



MANUAL OF ADDITIONAL PROCEDURES ORIGINAL

1 Sept 2020

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PART 0: CONTROL AND GENERAL

1) DISCLAIMER

- i. This additional manual has been written for the exclusive use of the South African Hang-Gliding and Paragliding Association hereto referred to as "SAHPA". The copyright to this manual rests with SAHPA. Access to the manual does not imply permission to reproduce and/or distribute the manual or any portion thereof without the prior permission from SAHPA.
- ii. SAHPA remains responsible for ensuring that the provisions, content, accuracy and currency of the manual, and to make any necessary amendments and/or additions.
- iii. This manual is issued and revised under the authority of the Accountable Manager, by the Quality Manager, and shall be reviewed when required, at least once in 12 months and any changes
- iv. The members and leaders of SAHPA will ensure that MOP/TPM AND this ADDITIONAL PROCEDURES MANUAL will be complied with at all times.

2) CONDITIONS OF USE

- i. Dissemination of this document shall be with prior permission of the Accountable Manager or his/her designate.
- ii. This manual shall be placed on the SAHPA website for the use of all applicable SAHPA members.

3) INTRODUCTION

- i. This Additional Procedures Manual has been developed in accordance as far as is possible with the South African Civil Aviation Regulations and Technical Standards and contains aspects relating to the control and regulation of flying of all paragliders and hang gliders and powered versions thereof inclusive of any with wheeled undercarriage, as well as aerobatics or display flying (and for the remainder of this document will be hereafter be understood to be inclusive when referred to as Paragliders and Hang-gliders) as applicable in South Africa.
- ii. It should be read in conjunction with the following documents:
 - a) The Civil Aviation Regulations (CARS).
 - b) The Civil Aviation Technical Standards (CATS) of the Civil Aviation Authority (CAA).
 - c) The Constitution of SAHPA/MOI as applicable.

Note: While this manual is required to be a stand-alone manual for purposes of paragliding and hang-gliding inclusive of all powered version thereof, all pilots that operate in this discipline also comply when applicable with contents of the SAHPA TPM.
- iii. SAHPA is the approved body for all forms of paragliding or hang gliding in South Africa as per the SA-CARS, Part 149 and is also recognised by the FAI (Federation Aeronautique Internationale) in specific CIVL which sets all international standards for this discipline.
- iv. SAHPA members shall adhere to the provisions of this manual.
- v. The term "SAHPA", whenever used herein shall mean South African Hang-gliding and Paragliding Association.

- vi. The term “SAHPA Executive Committee” shall mean the elected members who form the executive committee of SAHPA.
- vii. Amendments of this Manual shall only be approved by the SAHPA Executive Committee and details of changes shall be notified to the applicable authorities.
- viii. **Information contained in this manual of procedure**

RECORD OF AMENDMENTS AND EFFECTIVE PAGES

Revision number	Amendment Date	Effective Date	Authorised by
001	Original	1 Sept 2020	KS/LL

5. DEFINITIONS

Definitions and abbreviations are the same as those referred to SA-CARs, Part 1.

Paraglider and Hang-gliders means Paragliders and hang gliders and powered versions thereof inclusive of any with wheeled undercarriage for purposes of this document

6 ABBREVIATIONS)

AIC	Aeronautical Information Circular
AIP	Aeronautical Information Publication
ATO	Aviation Training Organisation
ATC	Air Traffic Control
ATS	Air Traffic Service
ATSU	Air Traffic Service Unit
CEO	Chief Executive Officer
EXCO	Executive Committee of SAHPA
HG	Hang gliding and powered versions thereof inclusive of tricycle undercarriage
HoT	Head of Training
MOP	Manual of Procedures
NSO	National Safety Officer
PG	Paragliding and powered versions thereof inclusive of tricycle undercarriage
PPT	Powered parachutes
RPA	Responsible Person Approved
SACAA	South African Civil Aviation Authority
SA-CARS	South African Civil Aviation Regulations
SA-CATS	South African Civil Aviation Technical Standards
TPM	Training and Procedure Manual
VFR	Visual Flight Rules

PART 1: RULES

1.1 MEMBERSHIP

- i. To be accepted as a member, the applicant shall complete an application form and forward it to SAHPA together with the fees as determined by SAHPA.
- ii. Membership is renewable (normally annually or biennially) as per SAHPA's Executive committee's prerogative and documented on the membership forms.
- iii. SAHPA is at present a valid section of the Aero Club of South Africa, and Members of SAHPA shall be members of the Aero Club of South Africa unless decided otherwise by the SAHPA committee.
- iv. All members will abide by SAHPA's Constitution, ethics and Code of Conduct.

1.2 PILOT QUALIFICATION

All pilots will a license or permit to fly and be current members of Sahpa the ARO to exercise their privilege of flight and utilize Sahpa sites and be covered by the 3rd party insurance

1.3 FLIGHT AUTHORISATION

- i. As per SAHPA's protocols and procedures in the applicable manuals and applicable regulations.
- ii. SAHPA as the ARO authorizes pilots in good standing to obtain further licenses and ratings integrating the Sahpa's code of conduct and ethics policy with the SAHPA ATO. This is the integration of the peer review that is pivotal to the ARO

1.4 GENERAL AIRWORTHINESS

- i. As per Parts 24 and 94 of the CARS as applicable.

1.5 AIRWORTHINESS

- i. As per Parts 24 of the CARS and CATS as applicable.

1.6 CIVIL AVIATION REGULATIONS

- i. Civil Aviation Regulations shall be complied with by all members.

1.7 TYPE AND CLASS RATING OF PARAGLIDERS AND HANG GLIDERS

- i. Definitions - As per Part 1 of the CARS
- ii. Type rating - As per Part 62 or applicable part of the SA CARS.
- iii. Class rating - As per Part 62 or applicable part of the SA CARS.

1.8 RULES OF THE AIR

- i. As par Part 91 and Part 94 as applicable.

1.9 INSTRUCTION AND INTRODUCTION

- i. As per the relevant part of the SA CARS and part 141 of SACARS and SA CATS and per the applicable manuals and protocols of the ARO.

1.10 USE OF RADIO COMMUNICATION

- i. As per Part 91 SA CARS and the current Electronic Communications ACT.

Notwithstanding this above

- i. All paraglider pilots shall comply with SA CAR 91.05.1(5).
 - ii. Paragliders may carry 2m Band Commercial FM transceivers licensed to SAHPA on a communal License by ICASA
- ii. ICASA has allocated SAHPA frequencies of 141.600MHz and 141.625MHz countrywide **Note shared with taxis & farmers.
- iii. All competitors in a SAHPA sanctioned competitions are required to fly with a radio capable receiving and transmitting on the SAHPA frequencies of 141.600MHz and 141.625 MHz
- iv. All paragliders will adhere to any radio carriage or radio use requirements if the site rules require.
- v. Radio licenses and call signs (allocated by SAHPA) are obtainable from SAHPA on payment of an annual license fee.
- vi. Radios must comply with ICASA regulations.
- vii. Radio users should observe good radio etiquette and procedure at all times.
- viii. Pilots using Air band radios must comply with the relevant CAA provisions.

1.11 EQUIPMENT

- i. A person shall not operate a paraglider and hang glider unless it is equipped with the basic equipment required by the class of airspace the flight will take place in.
- ii. SAHPA safety officers and all instructors are authorized to request any member to curtail a flight and request an airworthiness inspection is conducted should there be a safety concern.

1.12 CONDUCT

- i. Members shall conduct themselves in a manner that will not bring the SAHPA or SAHPA's ATO for paragliding or hand-gliding, or the sport into disrepute.
- ii. Members shall not make a nuisance of themselves to persons or property as per Part 91 SA CARS
- iii. By signing the application form members agree to abide and comply with the SAHPA constitution - Annexure A and Code of Ethics and Conduct - Annexure B

1.13 Standing COMMITTEES

i. Competition Committee

- This committee deals with all matters relating to competitive flying and will operate as per the Annexure C and feed back to the SAHPA chairperson
- Members serving in this committee must have flown competitively for at least 2 years

ii. Disciplinary Committee

- This committee deals with all matters relating to discipline and is only convened by the SAHPA chairperson as and when needed.
- These members serving in this committee will be persons of good standing within SAHPA



iii. Safety Committee

- This committee deals with all matters relating to safety and is only convened by the National Safety Officer as and when needed.
- Member serving on this committee will have a safety oriented back ground

PART 2: LICENCES – GENERAL

2.1 MEDICAL CERTIFICATE

- i. All pilots will hold an applicable medical be it a self-declared medical or a SACAA medical certificate for as per Part 67 SA CARS as applicable to their license for which they wish to utilize any license, rating or endorsement privilege.

2.2 AGE LIMITATIONS

- i. As per the applicable part in the SA CARS and the SAHPA TPM

2.3 NEW LICENCE APPLICATIONS

- i. As per the relevant or applicable part of the SA CARS and SAHPA TPM

2.4 FEES

- i. As per Part 187 of the CARS if applicable and as per the SAHPA's fee structure.

2.5 Foreign License Acceptance

Local Pilots with Foreign Licences

- In the event of a basic licence and membership application being received from a pilot already having attained a licence in a foreign country, the pilot will be required to pass a skills test and an oral evaluation of the appropriate theoretical exams pertaining to their licence grade by an applicably rated instructor Grade A or B or SO.
- In the case of a sport license/or endorsement or higher the latest SAHPA theoretical examination shall be written and passed, however SAHPA shall recognise FAI IPPI certifications/ card holders and consider conversions from the IPPI qualification levels.
- All applicants holding licences from non-FAI-recognised countries will be required to complete all applicable exams. A skills test may also be conducted at the instructor's discretion.
- Anyone wanting a TFI or instructor rating must fulfil all SAHPA requirements and as per the applicable SA CARS and SA CATS.

Visiting Foreign Pilots

- In the case of visiting pilots, temporary membership as per SAHPA requirements is required via our relevant systems, and the acceptance of their foreign licence maybe valid for a specified period only, after the temporary membership fee as prescribed by the SAHPA has been received. The fee shall include our mandatory 3rd party Insurance cover.

- If temporary membership status is granted foreign licence must be valid for the full period of the temporary membership / licence.
- A foreign pilot living in South Africa for a period exceeding 180 days is expected to apply for a SAHPA membership and convert their foreign paragliding or hang-gliding license.
- Foreign Instructor ratings do not apply unless the Instructor has been validated by the relevant SAHPA committee and has complied with the minimum requirements for the instructors rating as stipulated in the SA CARS and SA CATS.

Event based License validation

- Authorisation to fly is obtained by foreign pilot to participate only at the competition or event under the authority of the event organizer if the Pilot has complied with the SAHPA and competition licensing requirements.
- The organizer in an agreed period shall furnish to SAHPA, the pilots names, nationality, passport number, applicable license number and necessary correctly completed paperwork.
- SAHPA and the applicable authorities recognise the FAI IPPI card along with a valid foreign licence and /or FAI sporting license to allow the pilot to compete and fly in the event.
- SAHPA may delegate to reputable persons to conduct foreign license acceptance and document completion.
- Foreign pilots should be briefed and must at all times comply with local site requirements.

Free flight IPPI and foreign validations

- SAHPA and the applicable authorities shall accept all current foreign licenses accompanied by an FAI IPPI card.
- SAHPA's Safety Officers, Instructors and reputable persons at sites may check the pilots FAI IPPI card, foreign license, Sahpa membership (full or temporary) and validity. All Foreign pilots shall complete necessary membership application forms and pay the relevant fees. It is the foreign pilot's responsibility to ensure that they are aware of the applicable rules of the areas wherein they shall fly both land based and air based.
- The Sahpa membership provides the mandatory 3rd party insurance required to fly in South African airspace
- All foreign pilots shall make use of the SAHPA systems to enable this process and gather site information (at present this is an online system actuated via the SAHPA website).

PART 3: LICENCES – REQUIREMENTS

- i. As per Part 62 SA CARS or any applicable part and as detailed on the sahpa website and applicable forms and guidance documents

PART 4: LICENCES – RENEWALS

- i. As per Part 62 SA CARS or any applicable part and as detailed on the sahpa website and applicable forms and guidance documents

PART 5: ACCIDENTS AND MISSING PERSONS

- i. Members shall report all accident or incidents as per the accident reporting system and forms on the SAHPA website shall be utilised and the applicable documentation completed and submitted within 7 days. In the advent of accident or incident the relevant SAHPA accident and incident reporting system found on the SAHPA website
- ii. In the case of a fatality or severe accident the NSO, SAHPA office and AIID (details found on the SACAA website or AIID website as applicable) and the accident and incident reporting system found on the SAHPA website shall be utilised and the applicable documentation completed and submitted within 24 hours.
- iii. In the case of a fatality the body and equipment as far as possible must be secured and not moved, applicable photos should be taken and the police shall be contacted with details of the commanding officer of the scene recorded and submitted to SAHPA with relevant details of the death, time of accident and geographical position plus any other detail as is possible.
- iv. SAHPA and only SAHPA shall provide the official press release
- v. REPORTING COMPLAINTS As per Chapter 4 of the Aviation Act No13 of 2009
- vi. Accident investigation ; Should SAHPA or any of their members be appointed by AIID for any investigation, the applicable Act will be adhered to , in particular the following clauses wherein “ (a) The Aviation Safety Investigation Board, may, in the exercise of its powers and the performance of its functions in terms of this Act, the Constitution or any other law, enter into contracts for the purpose of obtaining the services of persons having technical or specialised knowledge of civil aviation or any other related field” and ‘The Aviation Safety Investigation Board with the concurrence of the Minister of Finance annually determine the remuneration, including reimbursement for travelling, subsistence and other expenses, of the persons referred to in paragraph (a).” . **SAHPA members shall not provide services or expertise to the AIID or the ASIB without compliance with this ACT and the permission from the ARO..**

Missing Pilots and Accident Procedure

- Report a suspected missing pilot immediately, even if you are not hundred percent

sure the pilot is missing.

- Visit www.sasar.gov.za for latest information
- Contact: the closest ATSU, SAHPA, The NSO, the club LSO
- Report to the local police
- Report to the Applicable authorities IE SACAA
- Note of the time you are reporting and write down the name of the police officer you make the report to. It is advisable to have a witness when you do this.

PART 6: COMMUNICATION

6.1 MEMBERSHIP COMMUNICATION

- i. Website postings on the SAHPA official website will be the main form of communication to members.
- ii. Internet and if applicable forums.
- iii. SAHPA will encourage all members to monitor the official SAHPA website page, where regular bulletins and safety notices shall be posted as applicable.

6.2 INSTRUCTOR, PERSON APPROVED COMMUNICATION

- i. as per 7.1.1 above
- ii. Instructors, CFI's, HOT's and Persons approved are expected to visit the SAHPA website at least once a month.
- iii. The Association Office bearers, Executive and General Committee will have full access and should monitor to all content placed on the SAHPA website and any other applicable SAHPA run forum.
- iv. SAHPA members will utilize the SAHPA systems as applicable.

6.3 COMMITTEE COMMUNICATION

- 6.3.1** Committee communication will be via any means accepted by the respective committee via the website facilities as necessary.
- 6.3.2** Distribution of this Manual of Procedure, Code of Ethics and Conduct, Quality Management System and any other important and regulatory documentation shall be published for download on the SAHPA official Website. Copies of the documentation are also available for inspection at SAHPA registered offices or if access is provided, within permission provided by SAHPA to access website documentation storage.

PART 7: SCHOOLS AND TRAINING

- i. AS per applicable part of the SA CARS and SAHPA TPM or other affiliated schools TPM's in the same discipline.

PART 8: DISCIPLINARY PROCEDURE

8.1 GENERAL

- i. SAHPA member have the responsibility to adhere to all the applicable rules and regulations as specified in the SA-CARS, SA-CATS, this manual of procedures and the SAHPA constitution/MOI (Annexure A) and Code of Conduct (Annexure B).

- ii. Executive committee members of SAHPA will use all possible means to oversight and motivate the members as necessary.
- iii. It is understood that all SAHPA pilots are responsible for themselves, their aircraft, their passengers, other people or property.
- iv. SAHPA pays for and takes out collective 3rd party insurance to cover all members of SAHPA.
- v. SAHPA's role is to motivate its member to take responsibility for the participation in the sport, as a member of SAHPA and in their actions, by means of communication and their information support systems.

8.2 REPORTING OF BREACH OF RULES AND REGULATIONS

- i. The following procedure shall be carried out when undertaking disciplinary actions against members of the Association for contravention of rules and regulations documented in this Manual of Procedures and/or the SAHPA constitution (Annexure A) and the ethics and code of conduct, (Annexure B).
- ii. SAHPA's role is to investigate any matter that is raised in written format, hold hearings and determine a course of action in cases of ethical, and/or Code of Conduct transgressions, i.e. in the event of a suspension this shall be undertaken against the person's membership of the association
- iii. Applicable authorities shall make available any decision including providing access or if necessary, provision of applicable evidence and minutes of the hearing and provide these to the authority if applicable.
- iv. An applicable authority may decide to take further action against a person, a license holder and any rating or an aircraft.
- v. Any transgressions against the regulations and/ or illegal activities shall be reported to the applicable authority, whom shall deal with the matter and if necessary report it to other applicable authorities.
- vi. SAHPA may not suspend or revoke any licenses.
- vii. All hearings and disciplinary actions shall be conducted in accordance with PAJA and all correspondence, meetings and hearings shall have minutes taken.
- viii. Individuals not part of the association that may be in contravention of the aviation rules and regulations and any other applicable regulations may be handed over to the applicable authorities to be dealt with and prosecuted if necessary.
- ix. Reporting will occur as follows:
 - a. A written and signed complaint shall be received by the Executive Committee of SAHPA within three months of any alleged infringement having taken place to enable SAHPA to investigate and decide whether disciplinary proceedings should be implemented.
 - b. Clubs taking action against a member for continuous breach of rules should provide documentation to back up the allegations and detail the warnings issued to the member and show that SAHPA was notified in writing.
 - c. The Chairman, after consultation with the executive committee shall determine the date of commencement with proceedings giving meetings dates, appoint members to serve on an ad hoc disciplinary committee (should one be required), to investigate the matter and be convinced by the evidence available that an infringement of the rules and regulations has taken place.
 - d. For any violation, at the discretion of the SAHPA executive committee, a verbal warning may be given followed by a written warning if necessary or if the infringement

warrants, hand alleged infringer immediately over to SACAA. If there is continued infringement then written notification of a Formal Disciplinary Hearing shall be communicated via our communication systems to the alleged offender normally via email or registered letter, giving at least 14 days' notice of the time, date, venue of the hearing and the charge/charges.

- e. The SAHPA executive committee will appoint a person to chair the disciplinary hearing.
- f. At a formal disciplinary hearing the charges will be described and against which rules there is contravention and the defendant is given the opportunity to offer their defense. The defendant is responsible for their own cost to attend the hearing.
- g. All meetings shall keep records of proceedings.
- h. If, after considering the presented and gathered evidence as well as any mitigating factors, the chairman of the disciplinary hearing shall provide its findings to the SAHPA Committee for ratification and if the defendant is found guilty, then an appropriate action/penalty will be applied.
- i. The SAHPA Committee shall hand a final decision on the matter to the relevant authority for record and/or further action.
- j. Should the defendant wish to take the matter further then, upon receipt of a written request from the defendant, within 7 days of the hearing, the SAHPA Executive Committee will review the case and make a final decision.
- k. The defendant may further appeal to the applicable authorities for review of the decision.
- l. The severity of the disciplinary action taken should take into account the seriousness of the offence, the consequences of the action, the defendant's past offences and the circumstances under which the offence took place.
- m. Corrective action should always be a first resort where possible, at the expense of the defendant if found guilty of the transgressions.
- n. Should the defendant not attend the formal hearing and/or not offer a valid excuse for his failure to appear, a decision will be handed down by the Chairman of the hearing, after review by the SAHPA Executive Committee, in the absence of the defendant, which will be binding.

8.3 GOVERNING REGULATIONS:

The procedures are governed by the CARS, CATS and SAHPA MOP and the penalties and regulation infringements will be as per Part 185 of the Civil Aviation Regulations.

8.4 RECORD KEEPING

SAHPA will keep record of all infringements notified to the ARO and rulings. If there is a gross violation or a part 185 prosecution has taken place regarding a member this will remain upon the pilot's record for a period of 10 years.

8.5 EXAMPLES OF OFFENCES THAT CAN BE HANDED OVER TO THE APPLICABLE AUTHORITIES FOR IMMEDIATE ACTION INTER ALIA, A PERSON:

- i. Hindering any inspection by an authorised person.
- ii. Providing false information to an authorised person.
- iii. Preventing any person from performing his duty or enjoying his privileges.

- iv. Operates, or authorises the operation of any aircraft which is not airworthy, without a valid SAHPA membership, without a license or without a valid medical.
- v. Acts in any way to affect the airworthiness of an aircraft.
- vi. Acts in any way to affect the safety of any person.
- vii. Operates an aircraft without the necessary license or who has obtained a license in a fraudulent manner.
- viii. Ignores or does not adhere to a decision made by an authorised person or body, such as SAHPA, also during a process of appeal or arbitration.
- ix. A person who knowingly and willfully does damage to 3rd party property or ignores rules pertaining to 3rd party property.

8.6 DISCIPLINARY ACTION

- 8.6.1 Disciplinary action by SAHPA should be consistent and follow the following process:
- a. First offence: verbal warning which will also be noted on members file
 - b. Second offence or non-compliance with the verbal warning: written warning via email or in the case that a member/non-member has no email address, a posted letter. Copy of this written communication will be placed on the members file.
 - c. Third offence or a Gross Violation: final written warning with immediate handover to Applicable authority for application of part 185 regulations with up to one-year suspension of membership.

8.7 CONTINUING VIOLATIONS

- 8.7.1 Should any member or non-member continue to contravene the rules and regulations and/or fail to respond to disciplinary action, then the executive committee shall report the matter to applicable authority for further action and may suspend membership permanently.

8.8 PENALTIES

- 8.8.1 Should any member or non-member commit offences as detailed this MOP, SAHPA will hand over the member or non-member to applicable authority immediately to be dealt with under part 185 of the CIVIL aviation regulations.

PART 9: PAERAGLIDER AND HANG GLIDER CLASSIFICATION AND OPERATION

- 9.1.1 SAHPA shall endeavour, in the interest of safety and compliance to that members are advised by complying with this manual that they are responsible to operate all gliders as prescribed in their applicable Aircraft Operating Manuals and the latest SA-CAR and/or SA-CATs.
- 9.1.2 SAHPA members shall operate paragliders and hang-gliders that are considered airworthy as per the applicable SA-CAR and SA-CATs. The manufacture dictates the operational limitations, be it for training or otherwise.
- 9.1.3 SAHPA makes use of the following categories within the ARO inclusive of wheeled undercarriages:
- Hang Glider

- Powered Hang Glider
- Paraglider
- Powered Paraglider
- Paratrike, Powered Paratrike and Powered parachute

9.2 Hang Glider Categories inclusive or powered and wheeled undercarriages

Training Hang Gliders	These must have forgiving flight characteristics and be undemanding to fly. Large, positive feedback must be experienced in both pitch and roll inputs. It is highly recommended that even on forgiving surfaces that the control frame base bar is fitted with large wheels to make up for any mistakes.
Beginner Hang Gliders	These gliders offer a significant performance increase with an associated increase in handling skills required but are considered suitable for experienced beginner pilots moving into the intermediate phase. Use factory recommended pilot experience guidelines
Intermediate Hang Gliders	These gliders offer a significant performance increase with an associated increase in handling skills required but are considered suitable for experienced beginner pilots moving into the intermediate phase. Use factory recommended pilot experience guidelines
Intermediate High Performance	These are intermediate gliders, which offer an incremental increase in performance and handling, which are suitable for intermediate pilots moving into the advanced phase. Use factory recommended pilot experience guidelines.
High Performance competition Hang Gliders	These high-performance gliders, which demand a high degree of pilot experience and skill suitable only for pilots. Use factory recommended pilot experience guidelines

- Hang Gliders and powered versions thereof inclusive or wheeled undercarriages do not require ATF's and do not require checking by an AP or other authority and all repairs /maintenance and modifications or

adjustments remain strictly the domain and control of the owner. SAHPA is not responsible for this checking or monitoring thereof.

9.3.1 Powered Paraglider parachutes *(inclusive or wheeled undercarriages)*

- Wings designed for Powered Paragliding and Paratrikes are certified or standardised by the EN 926 system for paragliders as well as new EARP and DGAC systems. The latter systems do not have categories, only Pass or Fail status. SAHPA accepts these standards and may accept other standards as necessary.
- The intended use or target pilot for these wings will be described in the user manual and/or on the manufacturer's web site by the manufacturer.
- Powered paragliders/parachutes inclusive of wheeled undercarriages airframes and engines do not require ATF's and do not require checking by an AP or other authority and all repairs /maintenance and modifications or adjustments remain strictly the domain and control of the owner. SAHPA is not responsible for this checking or monitoring thereof.

9.4.1 Paraglider Categories (these classification are superseded by the manufactures specification on what they may be utilised for) These aircraft

Trainee	AFNOR-Standard, LTF 1 or EN A
Beginner	AFNOR-Standard, LTF 1 & "Low end" 1-2 or EN A & Low end EN B
Intermediate	AFNOR-Standard, "High end" LTF 1-2 or High end EN B
Sport	AFNOR Performance, LTF 2 or EN C
High Performance	Sport, LTF 2-3 or EN D, competition, uncertified
Tandem	Dual place rated Certification or accepted by SAHPA

- SAHPA utilises the LTF and EN Paraglider classification list. Gliders flown on a Basic Licence may be further classified into the Beginner or Intermediate glider categories. For Higher level gliders, a Sport licence is required.
- Gliders not classified as per the above categories shall be graded by the National Safety committee and approved by the SAHPA Executive Committee. It is each member's responsibility to obtain a class rating, failure to do so will automatically default the paraglider/hang-glider into the High Performance/Competition Class rating.
- Pilots may only fly a glider class with the appropriate class license.
- The relevant HOT in conjunction with the NSO for paragliding shall have final say on any paraglider or hang-glider suitability for ab-initio training if there is a dispute.
- Paragliders do not require ATF's and do not require checking by an AP or other authority and all repairs /maintenance and modifications or

adjustments remain strictly the domain and control of the owner. SAHPA is not responsible for this checking or monitoring thereof.

9.5 PARAGLIDER OR HANG-GLIDER HANDLING

- 9.5.1 No glider shall be operated outside its performance limitations, as stated in the Glider Operating/manufacturer Manual. It will also not be operated outside the limitations as stipulated in the applicable SA-CARs and SA-CATs.

9.6 PARAGLIDER OR HANG-GLIDER MAINTENANCE PROCEDURES

- 9.6.1 The pilot is responsible for all maintenance and to ensure paragliders and hang-gliders are maintained. This is documented in the relevant pilot operations manual as the case may be.
- 9.6.2 Airworthiness checks by the pilot or whomever the pilot chooses, shall be carried out if the glider shows any flight characteristics differing from the standard.
- 9.6.3 Notwithstanding the above conditions, it needs be mentioned that it is the responsibility of the Pilot in Command ["PIC"] to ensure that their aircraft and applicable equipment is inspected during the pre-flight checks and that any defects are corrected.

9.7 PARAGLIDER AND HANG-GLIDER LOADING, WEIGHT AND BALANCE POLICY

- 9.7.1 SAHPA members shall ensure that all their gliders are loaded in the manner prescribed in the applicable manufacturer's manual.

9.8 MOTOR FUELING PROCEDURES

- 9.8.1 Fuelling should be done outdoors.
- 9.8.2 The engine shall be switched off, and the motor adequately secured.
- 9.8.3 The applicable fuel for the engine shall be used.

9.9 EMERGENCY PROCEDURES

- 9.9.1 All emergencies shall be reported to SO and if necessary, reported to SAHPA.
- 9.9.2 Demonstration and practicing of emergencies shall be executed at a safe height and in accordance with the relevant regulations, paraglider or hang-glider manufacturers manual.
- 9.9.3 No situation shall be simulated if the glider, the crew or any other person/s may be at risk of damage or injury.
- 9.9.4 Failures must be simulated in such a way, that they can be restored to normal flight configurations, simply and quickly.

PART 10: COMPETITIVE FLYING

Introduction

- The purpose of this section is to provide organisers hosting Provincial, National and International competitions with the necessary regulations and authority to carry out the task.

Validity

- Only competitions sanctioned by SAHPA and run according to this Section will be recognised by SAHPA.

Bids for staging competition

National and International Competitions

- Any Club or person wishing to stage a National or CIVL Category II Championship or higher, must submit a bid to do so to the SAHPA Executive by 31 October of the previous year, or six months in advance of the planned date of the competition, if the competition is planned for between 1 December and 28 February. The SAHPA executive reserves the right to decrease the time required to apply to hold a national competition.
- All bids for Category II Championships or higher must be sanctioned by SAHPA before application may be made to the CIVL and FAI via the AeCSA as the NAC.
- Application for Category II Championships or higher must be made to the CIVL at least six months before the proposed date of the competition.
- All participants in Cat 2 of higher competitions must compete with valid FAI sporting licenses unless otherwise arranged via FAI with their NAC.
- The bid must include details such as proposed dates, site information, and maximum number of competitors, competition format, organisers, cost and available sponsors. SAHPA will appoint an organiser to stage the competition after evaluation of the bids received, if any, and inform the members of the decision.

All competitions will comply with the AeCSA, FAI, SRSA and SASCOC requirements (as applicable) to be sanctioned.

- The organiser (via SAHPA) is requested to submit to AeCSA, for submission to SASCOC and SRSA approval, the following:
 - Endorsement letter from International Body confirming it is an authorised event. (In most cases the FAI confirmation)
 - Endorsement letter of financial support from the International body (If they are giving support or a letter from SAHPA to state they do are not receiving any financial support from the relevant international body)
 - Endorsement letter from host province.
 - Endorsement letter from host city.
 - Budget for the event indicating that the necessary funds are available for the successful completion of the event.
 - Supporting documents from sponsors endorsing support of the event or a letter confirming that there are no sponsors and the event will be funded out of attendance fees or the like.
 - Project plan/business Plan for any FAI CAT2 or CAT 1 competitions
 - Letter from SAHPA confirming the competition.

- Confirmation of adherence to FAI competition rules if a FAI CAT 1 or CAT 2 competition
- CAMU application and approval must be obtained
- Notam to be put in place as per the Airac cycle

Provincial Competitions

- Any organiser wishing to stage a Provincial competition must submit a bid to stage such a competition to SAHPA.
- The bid must include details such as proposed dates, site information, and maximum number of competitors, competition format, organisers, cost and available sponsors.
- SAHPA will appoint an organiser to stage the competition after evaluation of the bids received, if any, and inform the members of the decision.

Notification of competitions

- SAHPA committee will compile a competition calendar and publish it in the SAHPA Newsletter or official website and notify AeCSA.
- The organisers will be responsible for sending out notification and/or entry forms prior to the event.

Results

- It is recommended that the official results of competitions must be submitted to SAHPA immediately after the competition.
 - The results will be published.
 - If a FAI Category II or higher event results shall be submitted to the AeCSA as the NAC.

Entry

- Notification must be distributed to the members at least one month before the competition.
- The following information is required on the entry form:
 - Licence Requirements
 - Entry Fee
 - Deadline for registration
 - Venue, dates and time
 - Arrangements for transport/recovery/film/GPS
- A copy of the competition regulations must be available for all those requesting it.

Licence requirements

- Minimum licence requirements for Provincial and National and International Competitions a basic licence or higher.
- Organisers may give preferential entry to higher graded pilots.
- Minimum age for competitors is seventeen years old for South African competitors or Sixteen if the competitor is a student and is flying under direct observation of an instructor.
- Competitors that have valid sporting FAI licenses from their country and a valid license irrespective of age may compete.
- All competitors must have FAI sporting licences with the exception of local pilots participating in local competitions.

Competition regulations

- The aim of any SAHPA -sanctioned competition is for recreational activity only. Any claim for commercial loss due to a competition or task being cancelled or being invalid or due to a decision by the task committee or organisers will not be tolerated.
- The competition rules or regulations must be submitted to SAHPA Committee or relevant competition committee for the relevant discipline **Two (2) months** before the start of the competition for approval.
- Competition regulations must be available to all competitors at the start of the competition.
- Certain mandatory regulations regarding format, safety, etc, are stipulated this annexure, and must be adhered to and also contains suggested rules, which should be included in the competition regulations.

Accident emergency arrangements

- The organisers of an International competition shall provide on-site medics and ambulance facilities during the competition. Emergency arrangements for National and Inter-Provincial competitions will be at the discretion of the competition organisers unless otherwise arranged.

Take-off judges

- Organisers of Paragliding competitions shall ensure that appointed take-off judges or launch assistants are briefed on the importance of competitors carrying out a leg strap check and reserve handle check prior to obtaining launch clearance.

Selection of national teams

- The selection of National Paragliding Teams to compete in World Championships and other International events will be made by the SAHPA Paragliding competition committee.

Development of rules/scoring requirements for local competitions and the SAPC

In the case of paragliding the national competition committee chosen by the SAHPA executive will, after consultation via forums and other methods with the competition pilots in South Africa (i.e. the top 15 ranked pilots on the WPRS system) will put in place the formats, scoring criteria and national selection criteria along with suitable documentation will be ratified by the SAHPA executive.

Airspace permissions / approvals

- It is every pilot's responsibility to ensure they comply with airspace regulations.
- The competition organisers are responsible for implementing NOTAMS and informing nearby GA, clubs and applicable ATSUs of planned activities.
- Applications via the applicable authorities to CAMU must occur at least 180 days before the event to meet the AIRAC cycle.

PART 11 DISPLAY FLYING

SAHPA - Airshow procedures – Paragliding/ Hang Gliding

This document details in brief the operations, procedures, manoeuvres, equipment, safety considerations and ratings for paragliding pilots participating in an Air show in South Africa...

Display Flight Plan

A display flight plan must be submitted to the SAHPA Display committee for approval and list of details to be included in flight plan. Display flights at any event other than a SAHPA event, must be conducted in accordance with the applicable Display rules, and within the approved Display area, and completed within the allotted time slot.

If Aerobatics form part of the display, then the aerobatic portion of the display must be explained (briefly), and the sequence will then go on the members file inclusive of the Display Authorization as well as the Aerobatic Rating issued by the applicable authority on recommendation by the SAHPA display Committee (if applicable). Any display rating may only be issued once SAHPA has given the consent by issuing a Competence endorsement.

Grandfathering of Display examiners that performed these checks and issued/ signed off Competence Certificates (now competence endorsements) for display ratings in the past may be retained by those holders if they supply acceptable proof.

Pilot Qualification

Any Pilot wishing to participate in an Air Show in South Africa must be approved by SAHPA, and issued with a Competence endorsement. The following minimum requirements must be met by the pilot. Some are launch technique specific, so if for instance the pilot will be doing a winch launch, he or she does not need to meet the other launch technique requirements. The SAHPA Display Flight subcommittee has the right not to issue a competence certificate to a pilot that they deem, for whatever reason to be unsuitable for display flights, even if they meet the minimum requirements for the endorsement below.

Aerobatic Display requirements for PG

1. Min. Years flying: 3
2. Min. flights Logged: 600 (1200 for advanced aerobatics)
3. Min. hours Logged: 300 (600 for advanced aerobatics)
4. Licence held for Min. one (1) year prior to display
5. SAHPA Registered SIV Course completed
6. D-Bag exit: Min 6 successful prior deployments done
7. Rollover (Balloon): Min 3 successful prior deployments done
8. Winching: Min 40 tow launches logged prior to display flight
9. Min. one (1) year incident / accident free record
10. Approved by SAHPA Display committee (Competence endorsement issued)

Standard Display requirements for PG

1. Min. Years flying: 2
2. Min. flights Logged: 200
3. Min. hours Logged: 100
4. Club licence held for Min. one (1) year prior to display
5. Winching: Min 20 tow launches logged prior to display flight
6. Min. one (1) year incident / accident free record
7. Approved by SAHPA Display committee (Competence endorsement issued)
8. Appropriate licence held for craft flown

Aerobatic Display requirements for HG

1. Min. Years flying: 3
2. Min. flights Logged: 600 (1200 for advanced aerobatics)
3. Min. hours Logged: 300 (600 for advanced aerobatics)
4. Club licence held for Min. one (1) year prior to display
5. Drop (Balloon): Min 3 successful prior deployments done
6. Winching: Min 40 tow launches logged prior to display flight
7. Min. one (1) year incident / accident free record
8. Approved by SAHPA Display subcommittee (Competence endorsement issued)

Standard display HG

1. Min. Years flying: 2
2. Min. flights Logged: 100
3. Min. hours Logged: 100
4. licence held for Min. one (1) year prior to display
5. Winching: Min 20 tow launches logged prior to display flight
6. Min. one (1) year incident / accident free record
7. Approved by SAHPA Display committee (Competence endorsement issued)
8. Appropriate licence held for craft flown

Launch / Deployment techniques

Brief descriptions of each launch technique with safety requirements and considerations.

i Winching

Two types of winches may be used, the pay-out or pull-in type, pay-out is recommended because of its quick and simple operation. Several pilots may be towed aloft simultaneously, in parallel or in series.

ii Balloon Drop (Rollover)

Min. exit altitude 2000' AGL.

Glider must be gathered with entire leading-edge outwards / exposed, NOT in a 'rosette'

In the case of Hang-gliders the dropping mechanism must have a manual release mechanism that can be activated by either the pilot or a member aboard the balloon

iii D-Bag

D-Bagging can be done from many different low airspeed aircraft, i.e. Helicopter, three-axis or weights-shift microlight, Paratrike, Paramotor, Tandem Paraglider and Balloons. The aircraft type must have been used for launch by the pilot prior to the display flight. If the pilot will be using a D-Bag with releases, the system must be fitted with a backup to avoid accidental low altitude release. Should the pilot for any reason not release from the aircraft, the system must be set up in a way that the launch aircraft can land safely with the pilot in the hanging position. It should be noted that most helicopter skids are not approved for load bearing. Helicopter pilots flying with the pilot suspended below the aircraft should hold a sling rating on type. If a higher airspeed (in excess of 40knots) aircraft is to be used, the deployment technique must be successfully demonstrated Display committee designee for approval.

Min. exit / release altitude: 2000' AGL.

Max recommended release airspeed: 30kt

iv Aerotow

This can be done using a low airspeed craft like a trike or three axis microlight or a Paratrike. The tow line must have a pay-out winch on either the pilot or tow craft.

Demonstration to SAHPA Display designee is mandatory.

Aerobatic (Often referred to as Acro) Manoeuvres PG

New Paragliding Aerobatics or Acro manoeuvres are invented every year. Synchronized flying of two or more pilots is allowed, with paragliders or hang-gliders flying in close formation or even touching during manoeuvres. Recommended minimum altitudes for curtailing aerobatic manoeuvres 150ft AGL but may be lowered to ground level if approved by the SAHPA Display committee for certain manoeuvres.

Airshow Flight Plan

To be submitted to SAHPA for approval and issue of competence certificate.

(Each pilot must submit separate flight plan)

General

Venue: _____

Date: _____

Pilot: _____

Other pilots in display team:

1.) _____

2.) _____

3.) _____

Pilot

Total Hours: _____

Total Flights: _____

Licence held: _____

Date of issue: _____

Years Flying: _____

Equipment

Glider: _____

(Specify make, model, size, certification, colours)

Harness: _____

(Specify make, model, and certification)

Reserve: _____

(Specify make, model, size, and certification)

Smoke System: yes / no Duration: _____

Launch Technique: Winch / Balloon Drop / D-Bag / Other (Please Specify) _____

Previous experience on this technique: _____

Launch Aircraft: _____

Pilot of Launch Aircraft: _____

Attachment Technique: _____



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Flight Description

Flight Sequence, Manoeuvres, etc.

Notes: _____

For Official Use

Approval Granted: _____

Approved by: _____

Aerobatics: yes / no

Notes:

PART 12 SITE AND SITE RULES

Control of Sites

- The regular sites are contained in AIP 5.5 but due to the type of aviation SAHPA members participate in are not limited to only these sites. Any site may be flown at the discretion of any pilot or instructor.
- All SAHPA members and those with ATO's may utilise the SAHPA sites and the privileges afforded in accordance with this MOP and their respective TPM's.
- All SAHPA registered sites that are covered under the SAHPA site insurance must be accessible for all current, appropriately licenced / experienced members and schools, as long as all site and landowner rules are adhered to.
- SAHPA will require written land owner permission on the initial application of the site registration.
- SAHPA shall review the list of flying sites and notify the relevant authorities if there is a change of position affecting the current AIP's on an annual basis.
- The flying and discipline at sites in any area will be managed by the local Club or Clubs or schools or landowners.
- Any pilot who breaches any applicable rules may be prohibited from further flying at any site.
- Should a pilot not belong to any Club, only then may SAHPA be approached with a written complaint concerning the pilot.
- SAHPA committee may investigate the allegations if necessary and take necessary actions, where required as per SAHPA's disciplinary procedures.
- Where no Clubs manage sites in an area, the owner of the site or the local person or pilot dealing with the site, may approach SAHPA with a written complaint concerning any pilot. SAHPA Committee may appoint a Safety officer or suitable senior pilot to investigate allegations and make recommendations for disciplinary actions, where and if necessary.
- Access to any site may be controlled by the landowner(s), or their delegates, or a club or person who has negotiated the access with the landowner(s).
- Site fees, where applicable, may be collected by the landowner, or where a local club has negotiated a specific system for their members and/or controls the site. Any site fees collected by clubs should be paid to the landowner or collection body timeously.
- Where the landowner controls the access to the site, they will assume responsibility for ensuring that all pilots are licensed, unless he has specifically appointed a local Club or person to assume this duty.
- All persons or bodies who have site control are duty bound to keep SAHPA informed of any safety issues or ownership changes or fee requirements to allow the SAHPA third party insurance to cover pilots flying at these sites.
- The relevant authority is ultimately responsible for the checking of licenses.

Grading of Sites

- SAHPA flying sites are listed on the SAHPA website.
- Sites shall be initially graded by the local Club, SO; or School; or Instructor in the area managing the flying at the site having regard for:
 - Local weather characteristics (prevailing wind direction, wind strength, weather stability etc);
 - Type of launch (steep, cliff, razor-back, abort area) ;
 - Landing zone (distance to and size of landing zone, abort areas, obstacles & hazards);
 - Terrain (obstacles, turbulence, property); or
 - Any other subjective dangers or potential property damage.

Disagreement on grading

- Should a dispute arise as to the grading for any particular site, then the SAHPA safety committee shall determine the grading.

Site Rules

- Rules at regular flying sites are required to be drawn up having regard for landowner requirements, SAHPA rules and regulations, and general flight safety.
- Site rules and guidelines should be published / implemented by those managing the site.
- These rules should be made available to the flying public on applicable websites or site notice boards as the case may be, however additionally on the SAHPA website and the Club website.

Site Registration

- All regular flying sites utilised by members for all types of flying should to be registered with SAHPA and if necessary placed in the relevant AIP as necessary as per the SAHPA protocols. It is the responsibility of the local Clubs or the landowner to ensure that this information is submitted to the SAHPA office.
- Once registered, sites may be added to the SAHPA site insurance schedule.
- Any new site should be registered with SAHPA office within 30 days of being opened as a regular flying site.
- The following information should be provided:
 - Contact person for flying at the site
 - Controlling body or person details
 - Landowner details
 - Rules applicable to the site
 - Grading (suitable for training, Basic (default), Sport (advanced site)
 - Co-ordinates

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- Should any of the above details change, SAHPA shall be informed immediately.
- Local emergency numbers
- Should any of the above details change, SAHPA should be notified immediately.
- Notwithstanding the above, SAHPA members are allowed to fly all Class G airspace, with landowner permission as applicable.
- Sites will be reviewed on an annual basis and the ENR updated accordingly via the SACAA channels.



LIST OF ANNEXURES

ANNEXURE A – Constitution

ANNEXURE B – Code of Conduct and ethics

ANNEXURE C - South African Aerotow Manual



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ANNEXURE A –Constitution and or MOI

(PDF document found on the SAHPA website but included is the printed version provided to the applicable authorities)

REPUBLIC OF SOUTH AFRICA

COMPANIES ACT 1973

ARTICLES OF ASSOCIATION OF A COMPANY

NOT HAVING A SHARE CAPITAL

Section 60(1)
Regulation 18

REGISTER: 2005/028858/08 COMPANY:

The South African Hang Gliding And Paragliding Association
(Association Incorporated Under Section 21)

A. The Articles of Table A contained in Schedule I to the Companies Act, 1973, as amended, shall not apply to the Company.



B. The Articles of the Company are as follows:

1. DEFINITIONS

In these Articles, unless the context otherwise indicates - "THE ACT" shall mean the Companies Act No. 61 of 1973, as amended from time to time,

"THE BOARD" shall mean the Board of Directors of Incorporated Under Section 21) established by Article 9,

"THE COMPANY" shall mean (Association Incorporated Under Section 21).

"DIRECTOR" shall mean a member of the Board of Directors of (Association Incorporated Under Section 21).

"MEMBERS" shall mean the subscribers to the Memorandum of Association and such other persons as the Directors shall admit to membership in accordance with these Articles.

"MEMORANDUM" shall mean the Memorandum of Association of (Association Incorporated Under Section 21).

"THESE PRESENTS" shall mean the Memorandum and Articles of association and By-Laws of (Association Incorporated Under Section 21).

Words importing the masculine gender include females.

When a provision of The Act is referred to, the reference is to such a provision as amended by statute.

Words in the singular include the plural and words in the plural include the singular.

Expressions defined in the Act shall have their meanings so defined.

2. MEMBERSHIP

2.1 The subscribers of the Memorandum of Association shall be members of the Company.

2.2 The Board may by resolution in its sole discretion:

2.2.1 Elect any person as a member

2.2.2 Refuse to admit any person as a member

2.2.3 Suspend as existing member.



and the Board shall not be obliged to give reasons for a resolution in terms of this Article.

2.3 The Company shall retain at its registered office a Register of Members of the Company as provided in Section 105 of The Act. The Register of Members shall be open to inspection as provided in Section 113 of the Act.

2.4 No person elected in terms of Article 2.2.1 above shall become a Member unless and until his name has been entered in the Register of Members.

2.5 Should a member wish to withdraw from the Company he shall give written notice to the Company at its registered office of his intention so to do, and he shall cease to be a Member thirty days after receipt by the Company of such notice. He shall, nevertheless, for a period after he ceases to be a member, remain liable in terms of the undertaking set out in Clause VIII of the Memorandum of Association.

2.6 The rights of a Member shall be personal, shall not be transferable, and shall terminate

2.6.1 on his death

2.6.2 on his becoming of unsound mind

2.6.3 on his suspension, or

2.6.4 on his ceasing to be a Member in terms of Article 2.5

3. GENERAL MEETINGS

3.1 A Meeting of the Company shall be either the Annual General Meeting or a Special General Meeting.



3.2 The Annual General Meeting shall be held:

3.2.1 in the case of the first such meeting, within a period of 18 (eighteen) months after the date of incorporation of the Company;

3.2.2 thereafter within not more than nine months after the end of every ensuing financial year of the Company; and

3.2.3 within not more than 15 months after the date of the last preceding such meeting of the Company.

3.3 A Special General Meeting may be held at any time and may be called by two or more members representing not less than 25% (twenty five percentum) in number of the members.

4. **NOTICE OF GENERAL MEETINGS**

4.1 An Annual General Meeting, and a General Meeting called for by the passing of a Special Resolution, shall be called by not less than 21 (twenty-one) clear days notice in writing. Any other General Meeting shall be called by at least 14 (fourteen) clear days notice in writing. The notice shall be exclusive of the day on which it is served or deemed to be served and on the day for which it is served or deemed to be served and on the day for which it is given, and shall specify the place, the day and the hour of the meeting and shall be given in the manner hereinafter mentioned or in such other manner, if any, as may be prescribed by the Company in General Meeting, to all such persons as are, under these Articles entitled to receive such notices from the Company;

provided that a meeting of the Company shall, notwithstanding the fact that it is called by shorter notice than that specified in this Article, be deemed to have been duly called if it is to be agreed by a majority of the members having the right to attend and vote at the meeting, being a majority holding not less than NINETY FIVE PERCENT (95 %) of the total voting rights of all members.



5. The accidental omission to give notice of any meeting to any particular member or members shall not invalidate any Resolution passed at any such meeting.

- 5a. No business shall be transacted at any General Meeting unless a quorum of members is present at the time when the meeting proceeds to business. Save as herein otherwise provided, four members present in person, shall be a quorum.

6. PROCEEDINGS AT GENERAL MEETINGS

- 6.1 The Chairman of the Board shall preside at every General meeting. In the absence of the Chairman, his powers and duties shall devolve upon the Vice Chairman. In the event of both the Chairman and the Vice Chairman being absent from the General Meeting, the Members present shall elect a presiding officer from among their number.

- 6.2 The Annual General Meeting shall deal with and dispose of all matters prescribed by the Act, including;

6.2.1 the receiving and consideration of the Annual Financial Statements;

6.2.2 the consideration and approval of the Report of the Board;

6.2.3 the appointment and level
of remuneration of an Auditor;

6.2.4 the election of the Directors for the following year;

6.2.5 the consideration of any other matter of which due notice has been given.

- 6.3 A member who intends to bring a motion before a General meeting shall, not less than 21 (twenty one) days before the day appointed for the said General Meeting, serve upon the Company at its registered office a notice in writing signed by himself and one other member containing the proposed resolution. Upon receipt of such notice, the Secretary shall, in any case where the notice is



received before the notice of the General Meeting is issued include it in the notice of the General Meeting, and shall in any other case issue as quickly as possible to the members notice that such resolution will be proposed.

- 6.4 The Chairman may with the consent of any General Meeting at which a Quorum is present (and shall if so directed by the meeting) adjourn the meeting from time to time and from place to place, but no business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place. When a meeting is adjourned, the provisions of Article 192(2) of the Act shall apply mutatis mutandis to such adjournment.

7. VOTING AT GENERAL MEETINGS

- 7.1 Each member present at a General Meeting shall be entitled to a vote and shall have 1 (one) vote. No Member may be represented at a general meeting by a proxy.
- 7.2 At a General Meeting a resolution put to the vote of the Meeting shall be decided on a show of hands unless a poll has (before or on the declaration of the result of the show of hands), been demanded by at least three Members present in person and entitled to vote, or by a Member or Members representing not less than one tenth of the total number of Members having the right to vote at a General Meeting, and unless a poll is so demanded, by a declaration by the Chairman that a Resolution has on a show of hands, been carried, or carried unanimously or a particular majority, or lost an entry to that effect in the book of proceedings of the Company shall be conclusive evidence of the fact, without proof of the number or proportion of the votes recorded in favour of or against such resolution. The demand for the poll may be withdrawn.
- 7.3 If poll is duly demanded it shall be taken in such a manner as the Chairman directs, and the result of the poll shall be deemed to be the resolution of the Meeting at which the poll was demanded.



A circular notary seal for Adriaan Jacobus Swart, Notary Public, Gauteng. The seal is stamped in blue ink and includes the text 'ADRIAAN JACOBUS SWART', 'NOTARY PUBLIC', and 'GAUTENG'.

7.4 In the case of an equality of votes, whether on a show of hands or on a poll, the Chairman of the Meeting shall be entitled to a second or casting vote.

7.5 A poll demanded on the election of a Chairman or on a question of adjournment, shall be taken forthwith. A poll demanded on any other question shall be taken at such time as the Chairman of the Meeting directs. The demand for a poll shall not prevent the continuation of a meeting for the transaction of any business other than the question upon which the poll is demanded.

8. **MANAGEMENT OF THE COMPANY**

The business of the Company shall be managed by the Board who may exercise all the powers of the Company as are not by the Act or by these Presents required to be exercised by the Company in General Meeting. The Board shall exercise such powers subject to the provisions of the Act and these Presents.

9. **BOARD OF DIRECTORS**

9.1 The Board shall consist of not less than 2 (two) Members, but a maximum of 7 (seven) Members.

9.2 Should the number of Directors for any reason be reduced below 3 (three), the continuing Director may act for the purpose of increasing the number of Directors in terms of Article 10.3

10. **ELECTION OF DIRECTORS**

10.1 The election of Directors shall be by ballot. However, if the candidates validly nominated for election to the Board are not more in number than 3 (three) the candidates nominated shall be deemed to have been duly elected.

10.2 Unless the candidate for election to the board be a retiring director, a nomination of a member for the election of the board shall:



10.2.1 be made in writing;

10.2.2 be signed by at least two Members other than the candidate;

10.2.3 be given to the Secretary not less than 21 (twenty-one) days before the day appointed for the Annual General Meeting at which the election is to take place; and

10.2.4 be accompanied by a written statement signed by the candidate indicating his willingness to stand for election.

10.3 The Board shall have the power at any time, and from time, to appoint a Member as a Director, either to fill a casual vacancy or as an addition to the Board, subject to the provisions of Clause 9.1 A Director so appointed shall hold office until the next following Annual General Meeting of the Company and shall then be eligible for election without nomination.

11. ALTERNATE DIRECTORS

The Board may nominate a Member to act as alternate to a Director whilst the Director is absent or unable for any reason to act as a Director. An Alternate Director shall act subject to the terms, qualifications and conditions applicable to a Director.

12. ROTATION OF DIRECTORS

Each Director shall retire from office at an Annual General Meeting subsequent to that at which he was elected but shall be eligible for re-election.

13. REMOVAL AND DISQUALIFICATION OF DIRECTORS

13.1 A Director shall cease to be a Director if

13.1.1 by notice in writing to the company he resigns his office



13.1.2 he ceases to be a member;

13.1.3 he is absent without the prior or subsequent official leave of the board from two consecutive meeting's notice of which he has been given;

13.1.4 he becomes insolvent;

13.1.5 he becomes of unsound mind;

13.1.6 he is directly or indirectly interested in any contract with the company and fails to declare to the board the nature of his interest or;

13.1.7 without the consent of the board holds an office of profit under the company.

13.2 The Company may by ordinary resolution remove any Director before the expiration of his period of office.

13.3 Subject to the provisions of Section 234 to 241 inclusive of the Act, a Director shall not vote in respect of any contract or proposed contract with the Company in which he is interested, or any matter arising therefrom,

14. PROCEEDINGS

14.1 The Board may meet, adjourn and otherwise regulate its meetings, as it shall think fit provided that it shall meet at least twice a year.

14.2 A Meeting of the board shall be convened at any reasonable time upon request by a Director and such Meeting shall be held Within 14 (fourteen) days of the date of request. Notice of a Meeting of the Board shall be given orally or in writing to all Directors a reasonable period of time before such a meeting.



- 14.3 The quorum for a Meeting of the Board shall be three Directors present and entitled to vote. No business shall be transacted by the board unless a quorum of members is present at the time when the Meeting precedes to business.
- 14.4 At the Meeting of the Board following the Annual General Meeting, the Directors shall elect from among their numbers a Chairman, Vice Chairman, a Secretary and a Treasurer. A vacancy in any of such office before the term of office has expired may be filled by the Board from among its numbers and such appointment shall hold good until the next following Annual General Meeting.
- 14.5 The Chairman of the Board shall preside at every Board Meeting. In the absence of the Chairman his powers and duties shall devolve upon the Vice-Chairman. In the event of both the Chairman and the Vice-Chairman being absent from a Board Meeting, the Directors present shall elect a presiding officer from among their number.
- 14.6 Each Director present at a meeting of the Board shall be entitled to vote and shall have one vote.
- 14.7 Questions arising at a Meeting of the Board shall be decided by a majority of the votes recorded. In a case of an equality of votes the Chairman of the Meeting shall have a second (or casting) vote.

15. **COMMITTEES**

- 15.1 The Board may appoint committees from among the Members and may a Quorum thereof and delegate any of its powers to any such committees, and make any rules for regulating the proceedings of the committees. The Chairman or his nominee from time to time shall be ex-officio a Member of all Committees.
- 15.2 Subject to the approval of the Board, each such committee shall have the right to co-opt such person as it may think fit to be a member of such Committees.



16. SECRETARY

16.1 The Board may appoint an Executive Officer of the Company who shall be a Secretary of the Company and who shall act as Secretary of the Board.

16.2 The Secretary shall not be a Director.

17. GENERAL PROVISIONS

17.1 All acts done by the Board, or any person acting as a Director shall, notwithstanding that it afterwards be discovered that there was some defect in the appointment of any such Directors or persons acting as aforesaid or that they or any or them are disqualified, be as valid as if every such person had been duly appointed and were qualified to be a Director.

17.2 Subject to the provisions of the Act, the members of the Board, Auditors, Secretary and other officers for the time being of the Company, and every of them and every of their executors and Administrators, shall be indemnified and secured harmless out of the assets of the Company from and against all actions, costs charges, losses, damages and expenses which they or any of them, their or any of their Executors or Administrators shall or may incur or sustain by or by reason of any act done, concurred in or admitted in or about the execution of their duty in their respective offices, except such (if any) as they shall incur or sustain by or through their own willful neglect or default respectively, and subject as aforesaid, none of them shall be answerable to the acts, receipts, neglects or defaults of the other or others of them, or for joining in any receipt for the sake of conformity, or for any bankers or other persons with whom any monies or effects belonging to the Company shall or may be lodged or deposited for safe custody or for insufficiency or deficiency of any security upon which any monies of or belonging to the Company shall be placed out or invested, or for any loss, misfortune or damage which may happen in execution of their respective offices or in relation thereto, unless the same shall happen by or through their own willful neglect or default respectively.



18. ACCOUNTING RECORDS

18.1 The financial year of the Company shall be **FEBRUARY EACH YEAR.**

18.2 The Company shall keep such Accounting records as are necessary fairly to present the state of affairs and business of the Company and to explain the transactional and financial position of the Company including:

18.2.1 records showing the assets and liabilities of the Company;

18.2.2 a register of fixed assets showing the respective dates of acquisition and the cost thereof, depreciation if any, the respective dates of any disposals and the consideration received in respect thereof; and

18.2.3 records containing entries from day to day in sufficient detail of all cash received and paid out of the matters in respect of which receipts and payments take place.

18.3 The books of account shall be kept at the registered office of the Company or at such other place or places as the Directors think fit, and shall always be open to the inspection of the Directors.

18.4 The Directors shall from time to time determine whether and to what extent and at what times and places and under what conditions or regulations the accounts and books of the Company or any of them shall be open to the inspection of Members, not being Directors, and no Member (not being a Director) shall have the right of inspecting any account or document of the Company except as conferred by statute or authorised by the Directors or by the Company in General Meeting.

18.5 The Directors shall in respect of every financial year of the Company cause to be made Annual Financial Statements in accordance with Section 286 of the Act and shall lay them before the Annual General Meeting of the Company in respect of that year.



ABRAHAM JACOBUS SWART
NOTARY
PUBLIC
* GAUTENG *

18.6 A copy of the Annual Financial Statements which are to be laid before the Company in Annual General Meeting, shall not less than 21 (twenty one) days before the date of the meeting be sent to every Member of the Company. Provided that this Article shall not require a copy of those documents to be sent to any person of whose address the Company is not aware.

19. AUDIT

An auditor shall be appointed in accordance with the Act.

20. NOTICES

20.1 A notice may be given by the company to any member personally or by sending it by post to him at his registered address or (if he has no registered address within the Republic of South Africa) to the address if any within the Republic of South Africa supplied by him to the company for the giving of notices to him;

20.2 A notice by post shall be deemed to have been served at the time when the letter containing the notice was posted.


21. MINUTES

Minutes shall be made of all resolutions and proceedings of General Meetings of the company and of meetings of the board and committees.









Signatories to articles of association		Form CM 44C	
Particulars of subscribers	Date and signature	Particulars of witness	Date and signature
<p>1. Full names <u>PAUL PUTTER</u></p> <p>Occupation <u>CHAIRMAN</u></p> <p>Residential address <u>100B ALLCOCK STREET, COLBYN, PRETORIA, 0083</u></p> <p>Business address <u>4TH FLOOR, STINKHOUT BUILDING, TUINHOF COMPLEX, 265 WEST AVENUE, CENTURION, 0046</u></p> <p>Postal address <u>P O BOX 9241, CENTURION, 0046</u></p>	<p>11 MAY 2005</p> <p><i>Paul Putter</i></p>	<p>Full names <u>PETRO VAN RENSBURG</u></p> <p>Occupation <u>SECRETARY</u></p> <p>Residential address <u>134 1ST AVENUE, FONTAINEBLEAU, RANDBURG, 2194</u></p> <p>Business address <u>PENDORING OFFICE PARK, 299 PENDORING DRIVE, BLACKHEATH, 2195</u></p> <p>Postal address <u>P O BOX 2737, CRESTA, 2118</u></p>	<p>11 MAY 2005</p> <p><i>P. van Rensburg</i></p>
<p>2. Full names <u>MARYNA STRYDOM</u></p> <p>Occupation <u>VICE CHAIRMAN</u></p> <p>Residential address <u>5 CASTLE HEIGHTS, EARLS AVENUE, WINDSOR EAST, 2194</u></p> <p>Business address <u>265 OXFORD ROAD, ILLOVO, 2196</u></p> <p>Postal address <u>5 CASTLE HEIGHTS, EARLS AVENUE, WINDSOR EAST, 2194</u></p>	<p>11 MAY 2005</p> <p><i>Maryna Strydom</i></p>	<p>Full names <u>PETRO VAN RENSBURG</u></p> <p>Occupation <u>SECRETARY</u></p> <p>Residential address <u>134, 1ST AVENUE, FONTAINEBLEAU, 2194</u></p> <p>Business address <u>PENDORING OFFICE PARK, 299 PENDORING DRIVE, BLACKHEATH, 2195</u></p> <p>Postal address <u>P O BOX 2737, CRESTA, 2118</u></p>	<p>11 MAY 2005</p> <p><i>P. van Rensburg</i></p>
<p>3. Full names <u>JOHN REID</u></p> <p>Occupation <u>TREASURER</u></p> <p>Residential address <u>29 MARISE CRESCENT, SUNNINGHILL, SANDTON, 2195</u></p> <p>Business address <u>RAND REFINERY LTD, REFINERY ROAD, INDUSTRY WEST, GERMISTON, 1401</u></p> <p>Postal address <u>P O BOX 1181, RIVONIA, 2128</u></p>	<p>11 MAY 2005</p> <p><i>John Reid</i></p>	<p>Full names <u>PETRO VAN RENSBURG</u></p> <p>Occupation <u>SECRETARY</u></p> <p>Residential address <u>134, 1ST AVENUE, FONTAINEBLEAU, 2194</u></p> <p>Business address <u>PENDORING OFFICE PARK, 299 PENDORING DRIVE, BLACKHEATH, 2195</u></p> <p>Postal address <u>P O BOX 2737, CRESTA, 2118</u></p>	<p>11 MAY 2005</p> <p><i>P. van Rensburg</i></p>
<p>4. Full names <u>LAURA NELSON</u></p> <p>Occupation <u>PARAGLIDING INSTRUCTOR</u></p> <p>Residential address <u>51A HIGH ROAD, EASTLEIGH, EDENVALE</u></p> <p>Business address <u>51A HIGH ROAD, EASTLEIGH, EDENVALE</u></p> <p>Postal address <u>P O BOX 8587, EDENGLLEN, 1613</u></p>	<p>11 MAY 2005</p> <p><i>Laura Nelson</i></p>	<p>Full names <u>PETRO VAN RENSBURG</u></p> <p>Occupation <u>SECRETARY</u></p> <p>Residential address <u>134, 1ST AVENUE, FONTAINEBLEAU, 2194</u></p> <p>Business address <u>PENDORING OFFICE PARK, 299 PENDORING DRIVE, BLACKHEATH, 2195</u></p> <p>Postal address <u>P O BOX 2737, CRESTA, 2118</u></p>	<p>11 MAY 2005</p> <p><i>P. van Rensburg</i></p>

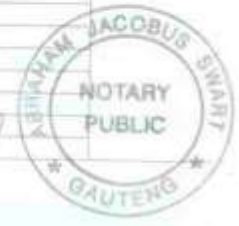
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NOTARY PUBLIC
GAUTENG

Signatories to articles of association		Form CM 44C continued	
Particulars of subscribers	Date and signature	Particulars of witness	Date and signature
<p>1. Full names: <u>JOHAN ANDERSON</u></p> <p>Occupation: <u>HANG GLIDING AND MICRO-LIGHT INSTRUCTOR</u></p> <p>Residential address: <u>777 WHITE, WILDERNESS, 6560</u></p> <p>Business address: <u>777 WHITE, WILDERNESS, 6560</u></p> <p>Postal address: <u>P.O. BOX 610, WILDERNESS, 6560</u></p>	<p>11 MAY 2005</p> 	<p>Full names: <u>PETRO VAN RENSBURG</u></p> <p>Occupation: <u>SECRETARY</u></p> <p>Residential address: <u>134, 1ST AVENUE, FONTAINEBLEAU, 2194</u></p> <p>Business address: <u>PENDORING OFFICE PARK, 299 PENDORING DRIVE, BLACKHEATH, 2195</u></p> <p>Postal address: <u>P.O. BOX 2737, CRESTA, 2118</u></p>	<p>11 MAY 2005</p> 
<p>2. Full names: <u>TRACEY KING</u></p> <p>Occupation: <u>CREDIT DIRECTOR</u></p> <p>Residential address: <u>38 MONTE FALCO, SUNSET DRIVE, PINESLOPES, 2120</u></p> <p>Business address: <u>BLOCK A, DDB, SOUTH AFRICA, 82 WESSELS ROAD, RIVONIA, 1685</u></p> <p>Postal address: <u>POSTNET SUITE 221, PRIVATE BAG X51, BRYANSTON, 2021</u></p>	<p>11 MAY 2005</p> 	<p>Full names: <u>PETRO VAN RENSBURG</u></p> <p>Occupation: <u>SECRETARY</u></p> <p>Residential address: <u>134, 1ST AVENUE, FONTAINEBLEAU, 2194</u></p> <p>Business address: <u>PENDORING OFFICE PARK, 299 PENDORING DRIVE, BLACKHEATH, 2195</u></p> <p>Postal address: <u>P.O. BOX 2737, CRESTA, 2118</u></p>	<p>11 MAY 2005</p> 
<p>3. Full names: <u>GERHARD BEUKES</u></p> <p>Occupation: <u>PROPERTY INVESTOR AND DEVELOPER</u></p> <p>Residential address: <u>21, 3RD BEACH, CLIFTON, CAPE TOWN, 8005</u></p> <p>Business address: <u>FORWARD STRATEGY T/A SUNSTAYS.COM, 21, 3RD BEACH, CLIFTON, CAPE TOWN, 8005</u></p> <p>Postal address: <u>SUITE 77, PRIVATE BAG X7, SEAPOINT, 8060</u></p>	<p>11 MAY 2005</p> 	<p>Full names: <u>PETRO VAN RENSBURG</u></p> <p>Occupation: <u>SECRETARY</u></p> <p>Residential address: <u>134, 1ST AVENUE, FONTAINEBLEAU, 2194</u></p> <p>Business address: <u>PENDORING OFFICE PARK, 299 PENDORING DRIVE, BLACKHEATH, 2195</u></p> <p>Postal address: <u>P.O. BOX 2737, CRESTA, 2118</u></p>	<p>11 MAY 2005</p> 
<p>4. Full names: _____</p> <p>Occupation: _____</p> <p>Residential address: _____</p> <p>Business address: _____</p> <p>Postal address: _____</p>		<p>Full names: _____</p> <p>Occupation: _____</p> <p>Residential address: _____</p> <p>Business address: _____</p> <p>Postal address: _____</p>	

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ANNEXURE B – Code of Conduct and ethics

Code of Conduct and Ethics

SAHPA has been established in order to:

- a) Promote, encourage and advance the sport of foot launched flying* amongst all South African residents regardless of sex, race and religion.
- b) License and monitor the activities of its members.
- c) Foster and publicize the technical development of flying equipment and techniques.
- d) Represent the interests of its members in consultation with Government agencies and other regulatory authorities.
- e) Expand the number of flying sites and protect them against the introduction of any unfounded, inappropriate and unnecessary airspace limitations.
- f) Institute and enforce the ethics of foot launched flying as regards pilot responsibility within a framework of minimum regulation
- g) Record, investigate, evaluate and report on all safety related matters either involving or affecting its members
- h) Co-ordinate and supervise competitions within the various codes
- i) Maintain pilot ranking lists within each code
- j) Select the National Team(s) and officials
- k) Undertake fund raising and marketing activities

* The generic term “Foot Launched Flying” currently includes Hang Gliding, Paragliding, the powered derivatives of both of these and Powered Parachuting inclusive of wheeled undercarriage.

2. Code of Ethics and Conduct

SAHPA expects its officials and members subscribe to an ethical code of conduct based upon the three tenets of beneficence (the duty to do good), non-maleficence (the duty to do no harm) and justice (offenders to be treated fairly and required to make good their wrongs and face the same sanctions for the same transgressions).

A code cannot cover every conceivable contingency and although it can be reasonably proscriptive in so far as the behaviour of officials is concerned, in the case of individual pilots one can only provide a guideline as to the type of behaviour that they should aspire to.

3. Application

The code should apply equally to all levels of the organisation from employed staff, committee members (both elected and co-opted), occasionally appointed officials such as Meet Directors and competition administrators such as those appointed ad hoc to the Task, Safety and Appeals Committees, as well as, School Staff, Instructors, Club Committee Members, Pilots and family members.

4. SAHPA Officials.

SAHPA Officials are expected to execute their respective portfolio responsibilities with alacrity, integrity and in accordance with the above principles by adhering to the following at all times:

- a) Maintain exemplary standards of personal, professional and ethical conduct in fulfilling all aspects of the position of SAHPA Committee Member and/or Officer, including while interacting with SAHPA Members and all external organizations and individuals.
- b) Act in the best interest of SAHPA while avoiding actions or decisions that could either bring the sport into disrepute or be unethical, illegal or contrary to the public interest.
- c) Communicate openly, honestly and in acceptable time frames, while respecting confidentiality and individual rights, with SAHPA members and any other individuals or organizations having a relationship with SAHPA.
- d) Ensure that all regulations, guidelines and licensing requirements are made freely available, applied, regularly reviewed and amended.
- e) Investigate, evaluate, act and report on any safety, technical, procedural or disciplinary matters brought to their attention timeously, scrupulously in accordance with current regulations and devoid of favouritism and unencumbered by any external influences.
- f) Exercise proper, legal and appropriate financial responsibility in all dealings with or on behalf of the SAHPA through maintaining accurate accounts and asset registers as well as being pro-active in pursuing debtors.
- g) Disclose any potential conflict of interest situation resulting from involvement in SAHPA activities, and where appropriate, exclude themselves from involvement in such activities.
- h) Keep privileged information confidential, except in circumstances when doing so would result in a breach of regulations or ethical conduct.
- i) Actively encourage diversity throughout the activities of the Society. Refuse to engage in or sanction discrimination on the basis of race, gender, age, religion, national origin, sexual orientation, physical appearance, or disability.

5. Pilots

Pilots are the most visible of all SAHPA members as regards exposure to public scrutiny and should therefore:

- a) Ensure that they are properly licensed for their class of glider.
- b) Maintain their logbooks accurately and up to date.
- c) Comply with all site regulations with regards to airspace restrictions, access controls, payment of fees and the avoidance of littering and smoking.
- d) Treat members of the public and other pilots with respect and common courtesy.
- e) Behave at all times in a manner that reflects credit to the sport.
- f) Report any safety related event accurately and timeously.
- g) Follow the correct protocol when either addressing the media or raising issues which require to be addressed by the sport's national or international authorities.

6. Tandem pilots

Tandem pilots, whether amateur or professional, have the added responsibility of ensuring the safety of their passengers and to this end should, in addition to the above:

- a) Apply a much greater safety test to conditions before flying with passengers.
- b) Meticulously maintain their flying equipment.
- c) Thoroughly explain the risks of flying to potential passengers.

7. Instructors

Instructors also have additional responsibilities in introducing new members to the sport and must therefore ensure that they:

- a) Emphasize safety at every opportunity.
- b) Only progress students who have comfortably achieved the required skills and knowledge taught in the earlier stages of instruction.
- c) Ensure that the applicable training curriculum is fully adhered to as a minimum and to extend this whenever a student's ability and flying conditions are conducive to such.
- d) Maintain their personal training qualifications and strive to advance their own proficiency, knowledge and teaching skills.

Special note

Becoming a member of SAHPA is upon the proviso that the pilot will abide and actively live up to this code of conduct. The pilot accepts that they will be held accountable for any deed or action that does not comply and this may result in eviction after following the SAHPA disciplinary process. The resultant is that the member will no longer be a member of the applicable ARO and therefor may not exercise the privileges granted in part 94

NB: Eviction or suspension from organisation automatically results as per part 94 that the member may not exercise their privileges of a license or rating and the regulatory authorities will be informed thereof to take action as required.

It may also constitute handing over such cases applicable for investigation and applying Part 185 legislation as per South Africa's Civil Aviation regulations.

Annexure C

ANNEXURE H South African Aerotow Manual

Hang Gliding

SOUTH AFRICAN AEROTOW



MANUAL

South African Aerotow Manual: Table of Contents

Section 1.

Introduction

1.1 General Guidelines

Aero towing involves the participation of more than one pilot from different organisations namely MISASA and the SAHPA. It is therefore very important that both parties understand the procedure that each will be using during the towing operation.

It is the tug pilot's responsibility to make sure that the pilot being towed understands what is required, and that he has the appropriate rating or has been briefed correctly for the training process. Failure to do this could well result in injury or death.

This manual has attempted to be as thorough as possible but does not waive either pilots right to use common sense should situations occur which aren't covered within.

This manual has also been compiled using current information and is based on current glider performance; it is intended to be an open document allowing for change as necessary.

MISASA and SAHPA welcome any advice, information or assistance, which will help to make aerotowing safer or more efficient.

1.2 Preliminary Recommendations

Criteria for safe and efficient Aerotowing:

- 1 Constant direction.**
The direction of the tug should remain as constant as is possible throughout the tow. Turns should be made as slowly and as smoothly as possible. The Hang Glider pilot should follow the line of the tug at all times. On launch, the tow line should be no more than 20 degrees off centre.
 - 2 Constant tension.**
The tension on the tow line must remain essentially constant throughout the towed flight.
 - 3 Centre mass attachment.**
The towing force must be attached as closely to the centre of the mass of both the tug and glider as possible.
 - 4 Gradual transitions.**
Any changes to tow tension or direction should be of a gradual nature.
 - 5 Reliable release.**
Both parties must have an accepted and reliable release.
 - 6 Weak link.**
The system must include an infallible weak link at both ends of the tow line.
 - 7 Safe learning method.**
The system must include a safe method for learning and gradually advance the student from one level of experience to another.
 - 8 Adequate power.**
The tug must have adequate power to maintain a safe mode of flight while towing.
 - 9 Capable crew.**
The system must be operated by crew who are familiar with all aspects of the operation and are of a number to ensure that the operation functions properly.
 - 10 Reliable communication.**
The system must provide a means whereby the pilot of both craft can reliably communicate their instructions to each other and to the rest of the crew.
 - 11 Suitable environment.**
The system must be operated from a site and within meteorological conditions which will be conducive to safe operations throughout the tow, and in the event of an emergency.
- “If at any time either pilot is not happy with the progress of the tow, they should end the tow immediately!!!”**

Section 2. Operational Requirements

2.1 Aerotow Operations

Aerotow launch and in flight operations and procedures are specified in the SAHPA Aerotow Manual, and must be complied with at all times.

2.2 Pilot Qualifications

2.2.1 Tow Rating (Tug)

No person shall act as pilot-in-command of a microlight engaged in towing operations unless that person:

- Is the holder of a current MPL endorsed with the towing micro-light type.
- Has completed a minimum of 100 hours as P1 in a microlight aircraft; or 2. 50 hours as P1 if the pilot has a Hang Gliding rating of B or higher, provided that the tug used is a trike.
- Has satisfactorily completed, within the last 24 months, an oral and practical test, conducted by either the holder of a C or higher rated Instructor with a Tug endorsement, OR the holder of a SAHPA Hang Gliding Instructor with considerable aerotow experience. The syllabus and standards for this test are contained in the "SAHPA Aerotow Manual".
- The granting of a Tow rating shall be entered into the pilot's logbook and signed by the Instructor as per SAHPA Operations and procedures manual section 3.

Tow Rating – Recent Experience Requirements.

No person shall act as pilot-in-command of a Microlight engaged in towing operations unless that person complies with point 2.2.1 (c) requirements in the SAHPA Aerotow Manual.

Tow Rating Privileges:

The holder of a tow rating is authorised to tow Hang Gliders subject to the following limitations:

- a. The Hang Glider pilot being towed must comply with all necessary SAHPA requirements and approvals.
- b. The Microlight and towing apparatus being used must comply with the provisions of this manual.
- c. The towing operations must comply with the provisions of this Manual.

2.2.2 The Hang Glider Pilot.

- a. The Hang Glider Pilot must be a current member of SAHPA and have an Aerotow endorsement
- b. Hold a minimum of novice rating and be under the direct supervision of an appropriately rated SAHPA instructor whilst undergoing training to gain an Aerotow endorsement as per SAHPA Operations manual section 3.

NOTE: “Direct supervision” means the detailed on site personal direction and supervision of the aerotow operations.

“At no time should Aerotowing be conducted with both an inexperienced Tug Pilot and an inexperienced Glider Pilot!!!”

2.2 Duty Pilot

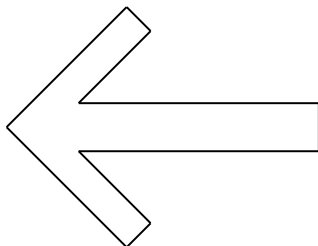
For each towing operation there shall be a duty pilot appointed from the people available on the day.

The duty pilot should preferably have a Hang Glider Aerotow endorsement or Aero tow Tug endorsement and be familiar with the site.

The duty pilot's responsibilities are:

- a) To co-ordinate and manage towing procedures for the day including:
- b) To ensure that both the tug pilot and glider pilot have been briefed and know what procedures have been adopted and endeavour to have all pilots adhere to these procedures.
- c) To determine the most appropriate launch area, the flight plan and the circuit and landing patterns they will use.
- d) To co-ordinate and liaise with other operators which may be using the same site, and to ensure that all mixed operations are carried out safely with due regard for other airspace users.
- e) When operations are being carried out at an airfield which may be in use by general aviation aircraft:-
- f) Ensure a gliding operations signal is in place; and to ensure that the appropriate VHF radio channel is monitored and any incoming traffic notified of towing operations.
- g) The duty pilot can be the tug pilot or towed pilot.

NOTE: A "gliding operations signal" is in the form of an arrow placed flat on the ground adjacent to the wind direction indicator. This symbol is in the shape illustrated.



Section 3. Equipment

3.1 The Tug

Tow aircraft requirements.

Any microlight used for towing operations shall:

- a. Be a Class 1 or Class 2 Microlight aircraft, but may NOT carry a passenger during the towing operations.
- b. Be either Type A (weight shift) or a Type B (3 Axis) Microlight only.
- c. Be capable of straight and level flight at 32 knots (35 mph) T.A.S.
- d. Be capable of a climb rate of 350fpm with the towed aircraft attached.
- e. Be capable of taking off and climbing to a height of 50 feet A.G.L. within 85% of the available runway length with the towed aircraft attached.
- f. Be fitted with a mirror of such a size and in such a position that the pilot can see the towed aircraft at all times.
- g. Be fitted with towing apparatus that conforms to the provisions of this Manual.

3.2 The Hang Glider

The hang glider must have a sufficient speed range to tow safely at speeds up to 35 knots.

It is recommended that wheels are fitted to all gliders involved in towing operations especially for pilots under Aerotow training.

Towing of low performance hang gliders at speeds in excess of 28 knots is not recommended unless a suitable bridle is used.

Towed Aircraft Requirements

The Pilot of a Hang Glider under tow shall comply with all requirements as laid down by SAHPA. Only certified hang gliders are to be used.

3.3 Releases

3.3.1 Tug releases

Tow Rig Requirements – Release Mechanism

All tow rigs shall contain a release mechanism at the forward end AND rearward ends, the forward end release mechanism being operable by the tug pilot and the rearward end release mechanism being operable by the towed pilot. Each release mechanism will:

- a. Be easily operable up to 1.5 times the tow line breaking strain.
- b. Be easily operable under conditions of no load (i.e. slack line).
- c. Be subject to testing prior to the first tow of any day.

3.3.2 Glider releases

All releases **MUST** release at any angle, and at any load. All releases must be as infallible as possible and only release upon pilot activation. Bridles, which automatically release in the event of a nose-in are acceptable but

the release cord must be attached to the pilot's shoulder and not the base bar.

There are many types of releases on the market today and it is highly recommended that only accepted and proven releases be used. Ask your Instructor if you are in doubt.

3.4 Tow bridles

3.4.1 Bridle construction.

Bridles should be constructed from non-stretch rope of around 4mm diameter. This is necessary to prevent injury to the pilot in the event of a weak link break or release under tension. A bridle with too much stretch can flick back to the pilot if the load is suddenly released.

Seamless stainless rings can be used so as to prevent any unnecessary wear to the bridle. Small aluminium karabiners are proving most popular. If at all possible, soft hard type rings can be used to avoid injury.

3.4.2 Types of bridles (refer Appendix 1 for diagrams)

- a. The usual, one to one bridle is most often used. In this configuration the bridle comes down from the keel, passes through the ring to which the release is attached and is then attached to the harness. The distance from the harness attachment point to the apex should be approximately two meters. This V type bridle is the most desirable when aerotowing as it helps to relieve the bar pressure. Low performance or intermediate gliders will find that this is the only system that will allow them to tow safely.
- b. The most common form of bridle used in aerotowing is just a short V bridle connected to the shoulders of the harness only. A weak-link is fitted to one end of the bridle with the release to the other end. This is also known as the "pro tow" method.

"When aero towing the bridle ropes attached to the harness pass over the control frame and not underneath as is usual with ground towing."

3.5 Attachments

3.5.1 The Tug Attachment.

Tow Rig Requirements – General

All tow rigs will be inspected and approved in writing for the specific Microlight aircraft to which they are fitted, by **EITHER** a MISASA approved person with towing experience, the manufacturer of the micro-light **OR** a SAHPA approved person.

It is recommended that tow rigs manufactured or approved by the aircraft manufacturer be used where possible.

Tow Rig Requirements – Bridle

Any bridle arrangement used during Aerotowing operations shall:

- a. Provide for the towing point to be on or near the thrust line of the towing aircraft.
- b. Be unable to foul the towing aircraft's propeller under any circumstances.
- c. Be unable to foul or hinder the towing aircraft's control system under any circumstances.

3.5.2 Glider attachments

Most harnesses have some form of tow loops sewn on from new, some older harnesses may not but they are easily retro fitted. They should be sewn through the main webbings as there can be a lot of force on them, which may damage the harness if sewn through fabric only.

For ground towing, these are usually attached to the lower webbings but for aerotowing, it may be more convenient to have them sewn to the upper webbings or even the shoulder straps.

If a chest mounted release is to be used it should be attached to the upper webbings or shoulder straps only.

If a V bridle is being used then the keel attachment point should be Forward of the king post and hang point. The glider manufacturer will have specific distances from the king post that provides the safest tow position. The attachment point should be restrained from moving further forward by a rope around the king post.

3.6 Weak Links

3.6.1 Glider weak link

The weak link should have a breaking load never exceeding 1g of all up weight. It is commonly accepted that weak-links for aero towing are much less than 1g. This is normally around 80 to 90 kgs dependant on the pilot weight. Weak link strengths of 60 kg for aero towing have proven to be more than adequate!

It is recommended that each pilot should have his own weak link of the appropriate strength. (Important! See tug weak links!)

Always test the breaking strain of a weak link to ensure that you are using the correct line.

It is recommended that the weak link should be between two rope rings that are soft in nature about 150mm apart. Care must be taken when using steel rings.

3.6.2 Tug weak link

Tow Rig Requirements – Tow Rope

Any rope used to connect the towing and towed aircraft during aerotow operations shall:

Contain a weak link at each end with the forward link being 10%-20% stronger than the rearward link. The forward link shall have a maximum breaking strain of 100kg or around 85% of the towed Hang Glider and pilot weight, whichever is lesser.

3.7 Rope Types

The most suitable rope for aerotowing is 4 – 5 mm polypropylene or polyester. These ropes are cheap and are available from most fishing or marine outlets. They are normally twisted which means that they must have a swivel at both ends. This is to prevent the two lines twisting around the release and preventing it from working properly. A heavy duty shark swivel is acceptable for this job.

All tow ropes should be stretched out on the ground before use and checked for any knots or wear which may cause its failure while in use.

A brightly coloured streamer attached at about 1/3rd the length of the tow line will help in its retrieval once released from the tug, and will also enable the tug pilot to see where the glider pilot is if he moves out of the field of vision of the rear vision mirror as the streamer will most likely still be in the field of vision. A small drogue chute can also be used. The chute must be positioned approximately 5 m from the hang glider along the rope.

Tow Rig Requirements – Tow Rope

- a. Be a minimum of 50 metres and a maximum of 100 metres in length.
- b. Be of a minimum breaking strain of 150 kgs and be of non-stretch material.
- c. Contain a drogue device situated at least 75% to the rear of the rope and of sufficient size to prevent excessive droop when towed unattached.

3.8 Launch Trolley (Dolly)

The launch trolley has become the most preferred method of take-off while aerotowing. It is essentially a triangular trolley with two castoring front wheels and one fixed rear wheel, and a rear support for the keel of the glider.

The trolley has a seat on either side for the base bar to sit in and has a cord running the width of the trolley under the base bar. The glider pilot holds on to this until he feels the glider and trolley start to lift off.

The height of the rear support can be adjustable and should be set at such an angle that the glider lifts off at about the best L/D speed.

The wheels should be free running and be large enough to allow for a fast acceleration.

“The maintenance of the trolley is just as important as that of the tug.”

3.9 Protective Eye Wear

It is recommended that protective eye wear should be worn by the glider pilot to prevent injury from the rope or bridle in the event of a high load weak link or line break.

3.10 Knife

It is recommended that the glider pilot carries a sharp knife, preferably a parachuting type hook knife. This should be in an accessible place on the harness to be used in the rare event of a release failure.

Section 4. Communication

4.1 Radio procedures

The use of radios is recommended for all towing operations, particularly whilst training.

As radios can be unreliable, both pilots must be conversant with all forms of communication, including signals.

When using radios, the following guidelines should be used.

- a. When a tow is under way, other pilots should refrain from using the tow channel.
- b. When towing in groups, different frequencies should be used by each tug and glider combination. The pilots should be referred to by name or call sign.
- c. While aerotowing it is prohibited to permanently activate the microphone. This is so that the tug pilot can communicate with the glider pilot.
- d. The duty pilot shall have a radio and will relay commands in the event of a radio failure or if the glider pilot has no radio.
- e. The following commands are to be used:

Glider pilot	"Pilot ready"	The glider pilot is ready to start.
Glider pilot	"Take up slack"	Put some tension on the line.
Glider pilot	"All out All out All out"	Smoothly apply full power.
Glider pilot	"Stop Stop Stop"	Stop the tow and if air born, release.
Glider pilot	"Releasing"	Self-explanatory
Tug pilot	"Tug ready"	These commands are self-explanatory.
1 Tug pilot	"Move up"	
1 Tug pilot	"Move down"	
1 Tug pilot	"Move left"	
1 Tug pilot	"Move right"	
1 Tug pilot	"Release"	

These are all the commands that are required to be used. They should be repeated at least twice to ensure that the message is understood.

The tug pilot should not start if he has not heard "All out" three times.

It is not advisable for the tug pilot to say much more during the tow as his commands may well be drowned out or misunderstood due to the noise of the motor under full power.

4.2 Signals

The following signals are to be used if radios are not being used. It is recommended that they be used in conjunction with radios to prevent any form of confusion.

4.2.1 Ground signals (refer Appendix 2 for diagrams)

Ready

One out stretched arm to any side, is used to indicate that the pilot is ready to start the towing sequence.

Take up slack

A one under arm wave from side to side across the body. Keep waving until the slack is completely taken up.

The tug pilot should keep one eye on the mirror to see when the line is tight.

All Out

A one arm wave above the head. Keep this going until it is obvious the message has been received, or if foot launching, the hang glider pilot may give the command by waving one leg out to one side.

Stop

One arm held stationary above the head.

Wait

Two out stretched arm is used to indicate that there will be some delay before the next phase.

Release

One out stretched arm moving up and down. This can be performed by the duty pilot or the glider pilot on the ground or in the air.

4.2.2 Signals to be used by the tug pilot (refer Appendix 3 for diagrams)

Tow higher

A stationary arm pointing out and up at 45 degrees.

Tow lower

A stationary arm pointing down at 45 degrees.

Move left

A stationary arm pointing left.

Move right

A stationary arm pointing right.

Release

An up and down waving arm.

Section 5. Procedures

5.1 Site considerations

The strip must be smooth enough to allow the tug to take off and land safely without risk of incurring damage, and must be of adequate length for the performance of the tug. The strip should be no less than 3 times the normal take off roll length for the given aircraft if flown solo, and be clear of obstacles and hazards.

5.2 Weather considerations

Training flights for either the tug pilot or glider pilot should be carried out in light wind conditions free from thermal or rotor activity.

As towing experience is gained so can the wind strength be increased.

Cross wind launches are permitted providing a launch trolley is used.

Aerotowing in strong or overly turbulent conditions should be avoided.

It is not recommended to foot launch in winds of less than 5 knots.



5.3 Training considerations

5.3.1 Tug pilot training

The tug pilot will already be an experienced pilot, preferably with some hang gliding experience.

Before the first tow, the tug pilot will be briefed with exactly the same procedures as the glider pilot.

5.3.2 Glider training

Before commencing towing, trainee pilots must be thoroughly briefed on the procedures and techniques to be used.

Pilots must gain an understanding of the following:

- a. The flight plan and any predetermined circuit procedures,
- b. Emergency procedures,
- c. All signals that are used,
- d. The pilot actions that are required whilst launching, towing and releasing.

Prior to being towed:

- a. The pilot shall have had at least one tow demonstrated to him/ her.
- b. The pilot shall have passed the SAHPA aero tow theoretical examination
- c. Although there is no height restriction for the first aerotow, the glider pilot may become nervous so it is recommended that the first tow is only to 1000'.

“Only Instructors with Aerotow experience are permitted to supervise Aerotow training operations, and they must endorse the pilot’s log book, or rating card when the acceptable standard has been achieved as per SAHPA Operations Manual section 3.”

5.4 Launch procedures

5.4.1 Tug launch procedures

When the command is given to take up the slack, the tug pilot will apply enough power to roll the unit forward at a slow pace, keeping an eye on the mirror and the power on, until the line is tight.

When the “all out” command is given, the tug pilot will smoothly apply full power and endeavour to get the tug airborne as quickly as possible. Once airborne, the tug pilot should maintain a comfortable speed for the first 2-300 ft. After this height a slower airspeed may be selected to make the tow more comfortable for the glider. (Initial climb should be at best climb angle)

If the tug pilot lets the nose up too quickly he will rise above the glider before the glider has time to react. This will allow the rope to go slack and the glider pilot to become very low. The result of this can be a weak link break and a sharp rearward pull on the tug.

“Be prepared to release the rope if in any doubt”. Power **must** be kept on until you have visually ascertained that the glider pilot has either

released or is under a successful tow. If the tow launch was successful maintain power and continue the climb.

While undertaking the launch procedure, it will not be possible to constantly look in the rear vision mirror, as you will be watching where you are heading. Special care must be taken to do a similar take off every time so that the glider pilots know what to expect.

5.4.2 Glider launch procedures

To avoid delays, pilots should carry out all pre-flight checks prior to being connected to the tow line. These checks should include the standard pre-flight checks as well as checks to ensure radio, bridle, release and weak link are all in order.

When using the trolley launch method, an additional pre-flight check to ensure that the harness and variable geometry ropes are located to prevent them snagging on the launch dolly. Check the dolly is lined up.

Once the pilot is connected to the tow line a final check with the tug pilot or duty pilot should be made.

Once ready for launch, the glider pilot should give the “take up slack” call. Once slack has been taken up the glider pilot gives either the “stop” command or if the pilot is happy to proceed with the launch, the “all out” call. For foot launching, the glider pilot should allow the rope to pull the pilot and glider – do not run before the pull of the tug is felt, taking quick short steps whilst offering very slight resistance to the tow force.

When using the launch trolley, initially the glider pilot should push back on the base bar so as not to be pulled forward through the A frame. This is done just to break the surface friction of the dolly until the dolly is accelerating. At this stage the pilot should pull himself through the control frame to the trim position (bearing in mind that trim will be at tow speed). Care must be taken to ensure that the glider does not rise from the trolley prematurely.

5.5 Procedures under tow

5.5.1 Tug procedure while towing

Once a successful tow is under way, the main concern is then to keep a watch out for other aircraft and to keep an eye on the position of the glider pilot, giving hand signals as necessary. The appropriate call by radio to the air frequency must be made.

If the glider pilot gets **high**, it may be necessary to **decrease** speed by **raising the nose, not by reducing power.**

If the glider pilot gets **low**, it may be necessary to **increase** speed by **lowering the nose, and keep full power.**

There is no need to announce a turn but they should be made slowly and smoothly with constant angle of bank. If the turn is too tight, the tow line will go slack, or worse the glider may be catapulted into a lock out situation. The weak link should break if a lock out occurs but it is best left untested in this situation.

Care must be taken not to take the glider too far down wind as the pilot may be unable to get back to the landing area should the weak link break.

5.5.2 Glider procedure under tow

Glider pilots should fly level at between 10 and 20 feet above the ground to avoid prop wash from the tug. The glider will lift off before the tug.

When foot launching, to ensure being able to achieve tow speed immediately after launch the pilot must quickly transfer his hands to the base bar, this should be done smoothly to ensure that sufficient control is maintained.

As soon as the tug lifts off and starts to climb, the glider pilot must ease the bar forward immediately to ensure climbing with the tug. The glider pilot should remain in a position referenced by the tug pilot, this is usually slightly lower and directly behind the tug. As a guide, the glider pilot can ascertain the correct station by keeping the wing of the tug on the horizon.

If the glider is too high the glider pilot should pull in until the correct relative position has been regained. Conversely glider speed should be reduced to move up to the correct station.

The tug pilot may request the glider to alter position by giving the appropriate signals.

When turning while under tow, the glider pilot should maintain a position slightly inside the track of the tug, so that the glider can fly at an acceptable speed.

Glider speed varies with tow position in turns, with the inside slower and the outside faster. The glider pilot will tend to point at the tug due to the tow tension and should fly the glider so that the line of the keel always points directly at the tug.

5.6 Release procedures

5.6.1 Tug after release

Once the glider has released, the tug pilot must accelerate forward and establish again that the release has been activated before starting a descending turn. The turn direction is usually left for the tug and right for the glider.

Before landing, the tug should do a low pass over the strip into wind and release the tow line.

Always check to see that the tow line is falling away from the tug. The tug can now land safely.

If a strip is being used of such a length that the tug can land safely without the risk of catching the tow line on any obstacles, then it is acceptable to land with the line still attached.

5.6.2 Glider release

The release procedure is to increase speed to reduce line tension and then release. Ensure you have released then look right for other traffic before commencing a right turn.

It is advisable to turn your head to one side as you release just in case the bridle flicks back. This will not be a problem with chest mounted releases.

“Always watch the rope fall away from the glider to ensure that the line has released.”

5.7 Emergency procedures

5.7.1 Line or weak link breaks

A line or weak link break will not adversely affect the tug, but the pilot should check that the hang glider is no longer attached to the tug before reducing power.

If the weak link breaks at a low level, the hang glider pilot should continue in the direction of the tow and not attempt to make it back to the launch site. Only if the hang glider has ample height, should an attempt be made to get back to the launch site.

If the line breaks at low level, then the hang glider pilot should release what is left of it right away. It may be that the weak link on the tug has gone, in which case you will have the full length of line attached to the hang glider.

If however the line breaks with good height, then the line should be carried back over the launch site and then released. You will make no friends if the line is lost.

5.7.2 Release failure

If the tug pilot can not release the tow line once the hang glider pilot has released, then he should land up the strip as far as possible to ensure that the line does not catch on any obstacles.

In the event of a release failure, the hang glider pilot should try to communicate to the tug pilot that he cannot release by extending and dangling his legs below his harness, the tug pilot will then be able to release from his end.

The glider pilot can then choose to land with the rope attached, (assuming that the landing area is long enough) or cut the rope away.

5.7.3 Lockouts

A lockout occurs when the glider being towed moves off the direction of the tow.

This will usually increase the tow tension, thus aggravating the situation. If this continues the weak link should break, if not, the tug pilot will either reduce power or release the tow line depending on how serious the situation has become.

The glider pilot can recover by speeding up and weight shifting back toward the centre line. If the hang glider pilot maintains the pitch and nose attitude up he will not be able to recover without releasing first. Once released, full control will return.

Notes:

- **Instructor to endorse pilot's logbook or rating card only upon completion of the SAHPA and/or MISASA aero tow checklist requirements.**
- **Original copy of the exam must be posted to SAHPA or MISASA with the checklist and appropriate fee if any within 7 days of completion thereof.**

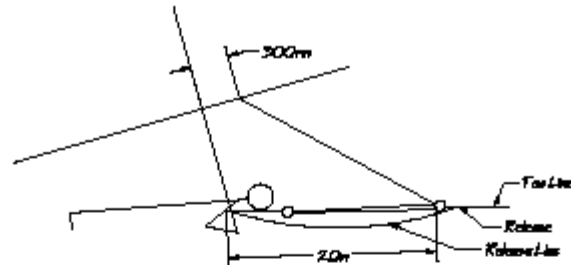


SAHPA MANUAL of Additional PROCEDURES

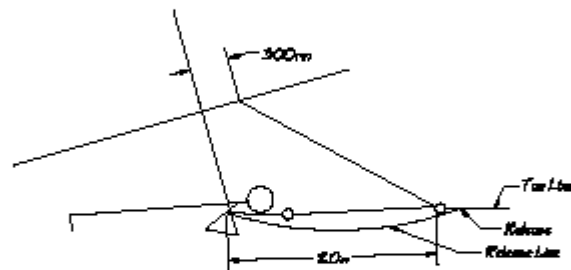
- **It is the responsibility of the endorsing officer to post the required documentation within the prescribed period.**
- **It is recommended that pilots keep copies of all documentation for their own records.**

Appendix 1

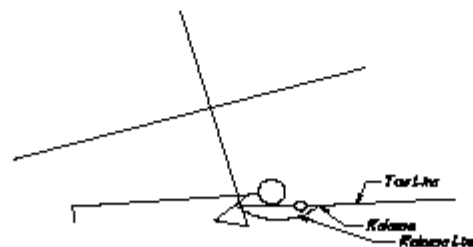
Bridle types: The two to one bridle has been replaced with the more popular use of the one to one bridle. This is especially so for inexperienced pilots flying slow gliders. Attachment points vary according to glider and pilot experience.



Two to One Bridle



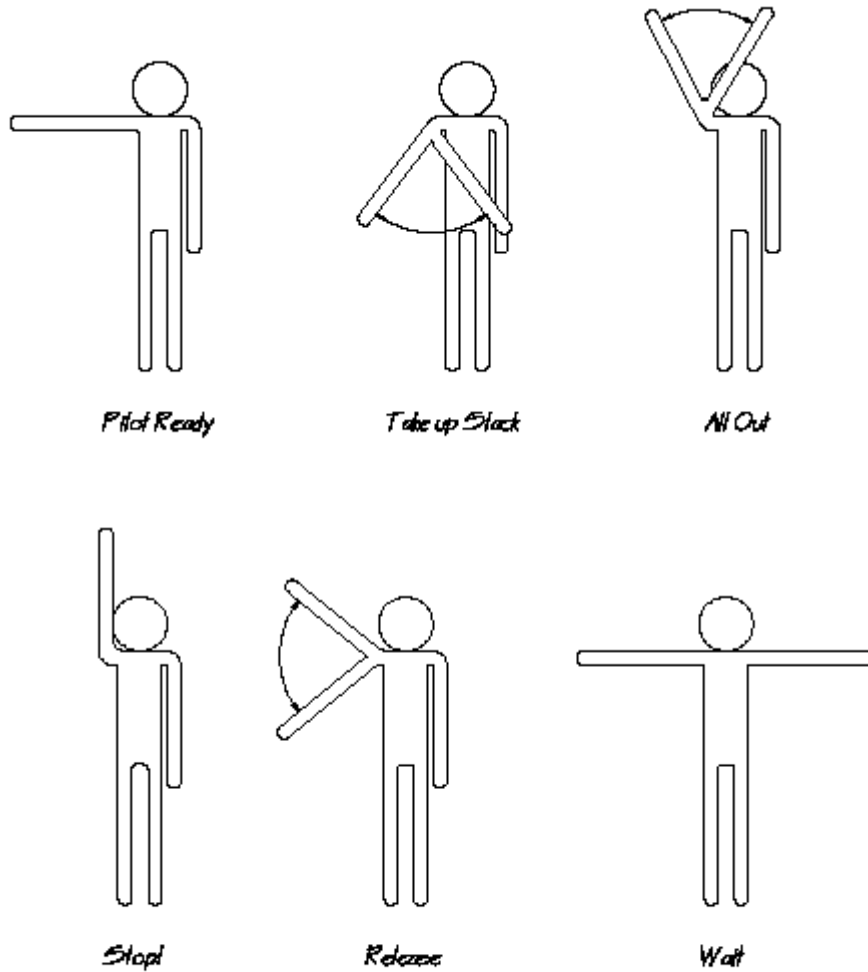
One to One Bridle



Short Bridle

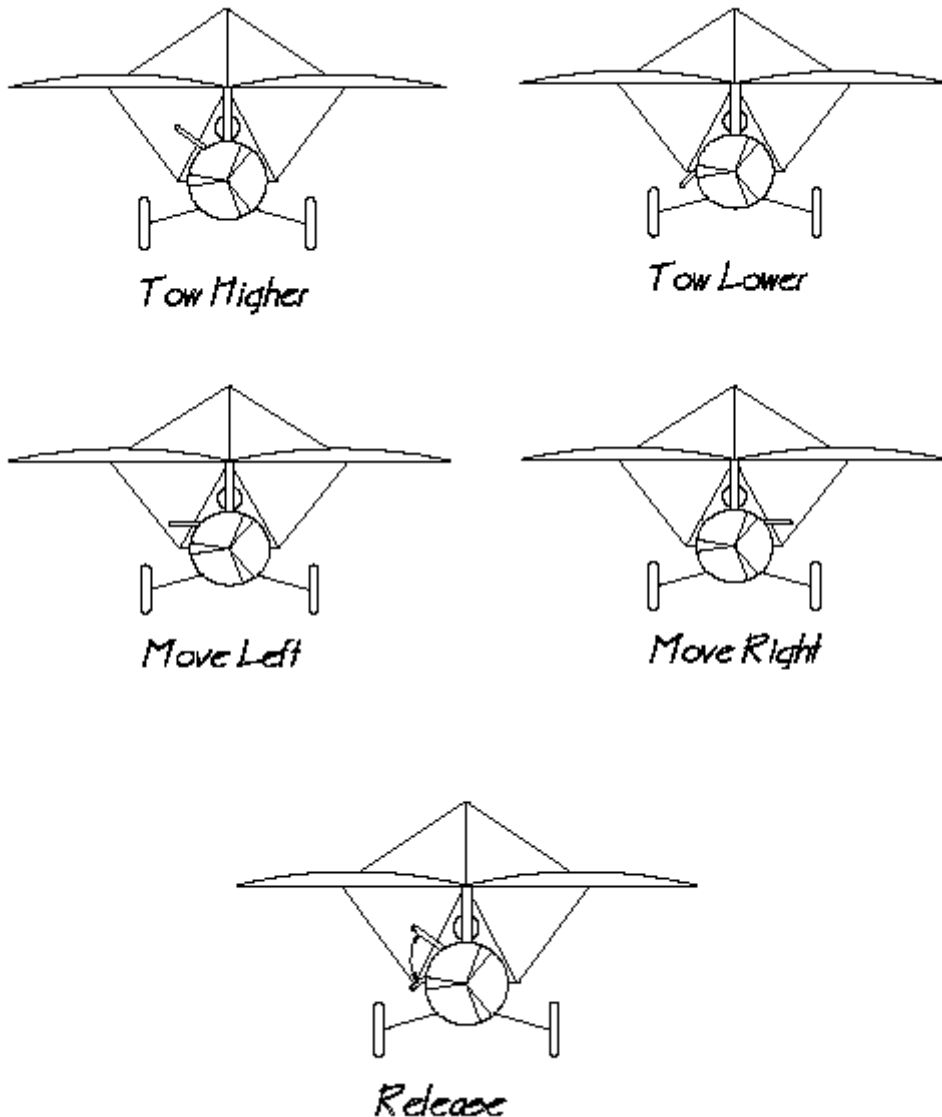
Appendix 2

Ground hand signals



Appendix 3

Tug signals



- *Restricted endorsements may tow Aero tow endorsed hang glider pilots only.*
- *Open endorsements may tow hang glider pilots under training and tandem flights.*
- *It is strongly advised that pilots keep a copy of this check list for their record.*