

# **THE LONDON GLIDING CLUB**

## **ROTAX FALKE SF 25C G-FLKS OPERATING MANUAL**

**1. INTRODUCTION**

It is important to remember that as a pilot approved to fly this motor glider you have additional responsibilities to the London Gliding Club over and above that of a glider pilot. Firstly, safety must be paramount when operating a propeller driven aircraft in the environment of a gliding club which by its very nature mixes aircraft and people. Secondly, the tugging operation generates noise in the surrounding area and great efforts are continually made to minimise the nuisance to the local population by the tug pilots being aware of, and complying with, the specific operation procedures, arrival and departure routes as specified in the Tug Pilots Manual. Operators of G-FLKS, and other self launching motor gliders using Dunstable are required to follow the same procedures and routes and generally comply with the requirements of this manual. The nature of 'KS is such that it is likely to be in regular usage in addition to the tugs. As it is fitted with a fixed pitch propeller it is unlikely that it will be operated much with the engine shut down, at least near to the airfield, and so well may assume a higher profile in the minds of our 'noise sensitive' neighbours than a glider, despite being a very quiet aircraft. Noise, real or imagined, has a direct bearing on the very existence of the club and it is important, therefore, that it is operated in a thoughtful and considerate manner and in accordance with this manual and the London Gliding Club Rules.

**2. APPROVAL TO FLY THE CLUB OPERATED MOTOR GLIDER**

Initial approval to fly the motor glider as Pilot-in-Charge will be issued by the CFI, once a full understanding of the requirements of this manual has been demonstrated. All flights intending to land away from Dunstable will require authorisation from the CFI or Duty Full Cat Instructor.

**3. LICENCES AND MEMBERSHIP**

Each pilot must be a full flying member of the London Gliding Club, and must hold an appropriate valid pilot's licence (or student pilot's licence). This must include the following:-

- A valid medical certificate. The onus for maintaining a current medical certificate rests with each individual pilot; the club will not issue reminders. An approved pilot may not fly if their medical certificate has expired or licence has lapsed.
- A valid Aircraft Rating and Certificate of Test/Check. (A pilot without the appropriate 'Aircraft Rating' may fly under the direct supervision of a CFI with his/her authority).

#### **4.0 CURRENCY**

If no powered aircraft or motor glider has been flown within the previous month, approval must be sought from the CFI before flying. If no such flying has been carried out within the previous three months then a check flight with a pilot approved by the CFI is required prior to flying as Pilot-in-Charge.

#### **5.0 ENGINE**

##### **5.1 General**

The engine fitted to this motor glider is a Rotax 912, which drives a fixed pitch wooden propeller. It is a four cylinder horizontally opposed piston engine which is capable of delivering 100 HP for up to 5 mins, at 5800 RPM (take off), but may be run continuously at 4800 RPM (climb). Unusually the cylinder heads are water-cooled whilst the barrels are air-cooled. It is fitted with a cowl flap and cylinder head (water) temperature gauge which enables good control of the engine temperature, especially during a low powered descent. The engine is equipped with two (electronic) ignition systems and a mechanically and electrically driven fuel pump. Thus it is unlikely that the engine will fail during the take-off but, as with all powered aircraft, it would still be prudent to expect this to occur every time and plan accordingly. During taxi and engine run up prior to take-off, the electric fuel pump should be OFF (see check list), as this will verify correct operation of the mechanical pump.

Training duties can be very hard on engines due to the alternate use of high or full power during club and take-off and low power during gliding flight or descent. Although with the Rotax engine the cylinder heads are water cooled, a long engine life will be encouraged by sensible use of the throttle. Therefore, make all throttle lever adjustments slowly both in the air and on the ground, paying particular attention when applying full power and when reducing power from a high level.

## **5.2 Operating**

Full details of the operation of the engine and aircraft are contained in the Flight Manual and check list to be found on board the aircraft. A copy of the check list is included as Appendix 3 of this manual. However, the following items should be noted:-

1. Before moving the motor glider by hand, ensure that the master switch is OFF, the ignition is OFF, that the propeller is horizontal (to avoid ground contact should the tail be lifted) and that the tail wheel is unlocked. As the engine does not have a mixture cut-off control, the engine will always contain fuel in the cylinders and therefore extreme caution should be exercised around the propeller. This is especially so with a hot engine. It is strongly recommended that ground handling is not performed by pulling on the propeller, but that whenever possible the motor glider is pushed backwards, with the tail wheel unlocked. This also enables several people to assist, whilst the aircraft is steered from the tail.
2. At the start of each day, check the oil level. The dipstick is located under a hinged panel in the top cowling.
3. Ensure that the area under and around the propeller is clear of stones and debris before starting. This is particularly important in the area near the fuel pumps.

4. For taxiing, use the minimum power necessary to achieve a fast walking speed. The rough nature of the ground at Dunstable should naturally preclude fast taxiing.
5. Before taking off (and landing) ensure that the tail wheel is locked. On take-off, open the throttle slowly and progressively to full power, taking three to four seconds. As the aircraft accelerates check the oil pressure and ensure that the engine speed is in the region of 5800 RPM.
6. When safely airborne, and not below a height of 500ft AGL, reduce engine speed to 4800 RPM (Max continuous) for the climb. At the top of the climb, reduce the power slowly to the desired level. Although the engine is partially water-cooled, slow changes in power will maximise engine life if performed habitually.
7. If it is deemed necessary to shut the engine down, expect the geared propeller to stop quickly. There is little difference in the glide performance with the engine idling or with it stopped. When shutting the engine down, run at idle for a short period to equalise temperatures. Shutting down is accomplished by turning the ignition key to OFF. If it is intended to land with the propeller stationary, inch it to the horizontal position using the starter button. Should the engine be shut down for an extended period, for example, if flying at altitude in wave, the engine and oil will become very cold. After re-starting, allow a period of running at low power (2500 RPM max) before opening the throttle fully. This may have implications for the height at which the decision to re-start is made.

## **6.0 NOISE ABATEMENT**

Although this motor glider is very quiet, even at full power, continual operation over the same area will cause considerable irritation to some of our neighbours. The recent change to the climb-out routes for aircraft departing to the North from Luton Airport off R/W 26 has only exacerbated this situation. Whilst little may be done in the short term to reduce the overall noise generated by the 'power' operation at Dunstable, we can dilute the effect by thoughtful and varied

climb-out and approach routings. Although on take-off and approach this motor glider is barely audible, it remains likely that it will be perceived by our near neighbours as a powered aircraft if it is habitually flown over houses near to the airfield. This variation forms the basis of the noise abatement procedures for the tugs and the following general points should be considered, along with the specific procedures as laid down in Section 8, Launch Points, when operating the motor glider.

1. Avoid overflying ALL houses and farm buildings immediately after take-off.
2. Fly around or downwind of Edlesborough, Eaton Bray and Totternhoe until at least 1500 ft AGL. Do not overfly Dunstable below 1500 ft AGL. (Ref: Air Navigation Order Rule 5.1. (ii))
3. Clear the immediate airspace as soon as practicable, and do not orbit or soar with the engine running until well clear of the local villages.
4. Remember that when turning, the focal point of the turn on the ground will be subjected to a concentration of noise.
5. Evenings and Sunday afternoons are particularly sensitive, and especially in light wind conditions.
6. **Do not fly circuits at Dunstable.**
7. Do not descend below 500 ft AGL until entering base leg and ensure that no houses are overflown, even with the engine off.

## **7.0 OPERATIONAL REQUIREMENTS**

### **7.1 General**

Unlike previous versions of the Falke, the SF 25C has a good power to weight ratio, which confers excellent take-off and climb performance even at high weight. However, the nature of the field at Dunstable requires special consideration when operating any powered aircraft in relation to more

conventional airfields. Therefore, give consideration to the following points when operating.

1. Wind speed and direction

Expect an increase in ground run and decrease in climb gradient when taking off with a crosswind or downwind component. If possible, always take off and land into wind.

2. Air temperature

High ambient air temperatures will reduce the engine and airframe performance more than a Group A aircraft.

3. Tyre pressures

Correct tyre pressure is important. Underinflated tyres will significantly increase the take-off run and possibly put the aircraft at risk of nosing over on landing, particularly as the wheel brakes are very effective

4. Surface condition

Soft surfaces, long and wet grass will all affect take-off and landing distances.

5. Wet Wings

***Do not attempt to take-off with wet wings.***

6. Weight

Consideration must be given, prior to taking off, as to the effect of degraded performance when operating at high weights, particularly when using the NE and E runs, in hot and/or crosswind conditions.

A copy of the CAA Safety Sense Leaflet titled “Aeroplane Performance” is included as Appendix 1 to this manual, and this details many of the factors to be applied to take-off distances for different conditions. Remember that these factors should be treated as minimum values.

**7.2** In the day-to-day operation at Dunstable, it will be sometimes necessary to taxi over the winch cables. Before crossing, call the tower/winch in plenty of time and state your intentions, as this will alert other stations who may not be able to see the motor glider. On receipt of an acknowledgement, cross the wires, but if no response is heard, cross only if it is judged safe after transmitting “KS crossing the wires”. If possible cross at 90° to the wires in such a position that you may be seen by both the tower and winch, or at least well clear of the launch point. Stop short of the wires immediately if anyone picks up a cable. It is recommended that you taxi up to the wires at a normal speed, coast over them at idle power before re-applying power. Avoid stopping on the wires or in an area where cables may fall following a real or simulated launch failure (crosswind considerations).

Before take-off, co-ordinate over the radio with the tower to ensure that this will not conflict a winch or aerotow launch. It is imperative that the winch cable is on the ground following a launch before committing to a take-off. **Under no circumstances should the take-off path cross or run along the winch cables.**

Before taking off always decide on a go/no go point along the take-off path, ensuring enough distance to stop safely under the particular conditions of the day should the take off have to be abandoned. As the elevator is not mass balanced, it will respond involuntarily in pitch over the rough ground until there is sufficient airspeed to provide some damping. It is therefore important to restrain the stick for approximately 75% of the take-off run, which in this motor glider is likely to be quite short. The SF 25C has a tendency to climb steeply after unsticking; particularly should it encounter a bump. It is important to counteract this tendency and initially fly a shallow flight path away from the ground. Due to the high level of power from the engine, it is possible to climb steeply at the blue line speed (best climb) on the ASI or 51 kt. However, it is strongly recommended that a speed of between 55 and 60 kt is adopted for the climb away from the airfield as this will enable the motor glider to adopt an attitude that permits good forward visibility. At 51 kt it is not possible to see over the nose. A good ‘rule of thumb’ is to position the highest part of the



cowling in line with the horizon. Also at 55/60 kt, greater controllability is available for flight in the turbulent conditions often experienced close to the hill.

Depart and approach the field in accordance with the diagrams shown in the section headed 'Launch Points'. Wherever possible, do not overfly people, aircraft or vehicles during take-off and landing.

The Rotax engine is not considered susceptible to carburettor icing, and it not fitted with an air intake heating system. Air for the engine is drawn from within the cockpit. During a long low power descent it would be prudent to increase the engine speed of 4000 RPM for a few seconds to ensure the availability of power should this be needed at a later time.

When approaching the field with the engine running at idle, the motor glider must be treated like a glider from the start of the base leg. Resist the temptation to adjust the glide path using power and the spoilers: spoilers only should be used. Should a go-around be necessary, close the spoilers, smoothly apply full power and climb straight ahead (but not over the winch cable run) at 55/60 kt before rejoining the circuit. At a safe height, reduce power to below 4800 RPM. **Do not** orbit on base leg or final approach as there is a significant risk of collision with other gliders/tugs that may be immediately behind. It is recommended that the minimum approach speed should be 55 kt, but higher in turbulent conditions or whenever a strong wind gradient is present.

Although a stop is provided at the full travel end of the spoiler lever movement, this may be overridden by a rotational movement of the handle. If this stop is overridden, and the lever pulled further aft, then the wheel brakes will be applied. These wheel brakes are very effective and so there is a risk that the aircraft could nose over on touchdown under these circumstances. The wheel brakes also operate independently at the extreme end of forward rudder pedal travel to assist in manoeuvring on the ground.

### **7.3 Additional requirements**

7.3.1 It is the commander's responsibility to terminate operations when darkness approaches. Resist all forms of persuasion to fly in these circumstances. Sunset tables are included in **Appendix 2** of this manual.

7.3.2 It is the commander's responsibility to end operations if visibility, wind strength or cloud base make operating hazardous. These limits will depend on both the limitations of the SF 25C and the pilot's personal limits.

7.3.3 Cloud flying is not permitted in this aircraft.

7.3.4 The anti-collision light should be on whenever the engine is running.

## **8.0 LAUNCH POINTS**

### **8.1 General**

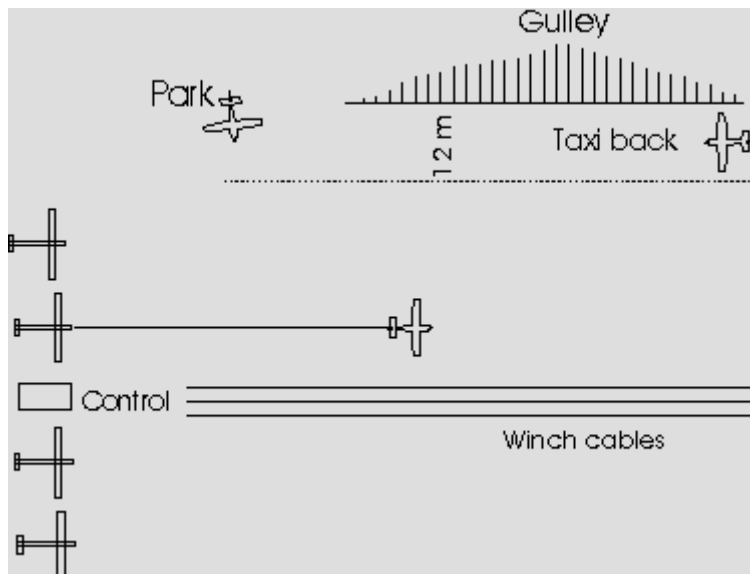
Unlike the glider pilot taking an aerotow, where the departure route is decided by the tug pilot, each take-off and landing direction at Dunstable presents the 'power pilot' with particular problems which must be considered. Listed below are notes and diagrams relating to each of the take-off and landing directions. As there is a considerable risk to people and gliders when the engine is running, the motor glider should always be parked and taxied well away from the launch point area. As a general rule, it should not approach closer than 20 metres to people or gliders awaiting launch. Normally a greater and safer distance can be achieved.

### **8.2 South West Run (Figures 1 and 2)**

*Launch Position.* Gliders will normally be positioned as shown in Figure 1. If the tower is positioned correctly there will be room for two K21's side by side.

*Take-off.* The take-off path must be kept within the area shown in Figure 1, between the 12m wide sterile area towards the gully and the central line.

The sterile area is identified by a line of short grass cut into the surface. Take-off along the normal aero tow run, (or from the top of hangar ridge close to the hill).



**Figure 1**

*Departure Routing.* There are two early route options, as shown in Figure 2, either between the farm buildings and the Tring Road, or between the farm buildings and the hill. Only if absolutely necessary should the old pig farm be overflowed. The second option requires adequate initial climb performance in order to comfortably clear the power wires, but usually results in a better climb gradient whenever the wind is blowing onto the hill. Do not overfly the winch and be aware that gliders or vehicles on the NE run landing area may not be visible from the launch point.

*Approach and landing.* The landing should normally be made to the left of the launch point and onto the upslope. Landing on Hangar ridge is not recommended due to the rough nature of the surface, and beware of curlover on short finals and in the gully in strong wind conditions.

Occasionally, it may be prudent to land on the E run, if wind conditions or congestion on the field dictate. In this case, a call should be transmitted to the tower/winch in good time. Also, avoid landing across the winch cables and ensure that no winch launch takes place as you taxi back to the launch point.

If taxiing back via Hangar ridge, try to anticipate the power requirements for climbing the slope and keep rolling, if possible. If the motor glider becomes stationary on the slope, even full power may not be enough to move forward. Avoid the steepest section closest to the launch point.

*Parking.* The motor glider should be parked in line with the edge of the gully and forward of the launch point.

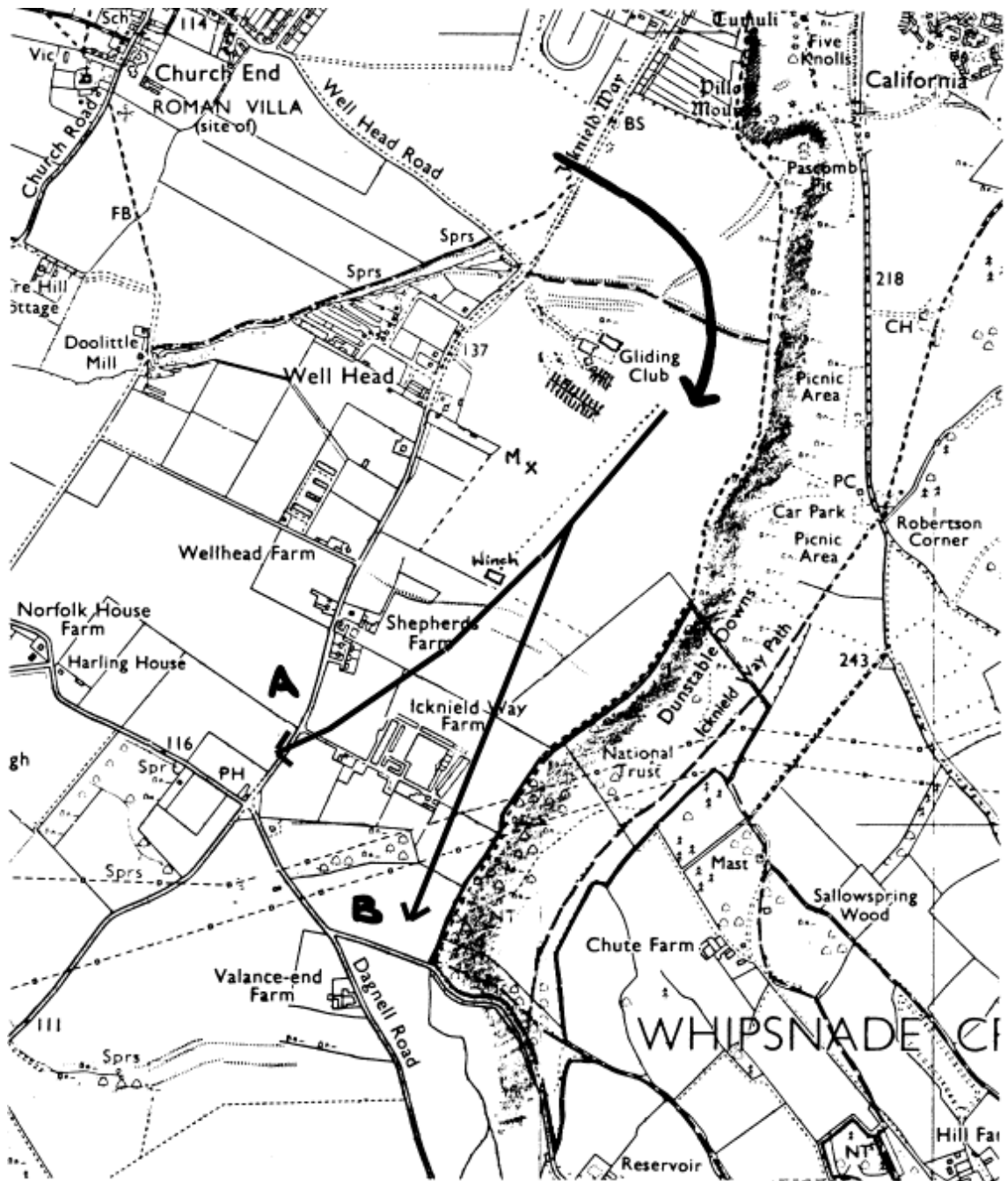


Figure 2

### 8.3 North East Run (Figure 3)

*Launch position.* Give consideration to the take-off on this run should there be a strong crosswind coming from the hill and/or at high ambient temperatures. Whilst the performance will usually be adequate, turbulence and sinking air downwind of the hill may result in control difficulties. The take-off should be commenced from the left side of the tower, no further than two wingspans from the tower. Any further to the left will compromise the take-off path. A line of cut grass indicates the centreline of the take-off area.

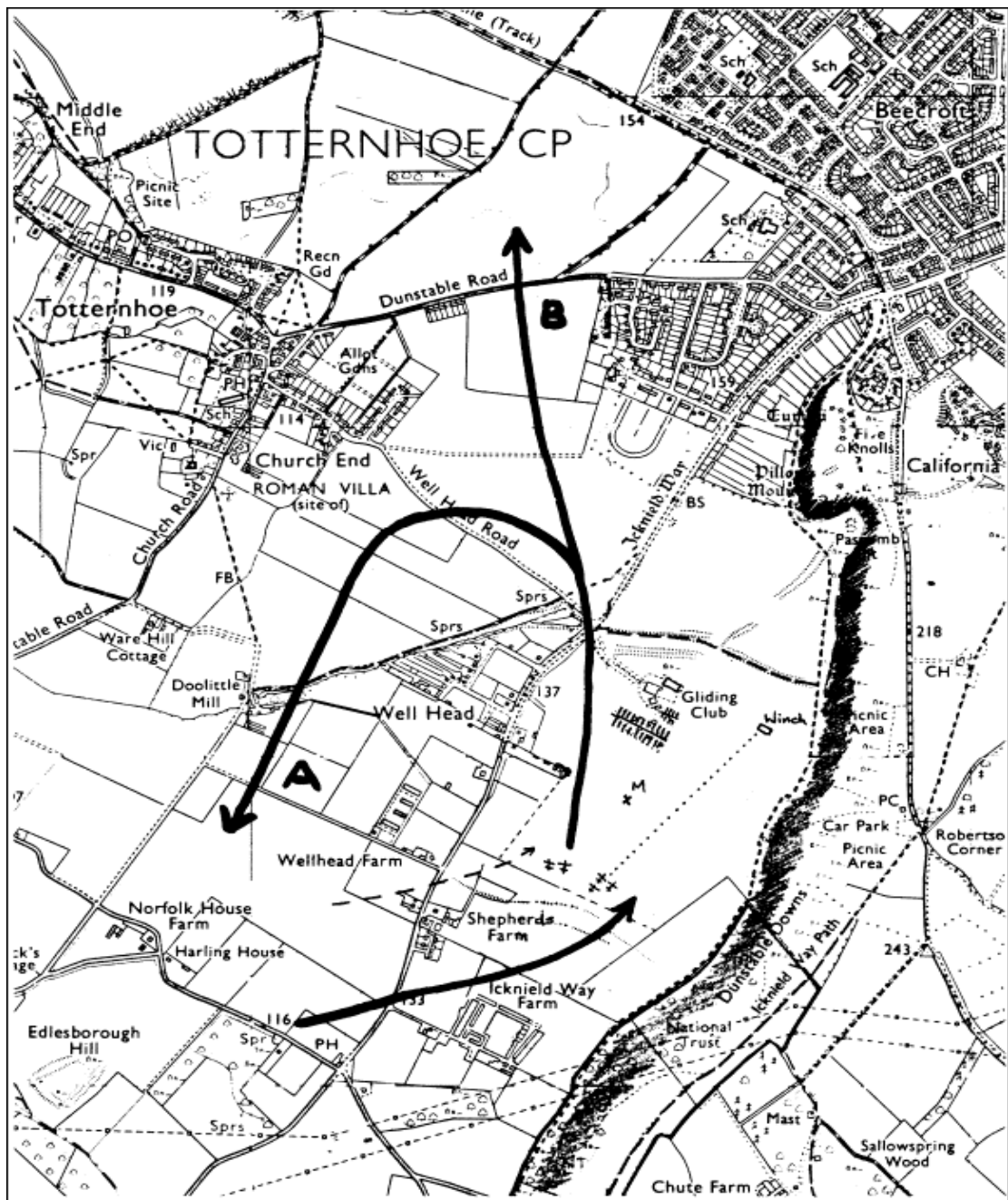


Figure 3

*Take off.* Before commencing take-off, the midfield lookout must be in position to confirm 'clear over the brow'. The normal take-off direction will be to the right of the bushes whilst keeping to the Tring Road side of the trailer racks. It is important to keep sufficient clearance from the bushes to allow for drift when the crosswind is from the right. This route will take you out over the Club entrance and away from the houses to the left of the road.

*Departure routing.* The initial route provides two options; straight ahead to the left of "The Avenue" houses or a left downwind turn to route between Totternhoe and the Tring Road. The first and apparently simplest option is particularly noise sensitive, particularly when the wind is coming 'off' the hill, as the motor glider is unlikely to have gained much height by the time it is abreast the houses. Consider turning left after take-off wherever possible and depart (initially) the area to the West, but be aware of the proximity of the 'Luton 08' boundary.

*Landing.* Landings should normally be made to the right of the launch point, where the ground is smoothest, along the approach paths indicated in Figure 3. Landing may be made onto the ground to the left of the launch point, which is rougher, but be aware of the location of the midfield lookout and of blocking any aerotow about to depart. If the winch cable needs to be traversed, call the tower to advise and exercise extreme care. Ensure that no cable has been 'picked up' as you cross. Beware of downdrafts on short finals in strong wind conditions.

*Parking.* The motor glider should be parked well away from the launch point towards the western corner of the field.

## **8.4 West Run**

*Launch position.* The launch position will normally be to the left of the tower and angled so as to always avoid taking off across the winch cables.

*Take off.* This take-off run is particularly noise sensitive and the direct overflying of the houses on the Tring Road **must** be avoided at all times. This allows three possible take-off paths, as shown in Figure 4. The most northerly (A) goes very close to the winch and special care must be made to co-ordinate with the tower. The middle options (B) keeps just to the south of the hedge line. The southerly option (C) allows a little more space but goes very close to the riding school, marked RS on the map. Try to avoid their training area as well as the buildings.

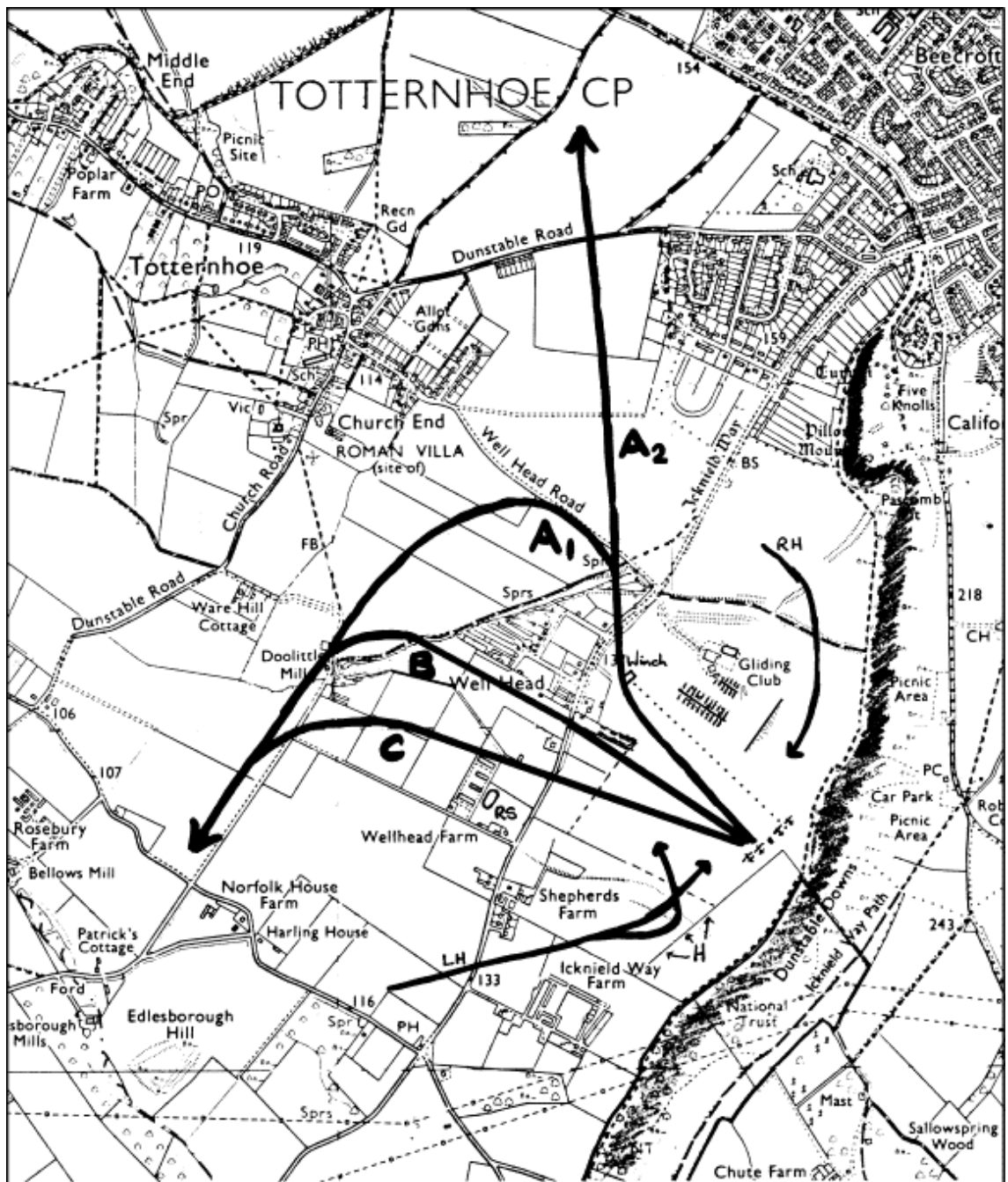


Figure 4

*Departure routing.* On route A, a 30° turn to the right must be made soon after take-off to avoid overflying any of the Wellhead houses. This often means overflying the winch. The preferred direction is then towards the south (A<sup>1</sup>), to avoid the noise sensitive houses on the western edge of Dunstable. Routes B and C require flying straight ahead on the appropriate heading until passing the Wellhead houses, when a left turn should be made.

*Landing.* If a left hand circuit is in progress, then the approach and landing should be similar to that when the NE run is in operation. If landing crosswind in front of the launch point, often the best option is to maintain a good distance forward of the launch point and to ensure a clear path is available in front to facilitate an overrun across the cables or a go-around. The final landing direction may be angled into wind if necessary. Care should be taken to avoid any low steep banked turns which could be affected by wind gradient effects. Please ensure that you do NOT compromise any other aircraft wishing to land parallel to the hill (The preferred option). If a RH circuit is in operation, then land as for the SW run and take care crossing the winch cables.

## **8.5** East Run (Figures 5)

Due to the good performance of this motor glider, it may be operated from the E run. However, all power and towing operations from this run will require authorisation by the CFI or CTP as it can be extremely hazardous due to curlover and downdrafts and the requirement to make a right turn immediately after take-off.



*Launch position.* The winch launch point is normally established on the edge of the ‘new ground’. The motor glider should be positioned to the right of this point, but not so close to the hedge as to make the subsequent right turn after take-off dangerous. Angle the take-off run as much as possible to the SW. It is possible that some of the take-off path will be obscured and care must be taken to ensure that no gliders, people or vehicles are in the intended path. When airborne and accelerating, commence a shallow banked turn to the right, away from the hill.

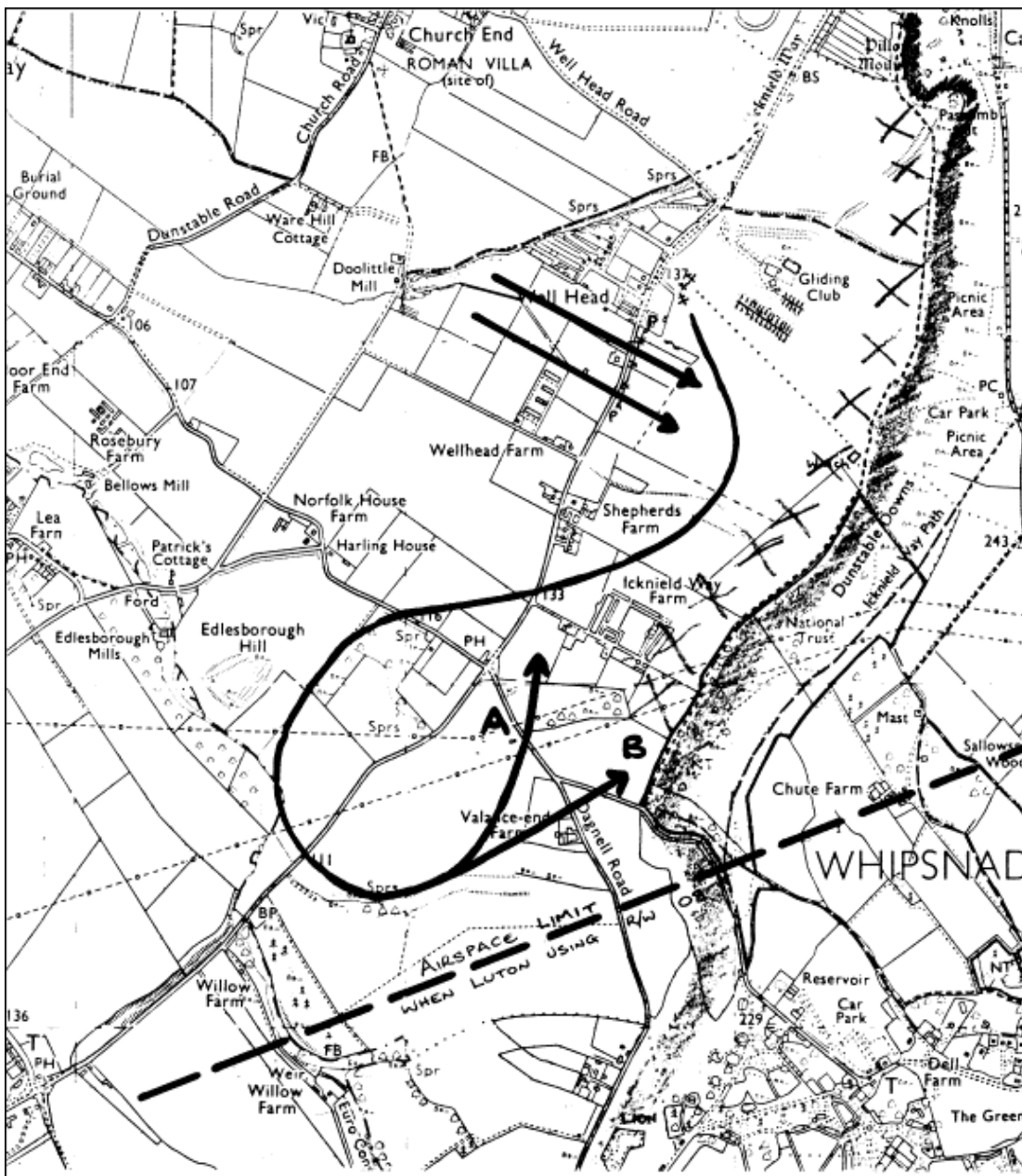


Figure 5

The drift imparted by the wind will effectively assist this turn and permit a flight path between the farm buildings and the group of bungalows on the Tring Road. Do not overfly these bungalows. The air is likely to be turbulent, especially in the highlighted area in Figure 5, and this could result in control problems whilst close to the ground.

*Departure routing.* Once past the Tring Road depart the area by flying straight ahead or turning right towards the north. It is not recommended that a turn is made back towards the field or the hill as this would place the motor glider in turbulent and sinking air which, with its poor climb performance, is likely to be dangerous. Be aware of the close proximity of the Luton 08 boundary when taking off on this run, as traffic is very likely to be approaching to runway 08. Remember to keep above 1500 feet when over Dunstable, Totternhoe etc.

*Landing.* The normal landing area is to the right of the bushes and towards the hill. A steepish final approach will usually be necessary as strong sink is often encountered. Landings in front of the launch point may only be made if there is no winch in operation.

## **9.0 Local Airspace**

The airspace around Dunstable is complex and subject to change. A thorough working knowledge of the local geography and position of the airspace boundaries is essential for all pilots who fly from the airfield, particularly those in command of a powered machine. All pilots can expect to be checked regularly on their knowledge of this as it is vital to the continued operation of the Club. Appendix 3 shows the local airspace and its restrictions as applied to the Club. However, only the latest issue CAA 1:5000000 Southern England chart contains up to date information and this should always be used when flying. The following summarises the main restrictions.

1. All flights must remain clear of the airway B3 above the airfield. With the altimeter set to zero for take-off, do not exceed 3000 feet indicated. For flights away from Dunstable it is recommended that the QNH is set on the altimeter (i.e. +500 feet indicated) whilst on the ground before take-off.
2. All flights must remain clear of the Daventry CTA. This limit to the West of Dunstable is Flight Level 55. To check this, set the altimeter to 1013 mb and remain below 5500 feet indicated.
3. Although the tugs are permitted to use a small area of airspace closer to the final approach path to runway 08 at Luton, the boundary for operating the motor glider will be the Southern set of power wires which run down the face of the hill immediately to the south of the airfield and which pass just to the north of Ivinghoe Beacon. However, it is strongly recommended that all flying takes place well away from this boundary, particularly when Luton are using runway 08. Note: Landing direction at Luton is constantly promulgated on Luton ATIS 120.57 MHz.

## **10. Refuelling**

Refuel before the next take-off whenever the tank is less than one quarter full. Taxy up the ramp to the pumps, stopping with the propeller disc just short of the white line ensuring that the earth wire and hose pipe are clear. Connect the earth wire to the engine exhaust and ensure that all electrics are switched off. Fill as required, but stop refuelling if the automatic cut-out activates on the fuel nozzle. This will avoid unnecessary spillage. Stow the earth cable and reposition the hose pipe with it looped through the rigid supply pipe to the right side pump. This should prevent the swinging arm to the hose from moving out in a strong wind with the attendant risk of being struck by the propeller. Record the uplift on the Fuel Record sheet in the shed. As, due to weight considerations, the SF 25 C may be parked overnight with less than a full tank, ensure that a thorough water drain check is carried out before the first flight of the day.

## 11. Tech Log

The Tech Log is an important document as it provides a pilot with the current status report of the aircraft. It also records flying hours and any defects. The information from the log is used by the Aircraft Engineer to schedule maintenance checks and maintain the engine and airframe log books. A Tech Log page should be completed for each day's flying and this is done basically in two stages. After the DI, the pilot will enter any new defects, the tacho time reading, date and sign for the DI. At the end of the day the last pilot will add any further defects, enter the tacho time, complete the hours and number of flights, and sign the log.

The Aircraft Engineer will vet all entries regularly, and arrange for rectification as appropriate, and annotate the Log accordingly. The daily pages, once vetted, will be removed.

## 12. Emergencies

All pilots must be continually aware of the possible emergency situations when operating the SF 25C. The engine is as likely to fail as other light aircraft engines, even though it is fitted with two ignition systems. The pilot's knowledge and competency of emergency procedures and associated vital checks is essential as any power failure in a motor glider that is likely to be critical will occur at low height. At low airspeeds the propeller on this motor glider will not windmill, but the idle power and stopped propeller glide performance are similar. **Keep in mind the available forced landing options for each take-off run on every take-off.**

## 13. Radio Procedures

A 720 channel radio and two headsets are installed in the SF 25C. Please take care of these headsets and stow carefully when not in use. Almost all operational messages at Dunstable are conveyed by radio, and whilst on the field the frequency to be used is 119.90 Mhz. The call sign for the various stations are as follows:-

<u>Station</u>	<u>Call Sign</u>
Tugs	“Charlie Alpha” “Charlie Bravo” “Charlie Charlie” “Uniform Alpha” “Yankee Mike”
Winch	“Winch”
Midfield bat	“Midfield”
Launch point	“Dunstable Radio”
Airfield controller (or Competition Control)	“Control”
LGC Office	“Office”

These may be prefixed with “Dunstable” should any conflict occur. When ready to take-off, if the tower is in operation, a call should be made stating “KILO SIERRA IS READY TO DEPART, CONFIRM ALL CLEAR ABOVE AND BEHIND”, even if it may be seen to be clear. The call will alert all other stations of your intentions. During midweek, only a few of the stations may be operating, and so a blind transmission should be made, “KILO SIERRA TAKING OFF”.

If you are doing something unusual, e.g landing in a different part of the airfield, taxiing across the cables or returning to refuel, then announce your intentions on the radio. The 119.90Mhz frequency is used for airfield operations and can become very busy. Therefore, please try and restrict your transmissions to legitimate information as much as possible.

#### **14. Booking in/out**

It is a legal requirement that all powered aircraft movements, but not those both starting and finishing a flight at Dunstable, should be recorded. A ‘movements’ book is located outside the main office and has two sections.

The first is for visitors, taking details of departure point, destination and times, and the second for LGC tugs, the SF 25C and Dunstable based motor gliders, recording either a destination or departure point.

## **15. Hangaring**

Whenever the SF 25C is hangered in the Tug hangar, it is important that access to the tugs is not unnecessarily impeded. If any tug is required to be moved, a pilot with at least a current Group A licence must be in charge. Take care in positioning the SF 25C as it is very easy to cause damage to the tugs with its wing tips, as the SF 25C may rock from side to side. When in the hangar, ensure that the ignition and electrics are off, the canopy is closed and a drip tray placed under the engine.

## **16. Daily Inspection**

Pilots must complete a daily inspection in accordance with the operating manual and this must be recorded in the Tech Log. In addition, special attention should be given to the following items:-

1. Air filter – not obstructed by grass, seed or insects
2. Correct main wheel tyre inflation. A soft tyre will significantly lengthen the take-off run.
3. Condition and security of the propeller and spinner. Do not push on the spinner when manoeuvring the SF 25C by hand, as this leads to cracking.
4. Remove the top cowling and check the engine for any signs of leakage of oil or fuel, general security of equipment and cylinder head cracking.
5. Thorough water drain check.

## **17 Checklists**

There is a check list for use with this motor glider, Appendix 3, to be found in the aircraft. Even if familiar with its operation, it is suggested that this is used each time the aircraft is flown.

## **18. Accidents/Incidents**

If any notifiable accident or incident occurs whilst the SF 25C is being operated with the intention of flight, the commander must not undertake any further flying until authorised by the CFI. It is the responsibility of the aircraft commander to notify the AAIB within 24 hours of any such accident/incident or, if unable to do so, the Operator.

**SUNSET TABLE**

JAN 1	1605	JAN 15	1625
FEB 1	1650	FEB 15	1720
MAR 1	1745	MAR 15	1805
APR 1	1935	APR 15	2000
MAY 1	2025	MAY 15	2045
JUN 1	2105	JUN 15	2120
JUL 1	2125	JUL 15	2115
AUG 1	2050	AUG 15	2025
SEP 1	1945	SEP 15	1915
OCT 1	1840	OCT 15	1805
NOV 1	1635	NOV 15	1615
DEC 1	1555	DEC 15	1550

(All times in local)



## London Gliding Club

### **CB SIFT CB E**

Canopy locked  
Tailwheel locked  
Trim full & free, set for take off  
Fuel Tap ON  
Throttle full & free, set 1mm open  
Parking Brake on  
Cowl Flap closed  
Flight Instruments checked and altimeter set  
Cabin Heat & Ventilation closed  
Master Switch ON  
Check Fuel Contents & Engine Instruments  
Avionics OFF  
Fuel Pump & ACL ON  
Choke as required  
Ignition both  
CLEAR PROP  
Starter max 10 sec. Light out, Oil pressure  
Choke in  
Throttle 2000 or as req. for smooth running  
Avionics ON  
Fuel Pump OFF

### **Power Check**

Brakes ON  
Fuel Pump OFF  
Oil Temp Green  
Set 4,000 check brakes holding  
Mag check Max drop 300  
Check idle

### **Pre Take Off**

Straps  
Controls Full & Free  
Tailwheel Locked  
Trim  
Fuel Tap ON  
Cowl Flap  
Fuel Pump ON Fuel sufficient  
Ts & Ps  
Eventualities  
Brakes OFF

### **Cruise**

**F**uel Contents & Pump  
**R**adio On required/next frequency  
**E**ngine Temperatures & Pressures  
**D**irection DI set and heading correct  
**A**ltimeter Height/Altitude OK

***G-FLKS***

Ver 1.2

### **Joining**

**F** Pump ON. Sufficient for go-around  
**R** Correct frequency  
**E** Ts & Ps  
**D** Direction for joining  
**A** QFE/QNH

### **Pre Landing**

Straps  
Tail Wheel locked  
Brakes  
Fuel pump & contents  
Ts & Ps

### **After Parking**

Brakes ON  
Pump, Radio, ACL Etc. OFF  
Mags OFF Key out  
Master Switch OFF