§21.95

- (ii) Designated for dispensing fire fighting materials to which §36.1583 of this chapter does not apply, or
- (iii) U.S. registered, and that had flight time prior to January 1, 1955 or
- (iv) Land configured aircraft reconfigured with floats or skis. This reconfiguration does not permit further exception from the requirements of this section upon any acoustical change not enumerated in §21.93(b).
 - (4) Helicopters except:
- (i) Those helicopters that are designated exclusively:
- (A) For "agricultural aircraft operations", as defined in §137.3 of this chapter, as effective on January 1, 1966:
- (B) For dispensing fire fighting materials; or
- (C) For carrying external loads, as defined in §133.1(b) of this chapter, as effective on December 20, 1976.
- (ii) Those helicopters modified by installation or removal of external equipment. For purposes of this paragraph, "external equipment" means any instrument, mechanism, part, apparatus, appurtenance, or accessory that is attached to, or extends from, the helicopter exterior but is not used nor is intended to be used in operating or controlling a helicopter in flight and is not part of an airframe or engine. An "acoustical change" does not include:
- (A) Addition or removal of external equipment;
- (B) Changes in the airframe made to accommodate the addition or removal of external equipment, to provide for an external load attaching means, to facilitate the use of external equipment or external loads, or to facilitate the safe operation of the helicopter with external equipment mounted to, or external loads carried by, the helicopter;
- (C) Reconfiguration of the helicopter by the addition or removal of floats and skis;
- (D) Flight with one or more doors and/or windows removed or in an open position; or
- (E) Any changes in the operational limitations placed on the helicopter as a consequence of the addition or removal of external equipment, floats, and skis, or flight operations with doors and/or windows removed or in an open position.

- (5) Tiltrotors.
- (c) For purposes of complying with part 34 of this chapter, any voluntary change in the type design of the airplane or engine which may increase fuel venting or exhaust emissions is an "emissions change."

[Amdt. 21-27, 34 FR 18363, Nov. 18, 1969]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §21.93, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at www.govinfo.gov.

§21.95 Approval of minor changes in type design.

Minor changes in a type design may be approved under a method acceptable to the FAA before submitting to the FAA any substantiating or descriptive data.

§21.97 Approval of major changes in type design.

- (a) An applicant for approval of a major change in type design must—
- (1) Provide substantiating data and necessary descriptive data for inclusion in the type design;
- (2) Show that the change and areas affected by the change comply with the applicable requirements of this subchapter, and provide the FAA the means by which such compliance has been shown; and
- (3) Provide a statement certifying that the applicant has complied with the applicable requirements.
- (b) Approval of a major change in the type design of an aircraft engine is limited to the specific engine configuration upon which the change is made unless the applicant identifies in the necessary descriptive data for inclusion in the type design the other configurations of the same engine type for which approval is requested and shows that the change is compatible with the other configurations.

[Amdt. 21–40, 39 FR 35459, Oct. 1, 1974, as amended by Amdt. 21–92, 74 FR 53387, Oct. 16, 2009; Amdt. 21–96, 77 FR 71695, Dec. 4, 2012]

§21.99 Required design changes.

(a) When an Airworthiness Directive is issued under Part 39 the holder of the type certificate for the product concerned must—

- (1) If the FAA finds that design changes are necessary to correct the unsafe condition of the product, and upon his request, submit appropriate design changes for approval; and
- (2) Upon approval of the design changes, make available the descriptive data covering the changes to all operators of products previously certificated under the type certificate.
- (b) In a case where there are no current unsafe conditions, but the FAA or the holder of the type certificate finds through service experience that changes in type design will contribute to the safety of the product, the holder of the type certificate may submit appropriate design changes for approval. Upon approval of the changes, the manufacturer must make information on the design changes available to all operators of the same type of product.

[Doc. No. 5085, 29 FR 14567, Oct. 24, 1964, as amended by Amdt. 21–3, 30 FR 8826, July 24, 1965]

§ 21.101 Designation of applicable regulations.

- (a) An applicant for a change to a type certificate must show that the change and areas affected by the change comply with the airworthiness requirements applicable to the category of the product in effect on the date of the application for the change and with parts 34 and 36 of this chapter. Exceptions are detailed in paragraphs (b) and (c) of this section.
- (b) Except as provided in paragraph (g) of this section, if paragraphs (b)(1), (2), or (3) of this section apply, an applicant may show that the change and areas affected by the change comply with an earlier amendment of a regulation required by paragraph (a) of this section, and of any other regulation the FAA finds is directly related. However, the earlier amended regulation may not precede either the corresponding regulation included by reference in the type certificate, or any regulation in §§ 25.2, 27.2, or 29.2 of this chapter that is related to the change. The applicant may show compliance with an earlier amendment of a regulation for any of the following:
- (1) A change that the FAA finds not to be significant. In determining whether a specific change is signifi-

- cant, the FAA considers the change in context with all previous relevant design changes and all related revisions to the applicable regulations incorporated in the type certificate for the product. Changes that meet one of the following criteria are automatically considered significant:
- (i) The general configuration or the principles of construction are not retained.
- (ii) The assumptions used for certification of the product to be changed do not remain valid.
- (2) Each area, system, component, equipment, or appliance that the FAA finds is not affected by the change.
- (3) Each area, system, component, equipment, or appliance that is affected by the change, for which the FAA finds that compliance with a regulation described in paragraph (a) of this section would not contribute materially to the level of safety of the product or would be impractical.
- (c) An applicant for a change to an aircraft (other than a rotorcraft) of 6,000 pounds or less maximum weight, to a non-turbine rotorcraft of 3,000 pounds or less maximum weight, to a level 1 low-speed airplane, or to a level 2 low-speed airplane may show that the change and areas affected by the change comply with the regulations included in the type certificate. However, if the FAA finds that the change is significant in an area, the FAA may designate compliance with an amendment to the regulation incorporated by reference in the type certificate that applies to the change and any regulation that the FAA finds is directly related. unless the FAA also finds that compliance with that amendment or regulation would not contribute materially to the level of safety of the product or would be impractical.
- (d) If the FAA finds that the regulations in effect on the date of the application for the change do not provide adequate standards with respect to the proposed change because of a novel or unusual design feature, the applicant must also comply with special conditions, and amendments to those special conditions, prescribed under the provisions of §21.16, to provide a level of safety equal to that established by the