02.10 Nationality symbol.** The Roman capital letter N will appear first in the identification mark, except that the symbol cross, +, will appear first in the identification mark of aircraft owned by an alien and not registered in some foreign country.

**02.11 Airworthiness symbol.** The international symbol N, or the symbol cross, +, will be followed in the mark by the Roman capital letter C, R, or X, or by a bar, for the purpose of classifying the aircraft as to its airworthiness, or lack thereof, as follows:

**02.110** (a) The letter C will classify an aircraft as complying fully with the airworthiness requirements of Parts 01 and 04, 05, 06, or 07, as the case may be for the purpose of carrying persons or property, for or without hire.

**02.111** (b) The letter R will classify an aircraft as complying in some limited respect with the airworthiness requirements of Parts 01 and 04, 05, 06, or 07, as the case may be, *provided* each deficiency is compensated for by means of suitable operation limitations (see also § 01.22). The certificate of an aircraft in this classification will specify the use, or uses, for which such aircraft is deemed airworthy, but such use, or uses, shall exclude passenger carrying, and shall be for industrial purposes only.

**02.112** (*c*) The letter X will classify an aircraft as one which has been issued an experimental certificate in accordance with § 01.3. An aircraft so classified has been found by inspection to possess no apparent unairworthy features.

**02.113** (*d*) The bar symbol, —, will classify the aircraft as one whose airworthiness rating has not been established. An aircraft so classified is an uncertificated aircraft and one not registered as an aircraft of the United States.

**02.12 Number.** The airworthiness symbol will be followed in the mark by a number issued for purposes of further identification.

**02.2 Issuance.**

**02.20 Assignment.** The aircraft identification mark of NC, NR or NX, as the case may be, plus a number, will be assigned to aircraft of the United States at the time of issuance of the registration and aircraft certificates, will be inserted in the body of either thereof and issued as a part thereof.

**02.200 Non-registered aircraft.** The aircraft identification mark of N—, plus a number, will be assigned to aircraft other than aircraft of the United States and other than aircraft registered in some foreign country, and issued by the Secretary, upon application of the aircraft owner. Such identification shall be valid only so long as the aircraft is owned by the owner making application for such identification. It shall be displayed as provided for in § 02.3.

**02.21 Provisional assignment.** Pending issuance by the Secretary a provisional assignment may be made by a Bureau inspector.

**02.3 Location for display.**

**02.30 Conventional airplanes and gliders.** The mark on such aircraft shall be located on the lower surface of the lower left wing and on the upper surface of the upper right wing. If, in a biplane, the lower left wing space is less than one-half that of the upper left wing, the mark shall be located on the lower surface of the upper left wing as far to the left as is possible. The top of the letters, symbols, and figures shall be toward the leading edge. The height shall be at least four-fifths of the mean chord; *provided, however*, that in the event four-fifths of the mean chord is more than 30 inches, the height of the letters, symbols and figures need not be more than 30 inches. If the span of either the upper left or lower right wing does not permit using letters and figures of at least 30 inches in height, with the proportions as set out in § 02.40, these letters, symbols and figures may be less than 30 inches *provided* they retain the proportions set out in § 02.40 and, *provided, further*, that they occupy at least four-fifths of the span. In the case of a monoplane, the mark shall be displayed on the lower surface of the left wing and the upper surface of the right wing in the manner thus described. On gliders the letters, symbols, or figures shall be displayed in the same manner and place prescribed for airplanes except the minimum height shall be 15 inches. The mark shall also be located on both sides of the vertical tail surface, of size as large as a 2-inch margin will permit.

**02.31 Unconventional aircraft.** Marks on such aircraft will be located as deemed satisfactory by the Secretary upon examination of a three-view drawing to scale, of the aircraft.

**02.32 Airships.** Same as §02.31.
**02.33 Conventional balloons.** Same as §02.31.
**02.34 Unconventional balloons.** Same as §02.31.
**02.4 Lettering.**
**02.40 Type.** The width of the letters, symbols and figures (except the figure 1) shall be at least two-thirds of their height. The width of each stroke shall be at least one-sixth of the height of the letters, symbols and figures, which shall be of uniform size. The space between such letters, symbols and figures shall be not less than one-sixth of the height.
**02.41 Color.** The letters, symbols and numbers shall be painted on the aircraft in one solid color on a background of any other solid color provided there is a strong contrast, as deemed suitable by the Secretary.
**02.42 Legibility.** Except with the approval of the Secretary, no other design, mark, symbol or description shall be placed upon an aircraft if such design, etc., modifies, adds to, detracts from, or confuses the assigned mark or destroys its legibility. The assigned marks shall be kept clean and clearly visible.
**02.5 Identification mark rules.**
**02.50 Domestic aircraft.** Every aircraft (except a foreign aircraft) entering the airspace over the lands and waters of the United States, including the Canal Zone, shall be possessed of and display an identification mark assigned and issued therefor by the Secretary. Such identification mark shall be displayed as provided for in §02.3.
**02.51 Foreign aircraft.** Foreign aircraft shall be subject to the provisions of § 02.50 unless specifically given other authorization pursuant to Section 6 of the Air Commerce Act.
**02.510 Non-registered alien aircraft.** Alien owned aircraft not registered under Part 00 or in some foreign country will be assigned an identification mark consisting of the symbol cross, +, followed by the bar symbol, —, and then a number. Such identification mark will be assigned and issued to such aircraft by the Secretary upon application of the alien owner. Such identification mark shall be displayed as provided for in § 02.3. Such identification shall be valid only so long as the aircraft is owned by the alien owner making application for such identification.
**02.52 Domestic aircraft for foreign delivery.** An aircraft manufactured in the United States for delivery to a foreign purchaser may display appropriate and duly assigned or issued foreign identification marks or insignia and may be navigated for the sole purpose of delivery to said foreign purchaser by the most practicable direct air route or for demonstration purposes for a limited time within the immediate vicinity of the manufacturer's airport on application made to and approved by the Secretary.