



Federal Aviation Administration

Memorandum

Date: November 10, 2015

To: See Distribution List

From: Susan J. M. Cabler, Acting Manager, Design, Manufacturing, &
Airworthiness Division, AIR-100 *SJM Cabler*

Prepared by: Ralph Meyer, Operational Oversight Policy Branch, AIR-140

Subject: Deviation to Federal Aviation Administration (FAA) Order 8100.15B,
Organization Designation Authorization Procedures, Regarding Requirements
for Prototype Installation Locations

Memo No.: AIR100-15-140-DM56

Overview

This memorandum authorizes a deviation from the current type certificate (TC) and supplemental type certificate (STC) Organization Designation Authorization (ODA) prototype installation location requirements of FAA Order 8100.15B, paragraphs 8-7 and 11-6b, and other related paragraphs. Prototype installations may now be conducted at any location as long as any necessary procedures and controls are in place to ensure the ODA holder conducts all of the needed conformity inspections.

Background

FAA Order 8100.15B currently requires that ODA prototype installations be conducted at certain fixed *facilities* authorized by the FAA or other foreign airworthiness authority to approve the altered product for return to service. These limitations were initially imposed based on the assumption that there was an increased risk of a nonconforming installation if not done at an approved facility. Since originally implemented, specific changes to the requirements have been instituted for foreign-registered repair stations and military commercial derivative aircraft (MCDA). In addition to the restrictions on installation locations, FAA Order 8100.15B also imposes specific purchasing and receiving requirements for off-site projects and requires the ODA holder to evaluate any off-site facility to confirm its capability to alter the product.

In practice, these ODA limitations have resulted in additional FAA workload to manage off-site projects, even when the ODA holder is technically qualified and the project is low-risk in terms of complexity or safety impact. Even with FAA management of such projects, no special

considerations are given to the location of the prototype activities or the capabilities of those performing the alteration.

Additionally, the FAA no longer believes that a prototype alteration's location or facility increases the risk of nonconformity to design data when the conformity of a prototype article or product is controlled and established through the standard conformity inspection processes of FAA Order 8110.4, *Type Certification*. Those requirements include a structured conformity inspection program based on the particulars of each certification project, and would determine the types of FAA conformity inspections required based on all of the factors involved in the installation, not just the specific facility and location.

The FAA Order 8100.15B requirements are also redundant to the requirements of Title 14 of the Code of Federal Regulations (14 CFR) part 43 when mandating that prototype installations be conducted at facilities authorized to approve for return to service. The order's requirements to approve an altered product for return to service are sufficiently addressed by part 43, similar regulations by foreign airworthiness authorities, and other requirements imposed by the military services. Duplication of these requirements as a condition of performing the prototype alteration provides no benefit, and should not apply to prototype activity unless the altered product is actually being returned to service.

Policy

Organization Management Teams (OMT) and ODA holders may deviate from the following paragraphs of FAA Order 8100.15B, as addressed below. ODA holders may not deviate from approved ODA manuals, which may be revised in consideration of the following.

Paragraph 8-7, Off-Site Project Requirements, and 8-7a, Authorized Facilities

ODA prototype installations may be conducted at any location by any entity determined by the ODA holder's evaluation as having the appropriate skills and equipment needed to ensure the conformity of the prototype installation. This may include repair stations operating under the authority of 14 CFR 145.203.

Note 1: If the prototype aircraft is being approved for return to service, the ODA holder must ensure the prototype installation is conducted in accordance with the applicable regulations or requirements of the airworthiness authority of the State of Registry or other entity responsible for the airworthiness of the product.

Note 2: Any prototype installation that requires on-site FAA participation as part of the project or for ODA supervision or any other reason is subject to the availability of FAA funding and resources.

Note 3: Prototype installations on projects classified as significant pursuant to 14 CFR 21.101 must be accomplished at FAA-certificated facilities.

The existing requirements of paragraphs 8-7b through 8-7f still apply.

Paragraph 8-7g, Off-site Project Coordination within the FAA

The existing requirements of paragraph 8-7g apply except for subparagraph 8-7g(4). The OMT is no longer required to verify that the off-site facility is authorized to approve for return to service.

Paragraph 8-7h, Off-site Prototype Installations on Commercial Derivative Military Aircraft

The existing requirements of this paragraph are no longer applicable. Prototype installations on MCDA may be performed at any facility and by any entity agreed to by the military service responsible for the airworthiness of the product. The ODA holder's evaluation must determine that the appropriate skills and equipment needed to ensure the conformity of the prototype installation will be used.

Paragraph 11-8, Off-Site Project Requirements, and 11-8a, Authorized Facilities

ODA prototype installations may be conducted at any location by any entity determined by the ODA holder's evaluation as having the appropriate skills and equipment needed to ensure the conformity of the prototype installation. This may include repair stations operating under the authority of 14 CFR 145.203.

Note 1: If the prototype aircraft is being approved for return to service, the ODA holder must ensure the prototype installation is conducted in accordance with the applicable regulations or requirements of the airworthiness authority of the State of Registry or other entity responsible for the airworthiness of the product.

Note 2: Any prototype installation that requires on-site FAA participation as part of the project or for ODA supervision or any other reason is subject to the availability of FAA funding and resources.

Note 3: Prototype installations on projects classified as significant pursuant to 14 CFR 21.101 must be accomplished at FAA-certificated facilities.

The existing requirements of paragraphs 11-8b through 11-8f still apply.

Paragraph 11-8g, Off-Site Project Coordination within the FAA

The existing requirements of paragraph 11-8g apply except for subparagraph 11-8g(4). The OMT is no longer required to verify that the off-site facility is authorized to approve for return to service.

Paragraph 11-9, Off-Site Prototype Installations on Military Commercial-Derivative Aircraft

The existing requirements of this paragraph are no longer applicable. Prototype installations on MCDA may be performed at any facility and by any entity agreed to by the military service responsible for the airworthiness of the product. The ODA holder's

evaluation must determine that the appropriate skills and equipment needed to ensure the conformity of the prototype installation will be used.

This deviation will be incorporated into a future revision of FAA Order 8100.15. For more information, please contact Ralph Meyer, AIR-140, at ralph.meyer@faa.gov or (202) 267-1575.

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