



THE GLIDING FEDERATION OF AUSTRALIA INC.

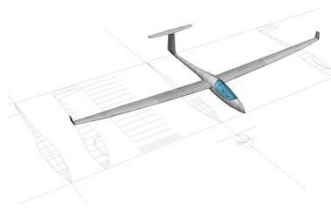
DESIGN APPROVAL PROCEDURES MANUAL

**THIS MANUAL OUTLINES THE PROCESSES THAT NEED TO BE FOLLOWED BY
GFA MEMBERS TO BOTH NEGOTIATE AND PROVIDE DESIGN APPROVAL
FOR SAILPLANE NON STANDARD MODIFICATIONS AND REPAIRS.**



Gliding Federation of Australia Inc.

C4 1-13 The Gateway Broadmeadows Victoria 3047
Phone 0393591613 Email www.glidingaustralia.org



MANUAL INTRODUCTION

When a non-standard modification, repair or replacement part is introduced to a certified sailplane or powered sailplane, (operated under GFA) the current, GFA issued, Certificate of Airworthiness, is suspended. To re-instate the Certificate of Airworthiness the non-standard modification or repair must be "Design Approved".

This manual outlines the procedures required to ensure that proper standards and processes are met, allowing Design Approval under CASA REG21.M to be issued by an Authorised Person, for the completed work, thereby revalidating the sailplane's or powered sailplane's original Certificate of Airworthiness.

NOTE:

- This manual does not apply to "gliders or motor gliders" identified and certified in the Small Light Aircraft category. (SLA).
- This manual does not apply to sailplanes and powered sailplanes which operate under an Experimental Certificate of Airworthiness.
- The procedures outlined in this manual are not required for standard modifications, repairs, replacement parts and materials which have been previously design approved.
- This manual does not apply to sailplanes carrying foreign registration.

INSTRUMENT OF APPOINTMENT

The CASA has issued to the GFA an Instrument of Appointment, the schedule of which lists selected GFA members who are authorised to exercise Design Approval functions. Under the terms of the Instrument all of the persons listed must act in accordance with this manual. This manual must be read in conjunction with the Instrument of Appointment and where any confliction occurs the Instrument of Appointment has total priority. The current Instrument of Appointment is located in Appendix (A).

MANUAL PRESENTATION

This manual is presented in 2 sections:

SECTION (1) **ACCEPTED** by CASA

This section provides the details of how the conditions set out in the Instrument of Appointment together with the requirements of the Approved Section of this manual are complied with.

SECTION (2) **APPROVED** by CASA

This section sets out the processes to be followed to satisfactorily complete project Design Approval.

MANUAL AMENDMENTS

SECTION (1) This section can be amended and the changes implemented from time to time by GFA without CASA approval. The amendments, however must be forwarded to CASA for perusal and can be assumed to be accepted if no response is received within 30 days.

SECTION (2) This section must have any proposed amendments submitted to and approved by CASA before they can be implemented.

MANUAL APPENDICES

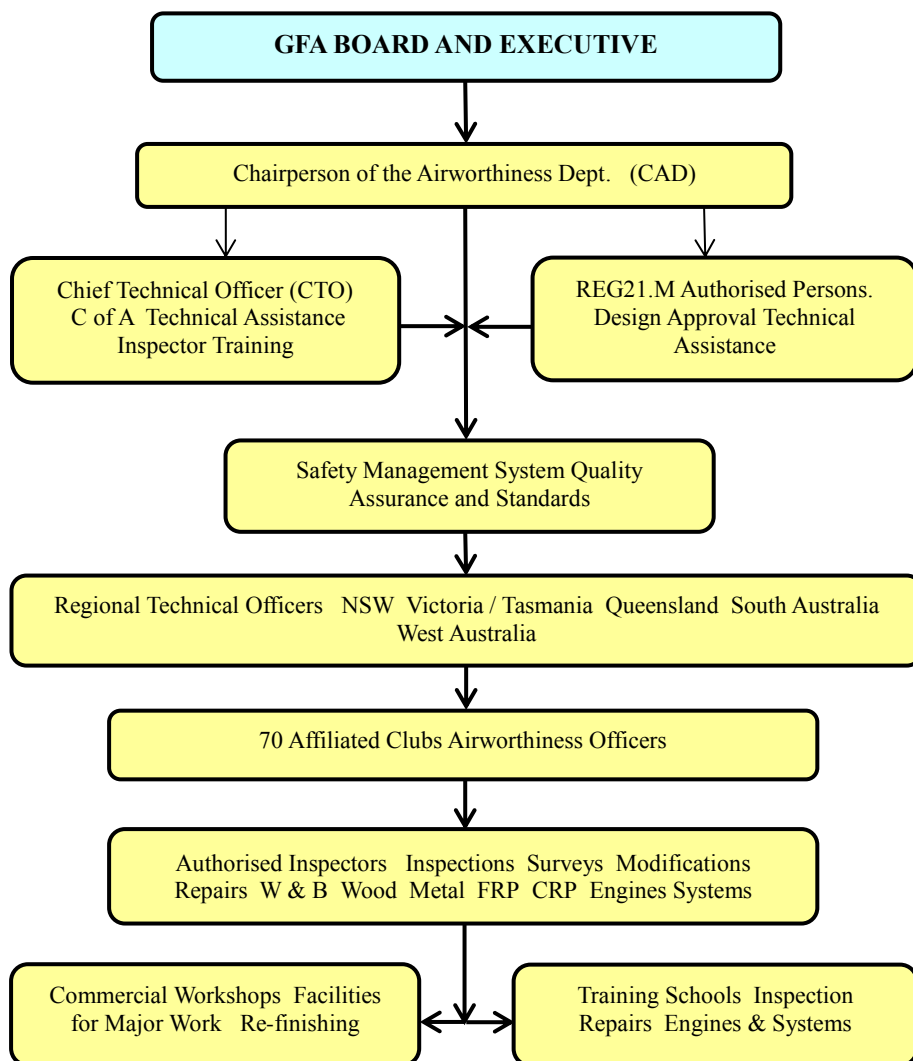
APPENDIX (A)	Instrument of Appointment
APPENDIX (B)	GFA Forms
APPENDIX (C)	Revision Documents

APPLICATION FOR DESIGN APPROVAL

The Applicant, (any member of GFA), can make application to have a non-standard modification or repair Design Approved. On receipt of the Design Approval they become the “Design Approval Holder” and as such must accept responsibility for the continued airworthiness of the Approved Design.

GFA AIRWORTHINESS ORGANIZATION

This outline of the GFA Airworthiness Organization emphasizes the depth of experience and accumulated Corporate History available to all GFA members carrying out airworthiness functions for which they are Delegated or Authorised. The role of persons authorised under REG 21.M is not restricted to Design Approval; they also contribute to standards, training and quality control.



HISTORY

The GFA Airworthiness Management Organisation, shown schematically above, has had a similar format for over 50 years. Perusal of the ATSB, CASA and other relevant accident reporting forums shows an almost 100% safety record in terms of airworthiness related accidents and incidents.

DESIGN APPROVAL

CASA REG 35/36 (now REG 21.M) Design Approval, was introduced by delegation 35 years ago and has been instrumental in addressing many airworthiness issues, some resulting in factory production changes and Design Requirement amendments. REG 21.M Authorised Persons can also carry GFA authorities for Inspection, Modification and Repair giving them significant input into project Design Approval work.

DELEGATION

Since 1949 GFA has operated as a Delegate of the Authority of the day, carrying out its functions under a variety of Exemptions and Instruments of Appointment. The current Instrument of Appointment for Design Approval is shown in Appendix (A).

ACRONYMS

THROUGHOUT THIS MANUAL THE FOLLOWING ACRONYMS ARE USED

Sailplane	Includes sailplanes, powered sailplanes and sustainer sailplanes
CAD	Chairperson of the GFA Airworthiness Dept.
CTO	Chief Technical Officer
IOA	CASA issued Instrument of Appointment
21.M AP	Design Authorised Person as listed on the Instrument of Appointment
Project	Used to describe non-standard modifications, repairs, materials and replacement parts. (CASA term is "Design Task").
MAP	A GFA Maintenance Authorised Person
EC	Experimental Certificate, issued for test flight purposes
DC	Design Approval Coordinator. (The 21.M AP who will issue the Final Design Approval where more than one 21.M AP is involved).
SFP	Special Flight Permit
CASA	Civil Aviation Safety Authority
GFA	Gliding Federation of Australia
CASR	Civil Aviation Safety Regulations
EO	Engineering Order
ER	Engineering Report
DAH	Design Approval Holder
RO	Sailplane Registered Operator
FMS	Flight Manual Supplement

CONCLUSION

By working closely with CASA, GFA and its members are able to continue a tradition of design and development work to improve both sailplane operational function and airworthiness safety. The trend in recent times has been to "Globalise" and sailplane airworthiness is no exception. Following these GFA / CASA procedures it is highly likely that our work will be recognised internationally, potentially contributing to airworthiness safety and possible design requirement review.

