



THE VIEW FROM WASHINGTON

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Back to Basics: The Proper Use of FAA Form 337

One of the common questions I am asked is about the Federal Aviation Administration's Form 337. The conversations often begin with, "My inspector wants..." Most recently, I've had some discussions about filing an FAA Form 337 for minor alterations.

In almost all cases, the "inspector" assumes no responsibility for wrong information. Following these seemingly harmless "recommendations" often leads to letters of investigations, violations and, almost always, extra administrative work. The proper use of FAA Form 337 cannot be over-emphasized.

FAA Form 337 is probably one of the most misunderstood and misused forms repair stations and A&P mechanics use on a daily basis. In addition to its misuse, it also has acquired a language all its own.

As I travel around and visit with AEA members and various regulatory authorities throughout the world, they refer to FAA Form 337 as a "field approval" — something it is not. It may be used to record a field approval, but it is so much more. To view each Form 337 as a "field approval" is to ignore the other 21 sources of approved data applicable to major repairs and alterations and, more importantly, to ignore the sources of FAA-approved data recognized by the international aviation authorities.

Let's start our review at the beginning:

The FAA describes the two main purposes of Form 337 as:

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.

FAA Form 337 is titled "Major Repair and Alteration." It is not titled "Record of Any Alteration" or "FSDO Paperwork Routing Document." It is a record of major repairs and alterations. It should not be used for any other purpose, and it should not be locally required for any other use. To use the form for a routing document for flight manual supplements or to "record minor alterations" is to declare the alteration (or repair) "major." Once you make the declaration of a major alteration by using Form 337, you must follow the regulatory procedures for a major alteration — that is, you must have approved alteration or repair data as applicable.

FAA Form 337 is not synonymous with a "field approval" as many people often refer to the form. It is a form used to record virtually all major repairs and major alterations. Major repairs and major alterations require approved data. Data may be approved by a supplemental type certificate, using DER-approved alteration data, or an alteration for which the data is developed by the applicant, then approved directly by the FAA's field inspector, often referred to as a "field approval."

According to the FAA's advisory circular AC 43-210, there are 21 separate sources of approved data; a "field approval" is only one of the 21 sources.

14 Code of Federal Regulations CFR Section 43.9 specifies the "content, form and disposition of maintenance, preventive maintenance, rebuilding and alteration records."

14 CFR Section 43.9 (d) states, "In addition to the [maintenance record entries] required by paragraph (a), major repairs and major alterations shall be entered on a form, and the form disposed of, in the manner prescribed in Part 43 Appendix B, by the person performing the work."

Therefore, to being with, 14 CFR 43.9 paragraph (d) provides specific recording requirements for "major repairs and major alterations." 14 CFR 43.9 paragraph (a) provides the general maintenance recording requirements. If the work you are performing is not a major repair or major alteration, the standard maintenance record entry of 14 CFR 43.9 paragraph (a) is appropriate.

Let's assume the work we are performing is a major repair or major alteration; therefore, paragraph (d) applies. Paragraph (d) requires the information about major repairs and major alterations "shall be entered on a form, and the form disposed of, in the manner prescribed in Part 43 Appendix B." What does Appendix B require? Remember, this is not an "acceptable" recommendation; Part 43 Appendix B is the regulation — this is what must be done.

Let's take a look at 14 CFR Part 43 Appendix B, "Recording of Major Repairs and Major Alterations." Paragraph (a) states each person performing a major repair or major alteration shall:

1) Execute FAA Form 337 at least in duplicate.

2) Give a signed copy of the form to the aircraft owner.

3) Forward a copy of the form to the FAA Aircraft Registration Branch in Oklahoma City, Okla., within 48 hours after the aircraft, airframe, aircraft engine, propeller or appliance is approved for return to service.

There are some exceptions to the requirements of paragraph (a). A repair station may record major repairs made in accordance with a "manual or specifications acceptable to the Administrator" on a work order in lieu of executing an FAA Form 337. However, paragraph (b) requires the following information:

1) Use the customer's work order upon which the repair is recorded.

2) Give the aircraft owner a signed copy of the work order and retain a duplicate copy for at least two years from the date of approval for return to service of the aircraft, airframe, aircraft engine, propeller or appliance.

3) Give the aircraft owner a maintenance release signed by an authorized representative of the repair station and incorporating the following information:

- Identity of the aircraft, airframe, aircraft engine, propeller or appliance.

- If an aircraft, the make, model, serial number, nationality and registration marks, and location of the repaired area.

- If an airframe, aircraft engine, propeller or appliance, give the manufacturer's name, name of the part, model and serial numbers (if any).

4) Include the following or a similarly worded statement: "The aircraft, airframe, aircraft en-

gine, propeller or appliance identified above was repaired and inspected in accordance with current regulations of the Federal Aviation Agency and is approved for return to service. Pertinent details of the repair are on file at this repair station under..." Then, include lines/spaces for the following information: order number; date; signature; signature of authorized representative; repair station name; certificate number; and address.

Paragraphs (c) and (d) contain three bits of important information.

First, they specifically state, "a completed copy of that form shall be given to the aircraft owner." This does not allow for a partially completed form to be given to the aircraft owner. If the alteration and/or repair data needs to be approved by your FAA inspector, do not return the aircraft to the owner and do not send him on his way with a partially completed FAA Form 337.

Secondly, they specify the timeline for submitting completed forms to the FAA: 48 hours.

Lastly, if the applicant is not using the electronic form, the FAA provides the address of where to submit the forms.

The regulations describe the "when" and "why" of using FAA Form 337. What about the "how" to use the form? For this answer, look to the FAA's advisory circular AC 43.9-1, "Instructions for Completion of FAA Form 337;" the latest version of this AC is revision "F."

From the AC: "This advisory circular provides instructions for completing Federal Aviation Administration Form 337, "Major Repair and Alteration (Airframe, Powerplant, Propeller or Appliance)."

In first review of the AC, the one instruction I have not found is: Fill out the form as instructed by "your inspector." That instruction doesn't exist. This AC, and only this AC, "provides instructions for completing FAA Form 337."

In the form instructions (paragraph 6), the FAA makes three statements:

1) The person who performs or supervises a major repair or major alteration must prepare Form 337.

2) 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.

3) The instructions in AC 43.9-1 apply to Items (blocks) 1 through 8 of the form.

Block 3 is for FAA use only. In Block 3, the FAA will indicate approval of the alteration and/or alteration data when it determines the data used to perform the major repair or major alteration conforms to accepted industry practices and is in compliance with current guidance and regulatory requirements.

According to the AC, approval is indicated by one of the following methods:

1) Approval of Data by Examination Only. When only approving the data, following the review of the data package and subsequent data approval, the FAA will enter the following statement on Form 337:

"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. When approving of the alteration or repair by physical inspection rather than a data package, the FAA will perform a physical inspection, demonstration or other type of test of an aircraft, and upon demonstrating satisfactorily complying with the applicable regulations and standards, the FAA will enter the following statement on Form 337:

"Approval by Physical Inspection, Demonstration, Testing, etc.—One Air-

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craft: 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.”

Approval by physical inspection is seldom done today. This option dates back to a time when data packages were minimal and a review of the physical installation was needed for aviation safety. With the quality of data packages and the basic follow-on installation of most avionics installations, alteration approvals based on option No. 2 are seldom performed.

Block 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. Block 7 is used to indicate approval or rejection of the repair or alteration and to identify the person or agency making the airworthiness determination.

Before approving the Form 337, it is the responsibility of the person returning the product to service — that is, signing Block 7 — to ensure all the work described in Item 8 matches the approved data and the information presented on the form is complete. Again, it’s a prohibition to returning a less-than-complete Form 337 to the customer.

The AC notes: “Supplemental data, such as stress analyses, test reports, sketches or photographs, are often proprietary and not intended as part of the Item 8 description.”

The AC also notes showing weight and balance computations under Item

8 is not required: “If weight and balance of the aircraft are affected by the work described on Form 337, the changes should be entered in the aircraft weight and balance records with the date, signature and reference to the form.”

FAA Form 337 is a good document for its intended purpose: to record major repairs and major alterations. The progressive misuse of this form occasionally has led to individuals facing violations, fines and, almost always, more administrative work than was necessary.

To ensure the highest level of compliance in maintenance recordkeeping, 14 CFR 43.9 and AC 43.9-1 should be reviewed at least once a year to ensure the form is being used properly, as it was intended; the appropriate level of approved data is documented; and the completed forms are distributed as required by regulation. □