

Advisory Circular

Subject: CONTROL OF PARTS SHIPPED

PRIOR TO TYPE CERTIFICATE

ISSUANCE

Date: 10/14/92

AC No: 21-32

Initiated by: AIR-200 Change:

1. <u>PURPOSE</u>. This advisory circular provides information and guidance concerning the control of parts proposed to be shipped by manufacturers with an approved production inspection system (APIS) or production certificate (PC) (production approval holders) in advance of type certification of a new aircraft, aircraft engine, or propeller (product).

- 2. RELATED FEDERAL AVIATION REGULATIONS (FAR).
 - a. Part 21, Subpart B, Type Certificates.
 - b. Part 21, Subpart F, Production Under Type Certificate Only.
 - c. Part 21, Subpart G, Production Certificates.
 - d. Part 21, Subpart L, Export Airworthiness Approvals.
- 3. GENERAL. Production approval holders must often ship parts to facilities such as coproducers, subcontractors, repair stations, and commercial air carriers in advance of type certification of a new product, so adequate spares are on hand, or are available for incorporation into the product upon type certificate (TC) issuance. Notwithstanding any contractual commitments, production approval holders located in the United States (U.S.) are responsible for the following:
- a. Applicants for type certification of new aircraft engines and propellers are responsible under FAR section 21.53, Statement of Conformity, paragraph (a), for submitting to the Federal Aviation Administration (FAA) a statement of conformity to the type design.
- b. Applicants for type certification of new aircraft or parts thereof are responsible under FAR section 21.53, Statement of Conformity, paragraph (b), for submitting to the FAA a statement of conformity to FAR section 21.33, Inspection and Tests, paragraph (a), when the aircraft or parts thereof are presented for tests.
- c. Manufacturers with an APIS are responsible under FAR section 21.130, Statement of Conformity, for submitting to the FAA a statement of conformity which must include:

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(1) For each product, a statement that the product conforms to its TC and is in a condition for safe operation.

- (2) For each aircraft, a statement that the aircraft has been flight checked.
- (3) For each aircraft engine or variable pitch propeller, a statement that the engine or propeller has been subjected by the TC holder to a final operational check.
- d. Production certificate holders are responsible for complying with FAR section 21.165(b) by ensuring that each completed product and part submitted for airworthiness certification conforms to the type design and is in a condition for safe operation.
- 4. <u>CONTROL OF PARTS SHIPPED PRIOR TO TC ISSUANCE</u>. Production approval holders located in the U.S. should control parts shipped in advance of TC issuance as follows:
- a. Production approval holders in the U.S., who enter into a production program requiring shipment of parts in advance of type certification, should present a formal proposal to the FAA detailing how the configuration of those parts will be controlled until the TC, APIS, and/or PC are issued. The proposal should be presented to the FAA as soon as practicable to allow review and discussion to determine if the proposal will result in a viable program. From a planning standpoint, the production approval holder should give the FAA sufficient lead-time to evaluate the proposal since it may be necessary in some instances for the FAA to coordinate with Civil Aviation Authorities (CAA) of other countries.
- b. The proposal for control of parts shipped prior to TC issuance should contain the following as a minimum:
- (1) The method of tracking part configuration from the time of manufacture through the time of shipment and until the TC is issued.
- (2) The method of identifying and segregating parts shipped by the production approval holder and/or its suppliers in such a manner as to preclude their inadvertent installation prior to type design approval.
- (3) The method of storing parts received by coproducers, subcontractors, repair stations, and commercial air carriers.
- (4) The method of recall and configuration updating of parts shipped prior to TC issuance, including parts used during type design testing and customer crew training, that do not meet type design at the time of TC issuance.
- (5) The method of notifying facilities, to whom parts were shipped prior to TC issuance, concerning the approved or non-approved status of the parts at the time of TC issuance.

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(6) The proposed use of any designees to conduct conformity inspections on behalf of the FAA as provided in FAR Part 183. These conformity inspections would be conducted on each part or lot of parts being shipped in advance of type certification of the product.

c. Production approval holders in the U.S. should be prepared to furnish the FAA with any design or quality control data which may be required by other CAA to determine conformity to the approved type design of completed products.

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Service