



## OPERATIONAL NOTICES

Revised April 2015

Reasons for issue

1. To ensure that the aircraft is operated in such a manner as to reduce its exposure to unnecessary risk and, where possible, to extend its life, and the life of its equipment.
2. To standardise the way the aircraft is operated where necessary.
3. To circulate important information to members.

Compliance with the Operational Notices is a requirement of flying membership, as stated in the Company Bye Laws, Section 4, Members' responsibilities.

Operational Notices will be issued, amended or withdrawn as and when required by the Committee.

Members who have any comments on the Operational Notices, or believe there are subjects that ought to be included, should make these known to the Committee.

In the event of conflict with the aircraft Flight Manual, the Flight Manual is the overriding document.



Zitair Flying Club Limited  
www.zitair.aviators.net



## OPERATIONAL NOTICES

Revised April 2015

### CHECK LIST OF CURRENT NOTICES

Subject	Number	
Aircraft refuelling	1	
Technical log	2	
Runway 17 at Wycombe Air Park	3	Cancelled
Aircraft Parking	4	
Aircraft defects	5	
Aircraft cleaning	6	
Pre-flight inspection	7	
Reducing engine and starter wear	8	
Seat Belts	9	
Tyre wear	10	
Checking of oil quantity	11	
Mixture leaning	12	
Mag drops	13	
Emergency locator transmitter	44	Cancelled
Engine cooling	15	



## **OPERATIONAL NOTICE N° 1**

Revised April 2015

### **Aircraft Refuelling**

Whenever possible, the aircraft should be left with 20 US gallons per side, by reference to the wing gauges.

NOTE: This is not up to the TABS, as the tabs indicate 25 US gallons.

If you are going to return to Wycombe Air Park after the fuel pumps have closed, prior to departure for Wycombe - if Payload and Take-Off conditions permit - uplift sufficient fuel so as to arrive back at Wycombe with 20 US gallons per side.

If you are unable to leave the aircraft with 20 US gallons per side, then notify the Bookings Officer and the next person due to fly the aircraft of the fuel state.

The fuel pumps normally close 30 minutes before the airfield tower closes.

### **Fuel Tank Filler Caps**

These should only be removed and replaced by the pilot or by someone briefed by him. This is to avoid having the caps removed with the aid of a screwdriver or nail, which is often the case. It is also to ensure that the caps are correctly refitted, and not forced closed.

The fuel caps must not be placed on the painted surfaces of the aircraft unless, the latches have been closed to enable the caps to be placed face down on the wing. This is to ensure that the paint is not scratched by the bolt and split pin on the underside of the cap.



## OPERATIONAL NOTICE N° 2

Revised April 2015

### Technical Log

The technical log section of the journey book is a legal requirement, therefore it should be filled in accurately and legibly.

The pilot in command should sign the log after every sector, and record any defects. If there are no defects, then NIL should be entered in the defects column. If there is an outstanding defect already recorded then NIL FURTHER should be entered. If there is a new defect then this should be entered with as much detail as possible. If you cannot fit it into the space provided then use the line below. **DO NOT** write in the next column (Rectification). If you use more than one line, draw a line through the additional lines used on the left hand page. See the example on the following page.

The column on the right of the right hand page can be used for recording information like 'paid cash for fuel', or 'aircraft cleaned' etc.

All defects should be reported to the Committee. If the defect makes the aircraft unserviceable and you cannot contact the Committee, then David Sarney Chief Engineer at Booker Engineering should be informed. See Operational Notice Number 5.

The Journey Book and the Aircraft Deferred Defects page in the Document Folder should be checked prior to flight, for any outstanding defects.

You must satisfy yourself that sufficient hours remain to complete your intended sortie and to return the aircraft to Booker.

LEFT HAND PAGE

TECHNICAL LOG

Date	OPERATING CREW		PLACE		TIMES*		Hours of Flight	Fuel Uplift	Oil Uplift
	Names	Duties	Departure	Arrival	Departure	Arrival			
2-9-87	A.N. OTHER	P1	W.A.P.	DENHAM	021.6	022.2	0.6		
2-9-87	A.N. OTHER	P1	DENHAM	W.A.P.	022.2	022.9	0.7	52 LTRS	
3-9-87	F. BLOGGS	P1	W.A.P.	W.A.P.	022.9	024.0	1.1	35 LTRS	1 LTR
5-9-87	F. BLOGGS	P1	W.A.P.	W.A.P.	024.0	024.5	0.5		
8-9-87	A.N. OTHER	P1	W.A.P.	SOUTHEND	024.5	025.3	0.8		
8-9-87	A.N. OTHER	P1	SOUTHEND	W.A.P.	025.3	026.2	0.9	55 LTRS	

\* Specify: G.M.T., Local Time, etc.

Hours of flight carried forward:

RIGHT HAND PAGE

Captains Signature	Next Check	Defects	Rectification	Engineers Signature	Remarks/Visa
A.N.Oxxxx	22.6	NIL			
A.N.Oxxxx	23.1	Landing light U/S			
F.Bxxxx	24.0	NIL Further	New landing light fitted	B.xxxxxxxx	
-----	24.3	Electric fuel pump is U/S	New electric motor fitted	B.xxxxxxxx	
F.Bxxxx	-----	switch keeps tripping off			
A.N.Oxxxx	24.9	NIL			
A.N.Oxxxx	25.6	NIL			A/C cleaned

10 February 2001

03-02-02



## **OPERATIONAL NOTICE N° 4**

Revised April 2015

### **Aircraft Parking at Wycombe Air Park**

#### **NORMAL HOURS**

If you return to Wycombe Air Park during normal hours the aircraft will normally be hangared, providing the hangars are still open. The aircraft should be left outside the hangars with the brakes off, the pitot cover fitted, the tow bar in the nose leg and the door and hatch locked. Check that the cabin lights are off.

#### **OUTSIDE NORMAL HOURS**

If you return outside normal hours, or if for some reason the aircraft cannot be hangared, it will obviously have to be left outside. In this case, if possible, it should be parked between the hangars, facing the apron. The parking brake should be applied, the controls secured with the seat belt, the tow bar should be locked in the baggage compartment and the door locked. Under no circumstances should the aircraft be left outside with the brakes off. If it is not possible to leave the aircraft between the hangars without causing an obstruction, then it should be parked on the apron or on the grass north of the fuel pumps. It must not be parked on the grass area between the hangars. Once again, it must be secured by applying the parking brake, securing the controls with the seat belt and locking the door and hatch with the seat belt inside.

If you leave the aircraft out overnight, it will not automatically be put away on the following day. The aircraft will stay outside until it is used again and returned during normal hours and left between the hangars, or until the ground crew are instructed to put it away by the member concerned. The ground crew will not move the aircraft if it is not parked between the hangars.

Therefore, if you are unable to have the aircraft hangared you should check to see if it is booked the following day. If it is, then you should liaise with the member to ensure that, if for any reason he is unable to fly the aircraft, either he or you instructs the ground crew to put the aircraft away.

Continued on following page.....

If you leave the aircraft parked anywhere other than between the hangars, it is your responsibility to reposition it back between the hangars. If you are unable to do so, then you should let the Bookings Officer know so that someone can reposition it on your behalf.

If you leave the aircraft outside at the request of another member, it will be the requesting member's responsibility to ensure that the aircraft is put away if he does not use it. But you must let him know where the aircraft is parked, in case he has to reposition it in the event that he does not use it.

If you require the aircraft early in the morning and you wish to have the aircraft left out overnight, when it is not being used the day before, the duty crew will pull the aircraft out late afternoon if they have sufficient notice. If you request them to do this then you must go up to the airfield that afternoon or evening to secure the aircraft for outside parking.

Requests for the duty crew to have the aircraft pulled out of the hangar or put away can be made by telephone on 01494 529262 and ask for the duty crew. Or direct to their mobile on 07936 006451 by voice or text. A minimum of one hour's notice is required.

The notice required by the ground crew to pull the aircraft out of the hangar, must be received by 1600 hours local time when the airfield closes at 1730 hours, and by 1630 hours local time when the airfield closes at 2000 hours.

#### SUMMARY

When leaving the aircraft outside ensure: **BRAKES ON**  
**CONTROLS TIED**  
**Pitot cover in place**  
**TOWBAR IN THE HOLD**  
**DOOR AND HATCH LOCKED**

Ensure that the aircraft is used the following day, or that the ground crew are instructed to put the aircraft away. If necessary return to the airfield to reposition the aircraft, or ask another member to do it on your behalf.

**NEVER LEAVE THE AIRCRAFT PARKED OUTSIDE OVERNIGHT WITH THE BRAKES OFF.**

If you have used the mooring eyes to tie the aircraft down, then ensure that they are removed from the wing and returned to the hold prior to flight.



## OPERATIONAL NOTICE N° 5

Revised April 2015

### Aircraft Defects

All defects must be recorded in the technical log, in the manner described in Operational Notice Number 2.

The Chairman and the Bookings Officer must be informed of all defects. If you are unable to contact the Chairman and the defect makes the aircraft unserviceable, you should contact Dave Sarney, the Chief Engineer at Booker Engineering, and ask him if he can fix it. If he is not available, then one of his engineers should be able to help.

By defects we mean things like faults, leaks and equipment being unserviceable.

But we ALSO mean items such as aircraft damage, including flat spots on the tyres, heavy landings and also exceeding of any aircraft limitations, eg. exceeding the flap or gear operating speeds or engine temperature. All of these **MUST BE REPORTED**.

These limitations are there for a reason, and if they are exceeded the aircraft may require an inspection prior to the next flight.

We cannot over emphasise the importance of reporting all defects and exceeding of limits. You may not consider it to be important but it could have disastrous effects on the aircraft at a later date.





## **OPERATIONAL NOTICE N° 6**

Revised April 2015

### **Aircraft Cleaning**

The aircraft **MUST** have the oil wiped off the nose gear doors prior to any flight. On completion of a flight (sector), the oil **MUST** be cleaned from the underside of the fuselage on the left hand side of the nose gear, and to the rear of the rear of the nose gear.

In the event of a member using a grass field, especially a wet grass field, then that member is responsible for cleaning any grass and mud off the aircraft. Also, in the event that a member has encountered a large quantity of flies during a flight, the member is responsible for removing the bulk of the flies and stains as best he can in preparation for use by subsequent members.

#### **LEAVE THE AIRCRAFT AS YOU WISH TO FIND IT**

With this routine, time consuming and costly cleaning by members or third parties can be reduced substantially.

General cleaning of the aircraft is required on a regular basis, using car cleaning fluid and **NOT** household cleansing fluids or scourers. Polishing of the aircraft will also be required on a regular basis using proprietary car wax.

All members are invited to participate in the general cleaning of the aircraft which is best done in groups of two or three. If the members are not able to maintain the cleanliness of the aircraft to the desired standard, we have to pay third parties to clean it on our behalf with the cost added to the monthly invoice.

If you are planning on a days flying but are unable to go due to bad weather, this could be a good opportunity to give the aircraft a wash.



## **OPERATIONAL NOTICE N° 7**

Revised April 2015

### **Pre Flight Inspection**

The Mooney is maintained in accordance with the CAA Light Aircraft Maintenance Schedule. One of the requirements of this schedule is that a check A is carried out prior to the first flight of the day.

On subsequent flights, a shortened check may be carried out but it must include the mandatory items such as fuel and oil contents.

If there is any doubt as to the integrity of the aircraft the full Check A must be completed.

The Check A is prepared in general terms to cover various types of aircraft with a maximum weight of less than 2730 Kg. It will therefore need to be interpreted by the pilot for the type being flown.

Below is listed the CAA requirements for the check A.

#### **1. GENERAL**

Remove frost, snow or ice, if present.

Check that the aircraft documents are available and in order.

Ensure all loose equipment is correctly stowed and the aircraft is free of extraneous items. If the aircraft has not been regularly used, ensure before resumption of flying that:

(a) Either (i) the engine has been turned weekly or run fortnightly,

or (ii) the manufacturer's recommendations have been complied with.

(b) compression appears normal when engine turned by hand.

(c) Previously reported defects have been rectified.

Continued on the following page.....

- 2 POWER-PLANT/  
ENGINE** Check - oil level; security of filler cap and dipstick.  
Inspect - engine, as visible, for leaks, signs of overheating, and security of all items.  
Inspect air filter / air intake for cleanliness.  
Check - security of cowlings, access doors and cowl flaps.
- 3 PROPELLER** Inspect - blades and spinner for damage and security.
- 4 WINDSCREEN** Inspect - for damage and cleanliness.
- 5 FUEL SYSTEM** Check visually that quantities are compatible with indicator readings.  
Drain fuel sample from each drain point into a transparent container and check for water, foreign matter and correct colour.
- 6 WINGS** Inspect skin / covering, bracing wires, struts and flying control surfaces for damage and security of all items.  
Inspect - pitot / static vents, fuel vents and drain holes for freedom from obstruction.  
Test operation of stall warning device.
- 7 LANDING GEAR** Check - shock-absorber struts For leaks and that extension appears normal.  
Check - tyres for inflation, damage and creep. Inspect brake installation for external evidence of leaks, and for damage and security.
- 8 FUSELAGE AND  
EMPENNAGE** Inspect skin / covering, bracing wires, struts and flying control surfaces for damage and security of all items.  
Inspect - drain holes and vents for freedom from obstruction.  
Inspect radio aerials for damage and security.
- 9 CABIN AREA** Check - flying and engine controls, including trimmers and flaps, for full and free movement in the correct sense.  
Check - brake operation is normal.  
Check - instrument readings are consistent with ambient conditions.  
Perform manual override and disengagement check on auto-pilot.  
Check - avionic equipment operation, using self test facility where provided.  
Inspect seats, belts and harnesses for satisfactory condition, locking and release.  
Check - emergency equipment properly stowed and inspection dates valid.  
Test operation of electrical circuits.  
Inspect - cabin and baggage doors for damage, security, and correct operation and locking.  
Check that markings and full complement of placards are correctly positioned and legible.
- 10 MOONEY SPECIFIC ITEMS** Check pitot and static water drains.



## **OPERATIONAL NOTICE N° 8**

Revised April 2015

### **Reducing Engine and Starter Wear**

In order to reduce the wear on the engine camshaft, and the load on the starter motor, on the first start of the day. It is recommended that the engine is pulled over by hand, to prime the oil ways.

First check that the brakes are on and that all switches are off. Treat the propeller as live.

The propeller should be pulled through at least 6 times, prior to the first start.

The setting of the throttle prior to engine start, is also very important to reduce engine wear.

The check list calls for the throttle to be set 1/8 of an inch open. Some members are prone to using a much larger setting, this results in high engine R.P.M. on start up, before the oil pressure has had time to establish.

The best way to set the throttle, is to close the throttle fully and place a finger on the throttle stem, with the tip 1/8 of an inch from the friction nut. Then open the throttle until the tip of the finger touches the friction nut.

Please Note - The Lycoming Operator's Manuals all state that:

'Cranking periods should be limited from ten (10) to twelve (12) seconds with 5 minutes rest between cranking periods.'



## **OPERATIONAL NOTICE N° 9**

Revised April 2015

### **Seat Belts**

When you release your seat belt, please ensure that you fasten it again behind you back prior to sliding the seat rearwards.

When entering the aircraft, sit in the seat prior to releasing the seat belt from across the seat and fasten it across your lap, prior to sliding the seat forward.

This is to ensure that the seat belt webbing does not get trapped in the seat runners, and thus damaging the webbing.

Please ensure that if you have a front seat passenger they also comply with this.  
The cost of a set of seat belts for each seat is around £400.



## OPERATIONAL NOTICE N° 10

Revised April 2015

### **Tyre Wear**

The Group has to change main wheel tyres prematurely, because the aircraft is from time to time being landed with the toe brakes lightly applied.

There is no way of knowing that you have landed with the brakes applied unless someone was watching the gear at touch down and saw smoke coming from the tyres.

It is therefore very important to ensure that your toes are clear of the toe brakes during landing. The best way to ensure this, is to have your toes on just the lower part of the rudder pedals during final approach checks, and then to slide your toes up on to the brakes only when you wish to apply them after landing.

A further possible cause of excessive tyre wear is heavy braking immediately after touchdown; this should be avoided except where necessary for safe operations.

The cost of changing a main wheel tyre at £300+ takes many hours of flying to recoup, and most of the ones we change are only about half worn.

**If you fly carefully you will only need to use the brakes for parking or while taxiing.**

To reiterate, add "Feet off brakes" to your Final Approach checks, and avoid braking after touch down. A timely go-around at a safe height if "hot and/or high" is good airmanship.

If your approach and landing was good, then rolling for a few seconds longer before making a 180-turn to backtrack on R24, is far preferable to creating a flat spot leading to us having to replace yet another nearly-new tyre). No airline-style braking please.



## OPERATIONAL NOTICE N° 11

Revised April 2015

### Oil Replenishment

To enable the oil consumption of the engine to be monitored accurately, we must all check the oil in the same way and record uplifts accurately.

Prior to flight:

Check oil level by removing dip stick, wipe clean, replacing in engine and screwing back in. Remove dip stick and check reading. If the oil level is below 6 qts replenish to between 6 and 6.5 qts.

Record the uplift in the journey book in the oil column against the previous sector.

**WARNING! THE AFM STATES THAT 6 QTS IS THE MINIMUM OIL LEVEL FOR FLIGHT.**

Remember that the dip stick is calibrated in US qts and 1 qt equals .95 Ltrs.



## OPERATIONAL NOTICE N° 12

Revised April 2015

### Engine leaning

After Take-off, when the aircraft is clean and climb power has been set to 75% or less (25 inches MP and 2500 RPM) lean mixture by one to two turns.

When clear of the circuit, lean mixture until the exhaust gas temperature (EGT) reaches its peak. Then enrich the mixture until the EGT is between 25° and 50° on the rich side of the peak.

Check the mixture at regular intervals during the climb, and re-adjust when established in the cruise.

Re-adjust the mixture after any power change, and enrich as required during the descent.

**Warning: At no time must the engine be leaned on to the lean side of the peak.**

Monitor the cylinder head temperature. If the cylinder head temperature reaches the top of the green range, open the cowl flaps to maintain the temperature within limits.

If you have to open the cowl flaps to maintain the cylinder head temperature within limits, please note the outside air temperature and advise the Chairman or Bookings Officer after landing.

In the event that the EGT gauge is not working, you can lean in the traditional manner. Wind back the vernier mixture control until the engine runs a little rough, then wind it back slightly until it runs smoothly again.

It may also help to wind back the vernier control a couple of turns for taxiing but remember to go full rich when you commence your engine checks.





## OPERATIONAL NOTICE N° 13

Revised April 2015

### Mag drops

If you experience a mag drop that requires clearing using the procedure below, please notify the Chairman or Bookings Officer so that it can be recorded and advised to the maintenance organisation in due course, if it is seen to be a recurring problem.

Most mag drops will clear as long as the correct procedure is adopted.

If you observe a mag drop after start, do not attempt to clear it until you carry out the Power Check, it may clear on its own during taxi.

When carrying out the Power Check, if you observe a mag drop greater than 175 rpm, run the engine at 2,000 RPM and slowly wind the mixture back until you observe a small reduction in RPM. Allow the engine to run for about 10 to 15 seconds with the mixture in this position, then fully enrich the mixture and carry out another mag check.

If the mag check is now normal continue with the rest of the checks in the normal manner. If you still get a mag drop, run the engine at 2,200 RPM and repeat the above procedure.

If the mag drop persists, run the engine at 2,400 RPM and repeat the above procedure. If this does not clear the mag drop then seek engineering assistance.

It is important that the mixture is only leaned using the vernier adjustment and not leaned by pulling the mixture control out, as the aim is to produce the maximum combustion temperature to burn the oil and carbon from the offending plug. This can only be done using the vernier control and watching for the slight reduction in RPM. Pulling the mixture control out will give you a reduction in RPM but you may find that it is because the engine is being starved of fuel, rather than reaching the combustion temperature peak.



## OPERATIONAL NOTICE N° 15

Revised April 2015

### Engine Cooling

The following notes have been taken from the Textron Lycoming website; they are particularly aimed at glider-tug or para-drop operations but they are relevant to Practice Forced Landings and fast descents from altitude:

*Sudden cooling is detrimental to the good health of the piston aircraft engine. Textron Lycoming Service Instruction 10940 recommends a maximum temperature change of 50<sup>o</sup>F per minute to avoid shock cooling of the cylinders.*

*The engine problems that may be expected when pilots consistently make fast letdowns with little or no power include:*

1. *Excessively worn ring grooves accompanied by broken rings.*
2. *Cracked cylinder heads.*
3. *Warped exhaust valves.*
4. *Bent pushrods.*
5. *Spark plug fouling.*

*Generally speaking, pilots hold the key to dodging these problems. They must avoid fast letdowns with very low power (high cruise RPM and low manifold pressure), along with rich mixtures that contribute to sudden cooling. It is recommended that pilots maintain at least 15" MP or higher and set the RPM at the lowest cruise position. This should prevent ring flutter and the problems associated with it.*

*Letdown speed should not exceed high cruise speed or approximately 1000 feet per minute of descent. Keeping descent and airspeed within these limits will help to prevent the sudden cooling that may result in cracked cylinder heads, warped exhaust valves, and bent pushrods.*

*The mixture setting also has an effect on engine cooling. To reduce spark plug fouling and keep the cylinder cooling within the recommended 50<sup>o</sup> F per minute limit, the mixture should be left at the lean setting used for cruise and then richened gradually during descent from altitude. The lean mixture, maintaining some power, and using a sensible airspeed should achieve the most efficient engine temperatures possible.*

*Whatever the circumstances, pilots must plan their flight operations so that the potential damage caused by sudden engine cooling can be avoided.*

**G-BJHB must not be used for Practice Forced Landings (PFLs). Use a flying club aircraft and instructor instead.**