Operations Manual

South Wales Gliding Club



Contents	Page5
1. PURPOSE	5
2. THE AIRFIELD	5
3. INSTRUCTING	6
4. ACCIDENTS AND INCIDENTS	6
5. SAFETY	6
5.1 SAFETY FOR MEMBERS OF THE PUBLIC	6
5.2 GLIDER CUSHIONS	6
5.3 REFUELLING OF THE WINCH	7
5.4 REFUELLING OF THE TUG	7
5.5 REFUELLING OF RETRIEVE VEHICLES	7
6. GLIDING OPERATIONS	7
RESPONSIBILITIES	7
6.1 GLIDER PILOT	7
6.2 DUTY INSTRUCTOR	8
6.3 DUTY PILOT DUTIES	8
6.4 TUG PILOT DUTIES	8
6.5 DUTIES OF TRACTOR AND GATOR DRIVERS	8
(i) Cable Retrieve	8
(ii) Glider Retrieve	8
7. TRAINING	8
7.1 PRE-SOLO	8
7.2 SOLO STANDARD	g
7.3 ANNUAL FLIGHT REVIEWS	9
7.3.1 RECORDING THE ANNUAL FLIGHT REVIEW	9
7.3.2 NUMBER OF FLIGHTS REQUIRED IN ANNUAL F	ELIGHT REVIEW9
7.4 INITIAL CROSS-COUNTRY FLIGHTS	9
7.5 FLYING RECENCY AND LOG BOOKS	10
8. QUALIFICATIONS FOR FLYING CLUB AIRCRAFT SOLO	11
8.1 CLUB TWO-SEATERS	11
8.2 K8 GLIDER	11
8.3 CLUB ASTIRS	11
9. AIRFIELD OPERATIONAL LAYOUT	11
9.1 CONTROL BLIS	11

9.2 GLIDERS AT THE EAST END LAUNCH POINT	11
9.3 GLIDERS AT THE WEST END LAUNCH POINT	12
9.4 WINCH POSITIONING AND CABLE LAYOUT	12
9.5 GLIDER RETRIEVAL AFTER LANDING	12
10. GROUND HANDLING GLIDERS AND EQUIPMENT	12
10.1 TRACTORS, BUGGIES AND GATORS	12
11. THE OPERATIONS TEAM	12
12. PREPARATION FOR FLYING – AIRCRAFT AND EQUIPMENT	13
13. FLYING LIST, FLYING ORDER, FLYING INSTRUCTION	13
14. TRIAL LESSON AND EXPERIENCE FLIGHTS	13
15. VISITING PILOTS	13
16. PRE-LAUNCH CONSIDERATIONS	13
16.1 GLIDERS ON THE AIRFIELD	14
16.2 MOTOR GLIDERS, SELF LAUNCHING SAILPLANES, AND WINCH CABLES	14
16.3 AEROTOW ROPE DROPPING	14
17. PRE-LAUNCH SIGNALLING	14
17.1 Aerotow signalling	14
17.2 Winch launch signaling	14
18. WINCHING	15
18.1 LAYING OUT WINCH CABLES	15
18.2 WINCH LAUNCH POINT COMMUNICATION	15
18.3 WINCH WEAK LINKS	15
18.4 WINCH WEAK LINK ATTACHMENT	15
18.5 FLYING THE WINCH	16
18.6 LAUNCH FAILURES: THE WINCH DRIVER'S ACTIONS	16
19. AEROTOWING	16
19.1 AEROTOW ROPE	16
19.2 OUT-OF-POSTION AEROTOWING	16
19.3 NORMAL RELEASE FROM TOW AND EMERGENCIES	16
20. CIRCUITS	17
21 PRE-LANDING CHECKS	17
22. COMPETITION FINISHES	17
23. AEROBATICS	17
24. SOARING	17
24.1 CROSS-COUNTRY FLYING	18

24.2 LANDING OUT	18
24.3 WAVE SOARING	18
25. TRIAL LESSONS CODE OF CONDUCT	18
26. MOTOR GLIDING AT SWGC	18
26.1 TRAINING IN MOTOR GLIDERS	18
27. PROCEDURES FOR USING THE RILES WAVE BOXES	18
APPENDIX A – AIRFIELD OPERATIONAL LAYOUT	19
APPENDIX B – GROUND COMPETENCE SYLLABUS	21
APPENDIX C – DUTIES OF THE DUTY PILOT	22
APPENDIX D – DUTIES OF THE TUG PILOT	24
APPENDIX E – TRAINING SYLLABUS	25
APPENDIX F – SWGC RECENCY REQUIREMENTS	25
APPENDIX G – PROCEDURE FOR OPENING THE RILES WAVE BOXES	26
APPENDIX G AMENDMENTS AND CHANGES	27

INTRODUCTION

This Operations Book, including appendices, details site-specific information for the South Wales Gliding Club and is supplementary to Managing Flying Risk, published on the British Gliding Association website.

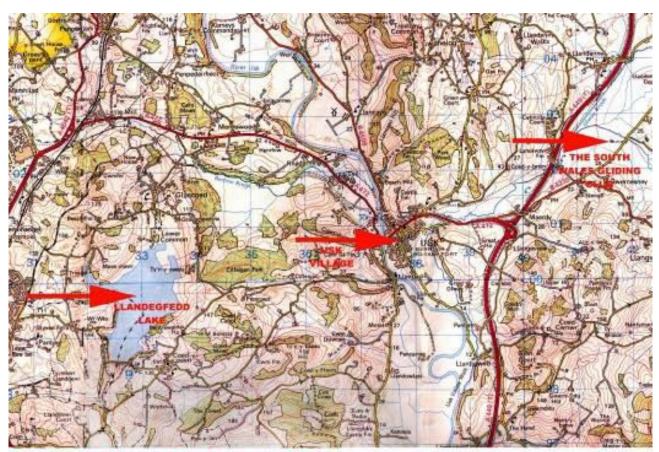
The Club's website is located at:

http://www.uskgc.co.uk

1. PURPOSE

All pilots using or planning to use the South Wales Gliding Club airfield, members and non-members alike, are expected to comply with these operational requirements.

2. THE AIRFIELD



NAVIGATIONAL REFERENCE POINTS TO LOCATE THE S.W.G.C. (NOTE THE THREE ITEMS INDICATED ARE IN LINE AND EQUIDISTANT)

Location:

Approximately 2 miles ENE of the town of Usk, east of the A449 Airfield GPS co-ordinates:

Latitude: 51 43.049N, Longitude: 2 50.710W

Size: The maximum safe length available is 900metres

Airfield speed limit: 15mph

Car parking:

For safety reasons, cars are not permitted to park at the launch point where gliders and retrieve vehicles are operating.

3. INSTRUCTING

The Chief Flying Instructor has overall responsibility for all flying operations, including tug and motor glider operations. The deputy CFI acts for the CFI in his/her absence.

Assistant Rate instructors may run the airfield if authorized to do so by the BGA. Instructors with at least 100 hours instructing may authorize first solo flights.

Basic instructors may only conduct first flights.

4. ACCIDENTS AND INCIDENTS

The immediate actions to be taken and the procedures to be followed in case of an accident are listed in the SWGC post accident guide. Copies of this document are kept on the notice board in the clubhouse, in the launch vehicle and in the winch.

Accidents causing damage or injury must be reported to the CFI.

All accidents and incidents must be reported to the Club Safety Officer using the forms located on the notice board in the clubhouse, or electronically, using the form on the Club website.

Because of the narrowness of the airfield, the winch drogue parachute falling outside the airfield is not a reportable incident unless it results in damage or injury to 3rd parties.

5. SAFETY

Safe operations must always be the prime consideration of all pilots and other personnel involved in flying activities.

5.1 SAFETY FOR MEMBERS OF THE PUBLIC

The Club has a duty of care towards members of the public as soon as they enter our airfield. This includes Trial Lessons, onlookers, walkers or any interested parties. Two footpaths entitle members of the public to legitimately enter our airfield. See 'AIRFIELD OPERATIONAL LAYOUT' in Appendix A for the location of these paths.

Generally, members of the public will not be aware of the activities of the Club. Therefore, flying operations must cease until a Club member escorts the potentially endangered members of the public to a position of safety. There are warning signs positioned on all of the Public Rights Of Way at our Club, and warning signs indicating where members of the public are not safe unless accompanied by a Club member.

Club members should actively 'police' anyone on the airfield who does not appear to know what is required from them or the dangers involved.

5.2 GLIDER CUSHIONS

See BGA Safety Bulletin on Energy Absorbing Cushions

There are Dynafoam or Confor cushions available which are reserved for use in the Club gliders. Dynafoam/Confor has special slow energy absorption and release properties. They will provide a certain level of protection against spinal shock in the event of a heavy landing.

IT IS STRONGLY RECOMMENDED THAT DYNAFOAM/CONFOR CUSHIONS BE USED AT ALL TIMES IN ALL CLUB AND PRIVATELY-OWNED GLIDERS.

5.3 REFUELLING OF THE WINCH

The SkyLaunch winch runs on LPG. It should be refuelled in accordance with the D.I. Procedure. Gloves must be worn when refuelling to avoid skin burns when de-coupling the gas refuelling nozzle. Significant jets of gas occur momentarily during this de-coupling operation.

The winch earth spike and earth clamp must be used to avoid the build up of static electricity both when refuelling and in use.

LPG is dispensed from the fenced-off fuel tank in front of the brick fuel store. This enclosure is normally locked. No naked flames are allowed within 20 meters of the refuelling process.

5.4REFUELLING OF THE TUG

The tug runs on AVGAS or MOGAS. This is dispensed from the underground fuel store beneath the Club's access road in front of the brick fuel store. The earth clamp must be attached to a suitable paint-free metal point on thetug (normally the exhaust pipe) before refuelling takes place thus avoiding the build up of static electricity. Naked flames are not permitted within 20 meters of the refuelling process.

5.5 REFUELLING OF RETRIEVE VEHICLES

Some of the retrieve vehicles run on diesel and some on petrol. Diesel is dispensed from the tank located on top of the brick, fuel store roof. Access to this tank is normally locked. Naked flames are not permitted within 20 metres of the refuelling process. AVGAS or MOGAS may be used to refuel those retrieve vehicles which run on petrol.

6. GLIDING OPERATIONS

RESPONSIBILITIES

The personnel concerned with gliding operations are reminded:

It is the responsibility of ALL members to assist in ensuring that flying operations are performed with the appropriate care and risk minimisation.

If in doubt stop the operation until it is safe to continue.

Members should ensure that they do not loiter in the area of the approach at the East end of the airfield. If the tug pilot is unable to rewind the towrope, the metal 'bullet' at the end of the rope could cause a significant injury to members or visitors when the tug is on approach.

There is a Ground Competence Syllabus (see Appendix B) to be used to train new members with all areas (except driving the winch) to be signed off before a pilot goes solo for the first time.

6.1 GLIDER PILOT

The pilot of an aircraft is responsible for its safety from the time of getting into the cockpit until it is parked or released to the next pilot. Unless the pilot is a qualified pilot, he or she must obtain a briefing from the Duty Instructor before flying.

Take off must not take place until the pilot is satisfied that it is safe to do so. The pilot must be in current flying practice as laid down in 'FLYINGCURRENCY AND LOGBOOKS'. They must meet the BGA medical requirements.

After landing, pilots must stay in command of the glider until a retrieve vehicle arrives and then expeditiously clear the landing area. The pilot is responsible for the correct handling of the glider until it is properly parked or released to the next pilot.

The last pilot flying the aircraft should be responsible for putting the aircraft inthe hangar, returning the parachute, in its protective bag, to the correct storage place in the clubhouse and putting the battery on charge.

If an aircraft is taken out, but does not fly, the pilot getting the aircraft out should be responsible for returning the aircraft, parachute and battery. This responsibility can be passed on to another pilot.

6.2DUTY INSTRUCTOR

The Duty Instructor is responsible for all gliding and flying operations that take place on his or her duty days, including the airfield set-up.

The Duty Instructor will issue a briefing to pilots before flying commences, including relevant weather, NOTAMS and flying conditions; all pilots (with lower qualifications than an SPL or a Silver C) intending to fly that day must attend this briefing or obtain another briefing from the Duty instructor before flying.

At the end of the day's operations the Duty Instructor should ensure that all equipment is correctly stored away and refuelling points secured.

6.3 DUTY PILOT DUTIES

The duty pilot facilitates safe and efficient gliding operations under the supervision of the duty instructor. Guidance for Duty Pilots is given in Appendix C, a copy of which is kept in the launch point vehicle.

6.4 TUG PILOT DUTIES

See Appendix D.

6.5 DUTIES OF TRACTOR AND GATOR DRIVERS

Club members who

- i) do not hold a valid UK Driver's license or
- ii) are under the age of 16

must have their Ground Competence Syllabus endorsed by a competent adult member prior to operating a golf cart, tractor or any motorised vehicle, and under 18s must have written authority from their parent/guardian to drive a motorised vehicle.

Children under the age of 14 years are not permitted to drive a tractor.

(i) Cable Retrieve

To avoid cables crossing, the tractor must be driven in as straight a line as reasonably practical from the winch to the launch point. The tractor driver performing this duty has priority over any other movements on the airfield.

(ii) Glider Retrieve

Gliders must be removed expeditiously from the airfield. Preferably they should be towed as close to the northern boundary as possible unless they have landed so close to the southern boundary that it would be quicker to retrieve along this edge of the airfield.

7. TRAINING

7.1 PRE-SOLO

The pre-solo training syllabus is shown in Appendix E. This form is issued to student pilots. Their instructor will fill in each box as the exercise becomes completed.

7.2 SOLO STANDARD

A student pilot may be sent solo when all of the pre-solo syllabus has been satisfactorily completed. After solo, the pilot will be subject to such checks every day they fly until the Duty Instructor is satisfied that these checks are no longer required.

7.3 ANNUAL FLIGHT REVIEWS

All solo glider pilots, other than instructors, require an Annual Flight Review from an Instructor. Annual Flight Reviews will be valid from 1stDecember up to the end of April the year after i.e. 17 months later. If the flight is done early the renewal date will be reset e.g. if you renew in December 2022 then it will be valid until the end of the April 2024.

Annual Flight Reviews contain an element of both testing and checking. The desirable outcome is for a safe pilot, and to help the pilot to identify areas for development in their flying.

7.3.1 RECORDING THE ANNUAL FLIGHT REVIEW

On completion of the flight(s) an entry will be made in the pilot's logbook. This entry will record any restrictions on flight for the pilot and the reviewing instructor's name. The Annual Flight Review book in the clubhouse should be completed by the pilot, with the date(s) and the name of the instructor who carried out the checks.

7.3.2 NUMBER OF FLIGHTS REQUIRED IN ANNUAL FLIGHT REVIEW

For most pilots this will comprise at least two flights, although if the pilot is aerotow only or pre-Bronze, a single flight only may be required.

Pilots over the age of 75 years require enhanced annual check flights with at least 2 different instructors and on different days. This is to ensure that older pilots' reactions are fast enough to maintain safety.

Regardless of the individual's method of launching, a satisfactory spin recovery must be demonstrated. All spinning must be concluded by 1,500 feet agl.

TMG only pilots are exempt from glider checks.

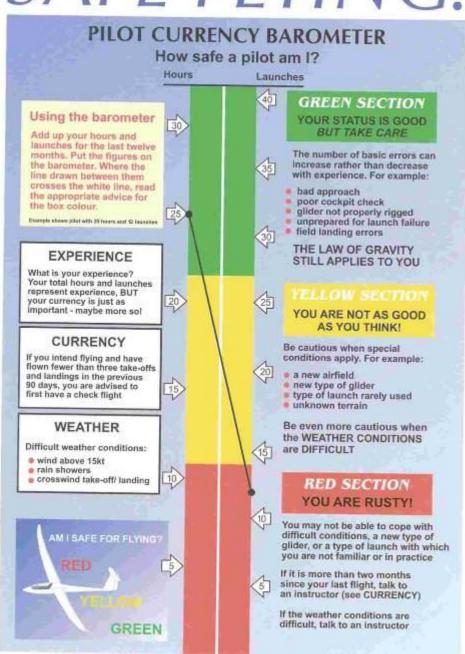
7.4 INITIAL CROSS-COUNTRY FLIGHTS

First and early cross-country flights are not to be attempted without obtaining a full briefing and clearance from an Instructor authorized to do so. The would-be cross-country pilot must declare his intentions and ask for a briefing before flying. A suitable retrieve crew can then be organized should it be required.

It is good practice to telephone the home site in the case of land out.

7.5 FLYING RECENCY AND LOG BOOKS

SAFE FLYING!



All pilots intending to fly as P1 must be in current flying practice. The BGA PILOT CURRENCY BAROMETER (above) is a useful guide to pilot currency. Any pilot not in the green section should seek advice from the duty instructor.

All South Wales Gliding Club pilots must keep an up-to-date logbook for this purpose.

In addition to the above barometer, SWGC has further recency requirements (see appendix G)

Recency requirements for pilots over 75 years of age is as follows:

75 – 79 years: at least one flight in the last 6 weeks 80 years and over: at least one flight in the last 4 weeks.

8. QUALIFICATIONS FOR FLYING CLUB AIRCRAFT SOLO

8.1 CLUB TWO-SEATERS

These are to be flown solo only if authorized by an Instructor.

Non instructors can fly together only if both pilots hold a SPL, the pilot flying P1 is clearly identified, and the CFI or deputy has approved the flight.

8.2 K8 GLIDER

The pilot must have flown at least 1 solo flight in a K13 and be in current practice.

8.3 CLUB ASTIRS

The pilot must have flown at least 1 solo flight in one of the club two-seater glass gliders, and be in current practice.

9. AIRFIELD OPERATIONAL LAYOUT

The main equipment layout for launch point, glider parking and queuing, carparking, winch cable laying and retrieve routes are shown on the field layout diagrams in Appendix A.

9.1 CONTROL BUS

The Control Bus is used as a focal point to assist with gliding operations. It also provides signaling to the winch by radio and lights. Winch launching operations are directed from this bus.

Before positioning the bus, it should be equipped with:

- 1. Serviceable glider frequency radio.
- 2. Daily flying lists and log sheets.
- 3. Spare trace and weak link assembly for winch and aero tow.
- 4. Cushions.
- 5. Glider parachutes.
- 6. Briefing board.
- 7. CO2 fire extinguisher (tug engine fires).
- 8. Charged battery for signalling lights.

When the control bus has been positioned, a radio communication check withthe winch should be made before the start of operations on 129.980 MHzfrequency. The lights must then be aligned with the winch and tested and confirmed as clear by the winch driver.

The briefing board must be filled in by the Duty Pilot to advise on the day's circuit pattern and any other useful information.

9.2 GLIDERS AT THE EAST END LAUNCH POINT

It is important to minimise the risk of collision of the starboard wing with the trees on the edge of the stream on the north boundary by allowing for sufficient clearance from the stream; this is important should the glider yaw to the right during the early part of the launch.

To avoid congestion and risk of collision no gliders are to be brought to the launch point area until they are fully ready to fly.

The space between gliders and northern boundary at the east end (cottage) is essential to provide an undershoot area for landing gliders.

There should be no more than three aircraft in line astern at the winch launch queue. Club gliders not in use or queuing are parked on the North side in the lay-by in the field recess shown. Private gliders remain on the South side but if not ready to fly, should stay alongside the trailers.

When busy, Club gliders stay to the north and private gliders stay to the south. Duty Pilot direction should be used when the airfield gets busy. The Duty Pilot makes the final decision about launch order.

9.3 GLIDERS AT THE WEST END LAUNCH POINT

Arrangements at the west end are designed to ensure that gliders awaiting launch are not encroaching on the approach line of aircraft coming in to land.

9.4 WINCH POSITIONING AND CABLE LAYOUT

The first diagram in Appendix A shows the positioning of cables at the East launch point. Winch position should follow the guidelines in the diagrams where the cable tractor driver steers a straight course from the winch to the launch point.

The second diagram in Appendix A shows the general positioning of cables at the West launch point. Winch positioning and cable layout when operating from the West launch point are pretty much a mirror image of the above. The exact positioning of the winch and launch point are at the Duty Instructors discretion.

9.5 GLIDER RETRIEVAL AFTER LANDING

See the diagrams in 'Airfield Operational Layout' Appendix A. Glider retrieve routes are marked in yellow. The north side of the airfield is preferred.

10. GROUND HANDLING GLIDERS AND EQUIPMENT

Except in light winds, pilots after landing should stay in or near theglider with the canopy secure until the retrieve arrives. The pilot is responsible for the safety and correct handling of the glider until it is properly parked or handed over to the next person to fly.

Never leave a glider unattended with the canopy open. It is very expensive to replace a damaged canopy.

10.1 TRACTORS, BUGGIES AND GATORS

- (i) They should not be driven faster than walking pace when towing gliders. They must not be driven by untrained drivers.
- (ii) Do not carry children under ten years of age.
- (iii) Do not drive directly at gliders or people.
- (iv) Avoid sharp turns when the airfield is soft after rain.

11. THE OPERATIONS TEAM

During normal club operations, the minimum crew required for flying to take place is as follows (some of these duties can be carried out by the same person):

- 1. Instructor on the ground (Duty Instructor)
- 2. Tug pilot or/and winch driver

- 3. Duty Pilot
- 4. Wing tip holder
- 5. Signaller/Log Keeper

In circumstances where no instructional flying is taking place and only aero tow is being used (midweek flying) the minimum requirement is for a tug pilot and one experienced pilot on the ground to hold wing tips, keep log and deal with any eventualities which may arise.

12. PREPARATION FOR FLYING - AIRCRAFT AND EQUIPMENT

An Instructor or Tug Pilot must be present before aircraft are removed from the hangar.

All aircraft must have a Daily Inspection and made ready for flight in the clubhouse or hangar area and not at the launch point or launch queue. This must be done by pilots authorized to DI aircraft. The Technical Officer, or an instructor, can approve and register pilots to perform DIs even if they are not qualified pilots – the Chairman is responsible for maintaining this register of pilots so approved.

It is strongly recommended that parachutes are worn by SWGC members and Trial Lessons.

13. FLYING LIST, FLYING ORDER, FLYING INSTRUCTION

A flying list is compiled which contains the names of those pilots who wish to fly Club gliders. Launches are usually then given in list order, but the actual order of flying is at the discretion of the Duty Instructor. It is expected that students turning up after flying commences will stay to assist packing of the hangar at the close of flying.

Club aircraft pilots are normally launched in the order shown on the flying list. Private aircraft pilots are launched in the order in which they arrive at the launch point.

Normally club and private gliders will be launched alternately. If good soaring conditions develop, the Duty Instructor may nominate a period devoted to launching private and club glider soaring flights using aerotow only. During this period, winching should be stopped.

During soaring conditions, it is strongly recommended that two-seater soaring instruction is given. The duration of the flight is also at the discretion of the Instructor.

14. TRIAL LESSON AND EXPERIENCE FLIGHTS

Trial lessons should be flown before 10:00 hrs local time or after 16:00hrs local time where possible.

Trial lesson flights should not exceed 30 minutes in duration unless agreed with the Duty Instructor.

15. VISITING PILOTS

It is the responsibility of the Duty Instructor to establish the flying credentials of any visiting pilot, even if the pilot brings his/her own glider. Logbook evidence should be viewed but is not mandatory. The Duty Instructor must advise the visiting pilot if they can or cannot fly the Club gliders in a solo capacity. Training (cable breaks etc.) or site checks must be given where appropriate. If the Duty Instructor is not able to make a decision, he/she should defer to a more senior rated instructor. If in any doubt or a more senior rated instructor is not available then the visiting pilot cannot fly solo.

16. PRE-LAUNCH CONSIDERATIONS

All pilots must carry out cockpit checks in accordance with the BGA recommendations in Managing Flying Risk.

16.1 GLIDERS ON THE AIRFIELD

A launch must not take place if a glider is in the middle of the airfield or sufficiently close to launching gliders or winch cables to present a hazard. It may be necessary to wait until these gliders are pulled to the side of the airfield.

16.2 MOTOR GLIDERS, SELF LAUNCHING SAILPLANES, AND WINCH CABLES

Motor gliders and Self Launching Sailplanes must avoid taking off over winch cables by either arranging for the take-off run to miss the cables, or by having the cables wound back in by the winch. The rewinding should only be requested if there is likely to be too long a delay before the cables will be used for a winch launch.

16.3 AEROTOW ROPE DROPPING

The Pawnee normally uses a rope retrieve winch and so ropes are not dropped from it.

The Eurofox (or other tug without a retrieve winch) will require a rope drop when launching from the East end of the field. The rope should be dropped from the east corner of the field, on the dead side, along the field, and the forward signaller should confirm to the tug pilot, by radio, that the rope has gone. The tug pilot will then climb up to high key in the active circuit. This is to avoid accidental conflict of the rope with the power lines on the approach at the East end.

17. PRE-LAUNCH SIGNALLING

17.1 Aerotow signalling

The wing tip holder:

- (i) Up slack arm below the waist, swung from side to side, facing the tug.
- (ii) All out arm above the head, swung from side to side, facing the tug
- (iii) Stop arm held stationary above the head.

ANYONE MAY STOP A LAUNCH BY SHOUTING 'STOP' CONTINUOUSLY AND HOLDING BOTH HANDS ABOVE THE HEAD UNTIL THE OPERATION HAS ACTUALLY STOPPED

The forward signaller:

The forward signaller should stand forward and to one side of the tug take-off run so as to be easily seen by the tug pilot. The purpose of the forward signaller is to establish that there are no aircraft on the approach, or other potential conflicts. In addition, the forward signaller relays the signals from the wing tip holder to the tug pilot.

The same arm signals are used as those used by the wing tip holder but are usually carried out with a bat. In addition, the forward signaller must establish radio contact with the tug before beginning to signal. 'Up slack' and 'All out' may be communicated by radio as well as hand signals, but 'stop' must be communicated by radio and hand signal.

During weekend operation, after Daily Briefing, a forward signaller is mandatory. When launching from the East end, the forward signaller should stand near the fuel store.

17.2 Winch launch signalling

THE ONLY SIGNALS TO BE GIVEN TO THE WINCH ARETHOSE USING THE ONE BAT METHOD OR USE OF LIGHTS.

It is essential that the winch be in radio contact with the launch point to be able to ascertain the glider type before a launch commences.

The ground crew attaching the launch cable should check with the pilot that the airbrakes and canopy are closed and locked and that he/she is holding the release knob.

The upwind wing is held level during the launch. In accepting the cable, the pilot is accepting a launch and no further actions are required from the pilot.

The ground crew checks that it is clear above and behind and proceeds to signal 'up-slack'. When the slack is completely taken up and it is still safe to launch the 'all-out' signal is given.

The wing tip holder's signals are relayed to the winch using the lights set up in the launch point bus. If the lights are not functioning a single bat may be used to relay the signals – the signals with a bat are described in 17.1 above.

18. WINCHING

18.1 LAYING OUT WINCH CABLES

Winch cables are pulled out by tractor and positioned as shown in the diagrams in Appendix A

If damaged cables or components of the winch equipment are damaged, they must be replaced immediately and before flying recommences.

The cable tractor driver must drive straight from the winch to the launch point to avoid crossing the cables and should take steps to avoid a curved or erratic tow out. If the winch cables are crossed on tow out or there is a suspicion that they are crossed, they must be straightened before the next launch.

It is recommended that he/she sit in the cab of the winch or tractor during a launch. The retrieve tractor should be parked behind the winch.

Cable parachutes and traces should not be allowed to drag along the ground, as this will cause excessive wear. The cable retrieve tractor must be driven slowly enough to avoid damage from field ruts and bumps

18.2 WINCH LAUNCH POINT COMMUNICATION

Radio communication between the launch point and the winch using airband transceivers must be made on a frequency of 129.980 MHz.

Members must only use the radio for brief and necessary communication between the launch point and the winch and all radio 'chatter' should be avoided.

The log keeper should pass information to the winch driver regarding the type of glider to be launched.

18.3 WINCH WEAK LINKS

K13 & Grob 103 Brown
K8 Blue
Astir Blue
Single-seater glass gliders Blue

All pilots must be aware of the weak link required for the glider they are flying and use an appropriate weak link from those available. This should be checked by the pilot when accepting the cable.

18.4 WINCH WEAK LINK ATTACHMENT

Only fit one weak link of the appropriate braking strain. Do not tighten the metal sheath onto the weak link. It is designed to be loose. If it is not loose it will increase the strength of the weak link and thus reduce the effectiveness of the weak link.

18.5 FLYING THE WINCH

All pilots should study and follow the guidance in the Safe Winch Launch booklet on the BGA website.

18.6 LAUNCH FAILURES: THE WINCH DRIVER'S ACTIONS

Instructors have to give simulated launch failures, and wherever practicable the instructor should request that the winch driver cuts the power at the winch in preference to the instructor pulling the cable release beforehand.

The winch cable should only be pulled in when the winch driver is absolutely sure that the glider is not in danger of snagging the cable/parachute assembly.

19. AEROTOWING

From time to time, the Club receives noise complaints from the local community. It is the Club's policy that, provided aero towing safety is not compromised, we will avoid noise sensitive areas.

19.1 AEROTOW ROPE

The Pawnee will be fitted with a rope retrieve winch with a permanently attached rope. If the retrieve winch is not serviceable, a conventional rope may be used. The standard Schweizer tow hook as fitted MUST use the larger of the two Tost rings as fitted to the tow rope. Failure to do this results in the tug pilot being unable to jettison the rope in an emergency.

19.2 OUT-OF-POSTION AEROTOWING

If, for training reasons, the glider is flown out of its normal position behind the tug the following applies:

- (i) The tug pilot must give his/her permission for the out of position activities before they occur or
- (ii) The out of position manoeuvres should only occur above 1000 feet agl.

If the glider becomes too high behind the tug or becomes too far out of position the glider pilot MUST RELEASEIMMEDIATELY to avoid the danger to the tug pilot of a tug upset.

19.3 NORMAL RELEASE FROM TOW AND EMERGENCIES

(i) Following release from tow, and observing the tow rope snaking away, the glider pilot shall perform a climbing turn to the left.

(ii) Wing drop

If the glider pilot cannot prevent either wing from touching the ground on the ground run, he/she should pull the release immediately to prevent a cartwheel from developing.

(iii) Tug requires the glider to release.

If the tug pilot requires the glider to release he will indicate this by rocking its wings laterally and the glider must release the tow rope immediately

(iv) Glider brakes open

If the tug pilot notices that the glider brakes are open, he will waggle the tug's rudder. The glider pilot should close the brakes immediately and the tow can continue as normal.

(v) The glider cannot release from the tug

The glider must fly out to the port (left) side of the tug to be seen by the tug pilot, and then should rock its wings

laterally. The tug pilot will release the rope from the tug end, and the glider pilot will return to the airfield using a high approach to allow for the rope hanging from the nose of the glider.

20. CIRCUITS

The circuit flown should be entirely predictable to others who are expecting you to do certain things at certain times. The duty instructor will specify the preferred circuit direction.

TMG circuits, when power assisted, will generally be wider and slightly higher than the glider circuits

When flying from the cottage end, try to land on the North (stream) side of theairfield; it's a smoother landing ground and it allows for a more expeditiously cleared landing area.

If there is any doubt about whether there is a glider following, then the landingglider's ground run should be kept straight. It is allowable for gliders to "taxi" to the North side of the landing area so as to clear the area expeditiously but only when this will not hazard any following glider. Following gliders should land to the south of the one on the ground where it is possible to do so.

A glider landing to South side must NOT turn to the South as following glidersmay be landing on the South side of the landing glider and be expecting it to turn right.

"Hangar" landings should be pre-arranged with the Duty instructor.

21 PRE-LANDING CHECKS

The required pre-landing checks for our airfield are

- U Undercarriage down, locked and visually checked
- S Speed set for the approach
- T Trim glider trim set for the approach speed
- A Airbrakes left hand on the airbrake handle
- Lookout landing area clear, other traffic in circuit (including any aircraft on a mirror circuit and any on long final approach)
- L Landing

22. COMPETITION FINISHES

Competition finishes are NOT ALLOWED on weekends.

23. AEROBATICS

Only basic aerobatic manoeuvres are permitted and these must be completed above 1500ft agl.

Basic aerobatics is defined here as spins, loops, stall turns and chandelles.

Any pilot wishing to undertake basic aerobatics (solo) must have their logbook endorsed beforehand.

No advanced aerobatics are permitted unless a suitably qualified aerobatic instructor endorses the pilot.

No aerobatics are permitted on trial lessons.

24. SOARING

The BGA soaring protocols described in Managing Flying Risk must be adhered to for thermal soaring, ridge soaring and wave soaring.

24.1 CROSS-COUNTRY FLYING

The minimum requirement for cross-country flying is a Bronze Endorsementwith the Cross Country Endorsement. For the first five cross country attempts, the pilot must get permission from the Duty Instructor or other nominated Instructor who can "sanity" check and provide a briefing for the task being attempted. The pilot wishing to fly cross-country must satisfy the Instructor that they are aware of any airspace restrictions that are active.

24.2 LANDING OUT

From time to time land outs are inevitable – they are a normal part of gliding.

Allow wide safety margins when landing out, make every effort to ask the field owner's permission to remove the glider, and report any real or perceived third party damage to the CFI.

See the BGA recommendations for land outs.

24.3 WAVE SOARING

An instructor must show you how to fly in wave before you attempt it on your own.

25. TRIAL LESSONS CODE OF CONDUCT

Pilots flying trial lessons must be familiar with the BGA code of conduct and follow it meticulously.

26. MOTOR GLIDING AT SWGC

Motor glider pilots should sign out before their flight and sign in after their flight using the book in the control box attached to the barbecue.

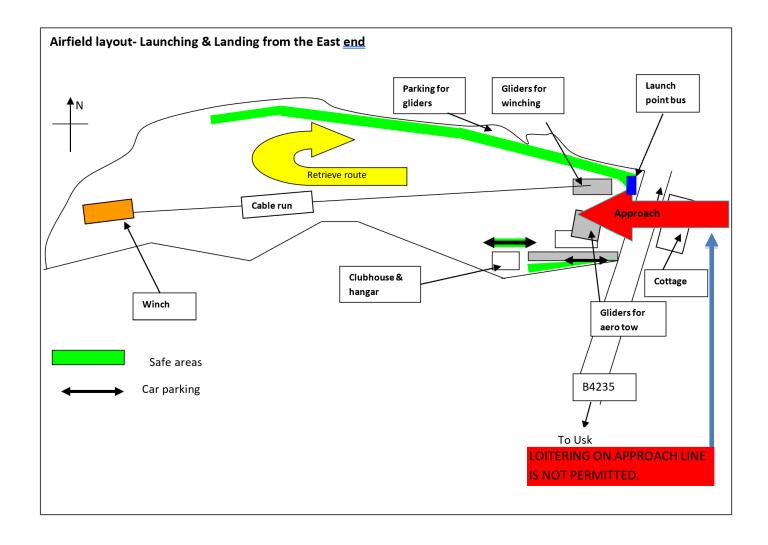
26.1 TRAINING IN MOTOR GLIDERS

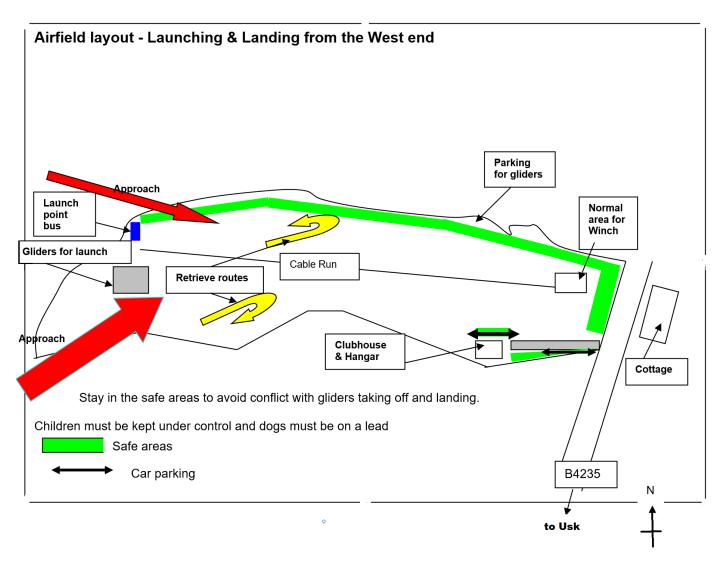
Training for full-flying Club members to gain a motor glider licence may be carried out at SWGC subject to prior agreement of the Directors. Instructors with an MGIR rating or TMG instructor rating may carry out Bronze Cross Country Endorsement checks for members and for visiting pilots.

27. PROCEDURES FOR USING THE RILES WAVE BOXES

See Appendix H

<u>APPENDIX A – AIRFIELD OPERATIONAL LAYOUT</u>





Who to ask:

Flying matters – any instructor

Ground vehicle matters – any member

Payment queries – the cashier

Aircraft matters – any instructor or inspector

If in doubt, ask anyone!

<u>APPENDIX B – GROUND COMPETENCE SYLLABUS</u>

Name :	Satisf		Satisf	
1. Safe areas of the airfield		13. Action when wingtip requires force		
		to keep level		
2. Moving gliders where not to push		14. Keeping log		
3. Towing gliders : (a) speed		15. Using the signalling lights		
(b) buggy position		16. Using the radio		
(c) lookout when towing		17. Forward signalling		
4. Parking gliders		18. Setting up the launchpoint vehicle		
5. Handling winch cable		19. Care of parachutes		
6. Position of cable in front of glider		20. Driving tractors		
7. Hook checks:		21. Towing out cables		
(a) winch		22. DI:		
(b) aerotow		(a) ground equipment		
8. Attaching winch cable		(b) Gliders Not pre-s		
9. Attaching aerotow rope		23. Setting up the winch	Not pre-solo	
10.Holding wingtip(including winglets)		24. Driving the winch	Not pre-solo	
11. Lookout on wingtip		25. Repairing cables and weak links	Not pre-solo	
12. Running with wingtip:		26. Propeller safety		
(a) on winch launch, (b) on aerotow		27. Location of fire extinguishers and		
		first aid boxes		

APPENDIX C - DUTIES OF THE DUTY PILOT

The function of the Duty Pilot is to ensure that the flying operations are run in an efficient, smooth, safe and pleasurable manner. It is an important job and is the second in the chain of command after the Duty Instructor.

If there is no Duty Pilot present then instructional flying must cease. Therefore if you cannot attend on your duty day there can be no instructional flying until a replacement for you is found, please therefore arrange your own duty swaps if necessary.

Preparation for flying:

Ensuring that there are appropriate members allocated to the various tasks, including ensuring that new, inexperienced or trial lesson members are given a courteous welcome to the Club and they are given any necessary guidance to the Club's operations.

Preparation of Aircraft:

Ensure that Daily Inspections are carried out by experienced members - this includes ensuring that the aircraft and especially their canopies are clean.

Note: An Instructor or a person approved by an Instructor must be present before the Club aircraft are taken out of the hangar.

Ground Equipment:

Allocate members to vehicles so that they are checked for levels of: oil, water, fuel, tyre pressures.

Winch is DI'ed as per its DI manual

Launch point bus is loaded with:

Daily Flying list and pens

Log Sheets

Membership forms

Up to date price list

Radio

Parachutes, cushions.

Spare traces and weak links.

Positioning of Equipment:

Assign members to:-

Position the winch as per the Duty Instructor's wishes.

Tow gliders to the launch point or park them out of the way, all gliders to be safely protected from any danger from the wind, tail dollies removed, and canopies closed and locked..

Tow winch cables to the launch point, if required

Commencement of flying:

Delegate members to ensure that the following jobs:

Winch driver

Log Keeper

Cable tractor driver

Glider retrieve vehicle driver

Launch signaller

Forward signaller and radio control of aerotows

Trainer of inexperienced members for the above tasks, in accordance with the Ground Competence syllabus Any non-members who may be visiting must be briefed as to where it is safe for them to go.

Throughout the day:

Make sure that the above duties are carried out with a fair sharing of the workload.

If new or inexperienced members are present make sure that they are properly and fully briefed in the duties, and their Ground Competence Syllabus is signed before they are asked to perform them. Ask an experienced member to mentor a new member on the operations.

Specific areas of concern:

All signallers must fully understand that their role is crucial in the chain of command. They must be briefed on the correct signals and how to use the "STOP" signal

Wing tip holders must move the wing tip at the same speed as the fuselage of the glider during the launch as otherwise they will turn the glider. Where the glider has winglets, the winglet must not be held on the ground run. Explanations on the correct use of weak links, traces and cable attachments, for both winch and aerotow launches, should be given to untrained members.

The winch driver is advised of the next glider to launch before the pilot are ready to launch.

Tug pilots cannot see behind the tug, forward signallers are needed to indicate when it is safe to launch, and to confirm rope drop at the east end of the field.

IF ANYONE SEES ANYTHING WHICH THEY BELIEVE COULD MAKE A LAUNCH DANGEROUS THEY MUST SHOUT "STOP" AND GIVE THE APPROPRIATE SIGNAL.

At the end of flying:

Make sure all aircraft are properly stored in the hangar.

Batteries are disconnected and if needed put on charge.

Parachutes are put in their bags and stored in the cupboard

All ground equipment is parked correctly and keys are returned to the Clubhouse

All documentation, log sheets, trial membership forms etc is brought into the Clubhouse, and placed into the safe when members have finished with them.

Fuel stores, container and hangar are closed and locked.

<u>APPENDIX D – DUTIES OF THE TUG PILOT</u>

The Duty Tug Pilot is responsible for:

1. Ensuring that he/she is qualified and insured to fly the aircraft and has a valid licence and medical.

- 2. Daily inspection and refuelling of the tug
- 3. Locking the fuel store at the end of towing
- 4. Supervising the refuelling or ensuring that a competent person does it
- 5. Doing a daily inspection of the tow rope and the tug winch
- 6. Keeping the tug log for glider identification, launch times and glider release height
- 7. Transferring release heights to the main gliding log
- 8. Cleaning and refuelling the tug before returning it to the hangar at the end of the day's operations

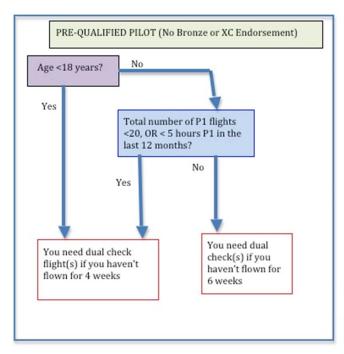
APPENDIX E - TRAINING SYLLABUS

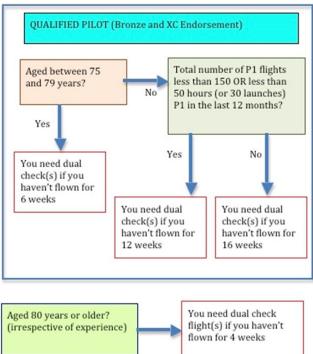
The standard BGA Gliding Syllabus Training Progress Card shall be used.

This will be given to pupils along with their log book upon joining the club.

<u>APPENDIX F - SWGC RECENCY REQUIREMENTS</u>

RECENCY FLOWCHART





APPENDIX G – PROCEDURE FOR OPENING THE RILES WAVE BOXES

RAGLAN AND MADLEY WAVE BOXES

1) Ring the Cardiff Duty Officer on 01446 712564, tell him you are from the South Wales Gliding Club, and ask for both the Raglan and Madley wave boxes to be opened up to FL195 from a specified time allowing 1 hour for Cardiff to contact London ATC to get approval for the request.

NB Black Mountains GC, Shobdon GC, Nympsfield GC and Cotswold GC may have already phoned and asked for the boxes to be opened.

When you specify a start time give a generous allowance for pilots to reach the base of the wave box. It takes a long time to reach FL145 even in what you think are strong conditions.

- 2) Give the Cardiff Duty Officer
 - (a) the upper limit in terms of a flight level, not an altitude amsl
 - (b) the expected launch time and time of entry into the wave boxes
 - (c) the number of gliders and associated call signs
 - (d) name and contact telephone number

Cardiff ATC will call back and confirm the start time and expected duration of activity in the Wave Boxes

- 3) In flight before you reach the box note down the QFE on your altimeter then set 1013.
- 4) Radio Cardiff on 125.855 MHz when you are about to enter the box. Use the correct radio procedure stating your current position, height and intentions.
- 5) Stay on 125.855 MHz whilst in the box and listen out as Cardiff may call you. Do not use this channel to talk to other gliders as it is a commercial frequency.
- 6) Keep strictly within the box and do not encroach into the airway. To know your position accurately you must have a moving map display with up-to-date airspace on it. Remember the wave boxes only go up to FL195.
- 7) Call Cardiff once you have descended out of the box and then change channels back to 130.105 MHz and reset your altimeter to QFE.
- 8) If all the gliders from SWGC have landed back please ring Cardiff again so that they can release the boxes earlier. (Make sure you tell them this applies to our gliders only).
- 9) If demand is high, Cardiff Watch Manager may elect to open the boxes for a fixed period of time for a maximum time of 2 hours. When the boxes are activated for a defined period, RT checks in the climb and descent are not to be made. At the time activation finishes all gliders are to be clear of controlled airspace.

APPENDIX G AMENDMENTS AND CHANGES

In order to keep this Operations Book up to date, new individual pages or sections will be issued that supersede existing information. Other non-maintained copies will cease to be valid once this occurs.

There will be an annual review of this Operations Manual, undertaken each December.

Section	DESCRIPTION OF CHANGE	CHANGE DATE	OLD	NEW	INITIALS
			ISSUE No.	ISSUE No.	
All	Re-write of out of date sections	02/08/2001	01	02	GWS
All	Re-write of out of date sections	Jan 2006	02	03	GWS
All	Review and rewrite of all sections	Jan 2007	03	04	DJJ
6	Astir solo requirements (page 24)	10/02/2007	04	05	DJJ
1	Web site address updated	31/12/2009	05	06	DJJ
3	Instructors list	31/12/2009	04	06	DJJ
6	Annual checks	31/12/2009	05	06	DJJ
Арр В	Removed	31/12/2009			DJJ
Арр С	Removed	31/12/2009			DJJ
All	Update of sections and appendices	31/03/2013			RWW
All	Update	31/12/2016			RWW
All	Update	01/01/2018		7.1	MPW
All	Update	30/03/2018		7.2	MPW
All	Update and inclusion of Post-accident procedures	06/04/2018		7.3	MPW
All	Update	14/08/2018		7.4	MPW
All	Update and re-write of out of date sections	14/06/2019		7.5	MPW
All	Update	26/01/2020		7.6	MPW
All	Update and rewrite out of date sections	01/10/2021		7.7	MPW
All	Update and rewrite out of date sections		06 .7.7	08	IBK