

GLOSSARY OF TERMS

AA	Airservices Australia. The regulatory body with responsibility for Air Traffic Services and aviation administration in Australia.
Accelerated flight	Flight in which the aircraft is accelerating around a curve, in other words a "G" loading of more than one is being applied.
AGL	Above ground level
AIP	Aeronautical Information Publication, the generic term for all the individual documents which provide pre-and in-flight information to licensed pilots.
AIC	Aeronautical Information Circular. A pamphlet-type notice, issued periodically to pilots, advising changes to facilities, procedures, etc
ASI	Air Speed Indicator, an instrument which measures the dynamic pressure caused by an aircraft's movement through the air, calibrated in knots.
Aspect ratio	The result of dividing the wing span by the average wing chord
AMSL	Above Mean Sea Level - self explanatory.
ATC	Air Traffic Control, the service responsible for the safe and orderly conduct of air traffic in controlled airspace. A division of Airservices Australia.
ADDGM	Aerodrome Diagrams. A document setting out the pattern of runways, taxiways and other features of Federal airports and Licensed aerodromes. Part of the En-Route Supplement, Australia (ERSA).
BASI	Bureau of Air Safety Investigation. A division of the Department of Transport and Communications, for the purpose of investigating accidents and incidents to all Australian-registered aircraft (including gliders).
BCAR	British Civil Airworthiness Requirements, a standard to which Australian gliders were constructed in past years.
Bernoulli's Theory	The Italian scientist Daniel Bernoulli established that if the velocity of a streamlined flow is increased, the pressure is decreased. This is how a wing works; the curved upper surface makes the air accelerate over the top of the wing, causing a reduction in pressure and tending to "suck" the wing upward.
Camber	The curvature of a surface, usually referring to the top surface of a wing. Analogous to the camber of a road surface.
CAR	Civil Aviation Regulation (previously ANR - Air Navigation Regulation). The CARs constitute the legal basis for the conduct of aviation in Australia.
CAO	Civil Aviation Order (previously ANO - Air Navigation Order). The CAOs are used to give effect to, or grant exemption from, the CARs.
CASA	Civil Aviation Safety Authority. The regulatory body with responsibility for controlling the standards and safety of aviation.
CFI	Chief Flying Instructor. The person in a club who is responsible to the club committee for the safe conduct of flying operations to GFA standards.
Chord	The distance between the leading and trailing edges of a flying surface such as a wing, tailplane, etc.

Cl	Lift Coefficient of an aerofoil section.
CIP	Chairman of Instructor Panel, the equivalent of a CFI in some clubs.
Cm	The pitching moment of an aerofoil.
C of A	Certificate of Airworthiness. A document specific to each individual aircraft on the Australian register, detailing its operating parameters and limitations.
C of G	Centre of Gravity. Usually written as CG.
CTAF	Common Traffic Advisory Frequency, the radio frequency used within a designated radius of nominated aerodromes. Not mandatory, non-radio aircraft may still operate within the designated radius.
DoTRS	Department of Transport and Regional Services.
ELB	Emergency Locator Beacon, a small transmitter carried in an aircraft which emits a distinctive tone when activated and allows the unit to be located by another aircraft. Also known as ELT (Emergency Locator Transmitter).
EPIRB	Electronic Position Indicating Radio Beacon, a marine locator beacon unit, cheaper than an ELB/ELT and suitable for glider use.
ERSA	En-Route Supplement, Australia. A document listing details of all Federal Airports and Public (Licensed) Aerodromes in Australia. Selected unlicensed aerodromes with significant traffic volumes are also included. Specific details of any gliding operations on these aerodromes are included.
FAI	Federation Aeronautique Internationale, the international governing body for sport aviation.
GFA	Gliding Federation of Australia
Glider	A fixed wing aerodyne without a power source (FAI definition). The term "sailplane" is regarded as interchangeable with glider.
ICAO	International Civil Aviation Organisation.
IGC	International Gliding Commission, the FAI sub-committee which deals with gliding matters at international level (formerly CIVV).
IH	Instructor's Handbook.
JAR 22	Joint Airworthiness Requirements, Section 22, the standard to which modern gliders and powered sailplanes are constructed and certificated.
LAME	Licensed Aircraft Maintenance Engineer. A person licensed by CASA for the maintenance of Australian-registered powered aircraft.
Load factor	Definition of the load applied to an aircraft by the force of gravity. The load factor in normal flight is unity (i.e. 1G). Doubling the load factor results in 2G being applied to the aircraft. From the pilot's point of view, load factors are defined as positive G (upright flight) and negative G (inverted flight).
MBZ	Mandatory Broadcast Zone. An area surrounding designated aerodromes, within which radio communication is mandatory on specified frequencies. Non-radio aircraft (including gliders) are not permitted in this environment.
MR	Maintenance Release, the document (carried in each glider) which validates the glider's C of A on a year to year basis.

MOSP	Manual of Standard Procedures
NGS	National Gliding School, the instructor and inspector training and standardisation school of the GFA.
NOTAM	Notice to Airmen
OCTA	Outside of Controlled Airspace
OSTIV	Organisation Scientifique et Technique Internationale du Vol a Voile, the international scientific and technical gliding organisation for gliding.
OSTIVAS	OSTIV Airworthiness Standards
PPL	Private Pilot's Licence
PAS	Power-assisted sailplane. A glider fitted with an auxiliary engine for self-retrieve. Not capable of taking off under its own power. Also known as "turbo" sailplane.
PS	Powered sailplane. A glider with an auxiliary engine, capable of self-launching.
QFE	The pressure-setting on an altimeter sub-scale which will result in the altimeter reading the glider's height above the point at which the setting was made, usually the aerodrome of departure. The initials are part of the international "Q" code and do not stand for anything in particular.
QNH	The pressure-setting on an altimeter sub-scale which will result in the altimeter reading the glider's altitude above mean sea-level.
QNE	The so-called standard pressure-setting on an altimeter sub-scale, which will result in the altimeter reading Flight Levels. Only used above 10,000ft.
RTO/OPS	Regional Technical Officer, Operations. The person responsible for the safe conduct of flying operations in a GFA Region.
RTO/A	Regional Technical Officer, Airworthiness. The person responsible for safe airworthiness practices in a GFA Region.
SAR	Search and Rescue
SARTIME	The nominated time of day after which various phases of SAR functions are declared, viz, uncertainty, alert, distress.
Sailplane	Theoretically a glider which is efficient enough to use atmospheric currents to gain height. In practice, the term "sailplane" is regarded as a normal term for any glider.
Soaring	The art of gaining height and/or prolonging a glider flight by means of natural currents in the atmosphere.
Span	The distance between the two tips of a flying surface such as a wing, etc.
Spar	The main load-carrying member of a wing or tail structure, running spanwise, usually at one-quarter to one-third chord.
Unaccelerated flight	Straight and level flight in which the load factor applied to an aircraft does not exceed the normal force of gravity. In other words, flight under "1G" conditions.
Venturi	A convergent-divergent duct, causing air flowing through it to accelerate through the constriction and lose pressure as a result. Used in gliders to compensate variometers for errors in lift/sink indications caused by changes in speed.

VHF	Very High Frequency - radio frequencies in the range 30 Mhz to 200 Mhz
VFR	Visual Flight Rules, the rules governing the conduct of flight by visual reference, otherwise known as the "see and avoid" principle
VMC	Visual Meteorological Conditions, the conditions under which VFR flight is legally possible. Note: Gliders are only permitted to fly under VFR and in VMC.

GFA STANDARD COCKPIT CHECKS

Pre take-off check - CHAOTIC

C	CONTROLS. Check for movement in the correct sense prior to entering cockpit. Ailerons and elevator must "move up to meet the stick".
H	HARNESS. Check for security, lap straps low on hips for both pilots.
A	AIRBRAKES & FLAPS. Check airbrakes for full and free movement, and then ensure they are closed and locked. Flaps set as required.
O	OUTSIDE AND OPTIONS. Check airspace and runway clear, wind direction and strength, adequate and competent ground crew available. Check options for launch failure on every flight.
T	TRIM & BALLAST. Trim set as required. Appropriate secure ballast as required. Tail dolly removed.
I	INSTRUMENTS. Altimeter set on QNH, ASI and other instruments reading normally, switches ON. Radio on if required.
C	CANOPY, CARRIAGE, CONTROLS. Canopy closed, locked and clean . Undercarriage locked down. Controls checked for full and free movement.

Pre-landing landing check - FUST

F	FLAPS. Set as required
U	UNDERCARRIAGE. Down and locked as placarded.
S	SPEED. Safe speed near the ground.
T	TRIM. Set as required for the selected speed.

Pre-stalling, spinning & aerobatic check - HASLL

H	HEIGHT. Sufficient for recovery by 1000ft AGL (2,000ft AGL within 2NM of a licensed aerodrome).
A	AIRFRAME. Flaps, airbrakes, undercarriage, set as required. Trim as required.
S	SECURITY. Harness tight. Loose objects stowed.
L	LOCATION. Clear of built-up areas, cloud, and controlled airspace.
L	LOOKOUT. Carry out 180 degree turn followed by a 90 degree turn in the other direction. (Do not carry out a 360 degree turn). Check in particular around and BELOW the glider.

“A” CERTIFICATE

Requirements

1. Minimum age 15 years.
2. GFA Medical Declaration signed.
3. Minimum of 5 solo flights with normal landings.
4. Satisfactory check flight which must include the following as a minimum:
 - a) An awareness of pre-spin symptoms and a demonstration of the correct action to prevent a spin developing;
 - b) An accurate circuit without reference to the altimeter; and
 - c) Correct handling of selected emergencies at the discretion of the checking instructor.
5. Oral examination on basic theory and, flight rules and procedures.

Privileges and limitations

1. May only fly solo under the direct supervision of an instructor.
2. May carry out local soaring only.

“B” CERTIFICATE

Requirements

1. A total of 15 solo flights with normal landings, including at least one soaring flight of not less than 30 minutes duration. (Note: This means an overall total of 15 solo flights, not 15 solo flights since qualifying for the ‘A’)
2. Completion of the post-solo training syllabus in accordance with the Instructor’s Handbook.
3. Oral examination on basic theory, flight rules and procedures (including the GFA Operations Regulations and Manual of Standard Procedures) and basic airworthiness.

Note: Power pilots holding a student or higher licence may count 5 landings as pilot-in-command towards the “B” Certificate, but must meet the soaring requirement.

Privileges and limitations

1. May carry out local soaring only.
2. May carry out mutual flying subject to the following conditions:
 - a) The other occupant of the glider also holds a minimum of a ‘B’ Certificate.
 - b) Each mutual flight is authorised by and carried out under the direct supervision of the Duty Instructor who shall nominate the command pilot for the flight. The command pilot shall carry out the take-off and landing.

“C” CERTIFICATE

Requirements

1. A total of 20 solo or mutual flights with normal landings, including two solo soaring flights of at least one hour’s duration each. Trained and checked in ability to carry out a safe outlanding.
2. Received a “passenger awareness” briefing, using the section “Air Experience” in Part 2 of the Instructor’s Handbook as a reference.
3. Oral examination on basic theory, basic navigation, basic meteorology, airways procedures, outlanding hazards, post outlanding actions and Search and Rescue requirements.
4. Satisfactory demonstration of spin entry and recovery.

Notes on requirements

- i) This means an overall total of 20 solos/mutuals;
- ii) Only time in command of mutual flights counts towards a “C” Certificate;
- iii) Power pilots holding a student or higher licence may count 10 powered landings as pilot-in-command towards a “C” Certificate, but must meet the soaring requirements.

Privileges and limitations

1. May fly cross-country at the discretion of the CFI/CIP;
2. May carry private passengers (i.e. not for hire and reward and not introductory flights under GFA temporary membership) under the provisions of a Private Passenger rating as described in the GFA Operations Manual, MOSP Section 16.2.4.

IMPORTANT NOTES ON THE BASIC PILOT CERTIFICATES

The operational functions of the GFA depend on a strong club-based structure. Each club has operational control over its members through the medium of its Operations or Instructor’s Panel.

The certificates provide the certainty of proper follow-up training after initial solo. That is their primary function. They also provide the basic qualifications for mutual flying (“B” Certificate) and carriage of private passengers and/or cross-country flying (“C” Certificate). These privileges may only be exercised on any given day if the pilot is not only in current flying practice, but also meets the particular operational requirements of the club. Some clubs have special requirements, e.g. radio or controlled airspace procedures, and detailed periodic club requirements may vary from one club to another.

It is not expected that any club will unnecessarily stand in the way of a pilot exercising privileges that have been rightly earned. On the other hand, each club reserves the right to exercise operational control over its members and this applies to holders of these certificates, just as it does to all other club members regardless of status or experience.

Notes