LSA Flying Order Book

LS Airmotive

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Abbreviation	Definition
AGL	Above Ground Level
AIAA	Area of Intense Aerial Activity
AIC	Aeronautical Information Circular
AIP	Aeronautical Information Publication
AIRPROX	When aircraft proximity compromises safety
ANO	Air Navigation Order
ATC	Air Traffic Control
ATZ	Aerodrome Traffic Zone
AUW	All-Up Weight
AVGAS	Aviation Gasoline
CAA	Civil Aviation Authority
CFI	Chief Flying Instructor
CG	Centre of Gravity
CO2	Carbon Dioxide
CPL	Commercial Pilot's Licence
DI	Direction Indicator
EFATO	Engine Failure After Take-Off
EFIS	Electronic Flight Instrument System
ENR	Enroute
ETA	Estimated Time of Arrival
FCL	Flight Crew Licensing
FI	Flight Instructor
FIR	flight information region
FOB	Flying Order Book
FSP	Flight Schedule Pro
FTO	Flight Training Organisation
HoT	Head of Training
IFR	instrument flight rules
IMC	instrument meteorological conditions
IR(R)	Instrument Rating (Restricted)
LAPL	Light Aircraft Pilot's License
LSA	LS Airmotive
MSD	Minimum Separation Distance
NOTAM	notice to airmen
PAN	Radio call indicating urgency
PFL	Practice Forced Landing
PPL	Private Pilot's License
QDM	Q-Code for magnetic track to the station
QFE	the Q-code for: Atmospheric pressure at aerodrome elevation (or at runway threshold)

0 Authorisation and Documentation

0.1 ANO, SERA, Rules of the Air

1. All flight training and aircraft operations conducted under the auspices of LS Airmotive shall be carried out in accordance with the applicable requirements of United Kingdom aviation legislation and regulation, including but not limited to the UK Air Navigation Order, the UK Aircrew Regulation, UK Standardised Rules of the Air (SERA), relevant Civil Aviation Authority publications, and any additional limitations or procedures contained within this Flying Order Book
2. Pilots are to familiarise themselves with the Air Navigation Order (ANO), UK Standardised Rules of the Air (SERA), CAP393, and all applicable regulations.
3. These Flying Orders specify many limitations that apply to pilots in current flying practice. Pilots who are not in recent practice must restrict themselves to more modest limits; this is common sense and self-supervision. Remember that 'Superior pilots are those who use superior judgement to avoid situations that might require the use of their superior skills'!
4. All Club members are to complete a new club membership form, before they first fly as commander, annually thereafter and upon amendment. By completing the membership form, the member is taking responsibility for following the provisions in this FOB.
5. As well as orders and limitations, the FOB contains warnings of what can happen when limits are ignored. The most common causes of serious accidents are flying in bad weather or taking off when the runway is not long enough. Knowing your own limits as well as your aircraft's limits is basic professionalism.

0.2 Flight Authorisation

1. The following may authorise flights, with the proviso that instructors who are not night current may not authorise night flights:

Authoriser	Authorisation Allowance
Flight Instructor	All flights
Flight Instructor (restricted)	All flights within the UK except first day or night solo and first solo out of the circuit
PPL holders with 10 hours P1 after gaining their PPL and with the CFI/HoT's permission	Their own flights within the UK
Pilot's approved by the CFI/HoT to authorise	Their own flights

2. Pilots with less than 10 hrs P1 after gaining their PPL are not specifically restricted to local area flying, but sorties outside the local area must be discussed with a member of staff. Such discussion does not itself constitute authorisation; the flight must be authorised by a Club authoriser (normally the Duty Instructor) in the Tech Log before the flight is made.
3. Pilots who are self-authorising are also self-supervising and do not need an instructor to be present when they fly. However they are to sign the FOB annually.
4. All solo students flying must be supervised by an instructor who is immediately available to ATC.
5. The Club may operate and offer for hire certain privately owned aircraft as well as its own. Any commander who flies using any aircraft within the fleet is to be a full member of the Club, but the Club takes no responsibility for the authorisation of these aircraft; aircraft owners who are suitably qualified to fly their own aircraft are considered to be self-authorising for flights in their own aircraft.
6. Club members wishing to hire new aircraft are to complete conversion training appropriate to the complexity of the aircraft and 'differences' training where appropriate; this will include briefing on any limitations specific to that aircraft.

All aircraft:- Hiring and/or conversion training is at the discretion of the CFI/HoT or authorising instructor.

0.3 Aircraft Check-Outs

All members must be checked out on each model that they fly. This may consist of either familiarisation training or differences training. Successful training for a new aircraft will be recorded using the “aircraft check-out” function on FSP.

0.3.1 Familiarisation Training

For any new type of aircraft for the member to fly (for example PA28-140, PA28-151, PA28-180, PA28-Arrow, SR22) The training will consist of a verbal brief and/or flight training as required. Extent of training required will be assessed by an instructor and recorded in Flight Schedule Pro

0.3.2 Differences training

Differences training is required for the following Single Engine Piston aircraft:

- Variable Pitch
- EFIS (Including Garmin G5)
- Retractable Undercarriage
- Turbo/Super-charged Engine
- Cabin Pressurisation
- Tail Wheel

Training required will be at the discretion of an unrestricted instructor who is checked out on the relevant aircraft type themselves. This can consist of a ground briefing and/or flight instruction.

Once successful differences training has been completed, this should be remarked in the member’s logbook and signed by the instructor.

0.4 Completion of Technical Log and Notification of Defects

1. Any technical defects must be entered in the defects section of FSP.
2. Pilots are to discuss the nature of such defects with a Duty Instructor or the Ops Office before entering the details of the defect in Flight Schedule Pro
3. Tacho/Hobbs and Block Times are to be entered where required for every flight.

0.5 Requirements for Solo Flying

1. Student Pilots must be in possession of a current UK CAA Class 2 or Class 1 Medical Certificate before their first solo.
2. Student Pilots should have passed Air Law exam before their first solo. In certain circumstances at the discretion of the CFI, if a student is ready for first solo and has not yet passed the Air Law exam, theoretical knowledge can be assessed orally by the authorising instructor.
3. Student pilots will always require authorisation and/or a check flight before solo flights. This will be solely at the discretion of the authorising instructor.
4. Student Pilots who have not flown dual in the last 7 days MUST have a check flight with an instructor before being sent solo.
5. PPL holders who have not flown in an LS Airmotive aircraft for a period of more than 30 days are to have a currency check with a Club instructor before flying solo.
6. CPL holders who have not flown in a LS Airmotive aircraft for a period of more than 45 days are to have a currency check with a Club instructor before flying solo.
7. On joining the Club all PPL holders are to be given an acceptance check. Subsequently all Club PPL holders are to have a competency check every 12 months. These checks are to cover stalling, a Practice Forced Landing without power, Partial Engine failure, Emergency drills, Circuits and Basic Instrument flying.
8. Extensions to the 30 or 45 day flying rule are at the sole discretion of the Head of Training and will be risk assessed case by case.

0.6 Licences and Flying Log Books

1. Club members' licences and Flying Log Books will be inspected by the CFI/HoT or his nominated deputy on joining the Club and annually thereafter.
2. All licence holders are personally responsible for maintaining the currency of their licences and any associated ratings including their medical certificates. Pilots' Flying Log Books are to be completed in accordance with Appendix G to Part 1 of CAP 53 and EASA part-FCL .
3. Licence holders who require authorisation are to make their licence and Flying Log Book available to their authoriser before flight.

0.7 Regulations for the Carriage of Passengers

1. All aircraft commanders have a duty of care to ensure the safety of their passengers. Before carrying passengers, commanders are to be specifically responsible for:

- Pilots must be reminded that their licence includes a recency requirement for the carriage of passengers. A pilot must complete three take-offs and landings every 90 days in order to comply with this requirement.
- Briefing passengers on the behaviour required from them and of the dangers of the propeller. In particular, passengers are only to approach an aircraft from the rear.
- Briefing passengers on the operation of seat belts and the aircraft entrance door and the actions to be taken in the event of emergency evacuation of the aircraft.
- Briefing passengers on the pre-crash ‘brace’ position and other emergency landing procedures.
- Pilots are reminded that no smoking or vaping is allowed in or around any club aircraft at any time.
- Passenger forms are completed prior to flight. These can be found as an online form from reception

1 Aircraft Handling Orders

1.1 Aircraft Checks Before Flight

1. Aircraft are to be correctly positioned before starting engines. Ideally aircraft should be positioned into wind and clear of any obstructions.
2. Particular attention must be paid to the area behind the aircraft to avoid any damage that might occur from prop wash once the engine has been started.
3. Pilots departing the local area must ensure that they have acquired adequate Met briefing information pertinent to the flight. Met information is available online as well as in the club's Flight Operations/Planning room. Any advice required should be sought from a member of club flying staff.
4. Pilots are to plan flights using recommended fuel contingencies. Advice should be sought from a member of flying staff.

1.2 Precautions When Starting Engines

1. Immediately prior to starting engines, pilots are to ensure that the parking brake is firmly applied and that the foot brakes are 'covered'.
2. Under no circumstances are engines to be started by hand swinging the propeller.
3. Pilots are to exercise common sense and not turn over engines until the battery is flat. If it is clear that the engine is not starting as easily as it should, shut down and seek advice from an instructor.

1.3 Running-Up Procedures

1. Engine run-ups are to be carried out according to the airfield information sheet.
2. Aircraft are to be positioned into wind but caution is to be exercised with regard other aircraft training at the airfield.
3. When operating from runway 19, power checks should be completed on the northern side, East of C3 hold on taxiway C, leaving space for aircraft to pass by. This does not apply on taxiway Alpha when operating from runway 01.
4. When power checks are completed for Rwy 19, aircraft should call ready for departure before moving. ATC will then issue clearance for onward taxi. For Rwy 01, aircraft can taxi up to A1 post power checks before calling ready for departure.

1.4 Turns After Take-Off

1. ATC may ask for an early turn after departure. This permits aircraft to clear the extended runway centre line as soon as possible and allows ATC to clear a subsequent aircraft to land or roll. If you are asked for an early turn, wait until at least 300 ft QFE or 550 ft QNH and then apply no more than 10° angle of bank in the appropriate direction to turn gently through about 20° ensuring that you do not over fly built-up areas below a height which would allow you to clear them in the event of engine failure. There is no need to turn any earlier or tighter than this.
2. For normal departures consult the airfield information sheets and noise abatement sheets.

1.5 Stalling, Spinning, and Aerobatics

1. Stalling and Stall/Spin Awareness (SSA) training may be conducted in Club aircraft. The minimum height to recover from such practice is 3000 ft AGL dual and 4000 ft AGL solo.
2. Intentional spinning is prohibited in Club aircraft except as required for instructor refresher flying, instructor re- qualification tests or FI courses.
3. Aerobatics may only be flown in approved aircraft specifically operated by the Club for that purpose with the authorisation of a suitably qualified instructor. Aerobatics are totally prohibited in all other Club owned aircraft.
4. Formation flying may only be carried out by FI(A)s who have received previous training and by pilots individually authorised for a particular exercise. The prior consent of all aircraft Commanders shall be obtained prior to any formation exercise.

1.6 Practice Forced Landings

1. PFLs are to be carried out over an active airfield (with ATC permission) or, when in the local area, clear of congested areas and livestock. Congested areas are defined as “areas substantially used for residential, industrial, commercial or recreational purposes”. Always observing the requirements of SERA 5005.
2. When conducting PFLs away from an airfield pilots are normally to go around by 500 ft AGL . When near housing, consider going around earlier to avoid annoying the residents. To initiate a PFL , select carb air to hot and then close the throttle. Do not induce a failure by operating the ignition or fuel controls. Once the throttle is closed, it is imperative to warm the engine by smoothly applying power approximately every 1000 feet to prevent shock cooling of the cylinders.
3. When instructors need to fly below 500 ft AGL in order to teach ‘Forced Landings With Power’, they are to be meticulous in adhering strictly to the requirements of low flying regulations flying no closer than 500 ft to any person, vehicle, vessel or structure.
4. Student pilots and PPL holders who are not self-authorising require specific authorisation for flights involving PFLs and the tech log is to be annotated with either the syllabus exercise number or ‘PFLs’.

1.7 Low Flight

1. Flight into bad weather continues to claim victims and all too many reports describe accidents caused by pressing on into bad weather. Club pilots must have no hesitation in returning to base or diverting if the weather en-route deteriorates below their limits.
2. Any pilot who is forced to fly below 1000ft AGL is to report the fact to the CFI as soon as possible after landing. As a report may have to be made the pilot must make a note of his route and the time of the occurrence.
3. For PA28 low level flight should be conducted at 75-80kt and with 2 stages of flap

1.8 Instrument Flying

1. Practice Instrument Flying may only be carried with the presence of a competent safety pilot who is current and qualified to fly the aircraft type being used. The safety pilot must occupy the other front seat of the aircraft.
2. A traffic service is recommended
3. If the safety pilot's field of view is obstructed, then an additional observer is also to be carried.

1.9 Go-Around and Land-After Clearance

1. When clearing an aircraft to land the controller must be sure that the runway is unobstructed. However, due to the busy nature of Oxford airport the controller will often offer a “land-after” clearance. **Student pilots are not to accept such a clearance** when flying solo. If cleared for a land-after, the solo student should respond with “Unable, student pilot” and should either continue approach to wait for a landing clearance, or initiate a go around.
2. If at any time on the final approach pilots are in doubt about their approach then they are to execute a go around. A go-around may be executed from any height prior to touchdown. Student pilots should always initiate a go-around if landing clearance has not been obtained by 250ft AGL (or 500ft QNH at Oxford)
3. Long and low go-arounds are not to be flown.
4. Go around procedures are noted in the attached airfield information sheet. note that at Oxford, due to helicopter operations, all go-arounds are flown on the ‘live side’.

1.10 Refueling Procedures

1. Refueling may be conducted by a license-holding club member or a member of staff.
    - Student Pilots may not refuel unsupervised
    - Members unfamiliar with refueling at Oxford should be supervised by a member of staff.
2. The following safety precautions must be observed:

    - Battery MUST be off and Keys out
    - Do not refuel with people inside the aircraft.
    - Do not use radios or mobile phones in the vicinity of the bowser.
    - Do not wear shoes with metal studs.
    - Do not use any plastic containers or funnels with AVGAS , except for the 'test tube' used for water checks after refueling.

Fin beacons and strobes must be switched off when the aircraft is near the fuel bowser because of high energy electricity close to fuel is a potential fire hazard. In the event of a fire the priorities are to preserve life rather than to save equipment. If you need them, there are CO2 and foam fire extinguishers at the pumps. The nearest telephones are adjacent to the fuel tanks.

Refer to the Oxford Airport self-service fueling instructions for more information.

1.11 Carburettor Icing

1. The Lycoming engine fitted to the PA28 is protected against carburettor icing because inlet air is ducted through the sump and thus is warmed before entering the induction system. Nonetheless pilots must be aware of the causes of carburettor icing, the symptoms and the corrective action necessary.
2. Carburettor icing is caused by the temperature drop inherent in fuel vaporisation - a drop of some 20 or 30 degrees - which can freeze atmospheric moisture and the water that is always present in fuel and so block the venturi. Low power settings are most conducive to icing because of lower engine temperatures and the ease with which the partially closed butterfly valve can be blocked.
3. Given a drop of up to 30 degrees in the venturi, it is clear that carburettor icing is not restricted to cold winter days. Indeed because of the mass of water in the air humidity is a critical factor; a cold winter day is less of a hazard than a warm humid summer day. Moreover, although carburettor icing is most likely in cloud or fog with their 100% humidity where the risk is obvious, most carburettors icing incidents have occurred in clear air when the pilot was taken unawares. Apart from in cloud and fog, high humidity can be expected when:
    - The ground is wet and the wind is light
    - In poor visibility especially near large areas of water.
    - Just below the cloud level or between cloud banks.
    - In persistent rain
    - Fog has just dispersed.

More information can be found in CAA Safety Sense leaflet No. 14A.

2 General Flying Orders

2.1 Minimum Altitudes for Training

1. In general all VFR training outside the aerodrome visual circuit must take place at a height which allows a sufficient margin above 500 ft MSA. In addition a greater margin is to be maintained for safety reasons and to avoid creating a nuisance to the populace of the local area.
2. For exercises involving stalling refer to **Section 1.5**.
3. For those exercises authorised for spinning the minimum entry height for intentional spinning is to be not less than 5000 ft AGL . Recovery action must be commenced by 3000 ft AGL . Up to 500 ft may be lost for every complete turn of a normal erect spin and even more for the recovery phase.
4. Spinning is not to be carried out when there is no defined horizon, when the aircraft is over uniform cloud cover or the sea or if vision from the aircraft is obscured.
5. Visual circuits below normal circuit height may be conducted by instructors only under the following circumstances:
    - Prior approval must have been given by ATC .
    - The exercise may only be flown as part of a CAA Skill Test or IMC Rating Test conducted by a CAA approved examiner or training for that purpose.
    - The exercise will be discontinued if any legitimate noise complaint is received during the conduct of the test.
    - ATC may refuse permission for low-level circuits.
6. Caution should be taken for Military Low Level flying. More information can be found in CAA Safety Sense leaflet No. 18.

2.2 Weather Minima

1. LS Airmotive has a duty of care to ensure that, as far as is reasonably possible, Club members do not fly in hazardous weather conditions. Equally, the Club does not wish to impose unreasonable restraints on members with appropriate qualifications. The IMC Rating is a UK national rating and is designed as a 'get you out of trouble' qualification and not as a replacement for the IR.
2. The following cloud and visibility limits apply to all pilots operating under the auspices of LS Airmotive:

Solo student pilots

- Outside the circuit: 10 km visibility, Cloud base to be at least 500ft above the calculated MSA for the route, with a defined horizon and in sight of the surface at all times.
- In the visual circuit: 7 km visibility, 1500 ft cloud base AGL with a defined horizon and in sight of the surface.

PPL Licence holders:

- Outside the circuit: 5 km visibility, 1500 m horizontally and 1000 ft vertically clear of cloud and in sight of the surface.
- In the visual circuit: 5 km visibility, 1500 ft cloud base AGL and in sight of the surface.
- Pilots with current IMC ratings can fly subject to the IMC minima. Pilots with current Single

IMC Rated Pilots:

- Can fly subject to the published UK IMC minima

Single Pilot Instrument Rated Pilots:

- Cloud and visibility not below published minima at departure and destination. Published minima should be one approach category higher than destination for alternate aerodromes.

3. The following wind limits apply to all pilots operating under the auspices of the LS Airmotive DTO:

- Non-PPL holders: 25 kt surface wind, 10 kt crosswind component.
- PPL holders with less than 100 hr P1: 25 kt surface wind, 12 kt crosswind component.
- Pilots with at least 100 hr P1: 25 kt surface wind, 17 kt crosswind component.
- Instructors: 35 kt surface wind, 17 kt crosswind component.

4. Under no circumstances are Club aircraft to be flown in conditions of known or forecast icing. Similarly, Club aircraft are not to be flown unless the runway surface is completely cleared of snow, slush or ice over the entire length of the calculated take-off distance required.

5. Although some of these club operating minima are more restrictive than those required by the ANO, we consider that our minima are safer particularly in the busy local airspace. Moreover, just because the weather is better than specified, pilots do not have an automatic right to fly. **The final decision as to the suitability of the weather rests with the CFI /authoriser and, once airborne, with the aircraft commander.**

6. Pilots without Single Pilot Instrument Ratings are to be aware that the IMC rating has no validity outside UK airspace and are to operate subject to the Club minima for unrated PPL holders when they conduct international flights.

7. If flying abroad, pilots must ensure that they satisfy the weather minima for their current location

2.3 Cross-Country and Navigational Exercises

1. Solo student pilots on navigation exercises which involve landing at other aerodromes are to be in possession of a correctly completed ‘Solo Navigation Briefing Certificate’.

2. All pilot’s landing away at another aerodrome must ensure they carry the aircraft grab bag, complete with the aircraft documents folder.

3. Pilots departing on international flights are to take the folder provided by the Club which contains the relevant documents required in accordance with Schedule 10 of the ANO. Life jackets are available and should be carried and worn when required.

2.4 Action When Lost

1. If pilots are unable to establish their position then they are to carry out the lost procedure.
2. Whilst circumstances will dictate the order in which the checks should be carried out the following is a general guide in the event of becoming lost:
    - Check the safety altitude for the route being flown. However do not climb into cloud if you are visual with the ground and never enter cloud if you do not have an instrument qualification.
    - Note the fuel state and the airborne time remaining. Ensure that the DI is correctly aligned with the compass.
    - Re-check the flight log to ascertain that the correct heading is being flown. Re-assess the ETA for the missed fix.
    - Assuming visual contact with the ground, stop and orbit, search the area for an identifiable feature within a circle of uncertainty of 10% of the distance flown since the last positively identified fix.
3. If you are lost call for assistance sooner rather than later. It is not an admission of failure but a prudent and safe course of action. Firstly, consider contacting a suitable radar station, such as Brize Norton or Birmingham for example, and request a radar position fix. In the unlikely event that this is not possible then make a PAN call on the frequency in use. Otherwise make a PAN call on 121.5 MHz. If you cannot remember the full CAP 413 phraseology then just state “Who you are, where you think you are and what help you need” - any further information will be asked for by the D&D controller. Don’t forget to cancel your PAN call when you are safe!

2.5 Landing Away Unintentionally

1. If a pilot lands at an unauthorised or unintended destination then the Duty Instructor, HoT/CFI or Operations are to be informed immediately. The Club telephone number should be noted on your solo navigation briefing sheet.

2. If a Flight Plan has been filed for the sortie then the pilot is to ensure that it is closed after landing.

3. Except in the case of a self-authorising pilot, If an unscheduled landing has been made, under no circumstances is a departure to be made until the CFI or authorising instructor has been consulted.

2.6 Actual Forced Landing

1. In the event of an actual forced landing captains are not to make any admission of liability for any damage caused and are not to promise any payment.
2. After any forced landing the aircraft is not to be flown again without the permission of the CFI, or authorising instructor.
3. In the event that the actual forced landing occurs away from an active airfield then the police are to be informed and where possible the aircraft is to be guarded until assistance arrives.

2.7 Weight, Balance and performance

1. There have been several General Aviation accidents caused by loading aircraft above the maximum all up weight or by attempting a take off with insufficient runway available. All Commanders shall be able to calculate the aircraft weight, centre of gravity and take off performance of their aircraft.

2. Having established that the aircraft is below the maximum AUW it is important to determine whether the aircraft can become airborne in the runway length available. This is far from academic at the smaller, possibly grass, airfields that are typical of the General Aviation world. Take off performance graphs are included in the aircraft Pilot operating handbooks. The take off performance must always be calculated. The graph gives the ground distance from the start of the take off run to the point where the aircraft is 50 ft above the ground. It is a CAA requirement that this distance (the take off distance required or TODR) is equal to or less than the Take off distance available.

3. The following points must be noted when calculating TODR :

    - In all cases read the POH. Some graphs are already factored by 1.25.
    - The graph is in feet whereas many airfields quote distances in metres. A conversion may be necessary.
    - The TODR is for dry hard surfaces. For take off from short dry grass increase TODR by 20%. Do not take off from long or wet grass, nor from hard surfaces with extensive standing water or slush.
    - The Flight Manuals have a graph to calculate the landing distance required but the critical distance is the take off distance. If you can take off safely then you can usually land.

4. In summary the Cherokee 140 is basically a 2 seater aircraft that happens to have 4 seats. If 4 people are carried then the fuel load has to be reduced substantially to stay below the maximum permitted AUW. Moreover to stay within the utility category no passengers or baggage can be carried and fuel must be at or below the tabs.

2.8 Flying Over the Sea

1. Any pilot who intends to fly over the English Channel, North Sea or Irish Sea is to inform Operations, CFI or HoT of the fact beforehand so a cross-channel check flight or briefing can be arranged. (Note: this is a mandatory club requirement for the first trip over seas.)
2. The Club has available for loan a certain amount of survival equipment and pilots should consult a member of staff to arrange for its loan.
3. Pilots and passengers in Single Engine aircraft intending to operate beyond gliding range from a safe landing area must wear life preservers for the duration of the flight.
4. Pilots should be reminded of the mandatory requirement to file a flight plan when intended routes cross International FIR boundaries (excluding London/Scottish boundary).
5. It is recommended that a flight plan be filed for flights over water more than 10 miles from the coast together with all flights over sparsely populated areas where search and rescue would be difficult.

2.9 Alcohol and Drugs

1. Pilots are to ensure that neither they nor their passengers operate aircraft under the influence of alcohol. Alcohol must not have been consumed in the eight hours prior to flying.

2. LSA does not allow members to use recreational drugs, whether on or off site.

3. Any allegation or reasonable suspicion of alcohol or drug misuse in connection with flying activities will be investigated in accordance with LS Airmotive safety and disciplinary procedures.
   Investigations will be proportionate, fact-based, and conducted in line with just culture principles. Where appropriate, no further action may be taken following initial assessment.

4. LSA has a zero tolerance policy regarding the above and members may have their membership terminated in accordance with Section **7-3 - Disciplinary Action**

2.10 Health

1. All pilots are to ensure that they have a **current** CAA medical in force. Students are not permitted to fly solo without one.

2. PPL holders are to adhere to the rules laid down in the ANO with regard to any period of sickness. This states that pilots must inform the CAA if he/she suffers injury that prevents them acting as flight crew. Pilots must also inform the Authority as soon as possible if suffering an illness that prevents them acting as flight crew for a period of 20 days or more or, in the case of a woman, has reason to believe that she is pregnant. In all mentioned circumstances the medical certificate is then deemed to be suspended (therefore suspending the pilot licence) until the person is medically examined under arrangements made by the CAA .

IF IN DOUBT, DO NOT FLY!!

2.11 Night Flying

1. All night flying at Oxford is to be conducted in accordance with the operating hours promulgated.
2. All Commanders shall be in possession of a serviceable torch when flying by night.
3. Extreme care must be exercised when operating on the ground due to the poor internal lighting of the PA28.
4. All external aircraft navigation lighting and red anti-collision lights must be fully serviceable for night operation. However, unserviceable wing strobes may be accepted at the Commander's discretion.
5. Pilots must be reminded of night currency requirements when flying solo. These state that a pilot must complete 3 night take-offs and landings every 90 days (one of which at night) in order to carry passengers at night. If the pilot has not flown at night for a period exceeding 6 months then a night check flight with a qualified instructor is required to revalidate night currency.

2.12 Wake Turbulence

1. All pilots are to be aware of the hazards posed by wake turbulence. All aircraft leave an invisible wake behind them when flying, consisting of 2 counter rotating vortices separated by about 3/4 of the aircraft wingspan. The rotational force of these vortices is dependent on the size and weight of the aircraft making them, but a vortex from a large transport aircraft is easily powerful enough to roll a light aircraft upside down regardless of any control inputs the light aircraft pilot may make. Because Club pilots share Oxford with a notable amount of jet traffic, all pilots must be keenly aware of the problem of wake turbulence and how to avoid it.
2. The vortex system from an aircraft slowly sinks down, dissipating about 1,000 ft below the aircraft. In the circuit this means that the vortices can reach the ground where they move sideways over the airfield usually at a height about equal to the wingspan of the aircraft that generated them. A particular dangerous situation exists if there is a 5 kt crosswind because this tends to hold one of the vortex cores over the runway. Should a light aircraft take off into this core it might easily be overturned and, at such a low altitude, a crash would be inevitable. This has happened to a Cherokee at Oxford in the recent past and there were no survivors. It is interesting to note that the aircraft causing the turbulence was a large helicopter.
3. There are two ways of dealing with wake turbulence:
    - Wait until it disperses; for take-offs from the runway intersection, wait 3 minutes from the time that the heavy aircraft becomes airborne before starting the take off run.
    - If taking off from the same point as the heavy aircraft, wait 2 minutes.
    - If landing behind a large aircraft and following the same path on finals the minimum separation is 8 miles or 4 minutes.
    - Avoidance. If following a large aircraft in to land it is possible to assess where the wake will start and finish and, as it will drift towards the ground, to plan an approach that will avoid it. The technique is to remain above the other aircraft's approach path and to touchdown beyond its touchdown point.
    - If cleared to land behind a large aircraft which is taking off the same logic dictates that the touchdown point shall be well before the heavy aircraft rotation point.

4. A particular hazard occurs when a large aircraft flies a low approach and go-around or flies a touch-and-go, because the nose-wheel is not lowered onto the runway and consequently both manoeuvres leave a carpet of vortices that cannot be avoided.

5. All aircraft other than light aircraft should be regarded with caution for wake turbulence consideration including helicopters.
6. Further details of the hazards associated with wake turbulence may be found in AIC P092/2017.
7. Student pilots are to wait for the wake turbulence to decay rather than attempting to fly to avoid it.

3 Rules of the Air and ATC

3.1 Aerodrome Operating Hours

1. Aerodrome operating hours are generally as promulgated in the Air Pilot Publication.

3.2 Signals Square and ATC Instructions

1. Whilst Oxford no longer has a signals square, some General Aviation airfields used by light aircraft are neither as well equipped nor as controlled. Therefore all pilots are to be familiar with Signals Squares and able to interpret them.
2. The ANO refers and there are various publications covering the subject.
3. Pilots are required to comply with ATC controller instructions during aerodrome published operating hours.

3.3 Circuit Procedures

1. The Oxford visual circuit patterns and arrival and departure procedures are designed to accommodate a large volume of traffic whilst minimising noise to local residents.
   Pilots are not to overfly Blenheim, Bladon, Tackley, Yarnton and Shipton-on-Cherwell.

2. To spread the noise evenly, circuit directions are variable – especially at night - so it is absolutely vital to listen carefully to ATC instructions.
   When flying from runways 19 and 01 extreme care must be taken to avoid the following:-
   Weston-on-the-Green Danger area
   Brize Norton Controlled Airspace

3. Ensure that you are completely familiar with all circuit patterns that you are required to fly as well as those patterns which may be flown by other training aircraft using the field (e.g.: Twin engine low level circuit patterns) so that you may fit in with traffic as required.

4. Departure procedures normally require a turn away from circuit direction and this should be requested prior to take off when ready for departure. Again, it should be noted that care must be taken to avoid Blenheim and Brize Norton. Pilots should also note which instrument approach procedure is in use at the time and plan departures accordingly.

5. For re-joins, aircraft should normally route as instructed by ATC taking care to avoid the instrument approach as necessary. Due to the busy nature of Oxford, direct joins are preferred above overhead joins although this is not always possible and ATC will advise.

6. It is often requested to ‘hold off’ in the local area and wait for rejoin sequencing – this should be anticipated.

3.4 Local Flying Areas

1. The main area in which Club training takes place is to the North-West of the field.
2. Club pilots must be careful not to infringe any Controlled Airspace or local ATZs without the appropriate clearance. Note also that the local flying area lies within the Oxford AIAA; this requires pilots to be particularly vigilant in their lookout for other aircraft.
3. There are many sites which although not active all the time can be very busy with parachuting, gliders, microlights etc. These are clearly marked on CAA charts and whilst up to date NOTAM will provide the times of activity for some of these areas, others may be active without NOTAM being issued. If in doubt, all should be treated as being active and a prudent margin of avoidance taken.
4. Pilots must take particular care to avoid Danger Area D129 around Weston-on-the-Green and Brize Norton Controlled Airspace.

3.5 Prohibited and Danger Areas

1. All Prohibited and Danger Areas are to be avoided. If pilots believe that they may have inadvertently strayed into such areas then they are to report the fact to ATC immediately. A report is to be made to the CFI as soon as possible afterwards.
2. Although the positions of local Prohibited, Restricted and Danger areas are displayed in the Club, pilots are to ensure that particular attention is paid to the activity state of any areas adjacent to their intended route.

4 Checklists

4.1 Checklists

1. All pilots are to be in possession of and use the checklists for the aircraft they intend to fly as recommended by LSA.
2. These check lists may be amended from time to time and members will be notified of any changes. No other check lists are to be used.

5 Emergency Drills

5.1 Emergency Drills

1. The emergency drills applicable to the aircraft are to be carried out in accordance with the drills laid down in the respective check lists.
2. Obviously all eventualities cannot be catered for in these check lists and sensible airmanship is required to ensure safe operation of aircraft.
3. Although all Club pilots will be required to demonstrate their ability to cope with emergency situations during their annual Club Check, common sense and good airmanship dictate that pilots must remain familiar with the Emergency Drills contained in Club aircraft checklists.

6 Accident, Incident, Airprox and Safety Reporting

6.1 Accident Reporting

1. All pilots are required to report any 'Notifiable' accidents as listed in the Investigation of Accidents Regulations. These regulations contain details of the commander's responsibilities following an accident.
2. In the first instance the Commander is to inform the CFI/Operations on 01865 370814 of any accident to a Club aircraft.
3. The telephone number of the Aircraft Accident Investigation Branch is 01252 512299 Pilots should be familiar with:

AIC P056/2020 DUTY TO REPORT AIRCRAFT ACCIDENTS AND SERIOUS INCIDENTS

6.2 Incident Reporting

6.2.1 Reporting New Incidents

1. Details of any Incident are to be reported to the club via the Centrik Safety Reporting system.
2. Any incident that goes unreported can have serious consequences and it is particularly important that pilots adhere to this order. Remember if in doubt, report it!
3. CAP 382 contains details of what constitutes an incident and how they should be reported.

Pilots should be familiar with:

AIC P056/2020 DUTY TO REPORT AIRCRAFT ACCIDENTS AND SERIOUS INCIDENTS

6.2.2 Reporting Past Incidents

1. When joining as a student or a member, all Members must report any past incidents/accidents that they have been involved in to the HoT or CFI.
2. This must be done before any flights take place.

6.3 AIRPROX Reporting

1. In the first instance AIRPROX reports should be reported to ATC on the frequency in use.
2. A follow up report should be submitted using form CA1094. Refer to AIP ENR 1.14 for guidance
3. An official of the Club is to be informed as soon as possible.
4. REMEMBER: Oxford and the local area is very busy – keep an exemplary lookout at all times.

6.4 Just Culture & Safety Reporting

6.4.1 Our Safety Culture

LS Airmotive operates a Just Culture. This means we recognise that aviation is complex and that honest mistakes can occur, even when people are trained, current, and acting with good intent. Safety improves when people feel able to speak up early, without fear of unfair blame or punishment.

You are expected to act professionally, responsibly, and within the guidelines of the Flying Order Book. In return, LS Airmotive is committed to dealing with safety reports fairly, proportionately, and constructively.

6.4.2 What Just Culture Means in Practice

Under Just Culture:

- You will not be punished for honest mistakes, errors of judgement, or unintended deviations that are reported openly and promptly.
- Reporting is encouraged, not frowned upon.
- Reports are used to identify trends, improve training, and prevent accidents, not to apportion blame.
- Learning and prevention always take priority over disciplinary action.

6.4.3 However, Just Culture does not protect:

- Wilful violations of the ANO, Rules of the Air, or this Flying Order Book.
- Reckless behaviour, deliberate rule-breaking, or knowingly unsafe acts.
- Dishonesty, concealment, or failure to report known safety issues.

6.4.4 What Should Be Reported

You are encouraged to submit a report for any safety concern, including (but not limited to):

- Incidents, near-misses, or AIRPROX situations
- Airspace infringements or potential infringements
- Weather-related concerns or decision-making issues
- Abnormal aircraft behaviour, or system issues
- Human factors issues (fatigue, workload, distraction, stress)
- Anything that “didn’t feel right”, even if nothing actually went wrong

If you are unsure whether something is reportable — report it.

6.4.5 How to Report

All safety reports should be submitted using the LS Airmotive Safety Reporting link

- Reports can be submitted quickly and easily.
- Reports may be factual and brief — perfection is not required.
- Early reporting is strongly encouraged; do not wait until later.

Where appropriate, reports should also be made to ATC at the time of the incident (for example, AIRPROX), followed by a formal report after landing.

6.4.6 What Happens After You Submit a Report

- Reports are reviewed by the Head of Training and relevant safety personnel.
- The focus will be on understanding what happened and why, not on blame.
- Outcomes may include changes to procedures, additional briefing, or training improvements.
- Where individual feedback is appropriate, this will be done constructively and privately.

6.4.7 Why Reporting Matters

Many serious accidents are preceded by unreported minor events. Every report helps build a clearer picture of risk and allows us to intervene early.

By reporting honestly, you are:

- Protecting yourself
- Protecting other students and instructors
- Contributing to a safer flying environment for everyone

Safety reporting is not about getting someone into trouble.

It is about keeping people safe.

7 Local (Club Regulations)

7.1 Smoking Prohibitions

1. Smoking/vaping is not permitted in any Club aircraft or within the Club house
2. Club members wishing to smoke/vape on the airport premises should make use of the smoking shelters

7.2 Care of Flying Equipment and Aircraft

1. All members are to take the utmost care with the equipment that the Club provides for their use. Many items, especially headsets, are costly to replace and frequent replacement will inevitably lead to hire charges being imposed.
2. Any items that are damaged or unserviceable are to be handed to a member of staff for repair or replacement.
3. Any member found to be abusing Club equipment may be billed for the replacement cost.
4. In the event of an accident (deemed the fault of the member by the Club) which requires repair or an insurance claim, club members will be expected to contribute to the costs – either the cost of repair outright, or the excess – whichever is the lower and up to a maximum contribution of £1500.
5. Any damage or un-serviceability of aircraft whether caused by accident or not must be reported immediately. This is for safety reasons which are regarded as paramount – not to apportion blame.

7.3 Disciplinary Action

1. Breaches of Orders contained in the FOB or breaches of flying discipline are viewed very seriously by the Club as well as by the CAA . Indeed the CAA has no hesitation in prosecuting those pilots who flagrantly disregard the ANO.
2. The Club will suspend and/or terminate membership, without refund of any fees, of those pilots who disregard either the ANO or the Flying Orders laid down in the FOB.

7.4 Flight Bookings and Hiring

1. Booking an aircraft prevents its use by other people and pilots should give as much notice as possible of cancellations. Clearly there will be occasions when pilots are obliged to cancel at short notice and the Club fully accepts this. However it is not acceptable to book slots 'just in case' and any Club member who books and cancels for no good reason will be charged. Pilots who cancel because of weather will of course not be charged but rather complimented on their good judgement.
2. Students should aim to arrive at least 30 mins before their booked slot, with any navigation exercises already planned, to allow time for briefing.
3. The club will endeavour to adhere to slot booking times and the flying programme as much as possible although this is not always possible due to weather etc.
4. The Club encourages pilots to tour within their experience. Pilots should discuss their flights with a Club instructor if appropriate, but this discussion does not constitute authorisation. Touring pilots pay their own landing fees when away from Oxford, but the Club will refund fuel uplifts if given appropriate receipts using the current price that the Club pays for fuel.

7.5 Airfields

1. Unfortunately, due to the difficult nature of recovering an aircraft in the event of an incident, Flights to the Scilly Isles are prohibited in LSA aircraft.

8 General Standards/Orders

8.1 Engine failure after take off

1. Instructors will not commence practice engine failures after take off at a height below 700’ AGL. This will give the instructor adequate time to assess the student’s performance before commencing a climb to comply with low flying regulations.
2. Consideration must be given to following circuit traffic before initiating an EFATO practice and a ‘Fanstop’ made to ATC. ‘Climbing away’ should also be called to ATC.
3. Noise abatement procedures should be considered and maintained throughout the exercise.

8.2 Circuit Procedures – Oxford

1. Instructors should ensure that they are totally compliant with circuit procedures at Oxford and any other training airfield used.
2. Rejoins should be expeditious whilst complying with ATC sequencing as requested.
3. New members should obtain a briefing from an isntructor as part of their club checkout.

8.3 Refuelling Directives

1. Students are not permitted to refuel aircraft alone.
2. Members must obtain a briefing on fuelling procedures from an FI before fuelling aircraft alone. Please read the LOA fuelling procedures document.
3. Aircraft must be vacated by all occupants when refuelling is in progress and all relevant and necessary safety precautions taken.
4. At Oxford:
5. Away from base:
    - Fuel will have to be paid for by the member and a receipt obtained. A refund will then be issued at the current Oxford fuel rate. Drawback of fuel is not permitted whilst utilising Club aircraft.

8.4 Aircraft Considerations.

1. When training it is ultimately the instructor's responsibility to ensure the aircraft is serviceable for the intended flight and is left in the same condition thereafter.
2. The following points must be adhered to:
    - Oil must be checked before the flight. You should consult an instructor before replenishing if the oil level is below the required minimum level (PA28 – 5 Quarts on dipstick)
    - Extreme care must be taken when teaching student how to correctly adjust seats. It must be stressed that this should be done outside the a/c. Seat rails are not sturdy and are difficult and expensive to replace.
    - Cockpits should be left tidy after every sortie with belts stowed and control locks (if applicable) inserted.
    - Covers should be replaced at the end of each day, and wing covers utilised if a ground-frost is forecast.
    - All high wing aircraft must be tied down between sorties.

8.5 Go-Around

1. Instructors are required to ensure that students carry out a go-around whenever required to do so. The best way to achieve this is to sacrifice landings in the early stages of circuit training for go-arounds. The procedure will then appear normal flying practice to the student who will become proficient in the execution of the manoeuvre whilst attaching no sense of failure to a missed approach.

2. All members should initiate go-arounds if:

    - No clearance to land has been obtained by 250ft AGL. “Land-After” clearances are not to be accepted by solo students who should be made aware of this.
    - Approach is unsatisfactory and/or unstable.
    - Balked landing.
    - On ATC request.

    “ANY DOUBT-NO DOUBT…..GO AROUND”

3. All members should be capable of executing a safe go around from approach and also from the balked landing scenario where a/c speed is likely to be critically low.

8.6 Engine Management

1. Shock cooling should always be considered but is particularly relevant with the types of engines within the LSA fleet. For this reason the following will apply:

    - No aerobatics are to be undertaken under any circumstances in any aircraft other than one that is operated by LS Airmotive solely for that purpose.
    - Intentional spinning is only to be carried out with an instructor and when authorised.
    - For idle descents, the engine should be warmed approximately every 1000ft by bringing the power smoothly to full and then back to idle.

2. Power checks should not be commenced until engine temperatures are within limits.
3. Students should be taught the difference between Idle RPM and slow running. Engines should be ‘idled’ at 1200 RPM to prevent spark plug fouling.

8.7 Authorisation for Student Solo Flights

1. Instructors are to ensure that all required aspects of the flying syllabus have been satisfactorily completed by the student before he/she is presented for a first solo check flight with a check-instructor.
2. For first solo in the circuit the student must be proficient in **all** of the following:-
    - All emergency drills – fire, engine failure/rough running, radio failure.
    - Flapless approaches
    - Glide Approaches
    - Full RT liaison
    - Go-arounds (See **General Standards No.5**)
    - Obtaining Tacho/Hobbs readings on shutdown.

3. For first Solo Navigation the student must be proficient in **all** the points above **plus**:

    - Unsure of position procedures – transponder usage, VDF QDM , obtaining radar fixes, 121.5 etc
    - Overhead joins
    - Action in the event of weather deterioration

4. All of the above will generally be completed in a logical sequence during training up to this point however a check must be made to verify that the above requirements have been satisfied.

8.8 Training Records

8.8.1 Training Records

1. Training records will be maintained by the student's primary instructor and monitored by the CFI and HoT. Students are encouraged to read and discuss their records with their instructor.
2. The Head of Training shall monitor all training records in accordance with the Quality System. Student log books are to be completed at the end of the course and certified correct for the course.
3. All records are to be checked prior to every lesson.
4. Training records shall contain the following entries:

Date; nature of training - ground/flight Exercise Number
Aircraft Registration
Hours flown, with cumulative hours; ground school hours Instructors name
Comments on student performance and progress

8.8.2 Ground Exams

1. Theoretical examinations shall be administered by the authorised ground examiner.
2. Candidates who fail the examination are to receive additional ground training before attempting another examination paper. Candidates who fail their 2nd attempt must be authorised by the Ground Examiner, CFI, or HoT before making their 3rd attempt.

8.8.3 Flight Exams

1. Students will not be eligible to take the Skill Test until they have:

- Completed the minimum ground and flight training
- Passed the ground examinations
- Received the recommendation of their course instructor

2. On completion of all training, the student's primary instructor will produce the student's record and logbook to the CFI for checking.
3. Candidates shall take the PPL Skills Test with an authorised examiner.

8.8.4Training Effectiveness

1. Because of the short duration of the course it may well take several hours of flying training before it becomes apparent that a student is having difficulty. Where necessary, additional training should be conducted before proceeding to the later exercises. On occasion, it may be appropriate to change instructors.
2. The changing of instructors shall be by mutual consent between the candidate, the CFI and the two instructors concerned.
3. As far as practical, no more than two instructors shall teach the same student.
4. Training deficiencies shall be detailed in the comments section of the training records, and discussed with the CFI /HoT
5. Students may be suspended from training for the following reasons:

    - Failure to comply with club Orders (FOB).
    - Failure to pass the ground examination after 4 attempts.
    - If their progress is assessed as unacceptable by at least two instructors.
    - Where the candidate's attitude is assessed as being incompatible with the safe operation of aircraft.

6. Students shall not be suspended without the agreement of the CFI who must first give a verbal warning, details of which shall be recorded in the training records.
7. Training records shall be retained for a period of 3 years. Copies of Training Records may be forwarded to other FTOs where the candidate goes for further training.

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