

Shropshire Soaring Group - Flying Notes 2011

Introduction

These notes cover the specific rules of the Shropshire Soaring Group relating to operation of gliders at Sleaf. They supplement the BGA's "*Laws and Rules for Glider Pilots*" and other operational regulations with which all members must comply. All glider pilots operating from Sleaf must also comply with Shropshire Aero Club's rules relating to flying and the operation of the airfield except only where they are obviously inapplicable for glider flying. Even in such cases, gliders must not be operated in conflict with the power flying rules.

Self-Authorisation - the basic principle of gliding at Sleaf

As the Group aims to provide soaring facilities for relatively experienced pilots operating without direct supervision, all members fly on a 'self authorised' basis and must show high standards of individual responsibility. As there is no duty instructor arrangement, individual pilots are responsible for ensuring the safe operation of their own flying, and for supporting other members. Before flying on a self-authorised basis, pilots must read and familiarise themselves with these notes.

Flight authorisation and currency requirements

The **minimum currency requirements** for self authorisation are:-

- 10 glider flights in the preceding year including at least one in the preceding three months.
- P1 gliding time of 100 hours, including 15 hours in the preceding year,
- Silver C,
- a satisfactory check flight with a BGA rated instructor or equivalent during the preceding 2 year period
- no accidents or serious incidents without subsequent clearance to fly.
- Valid medical declaration

Current members authorise their own flights including cross-country flights. As such they take individual responsibility for flight planning and execution including checking of NOTAMS and use of current charts as well as ensuring that they operate only in conditions which are within their own and their gliders' limits.

Members who do not satisfy the minimum currency requirements must obtain the approval of the CFI to fly P1. They must also maintain extra safety margins and not fly out of gliding range of the site until they are current again.

Any member involved as P1 in a **flying accident or serious incident** at Sleaf or elsewhere must report this as soon as possible to the CFI or, if he is not available, any other BGA instructor and must not fly P1 again until approval is obtained. Such incidents will include any failure to rig correctly and any known or suspected air-misses or airspace infringements.

Visiting glider pilots must meet similar currency standards to members. If you require a general briefing or have any queries, please check with the CFI before coming to Sleep as we do not operate a Duty Instructor rota.

All pilots must also ensure that if they are flying cross country that details of their intended task and route are known to other members present on the day in the event that overdue procedures need to be commenced (see below).

Defined Roles - variations from normal (training) gliding club practice

We do not have rotas for duty pilots, duty Instructors or duty launch marshalls. Each pilot is responsible for the conduct of his or her flying and, as a responsible pilot, for supporting the flying of other members. Appropriate functions are covered by the normal airfield operation - including the use of Sleep Radio for advisory information.

Flying that is not self authorised is 'instructional' (see below)

Instructional Flying

Any instructional flying including 'check flights' must be by BGA rated instructors (or equivalent) specifically authorised by the CFI for that purpose. They will be responsible for the operation of the glider(s) in which the instruction or supervised flying is taking place - including solo flights by pilots who do not meet the currency requirements. They will not necessarily act as 'duty instructors' for the supervision of self authorised flying by other members who meet the currency requirements.

Dual flying of two seat gliders

All other dual flying other than instructional flights must be designated clearly into one of the following categories according to the experience, qualifications and authorisation of the P1, the purpose for the flight, and compliance with any restrictions on the glider insurance.

Passenger flights when the P1 is authorised by the CFI for passenger carrying, meets the appropriate medical and currency standards and is the handling pilot at all times below 500'

Mutual flights when both P1 and P2 are current solo pilots and the nominated P1 is the handling pilot at all times below 500'

Safety flights when the P1 has a known risk of incapacitation in flight and the P2 is present to assist or take over if necessary - as specifically authorised by the CFI

See separate table at end of notes for further information.

Airfield Radio

All airfield radio communications are on the *Sleep Radio* frequency of 122.45. This is an advisory service. When active, it should always be consulted before any operation on the

airfield. When *Sleep Radio* is not active, members must operate with due regard for other known and unknown users of the site. This will include appropriate use of radio calls to "*Sleep Traffic*" to announce your position and intentions. When using 122.45, begin your radio call sign with the word "Glider" (e.g. "*Glider 258*") to avoid any confusion with power traffic. In general, do not use "G" or "Golf" registration prefixes as this may lead to confusion as to whether you are a powered aircraft.

Rigging Area and Launch Queue

Glider rigging should take place on a non-active runway such as the centre section of 10/28. On days when the tower is manned, the actual location of the rigging area should be agreed with the duty operator and should take into account current and forecast wind directions. This should be done by the first pilot who wishes to move his or her glider onto to the airfield, and who will then organise the initial disposition of the rigging area. Vehicular access to the rigging area should be via the perimeter track and non-active runways as agreed with the tower.

Whenever gliders are rigged, parked or queued for launching, there must be sufficient clearance from the active runway to avoid any real or apparent danger to other traffic including other gliders landing and turning off into the rigging area.

Rigging and Daily Inspection

Each glider must be given a daily inspection before flight. This inspection must include positive control and cable release checks. The glider's daily inspection book must be signed before flight. The aerotow rope, rings and weak link must be inspected before use. Cable release checks should be done with the rope and rings that will be used for the tow

Glider Launching

The key difference when launching gliders at Sleep is the need to cut the time spent on the active runway to the safe minimum required to line up the glider behind the tug, remove any ground handling equipment, attach the cable and start the aerotow.

Persons who hold glider wing tips for launch operations shall assume the responsibilities of launch marshalls. They must be competent to act in that capacity, and be fully aware of aerotow procedures including those set out in these notes. They must also confirm that each launch for which they are responsible is logged.

In order to be ready to line up on the runway the pilot must first:

1. complete the glider pre-flight checks;
2. check that the tug is ready;
3. have at least 2 members standing by to push out.

To line-up for a launch when Sleep Radio is active:

1. the launch marshall should carry out a visual check for traffic in the circuit and advise the pilot when it is clear (or if the tug is landing with a clear gap behind);
2. the glider pilot and the tug pilot should then establish that both are ready to launch

3. the tug pilot should then announce the intention to line up on 122.45 and the tug moving toward the runway should indicate to the ground helpers that it is clear to line up.
4. To minimise delays if the tug is landing and there appears to be a suitable gap then the glider pilot should state: "*Sleap Radio, glider 258, would like to line-up on 23 behind tug now landing.*" This also indicates to the tug pilot that he is to remain on the runway.

To line up for launch when Sleap Radio is not active:

The same procedures will apply as above except that if the tug is landing radio calls should be prefixed with "*Sleap traffic*"

Launching: The rope should not be attached to the glider until it is ready to take-off. In asking for the rope to be attached, the pilot indicates that he or she is ready for immediate departure and the wing tip holder/launch marshal then takes over responsibility for signalling without further instruction. At the same time the launch marshal should begin signalling *take up slack* (hand waved low), followed by *all out* (hand waved overhead) as appropriate. (Use of a white hat or similar conspicuous object to signal is recommended.) A forward signaller should be used if the tug has poor forward visibility.

To hold or abort the launch after the cable has been attached, the pilot must release the cable immediately, and then call on the radio and shout "*stop*". The launch marshal's stop signal is to hold a hand stationary overhead and shout "*stop*".

Low rope breaks: In view of possible conflicts with other traffic, it is not advisable to return downwind to the active runway following a low rope break. (There are 'landable' fields in most directions.) If a break occurs at a height which allows a reasonable circuit and if time permits, try to report your situation and intention to *Sleap Radio* on 122.45.

Clearing the field after take off: The aim is to clear the circuit area expeditiously. All aerotows inside the circuit area must stay below 800' to avoid conflicts with power traffic. The glider and tug should change to the chosen glider frequency (normally 130.125) as they clear the circuit to enable aerotow guidance without interfering with *Sleap Radio* communication. The tug pilot shall make any necessary radio calls. (e.g. *G-HL and glider are changing to gliding frequency.*)

Sleap rejoin and circuit procedure

The normal practice at Sleap is for power traffic to fly left-hand circuits and gliders to fly right-hand circuits. (These arrangements are sometimes altered such as when Shawbury helicopters operate at the airfield. See separate note.) The mixed glider and power circuits work well in practice provided that the glider pilots join correctly with sufficient height to be able to adjust the circuit to fit in with other traffic.

Before rejoining the circuit:

At approximately 1500', or 5 mins prior to joining the circuit, announce your intention to rejoin the circuit on the Sleap frequency giving your current position and height.

For example “*Sleep Radio (traffic), Glider 258 is 3 miles West of the field at 1500’ and will be shortly joining downwind right hand for runway 23*”.

Return to the immediate area (upwind, right hand) with enough height for a safe circuit. Continue to monitor 122.45 for a few minutes before rejoining in order to plan your circuit with regard for other traffic and the current runway. However, as some traffic may not have radio, you must also maintain a good look-out throughout particularly for power traffic on long finals when you are on the base leg.

Plan to join downwind at 800' - below the height of any power traffic that might be rejoining overhead on their 'dead side'. If you are likely to arrive much lower and need to execute an abbreviated circuit and/or use a different runway, warn *Sleep Radio* or *Sleep Traffic* as soon as possible and while you still have enough height to select an alternative field if necessary.

Unless otherwise requested or cleared by *Sleep Radio*, glider pilots should:

- fly right hand traditional (square) circuits for the active runway ;
- call on 122.45 at the start of the downwind leg,
e.g. "*Sleep Radio, Glider 258 is downwind for 23 right hand.*"
(In the absence of *Sleep Radio*, similar calls to "*Sleep Traffic*" should be made to tell other aircraft your position and intentions.);
- call briefly for base and finals (e.g. "*Glider 258 right base*") as requested by *Sleep Radio* or as necessary to inform other circuit traffic;
- aim to land in the appropriate place to allow a turn off into the rigging area or other non-active runway, provided this can be done safely. (Otherwise stop on the runway and push the glider clear as soon as possible.)

Do not land on the grass or crop within the airfield perimeter except in emergencies.

Do not roll across the runway edges onto or off the runway, particularly on **05/23** where there is a risk of hitting runway lights.

In the event of circuit emergencies including serious traffic conflicts or height misjudgments, remember your priorities are to AVIATE, NAVIGATE & COMMUNICATE strictly in that order. ie:-

- The first priority is to maintain a good look-out, safe airspeed and height margins.
- The second priority is to land safely on any part of the airfield or elsewhere that does not endanger anyone else.
- Finally, and only if you have time, tell *Sleep Radio* and/or other traffic of your revised intentions.

‘Mass Landing’ Procedures

If there are one or more gliders close ahead of you in the circuit, it is likely that the normal turn-off area will be obstructed. In this case continue to land on the active runway and roll close to the left* edge at the end of the landing run with the tip overlapping the grass so as to leave space for others to pass to the right.

* The left is the preferred side. However, if there is a cross wind from the right which is strong enough to prevent you going left, then go to the right edge.

End of the Day Procedures - Missing Gliders

No member shall leave the airfield on a flying day without either ensuring that all gliders launched from Sleaf are accounted for, or that someone else is staying until all are accounted for. Search procedures must be initiated no later than the end of official daylight in the event of any glider remaining unaccounted.

Any pilot who lands out, even on a pre-declared flight to another airfield, must report his or her situation to Sleaf as soon as possible - if only to prevent false alarms. In the event of a field landing it is also worth considering contacting the distress and diversion (D & D) cell by telephone (01489 612406) if you think your field landing may have caused alarm to people nearby.

Mid-week Shawbury helicopter activity at Sleaf.

Shawbury helicopters operate on the *dead side* of Sleaf A/F during the week (09:00 to 17:00). Therefore all civilian traffic including gliders must use the normal power circuit which will vary according to the runway in use as follows:

- Runway 23 – Left hand circuits
- Runway 05 – Right hand circuits (Midweek only. Normally LH during the weekend)
- Runway 36 – Right hand circuits (Midweek only. Normally LH during the weekend)
- Runway 18 – Left hand circuits

If you are unsure about the helicopter operations on a mid week day and the circuit direction in use then consult the duty instructor at the Aero Club who can brief you accordingly.

Gliders should attempt to minimise conflicts with the power traffic - for example by flying faster (60 knots) in the initial part of the circuit.

Runway Lights

In the event of an emergency return to the airfield in poor light, the runway lights on 05/23 may be activated by calling *Sleaf Radio*. (The former automatic activation has been discontinued) This advice is for real emergencies and is not an invitation to contravene regulations for flying gliders at night.

Local Flying - Sleaf ATZ and Shawbury MATZ and ATZ

Never attempt to soar in the Sleaf ATZ and try to avoid flying in it all times between take off and the rejoin for landing. When approaching the ATZ, listen out on 122.45 so that you are aware of traffic and airfield conditions - even if you don't intend landing immediately.

If you need to penetrate the MATZ when Shawbury is active, inform them of your position, height and intentions on 120.775. Do not fly in their ATZ and avoid the extended main runway line inside the MATZ at heights and positions that are likely to conflict with fast traffic.

Be particularly aware during mid week operations that the immediate environment around Sleaf experiences intense helicopter activity transiting to and from Shawbury.

Wave Flying

One of the attractions of flying from Sleaf is the opportunity for wave flying. Enjoy it within your own personal limitations but also pay particular attention to the following.

- **Airspace and altimeter settings**

Use an up to date aeronautical chart which displays the airspace at the heights you intend to fly at. Use the correct altimeter setting when operating near to the base of any airspace.

- **Wave boxes**

As of March 2007 all airspace above FL195 is no longer accessible to gliders unless in a designated “wave box”. Details of these and how to open them can be found on the BGA website and on the notice board.

- **Hypoxia**

The effects of oxygen deprivation are insidious. Familiar yourself with the symptoms of Hypoxia and ensure you have a functioning oxygen system for flights above 10,000ft.

- **Sunset times**

Be aware that sunset times at height are later than on the ground and descents from height take longer than you think. Plan your flight to be on the ground with sufficient daylight and in any event no later than official sunset.

- **Cloud Flying**

Wave gaps can close quickly and permanently. If you do not have appropriate instrumentation or are not comfortable with cloud flying then plan your flight to always have the option of a descent in the clear air.

Age Factors

Thinking and reaction times increase with age so that dealing with new problems becomes more difficult. Experience provides some compensation, but only if the older pilot uses his greater experience to avoid hazardous situations. Therefore think ahead to avoid difficult situations such as marginal final glides, low circuits and late field selection. Your personal currency requirements should be raised progressively. (i.e. Fly regularly and as often as possible.) Give more attention to formal check-lists; including rigging and daily inspections, pre-flight and downwind checks in the form of written check-lists.

Field Landings

All field landings have an element of risk and should not be undertaken lightly. Careful flight planning, competent flying and clear decision making with adequate height margins will reduce the risk to an acceptable minimum. Your attitude is a key factor. Recognise when a field landing is becoming likely and give it the priority it needs. Good airmanship means thinking ahead and avoiding the need to use 'superior skills' to execute last minute solutions.

Even when flying at Sleaf, ensure that every circuit and landing is flown precisely to your intentions. Plan with respect to the landing area and don't fall into the habit of using other ground references as these will not be available for a field landing. Approach speeds must be maintained accurately (+/- 2 knots), and the glider should land within a few feet of the intended spot. If you cannot do this consistently on the home airfield, you are unlikely to succeed under the pressure of an out-landing.

Plan all cross-country flights with the possibility of field landings in mind. Consider potential escape routes from any difficult areas and aim to stay within gliding reach of landable areas at all times.

During the flight recognise any early signs that a field landing may be likely - increasing high cloud, deteriorating thermal strengths, etc. Consider the landability of the area and, if necessary, head towards more favourable parts;

Actual field selection must include consideration of the key factors; size, slope, surface and stock, but give each its proper priority. Always choose fields with clear approaches.

Obstructions on the approach not only reduce the effective field length but also create turbulence, which could have fatal consequences if you attempt to clear them low and slow.

In the event of an accident in which poor field selection played a part, be prepared to answer the following question; Was there a better field within 5 miles? If so, then you could have reached it if you had been concentrating on selection from 1500'. If not, then why were you so low in such a poor area

Finally, even though field selection is vitally important, never let it interfere with your basic flying. A well flown circuit and landing into a poor field is safer than spinning into a perfect one.

SHROPSHIRE SOARING GROUP – DUAL FLIGHTS IN TWO SEATER GLIDERS AT SLEAP

Before flying as P1 on a dual flight make sure that:

1. You understand the category which covers the flight (see below)
2. All relevant P1, P2, medical and insurance criteria are being met

Category of Flight	Status of P1	Status of P2	Medical	Glider Insurance	Notes
Instructional	BGA rated instructor	Anyone who has signed a form to say that they are flying as a pilot under instruction.	P1 must meet PPL or BGA instructor requirements	Valid for instructional flights	P2 may handle wherever authorised by P1
Passenger	Current solo pilot who meets BGA requirements <u>and</u> authorised by CFI to act as P1 for passenger flights	Anyone who is <u>not paying for the flight</u>	P1 must meet unrestricted BGA / NPPL GP endorsed declaration	Insurance must be valid for <u>passenger</u> flights (ie 2 nd seat insured) with the named P1	P1 must be the handling pilot at <u>ALL</u> times below 500'
Mutual	Current solo pilot	Current solo pilot	P1 must meet BGA / NPPL GP endorsed declaration	Insurance must be valid for flights with the named P1	
Safety	Current solo pilot with known risk of incapacitation	Current solo pilot able to take over if P1 is incapacitated	P2 must meet BGA / NPPL GP endorsed declaration	Insurance must be valid with either pilot as P1	

Notes:

“Current solo pilot” is anyone who meets the currency requirements set out in the Shropshire Soaring Group Flying Notes

“Instructor” is a BGA rated instructor approved by the CFI for instructional flights from Sleaf

“Glider Insurance” refers to third party indemnity for the P1 and glider owners / operators. If in doubt check with the insurance company to ensure the glider the occupants are appropriately covered.