



CANCELLED 18.03.2016
SUPERSEDED BY MOSP 3 SECT.14
GFA AIRWORTHINESS DIRECTIVE

TYPES AFFECTED: General AD, not specific to type.
SUBJECT: Airworthiness surveys and life-extension inspections.

PURPOSE: After a certain number of years of operation or a defined number of flying hours, all gliders must undergo a survey or life-extension inspection to ensure their continuing airworthiness. The CTO/A may also direct that a survey be carried out in special circumstances. The purpose of this AD is to define the categories of gliders and specify the appropriate inspection and/or survey requirements for each category.

Note: The term “gliders” includes gliders and the airframe aspects of powered sailplanes and power-assisted sailplanes.

CATEGORIES: For the purpose of this AD, gliders fall into one of 5 categories, as per the following tables.

Category 1 - surveys

Structure	Example	1 st survey	Thereafter
Primarily wood	ES60	20 years from date of manufacture	Every 10 years from date of completion of last survey
Steel-tube fuselage, wooden wings, tail, etc	ASK-13	”	”
Primarily aluminium-alloy	L-13 Blanik	”	”

SIGNED: Mike Valentine

For and on behalf of:

SENIOR TECHNICAL OFFICER AIRWORTHINESS

**THE GLIDING FEDERATION
OF AUSTRALIA**

Category 2 - surveys

Structure	Example	1st survey	Thereafter
FRP* structure with <u>NO</u> manufacturer's life-extension program	PIK-20 series	30 years from date of manufacture	Every 10 years from date of completion of last survey

*FRP = Fibre Reinforced Plastic - includes gliders of glass, carbon or Kevlar reinforced plastic construction.

Category 3 - life-extension inspections

Structure	Example	1st inspection	Thereafter
FRP structure, <u>WITH</u> published manufacturer's life-extension program	Most FRP gliders	According to manufacturer's life-extension schedule	According to manufacturer's life-extension schedule

Category 4 - special cases

Structure	Example	1^{sts} Survey or inspection requirements	Thereafter
Any structure. Special cases found from in-service problems, notified by manufacturer or CTO/A	Foka 5	According to manufacturer or as specified by CTO/A	According to manufacturer or as specified by CTO/A

Category 5 - problem aircraft

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		Structure	Requirements
		Gliders of any type or structure, (a) having no logbook history, (b) imported without an export C of A, (c) when directed by CTO/A	As determined by CTO/A

Notes:

1. The intention of a category 5 survey or inspection is to return the glider to category 1, 2, 3 or 4.
2. The general airframe survey and inspection requirements described above in no way exempt the operator from carrying out inspection and servicing of individual components which have a defined service life, hours between inspection and/or servicing requirement.
3. Some gliders may have a published service life, defined by the manufacturer and/or airworthiness authority as a total number of hours to be flown before being retired from service. These gliders may be of aluminium-alloy or FRP construction. Regardless of any surveys or inspections carried out, this life cannot be exceeded.
4. For FRP gliders in categories 2 and 3, each type is different and no assumptions can be made with respect to whether an aircraft has a published service life or not. The reference document is the type's AD schedule, which is supplied with each Form 2 package and which indicates whether the aircraft has a service life and, if so, what inspection intervals are required. If no manufacturer's inspection schedule has been published, the aircraft belongs in Category 2 and will need a survey when it becomes 30 years old. If in doubt about which category a glider falls into, contact the RTO/A or the GFA Secretariat.
5. Gliders built from two or more airframes. Gliders may be repaired from substantial crash damage by utilizing components from other gliders. In these cases the component with the longest period in service or greater number of hours in service shall determine the life and survey requirements of the entire glider.

PROCEDURE:

20 and 30 year surveys, and subsequent 10 year surveys.

The purpose of an airworthiness survey is to verify that those parts of the structure and systems which are not normally examined during a Form 2 inspection are still airworthy and to ensure that no unapproved repairs, modifications, materials or parts are present in the aircraft.

By ensuring that the aircraft is in good condition at each Form 2 inspection, a survey should add only a small amount of time to the

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inspection, provided there are no hidden defects found.

For a glider approaching the survey date, the following procedure should be adhered to.

(i) The owner/operator should contact the area Regional Technical Officer, Airworthiness (RTO/A) well in advance. This is necessary to enable the RTO/A to plan for the visit, particularly when lengthy travelling is involved.

The RTO/A will need to see the aircraft's logbook and all other airworthiness documentation, then make a preliminary inspection of the aircraft. Unless the owner/operator holds "Survey" qualifications, the RTO/A will assist in locating an appropriately qualified person to supervise the survey.

(ii) After inspecting the glider and its documentation, the RTO/A will, in conjunction with the survey inspector and the owner/operator, prepare a survey schedule detailing any special inspection requirements.

(iii) Apply to the GFA Secretariat for a "survey package".

(iv) The surveying inspector supervises the survey and carries out any special inspections required by the RTO/A.

(v) The surveying inspector prepares a survey report including all repairs and any defects that may have relevance to other aircraft. A logbook entry shall be made, noting the date and/or flying time at which the inspection was carried out. This entry shall be certified by the surveying inspector.

(vi) A current* weight and balance report and a copy of the completed Form 2 are forwarded to the GFA Secretariat for inclusion in the aircraft's file.

*Provided there have been no significant changes to the weight and balance characteristics (e.g. major repairs, changes of instrumentation, addition of ballast, re-finishing, etc), a weight and balance report not older than 4 years may be considered current.

Manufacturer's life extension program

Carry out the inspection schedule laid down in the manufacturer's program. It is important to ensure you have the latest version of the program, as manufacturers amend programs in the light of feedback from the field. As the time for the life-extension inspection approaches, contact either the manufacturer or the GFA Secretariat for the latest version of the program.

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Powered sailplanes and power assisted sailplanes - aspects other than airframe

In addition to the airframe inspection, the following systems must be inspected in accordance with the manufacturer's inspection procedures and the GFA MOSP Part 3.

- (i) Engine and engine controls;
- (ii) Propeller and propeller controls;
- (iii) Fuel system;
- (iv) Engine-related electrical system;
- (v) Engine-related instrumentation

Particular attention must be paid to the effects of fuel, oil, heat and vibration on the airframe. The effects of fuel contamination on tanks, fuel lines, seals and carburetors must also be carefully checked and any manufacturer's service bulletins on this subject adhered to.

WEIGHT AND BALANCE The effects of any changes to the weight and balance of the aircraft and its control surfaces must be considered.

IMPLEMENTATION The requirements of this Airworthiness Directive must be carried out by persons rated "Survey" on the applicable type or by persons authorised by their RTO/A.

Any work carried out as a result of the inspection (e.g, repairs) must be carried out by appropriately authorized persons and certified in the log book in accordance with normal GFA procedures.

If required, re-weighing must be carried out by persons rated "Weight and Balance".

Copies of the inspection report are to be provided to the owner/operator, the RTO/A and the GFA Secretariat for inclusion in the aircraft's file.

COMPLIANCE The requirements of this GFA Airworthiness Directive are mandatory. This Directive is issued pursuant to the rules and regulations of the Gliding Federation of Australia.