§21.21 Issue of type certificate: normal, utility, acrobatic, commuter, and transport category aircraft; manned free balloons; special classes of aircraft; aircraft engines; propellers.

An applicant is entitled to a type certificate for an aircraft in the normal, utility, acrobatic, commuter, or transport category, or for a manned free balloon, special class of aircraft, or an aircraft engine or propeller. if—

- (a) The product qualifies under §21.27; or
- (b) The applicant submits the type design, test reports, and computations necessary to show that the product to be certificated meets the applicable airworthiness, aircraft noise, fuel venting, and exhaust emission requirements of the Federal Aviation Regulations and any special conditions prescribed by the Administrator, and the Administrator finds—
- (1) Upon examination of the type design, and after completing all tests and inspections, that the type design and the product meet the applicable noise, fuel venting, and emissions requirements of the Federal Aviation Regulations, and further finds that they meet the applicable airworthiness requirements of the Federal Aviation Regulations or that any airworthiness provisions not complied with are compensated for by factors that provide an equivalent level of safety; and
- (2) For an aircraft, that no feature or characteristic makes it unsafe for the category in which certification is requested.

[Doc. No. 5085, 29 FR 14564, Oct. 24, 1964, as amended by Amdt. 21–15, 32 FR 3735, Mar. 4, 1967; Amdt. 21–27, 34 FR 18368, Nov. 18, 1969; Amdt. 21–60, 52 FR 8042, Mar. 13, 1987; Amdt. 21–68, 55 FR 32860, Aug. 10, 1990]

EFFECTIVE DATE NOTE: By Amdt. 21–92, 74 FR 53385, Oct. 16, 2009, §21.21 was amended by removing the words "the Federal Aviation Regulations" and adding in their place the words "this subchapter" wherever they appear, effective Apr. 14, 2010.

#### §21.23 [Reserved]

## § 21.24 Issuance of type certificate: primary category aircraft.

(a) The applicant is entitled to a type certificate for an aircraft in the primary category if—

- (1) The aircraft—
- (i) Is unpowered; is an airplane powered by a single, naturally aspirated engine with a 61-knot or less  $V_{\rm so}$  stall speed as defined in §23.49; or is a rotorcraft with a 6-pound per square foot main rotor disc loading limitation, under sea level standard day conditions;
- (ii) Weighs not more than 2,700 pounds; or, for seaplanes, not more than 3,375 pounds;
- (iii) Has a maximum seating capacity of not more than four persons, including the pilot; and
  - (iv) Has an unpressurized cabin.
  - (2) The applicant has submitted—
- (i) Except as provided by paragraph (c) of this section, a statement, in a form and manner acceptable to the Administrator, certifying that: the applicant has completed the engineering analysis necessary to demonstrate compliance with the applicable airworthiness requirements; the applicant conducted appropriate flight, structural, propulsion, and systems tests necessary to show that the aircraft, its components, and its equipment are reliable and function properly; the type design complies with the airworthiness standards and noise requirements established for the aircraft under §21.17(f); and no feature or characteristic makes it unsafe for its intended use;
- (ii) The flight manual required by §21.5(b), including any information required to be furnished by the applicable airworthiness standards;
- (iii) Instructions for continued airworthiness in accordance with §21.50(b); and
- (iv) A report that: summarizes how compliance with each provision of the type certification basis was determined; lists the specific documents in which the type certification data information is provided; lists all necessary drawings and documents used to define the type design; and lists all the engineering reports on tests and computations that the applicant must retain and make available under §21.49 to substantiate compliance with the applicable airworthiness standards.
  - (3) The Administrator finds that—
- (i) The aircraft complies with those applicable airworthiness requirements

#### §21.25

approved under §21.17(f) of this part; and

- (ii) The aircraft has no feature or characteristic that makes it unsafe for its intended use.
- (b) An applicant may include a special inspection and preventive maintenance program as part of the aircraft's type design or supplemental type design.
- (c) For aircraft manufactured outside of the United States in a country with which the United States has a bilateral airworthiness agreement for the acceptance of these aircraft, and from which the aircraft is to be imported into the United States—
- (1) The statement required by paragraph (a)(2)(i) of this section must be made by the civil airworthiness authority of the exporting country; and
- (2) The required manuals, placards, listings, instrument markings, and documents required by paragraphs (a) and (b) of this section must be submitted in English.

[Doc. No. 23345, 57 FR 41367, Sept. 9, 1992; as amended by Amdt. 21–75, 62 FR 62808, Nov. 25, 1997]

# $\S 21.25$ Issue of type certificate: Restricted category aircraft.

- (a) An applicant is entitled to a type certificate for an aircraft in the restricted category for special purpose operations if he shows compliance with the applicable noise requirements of part 36 of this chapter, and if he shows that no feature or characteristic of the aircraft makes it unsafe when it is operated under the limitations prescribed for its intended use, and that the aircraft—
- (1) Meets the airworthiness requirements of an aircraft category except those requirements that the Administrator finds inappropriate for the special purpose for which the aircraft is to be used; or
- (2) Is of a type that has been manufactured in accordance with the requirements of and accepted for use by, an Armed Force of the United States and has been later modified for a special purpose.
- (b) For the purposes of this section, "special purpose operations" includes—

- (1) Agricultural (spraying, dusting, and seeding, and livestock and predatory animal control);
  - (2) Forest and wildlife conservation;
- (3) Aerial surveying (photography, mapping, and oil and mineral exploration):
- (4) Patrolling (pipelines, power lines, and canals);
  - (5) Weather control (cloud seeding);
- (6) Aerial advertising (skywriting, banner towing, airborne signs and public address systems); and
- (7) Any other operation specified by the Administrator.

[Doc. No. 5085, 29 FR 14564, Oct. 24, 1964, as amended by Amdt. 21–42, 40 FR 1033, Jan. 6, 1975]

### § 21.27 Issue of type certificate: surplus aircraft of the Armed Forces.

- (a) Except as provided in paragraph (b) of this section an applicant is entitled to a type certificate for an aircraft in the normal, utility, acrobatic, commuter, or transport category that was designed and constructed in the United States, accepted for operational use, and declared surplus by, an Armed Force of the United States, and that is shown to comply with the applicable certification requirements in paragraph (f) of this section.
- (b) An applicant is entitled to a type certificate for a surplus aircraft of the Armed Forces of the United States that is a counterpart of a previously type certificated civil aircraft, if he shows compliance with the regulations governing the original civil aircraft type certificate.
- (c) Aircraft engines, propellers, and their related accessories installed in surplus Armed Forces aircraft, for which a type certificate is sought under this section, will be approved for use on those aircraft if the applicant shows that on the basis of the previous military qualifications, acceptance, and service record, the product provides substantially the same level of airworthiness as would be provided if the engines or propellers were type certificated under part 33 or 35 of the Federal Aviation Regulations.
- (d) The Administrator may relieve an applicant from strict compliance with a specific provision of the applicable requirements in paragraph (f) of this