

THE GLIDING FEDERATION OF AUSTRALIA INC.

TRADING AS GLIDING AUSTRALIA

ABN 82 433 264 489 Unit C4, 1-13 THE GATEWAY, BROADMEADOWS, VICTORIA 3047 PHONE +61 (0) 3 9359 1613, FAX +61 (0) 3 9359 9865 www.glidingaustralia.org

AIRWORTHINESS AUDITS GUIDE FOR AUDITORS

Reference: MOSP 3 Manual of Standard Procedures

Requirement

MOSP 3 Section 22.1.5 requires the performance of an Airworthiness Audit of each Club or Operator at least every two years. Note that MOSP 3 encapsulates Australian Government legislation and CASA Regulations as they apply to gliding.

Objective

The purpose of an Airworthiness Audit is to identify any areas of non-compliance with MOSP 3 and to assist the Club or Operator to achieve full compliance, ie to ensure that Clubs and Operators are complying with Australian State and Federal law.

Role of the Auditor

The auditor is tasked with identifying WHAT is non-compliant, but does not have the authority to specify HOW it should be corrected. Every organisation has its own management methods; it is not the auditor's role to take over management responsibility from Club executives.

Audit Process

Evidence of compliance or non-compliance is required. This means that the auditor must ask questions of the form:

"Show me the record of ..."

and avoid questions of the form:

"*Tell me* how you do ..."

From an audit perspective, there is no validity in opinions or intentions.

Reporting Terminology

- 1. **Findings** are any points the auditor wishes to bring to the attention of the Club or Operator. Findings may be positive as well as negative. Highlighting of practices that produce good outcomes is very worthwhile.
- 2. Non-Compliance. A Non-Compliance is reported when a documented requirement can be identified together with clear evidence of non-compliance. (Note these are the two necessary elements before reporting a non-compliance.)
- **3. Observation.** An observation is reported when there is suspicion of noncompliance but either a documented requirement cannot be identified or there is insufficient clear evidence of non-compliance. Effectively an "observation" is a warning of suspected non-compliance.
- 4. **Opportunity for Improvement.** The auditor may make suggestions for improvements but cannot demand that they be actioned. As auditors visit many Clubs and Operations, they will observe good and not so good methods of achieving compliance. Pass this knowledge on where appropriate as an Opportunity.

Non-Compliance Notices

Whenever a non-compliance is identified, corrective action is required. The purpose of a Non-Compliance Notice is to clearly identify the elements of the non-compliance and establish an unambiguous time frame for rectification. The auditor must then follow up with the Club or Organisation to ensure the required action is completed.

Note that the Club or Operation always remains legally responsible for complying with the law. If they are operating in a non-compliant manner, the auditor can neither excuse them nor relieve them of responsibility under the law. As stated above, the auditor's role is simply to assist them to comply.

Conducting the Audit

Negotiate a mutually suitable date for the audit with the Club or Operator. MOSP 3 Section 22.1.7 requires at least 28 days notice of a scheduled Surveillance Audit. To assist the audit process, it is useful to provide a copy of the audit checklist prior to the audit.

The audit program should include:

- a. Introduction. Meet the Club/Operator personnel. Outline the scope of the audit (Airworthiness, MOSP 3 and other relevant law eg State OH&S laws). Establish which gliders are to be examined. (Usually the Club's primary trainer, at least one other Club glider and, if possible, at least one privately owned aircraft.)
- **b. Documentation Preliminaries.** Obtain the details required for the Audit Report (as far as is possible). Establish where aircraft data (logbooks, flight and maintenance manuals, maintenance releases) is stored and preserved.

- c. Maintenance Facilities Inspection. (Complete checklist)
- d. Individual Aircraft Inspections. (Complete checklists)
- e. Wrap-Up Meeting. Debrief the Members in attendance on all findings and specifically on any Corrective Action Requests and agree dates for rectification. Advise them of when you expect the formal report will be sent. You might consider sending them the report in draft and ensuring they have an opportunity to discuss any issues they might have with any part of it before submission. Thank the Members for their cooperation.
- f. Submit the Report. Send copies of the report as applicable to the following:
 - i. Club President
 - ii. Club AAO
 - iii. Other Club personnel who participated in the audit
 - iv. EMA
 - v. RMA (when conducting the audit on behalf of that officer)
- **g. Follow-Up.** Keep in contact with the Club as the date(s) for resolving Non-Compliance Notices approaches. If they are unable to achieve compliance, advise EMA.
- h. Finalize Non-Conformance Notices. Update the report with details of corrective action taken and forward copies to EMA.
- **ANNEXES: A.** Airworthiness Safety Audit Report form.
 - **B.** Airworthiness Audit Detailed Sailplane Report form.
 - C. Detailed Sailplane Audit worksheet

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AIRWORTHINESS SAFETY AUDIT REPORT

AUDITEE DETAILS

Club Name:
RN: Trading Name (if different):
ddress for Correspondence:
President: AAO:

AUDIT DETAILS

Туре:	Scheduled / Specia	۶]*
Location(s):		
Dates (On Site):		
Audit Scope:	Airworthiness	

AUDIT TEAM

Lead Auditor:	Second Auditor:
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DISTRIBUTION

To: (President)

Cc: CAP@glidingaustralia.org.au

EMA@glidingaustralia.org.au

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CONFIDENTIAL DOCUMENT

This Audit Report is a confidential document between the GAus and the Auditee. The GAus shall not disclose the contents of this report or part thereof, except in pursuance of its functions, without the express permission of the Gliding Club Airworthiness Administration Officer.

EXECUTIVE SUMMARY

BACKGROUND

[Insert a brief history of the club, when was it formed, how many members, how many Annual Inspectors, who is the Club Airworthiness Administration Officer, who is the lead airworthiness inspector. Record details of the club fleet by aircraft type, how many syndicate and private aircraft and of what type. Rough estimates suffice.]

SUMMARY

[Record when the audit team arrived and who welcomed them at the gliding club.]

[The opening meeting must outline to the Club representatives the scope of the airworthiness safety audit and the audit finding process. The scope of the audit should be in accordance with the audit check list/s shown in the body of this document however in extenuating circumstances the scope of the audit may vary.]

[Elaborate in detail on the findings of the airworthiness audit here, including findings from the detailed inspection of individual gliders]

I have reviewed the club's previous airworthiness audit report and SF records and certify that all previously issued non-compliance notices (NCN) are noted and acquitted.

Lead Auditor Signature:	Date:
Name:	GFA No: M

AIRWORTHINESS CHECK LIST

Club Sailplanes Inspected/ Listed (All Club owned sailplanes):

(Detailed reports for individual sailplanes must be presented in Annex B and should follow the format shown in the template.)

	Sailplane Description (Registration and Type)	Condition
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Private Sailplanes Inspected/ Listed (Only those considered in this audit):

1	
2	
3	
4	

WORKSHOP INSPECTION:

Adequate size	
Premises clean and tidy	
Sufficient lighting	
Sufficient ventilation	
Dedicated area for administration work	
Storage of ADs, ANs and drawings including process for maintaining access to latest issues	
Availability of a current set of General ADs including process for checking for latest issues.	
Accommodation for tools	
Adequacy of tools	
Adequacy of work benches	
Satisfactory storage of aircraft materials	
Adequacy of Fire Extinguishers	
Provision of smoke detectors - if appropriate to building environment and location.	
Availability of Personal Protection Equipment: dust masks, eye protection, gloves, etc as appropriate	
First Aid Kit: availability and contents current and adequate for type of work performed in the facility.	
Provision of earth leakage protection	
Adequacy of facilities for safe storage and use of oxygen re-filling equipment if applicable.	
Adequacy of facilities for safe storage of flammable chemicals (fuels, oils, lubricants, solvents, etc)	

INSPECTION CAPABILITIES:

Number of Annual Inspectors in club	
Number of Annual Inspectors actually active, last two years	
Number of inspectors active on Club Aircraft	
Number of inspectors active on private aircraft	
Maximum number of inspections by any inspector	
Do you have enough competent inspectors?	

OVERALL COMMENTS ON THE CLUB AIRWORTHINESS RESOURCES:

[Include details of non-conformances, observations (both +ve and -ve), and any opportunities for improvement]

Required Corrective Actions

Club / Organisation:....

An Airworthiness Safety Audit conducted on (date) has revealed the deficiencies detailed in the following Non Compliance Notices (NCNs):

[insert details of problem areas identified]

Action to correct the NCNs listed below is required. Please report actions to the auditor as they are completed.

NCN No	Brief Description of non-conformance	Due Date for Compliance
1		
2		
3		
4		
5		

Auditors Signature:	 Date:	
Name:	GFA No	»: M

** Register each NCN issued and corrective action requirement in Salesforce. Ensure each NCNs corrective action is acquitted against each finding.

Annex A

NCN No	Corrective Action Taken	Date of Compliance
1		
2		
3		
4		
5		

RMA Certification of NCN corrective action completed satisfactorily:

Auditors Signature: .	 Date:	
Name:	 .GFA N	lo:

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AIRWORTHINESS AUDIT - DETAILED SAILPLANE REPORT

Gliding Club		
Sailplane		
Documentation	 Is a full set of documentation available? TCDS? Flight Manual? Maintenance Manual? Full set of applicable ADs? Are the ADs current issues? Is the Specific to Type AN available? 	
Log Book	 Is the Logbook available? Is it up to date? Are the entries complete? Is sufficient detail included? Does the person signing it out hold an Annual Inspector (AI) ticket? Where was the last Form 2 inspection carried out? Have any major inspections 3000hr, 20yr, 30yr, etc been overlooked? Are the CofR and CofA in the Logbook? 	
Maintenance Release	 Is the Maintenance Release in the glider? Is it current? Have all sections been completed? Are all signatures and dates included? Has the person signing out an AI ticket? How many hours has the glider flown since the Form 2 inspection? How many launches has it had? Has the lubrication schedule been complied with? 	

Cockpit Placards	 Are the necessary placards in place? Are they current? Are weight and balance requirements included and clear? Is the registration placarded in a flameproof material? 	
Sailplane Inspection	 Perform a Daily Inspection on the glider How many hours has the glider flown? What is the general condition of the glider? Are any deficiencies evident? Have any items requiring attention at the next Form 2 inspection been identified? 	
Other Airworthiness Issues	Are there any other airworthiness points that the auditor feels need to be discussed? Please list below.	

SUMMARY OF INDIVIDUAL SAILPLANE AUDIT

[Include details of non-compliances, observations (both +ve and -ve), and any opportunities for improvement.]

Auditors Signature:	 Date:	

Name: GFA No: M-....

Annex C Airworthiness Auditor's Guide



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AIRWORTHINESS SAFETY AUDIT DETAILED SAILPLANE AUDIT WORKSHEET

Club:		
Glider Type:		Registration:
Questions to ask	Auditor Actions	Detail / Follow up
DOCUMENTATION – Is a full set of	documentation available?	
Type Certificate Data Sheet	Sight TCDS or view online.	MOSP 3 para 2.2.2 The TCDS is the primary airworthiness data reference.
Show me the flight manual. Latest	Sight manual. Verify it correctly	MOSP 3 para 2.7.5
issue?	represents the glider model. Check currency.	How can you check currency or obtain a new manual?
Show me the maintenance manual.	Sight manual. Verify it correctly	MOSP 3 para 2.7.5
Latest issue?	represents the glider model. Check currency	How can you check currency or obtain a new manual?
Show me the list of applicable ADs.	Sight AD listing:	How do you know the list is current and complete?
Are these all at latest issue?	- GFA ADs	For GFA ADs:
	- Country of Origin ADs (EASA)	www.glidingaustralia.org
	- CASA ADs	DOCS/FORMS => AD Register => <i>download</i> Online AD
	References:	Help or AD Schedules
MOSP 3 para 15.1.1 MOSP 3 para 15.3.3	download GFA AD/AN Sortable Index check list for your aircraft and issue No's.	
	MOSP 3 para 15.5.2	Access relevant websites for:
	MOSP 3 para 15.5.3	CASA ADs
		EASA ADs or other Country of Origin ADs

Questions to ask	Auditor Actions	Detail / Follow up
Show me how you access the ADs and ensure they are at latest issue?	View ADs on-line or hard copies and verify issue numbers.	www.glidingaustralia.org DOCS/FORMS => AD Directives => GFA AD (number group) => AD (number) <i>to download</i>
Show me how you check ANs. Show me how you access ANs currently applicable to your glider.	View ANs on-line or hard copies and verify issue numbers. View specific AN, and the list of general ANs applicable	MOSP 3 para 17.1.1 Similar to ADs but not mandatory unless mandated by MOSP 3
Show me how you check CASA ADs.	View on-line.	https://www.casa.gov.au/aircraft/standard-page/airworthiness- directives Examples: AD/RES/12, AD/GAS/001, AD/GEN/87 Also it is good to be able to find CASA CARs, CASRs and CAO 100.5
Show me how you check Country of Origin ADs	eg EASA View on-line.	www.ad.easa.europa.eu
LOGBOOK – Is the Logbook available	e?	

Questions to ask	Auditor Actions	Detail / Follow up
Show me the Logbook	View logbook and confirm aircraft details are correct What are storage arrangements for Logbook, old MRs and other critical maintenance documents eg fire-proof container? Check hours, flights and engine hours at commencement of last Form 2 inspection	Refer MOSP 3 paras 19.1 to 19.2 Record details up to commencement of last Form 2 Inspection: Date inspection commenced: Total Hours Flown: Total Flights: Total Engine Hours:
Show me that the logbook has been updated with all flight details from the MR.	View logbook and Maintenance Release and confirm that flight and launch details have been transferred to the logbook at appropriate times.	 MOSP 3 para 19.1.4: The Registered Operator must ensure logbooks are up-to-date at least annually prior to the Annual Inspection or: a. When certifying inspections or periodic maintenance b. When certifying compliance to ADs c. When any repairs are certified.
Show me the last Form 2 entry and any additional maintenance entries since then.	View logbook and confirm adequacy of recorded Form 2 inspection details and certification.	Basic Sailplane Engineering (BSE) AIRW M05 para 3.4
Identify who certified the last Form 2 inspection.	Confirm person signing out the inspection was appropriately qualified.	MOSP 3 para 10.9

Questions to ask	Auditor Actions	Detail / Follow up
Where was the last Form 2 inspection carried out?	If different from workshop inspected may need to consider checking maintenance facility.	
Show me how you ensure that inspections have not been overlooked?	Check Maintenance Manual and Life Extension ADs against logbook to confirm.	Specifically look for: lifed items (eg harnesses), lubrication schedules, life extensions and surveys, periodic maintenance (eg l'hotelliers, Tost releases).
Show me the Certificate of Registration	Sight certificate and verify currency.	MOSP 3 para 2.1
Show me the Certificate of Airworthiness	Sight certificate and verify currency.	MOSP 3 paras 2.4, 2.5, and 2.6
Show me the Type Certificate Data Sheet (TCDS)	Sight the TCDS	MOSP 3 para 2.2.2 Note the primacy of TCDS data over maintenance manual and Australian sourced data.
MAINTENANCE RELEASE – Is the r	naintenance release in the glider?	
Questions to ask	Auditor Actions	Detail/Follow Up
Show me the Maintenance Release. Is it current?	Sight Maintenance Release and confirm currency.	Refer MOSP 3 paras 19.3 to 19.7 Check MR validity date entered in Part 1. Must be within 1 year of date of issue of the MR.
Show me that all sections of the MR have been completed correctly.	Check each section of the maintenance release: MR Part 1: MOSP 3 para 19.4	Form 2 Entry - dated and signed by authorized inspector. Return to Service Flight Report – checked, dated and signed. Recurring Maintenance Items – Required entries present, items actioned as and when required. (Includes lubrication schedule where applicable. eg l'hotelliers.)
	MR Part 2: MOSP 3 para 19.5	 Major Defects recorded have been signed off by appropriately qualified inspector. Minor Defects – none carried forward from previous Form 2. Where rectified they have been signed off appropriately.

Questions to ask	Auditor Actions	Detail / Follow up
	MR Part 3: MOSP 3 para 19.6	Flights and hours recorded and added correctly.
		Correct figures transcribed into Logbook.
		Record details since last Form 2 Inspection:
		Date of Return to
		Service sign-off:
		Total Hours to date:
		Total Flights to date:
		Total Engine hours to date:
	Daily Inspection Schedule GFA Form 1	Verify that there is a DI record for each flight day recorded in Part 3.
	Check DI record prior to first flight in current MR. Verify conduct of an independent rigging and control	Verify that an independent rigging and control inspection is recorded with the first DI post Annual Inspection and following each subsequent re-rigging.
	inspection recorded at the same time.	Check that all entries are signed, dated and annotated with the inspector's GFA No.
	MOSP 3 para 19.7	Note: Inspectors should be using new M- numbers. (The old GFA membership numbers are no longer valid.)
Show me the record of any Permissible Unserviceabilities	Check that any PUs are recorded as minor unservicabilities and are allowable by GFA. (Refer to AIRW-M15 Permissible Unserviceabilities).	MOSP 3 para 2.9.8 Required PUs must be listed in the Maintenance Release Minor Defects and it is the pilots responsibility and decision whether to operate as such and to remain within the limits of the Permitted Unserviceability
	Expect to see PUs for:	Clause.
	For most non-motor gliders,	
	Compass swinging	
	Altimeter calibration	
	For Polish gliders:	
	Turn & Slip Indicator removed (if listed in TCDS minimum equipment list)	

Questions to ask	Auditor Actions	Detail / Follow up
Show me that all the necessary placards are in place.	Verify all placards present as specified in MOSP 3 Flight Manual.	MOSP 3 para 8.3 specifies required placards.
Are the placards current?	Verify from logbook that no significant changes have been made to equipment fit (eg oxygen, water ballast, etc) or that would be likely to have an effect on weight and balance	MOSP 3 para 10.12.3 Check the latest weight & balance data if available.
Show me the registration placard in the cockpit.	View the placard. Verify that it is made of fireproof material.	AN84 requires : "A fireproof (stainless steel or brass) engraved plate dimensioned as per Figure 4 is to be secured inside the cockpit in sight of the pilot."
Are weight an balance placards current, clear and correct? Explain limitations for tail ballast and for two seat gliders (as appropriate).	View placards. Verify they are in good condition Are the requirements clear? Also refer to MOSP 3 para 8.1.1.i for units.	Some gliders with tail ballast, and some modern 2-seat gliders have quite complex weight and balance requirements. Verify that Club personnel understand the requirements for the aircraft being examined and can readily explain these.
Show me the weak link placards. Show me the flight manual requirement.	Verify weak link placarding is correct according to: - TCDS and flight manual (for weak link strength) and - AN75 (for location of placards).	 AN75 Iss 4 states: A weak link is mandatory, and the specified breaking strength must be placarded in the glider cockpit and on the glider's external surface adjacent to each release hook. AN75 also provides additional information on Tost weak links including details of colour coding. Note: MOSP 2 para 16.1.6 and OAN 01-13 provide the same information.
Are all controls correctly colour coded?	Verify specified controls are correctly coloured and that no other controls use the specified colours.	MOSP 3 paras 8.6.1 & 8.6.2
MINIMUM EQUIPMENT FIT	•	·
Show me that the required equipment is fitted.	Verify that all required equipment (per MOSP 3) is fitted. Verify altimeter sub-scale units Check correct units (trainers).	MOSP 3 para 8.1.1 lists minimum fit and mandatory units. Altimeter sub-scale must be in hectopascals (millibars) Altimeter in feet and ASI in knots for training aircraft.

Questions to ask	Auditor Actions	Detail / Follow up
Confirm that equipment listed as mandatory in MOSP 3 and the Type Certificate Data Sheet is fitted.	Check compliance with: MOSP 3 Type Certificate Data Sheet (TCDS)	MOSP 3 paras 8.1.1 and 8.1.4
Confirm that the electrical system complies with the requirements of MOSP 3	Verify compliance of the electrical system. Battery Master, Isolation of equipment, Wiring.	MOSP 3 paras 8.1.2 and 8.1.3
SAILPLANE INSPECTION – Perform	a Daily Inspection on the glider	
Airframe	Note general condition and any damage.	AIRW-M03, AIRW-M04 Daily Inspectors Handbooks
Rigging	Verify all rigging pins, safetys, etc are correctly installed.	AIRW-M03, AIRW-M04 Daily Inspectors Handbooks
Control Connections	Verify correct connection and safetying.	AIRW-M03, AIRW-M04 Daily Inspectors Handbooks
Harnesses	Verify condition, functioning and life. Note: Where a life is specified by the harness manufacturer it is MANDATORY.	MOSP 3 para 13.2.4 If no life is specified, and the harness is over 10 years old, check the logbook for Annual Inspector certification. Date of Manufacture: Expiry Date (if labelled):
Instruments	Ensure condition and indications at rest are satisfactory. Check functioning of ASI, vario and altimeter sub-scale knob. Check ASI colour coding	AIRW-M03, AIRW-M04 Daily Inspectors Handbooks MOSP 3 paras 8.3.5 and 8.3.6 (ASI colour coding)
Radio	Check function.	
Batteries	Check mounting/restraints and fusing. Check the battery type.	MOSP 3 para 18.9 and para 8.1.2 for Fusing Be aware of requirements governing the fitting of Lithium batteries. Flight or Maintenance Manuals may state specific manufacturers' requirements for batteries.

Questions to ask	Auditor Actions	Detail / Follow up
Releases	Check functioning of all releases Note condition of release knobs and cables.	AIRW-M03, AIRW-M04 Daily Inspectors Handbooks Check for PU in Maintenance Release if belly release disabled or removed.
OTHER AIRWORTHINESS ISSUES		
Identify any modifications or changes made to the aircraft.	Verify status of changes, specifically identify any unapproved modifications that could impact on airworthiness.	MOSP 3 sections 18.6 to 18.10
Any other airworthiness point of note?	Note any issues/comments/difficulties.	