

## VFR CHECK LIST

**BOXED ITEMS SHOULD BE CARRIED OUT FROM MEMORY**

Check Aircraft surfaces clear of hoar frost, snow, ice.

### COCKPIT PREPARATIONS

Control Lock	Stowed
Pitot cover	Remove and Stow
Fire extinguisher	Check secure, gauge in green
First Aid Kit	Check present under rear seat
Magneto/starter switch	OFF, keys out
Battery master/ alternator switch	ON
Fuel selector	BOTH, Check contents gauges
Beacon	Check ON
Pitot heater	ON maximum 30 seconds check
Taxi/landing lights ( <i>if night flight</i> )	Check
Nav lights ( <i>if night flight</i> )	Check
Battery master/ alternator switch	OFF

### External Check for damage, security, fuel and oil

### BEFORE STARTING ENGINE

Parking brake	Set
External check	Complete
Passenger briefing	Complete
Cabin doors	Closed, locked
Seat and seat belts	Adjusted, secure
Elevator and Aileron Controls	Full, free and correct
Circuit breakers	IN
Battery master/alternator switch	ON

### STARTING ENGINE

Mixture	Full and Free Set RICH
Throttle	Full and Free Set 1/4inch Open
Carb Heat	Full and Free Set Cold
Prime	As reqd
Propeller area	Clear
Magneto/starter switch	START/BOTH

### AFTER ENGINE START

Starter warning light	Out
Oil pressure	Rising within 30 secs
Throttle	1000 rpm
Alternator	Charging

Radio/Nav/Intercom	Set
ATIS	Obtain
Flight instruments	Check, set QNH
Clearance	Obtain
Transponder	Code Set, GND

### INITIAL TAXY

Toe Brakes	Check
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### POWER CHECK

#### -Check clear to rear-

Engine Gauges	Check Green
Throttle	1700 rpm
Carb Heat	Check
Magnetos	Check Max drop 125 diff 50 rpm
Alternator	Not discharging
Throttle close	Check idle 600-800 rpm
Throttle	Set 1000 rpm

### PRE-TAKE OFF

Trim	TAKE OFF
Throttle friction	SET finger tight
Mixture	RICH
Fuel	Contents checked; selector BOTH
Flaps	0 or 10 deg
Engine Gauges	Check Green
Flight instruments	Check SET
Seat and seat belts	Secure
Cabin doors, Windows	Closed, locked
Ailerons and Elevator	Full and Free movement
Emergency handling pilot brief	Complete

### LINING UP CHECK ..When cleared onto runway..

Transponder	ALT
Taxi/Landing Light(s)	if required ON
Pitot heater	if required ON
Rudder	Check full movement
Flight Instruments	Check when turning

### AFTER TAKE OFF / MISSED APPROACH

Flaps	UP
Engine Gauges	Check Green
Taxi/landing light(s)	As Required

### IN-FLIGHT CRUISE / REJOIN CHECK

Fuel	Contents and balance
Radios	Check/Set/Ident
Engine	Gauges, Mixture, CARB HEAT
DI	Synchronised
Altimeter	Pressure Setting

### PRE- LANDING CHECK

Brakes	Check OFF
Mixture	RICH
Fuel	Contents, balance selector BOTH
Flaps	As required
Engine Gauges	Green
Landing light	As Required
Carb Heat	Check
Seat, seat belts, doors	Secure

### AFTER LANDING CHECK - When clear of runway -

Flaps	UP
Throttle friction	Loosen
Taxi/landing light(s)	As Required
Pitot heater	OFF
Transponder	7000 OFF
Trim	TAKE OFF

### CLOSING DOWN

#### - When in Apron -

Parking brake	Set
Throttle	1000 rpm
Electrical equipment (except Beacon)	OFF
Mixture	ICO
Magneto/starter switch	OFF, keys out
Battery master/alternator switch	OFF
Control lock	Fitted
Fuel selector	On sloping ground LEFT or RIGHT
Pitot cover	FIT

### PRE-STALLING CHECK

H Height	Sufficient to recover by 3000ft agl
A Airframe	Flaps as required
S Security	Cabin doors windows closed, No loose articles
Seat Belts	Secure
E Engine	Gauges, Fuel, Mixture RICH Carb Heat
L Location	Clear airfields, Built up areas, Cloud,
Controlled airspace	
L Lookout	1x180° or 2x90° clear of other aircraft

## ENGINE FIRE (GROUND)

Continue to crank/run engine to suck flames and accumulated fuel into the engine,

If engine starts - run at 1800 rpm for a few minutes then shut down and check for damage

If engine fails to start;

Throttle	OPEN
Mixture	ICO
Cranking	CONTINUE
Fuel	OFF

Battery master/alternator switch	OFF
Magnetos	OFF
Brakes	RELEASE
Evacuate aircraft as soon as possible	
Fire	EXTINGUISH

## ENGINE FIRE (AIR)

Mixture	ICO
Fuel	OFF
Battery master/alternator switch	OFF

Cabin heat/Cabin air Panel controls	OFF
Airspeed	100 kts or more to extinguish fire
Execute forced landing, <b>do not attempt restart</b>	
If fire out master switch	ON MAYDAY CALL

## ELECTRICAL FIRE (AIR)

Battery master/alternator switch	OFF
Vents/cabin air/heat	CLOSED
Fire extinguisher	Operate as required

All other switches (except ignition)	OFF
Ventilate cabin after using hand fire extinguisher	
If fire appears extinguished and electrical power required:	
Battery master/alternator switch	ON
Circuit breakers	Check, DO NOT RESET
Radio/elec. switches	One at a time ON until fault identified

# VFR CHECK LIST

## CABIN FIRE

Battery/Alt Switch	OFF
Vents, cabin air & heat	CLOSED
Fire extinguisher	Operate as required

Vents, cabin air and heat Open when fire extinguished  
Land as soon as possible

## ENGINE FAILURE IN FLIGHT

Carb Heat	ON
Glide	70 kts and Trim
Select a field and plan the descent,	Check failure
Fuel selector	BOTH
Mixture	RICH

Magnetos BOTH or START if propeller stopped  
Mayday call then CRASH / EFATO CHECKS

## CRASH / EFATO CHECKS

Throttle	Closed
Mixture	ICO
Fuel	OFF
Magnetos	OFF
Doors	Unlatch
Seat and Belts	Secure, Backs Upright
MAYDAY CALL	
Battery master/alt (After flaps selected)	OFF

## LOW VOLTAGE LIGHT ILLUMINATES

Ammeter Check to verify if alternator inoperative  
If ammeter shows discharge:  
Alternator circuit breaker Check and reset once  
Battery master/alt OFF (both sides)  
Battery master/alt ON  
Low voltage annunciator Check OFF  
If Low voltage annunciator illuminates again:  
Alternator switch (Only one side of switch) OFF  
Reduce electrical loads to minimum - Battery only source of electrical power - Land as soon as practical.

## BOXED ITEMS SHOULD BE CARRIED OUT FROM MEMORY

## AMMETER SHOWS EXCESSIVE RATE OF CHARGE

Alternator switch (only one side of switch) OFF  
Reduce electrical loads to minimum  
Battery only source of electrical power  
Land as soon as practical

## RECOMMENDED SPEEDS AND POWER SETTINGS - TAKE-OFF

Normal	VR 55 kts	Full power	Clean
Soft field	VR 50 kts	Full power	Flap 10°
Normal climb	70-80 kts	Full power	Clean
Best rate climb	74 kts	Full power	Clean
Best angle climb	62 kts	Full power	Clean

## APPROACH

Normal	56-65 kts	As required	Flap 30°
Flapless	60-70 kts	As required	Clean
Glide	70 kt	Idle	Clean
Short Field	60 kts	As required	Flap 40°

Note: After flap 30° is selected on a glide, approach speed may be reduced towards 65 kts

## STALLING SPEEDS

Power off / 1156kg	40 kts	Flap 30°
	48 kts	Clean

## SPEED LIMITATIONS

Never exceed speed (VNE)	164 kts
Maximum normal speed (VNO)	128 kts
Maximum manoeuvre speed (VA)	105 kts / 1156 kg
	98 kts / 997 kg
	90 kts / 861 kg
Maximum flap extend speed (VFE)	86 kts
Demonstrated crosswind	15 kts