



BAILIWICK OF JERSEY

Director of Civil Aviation

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Part 21-6

Part 39-5

AIRCRAFT AIRWORTHINESS REVIEW

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The Director of Civil Aviation (Jersey) www.cidca.aero

JAC 21-6
JAC 39-5

Aircraft Airworthiness Review

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GENERAL

Jersey Aviation Circulars are issued to provide advice, guidance and information on standards, practices, and procedures necessary to support Jersey Aviation Requirements. They are not in themselves law but may amplify a provision of the Air Navigation (Jersey) Law or provide practical guidance on meeting a requirement contained in the Jersey Aviation Requirements.

PURPOSE

This Circular provides guidance on the format and content expected of an Aircraft Airworthiness Review Report. The Airworthiness Review Report is a collection of data on the status of the build standard and continued airworthiness of an aircraft that will assist organisations and regulators in their assessment of the aircraft during the Certificate of Airworthiness process.

RELATED REQUIREMENTS

This Circular relates to JAR Parts 21 and 39.

CHANGE INFORMATION

First issue.

ENQUIRIES

Enquiries regarding the content of this Circular should be addressed to the Director of Civil Aviation (Jersey) www.cidca.aero

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1 Introduction

- 1.1 In order to certify that an aircraft conforms to an acceptable standard it may be necessary for an organisation to investigate the aircraft's build, operational fit, design, and repair standard and provide a report to the Authority. This report is referred to as the 'Aircraft Airworthiness Review' report. Organisations may be approved to supply reports under a JAR Part 39 Approval or by holding an appropriate design approval granted by an acceptable NAA.
- 1.2 The Airworthiness Review Report shall reflect the guidance material contained in this Circular and include information on compliance with the approved standard. Deviations and exceptions to the approved standard shall also be stated.
- 1.3 The Airworthiness Review Report is a collection of data on the status of the build standard and continued airworthiness of an aircraft that will assist organisations and regulators in their assessment of the aircraft. The report will also outline any applicable operational requirements. The report is to be used in conjunction with other documents, particularly the Survey Report detailed in JAC 21-3, in the assessment of the aircraft for the issue of a Certificate of Airworthiness.
- 1.4 It is not the intention that the Airworthiness Review Report will provide all of the information necessary for the Certificate of Airworthiness process, nor is it suggested that an Airworthiness Review report will be necessary for every Certificate of Airworthiness issued, it is merely one of the tools used. It would typically be requested by the DCA where the history of a particular aircraft is complicated or where an aircraft has not been in service for an extended period
- 1.5 JAR Part 21 provides details of the Type Approvals and Design Changes Approvals acceptable to the DCA.

2 Aircraft Airworthiness Review report

The following provides guidance regarding the content and layout of the Aircraft Airworthiness Review report. This should not be considered as an exhaustive checklist of the issues to be addressed during the investigation.

Front sheet

Organisation:	
Approval Reference:	
Aircraft Report Reference:	
Issue:	
Type Acceptance Certificate No:	
Aircraft Registration:	
Applicant:	
Application Form dated:	

Report Title

E.g. Transfer of Pre-Owned [aircraft type] from [Country] to [DCA] Register

Report summary

Write a summary statement of the report contents and conclusion

Compiled By:		Checked By:	
Date:		Date:	
		Approved By:	
		Date:	

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2. List of source documents reviewed
3. Approval Status of the Aircraft Build Standard
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 - List of Deviations
4. Continued Airworthiness
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 - Air Navigation Order and JARs
 - Airworthiness Directives
 - Alternative Methods of Compliance
 - Aircraft Inspection
 - Flight Test

Continued Airworthiness Instructions

Post Type Design Generic Regulation Changes

5. Conclusion

Introduction

Write a short introduction including:

This design review report is raised to assist with the Jersey Certificate of Airworthiness process for *[registration]*, a pre-owned *[Aircraft type]*.

The assessment is carried out against the TCDS Standard for the type listed on the applicable DCA Type Acceptance Certificate.

The aircraft currently has *(hours)* hours total time. *(NAA)* Export C of A No. refers.

The Type Certificate Holder for the aircraft is:

The aircraft conforms to Type Certificate Data Sheet No.

Applicable DCA Type Acceptance Certificate No.....

Aircraft Manufacturer:

The aircraft has operated as follows:

Basic Aircraft Data

Aircraft Type: Manufacturer's Serial No:

Engine Type: Manufacturer's Serial No:

APU Type:

Propeller Type:

The aircraft is proposed for certification in Certificate of Airworthiness Category:

List of source documents reviewed

Provide a list here, together with their revision status, of all the high level source documents used in the review of the aircraft and its build standard, e.g. Design Reports, Flight Manual, Damage/Repair Reports, Technical Records, Survey Reports, modification reports, Log Books, Worksheets etc.

Aircraft build standard status

Build Standard

The aircraft was built in *[date]* to *[NAA]* Type Certificate Data Sheet: *[number]* Rev. *[number]*
 Top drawing (*1234-789*) defines the basic build standard for the aircraft.

(List as applicable)

Modification History

The following modifications have been embodied since manufacture: -

Item	Date Installed	Modification Details	Modification No.	Installer	Modification Approval	Comments
1						
2						
3						
4						

Comments arising from modification history above: -

Item	Comments	Closure
1		
2		
3		
4		

Notes:

- Include details of any repainting since new and certification.
- The embodiment of a design change where the aircraft serial number applicability is different from the subject aircraft will require a design investigation as per JAR Part 21 Subpart C.
- Any instructions for continued airworthiness associated with design changes embodied should be listed in the Continued Airworthiness section of the report.

Repair History

The following repairs have been carried out since manufacture: -

Item	Date	Airframe hours	Damage details	Repair	Installer	Approval reference	Comments

Notes:

- 1) Quote references to the Structural Repair Manual, Manufacturer type certificated drawings, repairs certified against AC43 and aircraft Maintenance Manuals as appropriate.
- 2) Review and assess the aircraft damage chart (if applicable) and/or Technical Log for repaired and unrepaired damage.
- 3) Detail any repaint work and the certification basis.
- 4) Record the date of the last compass swing.
- 5) Check the last weighing report and variable load schedule (Ref 39 Subpart D).
- 6) Any airworthiness limitations or inspections associated with a repair should be listed in the Continued Airworthiness section of this report.

Environmental standards compliance

Provide statements on the noise and engine emission compliance with the requirements detailed in JAR Part 36. Assess the history of the aircraft for any modifications that could affect the noise or emission compliance statements/certificates. See also JAC 36-1 for guidance on the application for a noise certificate.

Equipment fit

This section should include a list of the original and replacement equipment fitted along with the associated equipment approval/modification references. Equipment fitted with no evidence of an acceptable approval will have to be assessed as a design change to the aircraft, ref JAR Part 21 Subpart C. The avionics fitted must be listed by part number, or type along with the equipment or design change (modification) approval reference number for each system. The VHF FM Immunity status, if any, shall be declared. The Mode S address code shall also be specified.

Flight Manual

This section should specify the reference and revision status of the Aircraft Flight Manual (AFM). The Temporary Revisions, applicable Supplement(s) and Change Sheet(s) must also be referenced. The AFM, revisions, supplements, and changes should be approved by an appropriate NAA or Design Organisation. The AFM must reflect the current configuration of the aircraft.

Summary List of Deviations and Variations to Approved Build Standard

This section should contain a summary list of deviations from the design certification requirements, if any. Discussions with the authority will be necessary to determine the actions required for the eventual acceptance of these deviations and variations.

Continued Airworthiness

Maintenance Schedule/Programme

The **Airframe** has been maintained to (*manufacturer's*) recommendations:
(Detail past maintenance schedule history sufficient to determine continued airworthiness)
List any Airworthiness Limitations and Utilisation (hours/year)

The **Engines** have been maintained IAW (*manufacturer*) Maintenance Schedule/Manual [*number*]
The aircraft will be maintained to Maintenance Programme Reference: [*number*]
DCA approval reference: [*number*]

The following bridging checks are necessary to transfer the aircraft on to the new Maintenance Programme:
[*Provide details*]

Airworthiness Limitations

Compliance must be established with the airworthiness limitations that are specified or referenced by the Aircraft, Engine or Propeller Type Certificate/Type Acceptance Certificate Data Sheets.

Certification requirements

All the certification requirements applicable to the issue of the Certificate of Airworthiness must be complied with. The following tables should be used to document compliance to the pertinent requirements.

Air Navigation (Jersey) Law requirements:

Article.	Description	Method of Compliance

Jersey Aviation Requirements:

Paragraph	Description	Method of Compliance

Examples:

- The aircraft must be weighed, and a weight schedule produced. (JAR Part 39 Subpart D)
- Placards and Markings required by the Air Navigation (Jersey) Law 2014 must be affixed and displayed in appropriate locations.
- Compliance with the appropriate equipment requirements and radio requirements in the Operational JARS must be declared.

Airworthiness Directives

FAA, Transport Canada, EASA

(List all airframe, engine and equipment Airworthiness Directives including means of compliance and date since build).

Alternative Methods of Compliance (AMOC)

An AMOC is defined as a different approach or technique not specified in an Airworthiness Directive or mandatory requirement that can assure a level of safety equivalent to that offered by direct compliance with the subject AD or requirement. AMOCs are normally supported by the State of Design or AD issuing Authority.

If upon the review of the aircraft and its records it is discovered that there are a number of AMOCs applied to the aircraft, they should be listed in this section together with the particular approval process route used. The DCA shall be consulted on the acceptance or otherwise of the AMOCs.

Aircraft Inspection

Make a statement about the physical condition of the aircraft, engines and equipment. See also JAC 21-3.

Flight Test

Attach a copy of any completed flight test schedule, flight evaluation or check flight as applicable, noting any deficiencies and making reference to their rectification.

Continued Airworthiness

List the sources of Continued Airworthiness (MRB, Maintenance Manual Chapter 4/5 for example).

List additional Continued Airworthiness tasks resulting from modifications or repairs since build.

Lifed Items

Provide evidence that the remaining hours and cycles of components that are subject to a hard time life or overhaul are acceptable.

Post Type Design Generic Regulation Changes

Investigate the applicability, compliance and impact on the aircraft modification standard and continued airworthiness instructions of any generic post type approval design changes, e.g. Fuel Tank Safety, Ageing Aircraft, EWIS etc.

Conclusion

Summarise the contents of the report above and make a statement that the aircraft either meets the requirements of the DCA for the initial issue of a Certificate of Airworthiness or list the deviations or further data that is required.