



GLIDING NEW ZEALAND INCORPORATED

ADVISORY CIRCULAR
AC 2-06

AEROBATIC FLIGHT IN GLIDERS

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1 Introduction

The Civil Aviation Rules (CAR) for aerobatic flight apply also to gliders:[§]

- CAR Part 91.701 Aerobatic flight and 91.703 Aviation events
- CAR Part 61, Subpart L – Aerobatic Flight Rating.

CAA Advisory Circular AC 61-12 Pilot Licences and Ratings – Aerobatic flight ratings expands on the above.

Under its CAR Part 149 Aviation Recreation Organisation Certificate, GNZ is authorised to administer aerobatic flight training, assessments, and aerobatic ratings; and also to assess competence for aerobatic/low level approvals.

The purpose of this Advisory Circular is to summarise the CAA requirements and to expand on the GNZ MOAP requirements and administration procedures.

2 Requirement for a Part 61 Aerobatic Flight Rating (AFR)

The following table summarises the CAR Part 91 and GNZ requirements (heights are above the surface):

WITH PASSENGER	NO PASSENGER	GLIDER SPIN TRAINING
AFR required 3,000 ft & above <i>[Level 2]</i>	GNZ Aerobatic Rating 3,000 ft & above <i>[Level 1]</i>	GNZ B Cert signoff for spins 1,000 ft & above
Not permitted below 3,000 ft	AFR required 1,500 ft & above <i>[Level 3]</i>	
	AFR required Minimum height as authorised & above, and must be participating in an aviation event <i>[Level 4]</i>	Not permitted below 1,000 ft

Note 1: AFR means an Aerobatic Flight Rating issued pursuant to CAR Part 61 (see section 3 following).

Note 2: Passenger means a person carried other than for the purpose of undergoing or giving instruction in the control of the aircraft (reference CAR Part 1 definitions).

Note 3: *[Levels 1 to 4]* relate to the minimum glider aerobatic instructor rating required for carrying out aerobatic instruction, based on CAA AC 61-12 (see section 4 following).

[§] Prior to the introduction of the current rules, gliding operated under Civil Aviation Safety Order (CASO) 17. This provided a general approval for aerobatic flight in gliders down to 1,000 feet above the terrain. It also provided for specific CAA approvals for aerobatic flight down to 400 feet above the terrain. GNZ strived to retain these simple and sensible provisions when the current Rules were being drafted to replace CASO 17, but was unsuccessful.

3 Issue of Aerobatic Flight Rating (AFR)

3.1 GNZ MOAP Section 2-3 Glider Aerobatic Rating

Section 14 on page 43 of the GNZ MOAP sets out the basic GNZ administration procedures for the issue of a glider aerobatic rating, including a Part 61 AFR for gliders. This involves completion of a ground course, and an aerobatic flight course (which may include solo practice and consolidation under direct supervision of an aerobatic instructor). Full competency in spinning must be demonstrated.

The AFR shall be issued by endorsement in the pilot's logbook, signed and dated by the aerobatic instructor. The endorsement shall set out the aerobatic manoeuvres that the pilot is approved to carry out. *Appendix 1* contains a pro forma loose-leaf entry (or wording) that may be used for this purpose.

3.2 Aerobatic Ratings issued by other organisations

Some flight training organisations certificated under CAR Part 141, or other organisations certificated under CAR Part 149 (eg Warbirds) may be authorised to administer aerobatics ratings pursuant to CAR Part 61. However, aerobatic ratings issued by these organisations will invariably relate to powered aircraft and will not automatically translate to gliders operated under GNZ's CAR Part 149 certificate. Therefore, written confirmation from the relevant organisation should be obtained that any aerobatic rating so issued applies to gliders before it may be relied on for that purpose. *Appendix 2* contains a pro forma that may be used for this purpose.

4 GNZ Aerobatic Flight Rating – Aerobatic Instructors

Glider aerobatic instructor ratings may be issued at one of four levels, appropriate to the required glider pilot privileges indicated in the table in Section 2 above.

The following table summarises the minimum flight instructor requirements and the associated syllabus for aerobatic instruction training of glider pilots.

LEVEL	GNZ ADVANCED TRAINING SYLLABUS	INSTRUCTOR REQUIREMENT
Aero 1	Aerobatics module	Trained and approved to provide aerobatic instruction
Aero 2	Aerobatics module	Hold Part 61 AFR Trained and approved to provide aerobatic instruction and to issue Part 61 AFR
Aero 3	Aerobatics module	As for Level 2 and have at least 50 hours of aerobatic flight instructor experience (not necessarily all in gliders)
Aero 4	Display flying module	As for Level 2 and have at least 100 hours of aerobatic flight instructor experience (not necessarily all in gliders)

Appendix 1 Pilot Logbook Entry for AFR

This is to certify that has satisfied the requirements of Civil Aviation Rule Part 61 for the issue of an aerobatic flight rating.

Issued ___/___/_____

Valid to (24 month) ___/___/_____

GNZ Approved Aerobatic Instructor:

Name

Signature

Privileges and limitations:

a)	Height not less than 3000ft above ground while carrying a passenger	Yes	No
b)	Height not less than 1500ft above ground while not carrying a passenger	Yes	No
c)	Height less than 1500ft above ground while not carrying a passenger, while participating in an aviation event. Minimum authorised heightft above ground.	Yes	No

(Clearly cross out Yes / No above as appropriate)

Pilot to comply with Flight Manual requirements relating to aerobatics in the glider being flown.
Manoeuvres approved:

Note: This aerobatic flight rating is issued in accordance with the CAR Part 149 Certificate held by Gliding New Zealand Inc. The Candidate has satisfactorily completed a glider aerobatic ground course, a glider flight training course (or GNZ recognised equivalents) and has demonstrated competency in aerobatics in gliders.

Competency Review (CAR 61.557 – 24 month)

Completed ___/___/_____

Valid to (24 month) ___/___/_____

GNZ Approved Aerobatic Instructor:

Name

Signature

Appendix 2 CAR Part 141 or Part 149 Organisation Confirmation of AFR

Aerobatic Flight Rating

I / we confirm that (Name)..... has completed an aerobatics ground course, an aerobatics flight training course, and has demonstrated competency in aerobatics and spinning and has been issued with a CAR Part 61 Aerobatic Flight Rating, as shown in the pilot's logbook.

The courses and assessment were conducted in accordance with a Part 141 Aviation Training Organisation Certificate / Part 149 Aviation Recreation Organisation Certificate (delete 1) and that Certificate provides for this Aerobatic Flight Rating to apply to the Aircraft category – Glider.

Certificate Holder Organisation

Qualified flight Instructor (Name).....

(Signature) Date ____/____/____