

## Advisory Circular

**Subject:** Control of Products and Parts
Shipped Prior to Type Certificate Issuance

Date: 08/31/2010
AC No: 21–32B
Initiated by: AIR–200

**1. Purpose.** This advisory circular (AC):

- **a.** Provides information about Title 14, Code of Federal Regulations (14 CFR), part 21, Certification Procedures for Products, Articles, and Parts. (Articles include parts as defined in 14 CFR § 21.1(b)(2)).
- **b.** Provides a means to control products and articles shipped prior to the issuance of a type certificate (TC), a supplemental type certificate (STC), or a production certificate (PC). For the purposes of this AC, the acronym TC includes STC.
- **c.** Is not mandatory and does not constitute a regulation. This AC describes an acceptable means, but not the only means, to comply with these requirements. However, if you use the means described in the AC, you must follow it in all important respects.
- **2. Audience.** This AC affects manufacturers who produce products or articles, shipped before the issuance of a TC or producing under subpart F, Production Under Type Certificate.
- **3. Effective Date**. This AC is effective April 16, 2011.
- **4. Explanation of Changes.** This revision:
- **a.** Updated all references to Title 14 CFR part 21, Certification Procedures for Products, Articles, and Parts, dated: October 16, 2009.
  - **b.** Updates formatting to match the current AC formatting policy.
- **5. Cancellation.** This AC cancels, as of its effective date, AC 21-32A, Control of Products and Parts Shipped prior to Type Certificate Issuance, dated March 19, 1996.
- **6. Background.** Aircraft, aircraft engine, and propeller manufacturers must often ship completed products or articles, before TC issuance to support their overall TC programs. This AC will facilitate TC programs as it contains procedures to control the configuration of urgently needed products or articles, shipped during the TC process. It will also help the industry ensure that FAA-approved articles are available for installation at the completion of the TC program.

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## 7. Regulatory Requirements.

**a.** Applicants for type certification of aircraft engines and propellers are required under 14 CFR part 21, § 21.53(a), to submit a statement of conformity to the FAA.

- **b.** A holder or licensee of a TC who manufactures a product under subpart F is required to provide a statement that the product conforms to its type design and is in a condition for safe operation. For each product and article, applicants are required, in accordance with 14 CFR § 21.130, to submit a statement of conformity to the FAA.
- **8. General Information.** For any shipments before TC issuance, the applicant should submit a written proposal to the local FAA manufacturing inspection district office (MIDO) requesting approval to ship completed products or articles. Products or articles should not be shipped to any country whose authorities would prohibit the entry of FAA personnel into their country, or inhibit FAA activities in any manner. The applicant should provide assurance of access to the FAA. The proposal should include:
- **a.** Documented procedures detailing how the products or articles will be controlled and positively identified consistent with paragraphs 9 and 10 of this AC. The applicant should give the FAA sufficient time to evaluate the viability of the proposal and coordinate with the civil aviation authority (CAA) of other countries if necessary.

**NOTE:** The FAA may request that the CAA of the country or jurisdictions in which the product or articles will be located, assist in conducting surveillance and inspections. Certain CAAs may charge a fee for services rendered. In this instance, the payment of CAA fees is the responsibility of the applicant. The CAA of other countries or jurisdictions may prohibit certain FAA activities, including functions performed by FAA designees, at facilities operating within their regulatory system. Any CAA assistance is subject to written agreements between the FAA and the respective CAA.

- **b.** Any planned use of FAA designees to conduct conformity inspections or make airworthiness determinations on behalf of the FAA. These functions would be performed on-site for each product or article, or lot of articles being shipped before TC issuance. The use of designees could be a factor in the FAA's approval of the proposal because the use of designees at a location outside of the United States may alleviate an undue burden on the FAA.
- **c.** All design and quality data that may be required to conduct conformity inspections or make airworthiness determinations.
- **d.** Procedures to control completed products and articles, that are directly shipped from suppliers.
- **9.** Aircraft Engines, and Propellers (Products). The proposal should contain, at a minimum, the following:

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## a. Before Type Certification.

(1) The procedures to track products configuration from the time of manufacture through the time of shipment and until the TC is issued. The procedures should require the use FAA Form 8130-9, Statement of Conformity, to establish the status of the product by listing all deviations to the proposed type design.

- (2) The estimated quantity of products to be shipped and the destination(s) (country, facility name, address, etc.).
  - (3) The reason why the products need to be shipped before TC issuance.
- (4) The approximate completion date of the TC program and estimated total operational hours that each product will accumulate before TC issuance.
- (5) The method used to monitor products operation and the entry of inspection and maintenance activities into the products records. The method should include instructions to record any operation that occurs in excess of the products proposed operating limitations. This includes products used for static and flight tests that may have exceeded design limits.
- **(6)** The method of clearly identifying the product with its airworthiness status e.g., "not for revenue service flight test only" or "not for revenue service type certificate pending."
- (7) The method of monitoring the segregated storage and storage conditions of products at the destination facility.
- (8) The facility location where the applicant will demonstrate that the product conforms to its proposed design and is in a condition for safe operation.

**NOTE:** The location of this facility could be a factor in the FAA's approval of the proposal because a location outside the United States may create an undue burden on the FAA.

- (9) The procedures to update the product to its approved TC design and the approximate date this will occur.
  - (10) The proposed use of any designees to conduct conformity inspection for the FAA.

## b. After Type Certification.

(1) Procedures for submitting FAA Form 8130-9, Statement of Conformity, stating that the product conforms to its approved design and is in a condition for safe operation. The procedures should also require the inclusion of a statement in Block D that the products final operational check was completed and date the operational check was conducted.

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(2) Procedures for marking the aircraft or aircraft engine data plate, propeller, propeller blade, or propeller hub with the TC number, if appropriate. Depending on the individual program, the product may be considered produced under TC versus produced under a PC. The FAA will determine on a case-by-case basis the appropriate marking in accordance with part 45, Identification and Registration Marking.

- **10.** Aircraft Parts, Aircraft Engine Parts, and Propeller Parts (Articles). At a minimum, the proposal should contain the following:
- **a.** Procedures to track the configuration of the articles from the time of manufacture through the time of shipment and until the TC is issued. The procedures should require the use of FAA Form 8130-9, Statement of Conformity, to establish the status of the article by listing all deviations to the proposed type design.
- **b.** The method of identifying and segregating the article shipped by the applicant or its suppliers with direct ship authority to prevent their inadvertent installation on type certificated products before TC issuance.
- **c.** The method of monitoring the segregated storage and storage conditions of the articles at the destination facility.
- **d.** The method of recalling and updating articles to the current configuration that do not meet the approved design at the time of TC issuance. This method should ensure proper disposition of articles to preclude their installation in type certificated products unless they are updated to the current configuration.
- **e.** The method of notifying facilities, where articles were shipped prior to TC issuance, concerning the approval status of parts after TC issuance.
- **11. Where to Find This AC.** You can find this AC at http://www.faa.gov/regulations\_policies/advisory\_circulars/.

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