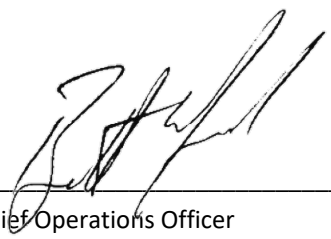
OPERATIONS MANUAL

Version: 20211006



Signed: _____

SAFA Chief Operations Officer

Brett Coupland

Date:

Disclaimer

The information contained in this operations manual is presented in good faith with the intention of:

(a) promoting safety in the sports of hang gliding, paragliding and weightshift microlighting;

(b) providing a clear understanding of the responsibilities and privileges of participants in these sports; and

(c) providing a framework upon which these sports can be administered and allowed to grow in harmony with other airspace users.

As far as possible, this manual represents the best information available at the time of publication.

1 Introduction

1.1 The Sports Aviation Federation of Australia (SAFA)

The SAFA is a body constituted to administer the sports of hang gliding, paragliding and weightshift microlighting, including all derivations of these disciplines. SAFA members fly under exemption provisions contained in Civil Aviation Orders (CAO's) 95.8, 95.10, and 95.32.

The Civil Aviation Regulations and subsequent exemptions in Australia require that persons acting as pilots in command of hang gliders, paragliders or weightshift microlights must be the holder of a pilot certificate issued by the SAFA (www.SAFA.asn.au), or as an alternative in the case of weightshift microlights a pilot certificate issued by the Recreational Aviation Australia (RAAus) who maintain their own operations manual (see www.raa.asn.au for details).

1.1.1 SAFA Operations Manual

This operations manual governs and limits our operations under the exemptions of the CAO's.

The Civil Aviation Regulations and Orders require that a pilot undergo training and is subject to the privileges and limitations specified within the SAFA Operations Manual. This manual is empowered by the CAO's, therefore non-compliance with the Operations manual, means the pilot is not covered by the CAO exemptions and full aviation regulations apply.

To effectively control the safety of the sport, the SAFA has established standards for operations, pilot certification and pilot training. These standards and any amendments are maintained by the Sports Aviation Federation of Australia and submitted for approval by the Civil Aviation Safety Authority.

Operations that are not in accordance with these standards and procedures may result in breaches of the Civil Aviation Act or Regulations.

SAFA members operating in breach of these standards may be disciplined in accordance with the SAFA Constitution and the SAFA Disciplinary Procedures Manual. Persons who breach the requirements of the CAO's or the SAFA Operations Manual may also face prosecution by the Civil Aviation Safety Authority.

1.2 Civil Aviation Safety Authority (CASA)

CASA is the government body established to control and regulate all aviation within Australia in accordance with the Civil Aviation Act, the Civil Aviation Regulations (CAR), and the Civil Aviation Safety Regulations (CASR). See www.casa.gov.au for more information.

The SAFA is a self-administered Recreational Aviation Administration Organisation (RAAO) approved by CASA and operates under CAO 95.8, 95.10, and 95.32. The SAFA has the responsibility of setting and applying safety and operating standards applicable to Hang Gliders, Paragliders, Powered Paragliders, Powered Hang Gliders and Weightshift Microlights. The SAFA also has the responsibility to ensure that all SAFA aircraft are operated in accordance with the SAFA Operations Manual and all applicable Aviation Regulations and Orders.

1.3 CASA – Regulations & Civil Aviation Orders (CAOs)

All flying activities in Australia are regulated by CASA under the Civil Aviation Act 1988 and pursuant to the Civil Aviation Regulations (CAR 1988) and the Civil Aviation Safety Regulations (CASR 1998). SAFA aircraft are required to operate in accordance with the applicable CAR and CASR, but 3 Civil Aviation Orders exempt them from certain requirements of the CAR.

Three Civil Aviation Orders (CAO's) provide the exemptions from specific sections of the CARs / CASRs for hang gliding, paragliding and microlight operations.

SAFA Pilots operate under one or more of the following CAO's:

(a) CAO 95.8 – "Hang gliders" (which includes Paragliders),

(b) CAO 95.10 – "Low-Momentum Ultralight Aeroplanes", and or
(c) CAO 95.32 – "Weightshift controlled aeroplanes and Powered Parachutes"

These CAO's establish:

(d) The aircraft class applicable to that CAO;
(e) The specific exclusions from the CARs applicable to that CAO;
(f) Registration of aircraft;
(g) General conditions, and;
(h) Flight conditions;

These CAO's are updated and or changed from time to time by CASA.

SAFA Pilots MUST remain current and familiar with;

(i) their applicable CAO, and
(j) relevant legislation eg. CAR 166 "Operations in the Vicinity of Non-Controlled Aerodromes"

1.3.1 Civil Aviation Order 95.8

CAO 95.8 is the exemption from the CAR under which the following list of (under 70Kg) aircraft types are flown.

(a) a hang-glider; or
(b) a powered hang-glider; or
(c) a paraglider; or
(d) a powered paraglider.

Relevant SAFA Pilots MUST remain familiar with CAO 95.8 and any future revisions thereof.

Failure to comply with this Civil Aviation Order is a breach of Federal Law and can attract significant penalties.

Stay current by visiting www.casa.gov.au

1.3.2 Civil Aviation Order 95.10

Relevant SAFA Pilots MUST remain familiar with CAO 95.10 and any future revisions thereof.

Failure to comply with this Civil Aviation Order is a breach of Federal Law and can attract significant penalties.

Stay current by visiting www.casa.gov.au

1.3.3 Civil Aviation Order 95.32

Relevant SAFA Pilots MUST remain familiar with CAO 95.32 and any future revisions thereof.

Failure to comply with this Civil Aviation Order is a breach of Federal Law and can attract significant penalties.

Stay current by visiting www.casa.gov.au

1.3.4 Abbreviations

AIP	Aeronautical Information publication
AIRS	Accident Incident Reporting System
AFI	Apprentice Flight Instructor
ATSB	Australian Transport Safety Bureau
BAI	Biennial Airworthiness Inspection
BFR	Biennial Flight Review
CAAP	Civil Aviation Advisory Publication.
CAO	Civil Aviation Order;
CAR	Civil Aviation Regulation
CASA	Civil Aviation Safety Authority;
CASR	Civil Aviation Safety Regulations http://www.comlaw.gov.au/Details/F2012C00133
CFI	Chief Flight Instructor
CIMA	FAI MICROLIGHT AND PARAMOTOR COMMISSION (CIMA) - https://www.fai.org/commission/cima
CIVL	FAI HANG GLIDING AND PARAGLIDING COMMISSION (CIVL) - https://www.fai.org/commission/civl
CTA	Control Area
ERC	Enroute Chart, available at Airservice Australia
ERSA	Enroute Supplement Australia, available at Airservice Australia
FAI	Federation Aeronautique Internationale: The international body which administers sport aviation throughout the world.
FEI	Flight Experience Instructor
FI	Flight Instructor
FTF	Flight Training Facility
GMT	Greenwich Mean Time
HG	Hang Glider
SAFA	Sports Aviation Federation of Australia
ICAO	International Civil Aviation Organisation.
IE	Instructor Examiner
IFR	Instrument Flight Rules.
IRIS	Integrated Risk Information System
LSA	Light Sport Aircraft
MoU	Memorandum of Understanding
NOTAM	Notice To Airmen
OCTA	Outside Controlled Airspace.
OPS-n	SAFA's Operations Manual series.
PG	Paraglider
PHG	Powered Hang Glider
POH	Pilot's Operating Handbook
PPG	Powered Paraglider
RA	Regional Association
RA-Aus	Recreational Aviation of Australia
RAAF	Royal Australian Air Force
RAAO	Recreational Aviation Administering Organisation that is recognised by CASA also reffered to as an Approved Self-administering Aviation Organisation (ASAO)
RAO	Recreational Aviation Organisation
RCC	Rescue Coordination Centres
SAAA	Sports Aircraft Association of Australia
SASAO	Self Administering Sport Aviation Organisations

SMS	Safety Management System
SO	Safety Officer
SSO	Senior Safety Officer
TIF	Trial Introductory Flight
TSI Act	Transport Safety Investigation Act 2003
UTC	Coordinated Universal Time
VFG	Visual Flight Guide
VFR	Visual Flight Rules.
VHF	Very High Frequency (Aviation)
VMC	Visual Meteorological Conditions.
VTC	Visual Terminal Chart
WM	Weightshift Microlight

Further aviation related abbreviations are available here:
https://www.casa.gov.au/about-us/standard-page/aviation-abbreviations-and-acronyms

1.3.5 Definitions

Accident: means a matter involving an aircraft where:

(a) any person dies or suffers *serious injury* as a result of an occurrence associated with the operation of the aircraft;
(b) the aircraft incurs damage or structural failure that adversely affects the structural strength, performance or flight characteristics of the aircraft that would normally require major repair or replacement of the affected component(s); or
(c) any third party property is destroyed or seriously damaged as a result of an occurrence associated with the operation of the aircraft.
(d) the aircraft becomes lost or inaccessible.

NOTE: See Serious Injury definition:

Acrobatic Flight: manoeuvres intentionally performed by a pilot involving an abrupt change in its attitude, an abnormal attitude, or an abnormal variation in speed.

Aeroplane: Aeroplane means a power-driven heavier-than-air aircraft deriving its lift in flight chiefly from aerodynamic reactions on surfaces remaining fixed under given conditions of flight, but does not include a power-assisted sailplane.

AGL: Above Ground (or water) Level.

Aircraft: any machine that can derive support in the atmosphere from the reactions of the air. The use of this term in this manual is to be read to include hang gliders, paragliders, weightshift microlights and, if applicable, other aircraft

Aircraft Log Book: either the manufacturer's log book for the aircraft, or failing that, the SAFA Aircraft Log Book, used for recording maintenance and to include separate logbooks for the engine and wing.

Altimeter Setting: a pressure datum which when set on the sub-scale of a sensitive altimeter causes the altimeter to indicate vertical displacement from that datum.

AIRS Manager: AIRS Manager Appointments are recommended by a Club or RA, affiliated with the SAFA, to assist in the investigation of Accidents and Incidents and management of operations at sites controlled by a club or RA.

Closely-settled area: in relation to an aircraft, means an area in which, because of:

(a) man-made obstructions such as buildings and vehicles; and
(b) the capabilities of the aircraft;

the aircraft could not be landed without endangering the safety of persons unconnected with the aircraft or damaging property in the area.

Coaching: The provision of guidance and advice for the improvement of pilot skills.

The provision of coaching for commercial gain being subject to:

(a) The coaching not being for, or leading to, the gaining of an endorsement or certification; and

(b) The recipient already holding the endorsement or certification relevant to the coaching being provided; and

(c) The provider holding a SAFA Flight Instructor (FI) or Chief Flight Instructor (CFI) certificate or an SSO approved to carry out such coaching.

Note: The provision of coaching for commercial gain, without the qualifications stipulated in "c" above, is prohibited.

Commercial Manufacturer: A manufacturer of products, distributed for industry use, in large quantities.

Common Traffic Advisory Frequency (CTAF): an airband radio frequency for aircraft pilots to exchange traffic information while operating to, or from, an aerodrome without an operating control tower or within a designated area. Where established a CTAF will be included within the Enroute Supplement Australia (ERSA).

Control Area (CTA): a control area or control zone as depicted on a Visual Terminal Chart (VTC) or Enroute Chart (ERC) where control services are provided by Air Services Australia. Controlled airspace is designated as Class A, B, C, D or E.

Current Member: a member of SAFA who's membership has not expired, been terminated or the member expelled.

Daily Maintenance: the replacement of component parts which require only assembly and no sewing other than hand tacking.

Direct Supervision: the detailed, on site, personal supervision and direction of pilot operations.

Duty Pilot: An experienced pilot, nominated to administer control of operations, when necessary, for and on behalf of the local club.

Emergency Services: Emergency Services are organizations which ensure public safety and health by addressing different emergencies. Police, Ambulance, Fire Brigade, SES etc.

Empty weight: means the actual weight of aircraft to which this Order applies in its airborne configuration including all fittings and equipment but excluding fuel and recovery or personal parachutes.

Engineer: refers to a qualified aeronautical engineer appropriate for the task or assessment being performed.

Endorsement: is an additional flight privilege issued to a certificate holder after additional training

Federation: the Sports Aviation Federation of Australia.

Financial Member: a member of SAFA who's membership has not expired, been terminated or the member expelled.

Free Flight: is any flight undertaken by a hang glider or paraglider which does not use an integrated motor to assist launch or maintain flight.

Flight Level: a surface of constant atmospheric pressure which is related to a specific datum, 1013.2 hPa and is separated from other such surfaces by specific pressure intervals.

Flight Operations: any flight or intended flight, including in which a passenger in addition to the pilot in command is carried (or intended to be carried) in an aircraft.

Flight Time: the total time from the moment at which an aircraft first commences movement for the purpose of take off until the moment at which it comes to rest at the end of a flight.

Hang Glider: is defined in CAO 95.8 means a glider that has a maximum empty weight of less than 70 kilograms and some rigid structure.

Hard Landing: a landing made while the aircraft is experiencing an excessive rate of descent or excessive ground speed or exceeding the crosswind landing limits specified in the manufacturer's operating manual.

Incident: means an occurrence other than an accident, associated with the operation of the aircraft including;

(a) hard landings or other events where there was ***potential*** for serious injury (including near misses);

(b) use of rescue equipment or crews to extricate Pilot and or aircraft from landing site.

Injury: means: injury not requiring medical assistance and excludes fatal or *serious injuries*.

Serious injury: is defined as any injury, other than *fatal* which –

(a) requires hospitalisation for more than 48 hours commencing within 7 days from the date the injuries were received; or
(b) results in the fracture of any bone (except simple fractures of fingers, toes or nose); or
(c) involves lacerations which cause severe haemorrhage, nerve, muscle or tendon damage; or
(d) Involves injury to any internal organ; or
(e) involves second or third degree burns, or any burns affecting more than five percent of the body surface.

Instructor: a person who holds an Instructor Certificate issued by the Federation.

Integral Part: any part which would affect the safe operation of the aircraft.

Just Culture: An atmosphere of trust in which people are encouraged to provide essential safety-related information - but in which it also clear about where the line is drawn between acceptable and unacceptable behaviour. Sanctions applied only when there is evidence of a conscious violation or intentional reckless or negligent behaviour.

Maintenance: means any work carried out on the aircraft, and is to include:

(a) Scheduled Servicing – hourly or calendar based
(b) Rectification/Repairs
(c) Modifications, and
(d) Any Airworthiness Directives, Service Bulletins/Instructions etc.

Major Modification: any modification to a structural component or an integral part of an aircraft or control system.

Major Repair: any repair to a structural component or an integral part of an aircraft or control system.

Major Repair - Engines: in regard to a weightshift microlight means any repair in which it is necessary to split the crank case or as defined by the engine manufacturer.

Minor Modification: is one that has no appreciable effect on the weight, balance, structural strength, reliability, operational characteristics, or other characteristics affecting the airworthiness of an aircraft, aircraft engine or propeller. All other changes are major changes

Mixed Operations: where Hang Gliders, Paragliders, Weightshift Microlights or any other aircraft are operating at the same site or airstrip.

Movement area: is that part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the manoeuvring areas and aprons.

Night: that period between the end of evening civil twilight and the beginning of morning civil twilight. Graphs that allow the beginning or end of daylight to be determined for a given latitude at a particular time of year are contained in the Operations Section of the Aeronautical Information Publication.

On-Site Supervision: The provision of site and conditions assessment information. This may also include, but is not limited to, the *periodic* surveillance, assessment and *advisory* correction and guidance of a pilot's operations. Where an approved cross country (XC) operation is being carried out, the supervisor must accompany the pilot either inflight or via close proximity ground observation, in both cases with radio communications.

Operations Manual: means a manual approved by CASA that is issued by the SAFA and contains the procedures and instructions necessary to ensure an acceptable level of pilot training and proficiency and the safe conduct of SAFA operations

Paraglider: as is defined in CAO 95.8, "means a glider that has an empty weight less than 70 kilograms and has a wing that is inflated and maintains its profile in flight due to the ram-air pressure of the air through which it moves".

Pilot Certificate: is a pilot or instructor certificate issued by the SAFA.

Pilot in Command: means: the pilot responsible for the operation and safety of the aircraft during flight time.

Student Pilot in Command under Direct Supervision: means as a student in actual control of the aircraft, under the direct supervision of an instructor either; in the aircraft or observing from the ground.

Powered Hang glider: means a framed hang-glider, if it did not have an engine attached.

Powered Paraglider: means an aircraft with a ram air wing of any type, with an engine attached.

QNH Altimeter Setting: (Query Nautical Height) that pressure setting which, when placed on the pressure setting sub-scale of a sensitive altimeter located at a reference point, will cause the altimeter to indicate the vertical displacement of the reference point above mean sea level.

A pressure-type altimeter, calibrated in accordance with the standard atmosphere, may be used to determine altitude or flight levels when set to QNH or Area QNH.

Regular Public Transport Air Service: a service for the purpose of transporting persons or cargo for hire or reward in accordance with fixed schedules to and from fixed terminals over specified routes.

Remote Areas: means: an area designated as such by the SAFA Operations Manager. Areas that may be considered remote include those where:

(a) no SAFA affiliated club exists; or
(b) where the current hang gliding . or paragliding populations are sparse; and
(c) attendance at the nearest approved SAFA Training Facility involves more than 5 hours driving in each direction.

NOTE: Remote Areas for general aviation aircraft include a large area of central Australia, south east alpine regions and western Tasmania.

Standard Pressure: the pressure of 1013.2 hectopascals which, if set upon the pressure sub-scale of a sensitive altimeter, will cause the altimeter to read zero when at mean sea level in a standard atmosphere.

State or Region: the SAFA membership of each state or region.

Supervision: the periodic surveillance, assessment and correction of pilot training operations and of persons engaged in those operations.

Student Day: means one student for one day. -- A class of 4 students for 1 day equals 4 student days.

Speed Wing: PG operations that involve operating at a wing with a loading over 5KG per square meter (flat area). This loading applies to all wings including freestyle, mini wings, speed wings and acrobatic wings.

Time in Service: the cumulative times from when the aircraft leaves the ground on take-off until when it touches down on landing.

Trial Introductory Flight: A flight or flights conducted for the purposes of assessing a person's motivation and suitability to undergo continued flight training as part of a SAFA syllabus. These initial flights must include an instructional component and the person must have attained SAFA membership prior to flight operations commencing.

Trainee: a SAFA member undertaking skills development or receiving instruction.

Trike: see weightshift microlight.

Trike Base: the undercarriage, seat, motor and associated components which are suspended beneath the wing of a weightshift microlight or wheel base PPG.

Visual Meteorological Conditions (V.M.C.): denotes the meteorological conditions in which the flight visibility and distances from cloud during a flight are equal to, or greater than, the applicable distances determined by CASA under CAR1988 and published in the AIP or by NOTAM.

Weightshift microlight (or Trike): any lightweight aeroplane controlled by weight shift as defined in CAO 95.32 or meeting the requirements of CAO 95.10.

Note: *Further definitions are contained in the Civil Aviation Regulations Part 1 Regulation 2.*

A list of abbreviations (and definitions) used in Aviation and Meteorological publications and charts can also be found in the Aeronautical Information Publication (AIP) - General Section.

2 Responsibility of Pilots, Clubs, Duty Pilots and Safety Officers.

2.1 Responsibilities

2.1.1 Pilots

2.1.1.1 Pilot Responsibilities

The responsibilities of individual SAFA pilots are:

(a) To perform a pre-flight check on their aircraft and flying equipment prior to every flight;
(b) The safety of their operations, both in the air and on the ground;
(c) Where the pilot is the holder of a Supervised HG or PG2 Pilot Certificate, before flying, seek advice from a Duty Pilot, Safety Officer or Instructor as to the suitability of the site and prevailing conditions, also confirming appropraite supervision during operations;
(d) Compliance to any limitations or protocols imposed by a Duty Pilot, Safety Officer, the owner of a flying site, the Committee and/or Safety Committee of the Club or Regional Association that control operations at the flying site;
(e) When new to a site or inexperienced in the prevailing conditions, seek advice from a Duty Pilot, Safety Officer or Instructor; and provide proof of qualifications and SAFA membership;
(f) When an accident or incident occurs, the pilot/s involved must report the accident or incident in accordance with section 3.2 of this manual;
(g) To operate within the regulations as set by CASA or stipulated in the Operational Directives Register or in this manual.
(h) Obey all directions and instructions given by a Chief Flight Instructor, Flight Instructor, Senior Safety Officer, Safety Officers or Duty Pilot.
(i) Whilst at or participating in an aviation event, obey all directions and instructions given by the Event Organiser or Director.
(j) Obey all directives, stipulations and instructions given by the SAFA Operations Manager.
(k) Obey all directions, stipulations and instructions given by Emergency Services personnel.
(l) Notify the SAFA Operations Team of any operational breaches and/or non-compliant operational activities.
(m) Upon request by an Instructor, Safety Officer, Duty Pilot or Operations Manager of the SAFA or the Operations Managers delegate, valid SAFA Membership and pilot flight log books must be produced.

2.1.1.2 Pilot Briefings

Visiting pilots (whether from overseas or other locations in Australia) MUST ensure they are properly briefed on local requirements and conditions. A valid SAFA Membership and pilot flight log book must be produced upon request of an SAFA Instructor, Safety Officer, Duty Pilot or Operations Manager of the SAFA or the Operations Managers delegate.

Safety Officers & Duty Pilots Liability

While Safety Officers and Duty Pilots will give advice when asked, they accept no responsibility or liability in respect of any advice given.

As the role of Safety Officer and Duty Pilot are entirely voluntary, each member of the Federation accepts that they will not hold any Safety Officer or Duty Pilot or liable for any act or omission in the performance of those duties which may cause injury or loss.

2.1.1.3 Log Book Requirements

Each member of the SAFA (other than non-flying members) shall keep a personal logbook. The personal logbook shall contain the following particulars:

(a) full name, address and date of birth of the member;
(b) a record of pilot qualifications; and
(c) a record of the flights of the member.

Flight information shall include:

(d) date and duration of flight;
(e) if under instruction, state dual or solo, the nature of the flight training and the specify the name of the Pilot in Command and the name of the instructor providing the training with entries being signed by both instructor and student;
(f) particulars of the aircraft flown;
(g) aircraft registration number (if applicable); and
(h) route flown (departure and destination).
(i) If a tandem flight, the passengers name.

Note: SAFA log books which allow members to record details that satisfy these requirements are available from the SAFA Office.

Other forms of log book that allow a record of information equivalent in detail to that shown in the SAFA Log book, are acceptable.

Use of the SAFA On-line Log Book is encouraged.

2.1.1.4 Insurance Policies and Claims

A major part of membership fees and subscriptions are directed to providing comprehensive member liability, and other related sports management and operational policies.

Copies of policies and certificates of currencies are available in member online services or the SAFA office.

Claims made against any policy, due to the actions, or consequences of the actions or operations of a member, or affiliated entity, whether made by the member, affiliated entity, or a third party, shall result in payment of an insurance excess.

Liability of such payment shall reside solely with the responsible member, or affiliated entity, whose actions or consequences of actions or operations, initiated such claim.

The excess liability payment sum, shall be as detailed in the insurance schedule of the policy against which such claim is initiated.

2.1.2 SAFA Regional Associations and Affiliated Clubs

The establishment, control and management of flying sites is the responsibility of SAFA State and Regional Associations and their affiliated clubs.

2.1.2.1 Responsibilities

The responsibilities of an affiliated club or Regional Association are:

(a) To appoint or nominate Duty Pilots, Safety Officers and Senior Safety Officers;
(b) Determine when the scale of operations at a site warrant the appointment of a Duty Pilot and arrange for a roster of Duty Pilots or Safety Officers to control operations on the site;
(c) To formulate and implement emergency management plans for the reduction of hazards to both pilots and members of the public;
(d) To liaise with landowners to maintain access to sites under control of the club;
(e) To provide advice to pilots of limited experience regarding sites and the prevailing weather conditions;
(f) To notify landowners, AirServices Australia, RAAF Briefing Office or other people where operations at a site require such notification;
(g) To formulate emergency management plans and coordinate with external agencies in the provision of assistance to accident victims at sites and/or operations controlled by the club;
(h) To assist the club Senior Safety Officer in the compilation and analysis of accident reports;
(i) To notify the SAFA Operations Manager of incidents which may require SAFA disciplinary action to be taken
(j) To seek to resolve local member disputes equitably.
(k) To notify the SAFA Operations Manager of accidents, incidents and such as may attract media scrutiny.

2.1.3 Duty Pilots

2.1.3.1 Requirements for Nomination

A Duty Pilot shall be nominated when:

(a) The weather conditions, the number of people flying and or the complexity of the launch and landing point are judged to require it.
(b) Supervised HG or PG2 Pilot Certificate holders are operating;
(c) There are other forms of aviation as well as hang gliding, paragliding or weightshift microlighting operating at a site or airstrip – known as “mixed operations”.

2.1.3.2 Nomination of a Duty Pilot

A Duty Pilot should be nominated as follows:

(a) When the weather conditions, the number of people flying and or the complexity of the launch and landing point are judged to require it.
(b) Where there is no club roster and a Duty Pilot is required, those Safety Officers present should elect a Duty Pilot;
(c) Where there is no club roster and a Duty Pilot is required and no Safety Officers are present, those experienced pilots present should elect a Duty Pilot.
(d) The nominated pilot must hold an Intermediate HG or PG4 Pilot Certificate or higher, with either:
    (i) a minimum of 80 hours flying experience in hang gliders or paragliders of the type of aircraft being supervised; or
    (ii) a minimum of 50 hours flying experience in hang gliders or paragliders of the type of aircraft being supervised with previous flying experience at the site used on the day.

2.1.3.3 Responsibilities

A Duty Pilot shall:

(a) Provide advice to pilots on request;
(b) Assist Supervised HG or PG2 Pilot Certificate holders on request;
(c) Make inquiries of pilots as to their qualifications to fly the particular site, and the currency of their membership of the SAFA;
(d) Notify the club executive or Senior Safety Officer of dangerous activities or incidents where disciplinary action is recommended, as safety has been or is likely to be compromised;
(e) Where there are mixed operations, work with the Duty Pilots from other organisations sharing the site to ensure safe operating procedures are established.
(f) Be present whilst operations are being conducted.

2.1.4 Safety Officers

Safety Officer appointments are made as follows:

(g) Hang Glider Safety Officer
(h) Paraglider Safety Officer
(i) Powered Paraglider Safety Officer
(j) Powered Hang Glider Safety Officer
(k) Weightshift Microlight Safety Officer

The appointment of Safety Officer is only effective for those sites and operations controlled by the nominating club.

Minimum requirements for appointment and responsibilities, are detailed in the Qualifications & Training Manual, section 1.4.1

2.1.5 Senior Safety Officers

Senior Safety Officer appointments are made as follows:

(a) Hang Glider Safety Officer
(b) Paraglider Safety Officer
(c) Powered Paraglider Safety Officer
(d) Powered Hang Glider Safety Officer
(e) Weightshift Microlight Safety Officer

One or more Senior Safety Officers are appointed for each club affiliated with the SAFA to assist in the supervision of operations at sites controlled by the club.

Minimum requirements for appointment and responsibilities, are detailed in the Qualifications & Training Manual, section 1.4.2

2.2 Suspension or Cancellation of Pilot Certificates

2.2.1 Expiry of Membership and Certificates

(a) Where a member fails to renew his or her membership, or advises the Federation of his or her desire to withdraw from membership of the Federation, his or her membership shall be automatically invalid and certificates suspended;

(b) Renewal of pilot certificates automatically cancelled due to expiry of membership may be accomplished by:

(i) Payment of the prescribed membership fee to SAFA; and

(ii) Where membership has been expired for more than ninety days the pilot must complete a flight review with a SAFA Flight Instructor or higher.

2.2.2 Contravention of Rules, Discipline of Members

Refer to the current SAFA Constitution and associated policy documents.

2.3 Accidents and Incidents

Pilots operating aircraft-under CAO 95.8, CAO 95.10 and CAO 95.32 are NOT EXEMPT from any of the Air Navigation regulations including TSI (Act 2003), applicable to accident and incident reporting.

The fundamental objective of the accident reporting requirements is the **prevention of accidents and incidents through shared learning.**

This is done by identification of the causal factors of the accident or incident.

The review of accidents and incidents aims to determine the factors involved and to use this information as the basis for enhancing the level of safety.

2.3.1 Media Interactions

SAFA members are not to discuss or make comment upon an accident or incident, with the media, nor publish via ANY public media format, information relevant to an accident or incident.

All media personnel and their requests for comment, **must** be referred to SAFA Operations – ops@SAFA.asn.au.
Public representation of any such events are to be managed by the SAFA nominated media and public relations representative.

Why: A statement to the media from a single source, provides a clear consistent message, minimising speculation, and sensationalism, allowing ATSB accident investigators and SAFA Operations operatives to work with 1st-hand information.

SAFA members must not discuss insurance issues, claims or coverage with potential claimants, external parties nor publish via ANY media format, information relevant to any event, claim or potential claim.

2.3.2 Definition of Accident & Incident

2.3.2.1 Accident

Accident means a matter involving an aircraft where:

(c) any person dies or suffers *serious injury* as a result of an occurrence associated with the operation of the aircraft;

(d) the aircraft incurs damage or structural failure that adversely affects the structural strength, performance or flight characteristics of the aircraft that would normally require major repair or replacement of the affected component(s); or

(e) any third party property is destroyed or seriously damaged as a result of an occurrence associated with the operation of the aircraft.

(f) the aircraft becomes lost or inaccessible.

NOTE: Serious Injury is defined as any injury, other than fatal which:

(i) requires hospitalisation for more than 48 hours commencing within 7 days from the date the injuries were received; or
(ii) results in the fracture of any bone (except simple fractures of fingers, toes or nose); or
(iii) involves lacerations which cause severe haemorrhage, nerve, muscle or tendon damage; or
(iv) involves injury to any internal organ; or
(v) involves second or third degree burns, or any burns affecting more than five percent of the body surface.

2.3.2.2 Incident

"Incident" in relation to an aircraft means an occurrence other than an accident, associated with the operation of the aircraft including;

(g) hard landings or other events where there was ***potential*** for serious injury (including near misses);

(h) use of rescue equipment or crews to extricate Pilot and or aircraft from landing site.

2.3.3 Notification of Accidents

Where an accident occurs, the pilot in command, and/or the owner, and/or the operator shall each be responsible for ensuring that notification of the accident, is reported to the SAFA Operations Manager immediately and the accident is reported via the SAFA on-line AIRS system within 72 hours of the accident.

http://www.atsb.gov.au/mandatory/asair.aspx

If a pilot witnessing an accident or incident is uncertain as to whether or not the accident or incident has been reported, they should report the accident or incident. It is preferable to receive two accident reports of the same accident than none at all.

NOTE: A Flight Instructor (FI) or Chief Flying Instructor (CFI) must notify the Operations Manager of any accident or incident which occurs under their supervision. This is inclusive of all training, coaching or skills development courses/activities.

2.3.4 Notification of Incidents

Within 72 hours of an incident, the pilot in command, the owner, and the operator (whichever) shall each be responsible for ensuring:

(a) The incident is reported via the SAFA online AIRS system, within 72 hours of the incident; (See 2.3.5).

(b) The incident is communicated to a Senior Safety Officer or AIRS Manager, of the club controlling the site.

(c) A Chief Flying Instructor must notify the Operations Manager of any training incident which occurs under their supervision.

http://www.atsb.gov.au/mandatory/asair.aspx

2.3.5 Where a Fatality has Occurred

Police must be called as soon as possible and directed to the site of the accident.

Accidents resulting in a fatality **must be;**

(a) reported immediately and directly to SAFA Operations by phone 0417 644 633, and if the Operations Manager is unavailable, a message must be left with the on-call Operations Operative and the SAFA office, providing notification and contact details (03 9336 7155).

(b) reported as soon as possible by email to ops@SAFA.asn.au

(c) reported as soon as possible by lodgement in the SAFA AIRS online database (See 2.3.5).

The Operations Team will report to and engage with the Australian Transport Safety Bureau (ATSB) and the

Civil Aviation Safety Authority (CASA). If the Ops Manager or delegate is not available, the ATSB must be notified by the reporting person.

http://www.atsb.gov.au/mandatory/asair.aspx

2.3.6 Custody, Inspection and Removal of Aircraft

When an accident or incident occurs, the aircraft and all its components, immediately come into the custody of the ATSB, typically via the local Police and/or SAFA Operations & Safety Management Officer (SMO).

The aircraft MUST NOT BE REMOVED or otherwise interfered with except with permission from the ATSB or SAFA delegate.

All SAFA or ATSB directives regarding the custody, inspection transport and possession of the aircraft must be adhered to. Failure to follow these directives is a breach of the Australian TSI ACT 2003 and ICAO protocols. Breaches of these protocols may lead to suspension of certificates, flight privileges, training approvals and possibly suspension of SAFA membership.

Note: *This provision is waived temporarily when it is necessary to extricate persons from the wreckage or to protect the wreckage from further damage, or to remove it if it presents an obstruction or danger to other aircraft, other transport or to the public.*

The aircraft will be released from custody when authorised by the appropriate authority and the SAFA.

2.3.6.1 Investigation and Review of Accidents and Incidents

Investigation of fatal accidents may be conducted by ATSB or other authorities with the assistance of the SAFA Operations Manager.

The SAFA Operations Manager will ensure that a formal review of fatal accidents is also conducted by the SAFA.

The SAFA Safety Management Officer, AIRS Managers and Senior Safety Officers, with the assistance of any Safety Officers, will review accidents and incidents with the SOLE intention of preventing a similar occurrence.

SAFA AIRS Managers, Safety Officers and Senior Safety Officers are honorary people putting in extra time to help us all be safer in the air. They are supplied with forms and guidelines to review and report on accidents and incidents. Help them to find the cause of any dangerous occurrences, so that by sharing the FACTS all can benefit and operate safely.

In the case of an accident or incident, investigating ATSB and/or Police Officers, shall have access to all relevant areas of the accident site, and all relevant SAFA members shall assist them.

2.3.7 Reporting via the SAFA Accident / Incident Report System (AIRS)

The process for notification and reporting is as follows;

(a) Log into the the SAFA online database at www.SAFA.asn.au

(b) Click on the "*AIRS - Submit Accident/Incident Report*" button - You will be prompted to enter in as much information as possible, including:

(i) Factual Information
(ii) Pilot Details
(iii) Aircraft and Equipment Details
(iv) Site and Location Details
(v) Weather Conditions
(vi) Description
(vii) File attachments (eg. photo's)

If a pilot witnessing an accident or incident is uncertain as to whether or not the accident or incident has been reported, he/she should report the accident or incident. Members can view de-identified accident / incident reports online.

3 Control of Operations

3.1 Operations Manager

The Operations Manager (also referred to in this and other SAFA Manuals as the Chief Operations Officer (COO)) is authorised and empowered to:

(a) be responsible for the overall control and supervision of disciplines administered by the SAFA.
(b) Implement the procedures of this Operations Manual
(c) Administer and enforce compliance to this Operations Manual.
(d) Ensure that these operations satisfy the requirements of the applicable Civil Aviation Safety Regulations, the relevant Civil Aviation Orders, Civil Aviation Regulation 1988 and the Transport Safety Investigation (TSI) Act. 2003
(e) Approve and issue Student Pilot Certificates or delegate the authority for the issue of Student Pilot Certificates.
(f) Upon recommendation from a CFI, approve or delegate the authority for the issue of Pilot Certificates.
(g) Upon recommendation from a CFI or Instructor Examiner, approve or delegate the authority for the issue of Instructor certificates.
(h) Approve or delegate the authority for the renewal of Instructor certificates.
(i) Upon receipt of written applications, assess and if approved, provide written exemptions to stipulations contained within this manual.
When or where necessary impose sanctions, suspensions or impose disciplinary measures, in accordance with SAFA disciplinary procedures, to ensure the safety of SAFA members, other airspace users, members of the public and public property.

3.2 General Requirements

Hang glider and paraglider pilots of any type must only fly aircraft models specifically designed to be flown by pilots **with their level of experience** and for the type of operation being conducted.

Hang gliders and paragliders, including powered versions (PPG & PHG), must be operated in accordance with this Operations Manual and:

(a) Must be certified where operations involve passengers or training operations,
Note: This includes all primary components, wing, harness, carabiners, suspension loops etc.

(b) When operating at a height in excess of 300 feet above ground level, carry a serviceable altimeter which meets the standards specified within the Maintenance & Standards Manual (section1.4), and:
(i) is set to area QNH;
(ii) is set to indicate height in feet; and
(iii) is easily read by the pilot at all times whilst in flight.

(c) When any ancillary equipment used either in flight, or during the launch or landing phase that directly affects the safety of the pilot, such as support harnesses, helmets, parachutes, suspension loops, release mechanisms, weak links and the like shall be of a type that is designed, manufactured in accordance with standards accepted by the SAFA (See Maintenance & Standards Manual 1.1, 1.4 & 1.5), or as specified in the SAFA Towing Procedures Manual (Doc. OTM-05 - See SAFA Documents Register in the online member's area).

(d) Always carry a reserve parachute, certified for the number of occupants, when taking part in a SAFA recognised contest.
(e) Always carry a reserve parachute, certified for the number of occupants, when taking part in tandem flights.
(f) Should, for operations which may conflict with other airspace users, carry and use a servicable VHF radio
(g) For operations involving VHF radio carry an accurate timepiece.
(h) For operations beyond 25NM of launch site or airfield carry and utilise a servicable GPS unit or equivalent.

***Note**: Reserve parachutes must be of appropriate size for the combined weight of the aircraft, harness, pilot and passenger. Additionally, a parachute must be fitted if specified by the manufacturer.*

Note: *The wearing of a reserve parachute for all operations in excess of 300 feet above ground level, is highly recommended.*

3.2.1 Aircraft Maintenance and Pre-Flight Inspections

Hang gliders and paragliders of any type and weightshift microlights must be operated in accordance with this Operations Manual and shall:

(a) Be subject to a pre-flight inspection (by the prospective pilot in command prior to EACH AND EVERY flight operation) in accordance with the procedures outlined in the aircraft manufacturer's manual, or if not available then as specified in Pre-flight Inspection Standards of the Maintenance & Standards Manual, section 2.1, and

(b) Be maintained in accordance with the maintenance procedures outlined in the manufacturer's recommendations, or where the manufacturer's manual does not include maintenance standards as specified in the Maintenance & Standards Manual section 2, "Assembly, Inspection and Maintenance Standards".

3.2.2 Helmets

The wearing of helmets is **mandatory** for **all** SAFA flight and training operations.

A member's helmet must **clearly** display his or her SAFA membership number.

3.2.3 Pilot in Command

No SAFA Member shall act as a pilot-in-command of a hang glider, paraglider of any type, or weightshift microlight unless:

(a) He or she has obtained the pilot certificate and endorsement(s) required for the flying activity intended to be performed,

(b) He or she is medically fit to the standard required for the flying activity intended to be performed, and

(c) Has attained the age of 15 years and where the applicant is under the age of 18 years, written parental consent must be granted.

3.2.4 Health Standard, General

For issue and renewal of all Pilot Certificates, a standard of health equivalent to that required for the issue of a private motor vehicle driver licence in Australia, is required.

The document "Assessing Fitness to Drive" – https://austroads.com.au/drivers-and-vehicles/assessing-fitness-to-drive provides guidance on the standard required to hold a driver's license

Medical factors such as the following, need to be assessed by your medical doctor to determine your fitness to fly and drive.

- blackouts
- cardiovascular disease
- diabetes
- musculoskeletal conditions
- neurological conditions such as epilepsy, dementia and cognitive impairment due to other causes
- psychiatric conditions
- substance misuse/dependency
- sleep disorders
- vision problems.

3.2.5 Health Standard, Specific to Instructional Operations

The pilot or applicant must:

(a) Hold and provide a signed statement from a General Practitioner (GP) who has undertaken a medical examination of the pilot or applicant, in conjunction with the use of the SAFA form INS-12 (Instructor Medical Examination), indicating that the pilot is fit to the standards as specified within INS-12 and therefore, for operations with students. **or**;

(b) Hold and provide a current, equivalent or higher, Aviation Medical Certificate from the CASA or an alternate RAO, and therefore, is fit for operations with students. **and;**

(c) Provide a copy of the completed INS-12 form or equivalent certificate, to the HGFA office, when required or requested.

3.2.6 Failure to Meet Health Standard

(a) It is the responsibility of all members holding a pilot certificate to report to the SAFA any change in their health status which would cause them to be below the minimum health standard required for that certificate or endorsement.

(b) Where the health standard of a member falls below the minimum required, the SAFA Operations Manager may suspend or cancel the members SAFA Pilot Certificate(s), after due consideration to the nature, severity and term of the illness, incapacity or disability.

3.2.7 Alcohol and Drugs

Pilots must not be under the influence of any alcohol, drugs or other intoxicating substances whilst in control of an aircraft, administering, or carrying out any aviation related task or duty. e.g. conducting maintenance on an aircraft or performing the role of a duty pilot etc., in accordance with the SAFA Drug and Alcohol policy.

Pilots must not consume any alcohol, drugs or other intoxicating substance within EIGHT (8) hours immediately prior to flying a hang glider or paraglider. A pilot must never have a blood alcohol content of more than 0.02 or be under the influence of illicit drugs, whilst in control of an aircraft or carrying out other aviation related tasks or duties.

Note: *Prescription drugs which do not cause drowsiness or impair judgement in any way are exempted.*

3.2.8 Provision of Pilot Instruction

No person shall give either ground or flight instruction unless:

(a) They are at least 18 years old,

(b) They are the holder of a current Instructor Certificate issued by the SAFA that is valid for the level of instruction being given and valid for the type of aircraft being used and they conduct the instruction under the supervision of a CFI, or

(c) They hold a Chief Flight Instructor certificate, or

(d) They are approved by the Operations Manager.

(e) They are approved by the Executive Committee of a SAFA Affiliated Club to operate from Club sites.

3.2.9 Carriage of Passengers

SAFA pilots shall not carry passengers in any aircraft under SAFA oversight unless:

(a) He or she is the holder of a valid Tandem endorsement for the aircraft type issued by SAFA; and

(b) The aircraft is certified to carry the combined weight of the pilot and passenger and for the type of launch and landing operation being operated;

(c) The aircraft is certified by an Engineer or Type Certified, as defined in Aircraft Design / Construction (Passenger), Maintenance & Standards Manual sections 1.1 & 1.3 ;

(d) The aircraft used has been maintained in accordance with any requirements of the Maintenance & Standards Manual, see Section 2 “Assembly, Inspection and Maintenance Standards”,

(e) The aircraft used has been maintained in accordance with the requirements of its manufacturer’s schedule; and

(f) Where the passenger is under 18 years of age, written parental / guardian consent is granted.

NOTE: Passengers shall not be carried for hire or reward unless the flight is for bona fide instructional purposes. In this instance the pilot in command must be the holder of an appropriate instructor certificate and the flight conducted by an SAFA approved flight training facility, the passenger must be a current member of the SAFA, have signed a SAFA Waiver and be a minimum of 10 years of age (with parental consent) and if the passenger is under 18 years of age, the Instructor must comply with the SAFA Member Protection Policy and hold a current Working With Children’s Check in accordance with the relevant legal requirements for each state where that activity is undertaken.

3.2.10 VHF Radio Operator Endorsement

No SAFA Pilot Certificate holder shall operate aeronautical frequency VHF radio equipment unless he or she has been issued with an appropriate endorsement or is undergoing training under the direct supervision and control of an appropriately qualified person for the purpose of gaining a radio operator endorsement.

3.2.11 Cross Country (XC) Operations (HG/PG/PPG/WM)

No pilot certificate holder shall act as pilot in command of a hang glider, paraglider, powered paraglider or weightshift microlight at a distance greater than 25 nautical miles from the point at which the aircraft was initially launched unless:

(a) They are the holder of a valid Advanced HG or PG5 Pilot Certificate whilst engaged in non-powered flight operations, or

(b) They are the holder of a valid PPG or WM Cross Country Endorsement whilst engaged in powered flight operations; or

(c) The proposed flight is approved in advance by a SAFA SSO, FI or CFI.

Note: Further XC operational clarifications are defined under the "**Privileges"** section of each pilot certificate level in Section 5. All of the privileges within a certificate level must be taken into consideration when planning and undertaking flight operations.

3.2.12 Air Displays (HG/PG/PPG/WM)

Pilots must hold an Advanced HG or PG5 Pilot Certificate with the relevant endorsements, Powered Paragliding or WM Pilot Certificate and gain the written recommendation of the SAFA Operations Manager before being permitted to fly in public displays.

Air displays require the written approval of the Civil Aviation Safety Authority – Written application for approval must be made to CASA and SAFA, not less than twenty-eight days prior to the proposed display.

3.2.13 Parachute Descents

Parachute descents, other than necessary emergency descents shall only be made in a manner approved by the Civil Aviation Safety Authority. CAR 152

Note: The Operational Regulations of the Australian Parachute Federation contain the written specification for sport parachute descents made by APF members.

3.3 Operational Requirements

3.3.1 Land Owner Rights and Pilot Responsibilities

Operations on or over private or public property must be conducted with due regard to the rights of the landowner.

Hang Gliding, Paragliding, Powered Paragliding and Weight-shift Microlight operations rely on the good will of landowners.

Please refer to the National Site Guide **and** contact local club officials, for detailed information **before commencing operations**.

3.3.2 Operations within Vicinity of a Non-Controlled Aerodrome.

If operating *within the vicinity* of a non-controlled aerodrome, carriage and use of an Airband VHF radio is required in accordance with the established protocols or the aerodromes requirements. Not all non-controlled aerodromes require VHF radio use.

Within the vicinity means:

(a) airspace, other than controlled airspace, and

(b) a horizontal distance of 16km or 10nm from the aerodrome (reference point), and

(c) a height above the aerodrome (reference point) that could result in conflict with operations at the aerodrome.

For more information, refer to Civil Aviation Regulation (CAR) 166. Visit www.legislation.gov.au

3.3.3 Hang Gliding and Paragliding Sites

A Duty Pilot shall be elected from those Pilot Certificate holders present:

(a) Where the Operations Manager or SAFA Affiliated Club SSO is of the view that the conditions of a site are such as to require a Duty pilot; or

(b) When Supervised HG and/or PG2 pilot Certificate holders of any type are operating; or where "mixed operations" are being conducted.

The Duty Pilot will wear a designated badge, armband or t-shirt for easy identification.

The Duty Pilot has the authority to control, direct and coordinate operations to ensure that they are conducted in accordance with Civil Aviation Regulations as amended from time to time, this manual, and in accordance with any conditions set by the owner of the site.

Where aircraft or aeronautical operations other than hang gliding and/or paragliding of any type are being conducted from the flying site then the SAFA Duty Pilot shall co-ordinate with the other duty officers to ensure that all operations are conducted in a safe and orderly manner and:

(c) Only appropriately certificated or endorsed pilots may fly from the site.

(d) Pilots shall obey all directions and instructions given by a Duty Pilot or Safety Officer, including grounding of pilots and / or aircraft if directed.

(e) When operating at a flying site where a Duty Pilot is appointed, that is not their home site, pilots must report to the Duty Pilot prior to undertaking any operations, or further operations, from that site.

(f) Visiting pilots **MUST** ensure they are properly briefed on local requirements and conditions. Proof of SAFA membership, Log books, (VHF endorsement and radio operations if required) should be produced on request by an Instructor, Safety Officer, or Duty Pilot of the SAFA.

(g) **If it is intended to fly cross country (XC) it is recommended that;**

(i) you fly with another SAFA pilot (Fly with a Buddy)

(ii) a detailed flight note be left with a responsible person stating the intended direction of flight, destination and intended time of return.

(iii) the flight note contains the phone numbers of the RCC and ATSB.

(iv) that pilots carry a current personal satellite GPS messenger device or a current Emergency Position Indicating Radio Beacon (EPIRB) or a current Personal Location Beacon (PLB).

Note: The Australian Maritime Safety Authority has developed and maintains guidelines for aviation search and rescue. For more information, visit www.amsa.gov.au

(h) Hang glider and paraglider pilots should be aware that when operating at airfields and in joint operations with sailplanes, ultralights and weightshift microlights that additional operating requirements can apply. Consult the Duty Pilot or Safety Officer controlling operations for details.

(i) All instructors utilising sites administered by an SAFA affiliated Club or SRA, must comply with any protocoles or stipulations imposed by that administrating club. Failure to do so may incurr disciplinary action, including suspension of priveledges, pending the outcome of a Disiplinary Tribunal.

3.3.4 Weightshift Microlight Operations

(a) Where weightshift microlights are operating without radio carriage and are used from a flying field where VHF carriage and use is not mandatory, a Duty Pilot must be elected from those Pilot Certificate holders present.

(b) The Duty Pilot will have the authority to control and direct operations that are not conducted in accordance with Civil Aviation Orders, Civil Aviation Regulations as amended from time to time, this manual and any conditions set down by the owner of the field.

***Note**: For further information on the nomination and responsibilities of Duty Pilots, refer to section 2.1.3.*

(c) Where aircraft or aeronautical operations other than hang gliding or paragliding of any type, or weightshift microlighting are being conducted from the flying field then the weightshift microlight Duty Pilot shall co-ordinate with the other duty officers to ensure that all operations are conducted in a safe and orderly manner.

(d) Where aircraft operations are operating from a field that is a training field, the Chief Flying Instructor of the Training Facility will have the authority to control and direct weightshift microlighting operations.

(e) Flying is to be conducted only during daylight hours and in Visual Meteorological Conditions (VMC).

(f) Only appropriately registered aircraft are to be operated from the field.

(g) Only appropriately certificated or licensed pilots may fly aircraft from the field.

(h) Pilots shall obey all directions and instructions given by a Chief Flight Instructor or Duty Pilot, including grounding of pilots and/or aircraft if directed.

(i) When operating at a flying field that is not their home field, pilots must report to the Chief Flying Instructor or Duty Pilot prior to undertaking any operations, or further operations, from that field.

***Note**: Visiting pilots MUST ensure they are properly briefed on local requirements and conditions. Proof of SAFA membership, and Log books must be produced by the visiting pilot on request by an Instructor, Safety Officer or Duty Pilot of SAFA.*

(j) Assemble and inspect all aircraft well clear of runways, taxiways and or other areas where aircraft are being moved under their own power.

(k) All vehicles shall be kept clear of aircraft, particularly those aircraft being refuelled or moving under their own power.

(l) Engines must NOT be started in any location that could present a danger to any persons or property.

(m) Before starting the engine, the aircraft must be in an operational area and precaution must be taken to ensure that the propeller blast will not endanger any person or aircraft.

(n) Prior to starting an engine a visual check and the call “CLEAR PROP” must be made in a loud clear voice.

(o) Weightshift microlights with engines operating shall not be left unattended at any time and engines must not be started without an appropriately certificated pilot at the controls.

(p) Pilots must ensure that members of the public and people not directly associated with the operation of a weightshift microlight are advised of the danger and not permitted near the aircraft whilst the engine is running.

(q) When ground testing and running-up aircraft engines, wheels must be adequately chocked and the aircraft tied down, as required.

(r) The aircraft should be correctly parked after flight. Ignition off, controls locked, wheels chocked and clear of active areas. Tie down as appropriate.

(s) Pilots must not consume any alcohol, drugs or other intoxicating substance within EIGHT (8) hours immediately prior to flying a weightshift microlight. The consumption of liquor on the flying site is not permitted.

(t) A pilot must never have a blood alcohol content of more than 0.02 or be under the influence of illicit drugs, whilst in control of an aircraft or carrying out other aviation related tasks or duties.

***Note**: Prescription drugs which do not cause drowsiness or impair judgement in any way are exempted.*

(u) NO SMOKING or NAKED FLAMES are permitted within 15 metres of any aircraft or aircraft refuelling point.

(v) refuelling inside hangars is not permitted.

(w) Adequate fire fighting equipment must be in an operational area and on hand during all refuelling operations.

3.3.4.1 Taxiing and Taking Off

Aircraft must be taxied slowly. Fast taxi speeds reduce safety response times and can cause ground controllability issues, particularly in gusty conditions. Fast taxi speed also causes excessive wear on airframe components.

When moving in to the “movement area” any aircraft must give way to aircraft which are landing or taking off and shall conform to the rules regarding “right of way” (the same as in the air).

Aircraft should be taxied to the take-off end of the strip and STOP at right angles to the strip so that the pilot can observe all traffic in the circuit.

Immediately before take-off a pilot must conduct a pre-take-off check in accordance with the aircraft manufacturers operator’s manual or otherwise appropriate for the aircraft type.

3.3.4.2 Fuel Quantity

It is critical that fuel quantity be checked as being sufficient for the proposed flight, including an adequate safety margin. It is recommended that tank is topped up prior to each flight as changing conditions, eg., an unexpected head-wind may increase the expected consumption.

See: https://www.casa.gov.au/publications-and-resources/standard-page/fuel-requirements-australian-aircraft

3.3.4.3 Turning after Take-off

During initial climb-out, the turn onto crosswind should be made appropriate to the performance of the aircraft, but in any case, not less than 500 FT above terrain so as to be at circuit height when turning onto downwind.

When departing from the aerodrome circuit area, aircraft should depart by extending one of the standard circuit legs.

However, an aircraft should not execute a turn opposite to the circuit direction unless the aircraft is well outside the circuit area and no traffic conflict exists. This is required to be at least 3 NM and no less than 1,500ft from the departure end of the runway. The distance may be less for aircraft with high climb performance. The distance should be based on pilots being aware of traffic and the ability of the aircraft to climb above and clear of the circuit area.

***Note**: Pilots of departing aircraft should be aware of traffic intending to join the circuit by the recommended overfly procedure as they can be 2000 FT or higher above aerodrome elevation.*

3.3.4.4 Circuits

An increasing number of approvals are being gained for hang gliding and paragliding operations in the vicinity of airports and airfields and therefore more pilots are involved in joint operations with GA aircraft, ultralights and weightshift microlights (known as “mixed” operations). It is therefore important that all pilots understand the circuit procedures used by powered aircraft.

Left Handed Circuits

A standard left-handed circuit is to be observed unless impractical or otherwise specified in ERSA.

Compliance to CAR 166A is required.

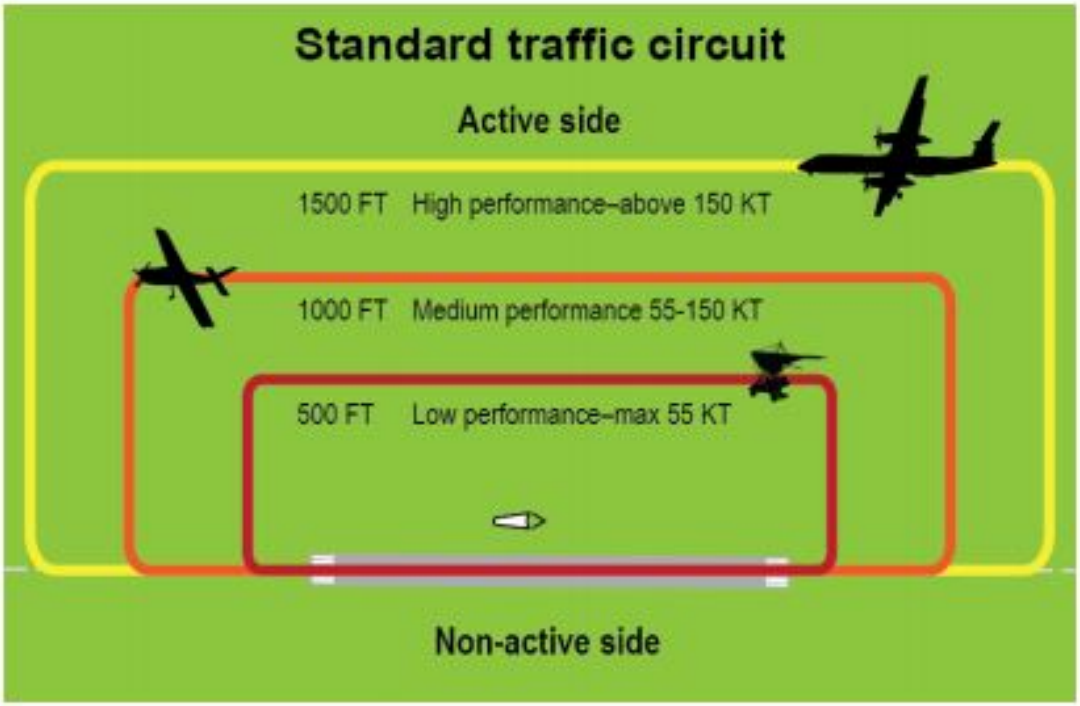
Aircraft may join the circuit pattern upwind, crosswind, downwind or on base leg as the case may be. A straight-in approach may also be carried out in accordance with CAR 166B.

The height at which aircraft join the circuit depends on the type of operations and local operational procedures.

CAAP 166-1 requires aircraft of differing performance to fly at different circuit heights above airfield elevation as per the table below.

Type of aircraft	Standard circuit speed range	Standard circuit height	
High performance (includes jets and many turboprop aircraft	Above approx. 150Knots	1,500ft above aerodrome elevation	
Medium performance (includes most piston engine aircraft)	Between 55 and 150 knots	1,000 ft above aerodrome elevation	
Low performance.		Approximately 55 knots maximum	500 ft above aerodrome elevation

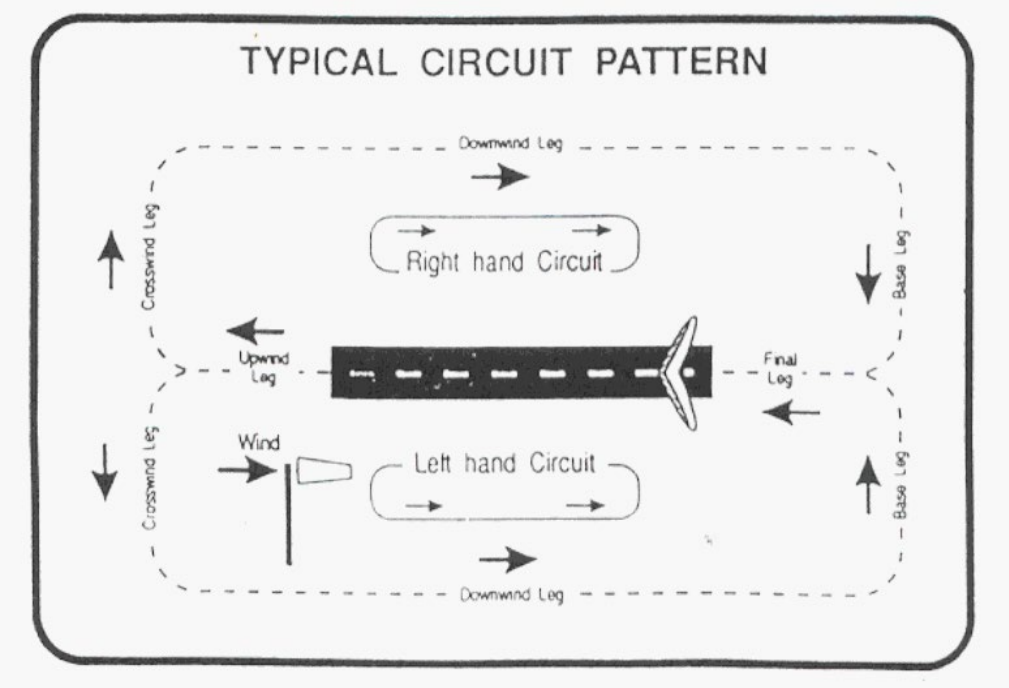
Figure 1: Standard Left Hand Circuits



CAAP 166-1 defines circuit procedures at non-controlled (CTAF) aerodromes, but these circuit procedures are considered standard practice for any landing area.

Weightshift microlights must conform with the standard circuit procedures set down, flying the circuit no lower than 500' AGL.

Special procedures for airports are published in ERSA (Enroute Supplement Australia) or can be determined by telephoning the Aerodrome operator prior to operating at or flying into the airfield.



When mixed operations are being conducted a Duty Pilot should be nominated and specific procedures determined to ensure no conflict between aircraft.

To minimise the likelihood of conflict, it is recommended that hang gliders and paragliders approach the airport above circuit height (at least 2000' AGL), lose altitude on the "dead" side, and fly the "standard" circuit direction below and inside the general aviation circuit. Gliders should then land on the verge of the runway on the circuit side, thus never crossing low over the runway.

NOTE: The "dead" side is the side of the runway which is not being used by powered aircraft in circuit, i.e. the side opposite the circuit area. Powered aircraft may use this side of the runway to lose altitude prior to joining circuit.

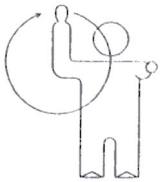
No aircraft may land, unless the runway is clear of other aircraft. After landing move clear of the runway as soon as possible. The "runway" includes the area inside the white gable markers surrounding the runway strip. If a hang glider has to land, it has right of way. However, the intent should be made clear to other aircraft at the aerodrome.

After landing adjacent to the runway, the glider pilot must move the glider from the runway strip as soon as practicable, i.e. outside the boundary formed by the gable markers.

3.3.4.5 Ground Marshalling Directions

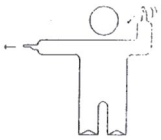
Start Engine

- Left hand pointing to specific aircraft.
- Right hand moving in a circular motion at head level.



Turns

- Arm pointing to the direction of turn.
- Other hand moved up and back.
- Speed of movement shows rate of turn.



Stop

- Arms repeatedly crossed above head.
- The rapidity of the arm movement shows the urgency of stop!

Move Ahead

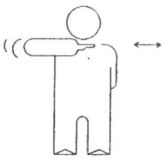
- Arms a little to one side moved repeatedly upwards and backwards.

Slow Down

- Arms down close to side moved up and down several times.

Cut Engine

- Hand level with shoulder.
- Hand moved sideways across the throat.



3.3.4.6 Registration of Weightshift Microlights with the SAFA.

SAFA registered Weightshift Microlights must be operated in accordance with this manual and are required to:

(a) be owned by a person holding and maintaining full SAFA membership; and

(b) have a current SAFA Registration Certificate (The period of validity is 2 years and is subject to the satisfactory completion of the relevant Airworthiness Inspection, as stipulated in section 9.7.7.1); and

(c) display SAFA registration markings.

3.3.4.7 Aircraft Registration Markings

Weightshift microlights, PPG aircraft registered with the SAFA under CAO 95.32 have the prefix T2 followed by a hyphen and the registered number; e.g. T2-2512.

Weightshift microlights, PPG aircraft registered with the SAFA under CAO 95.10 have the prefix T1 followed by a hyphen and the registered number; e.g. T1-2123.

The registration numbers allocated on the registration certificate shall be displayed as follows:

(a) Under Wings:
  (i) Not Required. However, are permisable on the undersurface of the port wing or acros the span of both wings with the base of the numerals towards the trailing edge.

(b) On Vertical Surfaces:
  (i) On any location on the side of the main structure.

(c) Characteristics of Numeral Markings Required:
  (i) The numerals in each group shall be of equal height;
  (ii) Minimum height 150mm; or
  (iii) Able to fit on the structure as large as practicable, with a minimum height of 70mm.
  (iv) Font is SOLID -- "hollow" or "outline" not permitted.
  (v) Be of a colour contrasting clearly with the background;
  (vi) Must be clearly visible when standing at 90 degrees to the travel of the aircraft.

3.3.4.8 Instrumentation – Weightshift Microlights

Weightshift microlights shall:

(a) Carry a serviceable altimeter which complies with the standards specified within AC 21.46 and:
  (i) is set to area QNH;
  (ii) is set to indicate height in feet; and
  (iii) is easily read by the pilot at all times whilst in flight; and

(b) Be fitted with a serviceable airspeed indicator which can be easily read by the pilot at all times whilst in flight; and

(c) If the microlight is to be flown on a cross country flight (>50 nautical miles).:

(d) Be fitted with a compass; and

(e) The pilot must carry an accurate timepiece;

(f) If operating under CAO 95.10, carry a current personal satellite GPS messenger device or a current Emergency Position Indicating Radio Beacon (EPIRB) or a current Personal Location Beacon (PLB), or an approved Emergency Locator Transmitter (ELT), or an approved portable ELT, as defined in regulation 252A.

(g) If operating under CAO 95.32, carry an approved ELT, or an approved portable PLB, as defined in CAR 252A.

Notes: Some weightshift microlights may be required, as part of aircraft type certification, to be fitted with other aircraft instrumentation such as an engine hour meter.

Aircraft flying within the vicinity of certain aerodromes or CTA require an airband radio, instrumentation and the pilot endorsement to use it. In some cases, this instrumentation, including a transponder is required to have checks of those instruments in accordance with CAO 100.5 requirements. For more information, see 5.3.8.5 "Radio Operator Endorsement (WM)"

3.3.5 Identification of Powered Paragliders & Powered Hang Gliders.

The owner of a powered hang glider or powered paraglider is required to prominently display the last 4 numerals of their SAFA number on the underside of the wing, or on a vertical surface on both sides of the harness, frame or wheelbase, as follows:

(a) If the numerals are displayed on the harness or wheelbase, they must be clearly visible when standing at 90 degrees to the direction of travel.

(b) Each numeral is to be Western Arabic and have a hi-contrast background that allows for the markings to be clearly visible from a distance of no less than 100 meters.

(c) If on the wing, each numeral must be a minimum of 150mm in height and 80mm width.

(d) If on the harness or wheelbase, each numeral must be a minimum of 70mm in height and 30mm width, or where space is not available, the height to be as large as practicable.

(e) The numbers must be maintained and are to remain legible at all times during flight.

(f) The seller is required to remove the numbers upon selling the wing, harness or wheelbase.

(g) The purchaser of a new or 2nd hand wing, harness or wheelbase is required to place the last 4 digits of their SAFA number upon the craft, prior to any use of the craft.

3.3.6 Powered Paragliders over 70 KG (Empty Weight).

All aircraft over the 70KG empty weight, as stipulated in CAO 95.8, must be registered under CAO 95.10 or CAO 95.32.

They will be required to display allocated registration numbers.

4 SAFA Flight Rules

4.1 General

4.1.1 Acrobatic Flight

An aircraft shall not be flown in acrobatic flight of a particular kind unless the flight manual and the relevant regulation for the aircraft specifies that the aircraft may perform that type of acrobatic flight.

Acrobatic flight is not to be performed over built-up areas. Pilots undertaking acrobatic manoeuvres must maintain adequate clearances from all other airspace or to persons on the ground not associate with the operation of the aircraft.

4.1.2 Dropping of Articles

Nothing may be dropped from a hang glider, paraglider, powered-paraglider or weightshift microlight in flight, except:

(a) ballast in the form of water or fine sand;
(b) with the written approval of the Civil Aviation Safety Authority, ropes and cables with the appropriate fittings used in launching; and
(c) components designed to be jettisoned in flight, such as drag parachutes or jettisonable wheels; or
(d) other items with the written approval of the Civil Aviation Safety Authority.

4.1.3 Flying over Public Gatherings

Except with the permission, in writing, of the Civil Aviation Safety Authority and in accordance with the conditions specified in the permit, an aircraft shall not be flown over any regatta, race meeting or public gathering unless passing from place to place in the ordinary course of navigation.

4.1.4 Low Flying (Under CAO 95.8)

Aircraft under CAO 95.8 must not be flown:

(a) "over any closely-settled area — below 1 000 feet above terrain, or the lowest height from which the hang-glider or paraglider could land without power outside the closely-settled area, whichever is the higher, except that during the launching and landing phase of flight only the requirement to be able to land clear of a closely-settled area applies", or
(b) "during the launching or landing phase of a flight — unless the aircraft can be launched or landed without endangering the safety of persons unrelated to the launching or landing or damaging unrelated property, and no closer than the distances specified in section 4.1.4.1 and 4.1.4.2

Note: Aircraft under CAO 95.10 / 95.32 shall observe the minimum heights established by those CAO's.

4.1.4.1 HG/PG (Non-powered) Heights & Distances / Launching / Landing

A non-powered SAFA aircraft (under CAO 95.8) shall not be flown at a height lower than 100 feet within a horizontal distance of 25 metres from:

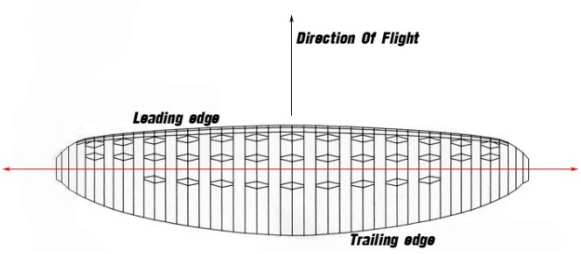
(a) public roads,
(b) a dwelling except with the permission of the occupier, and
(c) persons not directly associated, except during launching / landing phases,

Unless,

(d) the flying site has been given an exemption to these heights and or distances by the SAFA Operations Manager in writing.

Launch / Landing Phases

Operation closer than a horizontal distance of 25 metres from persons other than those persons directly associated with the operation of hang gliders or paragliders is permitted provided those other persons are behind a line passing through the launch or landing point at right angles to the intended direction of flight.

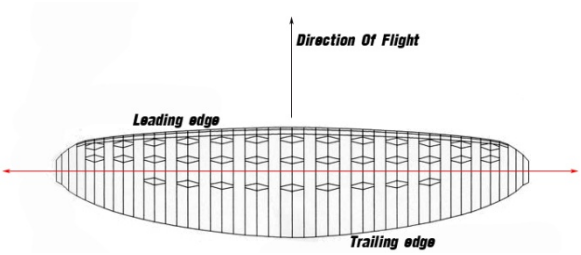


4.1.4.2 Operations of Powered Paragliders & Powered Hang Gliders (PPG & PHG)

(a) PPG or PHG may only be flown at a height of less than 300 feet above ground level, if:
- (i) the aircraft is in the course of taking off or landing; or
- (ii) the aircraft is flying over land that is owned by, or under the control of, the pilot; or
- (iii) the owner or occupier of the land (including the Crown), or an agent or employee of the owner or occupier, has given permission for the flight or flights to take place; or
- (iv) the pilot of the aircraft is engaged in flight training and the craft is flying over a flight training area, over which the SAFA has been authorised for low flying.

(b) Subject to 4.1.4.2(a), a PPG or PHG can be flown at a height lower than 300 feet above ground level, but must be at a distance of at least 25 metres horizontally from:
- (i) a public building (except with the permission, in writing, of the Civil Aviation Safety Authority and in accordance with the conditions specified in the permit,
- (ii) a dwelling (except with the permission of the occupier),
- (iii) persons not directly associated, except during launching / landing phases.

(c) Launch Phases: Operation closer than a horizontal distance of 25 metres from persons other than those persons directly associated with the operation of PPG or PHG is permitted provided those other persons are behind a line passing through the wing, at right angles to the direction of flight or intended direction of flight.



***Note**: ANY aircraft fitted with a motor whilst in flight is deemed to be carrying out motored operations, irrespective of the motor being used or not, and therefore must comply with the above minimum heights and distances requirements.*

4.1.5 Negligent Operation

Hang gliders and paragliders of any type, powered-paragliders and weightshift microlights shall not be operated:

(a) in a reckless or negligent manner so as to endanger the life or property of others;

(b) in such a manner, or in such circumstances as is or likely to cause avoidable danger to any person or property (including animals) on land or water or in the air.

(c) Without recognition of and compliance to, noise control regulations applicable in the jurisdiction where operations are occuring.

4.1.6 No-Fly Areas

Except with the permission, in writing, of the Civil Aviation Safety Authority and in accordance with the conditions specified in the Pilot's certification, a hang glider, paraglider, powered paraglider or weightshift microlight shall not be flown:

(a) within controlled airspace.
(b) within the vicinity of a non-controlled aerodrome without meeting the relevant CAR requirements; for example, CAR166, "Carriage and Use of Aircraft Radio",
(c) within an area designated by the Civil Aviation Safety Authority or the SAFA Operations Manager as an area where the operation of SAFA aircraft would constitute a hazard to other aircraft,
(d) within an area that has been designated as a prohibited or restricted area at such times as any such prohibited or restricted area is active,
(e) Within eight kilometres of a military airfield.

Details of controlled airspace and restricted areas are contained in the En-Route Supplement Australia (ERSA), available from Air Services Australia.

Stay current by visiting www.airservicesaustralia.com

4.1.7 Towing of Articles

Nothing may be towed behind an aircraft in flight except with the written approval of the Civil Aviation Safety Authority including:

(a) ropes and cables with the appropriate fittings used in launching; and
(b) other items.

4.1.8 Visual Flight Rules

Hang gliders and paragliders of any type, powered-paragliders and weightshift microlights shall be flown under Visual Flight Rules (VFR) at all times, that is:

(a) with constant visual reference to the ground or water when within 3,000 feet of the surface; and
(b) in circumstances where the flight visibility is at least 5,000 metres and the aircraft's distance from cloud is greater than 1,500 metres horizontally and 1,000 feet vertically above or below cloud.

Visual Flight Rules for operation below 3,000 feet AMSL or 1,000 feet above terrain (whichever is the greater) allow for operation clear of cloud PROVIDED a VHF radio for communication on the applicable CTAF or area frequency is both carried and used. If such a radio is not carried, then the limits specified in section 4.1.8 (b) apply.

Visual Flight Rules for operations above 10,000 feet require visibility of at least 8,000 metres forward and 1500 metres left, right and behind, and allow operations no closer vertically than 1,000 feet above or below cloud.

4.1.9 >10,000 Feet Above Mean Sea Level

4.1.9.1 Hang Gliders, Paragliders, Powered Paragliders & Weightshift Microlights

No hang glider, paraglider, powered paraglider or weightshift microlight shall be flown at a height above 10,000 feet above mean sea level except where the pilot:

(a) Is not limited by controlled airspace; and
(b) has an Oxygen Endorsement; and
(c) is carrying and using an approved oxygen supply system, or
(d) is given written permission by CASA.

4.2 Rules of the Air

4.2.1 Take Off Rules

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 taxying must give way to aircraft established on final.

The same principle applies to taking off from ridge site launches. Aircraft shall not;

(a) launch into the path of oncoming aircraft, nor
(b) raise their wing into that airspace, nor
(c) launch into ridge-soaring airspace which would then become crowded and force other pilots out of the airspace.

4.2.2 Give Way Rules

SAFA aircraft must not pass over or under, or cross in front of other aircraft, unless vertical separation detailed in Section 4.2.3 can be maintained.

Give way to other aircraft on your right. Power driven aircraft are required to give way to gliders, balloons and aircraft that are seen to be towing other aircraft or objects.

4.2.3 Operation in Proximity to other Aircraft

Pilots shall maintain a good lookout at all times.

Avoid abrupt changes in direction and speed when other aircraft are present.

Exercise care where other aircraft are displaying a red streamer indicating that the pilot in command holds a Supervised Pilot Certificate of any type.

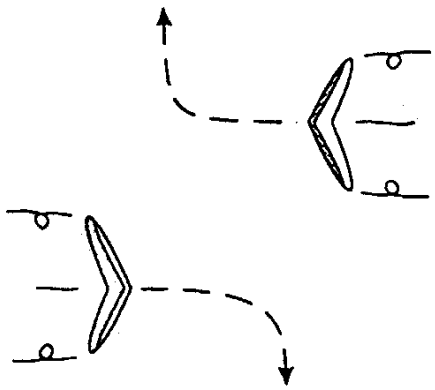
“An aircraft shall not be flown so close to another aircraft as to create a collision hazard.”

The following distances from other aircraft are suggested minimum for separations for SAFA Piloted aircraft where there is no prior arrangement to fly closer.

4.2.3.1 Remain clear of:

(a) Soaring hang gliders and paragliders of any type by at least 20 metres horizontally and 25 feet vertically;
(b) powered hang gliders and paragliders by at least 20 metres horizontally and 25 feet vertically;
(c) weightshift microlights, and tug aeroplanes towing hang gliders by at least 30 metres horizontally and 100 feet vertically;
(d) sailplanes and from tug aeroplanes towing sailplanes by at least 60 metres horizontally and 200 feet vertically; and
(e) other aircraft by at least 600 metres horizontally and 500 feet vertically.

4.2.4 Collision Avoidance



When two aircraft approach HEAD ON, or nearly so, both shall alter course to the RIGHT.

4.2.4.1 Ridge Soaring

When approaching head on along a ridge the hang glider, paraglider or sailplane with its right wing towards the ridge shall have right of way. The aircraft that has the ridge to its left shall give way by turning away from the ridge.

Golden rule: "Ridge on the right, has right of way."

4.2.4.2 Thermalling

When joining a thermal the pilot in command must turn in the same direction as any hang glider, paraglider or sailplane already circling.

When thermalling the pilot in command must give way to the hang gliders and paragliders that are climbing up from **BELOW**.

BE AWARE THAT THE RULES OF THE AIR FOR PILOTS OPERATING SAILPLANES REQUIRES THAT THEY GIVE WAY TO SAILPLANES ABOVE THEM IN THERMALS.

Note: Take extra caution when operating in the same thermal as a sailplane. Remember that the wing restricts the UPWARD vision of a hang glider or paraglider pilot, and that in many sailplanes the wing restricts the DOWNWARD vision of a sailplane pilot.

4.2.5 Overtaking Rule

When overtaking another aircraft, the slower aircraft has right of way.

A hang glider or paraglider engaged in ridge soaring shall overtake by passing between the ridge and the other aircraft. Other than when ridge soaring the OVERTAKING aircraft shall alter course to the RIGHT.

4.2.6 Landing Rule

When two or more aircraft are approaching to land, the one AHEAD has the PRIORITY.

4.2.7 CAR 166 "Operations in the Vicinity of Non-Controlled Aerodromes" – All Aircraft

All Pilots must familiarise themselves with the aerodromes in their flying area and or planned route.

CAR 166 defines the requirements of flying within the *vicinity* of these aerodromes.

If a Pilot enters the *vicinity*, he or she must:

(a) carry, use and be licensed, certified or endorsed to use an aeronautical frequency VHF radio.
(See "VHF Radio Operator Endorsement" in the SAFA Training Manual)
(b) Have familiarised themself with relevant aerodrome information, check ERSA.
(c) Observe and adopt correct standard traffic circuit procedures.

4.2.7.1 In the Vicinity

In the vicinity *[CAR 166]:* An aircraft is in the vicinity of a non-controlled aerodrome if it is within:

(a) airspace other than controlled airspace; and
(b) a horizontal distance of 16km or 10mn from the aerodrome; and
(c) a height above the aerodrome that could result in conflict with operations at the aerodrome.

4.2.7.2 Carriage and Use of Aircraft Radio

A radio operated on an aeronautical VHF frequency must be used in accordance with standard aeronautical procedures.

Callsigns - Hang Gliders and Paragliders (including Motorised)

Where a radio is used on a hang glider or paraglider of any type, the call-sign to be used is HG / PG (broadcast as the words "hang glider" or "paraglider") followed by the last four digits of the pilot's SAFA Membership Number.

For example, a hang glider pilot with SAFA membership number 12345 would use the call sign:

"Hang Glider 2345"

Callsigns - Weightshift Microlights

Where a radio is used on a SAFA registered weightshift microlight, the call sign to be used is Microlight followed by the last four digits of the SAFA registration number.

For example, when operating a weightshift microlight with the registration number T2-2512, the call sign would be:

"Microlight 2512"

VHF Airband Radio Usage and GMT

Many radio calls are made with reference to UTC (Coordinated Universal Time) or "Greenwich Mean Time" (GMT).

It is a requirement, when SAFA pilots and operators use Airband VHF radio, that they have access to an accurate timepiece.

Ref: http://vfrg.casa.gov.au/general/aircraft-equipment/day-vfr-equipment/

5 Pilot Certificates, Endorsements & Ratings

See SAFA Qualifcations & Training Manual

6 Instructor Certificates

See SAFA Qualifcations & Training Manual

7 Pilot Flight Training & Training Facilities

See SAFA Qualifcations & Training Manual

8 Aircraft & Equipment Standards

See SAFA Maintenance & Standards Manual

[End of the SAFA Operations Manual]