**U.S. Department of Transportation**
Federal Aviation Administration

# Advisory Circular

**Subject:** Standardized Procedures for Obtaining Approval of Data Used in the Performance of Major Repairs and Major Alterations

**Date:** 8/17/16 **AC No:** 43-210A
**Initiated by:** AFS-300 **Change:**

This advisory circular (AC) describes a standardized procedure for requesting approval of technical data associated with major repairs/major alterations. This AC also provides information that can help determine if a proposed repair/alteration requires approved data, guidance and standardized procedures for obtaining field approval (or approval by other means) of data, and instructions for completing the field approval checklist. This AC is not mandatory and does not constitute a regulation. This AC describes an acceptable means, but not the only means, to obtain approved data for a major repair or major alteration. However, if you—whether you're an aircraft owner, operator, or Aviation Maintenance Technician (AMT), collectively termed an applicant—use the means described in the AC, you must follow it in all important respects.

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## CONTENTS

**Paragraph** **Page**

**List of Figures**

# 1 INTRODUCTION.

**1.1 Purpose.** This advisory circular (AC) describes a standardized procedure for requesting approval of technical data associated with major repairs/major alterations. This AC also provides:

1. Information that can help determine if a proposed repair/alteration requires approved data;
2. Guidance and standardized procedures for obtaining field approval, or approval by other means, of data; and
3. Instructions for completing the field approval checklist (see Appendix A).

**1.2 Applicability.** This AC applies to applicants who request data approval for a major repair or major alteration.

**1.3 Cancellation.** This AC cancels AC 43-210, Standardized Procedures for Requesting Field Approval of Data, Major Alterations, and Repairs, dated February 17, 2004.

**1.4 Regulatory Basis.** Title 14 of the Code of Federal Regulations (14 CFR) part 43, § 43.7 specifies persons authorized to approve an aircraft or aircraft component for return to service after maintenance, preventative maintenance, rebuilding, or alteration. For major repairs or major alterations the work must be done in accordance with technical data approved by the Administrator. The following CFR references require the use of this data:

1. Title 14 CFR part 43, §§ 43.7(d) and 43.17(e)(2);
2. Title 14 CFR part 65, § 65.95(a)(1);
3. Title 14 CFR part 121, § 121.379(b);
4. Title 14 CFR part 135, § 135.437(b); and
5. Title 14 CFR part 145, § 145.201(c)(2).

Title 14 CFR part 1, § 1.1 defines major repairs and major alterations. In addition, part 43 appendix A, paragraph (a) further defines what constitutes a major alteration. In a similar manner, part 43 appendix A, paragraph (b) further defines what constitutes a major repair. A minor alteration is an alteration that is not major. Likewise, a minor repair is one that is not a major repair.

**1.5 Repair and Alteration Classification.** Only those persons with § 43.7 authorization may approve an aircraft, airframe, engine, propeller, appliance, or component part for return to service after the performance of a repair or alteration. You must perform major repairs and major alterations using technical data approved by the Administrator. You may perform minor repairs and alterations using technical data acceptable to the Administrator. This AC includes flowcharts (Figures 3-1, Field Approval Process, and 3-2, Determination of Major or Minor Alteration or Repair) to help classify a repair/alteration.

For assistance, you may use the Major Repair and Alteration Data Approval Job Aid at http://fsims.faa.gov/Wdocs/Other/Major_Repair_Alteration_Job-Aid%20R5.pdf. The job aid lists types of alterations and how applicants typically classify them.

**1.6 Responsibility for Obtaining Data.** It is the responsibility of the person intending on performing the major repair/major alteration to obtain, organize, and submit data to the approving authority for review and approval.

**1.7 General Information.** For the purpose of this order, the use of the term "ASI" includes Designated Airworthiness Representative (DAR) Function Code 51 when performing work in accordance with the current edition of Federal Aviation Administration (FAA) Order 8100.17, Field Approval Delegation Handbook. Also for the purposes of this guidance, Aircraft Flight Manual Supplement (AFMS) includes Rotorcraft Flight Manual Supplement (RFMS) and Supplemental Aircraft Flight Manual (SAFM).

## 2 DATA.

**2.1 Definition of Data as it Relates to a Repair or Alteration.** In its broadest sense, data is recorded information. Data supporting a repair or alteration consists of drawings and specifications, including a list of drawings and specifications, which define configuration and design features of a particular article, repair, or alteration. Data may be classified relative to its type or its approval status.

**2.2 Classification of Technical Data.**

**2.2.1** Types of Data.

**2.2.1.1 Descriptive Data.** Descriptive data describes the design of the repair or alteration. It should include reference to installation methods, materials, fabrication processes, dimensions, and tolerances. It may also include intended function and how the alteration is appropriate to the aircraft. Descriptive data, typically includes:

1. The drawings (or equivalent) and specifications necessary to define the configuration and the design features;

**Note:** We accept sketches, photos, or pictures as descriptive data when it is appropriate, such as for certain one-time approvals.

2. Information on dimensions, materials, and processes;
3. Airworthiness limitations, if applicable; and
4. Documents required by the airworthiness requirements such as instructions for continued airworthiness (ICA) and airplane or rotorcraft flight manuals.

**2.2.1.2 Substantiating Data.** Substantiating data shows that the design complies with the applicable regulations and that all appropriate technical considerations have been addressed. Examples of substantiating data can be: test results,

computations, and other information necessary to show that descriptive data meets the applicable requirements. Such substantiating data, when approved forms the basis of declaring conformity to the type design or applicable airworthiness standards.

**2.2.2** Approval Status.

**2.2.2.1** **Approved Data.** Approved data is data approved by the FAA. The term "approved" is based on § 1.1, which states, "Approved, unless used with reference to another person, means approved by the FAA or any person to whom the FAA has delegated its authority in the matter concerned, or approved under the provisions of a bilateral agreement between the United States and a foreign country or jurisdiction." For the FAA aviation safety inspector (ASI), "approved" or "approved by" means the item (e.g., data; methods, techniques, and practices; manual contents; tools; materials; equipment) is required to be and has been reviewed and formally approved by the FAA (or appropriate Civil Aviation Authority (CAA)). Approvals are granted only by letter, by a stamp of approval, by the issuance of operations specifications (OpSpecs), or by other official means. All data used to substantiate a major repair or major alteration, regardless of the source, must be approved before being used.

**2.2.2.2** **Acceptable Data.**

**2.2.2.2.1** Acceptable data means data acceptable to the FAA. The terms "acceptable to the Administrator" and "acceptable to the FAA" appear numerous times in the maintenance regulations. They refer to any item addressed in the regulation (e.g., data; methods, techniques, and practices; manual contents; tools; materials; equipment; etc.) that must meet regulatory standards. If the regulation requires only that an item must be "acceptable to," it does not necessarily follow that the FAA requires the item to have specific FAA review and acceptance before it may be used. A person making a determination of whether an item is "acceptable to" the agency must ensure the item addresses specific applicable section(s) of the regulations.

**2.2.2.2.2** Items required by regulation to be "acceptable to" the FAA or to the Administrator (unless otherwise required by regulation to be approved) do not necessarily require FAA review and acceptance prior to a person using the item. A person using an item that must be acceptable to the FAA should be able to demonstrate that the item meets all applicable regulatory requirements. If, however, upon subsequent review of the item, the FAA believes the item is not acceptable, the agency has the burden of demonstrating its unacceptability in any related enforcement matter. In any event, if an ASI finds an item unacceptable to the FAA, the ASI must immediately inform the maintenance provider/certificate holder, in writing, of the potential noncompliance and request compliance.

**2.2.3** Previously Approved Data. This term refers to data that was approved for a specific purpose, such as a Supplemental Type Certificate (STC) or major alteration on an aircraft, powerplant, propeller, or appliance. All previously approved data has to be applicable to the requested major repair or major alteration. All differences, deviations, inclusions, and exclusions between the original use of the data and the current one must be considered before the data can be approved for use. Figure 2-1, Possible Resources for Approved Data Relevant to Major Repairs or Major Alterations, lists typical sources by which you can obtain previously approved data. Not all of this data may be readily available. It is the applicant's responsibility to review all data that is available. You should consider the following items when evaluating previously approved data:

**2.2.3.1** **Product Certification Basis.** If the certification basis applicable to the product intended to be altered or repaired is different from the basis the previously approved data was developed for, you must make a comparison of the two and the differences addressed in making a determination of applicability for use of the previously approved data.

**2.2.3.2** **Special Conditions.** If special conditions are required to show compliance, representative data must be specifically approved for the product or appliance intended for alteration or repair.

**2.2.3.3** **Equivalent Level of Safety (ELOS) Findings.** If ELOS are used to show compliance, the underlying data must be specifically approved for the specific product or appliance intended for alteration.

**2.2.3.4** **Exemptions.** If data was developed and approved for a product design based on an exemption to an airworthiness standard, you must consider the exemption impact and any deviation which may have been granted to the approved product or appliance. Such exemption or deviation may require independent approval by the FAA or an appropriately authorized Designated Engineering Representative (DER) or Organization Designation Authorization (ODA).

**2.2.3.5** **Applicability.** You must review the data to determine applicability to intended use. If any data is not appropriate to the intended repair or alteration, it should not be referenced as supporting data.

**Figure 2-1. Possible Resources for Approved Data Relevant to Major Repairs or Major Alterations**

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|---|
| Type Certificate Data Sheet (TCDS). Refer to the current edition of FAA Order 8620.2, Applicability and Enforcement of Manufacturer's Data, for guidance. |
| Repair data from the current edition of AC 43.13-1, Acceptable Methods, Techniques, and Practices—Aircraft Inspection and Repair, as approved data for nonpressurized areas of civil aircraft, and the AC chapter, page, and paragraph listed in block 8 of FAA Form 337, Major Repair & Alteration (Airframe, Powerplant, Propeller, or Appliance), when the applicant has determined that it is:<br>• Appropriate to the product that is intended to be repaired;<br>• Directly applicable to the repair being made; and<br>• Not contrary to the airframe, engine, propeller, or appliance manufacturers' repair data or instructions. |
| Alteration data from the current edition of AC 43.13-2, Acceptable Methods, Techniques, and Practices—Aircraft Alterations, as approved data for major alterations for nonpressurized areas of civil aircraft when the AC chapter, page, and paragraph are listed in block 8 of FAA Form 337, when the user has determined that it is:<br>• Appropriate to the product intended to be altered;<br>• Directly applicable to the alteration being made; and<br>• Not contrary to the airframe, engine, propeller, product, or appliance manufacturers' data. |
| Airworthiness Directives (AD). |
| Appliance manufacturer's manuals or instructions, unless specifically not approved by the FAA, may be used as approved data for major repairs. |
| Data describing an article used in an FAA-approved alteration under a parts manufacturer approval (PMA). |
| Designated Engineering Representative (DER)-approved data, including repair specifications, within limitations on the DER's authorization. |
| Organization Designation Authorization (ODA)-approved data, within limitations in the ODA holder's procedures manual. |
| FAA-approved portions of structural repair manuals (SRM). |
| FAA-approved service bulletins (SB) and service letters (SL) or similar documents as documented in the current edition of AC 20-77, Use of Manufacturers' Maintenance Manuals. |
| Foreign bulletins, for use on U.S.-certificated foreign-designed aircraft, when approved by the foreign authority within the provisions of a bilateral agreement with the United States or as listed in TCDS notes. |
| Original aircraft manufacturer's service and repair data in accordance with current regulations, for major repairs on elements of nonpressurized airplanes, 12,500 pounds or less maximum certificated takeoff weight provided the person intending to perform such repair determines that:<br>• Data is appropriate and applicable for the specific make, model, and type of product being repaired; and<br>• The repair does not deviate from the manufacturer's methods, techniques, and practices. |
| United States Department of Commerce, Form ACA-337 dated prior to October 1, 1955, provided the data is appropriate, directly applicable, and not contrary to regulatory requirements. |
| Supplemental Type Certificate (STC) data may substantiate a major alteration on a different aircraft, provided such alteration is applicable to specifically listed make, model, and type appropriate to the certification basis and applicable amendments. |

# 3 FIELD APPROVAL PROCESS AND DATA APPROVAL.

**3.1 General Information.** An applicant must use approved technical data to accomplish a major alteration or repair on a product and approve the product for return to service. An applicant must perform three major steps when performing a major repair or major alteration: (1) conduct research, (2) evaluate the data, and (3) perform the repair or alteration.

**Note:** You should not start work until all data is approved. Inspectors may not be able to complete the approval as requested. If an applicant starts work before the approval is finalized, that work may not conform to the repair or alteration as approved.

## 3.2 Conduct Research.

**3.2.1** Plan the Repair or Alteration. You should review the repair or alteration to be performed to determine the effects to the proposed change as to whether certain aspects of the alteration or repair can be accomplished using acceptable data and/or whether other aspects of the alteration or repair require approved data. You must assure that the performance of the intended alteration or repair meets the applicable airworthiness standards and the product can be restored to its original or proper condition and is safe for operation. You must determine the certification basis of the product, including all applicable amendments, to ascertain if the alteration or repair can be accomplished using the field approval process admissible as a minor change to the type design. Or if the intended alteration or repair is significant enough to warrant seeking an STC, since a determination of such intended repair or alteration, when performed, results in a major change to the type design. Typical data may include analysis, drawings, photographs, specifications, or test data as required.

**Note:** Some aspects of the intended alteration or repair of a product may be performed using the field approval process. Whereas, other aspects may be determined significant such that one or more certificated properties of the product are exceeded, thus requiring a new certification basis be established.

**3.2.2** Determine the Repair or Alteration Classification. Determine if the repair/alteration is a minor change in type design (as defined in 14 CFR part 21, § 21.93) to the product's type design; and if so, is it a major or a minor repair/alteration. To determine if a repair/alteration is major or minor, refer to part 43 appendix A. Figure 3-2, Determination of Major or Minor Alteration or Repair, is a flowchart of the field approval evaluation process based on part 43 appendix A.

**3.2.2.1 Minor Repair or Minor Alteration.** If you are properly authorized, you may perform a minor repair/alteration using acceptable data, and without approved data. You may document the alteration or repair in the product's logbook per § 43.9 indicating return-to-service.

**3.2.2.2 Major Repair or Major Alteration.** You must perform a major repair or major alteration using approved data. If some substantiating data is not obtainable or cannot be approved by FAA designees, or by the ASI, then such data needs to be developed for those aspects of the major repair or major alteration intended to be performed and the request for such data approval be elevated to the appropriate Aircraft Certification Office (ACO) for approval. Your ASI can assist in such elevation and should assure timely review and approval by the ACO. After such data is reviewed and approved by the ACO, then the alteration or repair may be accomplished, using such substantiating data, as applicable. The field approval process is not available for all major repairs/major alterations, and some aircraft are not eligible for field approvals. Major repairs and major alterations that have all the necessary DER or ODA-approved technical data do not require further approval. See paragraphs 3.3.2 and 3.3.3 in this AC for more information.

**Note:** Aircraft operating under part 121 are eligible for field approvals under certain circumstances. If you are a part 121 operator, check with the ASI before beginning a repair or alteration. Persons holding delegation by the Administrator are not authorized to issue field approvals for aircraft operated by air carriers certificated under part 121.

**3.2.2.3 Major Changes to Type Design.** Major repairs/major alterations that are major changes to type design require an STC or an amended type certificate (TC). The field approval process is not available in these cases. The current edition of Advisory Circular (AC) 21-40, Guide for Obtaining a Supplemental Type Certificate, details the STC application process for a broad audience, while the current edition of FAA Order 8110.4, Type Certification, provides that same detail for ASIs. Personnel may also find useful the Major Repair and Alteration Data Approval Job Aid associated with FAA Order 8300.16, Major Repair and Alteration Data Approval. This job aid lists alterations governed by Order 8300.16 and alterations that should be processed as major changes in the approved type design.

**3.2.3** Gather Data. Gather and organize data describing and substantiating the proposed repair/alteration. Review paragraph 2 for data types you might use.

**3.2.4** Prepare the Data Package. To organize project data and standardize the field approval process, we recommend using a data package. A typical data package might include the following items:

1. Field approval checklist;
2. Copies of any substantiating data;
3. FAA Form 337, Major Repair or Alteration (Airframe, Powerplant, Propeller, or Appliance);
4. Compliance checklist;

5. Maintenance information; and
6. Draft Proposed AFMS or RFMS.

**Note:** Review and approval of an AFMS, RFMS, or SAFM is independent of the review and acceptance of approved data (or approval of technical data). The approval is indicated on the AFMS, RFMS, or SAFM, so you don't need a separate FAA Form 337. See paragraph 4 of this AC for further AFMS information.

**3.2.4.1 Complete the Field Approval Checklist (recommended).** The checklist and instructions in Appendix B can be used to organize data and information before requesting a field approval. It is a tool to ensure your submission is complete.

**3.2.4.2 Substantiate Applicable Requirements.** Indicate the specific applicable airworthiness requirements to show compliance, including the amendment level of the regulation and other requirements, except that you should not use general references, such as "part 25." As shown in Appendix B, you may reference a compliance checklist, specific to descriptive data instead of listing regulatory requirements.

**3.2.4.3 Complete FAA Form 337.** Complete FAA Form 337, except for dates and signatures in blocks 6 and 7. You should enter dated signatures after completing the repair/alteration and inspecting for conformance. The current edition of AC 43.9-1, Instructions for Completion of FAA Form 337, provides guidance on how to complete this form.

**3.3 Evaluate the Data.** Review the data to determine (1) if the package is complete and inclusive, and (2) if applicable data has been approved. There are several methods to obtain all the approved data. We sometimes use the field approval process, with an authorized ASI or other delegated authority, to approve technical data. Another alternative is approval of all the data by a DER or ODA. In some cases, you might need multiple DERs when the repair/alteration deals with several disciplines, such as systems and structures.

**3.3.1** The Field Approval Process. Field approvals are a method by which the FAA approves technical data for a major repair/major alteration on a single aircraft, and operational approval by reviewing and approving AFMS (RFMS or SAFM). A field approval may constitute an approval for the alteration or repair, and is a one-time approval for the product or appliance to which it applies. The overall process is illustrated in Figure 3-1, Field Approval Process, and is explained in paragraphs 3.3.1.1 through 3.3.1.3 below. Field approvals are a method by which we approve technical data for a major repair/major alteration on a single aircraft.

A field approval may require engineering assistance or coordination with an ACO. You may use the field approval process to obtain approval of acceptable data in certain cases.

**Note 1:** The information and process steps are provided in Figure 3-1 in a specific order to show a logical progression through the repair/alteration. We're not implying that one step must follow another in the order presented. Several actions may take place concurrently or in a different order. The goal is that you address all necessary concerns and regulatory considerations when performing a major repair/major alteration.

**Note 2:** The paragraph numbers next to blocks in the figure correspond to associated paragraph numbers in this order, which provide information in more detail.

**3.3.1.1 Contact the FAA ASI.** Contact a local FAA office and speak with an ASI who has field approval authority. Discuss the repair or alteration with the ASI and determine if you need to meet to review the request. Be as specific as possible about the needs, and especially about the schedule. In some cases you may contact DARs delegated with the authority to perform Function Code 51, who are now authorized to approve certain data in support of a major repair or major alteration by entering and signing the appropriate data approval statement in block 3 of FAA Form 337.

**3.3.1.2 Provide Data Package to the ASI.** Send a complete data package to the ASI. Using the checklist in Appendix B is one way to organize data and may help prevent omissions.

**3.3.1.3 ASI Review Procedures.**

**3.3.1.3.1** When the ASI receives the package, the ASI will review it to determine if the field approval request is appropriate.

1. Minor alterations/repairs do not require approved data. ASIs who deny data approval requests for alterations or repairs that do not require approval must explain to the applicant the reason for the denial and, if requested, provide a written explanation in letter or electronic form.
2. The Major Repair and Alteration Data Approval Job Aid describes repairs and alterations within the scope of a field approval. If the ASI determines that the alteration is not a major change but is outside of the field approval authority, the ASI should refer the applicant to utilize an appropriately authorized designee. If the ASI determines that the alteration is a major change in type design and requires an STC, and if the applicant is the design approval holder (DAH), the ASI should inform the applicant to apply for an STC or amended TC.
3. The ASI should examine the data to see if it has been approved. If all the required data is approved, then further approval is not required. If any required technical data is not approved, then you

can obtain approval from a DER, an ODA, or by requesting a field approval.

**3.3.1.3.2** After the ASI has reviewed the data package and/or inspected the aircraft, and can approve the repair/alteration, the ASI may (1) approve the data package only, or (2) approve the repair/alteration on FAA Form 337 by physical inspection. The ASI will sign and date block 3 indicating approval. The ASI enters one of two statements:

1. First statement: "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 § 43.7."

**Note:** This statement is entered on block 3 of FAA Form 337 when the ASI reviews a data package and completes data approval.

2. Second statement: "Approval by Physical Inspection, Demonstration, Testing, etc. One Aircraft: The repair or alteration 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 § 43.7."

**Note:** This statement is entered on block 3 of FAA Form 337 when the ASI makes a physical inspection of the aircraft, or the applicant satisfactorily performs a demonstration or other type of test and the ASI completes an installation or repair approval.

**3.3.2** DER Data Approval.

**3.3.2.1** A properly authorized DER is a designee of the FAA whom an applicant may employ to provide approved technical data to support a major repair/major alteration. A DER's authority is limited to specific functions, and data from more than one DER may be necessary. If an applicant has determined that a single DER has, or multiple DERs have, provided necessary approved data for the repair/alteration before involving the ASI, then no field approval is required.

**3.3.2.2** We have referenced DER authorizations and limitations in the current edition of FAA Order 8110.37, Designated Engineering Representative (DER) Handbook. This reference includes Repair Specification DER (RS-DER) authorizations and limitations, and general guidance on approving data for major repairs/major alterations. A list of current DERs and their appointed functions and authorizations is available at http://www.faa.gov/other_visit/aviation_industry/designees_delegations/designee_types/media/DERDirectory.pdf.

**Note:** Although DERs are not authorized to approve block 3 of FAA Form 337, you may use DER-approved data as a basis for a repair/alteration in support of FAA Form 337. However, when you have obtained sufficient DER-approved data that addresses requirements in parts 21 and 43, the approval process applicable to the alteration is complete. The person performing the alteration, not the DER, is then responsible for a conformity inspection and for return to service approval of the installation.

**3.3.3** ODA Data Approval. You may employ an ODA holder to provide approved technical data to support a major repair/major alteration. If the applicant employs a DER or ODA to provide approved technical data to support a major repair or major alteration, then the applicant is responsible for ensuring that the DER or ODA is authorized to approve such technical data, as applicable to the repair or alteration. If the data, as approved, addresses the entire repair or alteration, and all of the requirements of parts 21 and 43 are met, there is no requirement for any further approval by the ASI. If the repair or alteration data is approved solely by the DER, ODA, or DAR, but necessitates maintenance instructions, the maintenance instructions should be prepared by the applicant and recorded in block 8 of FAA Form 337.

**3.3.3.1 TC/STC ODA Holder with Specific Authority.** A TC/STC ODA holder with specific authority for major repairs/major alterations may approve data within its authority and limitations. The data approved by an ODA holder may not adequately cover every aspect of the repair/alteration.

1. If a major repair, alteration, and airworthiness (MRA) ODA holder approves all aspects of the major repair/major alteration data, then no field approval is necessary.
2. If an MRA ODA holder (or holders) does not approve all aspects of the major repair/major alteration data, then a field approval is necessary.

**3.3.3.2 ODA Authorizations and Limitations.** For ODA authorizations and limitations, and general guidance on approving data for major repairs/major alterations, refer to the current edition of FAA Order 8100.15, Organization Designation Authorization Procedures. A list of authorized ODA holders is available on the FAA Designees and Delegations Web page: https://www.faa.gov/other_visit/aviation_industry/designees_delegations/designee_types/media/ODADirectory.pdf.

**Note:** The person performing the alteration, not the ODA, must conform and approve the installation from ODA-approved data. ODA data does not constitute a field approval, but is approved data that, like other approved data, can be used for major repairs/major alterations without further approval if the data addresses the entire repair/alteration. In this case, the applicant does not need to request a field approval.

**3.4 Perform Repair or Alteration.** After the repair or alteration data is approved, an applicant can alter or repair the aircraft or one of its components. When the work is complete, you should review the requirements of 14 CFR part 91, § 91.407, and determine if a flight check is required. Complete FAA Form 337 and follow procedures in part 43 appendix B.

**Figure 3-1. Field Approval Process**

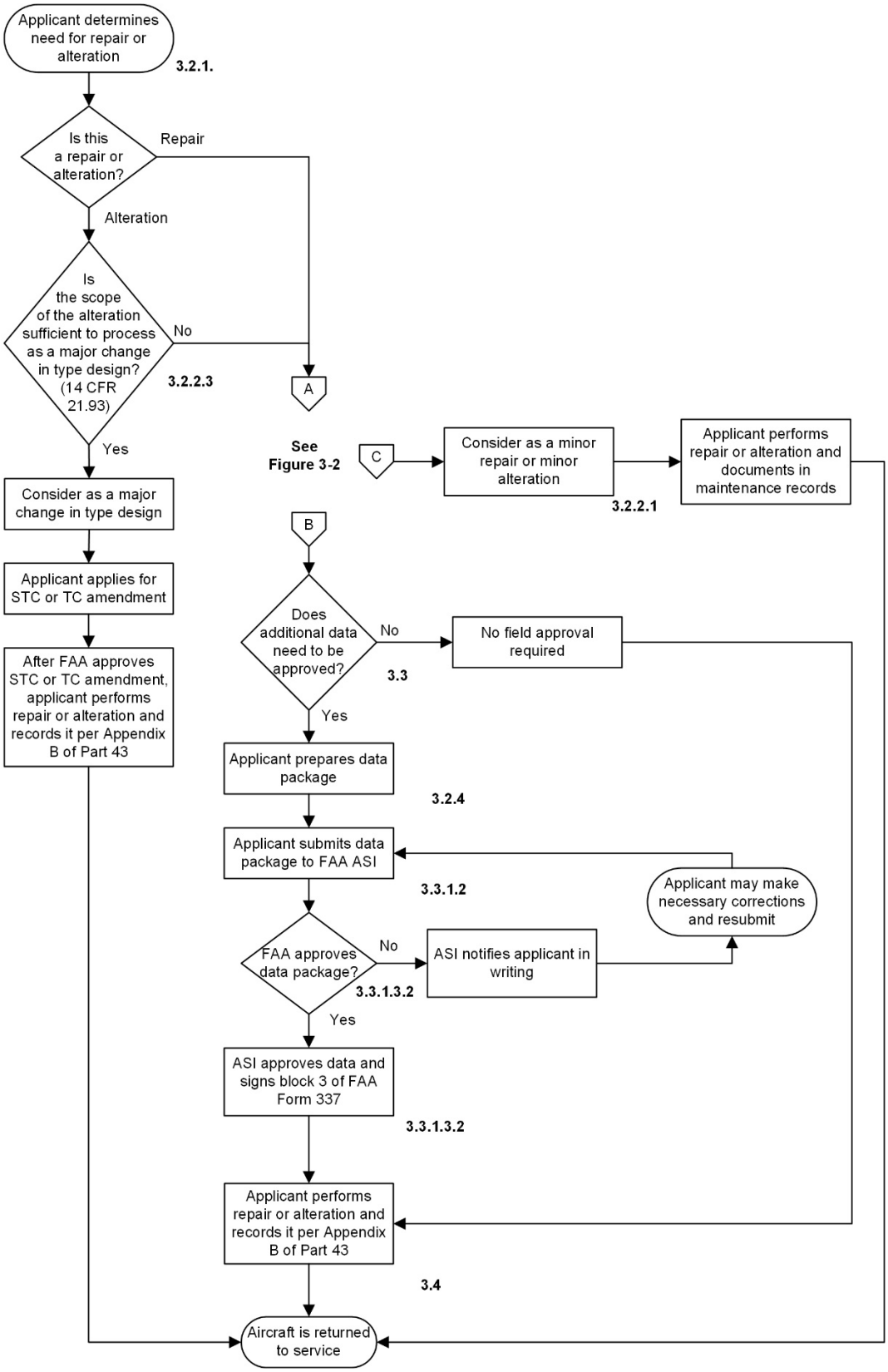
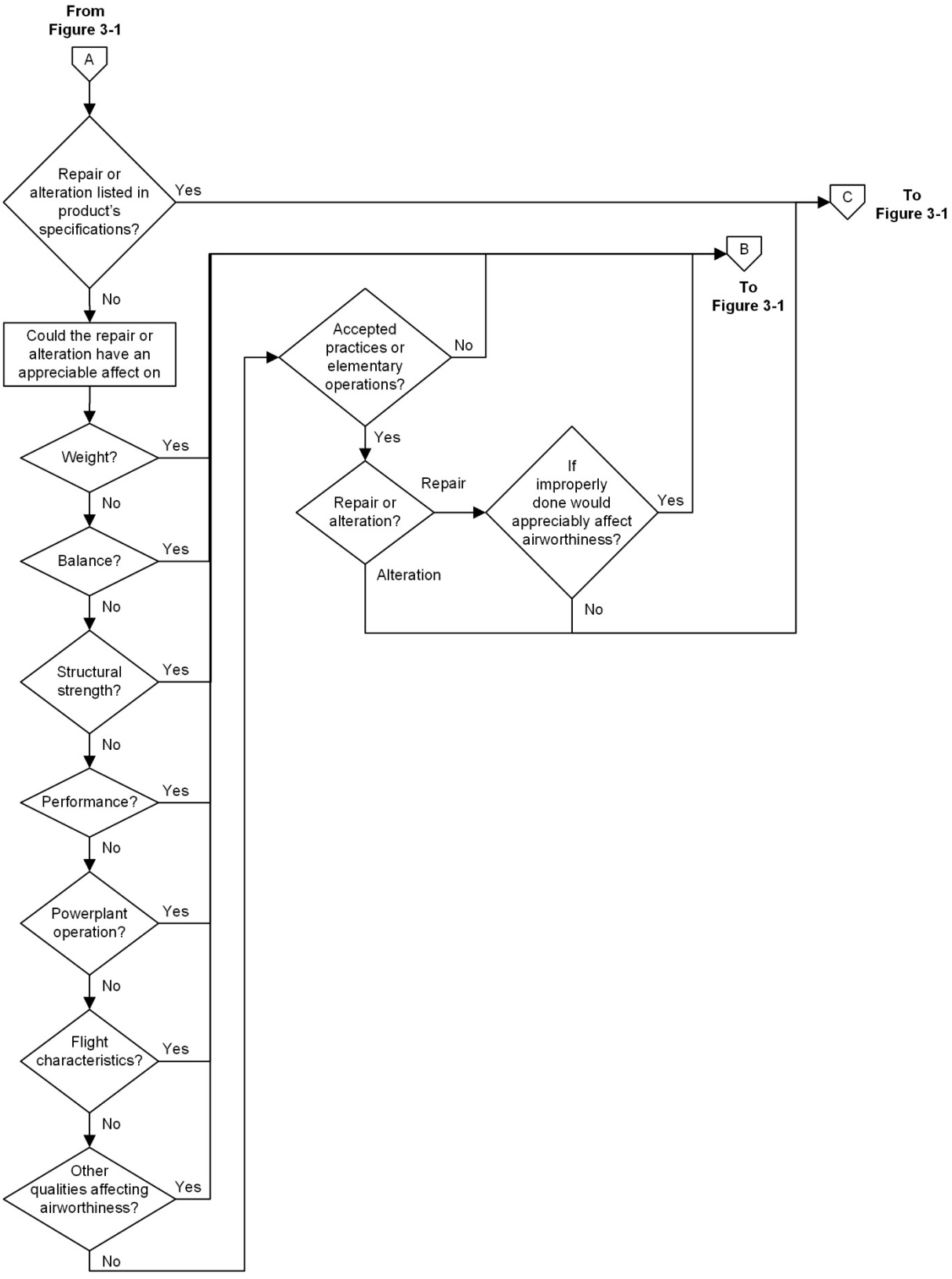


**Figure 3-2. Determination of Major or Minor Alteration or Repair**



## 4 FLIGHT MANUAL SUPPLEMENTS.

**4.1 General Information.** Alterations that result in a change to limitations, procedures, performance, or loading information from a current Aircraft Flight Manual (AFM) or placards, require an applicant to develop revised or supplemental information as addressed in paragraph 4.3 of this AC.

**4.2 Aircraft Flight Manuals.** Aircraft operating procedures and performance limitations are typically provided as:

1. AFMs, including either Airplane Flight Manuals or Rotorcraft Flight Manuals;
2. Markings or placards; or
3. Combinations of the above.

**4.3 Manual Supplements.** Supplemental information should be provided by one of the following methods:

1. If the aircraft has an AFM, the supplemental information must appear in an AFMS or RFMS.
2. If the aircraft does not have an AFM, the applicant should create a SAFM so necessary information is available to the pilot. A SAFM complements a pilot's operating handbook (POH), which may not have specific FAA approval. Procedures for creating and approving a SAFM are the same as those for an AFMS.
3. You may present the supplemental information either as modified, or as additional markings and placards in aircraft type-certificated before AFMs were required.

**4.3.1** If you substantiate a major alteration based on data from a previous approval, you must include a flight manual supplement if the previous approval had one. For the purposes of this guidance, AFMSs include RFMSs and SAFMs, as well.

**4.4 Format and Content.** The AFMS or placards must contain any new or changed limitations, emergency or abnormal operating procedures, normal operating procedures, performance, and system operating instructions. The supplement must be consistent with the format of the basic AFM and applicable to the specific installation configuration for the installed equipment and systems. ASI approvals of AFMS should not contain conditional operation descriptions and need to be explicit for the configuration of the targeted aircraft. The current editions of AC 23-8, Flight Test Guide for Certification of Part 23 Airplanes, and AC 25.1581-1, Airplane Flight Manual, provide guidance on what is recommended in an AFMS for aircraft.

**4.4.1** The AFMS should include:

1. The aircraft manufacturer's name;
2. Model number;
3. Serial number; and
4. Registration number.

**4.4.2** You should include the following information, as applicable to the altered conditions:

1. Abnormal or emergency procedures;
2. Normal operating procedures;
3. Aircraft performance;
4. Aircraft Weight and Balance (W&B); and
5. Loading information.

**4.4.3** You must install placards in clear view of the pilot and, as applicable, in proximity to affected equipment. Refer to 14 CFR part 23, § 23.1541; part 25, § 25.1541; part 27, § 27.1541; or part 29, § 29.1541.

**4.5 Supplement Information Approval.** Approval of the supplement (including placards):

1. Alterations that change the operating limits of the aircraft, aircraft engine, or propeller. These alterations would require coordination with an appropriate ACO for approval of the supplement or placard that stipulates limitations to the operation of the aircraft. See paragraph 4.6 for details.
2. ASIs with field approval authorization, and (1) authorized specifically by Flight Standards (AFS) policy, or (2) delegated by an ACO to review and approve certain AFMSs.
3. An authorized DER/ODA who can approve an AFMS or placards.

**4.5.1** Repairs or alterations that do not result in a change to limitations, procedures, performance, or loading information may not require a supplement, or the supplemental information may consist of system operating instructions only.

**4.5.2** An ASI with field approval authorization may review and grant field approval of an appropriately affixed placard characterizing operating limitations or information about certain equipment and systems. Refer to § 23.1541, 25.1541, 27.1541, or 29.1541. For examples of such placards—"Not For IFR" or "VFR Only"—refer to the "Kinds of Operations" paragraph in § 23.1525, 25.1525, 27.1525, or 29.1525.

## 4.6 Aircraft Certification Office Approval Process.

1. If an ASI or designee is not authorized to approve the AFMS, the ASI must forward the alteration data package, including proposed AFMS, to the ACO.
2. The ASI may route the AFMS to ACO flight-test personnel for review.
3. After review and approval of the AFMS/RFMS/SAFM, or limitations placard, the applicant must record the approval date, document name, and number on FAA Form 337, block 8, Description of Work Accomplished. Such entry must indicate that the AFMS/RFMS/SAFM is inserted or affixed to the AFM or POH.
4. The ASI will advise you that equipment upgrades, such as changes to the operating system software or hardware, may invalidate the existing FAA-approved AFMS and trigger a subsequent review and approval of the AFMS.

## 4.7 Additional AFMS Considerations.

**4.7.1** Operating procedures for a newly-installed appliance or system are frequently provided in an AFMS. Alternatively, you may incorporate equipment manufacturer operating manuals by reference into the AFMS.

**4.7.2** Manufacturer operating instructions included/referenced in the AFMS for systems or equipment, such as those for navigation systems, do not require specific approval; but if included in an AFMS, the AFMS itself must be approved.

**4.7.3** If all of the following conditions are met, an AFMS is not required:

1. Does not restrict, displace, or limit the use of required equipment;
2. All new limitations can be addressed via placards;
3. The aircraft performance is not negatively affected;
4. Does not require a placard per TC or STC;
5. VFR use only; and
6. Is nonrequired equipment.

**4.7.4** For equipment limited to VFR, you must install a readable placard, in clear view of the pilot, stating that the equipment is only for VFR operations. If the equipment automatically displays this message on start-up and the pilot must clear the message, an AFMS or RFMS is unnecessary, since the placard or display contains the equipment limitation.

## 5 MAINTENANCE INFORMATION.

**5.1 Purpose of Maintenance Information for a Major Repair or Major Alteration.** Maintenance information provides adequate instructions to maintain the repaired or altered product in an airworthy condition. For this AC, major repair and major alteration maintenance information can include:

1. Additional maintenance instructions;
2. Supplemental information for the product's maintenance manual or illustrated parts catalog;
3. Supplemental information for the product's ICAs;
4. Supplemental information for articles or appliance maintenance manuals or illustrated parts catalog; and
5. Any other information required to maintain the product in an airworthy condition.

**5.2 Benefits of Providing Maintenance Information for a Major Repair or Major Alteration.**

**5.2.1** When the owner/operator references maintenance information in block 8 of FAA Form 337, this gives the aircraft owner or operator the following advantages:

1. One document can reference or contain maintenance information about a major repair/major alteration;
2. The maintenance information becomes a permanent aircraft record as required by § 91.417(a)(2)(vi); and
3. The owner or operator can contact the FAA registry for a replacement FAA Form 337 if the maintenance information is lost or destroyed.

**Note:** The owner or operator may also forward a previously-completed FAA Form 337 and associated maintenance information if the FAA Form 337 is not currently in the registry.

**5.2.2** The additional reference to maintenance information as part of a major repair/major alteration in the aircraft's maintenance entry will ensure that maintenance personnel appropriately address maintenance of the major repair/major alteration during future inspections.

**5.3 Maintenance Information as Part of the Major Repair or Major Alteration Data Package.** We have determined that a major repair/major alteration data package must address how the major repair or major alteration affects continued airworthiness. You must develop maintenance information if a major repair/major alteration affects the continued airworthiness, or must also state that a major repair or major alteration doesn't affect continued airworthiness. If a major repair or major alteration affects the airworthiness limitations section (ALS) of the ICA or a part of the ICA that requires FAA

approval, such as described in part 26 ICA requirements, you must obtain approval of that maintenance information from an ACO/ODA for the major repair/major alteration. The maintenance information checklist is a guide for an applicant to develop maintenance information using methods, techniques, and practices acceptable to the FAA. See Figure 5-1, Major Repair or Major Alteration Maintenance Information Checklist.

**5.4 Maintenance Information Under the Civil Air Regulations (CAR).** For field-approved major alterations to CAR-certificated aircraft, engines, and propellers, maintenance information must meet the requirements of the original certification basis. In cases where the major alteration adds new items the CAR requirements didn't address, the major alteration must meet applicable 14 CFR requirements. Figure 5-1 lists acceptable guidance for these installations, and also for inspections not covered by the original equipment manufacturer's instructions.

**5.5 Maintenance Information Development.**

**5.5.1** Major alterations needing maintenance or inspections not covered by original equipment manufacturer's instructions must have maintenance information prepared in accordance with methods, techniques, and practices acceptable to the FAA. You should reference maintenance information as an attachment on block 8 of FAA Form 337. The entry—required by 14 CFR part 43, §43.9—must refer to the maintenance information and be identified by the approval date of the FAA Form 337. You must keep the form in the aircraft's permanent records per § 91.417(a)(2)(vi).

Maintenance information referenced in block 8 of FAA Form 337 is considered acceptable to the FAA and will not be approved unless specifically required by regulation, as with changes to the ALS or part 26 requirements. Applicants should use Figure 5-1 as a guide to help ensure they meet all applicable requirements.

**Note:** Maintenance information is required to be acceptable to the FAA; therefore, should be referenced as a separate document on block 8 of FAA Form 337. Block 8 of FAA Form 337 is for data that is approved by the FAA.

**5.5.2** If the repair or alteration data is approved solely by the DER, ODA, or DAR, but necessitates maintenance instructions, the maintenance instructions should be prepared by the applicant and referenced in block 8 of FAA Form 337.

**5.6 Maintenance Information Content.** Maintenance information must include specific instructions describing how to maintain affected areas for continued airworthiness. For example, maintenance information might include a new requirement for a special inspection during 100-hour or annual inspections. Such maintenance information must also include installed appliances that may impact maintainability of the product, or require periodic maintenance to ensure continued performance. When appropriate, maintenance information must also include specific instructions for determining excessive wear or deterioration, troubleshooting information, installation and removal procedures, and functional checks. You must also include servicing requirements, such as recommended fluid change intervals or lubrication schedules. In the instances that a

repair/alteration must meet part 26 requirements, only the ACO may approve the maintenance information developed. The maintenance information must contain:

1. Inspection tasks and task intervals;
2. Instructions and procedures in the aircraft maintenance manual to accomplish the tasks; and
3. Precautions, protective procedures, and information in the standard wiring practices manual.

**Figure 5-1. Major Repair or Major Alteration Maintenance Information Checklist**

| **A/C Make_____** | **Model_____** | **S/N_____** | **Reg. #N_____** |
|---|---|---|---|
| Revision:_____ | Date:_____ | System:_____ | |

| **Item** | **Subject** |
|---|---|
| 1. | Introduction: This section briefly describes the aircraft, engine, propeller, or component that has been altered. Include any other information on the content, scope, purpose, arrangement, applicability, definitions, abbreviations, precautions, units of measurement, referenced publications, and distribution of the maintenance information, as applicable. |
| 2. | Description: Describe the major alteration and its functions, including an explanation of its interface with other systems, if any. |
| 3. | Control, operation information or special procedures, if any. |
| 4. | Servicing information, such as types of fluids used, servicing points, and location of access panels, as appropriate. |
| 5. | Maintenance instructions, such as recommended inspection/maintenance periods in which each of the major alteration components are inspected, cleaned, lubricated, adjusted, and tested, including applicable wear tolerances and work recommended at each scheduled maintenance period. This section can refer to the manufacturer's instructions for the equipment installed where appropriate, such as functional checks, repairs, and inspections. It should also include any special notes, cautions, or warnings, as applicable. |
| 6. | Troubleshooting information: Information describing probable malfunctions, how to recognize those malfunctions, and remedial actions to be taken. |
| 7. | Removal and replacement information: This section describes the order and method of removing and replacing products, parts, and any necessary precautions. This section should also describe or refer to such items as manufacturer's instructions to make required tests, trim checks, alignment, calibrations, center of gravity (CG) changes, lifting or shoring, if any. |
| 8. | Diagrams: Access plates and information, if needed, to gain access for inspection. |
| 9. | Special inspection requirements, such as X-ray, ultrasonic testing, or magnetic particle inspection, if required. |
| 10. | Application of protective treatments to the affected area after inspection and/or maintenance, if any. |
| 11. | Data: Relative to structural fasteners such as type, torque, and installation requirements, if any. |
| 12. | List of special tools: Special tools required, if any. |
| 13. | For commuter category aircraft: The following additional information must be furnished, as applicable:<br>A. Electrical loads.<br>B. Methods of balancing flight controls.<br>C. Identification of primary and secondary structures.<br>D. Special repair methods applicable to the aircraft. |
| 14. | Recommended overhaul periods must be noted on maintenance information when an overhaul period has been set by the manufacturer of a component or equipment. If there is no overhaul period, the maintenance information for item 14 should state: "No additional overhaul time limitations." |
| 15. | Airworthiness limitation (AL) section: Include any approved ALs identified by the manufacturer or Federal Aviation Administration (FAA) Certificate Management ACO (CMACO). Example: An STC incorporated in a larger field-approved major alteration may have an AL. The FAA inspector will not establish, alter, or cancel ALs without coordinating with the appropriate FAA CMACO. If there are no changes to ALs, maintenance information should state for item 15: "No additional ALs" or "Not applicable." |
| 16. | Maintenance information must be acceptable to the FAA. As such, changes should be documented by submitting the revised maintenance information along with the original Form 337 to the Aircraft Registration Branch (AFS-750) in Oklahoma City. An entry in the aircraft records should indicate the current revision. |

# 6 ADMINISTRATIVE INFORMATION.

## 6.1 Acronyms.

| | | |
|---|---|---|
| 1. | 14 CFR | Title 14 of the Code of Federal Regulations |
| 2. | AC | Advisory Circular |
| 3. | ACO | Aircraft Certification Office |
| 4. | AD | Airworthiness Directive |
| 5. | AFM | Aircraft Flight Manual |
| 6. | AFMS | Aircraft Flight Manual Supplement |
| 7. | ALS | Airworthiness Limitations Section |
| 8. | AML | Approved Model List |
| 9. | AMOC | Alternate Means of Compliance |
| 10. | ASI | Aviation Safety Inspector |
| 11. | CAA | Civil Aviation Authority |
| 12. | CAM | Civil Aeronautics Manual |
| 13. | CAR | Civil Air Regulations |
| 14. | CFR | Code of Federal Regulations |
| 15. | CMACO | Certificate Management Aircraft Certification Office |
| 16. | CMO | Certificate Management Office |
| 17. | DAH | Design Approval Holder |
| 18. | DAR | Designated Airworthiness Representative |
| 19. | DER | Designated Engineering Representative |
| 20. | ELOS | Equivalent Level of Safety |
| 21. | FSDO | Flight Standards District Office |
| 22. | GNSS | Global Navigation Satellite System |
| 23. | ICA | Instructions for Continued Airworthiness |
| 24. | IFO | International Field Office |
| 25. | IFR | Instrument Flight Rules |
| 26. | MRA | Major Repair, Alteration, and Airworthiness (a type of ODA) |
| 27. | ODA | Organization Designation Authorization |
| 28. | PMA | Parts Manufacture Approval |
| 29. | POH | Pilot Operating Handbook |
| 30. | RFMS | Rotorcraft Flight Manual Supplement |

31. RS-DER Repair Specification Designated Engineering Representative
32. SAFM Supplemental Airplane Flight Manual
33. SB Service Bulletin
34. SDP Standard Data Package
35. SL Service Letter
36. SRM Structural Repair Manual
37. STC Supplemental Type Certificate
38. TC Type Certificate
39. TCDS Type Certificate Data Sheet
40. TSO Technical Standard Order
41. VFR Visual Flight Rules
42. W&B Weight and Balance

**6.2 Related FAA Orders and Advisory Circulars (current editions).**

1. FAA Order 8100.15, Organization Designation Authorization Procedures.
2. FAA Order 8100.17, Field Approval Delegation Handbook.
3. FAA Order 8110.4, Type Certification.
4. FAA Order 8110.37, Designated Engineering Representative (DER) Guidance Handbook.
5. FAA Order 8300.16, Major Repair and Alteration Data Approval.
6. FAA Order 8310.6, Airworthiness Compliance Check Sheets Handbook.
7. AC 20-138, Airworthiness Approval of Positioning and Navigation Systems.
8. AC 20-180, Approved Model List Supplemental Type Certificate (AML-STC).
9. AC 21-40, Guide for Obtaining a Supplemental Type Certificate.
10. AC 23-8, Flight Test Guide for Certification of Part 23 Airplanes.
11. AC 25.1581-1, Airplane Flight Manual.
12. AC 43.9-1, Instructions for Completion of FAA Form 337.
13. AC 43.13-1, Acceptable Methods, Techniques, and Practices—Aircraft Inspection and Repair.
14. AC 43.13-2, Acceptable Methods, Techniques, and Practices—Aircraft Alterations.

## 6.3 Obtaining Copies of Referenced Documents and This AC.

**6.3.1** A list of all ACs is available at http://www.faa.gov/regulations_policies/advisory_circulars/. Applicants can also obtain a copy of current CFRs online at http://www.ecfr.gov.

**6.3.2** The Major Repair and Alteration Data Approval Job Aid is available at http://fsims.faa.gov/Wdocs/Other/Major_Repair_Alteration_Job-Aid%20R5.pdf.

# APPENDIX A. INSTRUCTIONS FOR COMPLETING THE FIELD APPROVAL CHECKLIST

When requesting a field approval, you may use the fillable checklist found in Figure A-1, Field Approval Checklist, to provide the requested data, forms, descriptive items, and other information. You can also use an equivalent method for presenting the information and data. The following instructions apply to corresponding items 1 through 12 of the Field Approval Checklist as illustrated in this appendix.

**Item 1—Aircraft.** The Registration Number is the same as shown on AC Form 8050-3, Certificate of Aircraft Registration. Only U.S.-registered aircraft are eligible for field approvals.

**Item 2—Applicant.** Enter the applicant's name, address, and telephone number.

**Item 3—Type of Product and Certification Basis.** On the upper line, enter a check mark in the appropriate box to identify the item being approved. If you check "Other," enter the product's description in the space provided. On the bottom line, check the box that identifies how your aircraft or product was certificated. If you don't know this information, you can find it on the Type Certificate Data Sheet (TCDS) for your aircraft or engine. On the TCDS, look in the section titled Certification Basis.

**Item 4—Brief Description of Project.** Using the space provided, enter a short summary of the proposed repair or alteration, such as "Installing a GPS in the instrument panel above the right yoke." If you need additional space, attach a continuation page and note that on the form in this area.

**Item 5—Schedule for Completion of Project.** On the first line, enter the date you need the field approval. On the second line, enter the date you plan to start the work, and on the last line, enter the date you expect to complete the work.

**Item 6—Who Will Perform the Repair or Alteration?** On the top line, enter the name of the certificated mechanic who will be doing the work. If a repair station is doing the work, leave the mechanic's name blank and enter the name of the repair station. On the second line, enter the mechanic's Airframe and Powerplant (A&P) certificate number, or if a repair station is doing the work, their certificate number.

Also enter a contact name if you are using a repair station. If the ASI doing the approval has a question and you are not available, this will make it easier for the ASI to find someone knowledgeable about the project. On the third line, give the telephone number of the mechanic or the repair station doing the work. On the bottom line, enter the location where the work will be done. This location information should be as complete as possible.

**Item 7—Designees (DARs and DERs).** If you are working with any Designated Engineering Representatives (DER) or Designated Airworthiness Representatives (DAR) for this project, include their names and telephone numbers, in case the ASI needs to contact them for additional information or clarification. DERs have authorization limitations; if you are working with a designee, make sure anticipated work is within the designee's authorization.

**Item 8—Compliance Statement and Compliance Checklist.** Before completing the repair/alteration to your aircraft, be aware that the aircraft must still meet its certification basis after alteration/repair. Include an entry in block 8, to include proof, or data, as well as your compliance statement, that it still meets its certification basis. For example, if you want to

modify the wheels of your small airplane, you would ensure the altered wheels still conform to Title 14 of the Code of Federal Regulations (14 CFR) part 23, § 23.731. The compliance checklist will list affected 14 CFR/Civil Air Regulations (CAR) and indicate how the applicant showed compliance. The person doing the repair or alteration creates this checklist, and should address each section of the regulations applicable to the project. Appendix 2 has a sample compliance checklist format.

**Item 9—Previous Alterations or Repairs that May be Affected by This Alteration.** Review the aircraft's records to determine if there are any modifications, Supplemental Type Certificates (STC), alterations, or repairs that could conflict with the proposed repair/alteration. If the prior applicant completed an FAA Form 337 for repairs/alterations that might be affected, include it. If the prior applicant made a logbook entry concerning the work done, make a copy of that entry and include it in your package. Photographs and drawings of previous alterations/repairs that might be a factor can also be very helpful.

**Item 10—Maintenance Information.** In this attachment, describe how to maintain the altered/repaired part of the aircraft airworthy. This might include 100-hour or annual inspections. These should be specific instructions, including (1) inspection items, (2) minimum or maximum measurements of parts for wear or deterioration, (3) troubleshooting, (4) functional checks, (5) installation and removal procedures, and (6) servicing requirements, such as fluid change intervals or lubrication schedules. Figure 5-1 provides guidance and a sample checklist for creating maintenance information.

**Item 11—Aircraft Flight Manual Supplement (AFMS).** If you have an AFMS for your alteration, include a copy of it. Guidance for creating an AFMS is available in Advisory Circular (AC) 23-8, Flight Test Guide for Certification of Part 23 Airplanes, as amended. Appendix 5 of AC 23-8 has a sample format that you can use.

**Item 12—Data Attached.** If the data you are attaching is included on this list, check the appropriate box. If you have data or information not included in this list, check the box labeled "Other" and enter in the space provided a short description of what you are including.

**Item 13—For All the Data Submitted.** Review all data submitted and determine if the data meets the requirements listed. Check the appropriate box after review.

**Item 14—FAA Use Only.** Don't write or mark in this area—it is for FAA use only.

**Figure A-1. Field Approval Checklist**

| **FIELD APPROVAL CHECKLIST** | | | |
|---|---|---|---|
| Instructions: Print or type all entries. This information should be as complete as possible prior to an initial discussion with the FAA. | | | |
| **1. Aircraft** | Make | | Model |
| | Registration Number<br>N | | Serial Number |
| **2. Applicant** | Name | Address/Telephone Number | |

**3. Type of Product and Certification Basis**

☐ Airframe ☐ Engine ☐ Appliance ☐ Other

For an appliance or "Other" list:

Manufacturer:

Part Number:

Serial Number:

☐ Part 23 ☐ Part 25 ☐ Part 27 ☐ Part 29 ☐ Part 31 ☐ Part 33

☐ CAR 3 ☐ CAR 4(a) ☐ CAR 4(b) ☐ CAR 6 ☐ CAR 7 ☐ CAR 8 ☐ CAR 13

**4. Brief Description of Project**

☐ Repair ☐ Alteration

**5. Schedule for Completion of Project**

Date when field approval is needed:

Date when work is to begin:

Date for ASI visit (projected):

Projected completion date for project:

**6. Who Will Perform the Repair or Alteration?**

Mechanic's name: or Repair station:

Certificate no:

Contact person at the facility:

Telephone number:

Location where alteration/repair will be accomplished:

**FIELD APPROVAL CHECKLIST**

**7. Designees (DARs, DERs, or ODAs)** ☐ None

Designated Engineering Representatives (DER), Designated Airworthiness Representatives (DAR), or Organization Designation Authorization (ODA):

Name: Telephone number:

Name: Telephone number:

**8. Compliance Statement and Compliance Checklist**

Attach the Compliance Checklist you completed.

**9. Previous Repairs or Alterations Affected by This Alteration.** Is this alteration compatible with previously installed equipment?

**10. Maintenance Information and/or Instructions for Continued Airworthiness (ICA)**

Maintenance information attached? ☐ Yes ☐ No
Reference these in block 8 of FAA Form 337.

**11. Aircraft Flight Manual Supplement (AFMS)**

Do you have an AFMS? ☐ Yes ☐ No If yes, attach a copy.

**12. Data Attached**

☐ Proposed FAA Form 337
☐ Description of alteration, including drawings, schematics, and diagrams
☐ Material list
☐ Processes
☐ Specifications
☐ Previous field approvals
☐ FAA Form(s) 8110-3
☐ Serviceable tags
☐ Placards
☐ Test data and/or flight test data
☐ Load analysis (electrical and/or structural)
☐ Other:

**FIELD APPROVAL CHECKLIST**

**13. For All the Data Submitted:**

| | | | |
|---|---|---|---|
| Are all applicable airworthiness requirements addressed? | ☐ Yes | ☐ No | ☐ N/A |
| Are all exemptions addressed? | ☐ Yes | ☐ No | ☐ N/A |
| Are all special conditions addressed? | ☐ Yes | ☐ No | ☐ N/A |
| Are the requirements of Part 26 addressed? | ☐ Yes | ☐ No | ☐ N/A |
| Are all applicable airworthiness directives addressed? | ☐ Yes | ☐ No | ☐ N/A |
| Are instructions for continued airworthiness addressed? | ☐ Yes | ☐ No | ☐ N/A |
| Are the applicable noise requirements addressed? | ☐ Yes | ☐ No | ☐ N/A |
| Are the applicable emission requirements addressed? | ☐ Yes | ☐ No | ☐ N/A |
| Are all changes to a flight manual addressed? | ☐ Yes | ☐ No | ☐ N/A |

**14. FAA Use Only**

Date:
Assigned inspector:
FAA office:
Is a field approval appropriate? ☐ Yes ☐ No
If a field approval is not performed, what is the proper method for alteration?
☐ Record entry ☐ STC ☐ Other:
Requires ACO concurrence? ☐ Yes ☐ No
Requires AEG ICA review? ☐ Yes ☐ No
Additional information required:

## APPENDIX B. INSTRUCTIONS FOR COMPLETING THE COMPLIANCE CHECKLIST

The compliance checklist documents applicable regulations and associated compliance with those regulations.

> **Note:** At your option, you may list applicable regulatory requirements for which you still need to present substantiation data.

Instructions for completing this sample compliance checklist are as follows:

**1. Title 14 of the Code of Federal Regulations (14 CFR) Part/Civil Air Regulations (CAR) Paragraph.** You may list specific regulations by number, such as 14 CFR part 23, § 23.1353. Also include current amendment level.

**2. Subject.** You should list the subject or title of applicable 14 CFR part/CAR paragraphs, such as storage battery design and installation.

**3. Method of Compliance.** The method of compliance may include design drawings (D), analyses (A), tests (T), or other methods (O). Some compliance checklists simply list the letter corresponding to a method of compliance. Other checklists reference specific data by title or number. However you format the method of compliance, you and the ASI should agree on the format.

**4. Documentation Reference.** List the documentation, such as a test report number, analysis, or report number that demonstrated compliance to the subject 14 CFR part or CAR paragraph.

**Figure B-1. Compliance Checklist Format**

| 14 CFR Part/CAR Paragraph | Subject | Method of Compliance | Documentation Reference |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**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 Aircraft Maintenance Division (AFS-300) at 9-AWA-AFS-300-Division-Directives@faa.gov or the Flight Standards Directives Management Officer.

Subject: AC 43-210A, Standardized Procedures for Obtaining Approval of Data Used in the Performance of Major Repairs and Major Alterations

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: _____