



# SAC Flight Operations Manual

## SHROPSHIRE AERO CLUB

# Flight Operations Manual



# SAC Flight Operations Manual

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# SAC Flight Operations Manual

## Abbreviations

ADM	SAC Aerodrome Manual
AIS	Aeronautical Information Service
AM	Aerodrome Manager
AME	Aviation Medical Examiner
ANO	Air Navigation Order
AOB	Angle of Bank
ATS	Air Traffic Service
ATZ	Aerodrome Traffic Zone
CAA	Civil Aviation Authority
DI	Duty Flying Instructor
EASA	European Aviation Safety Agency
EFATO	Engine Failure After Take-Off
ELT	Emergency Locator Transmitter
FI	Flying Instructor
FL	Forced Landing
FOM	Flight Operations Manual
GPS	Global Positioning System
HOT	Head of Training
ICAO	International Civil Aviation Organization
ID	Identification
IFR	Instrument Flight Rules
IMC	Instrument Meteorological Conditions
MAUW	Maximum All Up Weight
MSA	Minimum Safety Altitude
MEL	Minimum Equipment List
MOR	Mandatory Occurrence Report
MTOW	Maximum Take-off weight
NCO	Non-Commercial Operation
NOTAM	Notice to Airmen
PFL	Practice Forced Landing
PIC	Pilot in Command
PLB	Personal Locator Transmitter
POH/FM	Pilots Operating Handbook/Flight Manual
PPL	Private Pilot's Licence
QFE	Isobaric Pressure at Aerodrome Reference Point
QHN	Isobaric Pressure at Sea Level
QXC	Qualifying Cross Country
RTF	Radiotelephony
SAC	Shropshire Aero Club
SMS	Safety Management System
SORF	Safety Occurrence Report
SSAT	Stall Spin Awareness Training
SSR	Standard Stall Recovery
TKI	Theoretical Knowledge Instructor





# SAC Flight Operations Manual

## 2.1 General

### 2.1.1 List & Description of the Flight Operations Manual

Section	Title	Contents
1	General	General information describing the organisation and structure of SAC
2	Technical	Information related to the servicing and maintenance of the SAC aircraft and to normal, abnormal and emergency handling procedures
3	Route	Instructions relating to flight planning, performance and loading of the SAC Aircraft
4	Personnel Training	Information regarding the induction, refresher and induction training of SAC staff and evaluation of instructional standards

### 2.1.2 Administration

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### 2.1.3 Responsibilities

#### 2.1.3.1 The Duty Flying Instructor (DI)

The DI is responsible to the HOT for: -

- Promoting the highest degree of safety awareness throughout the organisation.
- and has the authority of HOT and the SAC Committee to limit flying, up to and including ceasing all operations at SAC if in their opinion there is an overriding Flight safety reason for such action. Any such action will require a written report to the committee stating the reasons why this action was taken.
- Before any flying training takes place, the DI, will ensure that at least two suitably qualified fire crew are available, and that the fire vehicle has been "daily checked". If for any reason the fire crew or vehicles are not available, flying training will cease. The requirements for suitably qualified Fire Crew are detailed in CAP168 and CAP699.
- Ensuring that before flying training takes place that the runways have been checked and are serviceable.
- Ensuring the day to day flying and training is conducted in accordance with the SAC Operations manual.
- Monitoring the weather during the flying period. See SAC FOM 2.1.6
- Liaising with the SAC admin staff and modifying the flying programme, in the case of poor weather, technical problems, student no shows etc.
- Supervising restricted flying instructors.

#### 2.1.3.2 Flying Instructor (FI)

The FIs are responsible to the HOT for:-

- Promoting the highest degree of safety awareness throughout the organisation.
- Reporting any safety concerns using SAC SMS.
- Conducting airborne and ground instruction as directed by the DI.
- Supervising Restricted FI's when required.



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## **2.1.3.3 Theoretical Knowledge Instructor (TKI)**

The TKIs are responsible to the HOT for:-

- Promoting the highest degree of safety awareness throughout the organisation.
- Conducting ground instruction as directed by the HOT.

## **2.1.3.4 New SAC Members**

### **2.1.3.4.1 New Student Members**

New student members of SAC will be inducted into the club by the assigned instructor. The instructor will ensure that:-

- The new student member is briefed on all aspects of the club, its facilities and the course intended.
- The new student member is briefed on and signs as understanding the SAC SMS.
- Before embarking on the first flight of a course the student is briefed on the relevant safety and emergency procedures relating to the intended training aircraft.
- They have read and signed as understanding the required manuals.

### **2.1.3.4.2 New PPL (Experienced Pilot) SAC Members**

New PPL members of SAC will be inducted into the club by the assigned instructor. The instructor will ensure that:-

- The new PPL member is briefed on all aspects of the club and facilities.
- The new PPL member is briefed on and signs as understanding the SAC SMS.
- The new PPL member reads, and signs as understanding, the SAC FOM.
- Details of new members' Licences, ratings, and personal details are recorded by the SAC admin staff.
- The new PPL member undertakes a Club Check Flight to a satisfactory standard, and completes the Club type check out form which can be found at Appendix 1

### **2.1.3.4.3 New Instructor members**

New Instructors will be inducted into SAC according to Appendix 2

## **2.1.4.1. Discipline.**

2.1.4.1.1 Each SAC Member has the responsibility to be fully acquainted and to comply with the provisions of the SAC FOM. If the SAC member is also an Instructor or student undergoing a course at SAC then they must also be fully acquainted and comply with the SAC Training Manual.

2.1.4.1.2 Any act of wilful misconduct or gross negligence by an SAC member may result in suspension from SAC, after due consideration by the SAC Council of Management.

2.1.4.1.3 In particular, termination of Membership is likely in the event of:

- Deliberate and unjustifiable breach of the ANO or its implementing rules.
- Repeated failure to comply with the provisions of the SAC FOM
- Any wilful behaviour that endangers flight safety.

2.1.4.1.4 The SAC Council of Management will implement the following levels of action if an SAC member is to be disciplined depending on the severity

1. The issue of a formal verbal warning



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2. Formally advise, in writing, the member of concerns and possible termination of SAC membership.
3. Termination of SAC membership.

Each of these actions is independent and does not imply that all levels are used in any one disciplinary case, but in all cases will start at level 1.

- 2.1.4.1.5 An SAC member undergoing disciplinary action by the club may be accompanied by a representative.
- 2.1.4.1.6 Any SAC member observing a breach of flying discipline or regulations by another SAC member operating an SAC aircraft should report the breach to the HOT, or duty instructor, who will then inform the SAC Council of Management.

## **2.1.4.2 Alcohol**

No-one shall fly in an SAC aircraft if they have consumed any alcohol within eight hours of flying, or has a blood alcohol level in excess of the limit laid down in the RAILWAYS and TRANSPORT SAFETY ACT 2003.

Pilots (PIC) taking SAC aircraft to other countries/states must comply with the alcohol restrictions of that country/state if it is more restrictive than a blood alcohol content laid down in the RAILWAYS and TRANSPORT SAFETY ACT 2003

## **2.1.4.3 Drugs**

- 2.1.4.3.1 Illegal drug use is not compatible with aviation safety and any SAC member found to be indulging in such drug use is liable to immediate suspension from SAC.
- 2.1.4.3.2 No pilot is to fly an SAC aircraft if he has taken medication, whether prescribed or not, unless approval has been given by an AME.

## **2.1.4.4 Reporting and Documentation**

- 2.1.4.4.1 Details of any disciplinary action against an SAC student will be recorded in the trainee's training file. The trainee will be advised in writing
- 2.1.4.4.2 Any SAC member having their SAC membership terminated will be advised in writing, and the fact recorded in their membership file.

## **2.1.5 Approval and Authorisation of flights**

- 2.1.5.1 An SAC student pilot shall not fly solo unless authorised to do so, in writing before the flight. All student solo flights must be supervised by an FI.
  - 2.1.5.1.1 The only exception to 2.1.5.1 is in the case of "First Solo" where the Instructor may verbally authorise the student providing:-
    - The student holds an Aviation medical certificate applicable to the licence being trained for.
    - The student has completed to a satisfactory standard all the requirements of the pre-solo progress test, including passing the Aviation Law Examination.
    - The instructor has checked that the student has completed to the required standard, all aspects of the pre-solo progress report. (Appendix 3)
    - The instructor has signed a hard copy of the pre-solo progress report.
  - 2.1.5.1.2 SAC Members holding a current pilots licence may self-authorise as PIC only up to the limits of their licence and ratings.
  - 2.1.5.1.2.1 Dual instruction may only be given in SAC aircraft, or authorised privately owned aircraft, by a flying instructor appointed by SAC.
  - 2.1.5.1.3 All flights in SAC aircraft are to be authorised in writing on the authorisation sheet and are to include full details of the intended flight and the limits of the authorisation.
    - 2.1.5.1.3.1 An authoriser will enter the estimated duration of intended flights and



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- “Local Flying” for flights that are intended to remain wholly within the Sleep Local flying area as at Appendix 6, or
- Exercises numbers, and or route, or
- When it is intended to land away from Sleep, then the place, or places will be entered on a separate line and treated as separate flights.

2.1.5.1.4 SAC Students on solo flights outside the Sleep circuit pattern are to carry with them evidence of their authorisation Appendix 7 or Appendix 8 as appropriate.

2.1.5.1.5 Powers of authorisation for flights in SAC aircraft are delegated to SAC members and Instructors as follows

Appointment	Authorising Powers
Head of Training	All training flights.
Flight Instructors (Unrestricted)	All training flights and student solo flights including land-away flights to airfields approved by SAC, up to the limit of the instructor's rating and licence.
Flight Instructors (Restricted)	As for unrestricted flight instructors but excluding first solo flight by day and night, and first solo cross country by day and by night.
SAC Member	May self-authorise only to the limits of their licences and ratings.

## 2.1.5.2 Deviating from an Authorisation

2.1.5.2.1 The nature and limitations of the Flight Authorisation must be adhered to during the subsequent flight, except in case of emergency, or other extenuating circumstances.

2.1.5.2.2 In circumstances as 2.1.5.2.1 an SAC student pilot shall, as soon as possible after the flight has ended, inform the instructor who authorised the flight of the details of the subsequent deviation from his authorisation.

2.1.5.2.3 In circumstances as 2.1.5.2.1 an SAC PIC shall, as soon as possible after the flight has ended, inform the SAC office of the details of the subsequent deviation from his authorisation.

## 2.1.6 Restriction on Training in Poor Weather

In poor weather the duty instructor will liaise with the SAC office and modify the flying programme accordingly. The duty instructor will take into account the following for the whole, or part of, the affected period:-

- The present weather conditions.
- The forecast weather conditions.
- The type of training planned.
- Number of aircraft on the programme.
- Diversion airfields. (If applicable)

The duty instructor will review the flying programme and weather at regular intervals during the training period, and in consultation with the SAC admin staff modify it accordingly.

## 2.1.7 Nomination of Pilot-in-Command of Aircraft (PIC)

2.1.7.1 When self-authorising, an SAC member will always be the PIC for the duration of that flight

2.1.7.2 When authorising a Training flight in an SAC aircraft, the authoriser is to nominate one person as pilot-in-command (PIC), bearing in mind the following requirements:

-



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- On dual instructional flights the instructor will always be nominated as PIC
- On Examination flights, ie. Skills tests, the examiner will always be the nominated PIC.

## 2.1.8 Responsibilities of Pilot in Command

Before operating as PIC of an SAC aircraft a pilot must: -

- Maintain familiarity with relevant national and international aviation legislation and agreed aviation practices and procedures;
- Maintain familiarity with such provisions of the SAC FOM as are necessary to fulfil their function as PIC.
- Operate within the limitations of their licence.
- Check the validity of all licences, medicals, ratings etc. Flying without a valid licence or rating will invalidate that pilot's coverage under the SAC insurance policy and render the member personally liable for all eventualities. Records kept by SAC are for information only, and do not absolve the pilot from such responsibility. SAC members intending to fly club aircraft are responsible for informing the SAC Admin staff of the date of each expiry or renewal, and for providing a copy of each certificate. SAC members who operate their own aircraft are encouraged to submit this information to the office.

### 2.1.8.1 Specific Responsibilities of PIC

#### 2.1.8.1.1 Flying currency

- 2.1.8.1.1.1 Every pilot must obey the ANO 90-day rule with respect to the carriage of passengers.
- 2.1.8.1.1.2 Any SAC member not having flown a particular SAC aircraft type for more than 28 days is recommended to refer to the Duty Instructor, or HOT.
- 2.1.8.1.1.3 Any SAC member not having flown a particular SAC aircraft type for more than 42 days **MUST** refer to the Duty Instructor, or HOT
- 2.1.8.1.1.4 Any SAC member wishing to fly a new type of SAC aircraft must carry out appropriate differences training to the satisfaction of HOT. This may be delegated to a suitably qualified instructor. Any such checkout will be recorded on the new type check out form. Appendix 1.
- 2.1.8.1.1.5 SAC members who have not flown as PIC at night within the preceding 120 days may be required to carry out a check flight with a night qualified FI before operating as PIC on a SAC aircraft. This will be at the discretion of the HOT, or DI.

#### 2.1.8.1.2 The Pilot in Command of a SAC aircraft will: -

- (a) Occupy the solo flying seat of any SAC aircraft, except when the aircraft is being used for test or instruction purposes.
- (b) Be the sole operator of the flying controls during take-off and landing except when the aircraft is being used for test or instructional purposes.
- (c) Operate the aircraft within the limitations as stated in the aircrafts POH/FM
- (d) Be responsible for the safe operation of the aircraft and the safety of its occupants and cargo during flight;
- (e) Have authority to give all commands they deem necessary for the purpose of securing the safety of the aircraft and of persons or property



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- carried therein, and all persons carried in the aircraft shall obey such commands;
- (f) Have authority to disembark any person, or any part of the cargo, which in opinion of the PIC, may represent a potential hazard to the safety of the aircraft or its occupants;
  - (g) Not allow a person to be carried in the aircraft who appears to be under the influence of alcohol or drugs to the extent that the safety of the aircraft or its occupants is likely to be endangered;
  - (h) Ensure that all passengers are fully briefed on: -
    - use of the seat belt or harness;
    - the location and operation of emergency exits;
    - the method of opening and jettisoning windows;
    - the method of opening and emergency jettisoning of cabin doors;
    - the method of deploying life rafts and their subsequent operation (as appropriate);
    - the method and use of life jackets (as appropriate)
    - deployment and use of the radio beacon (as applicable)
    - other type specific safety features
  - (i) Ensure that all operational procedures and checklists are complied with, in accordance with the SAC FOM.
  - (j) Ensure that the weather forecast and reports for the proposed operating area and flight duration indicate that the flight may be conducted without infringing SAC operational and legal minima.
  - (k) Decide whether or not to accept an aircraft with unserviceability in accordance with the list of allowable defects.
  - (l) Take all reasonable steps to ensure that the aircraft and any required equipment is serviceable
  - (m) Ensure that aircraft refuelling and oiling is supervised with particular attention being paid to: -
    - The correct grade and amount of fuel.
    - Fuel water checks.
    - Fire safety precautions, including using the earth lead.
    - Checking filler caps for security and correct replacement after refuelling.
    - The correct grade and amount of oil.
  - (n) Take all reasonable steps to ensure that the aircraft weight and balance is within the calculated limits for the operating conditions. Sample load sheets for SAC aircraft can be found in Appendix 9
  - (o) Confirm that the aircraft's performance will enable it to complete safely the proposed flight. CAA recommended performance factors can be found in Appendix 10
  - (p) Not permit any pilot or passenger, occupying a seat with flying controls to perform any activity during take-off, initial climb, final approach and landing except those duties required for the safe operation of the aircraft;
  - (q) Take all reasonable steps to ensure that before take-off and before landing the flight crew are properly secured in their allocated seats;



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- (r) Take all reasonable steps to ensure that whenever the aircraft is taxiing, taking off or landing, or whenever the PIC considers it advisable (e.g. in turbulent conditions), all passengers are properly secured in their seats, and all cabin baggage is stowed in the approved stowage;
- (s) Ensure that the pre-flight inspection has been carried out.
- (t) Ensure on the first flight of the day an "A Check", is carried out and signed for in the authorisation sheets.
- (u) Ensure for cruise flight over the sea:-
  - A serviceable life jacket is available for each person on board.
  - Life jackets are worn throughout the flight.
  - Before flight brief all passengers on the ditching procedures.
  - A flight plan is filed.In addition, for cruise flight over the sea and greater than 10nm from the coast.
  - A serviceable dinghy, appropriate to the number of passengers is carried.
- (v) For flights outside the United Kingdom ensure that:-
  - A flight plan is filed.
  - The appropriate agencies have been informed when required by Law. eg HM Customs, Special Branch, Immigration etc.
- (w) At the end of a flight or series of flights terminating at Sleep the PIC will return the aircraft keys to the SAC office, or key safe if after office hours. Any aircraft keys removed from the airfield must be returned immediately. Failure to return keys will result in the PIC being charged for a replacement set, and may be disciplined in accordance with para 2.1.4.1
- (x) Report to AM any flight safety issues pertaining to their flight.
- (y) A PIC hiring SAC aircraft will comply with the conditions of hire and charging of SAC aircraft at Appendix 11

2.1.8.1.3 When two SAC qualified pilots fly together for the purposes of instrument flying practice, the pilot occupying the right-hand seat will act as safety pilot. The safety pilot will maintain an adequate lookout at all times. Should weather condition deteriorate and VFR cannot be maintained the flight will be terminated.

## 2.1.8.2 Deviation from procedures in Emergencies

The PIC shall, in an emergency situation that requires immediate decision and action, take any action they consider necessary under the circumstances. In such cases the PIC may deviate from rules, operational procedures, and methods in the interest of safety.

## 2.1.8.3 Responsibilities In Respect of Third Party Maintenance

2.1.8.3.1 In the event that third party maintenance of an SAC aircraft is required away from base, the PIC is first to contact the AM or his nominated deputy for authorisation. Any costs incurred for maintenance that has not been properly authorised will be wholly the responsibility of the PIC.

2.1.8.3.2 The PIC must ensure that, in the event of third party maintenance being required while away from base, the procedures referred to in the Technical Log are complied with.



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2.1.8.3.3 Any other fees incurred eg parking costs, return journey cost, accommodation etc, are entirely at the expense of the PIC.

## 2.1.9 Carriage of Passengers

Subject to the privileges of their licence, an SAC Member may fly as PIC of an SAC aircraft, carrying passengers, provided that the following conditions are complied with:

- a) All Passengers must complete the required paperwork to become temporary daily members of SAC before undertaking any flight in an SAC aircraft.
- b) All passenger surnames are entered in authorisation sheets for the intended flight.
- c) They shall not act as pilot-in-command during the day of an aircraft carrying passengers unless within the preceding 90 days they have made 3 take-offs and landings, as the sole manipulator of the controls of an aircraft of the same type or class.
- d) As PIC at night unless:-
  - One of the take offs and landings in 2.1.9 (c) is conducted at night or,
  - Holds a valid instrument rating
- e) After gaining a licence, a new PPL holder must complete 2 hours solo flying before carrying passengers in SAC aircraft.
- f) Passengers may not be carried on student solo flights.
- g) Passengers may not be carried on dual instructional flights with the following exceptions:
  - Another student on the same course of training may be carried if there is a training benefit to be gained.
  - CAA inspectors may be carried on any dual instructional flight, providing there is an acceptable seat.
  - When the student is undergo a familiarisation on a 4 seat aircraft, to facilitate a MAUW takeoff.

## 2.1.10 Aircraft documentation

### 2.1.10.1 Technical Log

2.1.10.1.1 The Technical log and authorisation sheets are combined at SAC. It is the responsibility of all pilots to check the aircraft technical log prior to engine start in order to establish that the aircraft is serviceable for the proposed flight.

2.1.10.1.2 The Daily 'A' Check may be conducted only by a licenced pilot, engineer, or student pilot under the direction of an instructor. The person conducting the check is to certify its completion by inserting their initials in the relevant box, on the authorisation sheet.

2.1.10.1.3 The PIC of the aircraft is to sign the 'Pilots Acceptance Column' certifying that he is satisfied with the pre-flight inspection and fuel/oil states for the intended flight. This signature also certifies that the PIC accepts and fully understands the briefing given by the flight authoriser.

2.1.10.1.4 On completion of the flight, the PIC is responsible for entering the off block/on block times, airborne/landing times, calculate the block time and airborne time, the fuel and oil state of the aircraft at the start of the flight, and the Taco readings. Any un-serviceability should also be recorded as soon as possible after landing.





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2.1.10.1.5 Flight time is defined as, “The time at which the aircraft first moves from its blocks for the purpose of flight, to the time that the aircraft returns to its blocks after flight”. Flight time will be recorded to the nearest 5 minutes.

2.1.10.1.6 For SAC aircraft operating out of Sleep, the taxi time is assumed to be 5 minutes after and before blocks. Therefore the airborne time entered in the authorisation sheets after flight will be 10 minutes less than the flight time. Actual taxi times to the nearest 5 minutes will be used when visiting other airfields.

2.1.10.1.7 Any defect recorded in the technical log will be cleared or deferred by a licenced engineer, or other authorised person, prior to the next flight

2.1.10.1.8 Care must be taken at all times to ensure that the technical log/authorisation sheet is completed accurately, legibly and in full.

**2.1.10.2 Documents to be carried in Flight** 2.1.10.2.1 The following documents are to be carried on each flight as originals or copies unless otherwise specified:

- a) Pilots licence and photo ID of PIC
- b) Pilots Operating Handbook or Flight Manual
- c) Certificate of Airworthiness (original)
- d) Airworthiness Review Certificate
- e) Certificate of Registration (original)
- f) Noise Certificate, if applicable
- g) List of specific approvals, if applicable
- h) Aircraft Radio Licence, if applicable
- i) Certificate of third party liability insurance
- j) Aircraft Technical Log
- k) Details of any filed ATS flight plan.
- l) Current and suitable aeronautical charts for the route of the proposed flight.
- m) Procedures and visual signals information for use by intercepting and intercepted aircraft
- n) The MEL (if applicable)
- o) Solo students Authorisation Certificate. Appendix 7 or 8 as appropriate for all flights outside the Sleep circuit.

2.1.10.2.2 In the case of flights intended to take off and land at the same aerodrome and remaining within UK airspace, items e to j above may be retained at the aerodrome.

## 2.1.11 Retention of Documents

2.1.11.1 Technical Logs shall be maintained for the life of the aircraft plus 2 years. Completed Technical Logs will be archived by month and year.

2.1.11.2 Copies of Technical logs of SAC aircraft used for approved training will be retained for a period of 3 years. When such aircraft are used only for short periods, copies of the relevant technical log pages are to be retained with the associated training record(s) for audit purposes.

## 2.1.12 Currency of Licences and Ratings

2.1.12.1. All pilots are to be in possession of a valid pilot licence and medical certificate before acting as PIC of an SAC aircraft. Student pilots shall hold a valid medical certificate before solo flight.

2.1.12.2 In order to be valid:

- a) The licence and medical certificate must be signed by the holder.



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- b) The medical certificate expiry date must not have been exceeded.
- c) The licence must contain a valid Certificate of Revalidation for the aircraft type or class to be flown.
- d) The licence must contain a valid Language Proficiency assessment.
- e) For flight under IFR, the licence must contain a valid instrument rating.
- f) If the flight involves flight at night, the licence must contain a night rating or a night qualification (unless the pilot is undergoing training for a night qualification).
- g) If the flight involves Aerobatic flight, the licence must contain an aerobatic rating (unless the pilot is undergoing training for an Aerobatic qualification).

2.1.12.3 PIC must carry their licence with them when airborne. PIC should also carry a valid photo ID to accompany their licence.

2.1.12.4 A pilot who holds a licence issued by another ICAO State shall ensure that the licence is valid in all respects demanded by that State. This includes a medical certificate valid in the state of licence issue.

## 2.1.13 Revalidation

2.1.13.1 It is the responsibility of each instructor to ensure that all licences, ratings and certificates necessary for the conduct of their duties remain valid at all times.

2.1.13.2 It is the responsibility of each SAC member to ensure that their own licences, and ratings, and certificates remain valid at all times.

## 2.1.14 Flight Duty Period and Flight Time Limitations (Flight Instructors)

### 2.1.14.1 Flight Duty Period

A Flight Duty Period is defined as “The period of time between reporting for flight duty and finishing flight duties.”

### 2.1.14.2 Maximum daily flight duty period (hours) Flight Instructors

Local Start Time	Sectors / flights		
	Up to 4	5	6
0600-0759	10	9 1/4	8 1/2
0800-1259	11	10 1/4	9 1/2
1300-1759	10	9 1/4	8 1/2
1800-2159	9	8	8

### 2.1.14.3 Flight Time Limitations (Flying Instructors)

2.1.14.3.1 Maximum daily flying instructional hours for an SAC instructor will be 6 hours.



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2.1.14.3.2 Maximum flying instructional hours in a period of 28 consecutive days expiring at the end of the day on which the flight begins will be 100 hours for an SAC instructor.

2.1.14.3.3 Maximum flying instructional hours during a period of 12 months, expiring at the end of the previous month will be 900 hours for an SAC instructor.

2.1.14.3.4 It is the responsibility of each individual instructor to ensure that the flying hour maximums are not exceeded.

## **2.1.14.4 Duty Hours (Instructors)**

Duty Hours are defined as the total number of hours spent at SAC on any Club related duties. These include flying duties.

2.1.14.4.1 The maximum numbers of duty hours worked in any 7 consecutive days will be 55 Hours.

2.1.14.4.2 The maximum numbers of duty hours worked in any 14 consecutive days will be 95 Hours.

2.1.14.4.3 The maximum numbers of duty hours worked in any 28 consecutive days will be 190 Hours.

2.1.14.4.4 It is the responsibility of each individual instructor to ensure that the Duty hour maximums are not exceeded.

## **2.1.15 Not used**

## **2.1.16 Rest Periods (Flight Instructors)**

2.1.16.1 The minimum rest period between consecutive duties is 12 hours, or at least as long as the preceding duty period, whichever is the longer.

2.1.16.2 Every SAC FI will

- Not be on duty for more than 7 consecutive days between days off.
- have a minimum of 2 consecutive days off in any 14-day period and
- have a minimum of 7 days off in any 4 consecutive weeks, and
- have an average of at least 8 days off in any 4-week period, averaged over 3 such periods.

2.1.16.3 It is the responsibility of each individual instructor to ensure that the required rest periods are taken.

2.1.16.4 If the individual FI operates for another flying organisation for profit or reward then they are responsible for ensuring that the required rest periods for both organisations are satisfied.

2.1.16.5 Any SAC FI who feels insufficiently rested to operate a flight should remove themselves from the flying programme and inform the DI of their action. They should not return to the flying programme without consultation with HOT.

## **2.1.17 Rest Periods (Students)**

2.1.17.1 SAC students must not fly unless sufficiently rested. SAC FI's should monitor students to ensure they are sufficiently rested for each instructional flight. If in the opinion of the FI a student is insufficiently rested for a flight, the instructor is to remove the student from the flying programme and inform the DI of their action. They should not return to the flying programme without consultation with HOT.

2.1.17.2 Minimum rest periods between flights

- Students will have a minimum rest period between consecutive flights of at least 30 minutes.



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- Students conducting dual to solo flights will be considered to be operating a single flight for rest purposes.
- Students, dual or solo, landing away from base on navigation exercises may continue with the next leg of the exercise providing they are suitably rested and feel fit for the next flight.

## **2.1.18 Pilots' Log Books**

- 2.1.18.1.1 All pilots are to maintain their personal logbooks in accordance with the provisions of AMC1 FCL.050
- 2.1.18.1.2 In particular, pilots are to ensure that the following particulars are recorded in their current log book:
- The name and address of the holder.
  - Particulars of the holders licence (if any) to act as a member of the flight crew of an aircraft.
- 2.1.18.1.3 Instructors will ensure that students correctly complete their log books at the end of each instructional flight. Instructors will sign and include their licence number in the comments column.
- 2.1.18.1.4 On completion of a course of training, the HOT is to inspect each student's logbook and certify that it contains an accurate record of the flights carried out.

## **2.1.19 Not in use**

## **2.1.20 Safety**

### **2.1.20.1 Safety Responsibilities**

- 2.1.20.1.1 The AM is responsible for monitoring and disseminating all information affecting flight safety to all flying personnel.
- 2.1.20.1.2 Notwithstanding the above, all SAC members have a personal responsibility towards flight safety. Anyone who discovers a factor affecting flight safety, or who wishes to discuss any matter affecting safety, should contact the AM.

### **2.1.20.2 Safety Equipment**

- 2.1.20.2.1 All pilots are to ensure that they know how to operate the fire extinguishers fitted to the SAC aircraft.
- 2.1.20.2.2 Prior to each flight pilots are to ensure that the fire extinguisher and first aid kit have been inspected within the preceding 12 months and are properly secured in the aircraft.
- 2.1.20.2.3 Any PIC who uses either the fire extinguisher or the first aid kit for any reason must report the fact to the SAC admin staff and note its use in the tech log.
- 2.1.20.2.4 All PIC must ensure that they have available a PLB or ELT on board SAC aircraft for all flights.
- 2.1.20.2.5 All PIC should be familiar with the operation and use of any additional safety equipment loaded on aircraft. I.e. Life jackets, dinghies etc.
- 2.1.20.2.6 PIC's are responsible for briefing all passengers in the use of all aircraft safety equipment loaded.
- 2.1.20.2.7 Any costs incurred by SAC through inappropriate use of safety equipment will be recovered from the PIC.



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## **2.1.20.3 Radio Listening Watch**

Pilots are to ensure that a listening watch is maintained on a suitable radio frequency throughout the flight. In normal circumstances, pilots are to be in receipt of at least a Basic Service if available.

## **2.1.20.4 Accidents and Incidents**

2.1.20.4.1 Any pilot involved in an accident or incident at Sleep is to complete an SAC SORF. Once completed, the report is to be passed to the AM. SAC SORFs may be obtained from the SAC office.

2.1.20.4.2 The AM/Safety Manager is to investigate any incident or occurrence involving SAC aircraft or any other part of the operation. This in no way absolves SAC or aircraft PIC from their duty, under the Air Navigation Order, to report accidents or incidents.

2.1.20.4.3 The objective of an internal investigation of an accident or incident is as follows.

- To find out what happened.
- To find out why it happened.
- To recommend measures to prevent it happening again.

## **2.1.20.5 Mandatory Occurrence Reports MOR**

2.1.20.5.1 EU law requires all aviation related incidents to be reported using the EASA MOR. MORs should be filed online at [www.aviationreporting.eu](http://www.aviationreporting.eu)

Further information about the reporting system can also be found on this web site.

2.1.20.5.2 An MOR should be filed for the following: -

### **Light Aeroplanes, Helicopters, Gliders /Balloons**

- Interaction with air navigation services (for example: incorrect services provided, conflicting communications or deviation from clearance) which has or could have endangered the aircraft/gliders/balloon, its occupants or any other person.
- Airspace infringement.
- Any occurrence leading to an emergency call.
- Fire, explosion, smoke, toxic gases or toxic fumes in the aircraft/ glider/balloon (beyond the normal operation of the burner).
- Incapacitation of the pilot leading to inability to perform any duty.
- Any flight which has been performed with an aircraft/gliders/balloon which was not airworthy, or for which flight preparation was not completed, which has or could have endangered the aircraft/gliders/balloon, its occupants or any other person.
- Interference with the aircraft/gliders/balloon by firearms, fireworks, flying kites, laser illumination, high powered lights lasers, Remotely Piloted Aircraft Systems, model aircraft or by similar means.

### **Light Aeroplanes, Helicopters, Gliders**

- Unintentional loss of control.
- Abnormal severe vibration (for example: aileron or elevator “flutter”, or of propeller).
- Any flight control not functioning correctly or disconnected.
- A failure or substantial deterioration of the aircraft/gliders structure.
- A loss of any part of the aircraft/gliders structure or installation in flight.
- A collision on the ground or in the air, with an aircraft, terrain or obstacle.
- A near collision, on the ground or in the air, with an aircraft, terrain or obstacle requiring an emergency avoidance manoeuvre to avoid a collision.

### **Light Aeroplanes, Helicopters**



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- Landing outside of intended landing area.
- Inability or failure to achieve required aircraft performance expected in normal conditions during take-off, climb or landing.
- Runway incursion
- Runway excursion.
- Unintended flight into IMC conditions of aircraft not IFR certified, or a pilot not qualified for IFR, which has or could have endangered the aircraft, its occupants or any other person.
- A failure of an engine, rotor, propeller, fuel system or other essential system.
- Leakage of any fluid which resulted in a fire hazard or possible hazardous contamination of aircraft structure, systems or equipment, or risk to occupants.
- Wildlife strike including bird strike which resulted in damage to the aircraft or loss or malfunction of any essential service.
- A lightning strike resulting in damage to or loss of functions of the aircraft.
- Severe turbulence encounter which resulted in injury to aircraft occupants or in the need for a post-flight turbulence damage check of the aircraft.
- Icing including carburettor icing which has or could have endangered the aircraft, its occupants or any other person.

## **Gliders**

- An occurrence where the glider pilot was unable to release either the winch cable or the aerotow rope and had to do so using emergency procedures.
- Any release of the winch cable or the aerotow rope if the release has or could have endangered the glider, its occupants or any other person.
- In the case of a powered glider, an engine failure during take-off.
- Any situation where no safe landing area remains available.
- A lightning strike resulting in damage to the glider.

### **2.1.20.6 Forced landing, Diversion and landing at a place other than the authorised destination, or where the aircraft sustains damage.**

In the event of a Forced landing, Diversion and landing at a place other than the authorised destination, or where the aircraft sustains damage, the PIC of a club aircraft is to immediately:-

- Pass details by any suitable means to the destination airfield.
- Take all necessary steps to protect the aircraft from damage, taking into account considerations such as weather, sightseers, livestock etc.
- Notify the AM and DI at SAC.
- The PIC is responsible for the safety of the aircraft until it has been handed over to an authorised SAC official.

No attempt is to be made to take off without first obtaining the specific authorisation of the HOT, or Duty Instructor. In the event of a Forced landing this is unlikely to be given.

### **2.1.20.7 Admission of liability**

In the event that a SAC aircraft is involved in any accident, incident or occurrence, which directly or indirectly causes damage or injury to a person or property, no member or passenger shall in any circumstances make any admission of liability or offer promise of payment.

### **2.1.20.8 Media coverage**



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Information is not to be given to any person, including the press, media, or social media without the prior permission of SAC in relation to:-

- Accidents or incidents involving SAC aircraft.
- Any reportable occurrence involving a SAC aircraft.
- Any non-reportable occurrence involving a SAC aircraft.



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## **2.2 Technical**

### **2.2.1 Aircraft POH/FM**

2.2.1.1 A full list of SAC aircraft available to SAC members is at Appendix 12.

2.2.1.2 Technical details of the aircraft used by SAC can be found in the relevant Pilots Operating Handbook or Flight Manual, which are to be considered as Annexes to this Manual.

POH/FM are kept in the SAC instructor's office and are available for reference to all SAC members.

The amendment state of these POH/FM are published at Appendix 12.

### **2.2.2 Aircraft Handling**

#### **2.2.2.1 Maintenance**

SAC holds a maintenance contract with a maintenance organisation Part M to carry out continuing airworthiness management tasks on aircraft owned by SAC. Appendix 13.

#### **2.2.2.2 Technical Logs**

Refer to Part2 Para 2.1.10.1

#### **2.2.2.3 Deferred Defects**

2.2.2.3.1 Any aircraft defect that affects flight safety is to be rectified before the aircraft's next flight.

2.2.2.3.2 The decision as to whether a defect seriously affects flight safety may be taken only by authorised certifying staff as defined in EASA Part M.

2.2.2.3.3 Rectification of any aircraft or operational defect that does not seriously affect flight safety may be deferred but it must be rectified as soon as practicable after it is reported and within any time limits specified in the applicable maintenance data.

2.2.2.3.4 Any defect not rectified before flight is to be recorded on the Deferred Defect Record kept in the aircraft document folder. Rectification of aircraft defects may be deferred only by authorised certifying staff as defined in EASA Part M. Rectification of operational defects may be deferred by the pilot

2.2.2.3.5 Aircraft defects are considered to be failure or malfunction of, or damage to, an aircraft's structure, systems and associated equipment that may affect its airworthiness.

2.2.2.3.6 Operational defects are considered to be failure or malfunction of aircraft instruments, equipment or systems not required to comply with Schedule 4 and 5 of the Air Navigation Order 2009, as amended.

2.2.2.3.7 Deferred defects and the action taken to correct them must also be recorded in the relevant aircraft logbooks

### **2.2.3 Allowable deficiencies**

2.2.3.1 Aircraft are to meet the minimum airworthiness requirements at all times and all equipment required by European and national legislation, appropriate to the type of flight intended, is to be fitted and working.





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## 2.2.3.2 Aircraft with an established Minimum Equipment List (MEL)

Under Part-NCO of the Air Operations Regulation an approved Minimum Equipment List is not mandatory for training aircraft.

## 2.2.3.3 Aircraft without an established MEL

The following table shows the allowable deficiencies for SAC aircraft. PICs must consult with an approved engineer and SAC if in any doubt about the serviceability of an aircraft.

Allowable Deficiencies – Single-Engine Aircraft			
Deficiency	Acceptable		Remarks
	Day	Night	
Cockpit or cabin lights	y	n	
Strobes/Flashing beacon	y	n	
Landing light/Taxi light	y	y	
Navigation (Position) lights	y	n	
OAT gauge	y	y	Flight to remain clear of known icing conditions
Pitot heater	y	y	Flight to remain clear of known icing conditions
Cabin heating	y	y	
Airspeed indicator	n	n	
Altimeter	y	y	One may be unserviceable if two are fitted, subject to legal requirement for the flight
Vertical Speed Indicator	y	y	No solo student flights permitted
Attitude indicator	y	n	Day VMC only. No student solo flights permitted.
Turn co-ordinator	y	y	VMC only. No spin/stall awareness/avoidance training permitted. No solo student flights permitted
Directional gyro	y	y	No solo student flights permitted
VHF comms	y	y	Continue to destination only if no requirement for radio at destination
Intercom	y	y	For non-instructional flights only
Radio & nav aids/GPS	y	y	Subject to legal requirement for the flight
Transponder	y	y	Subject to legal requirement for the flight. No solo flights permitted



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Fuel contents gauge	y	y	No solo student flights permitted Visual inspection must be carried out before every flight (Fuel for the planned flight with normal reserves, plus extra one hour contingency fuel is the minimum departure load)
Clock/stopwatch	y	y	Provided another time piece is carried ie a wrist watch.
Auto pilot	y	y	
GPS	y	y	

## 2.3 Route

### 2.3.1 Flight planning

#### 2.3.1.1 Fuel

2.3.1.1.1 Prior to each flight the PIC is to ensure that sufficient fuel has been loaded to complete the intended flight profile plus 5% contingency and to allow the aircraft to land with sufficient fuel to fly for a minimum of:-

VFR Flights Day

- 30 minutes flying at normal cruise speed 2000ft above destination aerodrome level.

VFR Flights Night

- 45 minutes flying at normal cruise speed 2000ft above destination aerodrome level.

IFR flights Day or Night

- When no destination alternate is required, to fly for at least 45 minutes at normal cruising altitude; or
- When a destination alternate is required, to fly to an alternate aerodrome and thereafter to fly for at least 45 minutes at normal cruising altitude.

2.3.1.1.2 The fuel calculated in Para 2.3.1.1.1 is a minimum fuel and in no way precludes the loading of extra fuel providing weight balance and performance limits are not exceeded. Extra fuel is at the discretion of the PIC.

2.3.1.1.3 At the end of the flight the PIC will record the starting fuel, and the fuel burn as calculated from the tables available near the Tech log/ Authorisation sheets. See Para 2.1.10.1.4

#### 2.3.1.2 Oil

2.3.1.2.1 Before starting the engine of an SAC aircraft, the PIC must ensure that the engine oil level exceeds the minimum stated in the POH/FM.

2.3.1.2.2 At the end of the flight, PIC will record the Starting Oil level in Qts. on the Tech log/ Authorisation sheets, See Para 2.1.10.1.4



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## 2.3.2 Minimum Safe Altitude (MSA)

2.3.2.1 Before departing on a cross-country flight, pilots are to calculate a minimum safe altitude for the intended route: If, during the flight, the weather conditions are such that the minimum safe altitude cannot be maintained in VMC with good ground reference, the flight will be:-

- Diverted to better weather and the flight continued, or terminated and diverted or returned to base, and the aircraft landed or
- If the PIC has a suitable instrument qualification, climbed above safety altitude and the flight continued or diverted as required

2.3.2.2 Minimum safe altitude is to be calculated as follows:

1. Locate the highest obstructions and spot heights within 5nm either side of track/turning points/destination.
2. Take the highest spot height, round up to the nearest 100ft then add 300ft to allow for uncharted obstructions. Add a further 1000ft.
3. Take the highest obstruction. Round up to the nearest 100ft, then add 1000ft.
4. Compare the two heights obtained from step 2 & 3, use the highest as the minimum safe altitude.
5. A separate MSA should be calculated for each leg of the intended flight.

## 2.3.3 Weather Minima

2.3.3.1 SAC members flying SAC aircraft must ensure that the forecast weather for the duration and route of their flight is expected to remain within legal weather minima limits, their ratings, and the aircraft limits as stated in the POH/FM.

2.3.3.3 SAC aircraft will cease operations when the wind steady speed reaches 40kts or gusts exceed 50kts or lower values if stated in the POH/FM

2.3.3.4 SAC students will only be authorised for solo flights when:-

- In the circuit the cloud base is at least 300ft above the briefed circuit height, the visibility is greater than 7 km in flight visibility, and in the opinion of the instructor there is a “usable horizon” or
- For flights in the local area the student will be able to complete the briefed flight and remain clear of cloud by 500ft vertically and 1000ft horizontally, have greater than 7km in flight visibility, can remain in sight of the ground, and in the opinion of the instructor there is a “usable horizon” or
- For cross country flights, the forecast cloud base must be above the MSA for the intended route as calculated in para 2.3.2.2. The forecast visibility must be greater than 7km, and in the opinion of the instructor there is a “usable horizon”

2.3.3.5 Introductory flights in the Local area will only operate when the PIC will be able to complete the briefed flight and remain clear of cloud by 500ft vertically and 1000ft horizontally, have greater than 7km in flight visibility, can remain in sight of the ground, and in the opinion of the PIC there is a “usable horizon”



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## **2.3.4 SAC/SLEAP Flying Activities**

### **2.3.4.1 Aerodrome Opening Hours**

2.3.4.1.1 The aerodrome will be open for flying and flying instruction at such time as are listed in the AIP. Any changes to these times will be notified by NOTAM and posted in SAC operations.

2.3.4.1.2 The airfield will not be used for any reason before 0700 local or after 2300 local.

2.3.4.1.3 SAC instruction will take place normally between 0830hrs and 1630hrs. No solo students will be authorised after 1630hrs on weekdays due to absence of fire cover.

### **2.3.4.2 Aircraft Parking Procedure**

2.3.4.2.1 Aircraft will be parked in the areas indicated on the chart at Appendix 14.

Private aircraft operated out of private hangars may be parked adjacent to these hangars but must not impede the taxiway to other aircraft or emergency vehicles at any time.

SAC aircraft may be parked on the hard standing in front of the club hangar.

Visiting aircraft staying overnight or longer will be advised by Sleaf Air Ground Radio of a parking position.

Aircraft will be parked into wind, and in such a position to allow free access to and from the parking area by other aircraft.

Aircraft must not be parked in a way that may cause a hazard to other aircraft. Aircraft will be repositioned, by hand if necessary, to mitigate any such hazard.

No aircraft will be parked on the grass borders to taxiway B.

No aircraft will be parked on the refuelling bay.

2.3.4.2.2 Aircraft are to be parked into wind. If strong winds are experienced or forecast parking brakes should be applied and control locks fitted.

If strong winds are experienced or forecast SAC aircraft will be returned to the Club hangar.

### **2.3.5. Taxi Procedure**

2.3.5.1 Before taxi, PIC will call on the Sleaf Air Ground frequency and will advise their intention to taxi, their intended route and the intended holding point.

2.3.5.2 Taxi routes are at the discretion of the PIC. PIC's will use taxi routes that minimize any back tracking of the active runway.

Suggested taxi routings are at Appendix 15.

2.3.5.3 Taxi speeds for all aircraft are to be kept below a "Fast Walking Pace". The only exception will be when expediting the taxi on the active runway, to facilitate other aircraft movements.

2.3.5.4 No SAC Member may taxi an SAC aircraft unless qualified and cleared to do so.

2.3.5.5 SAC members will only become qualified to taxi an SAC aircraft after:-

- their initial acceptance check flight on that aircraft type, or
- after differences training on that aircraft type.

2.3.5.6 SAC Student pilots may taxi solo an SAC aircraft providing:-

- The student has completed first solo flight and
- The aircraft is the same type the student is being trained on and
- The student is specifically authorised by an instructor. This authorisation may be verbal and
- No other person is aboard the aircraft unless that person is a flying instructor.



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2.3.5.7 Engine power checks will be carried out into wind, and as close as practicable to the holding point for the active runway. PIC must ensure that the area behind the aircraft is clear of obstructions, other aircraft, and personnel.

2.3.5.8 Strobe lights will not be used until the aircraft is fully ready for take-off and at the holding point and ready for immediate departure. Strobe lights will be turned off as part of the after-landing checks, but in all cases before the aircraft enters the parking area.

2.3.5.9 At night, the following light signals will be used:-

- After battery master on, the beacon and Nav lights will indicate that the aircraft is "LIVE".
- The landing light will be flashed 3 times to indicate imminent engine start. Use of landing/taxi lights will be kept to a safe minimum. They will be used with consideration for others, especially when waiting at the holding point when they can be a severe distraction and should be turned off until entering the runway.

## **2.3.6. Circuit procedures**

2.3.6.1 All PIC operating at Sleaf will use the circuit procedures as detailed in Appendix 16.

2.3.6.2 When a PIC initiates an EFATO the PIC will make a radio call "FANSTOP". On termination of the EFATO the PIC will call "CLIMBING AWAY"

2.3.6.3 All PIC's will avoid the noise sensitive areas and fly circuit routings as depicted at Appendix 17.

2.3.6.4 When in the circuit PIC's must remain within the Sleaf ATZ.

2.3.6.5 PIC will not carry out orbits to facilitate circuit adjustments. Speed or routing adjustment are acceptable subject to Para 2.3.6.4

2.3.6.6 Bad weather circuits may be flown in the standard circuit direction for the runway in use. Bad weather circuits will be flown 100ft below the cloud base, to a minimum height of 500ft QFE.

2.3.6.7 Instructors will take account of the prevailing circuit traffic and conditions before sending a student first solo.

## **2.3.7 Local Flying Area**

The local flying area is located to the west of Sleaf and is depicted at Appendix 6 Care should be taken not to infringe the controlled airspace to the west and north of the local area.

All Aircraft should be in receipt of a basic service from RAF Shawbury Zone, or if operating outside RAF Shawbury hours a listening watch on Sleaf Air-ground radio, when operating in the Sleaf local flying area.

## **2.3.8 Standard Cross-country Routes**

2.3.8.1 Standard training cross country routes may be found in the SAC Training Manual

## **2.3.9 Aerobatics, Display and Non-Standard circuit procedures.**

2.3.9.1 Aerobatic, Display and Non-standard procedures are detailed at Appendix 18



# SAC Flight Operations Manual

## **2.3.10 Re-Fuelling Procedures**

- 2.3.10.1 PIC will refuel aircraft to desired level prior to flight. SAC aircraft will only be refuelled after flight at the specific request of the SAC Admin Staff after liaising with next PIC.
- 2.3.10.2 PIC will, notwithstanding Para 2.3.10.1, leave aircraft over night with at least enough fuel for the first flight of the following day. PIC will also avoid refuelling at SAC Office closing times.
- 2.3.10.3 All aircraft must be taxied to the refuelling point in such a way that the aircraft will not continue to approach the fuel tanks if the brakes fail to stop the aircraft sufficiently. The engine will be stopped, keys removed, and the Battery Master switch turned off.  
Prior to refuelling the aircraft will be earthed, the parking brake will be left off. A suitable fire extinguisher will be positioned close at hand during the refuelling.
- 2.3.10.4 No smoking is allowed within the refueling area at any time.  
The use of mobile phones and photographic flash equipment is not allowed within the refuelling area.  
Nobody is allowed to remain on board the aircraft.  
Care will be taken to avoid any spillage of fuel.
- 2.3.10.5 After refuelling and before payment is made aircraft will be moved to a position that is suitable to either:-  
Park the aircraft, or  
Start the aircraft and taxi.
- 2.3.10.6 Under no circumstances are aircraft to be left on the refuelling bay unattended.

## **2.3.11 Conduct in and around Hangars**

- 2.3.11.1 The following is prohibited within any SAC owned hangar  
Smoking  
Starting of aircraft engines.  
It is strongly recommended that this rule is applied by members in private hangars.
- 2.3.11.2 Aircraft will be moved well clear of hangars and any associated ramps, obstructions or stones before start. Aircraft will also be positioned so to ensure the propeller slipstream will be directed into a safe and clear area.
- 2.3.11.3 Aircraft must not be parked in such a way as to obstruct any taxiway or access to adjacent hangars.
- 2.3.11.4 Under no circumstances whatsoever will an aircraft be taxied in to a hangar.
- 2.3.11.5 Aircraft will be left with brakes off, and aircraft doors unlocked within hangars.
- 2.3.11.6 SAC aircraft within the SAC hangar will be moved using the steering bars provided. Steering bars must be returned and secured in the correct stowage in the aircraft or hangar after use.
- 2.3.11.7 SAC aircraft keys will be returned to the SAC office after aircraft have been hangared.

## **2.3.12 Night flying**

- 2.3.12.1 "Night" is defined as being local sunset plus 30 minutes until sunrise minus 30 minutes.
- 2.3.12.2 Night flying will normally cease by 2115 Local time and must stop by 2300 Local time due to local restrictions.
- 2.3.12.3 The PIC will ensure that two serviceable torches are carried in any SAC aircraft that is night flying.



# SAC Flight Operations Manual

## **2.3.13 Glider Operations at Sleaf**

2.3.13.1 Information on glider operations at Sleaf can be found in ADM Vol1.1 Para 1.4.10a

## **2.3.14 Defence Helicopter Flying School Operations at Sleaf**

2.3.14.1 Information on Defence Helicopter Flying School Operations at Sleaf can be found in ADM Vol1.1 Appendix A/D

## **2.3.15 Introductory flights**

2.3.15.1 Introductory flights offered by SAC to members of the public will be operated within the rules laid out in the CAA Publication, Introductory flights – Guidance to Operators. (Mar 18 V1.0)

2.3.15.2 Only SAC pilots who are authorised by the HOT to operate introductory flights may do so. Flights will be conducted according to the conditions for such flights laid out in Appendix 19.

## **2.4 Personnel Training**

### **2.4.1 Responsibilities**

The HOT is responsible for the supervision of all flight instructors and the standardisation of all flight instruction. HOT is also responsible for maintaining appropriate training records of instructors.

### **2.4.2 Initial Training**

2.4.2.1 Before commencing flying instructional duties at SAC, an FI will undergo training as detailed in Appendix 2 Para APP2.1

2.4.2.2 Before commencing ground instructional duties at SAC, a TKI will undergo training as detailed in Appendix 2 Para APP2.2

### **2.4.3 Refresher Training**

2.4.3.1 Refresher training will take place once a year for all instructors.

2.4.3.2 The subject for refresher training will be at the discretion of the HOT.

### **2.4.4 Standardisation Training/ Instructor meetings**

2.4.4.1 A minimum of 2 standardisation meetings will be held each calendar year.

2.4.4.2 Additional standardisation meetings may be held as required by the HOT.

2.4.4.3 Any instructor or examiner who notes any standardisation issues at SAC are to report them to HOT/DHOT without delay.

2.4.4.4 A standardisation flight will be carried out by the HOT or DHOT on each instructor annually.

### **2.4.5 Proficiency Checks and Revalidation**

2.4.5.1 Instructor proficiency check and revalidation is to be arranged by the instructor concerned in accordance with FCL.940.FI FI – Revalidation and Renewal.

2.4.5.2 The results of the Instructor proficiency check and revalidation detailed in para 2.4.5.1 are to be recorded by the SAC office in the instructor's file.

### **2.4.6 Upgrading Training**

2.4.6.1 Upgrade training of an instructor is the choice of, and cost to, that individual instructor.



# SAC Flight Operations Manual

2.4.6.2 SAC, may, on occasion, identify a need for extra instructional capability. In this case they may agree with an individual, a course of action to satisfy this need.

## **2.4.7 SAC Personnel Standards Evaluation**

2.4.7.1 It is the responsibility of each instructor undertaking instruction at SAC to ensure that they remain qualified to undertake the instruction that they give.

2.4.7.2 The SAC office will maintain details of the instructor's licence, ratings and medicals. They will advise the individual instructor when renewals are becoming due. Instructors are required to submit their licence for checking on request.

2.4.7.3 SAC will maintain a file on each instructor, in which will be recorded  
Personal contact information.

Next of Kin.

Licence and rating details and expiry dates.

Medical certificate details and expiry date.

Detail of instructor proficiency checks and revalidation.

A record of annual standardisation flights carried out at SAC.

A record of standardisation training carried out at SAC.

A record of refresher training carried out at SAC.





# SAC Flight Operations Manual

## Appendix 1

### Dual Check Certificate New Club Members, New type Check

Name _____	Type of Licence & Rating _____
A/c Type _____	Licence Expiry Date _____
Total Time _____	Total Time P1 _____

Item	Com-pleted	Comments
SAC Safety Management System		
Brief Local area, MATZ procedures, circuit & re-join procedures, Taxi routings & parking. Refuelling & oil.		
SAC Flight operations Manual, Pilot's order book.		
Weather conditions		
A/C documentation, including Tech Log & Minor defects		
Load sheet & Performance. Load sheet for actual flight attached		
Pre-flight Checks & RT procedure		
*Aircraft differences/ feature specific to a/c being flown		
Brief on radio, and avionics installation.		
*Take-off. Noise abatement & Departure. 4 seat A/C to make at least one take off at MTOW		
General flying & airmanship. Including 45° AOB turns		
*SSR from a clean full. *SSR from a stall in the approach config at the stall warner SSR from a stall simulated after take-off at the stall warner.		
*Forced landing without power and or EFATO. State failure given		
GPS use of direct to and other functions.		



# SAC Flight Operations Manual

Join circuit & landing		
*Full flap landing		
Flapless landing		
Glide landing		
Short field take-off Low level circuit & short field landing		
*Go around from below 50'agl with full flap		
Post flight actions, including tech log, defects, payment, etc.		

\*Mandatory items all others optional

## Emergency and Safety Section

In the event of the following please indicate the action you would take in the space provided.

Emergency	Write you actions below
Engine fire on Start-up	
Brake failure taxiing from dispersal	
Aircraft not accelerating as expected	
Getting lost	
Alternator failure	
Engine fire in flight	
Cabin fire in flight	
Lowering cloud base with no IMC or instrument rating	
Radio failure	



# SAC Flight Operations Manual

I have checked the pilot named below on the items specified overleaf and above. All were answered or flown to my satisfaction.

Name of Instructor \_\_\_\_\_ Date \_\_\_\_\_

Signed \_\_\_\_\_

I have been checked on the items specified overleaf and above and confirm I have read the SAC Flight Operations Manual.

Name of Pilot \_\_\_\_\_ Date \_\_\_\_\_

Signed \_\_\_\_\_



## Appendix 2

### Procedures for Training Instructional SAC staff

- APP2.1 Before commencing flying instructional duties at SAC, an FI will be fully briefed on the Management, Operation and Training at SAC by the HOT. This will include, but is not limited to:-
- Theoretical knowledge instruction on the aircraft types on which instruction is to be given.
  - Differences training on each aircraft type on which instruction is to be given.
  - SAC documentation (Operations Manual, Training Manual, Organisation Management Manual, etc.)
  - Maintenance procedures including allowable deficiencies/MEL
  - Theoretical knowledge training programme.
  - Flight training programme
  - Emergency and safety training.
  - SAC Safety Management System.
  - Local area familiarisation/standardisation check.
  - Student Record keeping and record completion.

The HOT may vary the induction, depending on the familiarity of the FI with SAC and experience.

- APP2.2 Before commencing ground instructional duties at SAC, a TKI will be fully briefed on the Management, Operation and Training at SAC by the HOT. This will include, but is not limited to:-
- Theoretical knowledge instruction on the aircraft types on which instruction is to be given.
  - SAC documentation (Operations Manual, Training Manual, Organisation Management Manual, etc.)
  - Theoretical knowledge training programme.
  - Flight training programme
  - Emergency and safety training.
  - SAC Safety Management System.
  - A test lecture.
  - Student Record keeping and record completion.

The HOT may vary the induction, depending on the familiarity of the TKI with SAC and experience.



## Appendix 3 PT1 Pre Solo Progress Report

Student's Name

Prior to going 1<sup>st</sup> solo the following must be completed.

Both the instructor and the student should check the following and confirm that each statement is correct. Both the instructor and the student should initial each statement and then sign and date the certificate.

Check prior to 1 <sup>st</sup> Solo	Explanation	Instructor initials	Student initials
Total Flying Hours	The flying hours recorded in student's log book are correct and corresponds to the record in the students file		
Hours SSAT	Min 2hrs Stall, Spin Awareness Training recorded in student's log book		
Aviation Law	The student has passed the aviation law examination and it is recorded in the student's file.		
Pre-solo essential knowledge test	The student has completed the solo essential knowledge test on the aircraft type being used for training.		
Operational procedures	The student has passed the Operational Procedures examination and it is recorded in the student's file.		
Medical certificate	The student holds a valid aviation medical certificate, a copy of which is on the student's file.		
Flight exercises	The student has completed all pre-solo flight exercises to a solo standard.		
Aircraft familiarisation	The student is able to complete unaided the pre and post flight actions.		
Aircraft control	The student is able to control the aircraft using external visual reference		
Critically slow airspeed	The student is able to recognise flight at critically slow airspeeds; recognition and recovery from incipient and full stalls, and spin avoidance.		

# SAC Flight Operations Manual



Take-off and landing	The student is able to perform satisfactory normal take-offs and landings.		
Airfield & circuit procedures	The student understands the traffic pattern and circuit procedures.		
Emergency procedures	The student has completed several selected emergency procedures, including an EFATO to a good standard.		

Instructor's Signature

Student's Signature

Date



## Appendix 4

### Student PT2 Pre Solo Navigation Certificate

Student's Name \_\_\_\_\_

Prior to going 1<sup>st</sup> solo navigation sortie the following must be completed. Both the instructor and the student should check the following and confirm that each statement is correct. Both the instructor and the student should initial each statement and then sign and date the certificate.

Check prior to 1 <sup>st</sup> Solo navigation	Explanation	Instructor initials	Student initials
Total Flying Hours	The flying hours recorded in student's log book are correct and corresponds to the record in the students file		
PT1 Solo certificate	The student has completed all the requirements for 1st solo and the PT1 is in the student's file.		
Communications	The student has completed the communication Theoretical Knowledge course or completed the practical examination.		
Meteorology examination	The student has passed the meteorology examination and it is recorded in the student's file.		
Navigation examination	The student has passed the navigation examination and it is recorded in the student's file.		
Medical certificate	The student holds a valid aviation medical certificate, a copy of which is on the student's file.		
Flight exercises	The student has completed all pre-solo navigation flight exercises to a satisfactory standard.		
PT1 Consolidation	The student has consolidated the pre 1 <sup>st</sup> Solo flight exercises and most are now Skills test standard		
Aircraft control	The student is able to navigate the aircraft using external visual references, dead reckoning and radio aids.		
Critically high air-speed	The student is able to recognise flight at critically high air-speeds; recognition and recovery from spiral descents.		
Take-off and landing	The student is able to perform satisfactory crosswind take-offs and landings. The student is able to perform satisfactory short-field, and obstacle take-offs, and short-field landings.		
Airfield & circuit procedures	The student understands the traffic pattern and circuit procedures.		
Emergency procedures	The student has completed selected emergency and abnormal procedures, including selected equipment failures and PFLs.		

Instructor's Signature

Student's Signature

Date



## Appendix 5

### PT3 Pre Skills Test Progress Check Certificate

Student's Name \_\_\_\_\_

Prior to the pre-skills test progress test the following must be completed.

Both the instructor and the student should check the following and confirm that each of the statements is correct. Both the instructor and the student should initial each statement and then sign and date the certificate.

Check prior to pre-skills test progress check	Explanation	Instructor initials	Student initials
Total Flying Hours	The flying hours recorded in student's log book are correct and corresponds to the record in the student's file		
Skills Test hours	The student has flown the correct number of hours required in each discipline, solo and dual, for the course requirement.		
PT1 & PT2 certificates	The student has completed all the requirements for PT1 & PT2 and these are in the student's file.		
Theoretical Knowledge Examinations	The student has completed and passed all the theoretical knowledge examinations required for the course.		
Skills test quiz	The student has completed the aircraft essential knowledge quiz on the aircraft to be used in the skills test.		
Medical certificate	The student holds a valid aviation medical certificate, a copy of which is on the student's file.		
Flight exercises	The student has completed all the flight exercises for the course. All exercises have been rated as skills test standard.		
Aircraft control	The student is able to fly solely with reference to the instruments, including a 180 degree level turn.		
Navigation	The student has completed a solo qualifying cross-country flight of the required length for the licence being applied for. The cross-country paper work has been correctly filled out and is in the student's file.		
Emergency procedures	The student has completed selected emergency and abnormal procedures, including selected equipment failures and precautionary landings with power.		

Instructor's Signature

Student's Signature

Date







## Appendix 7

### Student Solo Authorisation Certificate

From:- \_\_\_\_\_ To: \_\_\_\_\_  
 From:- \_\_\_\_\_ To: \_\_\_\_\_  
 From:- \_\_\_\_\_ To: \_\_\_\_\_  
 Estimated Time Of Departure (ETD) \_\_\_\_\_ Local Date \_\_\_/\_\_\_/\_\_\_  
 Estimated Time En-route \_\_\_\_\_ Hrs \_\_\_\_\_ Mins Nominated Diversion  
 Estimated Diversion Time Hrs Mins

<p><b><u>Route</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Safety Altitudes, terrain clearance and altitudes to fly</li> <li><input type="checkbox"/> Altimeter setting procedures</li> <li><input type="checkbox"/> Notable features of route.</li> <li><input type="checkbox"/> Controlled airspace.</li> <li><input type="checkbox"/> Other airspace (danger areas etc.)</li> <li><input type="checkbox"/> NOTAM and AIS information</li> <li><input type="checkbox"/> Maintenance of navigation plan and fuel plan</li> </ul> <p><b><u>Departure &amp; Destination(s)</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Permission to use airfield(s)</li> <li><input type="checkbox"/> Departure procedure(s)</li> <li><input type="checkbox"/> Arrival and circuit joining procedure(s)</li> <li><input type="checkbox"/> Runway selection</li> <li><input type="checkbox"/> Taxiing and parking procedures.</li> <li><input type="checkbox"/> Arrival and departure notification</li> <li><input type="checkbox"/> Alternate airfield(s)</li> </ul> <p><b><u>Meteorology</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> General Met. Situation</li> <li><input type="checkbox"/> Departure forecast and observations</li> <li><input type="checkbox"/> En-route forecast and observations</li> <li><input type="checkbox"/> Destination(s) forecast(s) and observation(s)</li> <li><input type="checkbox"/> Updating Met. Information</li> <li><input type="checkbox"/> Daylight: Sunset _____ Hrs Local</li> </ul>	<p><b><u>Communications</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Communication frequencies</li> <li><input type="checkbox"/> Specific RTF procedures</li> <li><input type="checkbox"/> Transponder (SSR) procedures</li> <li><input type="checkbox"/> Emergency frequencies</li> <li><input type="checkbox"/> Action in event of radio failure</li> </ul> <p><b><u>Aircraft</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Aircraft serviceability</li> <li><input type="checkbox"/> Fuel state: total endurance      hrs      mins</li> <li><input type="checkbox"/> Fuel required: (inc. reserves)      hrs      mins</li> <li><input type="checkbox"/> Mass and balance</li> <li><input type="checkbox"/> Performance</li> </ul> <p><b><u>Abnormal &amp; Emergency</u></b></p> <p>Procedures and actions in the event of the following:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Fuel Shortage</li> <li><input type="checkbox"/> Unsuitable weather</li> <li><input type="checkbox"/> Becoming lost</li> <li><input type="checkbox"/> Infringement of controlled airspace</li> <li><input type="checkbox"/> Diversion</li> <li><input type="checkbox"/> Unscheduled landing</li> <li><input type="checkbox"/> Aircraft unserviceability (airborne or on ground)</li> <li><input type="checkbox"/> Other (specify)</li> </ul>
---	--

Please tick all of the above that apply and have been briefed. I certify that I have been properly briefed for the above solo cross-country flight. In the event of an unscheduled landing, diversion or aircraft unserviceability, I WILL contact the SAC office/DI and act in accordance with their instructions:

Instructor Name \_\_\_\_\_  
 Instructor Signature \_\_\_\_\_

Student Name \_\_\_\_\_  
 Student Signature \_\_\_\_\_

**This section is to be detached and given to the student, and must be taken on the flight by them.**

In accordance with Part-FCL 020 and 045(d)

I Certify that Student Pilot \_\_\_\_\_

\_\_\_\_\_

has been briefed and authorised to fly the flight routing \_\_\_\_\_

Date \_\_\_/\_\_\_/\_\_\_

Instructor's Name \_\_\_\_\_

Instructor's Signature \_\_\_\_\_

Instructor's License Number \_\_\_\_\_

Shropshire Aero Club Ltd, Sleaf Aerodrome, Harmer Hill, Shropshire, SY4 3HE (01939-232882)

# Appendix 8

## Student Solo QXC Authorisation Certificate

From:- \_\_\_\_\_ To: \_\_\_\_\_  
 From:- \_\_\_\_\_ To: \_\_\_\_\_  
 From:- \_\_\_\_\_ To: \_\_\_\_\_  
 Estimated Time Of Departure (ETD) \_\_\_\_\_ Local Date \_\_\_/\_\_\_/\_\_\_  
 Estimated Time En-route \_\_\_ Hrs \_\_\_ Mins Nominated Diversions

Estimated Diversion Time Hrs Mins

<p><b>Route</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Safety Altitudes, terrain clearance and altitudes to fly</li> <li><input type="checkbox"/> Altimeter setting procedures</li> <li><input type="checkbox"/> Notable features of route.</li> <li><input type="checkbox"/> Controlled airspace.</li> <li><input type="checkbox"/> Other airspace (danger areas etc.)</li> <li><input type="checkbox"/> NOTAM and AIS information</li> <li><input type="checkbox"/> Maintenance of navigation plan and fuel plan</li> </ul> <p><b>Departure &amp; Destination(s)</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Permission to use airfield(s)</li> <li><input type="checkbox"/> Departure procedure(s)</li> <li><input type="checkbox"/> Arrival and circuit joining procedure(s)</li> <li><input type="checkbox"/> Runway selection</li> <li><input type="checkbox"/> Taxiing and parking procedures.</li> <li><input type="checkbox"/> Arrival and departure notification</li> <li><input type="checkbox"/> Alternate airfield(s)</li> </ul> <p><b>Meteorology</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> General Met. Situation</li> <li><input type="checkbox"/> Departure forecast and observations</li> <li><input type="checkbox"/> En-route forecast and observations</li> <li><input type="checkbox"/> Destination(s) forecast(s) and observation(s)</li> <li><input type="checkbox"/> Updating Met. Information</li> <li><input type="checkbox"/> Daylight: Sunset _____ Hrs Local</li> </ul>	<p><b>Communications</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Communication frequencies</li> <li><input type="checkbox"/> Specific RTF procedures</li> <li><input type="checkbox"/> Transponder (SSR) procedures</li> <li><input type="checkbox"/> Emergency frequencies</li> <li><input type="checkbox"/> Action in event of radio failure</li> </ul> <p><b>Aircraft</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Aircraft serviceability</li> <li><input type="checkbox"/> Fuel state: total endurance      hrs      mins</li> <li><input type="checkbox"/> Fuel required: (inc. reserves)      hrs      mins</li> <li><input type="checkbox"/> Mass and balance</li> <li><input type="checkbox"/> Performance</li> </ul> <p><b>Abnormal &amp; Emergency</b></p> <p>Procedures and actions in the event of the following:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Fuel Shortage</li> <li><input type="checkbox"/> Unsuitable weather</li> <li><input type="checkbox"/> Becoming lost</li> <li><input type="checkbox"/> Infringement of controlled airspace</li> <li><input type="checkbox"/> Diversion</li> <li><input type="checkbox"/> Unscheduled landing</li> <li><input type="checkbox"/> Aircraft unserviceability (airborne or on ground)</li> <li><input type="checkbox"/> Other (specify)</li> </ul>
--	---

Please tick all of the above that apply, and have been briefed.

I certify that I have been properly briefed for the above solo qualifying cross country flight. In the event of an unscheduled landing, diversion or aircraft unserviceability, **I WILL** contact the SAC office/ DI and act in accordance with their instructions:

Student Name \_\_\_\_\_  
 Student Signature \_\_\_\_\_  
 Instructor Name \_\_\_\_\_  
 Instructor Signature \_\_\_\_\_

**Page 1 of this authorisation is to be placed in and retained in the student's file before flight.**  
**Page 2 of this authorisation is to be carried by the student of the QXC series of flights and is to be signed by a representative of the airfields visited.**

---

**This section is to be detached and given to the student, and must be taken on the flight by them.**

In accordance with Part-FCL 020 and 045(d)

I Certify that Student Pilot \_\_\_\_\_

\_\_\_\_\_

has been briefed and authorised to fly the flight  
routing \_\_\_\_\_

Date \_\_\_/\_\_\_/\_\_\_

Instructor's

Name \_\_\_\_\_

Instructor's

Signature \_\_\_\_\_

Instructor's Licence Num-  
ber \_\_\_\_\_

Shropshire Aero Club Ltd, Sleaf Aerodrome,  
Harmer Hill, Shropshire, SY4 3HE

[Tel:- 01939 232882](tel:01939232882)



---

First Landing Airfield \_\_\_\_\_  
Comment on student performance.

Signature of airfield representative \_\_\_\_\_ Position \_\_\_\_\_

---

Second Landing Airfield \_\_\_\_\_  
Comment on student performance.

Signature of airfield representative \_\_\_\_\_ Position \_\_\_\_\_

I certify that I have completed the briefed route

Student signature \_\_\_\_\_

I certify that \_\_\_\_\_ has completed the requirement of the QXC  
for the PPL/LAPL\* course to my satisfaction.

Instructor's signature \_\_\_\_\_

Date \_\_\_\_\_

\*Delete as appropriate



## Appendix 9

### SAC Aircraft Load Sheets

#### G BILR Weight & Balance Certificate

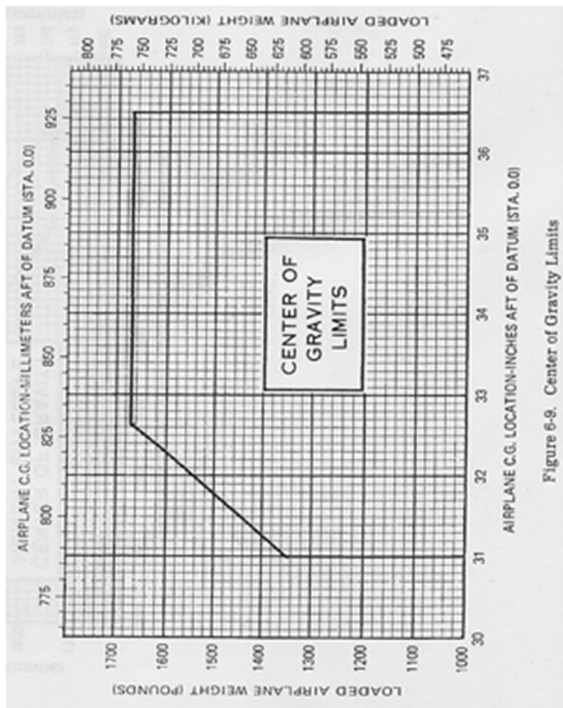
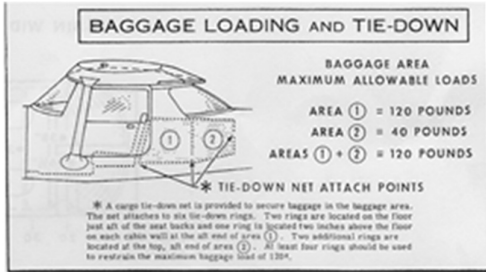
1. Include the weight of each item to be loaded into the weight column of the table.
2. Multiply each weight by its arm datum to determine the moment of each item loaded.
3. Total all the weights to find the actual take-off weight. (ATOW)
4. Ensure the ATOW is less than the Maximum take-off weight (MTOW)
5. Total all of the moments to find the total moment.
6. Divide the total moment by the total weight to determine the C of G position.
7. Use the figures from 4 & 6 to ensure that the loading falls within the C of G envelope of the aircraft. Record the point on the graph over leaf.
8. Ensure the total baggage weight of area 1 + area 2 is Max 120lbs
9. Sign and date the certificate

Item Loaded	Weight lbs	Arm aft of datum in	Moment lb-in
Basic empty weight of a/c	1204	30.05	36171
Pilot		39.0	
Front PAX		39.0	
Usable Fuel (Max 20.4 imp gal)		39.5	
Baggage Area 1 (Max 120lbs)		64.0	
Baggage Area 2 (Max 40lbs)		84.0	
ATOW (MAX 1670lbs)			

I certify that G BILR is loaded in accordance with this certificate.  
Commander's name

Signature

Date





Shropshire Aero Club  
Flight Operations Manual.



**G BNKS Weight & Balance Certificate**

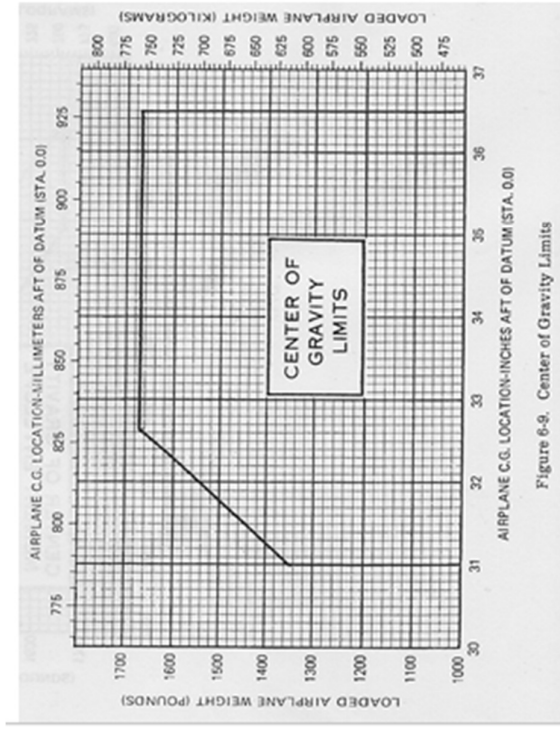
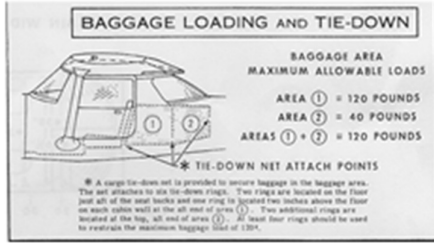
1. Include the weight of each item to be loaded into the weight column of the table.
2. Multiply each weight by its arm datum to determine the moment of each item loaded.
3. Total all the weights to find the actual take-off weight. (ATOW)
4. Ensure the ATOW is less than the Maximum take-off weight (MTOW)
5. Total all of the moments to find the total moment.
6. Divide the total moment by the total weight to determine the C of G position.
7. Use the figures from 4 & 6 to ensure that the loading falls within the C of G envelope of the aircraft. Record the point on the graph over leaf.
8. Ensure the total baggage weight of area 1 + area 2 is Max 120lbs
9. Sign and date the certificate

Item Loaded	Weight lbs	Arm aft of datum in	Moment lb-in
Basic empty weight of a/c	1185	30.27	35866
Pilot		39.0	
Front PAX		39.0	
Usable Fuel		42.17	
Baggage Area 1 (Max 120lbs)		64.0	
Baggage Area 2 (Max 40lbs)		84.0	
ATOW (MAX 1670lbs)			

I certify that G BNKS is loaded in accordance with this certificate.  
Commander's name

Signature

Date





**G BOIR Weight & Balance Certificate**

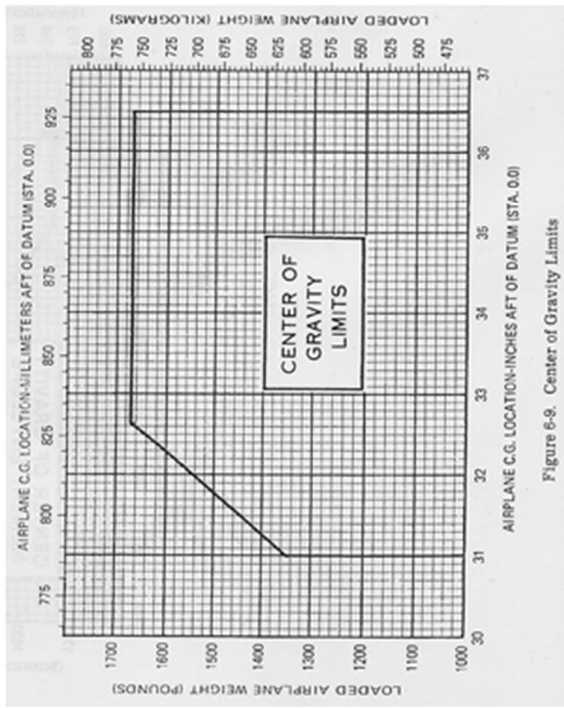
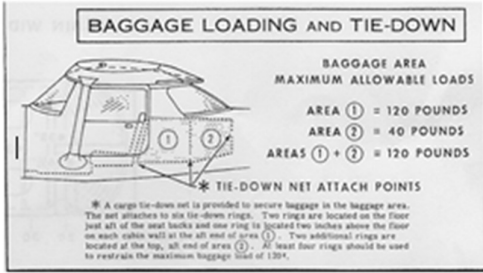
1. Include the weight of each item to be loaded into the weight column of the table.
2. Multiply each weight by its arm datum to determine the moment of each item loaded.
3. Total all the weights to find the actual take-off weight. (ATOW)
4. Ensure the ATOW is less than the Maximum take-off weight (MTOW)
5. Total all of the moments to find the total moment.
6. Divide the total moment by the total weight to determine the C of G position.
7. Use the figures from 4 & 6 to ensure that the loading falls within the C of G envelope of the aircraft. Record the point on the graph over leaf.
8. Ensure the total baggage weight of area 1 + area 2 is Max 120lbs
9. Sign and date the certificate

Item Loaded	Weight lbs	Arm aft of datum in	Moment lb-in
Basic empty weight of a/c	1203	31.32	37677.21
Pilot		39.0	
Front PAX		39.0	
Usable Fuel		42.17	
Baggage Area 1 (Max 120lbs)		64.0	
Baggage Area 2 (Max 40lbs)		84.0	
ATOW (MAX 1670lbs)			

I certify that G BOIR is loaded in accordance with this certificate.  
Commander's name

Signature

Date



Shropshire Aero Club  
Flight Operations Manual.



**GLAMS Weight & Balance Certificate**

1. Include the weight of each item to be loaded into the weight column of the table.
2. Multiply each weight by its arm datum to determine the moment of each item loaded.
3. Total all the weights to find the actual take-off weight. (ATOW)
4. Ensure the ATOW is less than the Maximum take-off weight (MTOW)
5. Total all of the moments to find the total moment.
6. Divide the total moment by the total weight to determine the C of G position.
7. Use the figures from 4 & 6 to ensure that the loading falls within the C of G envelope of the aircraft. Record the point on the graph over leaf.
8. Ensure the total baggage weight of area 1 + area 2 is Max 120lbs
9. Sign and date the certificate

Item Loaded	Weight lbs	Arm aft of datum in	Moment lb-in
Basic empty weight of a/c	1201	30.16	362220.16
Pilot		39.0	
Front PAX		39.0	
Usable Fuel		42.00	
Baggage Area 1 (Max 120lbs)		64.0	
Baggage Area 2 (Max 40lbs)		84.0	
ATOW (MAX 1670lbs)			

I certify that G LAMS is loaded in accordance with this certificate.  
Commander's name

Signature

Date

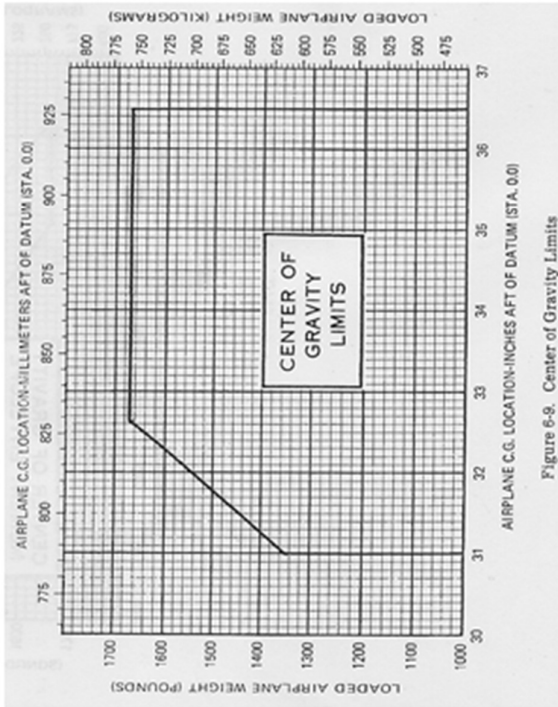
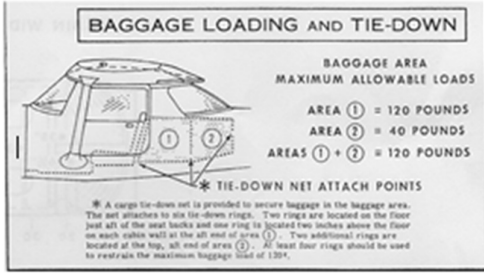


Figure 6-8. Center of Gravity Limits



# Shropshire Aero Club Flight Operations Manual.

## G LORR Weight & Balance Certificate

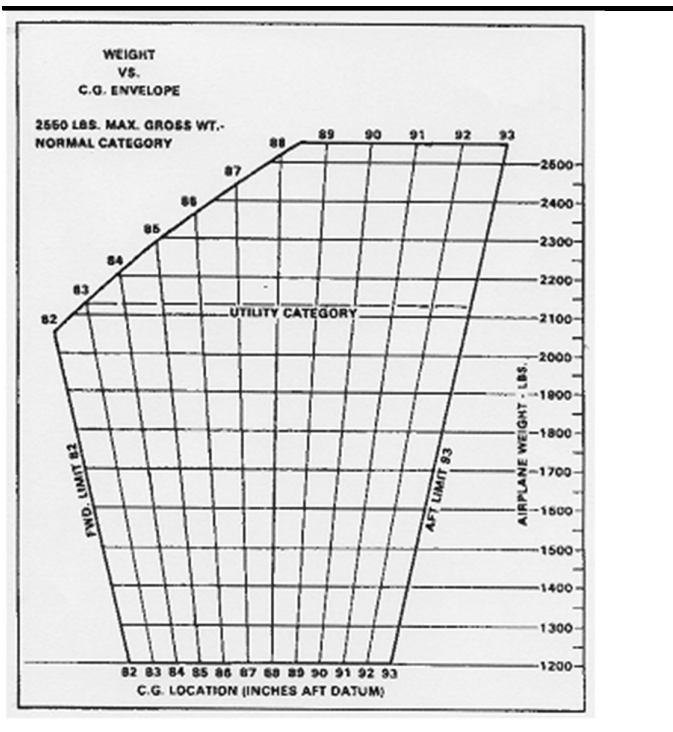
1. Include the weight of each item to be loaded into the weight column of the table.
2. Multiply each weight by its arm datum to determine the moment of each item loaded.
3. Total all the weights to find the actual take-off weight. (ATOW).
4. Ensure the ATOW is less than the Maximum take-off weight (MTOW)
5. Total all of the moments to find the total moment.
6. Divide the total moment by the total weight to determine the C of G position.
7. Use the figures from 4 & 6 to ensure that the loading falls within the C of G envelope of the aircraft. Record the point on the graph over leaf.
8. No rear passengers or baggage can be carried at take-off weights above 2130lbs i.e. in the utility category
9. Sign and date the certificate

Item Loaded	Weight lbs	Arm aft of datum in	Moment lb-in
Basic empty weight of a/c	1708.0	86.8	148179
Pilot		80.5	
Front PAX		80.5	
Rear PAX		118.1	
Rear PAX		118.1	
Fuel (Max 48 USG)		95.0	
Baggage (Max 200lbs)		142.8	
ATOW (MAX 2550lbs normal, 2130lbs Utility see note 8)			

I certify that G LORR is loaded in accordance with this certificate.  
Commanders name

Signature

Date





# Shropshire Aero Club Flight Operations Manual.

## GMPAA Weight & Balance Certificate

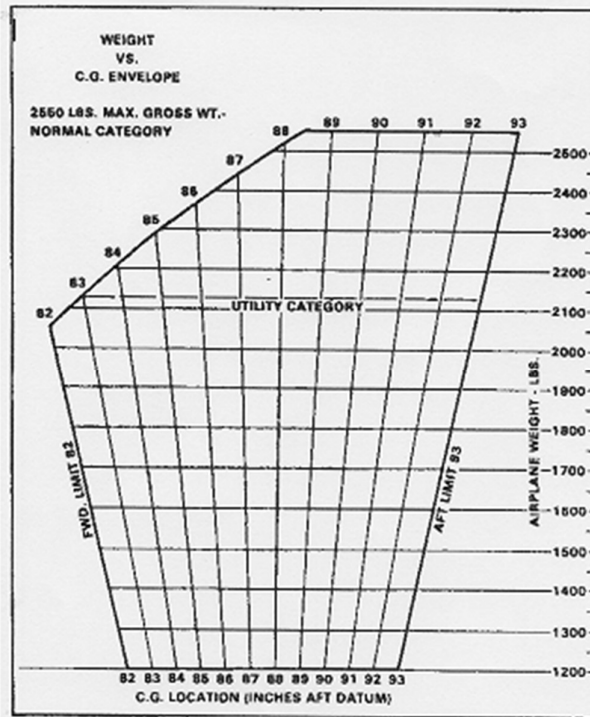
1. Include the weight of each item to be loaded into the weight column of the table.
2. Multiply each weight by its arm datum to determine the moment of each item loaded.
3. Total all the weights to find the actual take-off weight. (ATOW)
4. Ensure the ATOW is less than the Maximum take-off weight (MTOW)
5. Total all of the moments to find the total moment.
6. Divide the total moment by the total weight to determine the CoG position.
7. Use the figures from 4 & 6 to ensure that the loading falls within the CoG envelope of the aircraft. Record the point on the graph over leaf.
8. **No rear passengers or baggage can be carried at take-off weights above 2130lbs i.e. in the utility category**
9. Sign and date the certificate

Item Loaded	Weight lbs	Arm aft of datum in	Moment lb-in
Basic empty weight of a/c	1795.2	88.253	158431.7
Pilot		80.5	
Front PAX		80.5	
Rear PAX		118.1	
Rear PAX		118.1	
Fuel (Max 48 USG)		95.0	
Baggage (Max 200lbs)		142.8	
ATOW (MAX 2550lbs normal, 2130lbs Utility see note 8)			

I certify that GMPAA is loaded in accordance with this certificate.  
Commanders name

Signature

Date







# Shropshire Aero Club Flight Operations Manual.

## G SHSP Weight & Balance Certificate

1. Include the weight of each item to be loaded into the weight column of the table.
2. Multiply each weight by its arm datum to determine the moment of each item loaded.
3. Total all the weights to find the actual take-off weight. (ATOW)
4. Ensure the ATOW is less than the Maximum take-off weight (MTOW)
5. Total all of the moments to find the total moment.
6. Divide the total moment by the total weight to determine the C of G position.
7. Use the figures from 4 & 6 to ensure that the loading falls within the C of G envelope of the aircraft. Record the point on the graph over leaf.
8. **If the Loading falls within the graph area, any Normal category manoeuvres may be performed. To perform Utility category manoeuvres the C of G must lie in the Utility area. In addition No rear PAX or Baggage in the utility area.**
9. Sign and date the certificate

Item Loaded	Weight lbs	Arm aft of datum in	Moment lb-in
Basic empty weight of a/c	1699.7	39.43	67025.12
Pilot		38.0	
Front PAX		38.0	
Rear PAX		73.0	
Rear PAX		73.0	
Fuel (Max 53 USG)		48	
Baggage Area 1(Max 120lbs)		95.0	
Baggage Area 2 (max 50lbs)		123.0	
ATOW (MAX 2550lbs normal, 2200lbs Utility see note 8)			

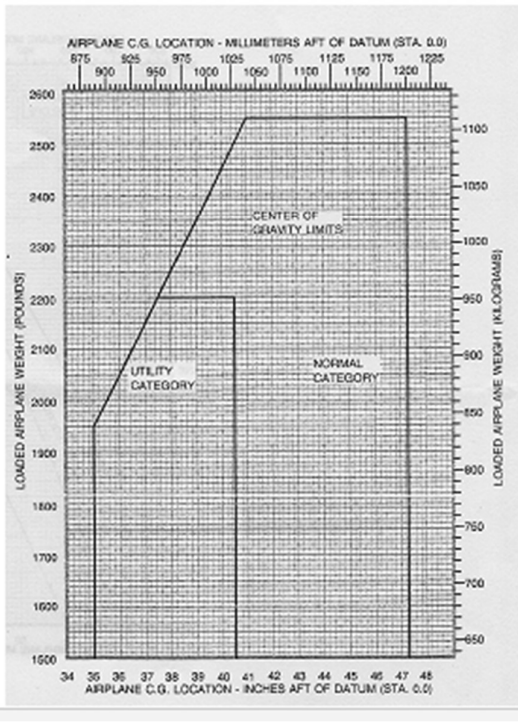
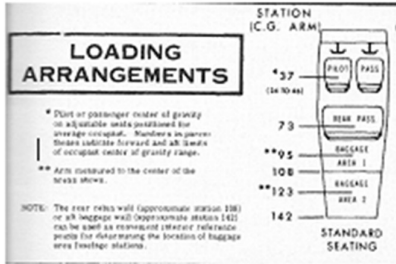
Note Max total in baggage area 1 + area 2 = 120lbs

I certify that G SHSP is loaded in accordance with this certificate.

Commander's name

Signature

Date





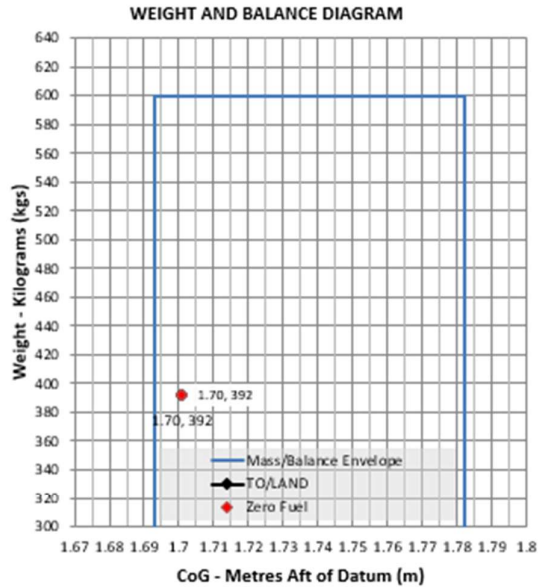
**LOAD SHEET for TECNAM P2002JF - G-CGWO; S/N 168; Effective date : 25/Jul/2011**



Pilot	Date	From	To

LOADSHEET G-CGWO					
Load Distribution			Weight (kg)	Arm (m)	Moment (kg*m)
APS Weight			392.0	1.701	666.79
COCKPIT (kg)	Commander	Copilot		1.80	
	BAGGAGE (kg)			2.20	
*SELECT* FUEL MASS (kg)	ZERO FUEL MASS (kg)		392	1.70	667
	ADED FUEL MASS (kg)			1.53	
*SELECT* FUEL MASS (kg)	TAKE-OFF MASS (kg)		392	1.70	667
	TRIP FUEL MASS (kg)			1.53	
	EST LANDING MASS (kg)		392	1.70	667

- NOTES :**
- 1) APS weight is defined in the Weight and Balance schedule referenced at note 3) and includes :
    - a) Unusable fuel and engine oil
    - b) Fire Extinguisher and First Aid Kit
  - 2) Maximum allowables :
    - a) Authorized weight (Max take off / Max landing) = 600kg
    - b) Baggage weight = 20kg max
    - c) C of G limits (metres aft of Datum) : Forward limit = 1.693m; Aft limit = 1.782m
    - d) Useable fuel = 39.00L / 71.28kg / 157.14lbs
  - 3) Weighing report ref : 168-JF/11 ; Date : 23/May/2011 . Schedule ref : CGS/GWO/01 ; Date : 05/Jul/2011



Printed : 15-Aug-18

Issued : 25-Jul-11

Revision : 01

Loadsheet developed by ZEPHYR AVIATION

**LOADSHEET IS ONLY VALID IAW WEIGHING REPORT REF : 168-JF/11 DATED 23/MAY/2011, SCHEDULE REF : CGS/GWO/01 DATED 05/JUL/2011**



## Appendix 10

### CAA Takeoff Performance Factors.

TO SUMMARISE:

<b>FACTORS MUST BE MULTIPLIED i.e. 1.2 x 1.3</b>				
CONDITION	TAKE-OFF		LANDING	
	INCREASE IN DISTANCE TO HEIGHT 50 FEET	FACTOR	INCREASE IN LANDING DISTANCE FROM 50 FEET	FACTOR
A 10% increase in aeroplane weight, e.g. another passenger	20%	1.2	10%	1.1
An increase of 1,000 ft in aerodrome elevation	10%	1.1	5%	1.05
An increase of 10°C in ambient temperature	10%	1.1	5%	1.05
Dry grass* – Up to 20 cm (8 in) (on firm soil)	20%	1.2	20% +	1.2
Wet grass* – Up to 20 cm (8 in) (on firm soil)	30%	1.3	30% + When the grass is very short, the surface may be slippery and distances may increase by up to 60%.	1.3
A 2% slope*	uphill 10%	1.1	downhill 10%	1.1
A tailwind component of 10% of lift-off speed	20%	1.2	20%	1.2
Soft ground or snow*	25% or more	1.25	25% + or more	1.25
<b>NOW USE ADDITIONAL SAFETY FACTORS (if data is unfactored)</b>		<b>1.33</b>		<b>1.43</b>

- Notes:
- \* Effect on Ground Run/Roll will be greater.
  - + For a few types of aeroplane e.g. those without brakes, grass surfaces may decrease the landing roll. However, to be on the safe side, assume the INCREASE shown until you are thoroughly conversant with the aeroplane type.
  - Any deviation from normal operating techniques is likely to result in an increased distance.

**So, if the distance required exceeds the distance available, changes will HAVE to be made.**



## **Appendix 11**

### **Conditions of Hire of SAC Aircraft**

#### Student and lapsed/unqualified pilots

Must be a full and paid up member of Shropshire Aero Club

Must be accompanied by a qualified and current Shropshire Aero Club instructor

Or

Must have been authorised for a solo flight by a qualified and current Shropshire Aero Club instructor. A current medical must be held in this case.

#### Solo hire

Must be a full and paid up member of Shropshire Aero Club

Hold a current licence suitable for the type of aircraft to be flown

Hold a current rating suitable for the type of aircraft to be flown

Have a current medical appropriate for the licence held

Must be within club required currency on type. If not flying on a particular type within 28 days of last doing so, then the pilot is recommended to refer themselves to the duty instructor before flight.

If not flying on a particular type within 42 days of last doing so, then the pilot is required to refer themselves to the duty instructor before flight.



## Appendix 12

### List of SAC Aircraft and POH/FM Amendments

#### SAC aircraft available for Hire

Annex	Type	Models	Reg	POH/FM Ref.
A	C152		G BILR	152 84822 20 Jun 2008
B	C152		G BNKS	152 83186 20 Jun 2008
C	C152		G BOIR	152 83272 20 Aug 2008
D	C152		G-LAMS	1431
E	PA28-181	Archer III	G MPAA	2843539 12 Jul 1995
F	PA28-181	Archer III	G LORR	2843037 12 Jul 1995
G	P2002	JF	G CGWO	s/n 168 20 Dec 2012
H	C172S	S	G SHSP	172S8079 30 May 2000
I	Slingsby Firefly	T67M Mk2	G BUUK	2121



## **Appendix 13**

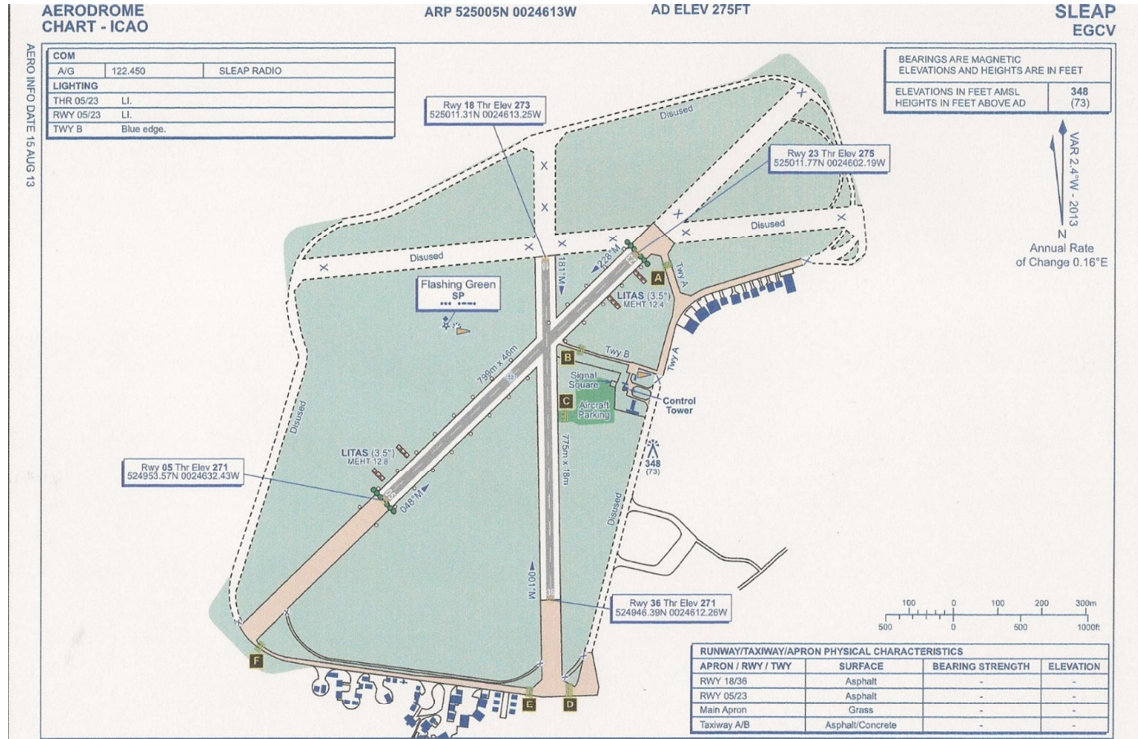
### **List of Engineering Contractors used by SAC**

- APP13.1 SAC Dry lease 4 Cessna 152 training aircraft from APB Leasing Ltd. These are maintained by them at Sleaford by licensed engineer Mr Adam Burgess AMEC4171286H
- APP13.2 All other SAC aircraft are maintained at Sleaford by Shropshire Light Aviation. VK.MG.0434



# Appendix 14

## Aircraft Parking Areas

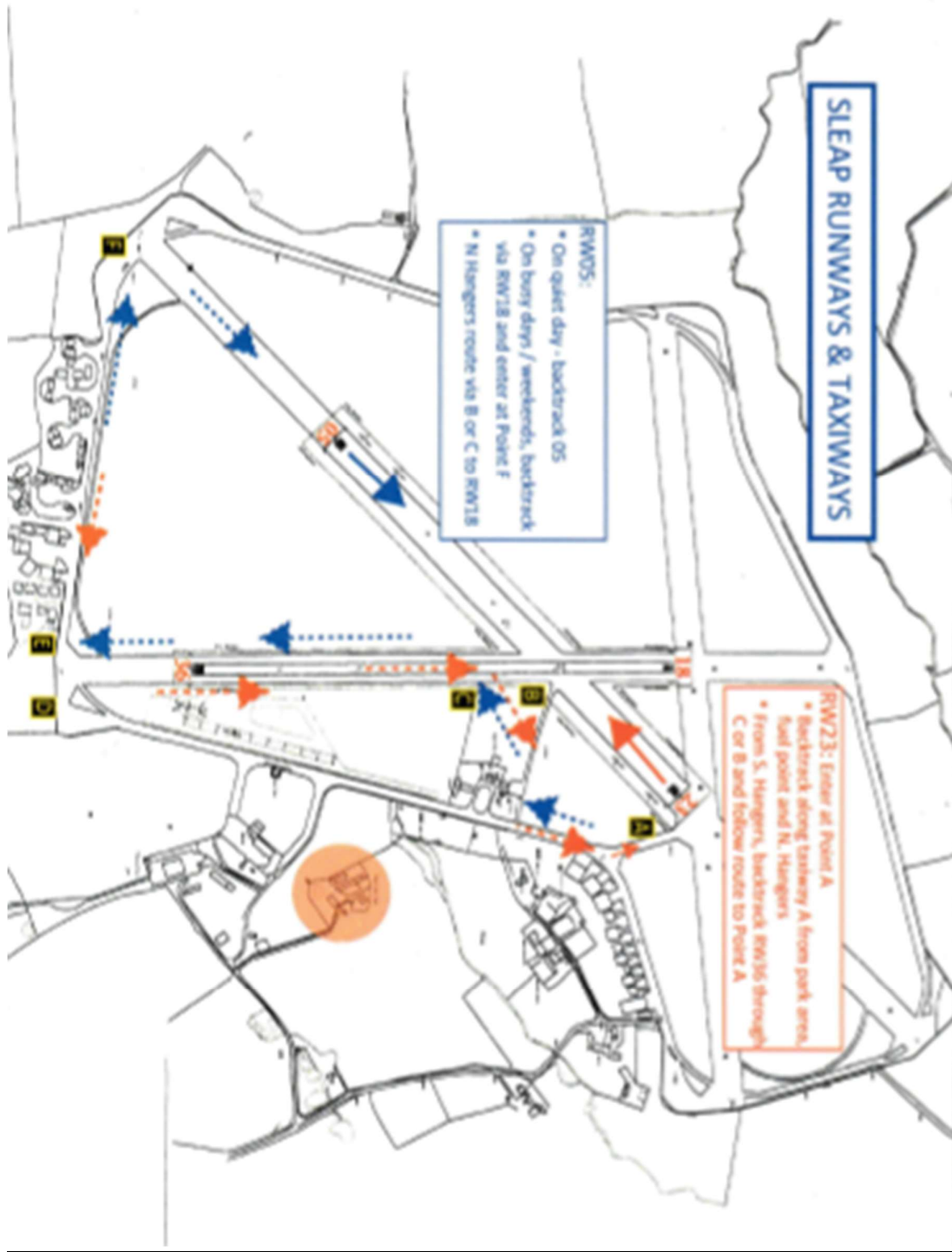


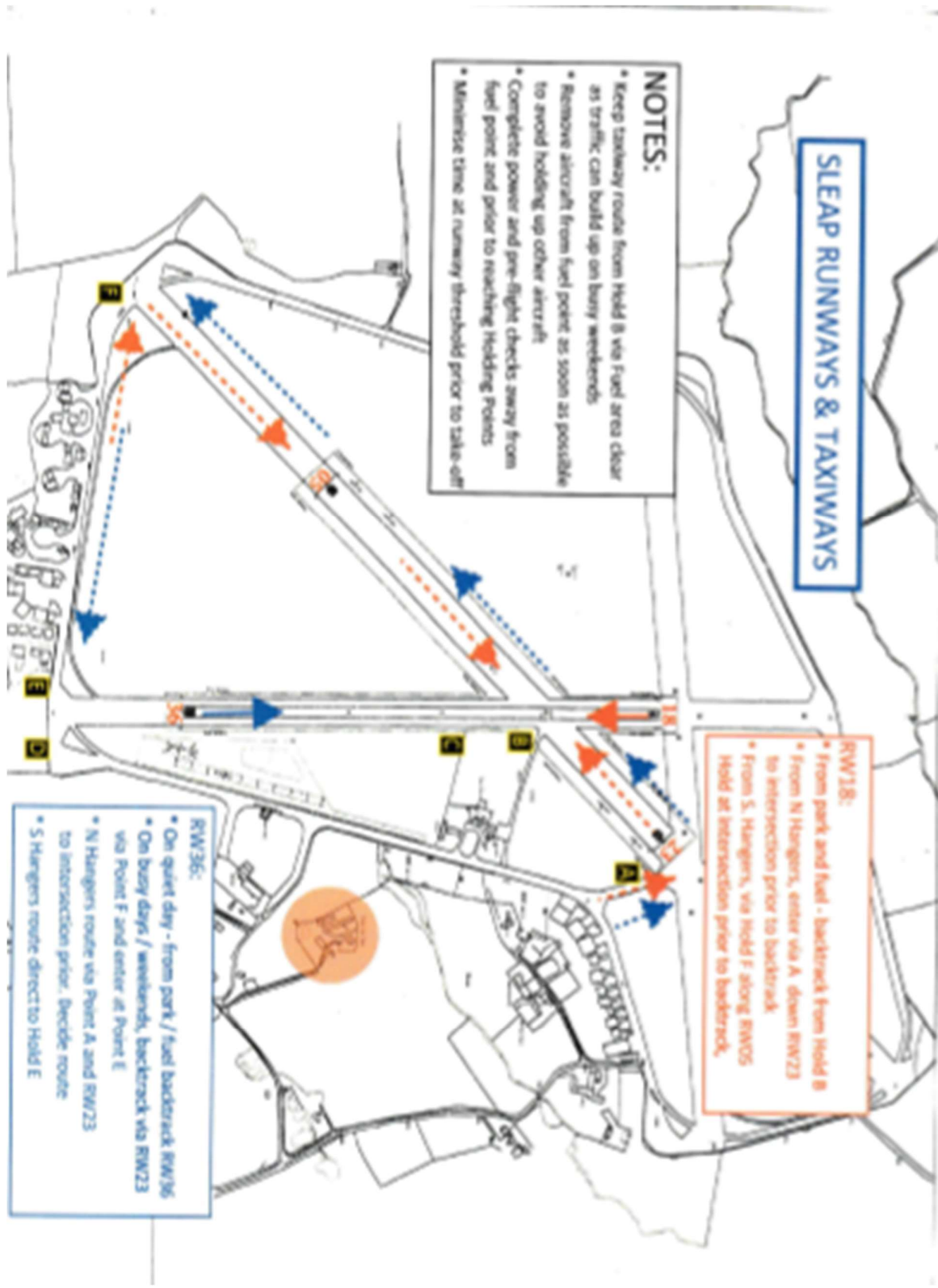




## Appendix 15

### Aircraft Taxi Routings







## Appendix 16

### Sleap Circuit Procedures

Military Helicopters operate to the west of the active runway Monday to Friday 9am to 5 pm local up to 500ft AGL within the Sleap ATZ. Military aircraft may not be monitoring Sleap frequency.

When Shawbury MATZ is active, all arriving and departing aircraft **must** contact Shawbury ATC before entering the Shawbury MATZ. RAF Shawbury operates entry and exit lanes, which operate not above 1000ftAGL 3nm SE,S, SW of Sleap.

Radio controlled model aircraft operate north and west of the windsock, which is situated 100m west of runway 23/05 and 100m south of the disused runway 28/10. Do not confuse with the wind sock near the refuelling area. The position of the Radio Controlled model flying area is annotated on the airfield chart. High performance models, including jet models operate up to 400ft AGL during daylight hours 7 days a week, at up to 1nm range from the wind sock in this sector.

Aerobatics may take place to the west of the airfield overhead at weekends. Aerobatics may occur for short periods of 10 mins max, between 12:00L to 14:00 L. While aerobatics are taking place no departures are allowed.

**Noise sensitive points** are published and are available in the airfield guides. They include Burlton, Loppington, Wem, Clive, Myddle, Nonely, and Ruewood farm.

All types are to follow the circuit ground tracks as published. Under no circumstances are circuits, at any height, to be flown over or inside the Chicken Farm, to the east of the field. Circuits must not be extended or fly to the east of Clive due to the proximity of RAF Shawbury.

#### Fixed Wing Procedures

The Fixed wing aircraft circuit will be to the **East of Sleap at all times**, unless promulgated by NOTAM for special reasons. Normal Circuit height will be 1000ft QFE. Low level circuits may be flown not below 500ft QFE.

The circuit direction will be :-

05 Right

23 Left

18 Left

36 Right

#### **Fixed wing aircraft inbound at all times**

Fixed wing aircraft will arrive using a standard 2000ft QFE overhead join into the fixed wing circuit.

#### **Fixed wing aircraft outbound at all times.**

Fixed wing aircraft will climb in the circuit direction to above circuit height and depart from overhead the airfield. No early turns to the west are permitted at any time due to the presence of the RC models, Shawbury helicopters operating in the Sleap ATZ and arriving/departing helicopters using the Burlton Gate.

During periods of aerobatics in the overhead, aircraft may join directly into the circuit from the North, East, and South.

#### Helicopter Procedures



**Burlton Gate. A point between the North edge of Burlton village and Burlton Grange Farm.  
52°50'0.49"N 2°48'17.86"W  
Radial from Sleaf airfield reference point 265M range 1.2nm  
SWB VOR 292/5.5nm**

**Helicopters Inbound from the South, West and North.**

**Procedure during the period Monday to Friday 0900 - 1700 local**

Helicopters are to route via "Callsign, Burlton Gate, inbound" at 800ft QFE. NB Routing is over military helicopters which operate to the west of the active runway not above 500ft. After calling "call sign, Burlton Gate, inbound", track 085M for the intersection of the useable runways (23/05/18/36). Maintain south of the disused runway (RW28/10) and windsock at all times. Do not descend until after crossing the intersection. After crossing the intersection, turn in the circuit direction and make an approach to the intersection via the runway in use. From the intersection taxi to the apron.

**Procedure at all other times**

Helicopters are to route via "Burlton Gate West" at 800ft QFE. After calling "Callsign Burlton Gate Inbound" they should track 085M for the intersection of the useable runways (23/05/18/36). Approaching the airfield boundary start a descent and make a direct approach to the west of the intersection of the useable runways (23/05/18/36). Maintain south of the disused runway (RW28/10) and the wind sock at all times. Remain to the west of the intersection until runway traffic permits, then taxi to the grass apron.

Inbound Helicopters from the West may elect to join using a standard 2000ft QFE overhead join to the fixed wing circuit at any time.

Aerobatics will be suspended for inbound helicopters once they have called "Burlton gate inbound" until they are to the East of the active runway.

**Helicopters Inbound from the East at all times**

Helicopters must remain clear of Shawbury ATZ at all times. Join the circuit using a standard overhead join from 2000ft. Make an approach to the intersection of the usable runways (23/05/18/36), using the active runway. From the intersection taxi to the apron.

**Or**

Keep clear of the Sleaf ATZ and route inbound via Burlton Gate

**Helicopters Outbound to the South, West or North.**

**Procedure during the period Monday to Friday 0900-1700 local time**

When traffic permits, taxi to the intersection of the usable runways (23/05/18/36). Depart using the runway in use and climb on runway heading to 800ft AGL. Route directly towards the "Burlton Gate " NB routing is over military helicopters operating not above 500ft QFE. Call "Callsign, Burlton Gate, Outbound" and track en-route clear of the Sleaf ATZ and RAF Shawbury MATZ

**Procedure at all other times**

When traffic permits, taxi to the intersection of the usable runways (23/05/18/36). Route directly towards the Burlton gate whilst calling "Callsign, Burlton Gate, Outbound" tracking



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265M, climbing not above 800ft. Remain South of the disused runway and wind sock at all times.

### **Helicopters Outbound to the East at all times**

When traffic permits, taxi to the intersection of the usable runways (23/05/18/36). Depart using the runway in use. Climb in the circuit direction to above Shawbury ATZ and depart to the east. When RAF Shawbury active contact Zone before entering MATZ.

### **Glider Procedures**

#### **Gliders inbound to Sleaf during the period Monday to Friday 0900-1700 local time.**

Gliders will announce their position and intentions approximately 1500' / 5 mins prior to joining the circuit.

Gliders will route via the overhead to join the fixed wing circuit, east of the field, for the runway in use. However, gliders may have to join via other points due to weather and flight performance limitations. In these instances, glider pilots will announce their intentions on Sleaf Radio as early as practicable.

#### **Glider Inbound Procedure at all other times.**

A Gliders circuits will be flown to the west of the field not above 800', to the runway in use. Gliders will announce their position and intentions approximately 1500' / 5 mins prior to joining the circuit.

There may be instances when gliders have to use the power circuit due to weather and flight performance limitations. In these instances, glider pilots will announce their intentions as early as practicable.

Gliders must be aware of the Model flying area.

Aerobatics will be suspended when gliders Inbound enter the Sleaf ATZ.

#### **Glider Procedures outbound.**

Glider and tug combinations, and SLMG's will follow the fixed wing departure procedure.

### **Glider Tug Procedures**

The Chipmunk glider tug generally releases gliders outside of the ATZ. The release will normally be on the dead side of the runway in use

#### **Gliders Tug inbound to Sleaf during the period Monday to Friday 0900-1700 local time.**

The Glider Tug will use normal fixed wing procedures.

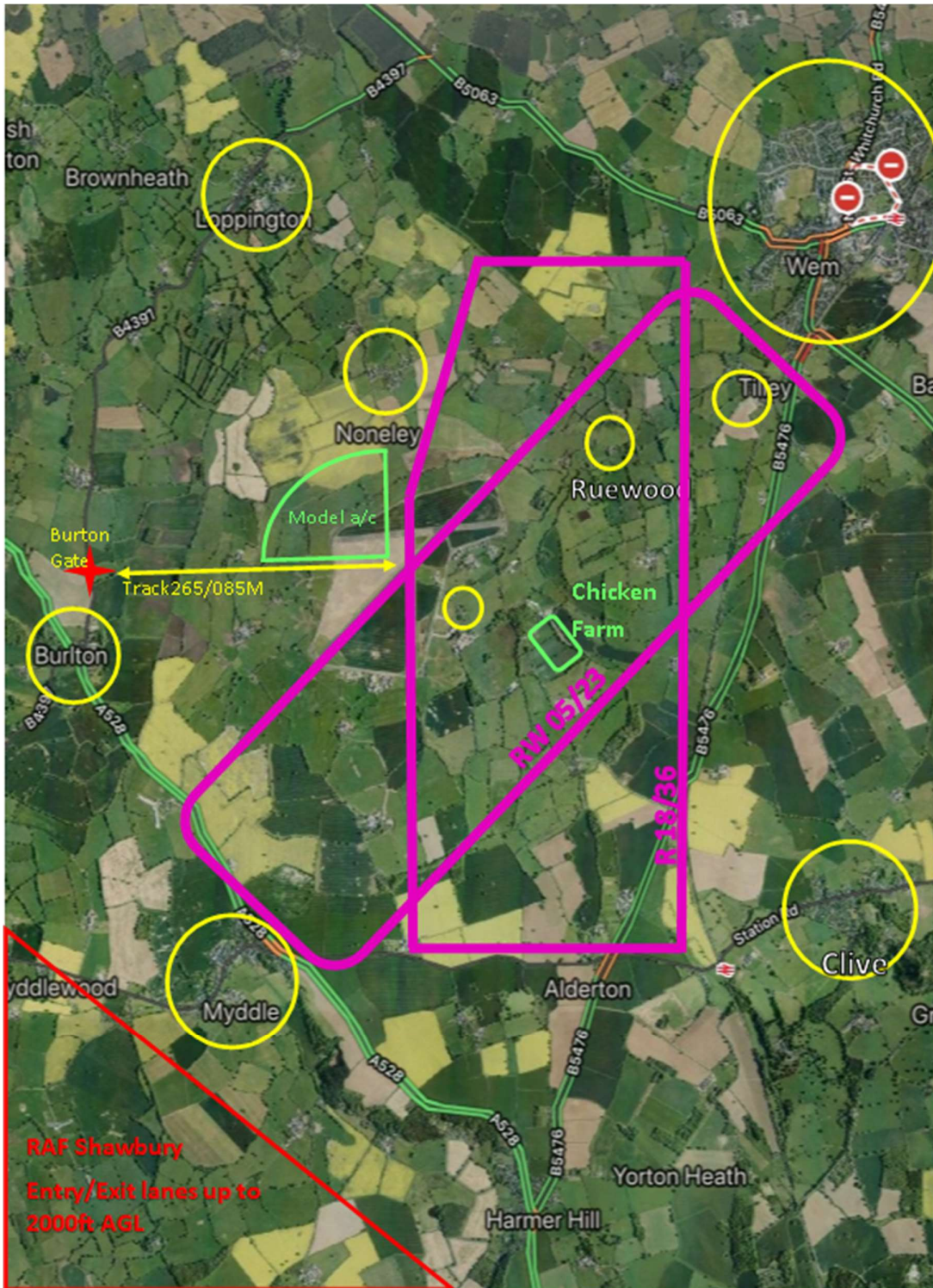
#### **Glider Tug Procedure at all other times.**

The glider tug will generally join downwind using the glider circuit not above 800ft. Tug pilots will give way to traffic using the fixed wing circuit on the established runway in use circuit direction.



## Appendix 17

### Sleep Noise Sensitive Areas





## Appendix 18

### Aerobatic, Display and Non-standard procedures

Aerobatics may take the form of training, practice, display or competition. The Club also offers AOPA (Aircraft Owners and Pilots Association) Aerobatic Certificate Courses and aerobatic experience flights.

In order to facilitate and encourage aerobatics at Sleaford in a safe environment a revised procedure has been formulated and agreed with relevant interest parties which integrates these activities in a way that gives neither priority to nor prejudices those who wish to participate.

Sleaford Aerodrome is located within Shawbury MATZ and the regional AIAA. The MATZ extends from the surface to 3272 feet (AMSL) and the AIAA extends from the surface to flight level 70. Shawbury operating hours are from 08.45 to 17.15 weekdays, although military helicopter training may take place outside of these operating hours both during weekdays and at weekends. Military helicopters operate within Sleaford ATZ to the west of runway 05/23 up to a height of 1000 feet above the aerodrome (1271 AMSL). Military aircraft arriving at, operating at, or departing from Sleaford may not be monitoring the Sleaford air/ground frequency, therefore whenever there is military aircraft activity at Sleaford there will be no aerobatic or display practice permitted.

The following is intended to define how and where aerobatics, etc will take place in the Sleaford ATZ. It is essential that good airmanship will be exercised and any deviation from these procedures may be reported and action taken against miscreants.

#### **SECTION A – AEROBATIC TRAINING**

1. There will be no aerobatic training in the Sleaford ATZ, i.e. 2.5 nautical miles radius from the notified mid-point of runway 05/23 to a height of 2000 feet above the aerodrome (2275 feet AMSL).
2. Aerobatic training may take place at any time above the Sleaford ATZ but not below 3000 feet above the aerodrome (3275 feet AMSL). This will allow aircraft arriving or departing from Sleaford to conduct standard overhead joins or departures where there will be not less than 1000 feet separation.
3. Anyone wishing to conduct aerobatic training above the Sleaford ATZ during normal operating hours will be required to notify the aerodrome manager (or assigned deputy) and duty instructor. A 'Aerobatic Approval Form' will be completed and provided to the air/ground radio operator. The air/ground radio operator will where necessary advise joining or departing traffic of the activity. The pilot(s) will advise the air/ground radio operator when the activity is completed and their intention to join the circuit.



4. The possibility of there being aerobatic training above the Sleep ATZ at any time not below 3000 feet Sleep QFE (3275 feet Sleep QNH) up to a unspecified height will be included in the UK Aeronautical Information Publication (AIP).

### **SECTION B – AEROBATIC PRACTICE**

1. This is distinct from aerobatic training in that it is likely that it will involve a single pilot in a single aircraft. Also, the activity will be carried out in preparation for a competition event such as those promoted by the British Aerobatic Association Limited.

2. In order to suitably prepare for a competition event the pilot will undertake the practice inside the competition 'Box' delineated on the attached plan. At Sleep the 'Box' is aligned with Runway 05/23, on the West side, and consists of a volume of air normally 1000 metres long, 1000 metres wide and 1000 metres deep. The lower and upper limits vary depending on the class of competition being flown.

	Lower Limit	Upper Limit
i.e Club (formerly Beginners)	500m	1,100m
Sports (formerly Standard) and Intermediate	300m	1,100m
Advanced	200m	1,100m
Unlimited	100m	1,100m

When runway 18 or 36 is active due to prevailing wind conditions it is considered that there will be no conflict with aerobatic practice aircraft in the 'Box' due to the profile of arriving or departing traffic. However, good airmanship will be expected.

3. Aerobatic practice may take place at any time within the Sleep ATZ 'Box' with prior notification to the aerodrome manager (or assigned deputy) and duty instructor, who's approval will not be unreasonably withheld if during normal operating hours. A 'Aerobatic Approval Form' will be completed and provided to the air/ground radio operator. The air/ground radio operator will advise joining or departing traffic of the activity. The air/ground radio operator will ask arriving traffic how they wish to join the circuit and shall expect the response to be 'down wind' for the active runway. All circuits will be conducted on the East side of the airfield, i.e. right hand 05 and 36, left hand 18 and 23. The 'Aerobatic Approval Form(s)' will be retained in the office as a permanent record of the aerobatic activity.

4. Whenever aerobatic practice takes place there will be a appropriate competent 'spotter' (a pilot with aerobatic experience or someone in the aerobatic competition community) located preferably on the roof of the tower, but in any event where there is a clear and unobstructed 360degree view of the 'Box' and surrounding area, who will have two way communication with the aerobatic pilot on the Sleep frequency, so that in the event he/she sees a potential conflict with other traffic he/she will transmit to the pilot "Break, break, break". The aerobatic practice will immediately cease and not recommence until the conflict is deemed passed. A list of authorised 'spotters' will be retained in the office.

5. Aerobatic practice should only commence with an awareness of inbound traffic and it is the aerobatic pilot's responsibility to not cause conflict or risk to other traffic.

### **SECTION C – DISPLAY PRACTICE**





## Shropshire Aero Club Flight Operations Manual.

1. This is distinct from aerobatic training and aerobatic practice for competition, and relates to display practice or rehearsal where Sleaford aerodrome has a specific permission issued by the Civil Aviation Authority to allow designated aircraft and pilots to fly below 500 feet (150 metres) above the ground, or below 500 feet above the highest obstacle within a radius of 500 feet of the aircraft for this purpose.
2. The current permission requires the Pilot in Command of each aircraft to have been briefed by a Display Authorisation Evaluator and authorised for each flight by Nathan Cross (airfield manager) or his nominated deputy. It specifically requires Nathan Cross to maintain records of each flight made pursuant to this Permission and to make such records available to the Authority on request, therefore a 'Aerobatic Approval Form' will be completed and provided to the air/ground radio operator.
3. The aerobatic display area is designated as that area to the West of Runway 05/23 and bounded by the perimeter track. This area includes the part of the airfield regularly used by the aeromodeller section of the Club who may fly their radio controlled aircraft up to 400 feet agl. Two-way radio communication with the aeromodellers applies at all times during airfield normal operating hours and they will be advised by the air/ground radio operator of impending display practice so that they may cease flying during the event. During weekdays communication will normally be from the office. At weekends communication will normally be with the air/ground operator in the tower.
4. Each display pilot is likely to possess a Display Authorisation, or be training towards one, and must not fly lower than that individually permitted. If no Display Authorisation is held he/she must not fly below 200 feet.
5. Any breach in relation to any aircraft of any condition of this Permission will render the Permission invalid for that aircraft.
6. There will be no requirements to have a 'spotter' monitoring other traffic in the Sleaford ATZ, however, the air/ground radio operator will advise arriving and departing traffic of the activity and the expected duration. In case of an emergency being declared by an arriving or departing pilot the display pilot(s) will terminate the practice and depart to an area and altitude suitable to hold until the emergency is over.
7. Display practice should only commence when there is no inbound traffic and it is the pilot's responsibility to not cause conflict or risk to other traffic.

### **SECTION D – AEROBATIC COMPETITIONS**

1. These are organised by the British Aerobatic Association Limited and are well publicised in advance and NOTAMed.
2. The tower is always manned by an air/ground radio operator throughout these events and he/she will remind arriving and departing pilots that a competition is taking place in the aerobatic 'Box'. There will be no overhead joins or departures during the event and arriving pilots will be asked how they wish to join the circuit, which will normally be 'downwind' for the active runway. All circuits will be conducted on the East side of the airfield. i.e. right hand 05 and 36, left hand 18 and 23.
3. Aerobatic competitors will use the Sleaford air/ground radio frequency for take-off and



landing information, however, at other times they will be on the competition discrete frequency. The competition judges will be responsible for spotting any potential conflict with other traffic and will call "Break, break, break" if necessary, at which time the pilot will cease his/her display and depart the area.

4. There will be no aerobatic training, practice, display or experience flights permitted during these competition events.

#### **SECTION E – AEROBATIC EXPERIENCE FLIGHTS**

1. These will usually be undertaken at weekends or public holidays when there will be an air/ground operator in the tower.
2. The aerobatic pilot will be required to notify the Aerodrome Manager (or assigned deputy) and duty instructor whose approval will not be unreasonably withheld. A 'Aerobatic Approval Form' will be completed and submitted to the air/ground radio operator.
3. Aerobatic experience flights will only take place within the aerobatic 'box' described at B(2) and will not be below 1,000 feet agl. There will be no conflict with the aeromodellers.
4. During these flights there will be no overhead joins or departures and arriving pilots will be asked how they wish to join the circuit and shall expect the response to be 'downwind' for the active runway. All circuits will be conducted on the East side of the airfield. i.e. right hand 05 and 36, left hand 18 and 23.
5. There will be an authorised and appropriately qualified 'spotter' located preferably on the roof of the main building, but in any event where there is a clear and unobstructed 360 degree view of the 'box' and surrounding area, who will have two way communication on the Sleaf frequency with the pilot, so that in the event he/she sees a potential conflict with other traffic he/she will transmit to the pilot "Break, break, break". The pilot will immediately cease the activity and not recommence until the conflict is deemed to have passed.

#### **SUMMARY**

Aerobatics in any form will be conducted with due consideration to all other airfield users and with the least amount of inconvenience to other pilots.

There should also be consideration given to the level of and duration of noise imposed upon our neighbours, therefore every effort should be made to minimise these whenever possible without compromising safety.

Aerobatic practice outside the Sleaf ATZ and away from the airfield should be rotated by area to avoid repetitive activity over the same ground location.

Good airmanship will allow aerobatics to be enjoyed in the Sleaf ATZ by both pilots and visitors.



## Appendix 19

### Rules for operating Introductory flights.

#### Pilots

Any SAC Pilot members with over 100hrs P1 since the issue of their licence who wish to operate introductory flights on behalf of SAC may apply in writing to the AM/HOT, giving break down of experience on aircraft types, licences and ratings. Those who wish to be considered will undertake an interview and a flight assessment at their own expense. If successful the pilot will be authorised to conduct introductory flights.

SAC will select a pool of suitable members to operate Introductory Flights. Where replacement or additional pilots are required applications on record will be considered in receipt order. Should no applications be on record the position will be advertised within the club.

PIC operating Introductory flights must be within 28 day currency on the aircraft type being used.

PIC must be suitably licenced and rated and in date for the flight.

PIC will be given no remuneration with regard to the operation of introductory flights.

#### Passengers

Passengers will be informed that introductory flights do not conform to the same safety standards that apply to Commercial Air Transport/ Public Transport operations.

Passengers will fill out and sign the Introductory Flight/ SAC temporary membership form before the flight. This form states the conditions of carriage.

Passengers will be informed before the flight that the flight will not count as training toward the grant of a pilot's licence.

Pilot should be mindful that they are representing SAC, and as such should be smartly dressed and their conduct should portray SAC in the best possible light to potential new members.

#### Operation

Only SAC Club aircraft will be used for Introductory flights.

Introductory flights will only be operated in VMC and when the weather is as required in Para 2.3.3.5 or better.

Pilots must resist any pressure from the passenger to operate when the weather is below limits. In these circumstances the only option is to reschedule.

PIC will complete and sign a load sheet for each Introductory flight before departure.

PIC will occupy the lefthand seat, and may not hand over control to the passenger at



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anytime unless the PIC is an SAC instructor.

The flight must be operated in and out of Sleaford, intentional landings away from Sleaford are not permitted.

The flight will be an air tour of the local area and when possible will allow the passenger to view their local town/ own house etc.

Care must be taken not to cause any noise nuisance, and under no circumstance may the low flying rules be broken.

**Discipline**

Any PIC who is found to have wilfully broken the rules pertaining to Introductory flights will be removed from the list of pilots able to perform these flights.