Documenting Compliance Findings

Using FAA Form 8110-3, "Statement of Compliance with Airworthiness Standards"

A Designated Engineering Representative (DER) uses his or her authority to make findings of compliance. As a DER you are authorized to find that engineering data complies with appropriate airworthiness standards. A DER signs and issues FAA Form 8110-3 to indicate compliance.

This document describes FAA Form 8110-3, "Statement of Compliance with Airworthiness Standards," its usage and distribution. In addition this document provides an overview of information blocks in the form and examples of how you might enter data into the form in a variety of circumstances.

This presentation is based on information published in FAA Order 8110.37().

STATEMENT	OF COMPLIA	OF TRANSPORTATION ON ADMINISTRATION NCE WITH AIRWORTI DARDS	HINESS
	AIRCRAFT OR	AIRCRAFT COMPONENT IDEN	TIFICATION
2 MAKE	3. MODEL NO	4. TYPE (downsh. Lagina, Propeller, ex.)	3 NAME OF APPLICANT
6 IDENTIFICATION	-	LIST OF DATA	
6. IDENTIFICATION		1. TITLE	
	ority vessed by direction of the and on attached sheets quise ment of the Authorits timend approval of thes	e data	confidence and limitations of appointment accordance with established procedures
PUCABLE REQUIREMENTS ERITECATION - Vider sub- + CFR Part 151, data limed abo Recomply mits applicable or Recomply mits applicable or	ority vessed by direction of the and on attached sheets quise ment of the Authorits timend approval of thes	iz Demos	Providet,
PUCABLE REQUIREMENTS ERITECATION - Vider sub- + CFR Part 151, data limed abo Recomply mits applicable or Recomply mits applicable or	ority vessed by direction of the and on attached sheets quise ment of the Authorits timend approval of thes	e data	conditions and limitations of appointment as accordance with established procedures 23. CLASUFICATION(8)
PUCABLE REQUIREMENTS ERITECATION - Vider sub- + CFR Part 151, data limed abo Recomply mits applicable or Recomply mits applicable or	ority vessed by direction of the and on attached sheets quise ment of the Authorits timend approval of thes	iz Demos	Providet,

Click item title to link to content

J	sing FAA Form 8110-3, "Statement of Compliance with Airworthiness Standards"	1
G	eneral Information on FAA Form 8110-3	3
= /	AA Form 8110-3: Special Delegations	3
ΞΙ	ectronic FAA Form 8110-3	4
J	sing Approval Authority	4
)	stribution of FAA Form 8110-3	4
ΞΙ	ntering data on FAA Form 8110-3	5
	FAA Form 8110-3 List of Data (Block 6 and 7)	7
	Partial Approval – example for list of data	7
	Special Delegation – example for list of data	8
	Repair or Alteration– example for list of data	9
	Multiple DER signatures– example for list of data	10
	PMA Identicality – example for list of data	11
	AMOC– example for list of data	12
	Continuation sheets– example for list of data	12
	Other Reviewing Engineers– example for list of data	13
	Software/AEH	13
	Project Number – example for purpose of data	14
	Major Repairs/Alterations on aircraft - example for purpose of data	14
	Major Repairs/Alterations not on aircraft - example for purpose of data	14
	Multiple Use Repairs – example for purpose of data	14
	PMA Identicality – example for purpose of data	14
	AMOC – example for purpose of data	15
	Global AMOC – example for purpose of data	
	Applicability	15
	Certification	16
	Signature	16

General Information on FAA Form 8110-3

FAA Form 8110-3 is used for compliance findings. It is a communication from the DER to the FAA assuring that the DER:

- Reviewed the engineering data specified on the form
- Verified that the engineering data complies with applicable airworthiness standards
- Approved the engineering data on behalf of the FAA or, recommends the FAA review and approve the data

Note: Data "approval" signifies only that the data complies with airworthiness standards not FAA approval to produce parts or use the data.

Only a DER's signature may appear in the signature bock of FAA Form 8110-3.

FAA Form 8110-3 is not used to document a DER's participation in or review of any other part of a certification project besides a finding of compliance.

FAA Form 8110-3: Special Delegations

Some approvals require the DER to be granted a special delegation. The DER must be granted the special delegation on the letter of authorization prior to exercising that special authority.

Special Delegations include:

- Major repairs and/or Major Alterations
 - o Repair Specification DER (RS-DER)
 - Vintage Airplanes and Engines
- Parts Manufacturer Approval (PMA) by Identicality
- Alternative Method of Compliance to an Airworthiness Directive (AMOC)
- Management DER

An explanation of these special delegations can be found in FAA Order 8110.37, paragraph 2-7.

Electronic FAA Form 8110-3

Computer generated and stock FAA printed forms may be used interchangeably. Any computer generated form must be the same size; have the same general layout and configuration; use the same sequencing, numbering, and arrangement of information; and use identical wording of the stock form. It must be so identical that there is no question about what the form is and how it is being used.

NOTE: A PDF copy of Form 8110-3 with instructions can be found on the FAA's designee web-page by following this series: WWW. FAA.gov/Regulations and Policies/Forms, then search "8110-3."

Using Approval Authority

A DER authorized to approve technical data is expected to approve data to the full extent of their authority. If a DER declines to approve any or all portions of the data, the DER must contact the FAA project office or managing office to discuss their concern. DERs may submit Form 8110-3 to the FAA as "Recommend Approval of These Data" for the FAA to review only if their authority is limited to recommend only.

For major repairs or major alterations:

- DERs approval may be for all or part of the data that an installer needs to return an aircraft to service.
- DERs must state whether the approval constitutes all or only part of the required data approval necessary to complete the repair or alteration.
- If the approval is only part of the approval needed, the DER must state what other approvals are needed, if known.

Distribution of FAA Form 8110-3

Certification Activities:

• DERs send all original Form(s) 8110-3 to the project office, and copies to their managing office (if not also project office).

Major Repair and Major Alterations:

• DERs retain the original Form 8110-3 and submit copies to their managing office and the owner/operator or repair station that requested approval.

Alternative Methods of Compliance:

 DERs submit the original Form 8110-3 to the FAA office responsible for the Airworthiness Directive (AD), with a copy to the DER's managing office.

In Support of Foreign Civil Aviation Authority (CAA) requirements

- DERs provide the original Form 8110-3 and substantiating data to the project office for review and concurrence.
- Copies of form 8110-3 and approved data may not be given to any foreign certification authority as proof of an FAA approval.
- Communication with foreign CAA is through the FAA. (The project office or managing office will transmit FAA approval to the foreign CAA if necessary.)

Entering data on FAA Form 8110-3

Block 1, Date- Enter the date the DER signs the form. If more than one DER signs, the date must be the date the last finding was made.

STATEMENT OF	U.S. DEPARTMENT OF THE FEDERAL AVIATION AS COMPLIANCE WITH	OMINISTRATION	1	ARDS	1. DATE
	AIRCRAFT OR	AIRCRAFT CO	MPONENT IDENTI	FICATION	
2. MAKE	3. MODEL NO.		uft, Engine, Propeller, e		ME OF APPLICANT
		LIST O	F DATA		
6. IDENTIFICATION			7. TITLE		
8. PURPOSE OF DATA					
9. APPLICABLE REQUIREMENT	S (List specific sections)				
Part 183, data listed above and on with applicable requirements of the Reco	attached sheets numbered Ainworthiness Standards listed emmend approval of these cove these data	d. have t	been examined in accor	dance with esta	Imitations of appointment under 14 CFR billshed procedures and found to comply 13. CLASSIFICATION(S)
AA Form 8110-3 (03/10) SUP	ERSEDES PREVIOUS EDITIO	N			

Block 2, Make- Enter the make as listed on the type certificate (TC) data sheet. If approval is for a part or component such as repair or PMA, enter the manufacturer of the component.

Block 3, Model No.- Enter the aircraft model series or specific aircraft model number as listed on the product's TC data sheet; list multiple models separately; For additional space, list additional models in the List of Data - Title block (7).

Block 4, Type - Enter the type of product as listed on the product's TC data sheet. (Aircraft, Aircraft Engine, Propeller, etc.)

Block 5, Name of Applicant - List the name of the applicant for the approval or authorization. For a major repair this is the name of person or organization who arranged for the DER to approve the data.

Block 6, List of Data: Identification - Enter the report, drawing, analysis or document number, date and revision level.

Block 7, List of Data: Title - Enter the title of the report, drawing, analysis, or document and the exact extent of the approval. Examples of entries for this block are available in this presentation. DERs may use additional engineers to evaluate technical data. The DER accepts responsibility when signing the Form 8110-3. (A note may be placed in block 7 to indicate additional evaluators, but the evaluator's signature must not appear.) Use additional sheets to list all data reviewed.

When finding compliance to the requirements of 14 CFR part 23, Amendment 23-64 (the "new Part 23"), DERs must list the means of compliance (MOC) under § 23.2010 in addition to the regulations. Block 7 must list either the MOCs used for finding compliance, or must reference the document containing the MOCs.

Block 8, Purpose of Data - Enter the type of project (i.e., original STC, major repair, AMOC etc.) and an identifying project number, part number, serial number, etc.

STATEMENT OF COMPLIANCE WITH AIRWORTHINESS STANDARDS AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION			
2. MAKE	3. MODEL NO.	4. TYPE (Aircraft, Engine, Propeller, etc.)	5. NAME OF APPLICANT
	-	LIST OF DATA	<u>'</u>
6. IDENTIFICATION		7. TITLE	
8. PURPOSE OF DATA			
9. APPLICABLE REQUIREMEN			
Part 183, data listed above and with applicable requirements of Re	suthority vested by direction of to on attached sheets numbered the Airworthiness Standards list commend approval of these prove these data	have been examined in accordanced.	itions and limitations of appointment under 14 CFR re with established procedures and found to comply
11. SIGNATURE(S) OF DESIG	NATED ENGINEERING REPRI	ESENTATIVE(S) 12. DESIGNATION NUM	BERS(3) 13. CLASSIFICATION(5)

Block 9, Applicable Requirements - Enter the exact regulation(s) paragraphs, subparagraphs, or other appropriate airworthiness requirements with which the data comply. Be sure to include the appropriate amendment levels. This block may include current regulations, predecessor regulations, or ADs to current or predecessor regulations.

Block 10, Certification - Enter the number of additional sheets, or N/A if there are none.

A DER is only allowed to "approve these data" when the data falls under the DER's full approval authority. To choose "Recommend approval of these data," the DER must first be authorized to recommend approval in that area.

Block 11, Signature - Type or print your name and sign the final printed original document. Electronic signatures may be used according to an agreement with the project office or the DER's managing office.

Block 12, Designation Number - Enter the DER's Identification number.

Block 13, Classification(s) - Enter the DER's discipline or classification (mechanical systems, engines, etc.).

FAA Form 8110-3 List of Data (Block 6 and 7)

List of Data is divided into two parts; data identification and data title. You will list both types of data, descriptive and substantiating data.

Descriptive data – complies with the airworthiness standard identified on the form (e.g. engineering drawings, reports, or other data that describes the final design, installation or configuration that is found to meet the standard.)

Substantiating data – provides evidence of how or why the descriptive data meets the standard (e.g. part drawings, installation drawings, repair procedures, test reports, etc.)

LIST OF DATA	
6. IDENTIFICATION	7. TITLE
I	

Partial Approval - example for list of data

	LIST OF DATA	
6. IDENTIFICATION	7. TITLE	
ABC Manual 1234 Rev B. 10/20/03	Converter Regulator Installation Manual.	
1000047 Revision A Dated 10/22/03	Drawing - Converter Regulator Cooling Mod.	
1000048 Revision C Dated 10/22/03	Drawing - Scoop Assy Converter Regulator Cooling.	
TR-5689-1 Dated 11/8/03	Prototype Operational Test Report – Converter Regulator.	
	NOTE: This approval covers electrical details only. Additional approvals required.	

Note: You must reference any data that you are not approving by a separate list with the notation "FAA APPROVAL REQUIRED." You must write a statement that clearly indicates which data is or is not approved.

Special Delegation - example for list of data

6. IDENTIFICATION	7. TITLE
	Stress Report, "Cabinet Installation, Bell
Report No. SR 88-25, N.C. New, Dated 6-29-88	Model 222 Helicopter S/N 12345".
Sketch Dwg. 88 New, Dated 6-29-88	Sketch Package, Cabinet Installation, Pages 1, 2, & 3.
	Notes: 1) The structural aspects only of the above listed data are approved herein. This approval is only for the engineering data. It indicates the data listed above demonstrates compliance only with the regulations specified by paragraph and subparagraph listed below as "Applicable Requirements." 2) This form does not constitute FAA approval of all the engineering data necessary for substantiation of compliance to necessary requirements for the entire alteration. The requirements of 14 CFR 29.853 are not included in this approval and require separate approval. 3) Aircraft interior compliance inspection is not included in this approval and requires separate approval.

Note: when using a special delegation to approval data for a major repair or major alteration enter appropriate notes below:

(Examples)

"This approval is for engineering design data only. It indicates the data listed above demonstrates compliance only with the regulations specified by paragraph and subparagraph listed below as applicable requirements."

"This form does not constitute FAA approval of all the engineering data necessary for substantiation of compliance to necessary requirements for the entire alteration/repair."

Note: List the remaining requirements generally.

(Examples)

"Interior compliance inspection required."

"Structural aspects approved, electrical aspects are not included."

Repair or Alteration- example for list of data

6. IDENTIFICATION	7. TITLE
Report No. SR 88-25, N.C. New, Dated 6-29-88	Stress Report, "Cabinet Installation, Bell Model 222 Helicopter S/N 12345".
Sketch Dwg. 88 New, Dated 6-29-88	Sketch Package, Cabinet Installation, Pages 1, 2, & 3.
	Notes: 1) All engineering aspects of the above listed data are approved herein. This approval is only for the engineering data. It indicates the data listed above demonstrates compliance only with the regulations specified by paragraph and subparagraph listed below as "Applicable Requirements."
	2) This form constitutes FAA approval of all the engineering data necessary for substantiation of compliance to necessary requirements for the entire alteration.

Note: If no additional compliance is required for a repair or alteration, the following note must be added: "This form constitutes FAA approval of all the engineering data necessary for substantiation of compliance to necessary requirements for the entire alteration/repair."

Multiple DER signatures- example for list of data

LIST OF DATA	
IDENTIFICATION	7. TITLE
ABC Manual 1234 Rev B. 10/20/03	Converter Regulatory Installation Manual. (Approved by DER [name])
1000047 Revision A Dated 10/22/03	Drawing - Converter Regulator Cooling Mod. (Approved by DER [name])
1000048 Revision C Dated 10/22/03	Drawing - Scoop Assy Converter Regulator Cooling. (Approved by DER [name])
TR-5689-1 Dated 11/8/03	Prototype Operational Test Report – Converter Regulator. (Approved by DER [name])
	NOTE: This approval covers electrical details only. Additional approvals required.

LIST OF DATA	
6. IDENTIFICATION	7. TITLE
	Approved by DER[name]
ABC Manual 1234 Rev B. 10/20/03	Converter Regulatory Installation Manual.
1000047 Revision A Dated 10/22/03	Drawing – Converter Regulator Cooling Mod.
	Approved by DER [Name]
1000048 Revision C Dated 10/22/03	Drawing – Scoop Assy. – Converter Regulator Cooling.
	NOTE: This approval covers electrical details only

Note: When more than one DER signs FAA Form 8110-3, the list of data must clearly indicate which DER found compliance to the data for each entry in the list. This can be item by item or they can be grouped. If entries in this block cannot be clearly identified for each DER, then separate forms must be used for each DER.

PMA Identicality - example for list of data

6. IDENTIFICATION	LIST OF DATA 7. TITLE
A12345X Rev. D, 04/01/2001	Oil Pump Shaft Drawing.
RPT-2468 Rev. B, 04/12/2001	Certification and compliance report.
	Note: FAA approval of the design is contingent upon FAA Engineering verification of the type design data listed.

Note: When approving PMA data using a special delegation for PMA Identicality, enter the note, "FAA approval of the design is contingent upon FAA Engineering verification of the type design listed."

AMOC- example for list of data

6. IDENTIFICATION	7. TITLE		
0. 132.000			
FR12345 Rev. C, 2/12/2001	Skin Panel Repair.		
	Repair – 1 larger ext dblr, 1 int finger dblr, internal structure spliced per SRM, solid fasteners, 10 by 34 inch cutout for corrosion and cracks, SRM practices, thicker than SRM repair.		
	Notes: 1. Delegation of AMOC authority for AD 2000-01-01 was granted to John Doe by the Seattle ACO letter of delegation, dated January 4, 2000. 2. This deviation has been approved as an Alternate Method of Compliance (AMOC) to paragraph (c)(3) of AD 2000-01-01 and has been found to meet the Type Certification Basis of this airplane. 3. These requirements must be coordinated with the cognizant Flight Standards District Office. 4. This approval is for a temporary repair that must be removed on or before 6000 landings, not to exceed 24 months from the date of this approval.		

Note: DERs must be granted a special delegation to approve an AMOC. Indicate the AMOC proposal FAA letter (and date) granting AMOC approval authority. Indicate that the approval meets the applicable sections of the aircraft type certification basis or other defined airworthiness standards as require by the AD. An AMOC for a temporary repair must indicate that the approval is time limited and will have to be removed before (specific date, cycle limit, or flight time) expiration.

Continuation sheets- example for list of data

Use as many continuation sheets as necessary to complete the list of data. There is no standard format for continuation sheets, but each additional sheet must be marked with a sheet number indicating it is a continuation of the applicable FAA Form 8110-3. In the Certification block (block 10) you will indicate the total number or sheets used.

Other Reviewing Engineers- example for list of data

6. IDENTIFICATION	LIST OF DATA 7. TITLE		
A12345X	Oil Pump Shaft Drawing.		
Rev. D, 04/01/2001	Certification and compliance report.		
RPT-2468 Rev. B, 04/12/2001	Certification and compliance report.		
	The above has been reviewed by John Doe, Project Engineer ABC Company		

You may use as many experienced engineers as needed to completely evaluation engineering technical data. Notes may be placed in block 7 to indicate that a project engineer also evaluated the data and may include the name and title of the engineer, but not his or her signature. The DER's signature on FAA Form 8110-3 indicates the DER is responsible for the data approval.

Software/AEH

6. IDENTIFICATION	7. TITLE
PSAC-1000-001 Rev A Dated 10/30/09	Plan for Software Aspect of Certification for XXXXX System.
SCMP-1000-003 Rev B Dated 10/30/09	Software Configuration Management Plan for XXXX System.
	pport of TC for XXXXX for ABC Company, Project # SA-yyyy-zzz. This data provides evidence and development process for level A/B/C/D software. The development process is not complete until plishment summary.
	S (List specific sections)

Compliance findings are made to applicable parts of 14 CFR (23, 25, 27, 29, 31, 33, and 35) sections 1301 and 1309 may reference RTCA documents: DO-178 for software, DO-254 for airborne electronic hardware.

Project Number - example for purpose of data

8. PURPOSE OF DATA
In support of type certification of the fuel system for the Smithson 401 Aircraft. Project No. SA-00146-AC.

Major Repairs/Alterations on aircraft - example for purpose of data

8. PURPOSE OF DATA
In support of a major repair for S/N 12345.

Major Repairs/Alterations not on aircraft - example for purpose of data

8. PURPOSE OF DATA
In support of a major repair of Parker actuator 2HX by Ralph's Accessory Repair Station for part number 1234 repaired under work order 5678 dated 2/2/06.

Include the specific serial numbers of the parts, components, engines, propellers (or specific work order numbers for parts or components that are not serialized must be used in lieu of the project number.)

Multiple Use Repairs - example for purpose of data

8. PURPOSE OF DATA

Multiple use major repair data in support of a repair specification for Ralph's Accessory Repair Station repair of Parker actuator 2HX.

An RS approval is required for multiple use repairs, repair schemes, or establishment of repair limits for multiple use repairs without specific serial number or work order effectivity.

PMA Identicality - example for purpose of data

8. PURPOSE OF DATA
Identicality only under 14 CFR § 21.303.

Entry must be accompanied by the appropriate note in List of Data: Title (block 7) for PMA Identicality.

AMOC - example for purpose of data

8. PURPOSE OF DATA
In support of AMOC for S/N 1357.

Enter the serial number of the aircraft for which the AMOC applies.

Global AMOC - example for purpose of data

8. PURPOSE OF DATA
In support of global AMOC (number).

Enter the serial number of the aircraft for which the AMOC applies.

Applicability

9. APPLICABLE REQUIREMENTS (List specific sections)

14 CFR 25.1301(all) Amdt.25-123, 25.1309(a) Amdt.25-123, 25.1359(d)(3) Amdt.25-72.

9. APPLICABLE REQUIREMENTS (List specific sections)

CAR 6. [.200; .201; .202(a),(b); .260; .300; .301; .302; .303; .304(a),(b);
.305; .306; .307(d); .730(b),(c).] Released 12/20/ 1956.

9. APPLICABLE REQUIREMENTS (List specific sections)

CAR 4b.202(a),(b),(d) Released 12/31/1953

AD 97-03-05, paragraphs (c)(3) and (d).

Enter the exact regulation(s) paragraphs, sub paragraphs or other appropriate airworthiness requirements with which the data comply, including amendment levels. References may be current regulations, predecessor regulations and ADs to current or predecessor regulations. (Generalizations are not acceptable)

Include applicable amendment levels

Enter any non 14 CFR requirements that are FAA adopted or accepted or that are specifically delegated to the DER.

Certification

10. CERTIFICATION - Under authority vested by direction of the Administrator and in accordance with conditions and limitations of ap	
Part 183, data listed above and on attached sheets numbered N/A have been examined in accordance with established procedu	ures and found to comply
with applicable requirements of the Airworthiness Standards listed.	
Recommend approval of these data	
I (We) Therefore Approve these data	

Enter the number of additional sheets if any, if none indicate with N/A. Indicate "I" or "We" in the bottom right of the block then check the block next to "Approve these data," or "Recommend approval of these data."

Note: "Recommend approval" can only be used for the delegated functions identified on the DER's letter of authorization as "Recommend only."

Signature

James Bullock James Bullock	DERY-123456-NM	Systems & Equipment

Enter the DER's typed or printed name and signature in block 11 with the designation number and classification as requested.

Note: Electronic signatures on FAA Form 8110-3 may be authorized for use by the project office or the DER's managing office.