

Advisory Circular

Subject: Instructions for Completion of FAA Form 337

Date: 11/1/19 Initiated by: AFS-300 **AC No:** 43.9-1G

by: AFS-300 Change:

- 1 PURPOSE OF THIS ADVISORY CIRCULAR (AC). This AC provides instructions for completing Federal Aviation Administration (FAA) Form 337, Major Repair and Alteration (Airframe, Powerplant, Propeller, or Appliance).
- **2 AUDIENCE.** This AC applies to all aircraft owners.
- **3 WHERE YOU CAN FIND THIS AC.** You can find this AC on the FAA's website at http://www.faa.gov/regulations_policies/advisory_circulars.
- **4 WHAT THIS AC CANCELS.** AC 43.9-1F, Instructions for Completion of FAA Form 337, dated January 25, 2007, is canceled.
- **5 RELATED REGULATIONS.** Title 14 of the Code of Federal Regulations (14 CFR) part 43, §§ 43.5, 43.7, 43.9, and appendix <u>B</u>.
- **6 RELATED INFORMATION.** FAA Form 337 is free and available at all FAA Manufacturing Inspection District Offices (MIDO), Responsible Flight Standards Offices (RFSO), International Field Offices (IFO), certificate management offices (CMO), and online at https://www.faa.gov/forms/index.cfm/go/document.information/documentID/185675.
- **6.1 Purpose of FAA Form 337.** The form serves three main purposes:
 - 1. To provide aircraft owners and operators with a record of major repairs and major alterations indicating the details and approvals;
 - 2. To provide the FAA with a copy of the form for inclusion in the aircraft records at the FAA Aircraft Registration Branch; and
 - 3. To document and record compatibility assessment conducted by the installer in accordance with the Form 337 NOTICE header block located above Item 8 Description of Work Accomplished.
- **6.2 Completion of FAA Form 337.** This form can be completed on paper or by using the electronic FAA Form 337. Information can be found online at http://eformservice.faa.gov/eForm337.aspx or by contacting your RFSO.

7 ELECTRONIC FORMAT.

7.1 Electronic Tracking Number. In the upper right corner of the form's header, there is a block titled "Electronic Tracking Number." This block is used only in the electronic version to automatically apply a number that identifies and retrieves forms electronically. Further information on the use of this number is supplied in training material at the website provided in paragraph <u>6.2</u> of this document.

- **7.2 Watermark.** Under current policy, the header block titled "For FAA Use Only" has no official use except as a watermark applied automatically to indicate submittal when using electronic media.
 - 8 FORM INSTRUCTIONS. The person who performs or supervises a major repair or major alteration must prepare FAA Form 337. The form is executed at least in duplicate and is used to record major repairs and major alterations made to an aircraft, airframe, powerplant, propeller, appliance, or a component part thereof. The following instructions apply to Items 1 through 8 of the form as illustrated in Appendix A, FAA Form 337. The terms "Item" and "Block" are used synonymously in FAA documents relating to data collection on FAA Form 337.
- **8.1 Item 1 Aircraft.** The "Nationality and Registration Mark" is the same as shown on Aircraft Certification (AC) Form 8050-3, Certificate of Aircraft Registration. An "N" prefix denotes the nationality for U.S.-registered aircraft. Information to complete the "Make," "Model," and "Serial Number" blocks is found on the aircraft manufacturer's identification plate. A "Series" block has been provided to further identify the series of a specific model. Proper segregation of the model and series will be useful in collecting data for safety related issues.

Note: When the aircraft registry receives a completed FAA Form 337 for the official aircraft file, it is validated by matching the registration "N" number with the serial number. If an application for a change to the "N" number has been made, it is important for the submitter to receive verification of the change from the FAA registry with a new AC Form 8050-3. If the FAA Form 337 must be submitted before receipt of the new registration, then the old "N" number must be used.

8.2 Item 2 – Owner. Enter the aircraft owner's complete name and address as shown on AC Form 8050-3. When work is performed during a change in ownership, it is permissible to use the name and address shown on AC Form 8050-1, Aircraft Registration Application.

Note: When a major repair or major alteration is made to a component part, Items 1, 2, and in some cases 5 will be left blank and the original and duplicate copies of the form will remain with the part until it is installed on an aircraft. After entering the required information in Items 1, 2, and if appropriate, 5, the person who installed the part will give one form to the owner/operator and forward the duplicate copy to the FAA registry within 48 hours after the aircraft is approved

for return to service. If a component part of an airframe, powerplant, propeller, or appliance is repaired or altered and the unit identification information is not known, it is appropriate to apply the preceding procedure and leave Item 5 blank until the airframe, powerplant, propeller or appliance is installed on the aircraft.

- **8.3** Item 3 For FAA Use Only. Indicate approval in Item 3 when the FAA determines that data used to perform a major repair or major alteration conforms to accepted industry practices and is in compliance with current guidance and regulatory requirements. Approval is indicated by one of the following methods. (See paragraph 9 for further details.)
- **8.3.1 Approval of Data by Examination Only.** Enter the following statement on FAA Form 337 when the data package is reviewed and a data approval is completed:

"The data identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized in section 43.7."

8.3.2 Approval of Data by Physical Inspection. Enter the following statement on FAA Form 337 when a physical inspection, demonstration, or other type of test of an aircraft is satisfactorily performed and an installation approval is completed:

"Approval by Physical Inspection, Demonstration, Testing, etc.—One Aircraft: The alteration or repair identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized in section 43.7." (Refer to FAA Order 8300.16, Major Repair and Alteration Data Approval.)

8.3.3 Designated Airworthiness Representative Statement of Completeness. Authorized designee certification of data indicates that the data in Item 8, Description of Work Accomplished, comes from FAA-approved sources and addresses all the original certification requirements for the aircraft described in Item 1. It does not constitute a field approval or approval of the data. Enter the following statement when an authorized designee has reviewed and certified the alteration data package by signing, dating, and entering its designee authorization number in Item 3:

"The alteration identified herein has been reviewed and found to be complete with appropriate Designated Engineering Representative approvals. All aspects of the alteration(s) are compatible and eligible for use on the above described aircraft, subject to conformity inspection by a person authorized in § 43.7." (Refer to FAA Order 8100.8, Designee Management Handbook, Function Code 50.)

Note: Advisory material for making compatibility determination can be found in AC <u>20-188</u>, Compatibility of Changes to Type Design Installed on Aircraft.

8.3.4 Overweight Aircraft Operating Under a Special Flight Permit. Enter the following statement as part of the recordkeeping requirements for overweight flight permits contained in FAA Order 8130.2, Airworthiness Certification of Aircraft:

"No person may operate this aircraft, as altered herein, unless it has within it an appropriate and current special flight permit issued under part <u>21</u>." (Refer to Order 8130.2.)

- **8.4** Item 4 Type. Enter a checkmark in the appropriate column to indicate whether the unit was repaired or altered. Use only one "Type" line per form.
- **8.5 Item 5 Unit Identification.** Use the information blocks under Item 5 to identify the airframe, powerplant, propeller, or appliance that has been repaired or altered. It is only necessary to complete the blocks for the unit repaired or altered. The procedure for repair or alteration of a component part when the unit identification is unknown is detailed in paragraph 8.2, above. Use only one "Unit Identification" line per form.

Note: A component of an airframe, powerplant, propeller, or appliance repaired or altered must be clearly identified in Item 8 listing the part number, serial number, and any other descriptive information, as applicable.

- 8.6 Item 6 Conformity Statement.
- **8.6.1** "A" Agency's Name and Address. Enter the name of the certificated person or entity accomplishing the repair or alteration. Mechanics should enter their name and permanent mailing address. Manufacturers, repair stations, and certificated maintenance organizations should enter the name and address under which they are certificated.
- **8.6.2** "B" Kind of Agency. Check the appropriate box to indicate the type of person or organization that performed the work.

Note: For the purposes of this form, a Canadian Approved Maintenance Organization is considered a foreign mechanic.

- **8.6.3** "C" Certificate Number. Enter the appropriate certificate number for the "Kind of Agency" entered in Item 6B of the form. Mechanics should enter their Mechanic Certificate number. Certificated maintenance organizations and repair stations should enter the number referenced on the Air Carrier, Air Operator, or Air Agency Certificate issued by the FAA, as appropriate. Manufacturers should enter their Production Certificate (PC) or Supplemental Type Certificate (STC) number, as appropriate. When repairing or altering articles, manufacturers holding Technical Standard Order (TSO) approvals should enter the TSO number of the affected article.
- **8.6.4** "D" Conformity Statement. Use this space to certify that the repair or alteration complies with part 43. When work was performed or supervised by certificated mechanics, they should enter the completion date of the repair or alteration and sign their full name. Repair stations and maintenance organizations are permitted to authorize their

- employees to date and sign this conformity statement to comply with their FAA-approved program.
- **8.6.5 Fuel Tank Modification.** For modifications involving installation of extended range fuel tanks in the passenger or baggage compartment as described in part 43, appendix B, check the box provided to indicate the modification.
 - **Note:** In this instance, one copy of FAA Form 337 must be placed onboard the aircraft as specified in 14 CFR part 91, § 91.417, when the aircraft is approved for return to service.
 - **8.7** Item 7 Approval for Return to Service. Part 43 establishes the conditions under which major repairs or major alterations to airframes, powerplants, propellers, and appliances may be approved for return to service. This portion of the form is used to indicate approval or rejection of the repair or alteration and to identify the person or agency making the airworthiness determination.
- **8.7.1** Check the "Approved" or "Rejected" box to indicate the finding. Rejected forms will be returned to the person who made the modification, as identified in Item 6, for correction. Approved forms will be completed, signed, and submitted to the aircraft registry.
- 8.7.2 Check the appropriate box to indicate who made the finding. Use the box labeled "Other" to indicate a finding by a person other than those listed. This box is reserved for any entity, not otherwise identified, that the FAA may authorize to perform that function. The person who made the finding should sign and date the form. The person's name should also be typed or printed below their signature and the appropriate certificate or designation number should be entered. If an aviation safety inspector (ASI) signs Item 7, the ASI's office identifier is placed in the "Certificate or Designation No." block.
- **8.7.3** Before approving FAA Form 337, it is the responsibility of the person approving the product for return to service to ensure that all the work described in Item 8 matches approved data and that the information presented on the form is complete.
- **8.7.4** If the form is not accepted by the aircraft registry for any reason, it will be routed through the responsible FAA office back to the approval for return to service agent identified in Item 7.
 - 8.8 Item 8 Description of Work Accomplished.
- **8.8.1** Enter a clear, concise, and legible statement describing the work accomplished in Item 8 on the reverse side of FAA Form 337. It is important to describe the location of the repair or alteration relative to the aircraft or component. If making a repair to a buckled spar, the description entered in Item 8 might begin by stating, "Removed wing from aircraft and removed skin from outer 6 feet. Repaired buckled spar 49 inches from the tip in accordance with..." and continue with a description of the repair. If the repair or alteration can be concealed by skin or another structure, then an authorized individual should make a pre-closure certification statement. This statement includes a signature and

- certificate number and says that a pre-closure inspection was made and that covered areas were found satisfactory.
- **8.8.2** The description should refer to all applicable 14 CFR sections and to the FAA-approved data used to substantiate the airworthiness of the repair or alteration. Forms of FAA-approved data are contained in Order 8300.16 and AC <u>43-210</u>, Standardized Procedures for Obtaining Approval of Data Used in the Performance of Major Repairs and Major Alterations.
 - **Note:** Supplemental data such as stress analyses, test reports, sketches, or photographs are often proprietary and not intended as part of the Item 8 description. Supplemental data submitted as part of the Item 8 description should be identified as an attachment to the form using the following procedure.
- 8.8.3 If additional space is needed to describe the repair or alteration for Item 8, check the "Additional Sheets Are Attached" box at the bottom of the page. Attach sheets showing the aircraft nationality, registration mark, and the date the work was completed. All attachments to Item 8 must be submitted on 8½ by 11-inch paper to allow for proper processing into the aircraft historical record at the aircraft registry. If attachments to FAA Form 337 are received by the FAA in a format larger than an 8½ by 11-inch page, then the submission will be returned to the person identified in Item 7 for correction and resubmission.
- **8.8.4** Showing Weight and Balance (W&B) computations under Item 8 is not required but it may be done. If W&B of the aircraft are affected by the work described on FAA Form 337, the changes should be entered in the aircraft W&B records with the date, signature, and reference to the form.
- **8.8.5** AC 20-188, paragraph 4, provides examples of potentially hazardous additions of new modification to existing aircraft.
- **8.8.6** AC 20-188, paragraph 5, provides the aircraft owner/operator guidance on how to assess the STC compatibility and other considerations as part of the evaluation.
- **8.8.7** AC 20-188, paragraph 6, advises installers of their responsibilities in the compatibility assessment.
- **8.8.8** AC 20-188, paragraph 7, provides guidance on how to address the non-compatible modifications.
 - **9 ADMINISTRATIVE PROCESSING.** FAA Form 337 will be executed in duplicate with one signed copy given to the aircraft owner and one copy forwarded to the FAA within 48 hours after the airframe, aircraft engine, propeller, or appliance is installed on an aircraft and approved for return to service. FAA processing of the forms and their supporting data will depend on whether approved or unapproved data is used.
 - **9.1 Approved Data.** Complete the form as instructed in this AC, excluding Item 3, and ensure that Items 6 and 7 have been properly executed. Give a copy of the form to the

aircraft owner/operator and send a duplicate copy to the Aircraft Registration Branch within 48 hours after the airframe, aircraft engine, propeller, or appliance is installed on an aircraft and approved for return to service.

9.2 Unapproved Data. Complete the form as instructed in this AC, leaving Items 6 and 7 blank. Both copies of the form and any supplemental data will be sent to the FAA office. When the FAA determines that the major repair or major alteration data complies with regulations and conforms to accepted industry practices, data approval will be recorded by entering an appropriate statement in Item 3. Both forms and any supplemental data will be returned to the applicant who will then complete Items 6 and 7. The applicant will give one of the completed forms to the aircraft owner/operator and ubmit the other completed form to the Aircraft Registration Branch for inclusion in the aircraft records.

Note: The electronic FAA Form 337 allows for electronic approvals and processing of FAA Form 337 from the time it is used to describe the alteration or repair until it is forwarded to the Aircraft Registration Branch. At this time, the FAA does not allow for the mixing of the two processes. If FAA Form 337 is started in the electronic format, it must be completed that way and cannot be completed using the paper process. Further information is supplied at the website shown in paragraph <u>6.2</u>.

9.3 Signatures of FAA Form 337.

9.3.1 An FAA inspector's signature in Item 3 indicates approval of the data described in that section for use in accomplishing the work described in Item 8 of the form. The statement of completeness in Item 3 by an appropriately rated designee is a "certification of completeness" of required data. It is not a field approval or approval of data.

Note: Signatures in Item 3 count as data approval or completeness of approved data only and do not indicate the approval for return to service for the work in Item 8.

- **9.3.2** A signature in Item 6 is a certification by the person performing the work that the work complies with all applicable airworthiness requirements and FAA-approved data. The certification is applicable only to the work described in Item 8 or attached sheets.
- **9.3.3** A signature in Item 7 by a Flight Standards inspector or designee constitutes an authorized approval for return to service. A signature is not an approval of data. Data approval procedures are performed in Item 3 by an authorized individual and further defined in Order 8300.16 and AC 43-210. Other persons listed in Item 7 are authorized to "approve for return to service" if the major repair or major alteration uses and conforms to FAA-approved data and is performed in compliance with part 43.
- **9.3.4** If engineering assistance was requested, written Aircraft Certification Office (ACO) concurrence (e.g., memo or email) becomes an attachment to FAA Form 337.
 - **9.4** U.S. Military and Foreign Use. FAA Form 337 is not authorized for use with aircraft not registered in the United States. The form may be provided to the U.S. Military or a

foreign civil air authority if it is requested as a record of work performed and should be completed following part 43 and this AC. A note on the form should inform the U.S. Military or foreign authority that the form is not an official record and that the FAA aircraft registry will not record it.

- **9.5 Completed Forms.** Completed forms should be submitted to the Aircraft Registration Branch, P.O. Box 25504, Oklahoma City, OK 73125. Electronic forms are submitted automatically through the website at http://eformservice.faa.gov/eForm337.aspx.
- **10 AC FEEDBACK FORM.** For your convenience, the AC Feedback Form is the last page of this AC. Note any deficiencies found, clarifications needed, or suggested improvements regarding the contents of this AC on the Feedback Form.

Robert C. Carty

Deputy Executive Director, Flight Standards Service

11/1/19 AC 43.9-1G Appendix A

APPENDIX A. FAA FORM 337

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FAA Form 337 (10-08)

N	O		P

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

Description of Work Accomplished (If more space is required, attach additional sheets. Identify with aircraft nation	nality and registration mark and date	work completed.)
	Nationality and Registration Mark	Date
Additional Sheets	s Are Attached	

FAA Form 337 (10-08)

Advisory Circular Feedback Form

If you find an error in this AC, have recommendations for improving it, or have suggestions for new items/subjects to be added, you may let us know by contacting the Flight Standards Directives Management Officer at 9-AWA-AFB-120-Directives@faa.gov.

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ase check all appropriate line iten	ıs:	
An error (procedural or typogramon page	phical) has been noted is	n paragraph
Recommend paragraph	on page	be changed as follows
In a future change to this AC, place (Briefly describe what you want		g subject:
Other comments:		
Other comments: I would like to discuss the above		