

## CHAPTER 6 - AIR LEGISLATION

### RULES OF THE AIR

The following rules are extracted from the GFA Operational Regulations, which are approved by the Civil Aviation Safety Authority (CASA). They apply to all glider pilots.

A sailplane shall not be operated in a negligent manner or in reckless manner so as to be likely to endanger life or the property of others.

A sailplane shall not be flown in such a manner or in such circumstances as is or are likely to cause avoidable danger to any person or property (including animals) on land or water or in the air.

A sailplane shall be flown only in Visual Meteorological Conditions (VMC) at all times, in accordance with the table below. Note that, for the latter category of VMC, at or below 3,000ft or 1,000ft above terrain, carriage of radio is mandatory.

<b>Height</b>	<b>Required flight visibility</b>	<b>Horizontal and vertical distance to be maintained from cloud</b>	<b>Additional conditions</b>
At or above 10,000 feet AMSL (Above Mean Sea Level)	8 kms	1.5 kms horizontal, 1,000 feet vertical (above and below)	Nil
Below 10,000 feet AMSL	5 kms	1.5 kms horizontal, 1,000 feet vertical	Nil
At or below 3,000 feet AMSL or 1,000 feet AGL (Above Ground Level), whichever is the higher	5 kms	Clear of cloud and in sight of the ground or water	Carriage and use of VHF radio required when operating to these conditions, for communication on the MBZ frequency or CTAF when within the prescribed distance of an aerodrome, or on the area frequency when en-route

A glider shall not be flown above cloud covering more than one half of the pilot's downward field of vision for more than 30 minutes; and

NOTE: in controlled airspace a sailplane shall not fly above more than 4/8 cloud, and shall be able to fix position accurately by reference to the ground at any time.

If outside controlled airspace, be able to fix position accurately by reference to the ground at intervals not exceeding 30 minutes.

Nothing may be towed behind an aircraft in flight except with the permission of CASA

Nothing may be dropped from a sailplane in flight except:-

ballast in the form of water or fine sand;

ropes and cables with appropriate fittings used in launching sailplanes;

components designed to be jettisoned in flight, such as drag parachutes or jettisonable wheels; or

other items with the approval of CASA.

Parachute descents other than emergency descents shall only be made in a manner approved by CASA, for example, in accordance with the Operational Regulations of the Australian Parachute Federation.

Flight instruction and authorisation to a student for solo flying shall be such as to ensure that a sailplane flown by that student does not constitute a hazard to other aircraft.

A sailplane shall not be flown in aerobatic manoeuvres (that is, manoeuvres in which the angle of pitch or bank exceeds 60 degrees) without the written approval of CASA when it is:-

below 2000 feet above the level of a Federal airport or licensed aerodrome within two nautical miles of that aerodrome; or

in any other location below 1000 feet above the highest terrain or obstacle within a 600 metre radius of the sailplane

Before engaging in aerobatic manoeuvres the pilot in command of a sailplane shall ensure that:

the proposed manoeuvres are permitted by the sailplane's Certificate of Airworthiness;

all occupants of the sailplane are secured with correctly-adjusted safety harnesses;

the safety harness of any unoccupied seat is made secure so that it does not foul any controls of the sailplane;

all loose articles are removed from the sailplane or made secure in the sailplane; and

the proposed manoeuvres will not bring the sailplane into close proximity with other aircraft.

A sailplane shall not take part in an airshow or flying display, or fly over a public gathering except in the course of arriving at or departing from an aerodrome or gliding site, unless written approval has been obtained from CASA and from the RTO/Ops.

A sailplane shall not fly lower than 1500 feet over a built-up area except in the course of taking off or landing at an aerodrome or gliding site, nor lower than 500 feet above the ground except:

when taking off at an aerodrome or gliding site, or being retrieved following an outlanding in a place which meets the dimensions for an Aircraft Landing Area.

when in the course of landing;

when completing a race in a gliding competition approved by CASA. NOTE: CAO 95.4 prescribes conditions for this'; or

when engaged in ridge or hill soaring.

When engaged in ridge or hill soaring a sailplane shall not be flown at a height lower than 100 feet whilst it is within 100 metres of any person, dwelling or public road.

A sailplane which is required to give way to another aircraft shall do so by passing behind it or, if passing in front or above or below that aircraft, shall keep well clear.

When two aircraft are on converging headings at approximately the same height, the aircraft that has the other on its right shall give way, except that:

power-driven heavier-than-air aircraft shall give way to airships, sailplanes and balloons;

airships shall give way to sailplanes and balloons;

sailplanes shall give way to balloons; and

power-driven aircraft shall give way to aircraft that are seen to be towing sailplanes.

Where two aircraft are approaching head on or approximately so and there is a danger of collision, each shall alter its heading to the right. A sailplane which is ridge soaring and has the ridge to its left shall give way by turning away from the ridge.

An aircraft that is being overtaken has right-of-way over the overtaking aircraft, which shall not overtake by climbing or diving to pass over or under the other aircraft. No subsequent change in the relative positions of the two aircraft shall remove this right-of-way until the overtaking aircraft is entirely past and clear. A sailplane engaged in ridge or hill soaring shall overtake by passing between the ridge or hill and the other sailplane. Other than a sailplane ridge or hill soaring an aircraft shall overtake another aircraft by passing to its right.

An aircraft in flight or on the ground shall give way to an aircraft landing or on final approach to land.

Where two or more sailplanes are approaching to land, the lowest sailplane has the right-of-way but shall not use this rule to cut in front of, or overtake, another sailplane on final approach. A power-driven aircraft shall give way to a sailplane which is approaching to land.

Where two sailplanes are at approximately the same height and both are approaching to land, the higher-performance sailplane shall give way to the lower-performance sailplane.

An aircraft which is about to take-off shall not do so until there is no apparent risk of collision with other aircraft.

An aircraft the pilot of which is aware that another aircraft is compelled to land shall give way to that aircraft.

Sailplanes shall maintain separation from other sailplanes and from tug aeroplanes towing sailplanes by at least 200 feet horizontally and vertically.

As far as practicable, when in the circuit area of a Federal airport or licensed aerodrome a sailplane shall be flown such that all turns are made to the left, except at those aerodromes where turns to the right are required by CASA.

When it is not practicable for a sailplane to comply with particular procedures, the pilot shall ensure that he/she avoids conflicting with aircraft which are complying with that procedure.

Wherever possible a sailplane arriving at an aerodrome shall track over the ground such that at least two turns, each of approximately 90 degrees in the circuit direction, are made prior to landing.

## **Outlanding**

A sailplane may, in cases of necessity, be landed in any place having adequate approach paths and landing surfaces, and landing at such a place is not considered of itself an accident or incident.

Attention is directed to the fact that this Regulation does not confer on the operator of a sailplane any rights as against the owner or occupier of any land on or over which the operations are conducted, or prejudice in any way the rights and remedies which a person may have in respect of any injury to persons or damage to property caused directly or indirectly by any sailplane.

If a sailplane is landed on private property all reasonable actions shall be taken to obtain the permission of the landowner prior to removing the sailplane.

All gates should be left in the condition as found after removing a sailplane from private property where it has landed. Care shall be taken not to damage crop or disturb stock.

A sailplane shall not be aerotowed from a paddock without the consent of the landowner or his/her agent.

A sailplane shall not be aerotow retrieved from a site unless it meets the requirements for dimensions of an authorised landing area.

## Parachutes

A serviceable parachute shall be worn by each occupant of a sailplane taking part in a GFA recognised contest.

A parachute is not considered to be serviceable unless it has been inspected and repacked in accordance with the manufacturer's maintenance requirements. This may be carried out by a person qualified under CAR 30 or by a parachute organization approved by CASA. Unless a shorter time interval is specified, an inspection is valid for six months.

## Radio operation

A pilot may be authorised to operate radiotelephone apparatus installed in a sailplane after he/she has been trained by a gliding instructor holding a Flight Radiotelephone Operator Licence (issued by CASA) or Radio telephone Operator Authorisation, (issued by GFA) and has passed an oral examination in radio operation of an equivalent standard to that required to obtain a Flight Radiotelephone Operator Licence. This authorisation shall be notified by log-book endorsement.

For further information on radio operation and other requirements, see the GFA publication Airways and Radio Procedures for Glider Pilots

## Accidents and incidents

Accident - an occurrence associated with the operation of an aircraft between the time any person boards the aircraft with the intention of flight until the time all such persons have disembarked in which any person suffers death or serious injury as a result of being in or in contact with the aircraft, or the aircraft incurs damage or structural failure which adversely affects its structural strength, performance or flight characteristics, or the aircraft is missing or inaccessible.

Note: This is the legal definition of an accident, which takes no account of certain characteristics of the sport of gliding. A blowover, for example, does not come within the above definition, yet it is certainly an accident, since no one would deliberately let it occur. GFA would expect to hear about such an occurrence, even if it were not reported to BASI, because blowovers are usually total write-offs.

Incident - an occurrence to an aircraft other than an accident that affects or could affect the safety of its operation.

Any accident shall be reported to both the RTO/Ops and the Bureau of Air Safety Investigation (BASI) without delay.

An incident shall be reported to the RTO/Ops within 24 hours and to BASI within 48 hours.

Any sailplane involved in an accident requiring immediate notification to BASI may not be moved, other than to the minimum extent necessary to preserve life, without the prior approval of BASI, and shall be deemed to be in the custody of BASI.

Information to be notified in the event of an accident shall be:

- the type, model, nationality and registration marks of the sailplane;
- the name of the owner, operator and hirer (if any) of the sailplane;
- the name of the pilot in command of the sailplane;
- the date and time when the accident occurred;

- the last point of departure and the point of intended landing of the sailplane and the nature of the flight;
- the position of the sailplane with reference to some easily defined geographical point and the latitude and longitude of that position;
- the number of persons aboard the sailplane and, where by reason of the accident a person has died or been seriously injured,
- the number of members of the crew (if any) who have died or become seriously injured and, if the information is available, the names of those members;
- the number of passengers (if any) who have died or become seriously injured and, if the information is available, the names of those passengers; and
- the number of other persons (if any) who have died or been seriously injured and, if the information is available, the names of those persons;
- the nature and causes of the accident as far as it is known;
- the nature and extent of damage to the sailplane; and
- the physical characteristics of the area in which the accident occurred.

### **High altitude flight**

Supplementary oxygen shall be used by all occupants of a sailplane above 10000ft AMSL. Supplementary oxygen systems shall only be filled with dry breathing oxygen.

### **Flight in controlled airspace**

Other than in an emergency, a sailplane operating in controlled airspace shall only do so if an airways clearance has been obtained. No aircraft shall enter military or civil controlled airspace without a clearance.

If the pilot in command cannot comply with an airways clearance he/she must advise ATC immediately and request an amended clearance.

NOTE: within controlled airspace a sailplane must be flown so as to remain within 5 nm of its nominal track.

When flying in controlled airspace, a pilot shall set QNH on the altimeter (see Glossary)

Note: QNH may be obtained by:

- obtaining the QNH or Area QNH from a briefing unit before take-off; or
- obtaining the Area QNH from a Flight service or Air Traffic Control unit, by radio in flight; or
- setting the aerodrome elevation on the altimeter prior to take-off.

For further information on altimetry, see the GFA publication Airways and Radio Procedures for Glider Pilots

The format of a position report in controlled airspace is:-

- NAME of ATC unit
- SAILPLANE (callsign)
- POSITION by distance and direction from nearest aerodrome etc
- AT (TIME in minutes past the hour)
- ALTITUDE or Flight Level

and if appropriate

- REQUEST CLIMB/DESCENT TO (altitude or Flight level) and/or
- REQUEST AMENDED TRACK VIA (proposed route)

Based on the above, a sample airways clearance (in this case to enter the Control Area for wave-flying) might be: -

*Melbourne Control, Glider X-ray Oscar Charlie, one-zero miles west of Bacchus Marsh at one-five (minutes past the hour), five thousand five hundred (feet), request climb to Flight Level one-five-zero.*

### **Danger Areas, Restricted Areas and Prohibited Areas**

Danger Areas are areas where the potential for an increased level of risk exists. Such areas may be light aircraft lanes of entry or areas of intense flying training or aerobatic activity. Gliders are permitted to fly in Danger Areas without prior permission, but extra care must be taken to ensure that the risk of conflict is minimised.

Restricted Areas are more hazardous than Danger Areas. Typically they are things like military gunnery ranges, explosives storage areas or security-restricted areas. They are not necessarily always active. Whether a Restricted Area is active or not may be ascertained by contacting an Airway Operations Unit, typically the nearest Flight Service Unit. Gliders are only permitted to fly in an active Restricted Area with the prior permission of the controlling authority (e.g. Army, Air Force) or the appropriate Airways Operations Unit.

Prohibited Areas. Gliders are not permitted to fly in Prohibited Areas under any circumstances.

Locations and dimensions of Danger, Restricted and Prohibited Areas are shown on Visual Enroute Charts (VECs), Visual Navigation Charts (VNCs) and Visual Terminal Charts (VTCs).

### **Operations in Remote Areas**

A "remote area" may be defined as an area of terrain in which it is difficult to gain access for the purpose of search and rescue.

Operations in such remote areas shall carry an Emergency Locator Beacon (ELB) or a marine Electronic Position Indicating Radio Beacon System (EPIRBS) and be accompanied by sufficient crew to retrieve the sailplane without outside assistance.

One of the designated crew shall be responsible for maintaining a Search and Rescue watch (SARWATCH) and initiating search action if necessary.

SAR action shall be initiated at 2100 hours local time, and in the event of outlanding the pilot shall activate the ELB or EPIRBS no later than that time.

Pilots operating in a remote area shall hold either a Flight Radiotelephone Operator Licence (issued by CASA) or a GFA radio operator qualification.

Pilots not resident in Australia shall hold a certification from the CFI of their home club that they are competent to fly in remote areas and are competent in the use of the English language. If they intend to operate within an MTAF or in controlled airspace, they shall apply in writing at least 8 weeks prior to arrival. GFA will then forward the request to CASA for processing.