

Advisory Circular

Subject: Instructions for Completion of FAA Form 337

Date: 1/25/07 AC No: 43.9-1F Initiated by: AFS-350

Change:

1. PURPOSE. This advisory circular (AC) provides instructions for completing Federal Aviation Administration (FAA) Form 337, Major Repair and Alteration (Airframe, Powerplant, Propeller, or Appliance).

2. CANCELLATION. AC 43.9-1E, Instructions for Completion of FAA Form 337 (OMB No. 2120-0020), Major Repair and Alteration (Airframe, Powerplant, Propeller, or Appliance), dated 5/21/87, is canceled.

3. RELATED REGULATIONS. Title 14 of the Code of Federal Regulations (14 CFR) part <u>43</u>, §§ <u>43.5</u>, <u>43.7</u>, <u>43.9</u>, and appendix <u>B</u>.

4. **INFORMATION.** FAA Form 337 is free and available at all FAA Manufacturing Inspection District Offices (MIDO), Flight Standards District Offices (FSDO), International Field Offices (IFO), certificate management offices (CMO), and online at https://www.faa.gov/forms/index.cfm/go/document.information/documentID/185675.

a. The form serves two 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 (AFS-750).

b. 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 local FSDO.

5. ELECTRONIC FORMAT.

a. 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 4b of this document.

b. 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.

6. 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 1, FAA Form 337. The terms "item" and "block" are used synonymously in FAA documents relating to data collection on FAA Form 337.

a. 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.

b. 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.

c. 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 $\frac{7}{2}$ for further details.)

(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."

(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 <u>8300.16</u>, Major Repair and Alteration Data Approval.)

(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 <u>8100.8</u>, Designee Management Handbook, Function Code 50.)

(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 <u>8130.2</u>, 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 21." (Refer to Order 8130.2.)

d. 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.

e. 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 $\underline{6b}$ 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.

f. Item 6 – Conformity Statement.

(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.

(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.

(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.

(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.

(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 <u>91</u>, § <u>91.417</u> when the aircraft is returned to service.

g. 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.

(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.

(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.

(3) Before approving FAA Form 337, it is the responsibility of the person returning the product 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.

(4) If the form is not accepted by the aircraft registry for any reason, it will be routed through the FAA regional office back to the return to service agent identified in item 7.

h. Item 8 – Description of Work Accomplished.

(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.

(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 $\underline{43-210}$, 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.

(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 $8\frac{1}{2}$ by 11-inch page, then the submission will be returned to the person identified in item 7 for correction and resubmission.

(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.

7. 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.

a. 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 AFS-750 within 48 hours after the airframe, aircraft engine, propeller, or appliance is installed on an aircraft and approved for return to service.

b. 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 local FAA district 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 submit the other completed form to AFS-750 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 AFS-750. 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>4b</u>.

c. Signatures of FAA Form 337.

(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.

(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 only applicable to the work described in item 8 or attached sheets.

(3) A signature in item 7 by an FAA Flight Standards (AFS) inspector or designee constitutes an authorized 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.

(4) If engineering assistance was requested, written Aircraft Certification Office (ACO) concurrence (e.g., memo or email) becomes an attachment to FAA Form 337.

d. 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.

e. Completed Forms. Completed forms should be submitted to the Aircraft Registration Branch, AFS-750, P.O. Box 25504, Oklahoma City, OK 73125. Electronic forms are submitted automatically through the website at <u>http://eformservice.faa.gov/eForm337.aspx</u>.

8. 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.

ORIGINAL SIGNED by Roger Forshee

James J. Ballough Director, Flight Standards Service

AC 43.9-1F Appendix 1

APPENDIX 1. FAA FORM 337

FIGURE 1-1. SAMPLE FAA FORM 337

											Form Approved OMB No. 2120-0020		Electronic Tracking Number
US Department MAJOR REPAIR AND ALTERATION										For FAA Use Only			
of Transportat Federal Avia	of Transportation (Airframe, Powerplant, Propeller, or Appliance) Federal Aviation Administration								the second day				
instruction		ition of this	form.										sequent revision thereof) for ult in a civil penalty for each
	-	÷ .	stration Mark					Serial No.					
1. Aircraft	Make	Make						Model				s	eries
	Name (As	Name (As shown on registration certificate)							Address (As shown on registration certificate) Address				
2. Owner								City					State
		0 F F					Zip	Coun			ountr	у	
3. For FAA Use Only													
4. Ty		5. Unit Identification											
Repair	Alteration	Unit		Make			Model				Serial No.		
		AIRFRAM	E				(As described in Item 1 above)						
		POWERP	LANT	NT									
		PROPELL	ER	1									
				Туре									
		APPLIANC	CE ,	Manufacturer									
					6.	Co	nformity Sta	tement					
	Name and A	ddress				B. I	Kind of Agend	,					
Name					—		U. S. Certificated Mechanic Foreign Certificated Mechanic						facturer
Address							Repair Station			C. Certificate No.			
ZipCountry						+	Certificated Repair Station						
have b	 D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge. 												
Extended range fuel Signature/Date of Authorized Indivi per 14 CFR Part 43 App. B													
				7	. App	rov	al for Return	to Service					
Pursuant Administra	7. Approval for Return to Service Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is Approved Rejected												
l Ir	AA Fit. Stand	lards	Manu	Manufacturer		Maintenance Or		ganization	Depart		ersons Approved by Canadian epartment of Transport		
BY FAA Designee Repair Station Inspection Authorization Oth					Othe	er (Specify)							
Certificate or Designation		Signature/Date of Authorized Individual											

FAA Form 337 (10-06)

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FIGURE 1-1. SAMPLE FAA FORM 337 (CONTINUED)

NOTICE

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 nationality and registration mark and date work completed.) 												
(n more space is required, according another shoets, ruenary with ancient nationality and registration mark and date work completed.)												
	Nationality and Registration Mark	Date										
Additional Sheet	s Are Attached											

FAA Form 337 (10-06)

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-AFS-140-Directives@faa.gov.

Subject: AC 43.9-1F, Instructions for Completion of FAA Form 337

Date: _____

Please check all appropriate line items:

An error (procedural or typographical) has been noted in paragraph ______ on page _____.

Recommend paragraph ______ on page ______ be changed as follows:

In a future change to this AC, please cover the following subject: (*Briefly describe what you want added.*)

Other comments:

I would like to discuss the above. Please contact me.

Submitted by: _____

Date: _____