

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N 8900.121

National Policy

Effective Date:
6/7/10

Cancellation Date:
6/7/11

SUBJ: Maintenance/Alteration Using Manufacturer's Blueprints and/or Parts

- 1. Purpose of This Notice.** This notice provides guidance to aviation safety inspectors (ASI) (Maintenance and Avionics) for advising maintenance providers on the use of manufacturer's blueprints, and parts produced outside the requirements of Title 14 of the Code of Federal Regulations (14 CFR) part 21 subpart K when performing maintenance and/or alteration.
- 2. Audience.** The primary audience for this notice is Flight Standards District Office (FSDO) and International Field Office (IFO) ASIs (Maintenance and Avionics) who have certificate management oversight responsibilities. The secondary audience includes Flight Standards branches and divisions in the regions and in headquarters.
- 3. Where You Can Find This Notice.** You can find this notice on the MyFAA employee Web site at https://employees.faa.gov/tool_resources/orders_notices. Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at <http://fsims.avs.faa.gov>. Operators may find this information on the Federal Aviation Administration's (FAA) Web site at <http://fsims.faa.gov>.
- 4. Background.** The Aircraft Maintenance Division (AFS-300) has discovered that maintenance providers, particularly ones directly associated with manufacturing facilities (non-type/production certificate holders), are using manufacturer's blueprints, drawings, and process sheets when performing maintenance and/or alteration. In some cases, maintenance facilities are procuring parts from these manufacturing facilities without the approval of the Production Approval Holder (PAH). These practices have lead to the disclosure of unapproved parts, and performance of improper maintenance.
- 5. Regulations.**
 - a. Maintenance.** Title 14 CFR part 43, § 43.13(a) requires each person performing maintenance, alteration, or preventive maintenance, on an aircraft, engine, propeller, or appliance use the methods, techniques, and practices prescribed in the manufacturer's maintenance manual, or instructions for continued airworthiness (ICA) prepared by its manufacturer, or other methods techniques, and practices acceptable to the administrator.

b. Approval of Parts. Part 21, § 21.303, applies to the approval of materials, parts, processes, and appliances. Section 21.303(a) requires persons producing modification or replacement parts *for sale for installation* on a type-certificated products to produce those parts according to a Parts Manufacturing Approval (PMA).

c. Exceptions. Exceptions to the PMA requirement found in § 21.303(b) are:

- (1) Parts produced under a type or production certificate,
- (2) Parts produced by an owner for maintaining his or her own product,
- (3) Parts produced under an FAA Technical Standard Order (TSO), or
- (4) Standard parts (e.g., such as bolts and nuts) conforming to established industry or U.S. specifications.

6. Legal Rulings.

a. Interpretation. On August 5, 1993 the Assistant Chief Counsel for Regulations (AGC-200) issued a legal interpretation addressing the definition of an “owner produced part,” § 21.303(b)(2). The interpretation is important from the perspective that it also clearly addresses the ability of a “person” to produce a part for the purpose of performing maintenance or alteration, provided certain circumstances that assure quality control of the part produced is upheld.

b. Quality Control (QC). These provisions would include a QC system similar to that contained in § 21.303(h). The interpretation also provides a discussion on the intent of the language “produce for sale for installation.” Office of the Chief Council (AGC) has concluded that parts produced by repair stations and mechanics for the purpose of performing maintenance on products brought in by their customers would *not* be considered “produced for sale” as defined in the context of § 21.303(a).

7. Guidance (current editions).

a. Advisory Circular (AC) 43-18, Fabrication of Aircraft Parts by Maintenance Personnel. This AC provides provisions for the fabrication of aircraft parts by maintenance personnel. The AC is one method of ensuring that parts fabricated during maintenance or alteration have an equivalent level of safety as those parts produced under the original design approval holder’s certificate.

b. AC 120-77, Maintenance and Alteration Data. This AC provides definitions for the terms methods, techniques, practices, and technical data. Methods, techniques, and practices are “the step by step, how to instructions for accomplishing maintenance, preventive maintenance, and alterations.” Technical data is the “drawings and specifications, including a list of drawings and specifications to define the configuration and design features of a particular article, repair, or alteration.”

c. FAA Order 8900.1, Volume 6, Chapter 9, Part 145 Inspections. This cautions principal inspectors (PI) performing surveillance to be cognizant of repair stations that are associated with, or part of, a production approval holder or supplier to the production approval holder. Repair stations associated with these type of facilities often use manufacturer's drawings and data to perform maintenance. This data may not meet the requirements of the performance rules set forth in § 43.13(a). Additionally, PIs should take caution that parts manufactured by non PAHs must receive approval through a method outlined in § 21.305.

8. Action.

a. Responsibility. ASIs (Maintenance and Avionics) responsible for certificate management oversight of persons performing maintenance and/or alteration, should review data being utilized for compliance to § 43.13(a). Manufacturer's blueprints, or drawings may not contain the procedures ("how to instructions") necessary to show compliance with this section.

b. Procurement. PIs should also ensure that repair stations associated with, or part of, a PAH, or supplier to the PAH are procuring parts through the proper sources when performing maintenance or alteration functions, they are as follows:

(1) The PAH with responsibility for the airworthiness of the product or article may allow parts to be directly shipped from a supplier to an end user, commonly called "direct ship authorization." In this case, the PAH must provide written documentation of this authorization. This documentation should be requested by the repair station prior to utilization of those parts. Authorizations of this type are generally limited in scope and duration. Additional information can be found in the current editions of FAA Order 8120.2, Production Approval and Certificate Management Procedures, and FAA Order 8130.21, Procedures for Completion and Use of the Authorized Release Certificate, FAA Form 8130-3, Airworthiness Approval Tag.

(2) The supplier holds PMA for the parts they are manufacturing.

9. Disposition. We will incorporate the information in this notice into FSIMS before this notice expires. Direct questions regarding this notice to the Aircraft Maintenance Division, General Aviation Branch, AFS-350, at (202) 385-4277.

A handwritten signature in dark ink, appearing to read "Raymond L. Allen". The signature is fluid and cursive, with a large initial "R".

for

John M. Allen
Director, Flight Standards Service