

Flightwise Training Services

This document is designed so that the pages may be printed in order on both sides of an A4 sheet and then folded to form a 12 page A5 booklet.

This page does not form part of the Document.

NOTES ON USE OF CHECKLIST

- 1 The 'Philosophy of Use' for this check list is based on the 'Do-Read-Verify' principle. All systems should first be set up from memory using a scan pattern. Only then should the check list be read to ensure completion. Each check item should be read as a challenge and the appropriate system condition checked before the response is read. Keep a mental track of each item number to ensure no item is skipped. Checks 7 to 13 should be completed totally from memory using mnemonics without further reference to the checklist. Pilots should not hesitate to use the check list as a back-up to any memory only checks if necessary. Most of the Abnormal and Emergency Checks cover minimum time available situations and should be completed from memory, however if time and circumstances permit the check list should always be read.
- 2 A break in a check indicates a pause in the memory scan. The check list should be picked up and read to this point before setting it aside to continue with the memory scan.
- 3 Items in faint italics are generic check list items included for training purposes but are not applicable to the Cessna 172.
- 4 The 'Taxi Check' may be performed after the 'Power Check' provided the aircraft does not move after start. Brakes must be checked immediately when the aircraft first moves.
- 5 On line up, verify positioned on the correct runway by cross checking the DI / compass. The 'Take Off Check' should be completed *after* take off clearance has been received. The ASI and engine instruments should be checked during the take off roll.
- 6 The 'After Landing Check' (memory scan only) should not be commenced until the landing roll is complete and the aircraft is at taxi speed. It should preferably be commenced when clear of the active runway unless a long taxi on the runway itself is anticipated. In this case the strobe lights should remain 'on' until the runway is vacated. A brake check should be carried out prior to entering the parking area.
- 7 The 'After Landing Check' should not be read until the aircraft is parked prior to shutting down the engine. Carry out the Shutdown Check to the first pause line and then read both checks to the first pause line before setting aside the check list and continuing with the memory scan to shut down the engine. Headsets may be removed after the avionics master is switched off. (Intercom no longer available.)
- 8 The 'Engine Fire During Start' check assumes evidence of fire can be seen from the cockpit. In this case it is unlikely that the fire is confined to the intake. If it is believed that a fire is confined to the intake use the Flight Manual procedure on page 3-2.
- 9 Do not switch off individual avionic services post flight. Use the Avionics Master Switch for this purpose. The Avionics Master Switch **must be off prior to engine start and shutdown** to prevent possible damage to avionics.
- 10 Do not use this check list on any other aircraft - there will inevitably be differences.
- 11 Refer to the FTS Cessna 172 Expanded Check List and the Aircraft Flight Manual for detailed procedures.
- 12 This check list may be amended from time to time. Please check notice boards for latest issue number and destroy old editions.
- 13 This check list is produced by the Flightwise Training Services for use on EI-OFM only. It is the pilot's responsibility to ensure that all procedures are carried out according to the manufacturer's published procedures. Nothing in this check list shall prevent a pilot taking such action as may be necessary in the interests of safety.

Flightwise Training Services

CESSNA F172N CHECK LIST

EI-OFM

NORMAL PROCEDURES

ABNORMAL AND EMERGENCY PROCEDURES

ISSUE	1
FORMAT	1
DATE	31/03/2008

1 Pre Start Check

1. Tech Log / Flight Sheet Checked / Signed
2. Fuel Load..... Sufficient
3. Performance / Wt & Bal Checked
4. Met Brief / ATIS Obtained
5. Flight Plan..... Filed
6. Aircraft Documents Checked
7. Internal / External Check Complete
8. Mobile Phones..... Off
9. Brakes Set
10. Seats / Harness Locked / Secure
11. Electrics Off
12. Autopilot..... Off
13. CBs..... In
14. Alternate Static Valve Push / Off
15. Carb. Heat Checked / Cold
16. Mixture..... Checked / Rich
17. Throttle Checked / Set 1/4in
18. Fuel Selector BOTH

2 Start Check

1. Primer.....Use if Req'd. / Locked
2. Master SwitchOn
3. Lo Volt light.....On
4. Fuel GaugesAgree with load
5. Avionics MasterOn
6. Start Clearance.....Obtain
7. Avionics MasterOff
8. BeaconOn
9. Nav Lights (Night).....On
10. Prop Area.Clear
11. Mags / StarterStart (10 Secs.)
12. Throttle1100 RPM
13. Oil Pressure.....Green Sect. (30 Secs)
14. Starter LightOut
15. AmmeterPositive Charge
16. Lo Volt Light.....Out
17. Avionics MasterOn
18. Intercom.....On / Set / Checked

3 After Start Check

1. Radios / Nav aids On / Set / Checked
2. Suction..... Indicating
3. Flight Instruments Checked / Set
4. Direction Indicator..... Synchronised
5. Altimeter Set QNH
6. Primer In and Locked
7. Magnetos BOTH Position
8. Flaps..... Up (Visual Check)
9. Flight Controls Full Free Correct
10. Hatches / Harness Secure

4 Taxi Check

1. Brakes Checked
2. Steering Checked
3. Flight Instruments Checked

5 Power Check

1. Position..... Into Wind
2. Brakes Set and Guarded
3. Engine Insts..... Press / Temps Checked
4. Area Clear
5. Throttle 1700 RPM
6. Carb. Heat Checked / Cold
7. Magnetos..... Checked 125 / 50 Both
8. Engine Insts..... Press. / Temps Checked
9. Suction..... Green Range
10. Alternator Load / Positive Charge
11. D.I. Synchronised
12. Idle RPM..... Checked
13. Throttle 1100 RPM

OIL					FUEL				
Aeroshell W80	US Quarts	Lbs	Ltrs	Kgs	Avgas 100LL Fuel Quantity	US Gals	Lbs	Ltrs	Kgs
Total Capacity	6.0	11.2	5.7	5.1	Total Capacity	43	258	163	117
Normal Flight	5.0	9.4	4.7	4.3	Unusable Fuel	3	18	11	8
Min Safe	4.0	7.5	3.8	3.4	Usable Fuel	40	240	152	109
Dipstick is graduated in US Quarts									

LOADING				WIND LIMITS (AFC)	
EI-OFM	Kgs	Arm (M)	Mom.MKg	Max Wind Kts	
Basic Empty Weight	681	0.9801	666	Max Gust Kts	30
MTWA	1043			X Wind T/O+Lndg	15
Weight Available for Variable + Disposable Load	362				
Max Baggage Area 1 (Fwd)	54	2.74	Max total Baggage 54 Kg		
Max Baggage Area 2 (Aft)	23	3.12			
Refer to the Weight and Centre of Gravity Schedule and to the Aircraft Flight Manual for Loading Calculations					

SPEEDS Sea Level @ 1043 Kgs		DUB COMMS FAILURE	
Speeds	Kts	Holding Pattern	Alt
Vr Flap 0°	55	Broad Meadow Bridge	1000?
Vx Flap 0°	60		
Vr Flap 10°	48	Finglas Church Spire	1700?
Vx Flap 10°	53		
Vy	73	For Detailed Procedures See AIP Ireland EIDW AD 2-31	
Normal Climb	80		
Best Glide Speed	65		
Va	97		
Vs1	47		
Vref 0 °	70		
Vref 20 °	65		
Vref 40 °	59		
Increase V _{ref} to allow for gusts.			

SSR CODES	
Conspicuity	7000
Comms Fail	7600
Emergency	7700

VHF FREQUENCIES	
Abbeysrule	122.6
Aldergrove ATIS	128.2
Aldergrove Appr.	124.9
Aldergrove Twr.	118.3
Aldergrove Gnd.	121.75
Baldonnell Appr.	122.0
Baldonnell Twr.	123.5
Clonbullogue	128.55
Dublin ATIS	124.52
Dublin Volmet	127.0
Dublin Ground	121.8
Dublin Tower	118.6
Dublin Approach	121.1
Dublin ATCC Sth.	124.65
Dublin ATCC Nth.	129.17
Dublin Delivery	121.87
Gowran Grange	130.4
Shannon ATCC	124.7
Trim	123.3
Weston	122.4

16 Inadvertent Icing Encounter

1. Pitot Heat On
2. Cabin Heat..... Full On
3. Throttle..... High RPM
4. Carb. Heat Hot
5. Mixture Adjust
6. Icing Area..... Leave

If Unable to Leave Icing Conditions

6. Land at Nearest Suitable Airport
7. Apply **Landing With Residual Ice Check 18**

If Ice Build Up is Severe

6. Apply **Landing With Residual Ice Check 18**
7. Apply **Forced Landing With Power Check 6**

17 Blocked Static

1. Altn. Static Valve..... Pull On
2. Airspeed..... Sect 5 POH

18 Landing With Residual Ice

1. Flaps..... Retracted
2. Approach Speed 75 Kts.

If Windscreen Obscured

3. Side Window..... Open

Or

4. Sideslip Perform

19 Starter Engaged Light On

If Light Remains On After Ground Start

1. Master Switch.....Off
2. Mixture Idle Cut Off
3. Apply **Normal Shut Down Check 15**

If Light Remains On After Air Start

1. Land as soon as practicable
2. After landing turn Master Switch off.

20. Flooded Engine Start

Indications: Weak Intermittent firing and puffs of black smoke from exhaust stack.

1. Mixture Full Lean
2. Throttle Full Open
3. Starter Engage (10 Secs)

If Engine Fires

4. Mixture Rich
5. Throttle..... 1100 RPM

If Engine Does not Fire

4. Attempt Normal Start Procedure Without Further Priming.

21. Asymmetric Flap

1. Use aileron and rudder as necessary to maintain aircraft control.
2. It may be possible to restore symmetry by extending / retracting undamaged flap. Proceed with caution. See warning below.
3. Land as soon as practicable.

CAUTION!

FURTHER MOVEMENT OF THE FLAPS MAY CAUSE FLAP BUCKLING AND AILERON DAMAGE

6 Pre Take Off Check

- T Trim Take Off Range
- T Throttle Friction Set
- C Carb. Heat Cold
- M Mixture Full Rich
- M Magnetos..... BOTH Position
- P Prop Pitch Full Fine
- F Flaps Set 0 ° or 10 °
- F Fuel BOTH / Sufficient
- F Flight Controls Full Free Correct
- O Oil Press. / Temp..... Checked
- H Hatches Secure
- H Harness Secure
- A Autopilot Off
- I Instruments, Flt / Eng ... Checked
- L Look Out..... Complete

7 Take Off Check

- P Pitot Heat On (IMC / Precip)
- L Landing Light..... On
- A Altimeter QNH Set
- N Nav aids Set As Cleared
- T Transponder..... ALT
- S Strobe Lights On

8 After Take Off Check

- F Flaps Up
- L Landing Light Off / As Req'd.
- U Undercarriage Up and Locked
- E Engine Insts. Checked

9 Navaid Selection

- S Select Set Frequency
- I Identify..... Check Morse Ident
- D Display Set / Chk / Trk Rqd.

10 Safety Check

- H Height..... Sufficient
- A Airframe..... Configuration Checked
- S Security Hatches / Harness / Cabin
- E Engine Insts. / Mixt. / Carb. Chkd.
- L Location..... Checked
- L Look Out..... Complete

11 Enroute and Approach Check

- F Fuel BOTH / Qty Checked
- R Radio / Nav aids ..Select for Route / Appr
- E Engine..... Insts. / Mixt. / Carb. Chkd.
- D D.I..... Synchronised
- A Altimeter Set

12 Pre-Landing Check**B** Brakes Off / Pressure Checked*U Undercarriage..... Down and Locked***M** Mixture..... Rich*P Prop Pitch..... Full Fine***C** Carb. Heat.....Checked / Reset Cold**F** Fuel On / Contents Checked**F** Flaps..... As Required**H** Hatches Secure**H** Harness Secure**A** Autopilot..... Off**I** Insts, Eng / Flt..... Checked**L** Landing Light As Required.**L** Look Out..... Complete**Prior to Power Reduction****C** Carb Heat Full Hot**On Finals****F** Flap Extension..... Completed As Req'd.**13 Go Around****Flaps 20° / 40°****1.** Throttle Full Open**2.** Carb Heat..... Cold**3.** Flaps 20°**4.** Airspeed 60 Kts.**5.** Flaps 10°**When Clear of Obstacles****6.** Flaps Up**14 After Landing Check****1.** Carb. Heat..... Cold**2.** Flaps Up**3.** Transponder..... STBY**4.** Pitot Heat Off**5.** *Strobe Lights* Off**6.** Landing Light Off (Day)**7.** Non Esntl. Electrics Off**15 Shut Down Check****1.** Position Into Wind**2.** Brakes Set**3.** Throttle 1100 RPM**4.** Engine Insts. Checked**5.** Magnetos Checked**6.** Non Esntl. Electrics Off

7. Avionics Master Off**8.** Mixture Idle Cut-Off**9.** Magnetos Off**10.** Key Out**11.** Beacon Off**12.** Nav Lights Off**13.** Esntl. Electrics..... Off**14.** Master Switch..... Off**15.** Control Lock In**16 Post Flight Check****1.** Rudder Lock..... In Place**2.** Tie Downs Secure**3.** Pitot Cover In Place**4.** Chocks Inserted**5.** Fuselage Cover..... Secure**6.** Tech. Log Completed**15 Ditching****1.** Mayday Call..... Transmit on Current Frequency. If no contact, 121.5**If still no contact and / or no previous squawk assigned.****2.** Transponder7700 / ALT**3.** Heavy Objects in Baggage Area.....Secure or Jettison**4.** ApproachPlan

High Winds, Heavy SeasInto Wind

Light Winds, Heavy SwellsParallel to Swells

5. OccupantsProtect Faces With Folded Coats or Cushions**If Power Available****6.** Flaps.....40 °**7.** Approach Speed / Power.....55 Kts. / ROD 300 FPM**If Power Not Available****6.** Flaps.....0 ° or 10 °**7.** Approach Speed.....65 Kts. Flaps 0 °

60 Kts .Flaps 10 °

8. HeadsetsRemove and Stow Clear of Exits**9.** HarnessTight**10.** HatchesUnlatch and Wedge Open if Possible**11.** WindowsOpen**12.** TouchdownLevel Attitude at Established Descent Rate**13.** OccupantsEvacuate**14.** Life Vests and RaftInflate When Clear of Aircraft

10 Low Oil Pressure In Flight

1. Oil Temp. Check

If Temp Normal

2. Land at Nearest Suitable Airport.

If Temp High

2. Throttle Close

3. Power Min. Necessary

Engine Failure is Imminent

4. Landing Area Select

5. Apply **Forced Landing with Power** Check 6

11 Rough Engine or Power Loss

If Oil Pressure Low

1. Apply **Low Oil Pressure in Flight** Check 10

If Carb. Ice Suspected

1. Throttle Full Open

2. Carb. Heat Full Hot

If Spark Plug Fouling

or

Magneto Malfunction Suspected

1. Mags.....L & R Check

2. Mags.....Both

3. Mixture.....Adjust

4. ThrottleAdjust

If no Improvement After Several Minutes

5. Functioning MagSelect

6. Pan Call.....Transmit

7. Land at Nearest Suitable Airport

12 Low Oil Pressure After Start

1. Mixture Idle Cut Off

2. Apply **Normal Shut Down Check 15**

13 Low Voltage Light On

1. Avionics Master..... Off

2. Alternator CB Check In

3. Master Switch Cycle

4. Low Volt Light Check Off

5. Avionics Master..... On

If Low Volt Light illuminates again

6. ATC..... Advise

7. Alternator Off

8. Electrical Load Reduce

Total Electrical Failure is Imminent

Approx 30 Mins. Battery power Available

9. Land at Nearest Suitable Airport

Consider Flapless Landing

14 Excessive Rate of Charge

1. Alternator Off

2. Alternator CB Pull

3. ATC..... Advise

4. Electrical Load Reduce

Total Electrical Failure is Imminent

Approx 30 Mins. Battery power Available

5. Land at Nearest Suitable Airport

Consider Flapless Landing

INDEX

<i>Check Title</i>	<i>Page and Check Number</i>
Asymmetric Flap	5-21
Blocked Static	5-17
Ditching	4-15
Electrics / Cabin Fire In Flight	2-8
Engine Failure After Take Off	1-3
Engine Failure In Flight	1-4
Engine Failure On Take Off Run	1-2
Engine Fire During Start	1-1
Engine Fire In Flight	2-7
Excessive Rate Of Charge	3-14
Flooded Engine Start	5-20
Forced Landing	1-5
Forced Landing With Power	2-6
Inadvertent Icing Encounter	5-16
Landing With Residual Ice	5-18
Low Oil Pressure After Start	3-12
Low Oil Pressure In Flight	3-10
Low Voltage Light On	3-13
Rough Engine Or Power Loss	3-11
Starter Engaged Light On	5-19
Wing Fire	2-9

1 Engine Fire During Start

If fire is believed to be confined to the intake

Apply Procedure on Flight Manual Page 3-2

If fire or smoke is visible from the cockpit.

1. Throttle..... Closed
2. Mixture..... Idle Cut Off
3. Magnetos..... Off
4. Fuel Selector..... Off
5. Occupants..... Evacuate
6. Fire Extinguisher..... Activate

2 Engine Failure On Take Off Run

1. Throttle..... Close
2. Brakes..... Apply
3. Flaps..... Retract

If Overrun is Likely

4. Mixture..... Idle Cut-Off
5. Master Switch..... Off

3 Engine Failure After Take Off

1. Airspeed..... 65 Kts.
2. Landing Area..... Select

If Time Available

3. Apply **Forced Landing** Check 5

4 Engine Failure in Flight

1. Airspeed..... 65 Kts.
2. Landing Area..... Select
3. Primer..... Locked In
4. Mags..... Both
5. Carb. Heat..... Hot
6. Throttle..... Setting Chkd
7. Mixture..... Rich
8. Fuel Selector..... BOTH
9. Fuel Contents..... Sufficient
10. Starter..... Engage

If Propeller Stopped

If Engine Does Not Start

11. Mayday Call..... Transmit
- If no Contact and/or no Squawk Assigned**
12. Transponder..... 7700 / ALT
13. Apply **Forced Landing** Check 5

5 Forced Landing

1. Throttle..... Closed
2. Mixture..... Idle Cut Off
3. Fuel Selector..... Off
4. Mags..... Off
5. Harness..... Tight
6. Master Switch..... On If Flaps Reqd.
7. Flap Extension..... Complete
8. Master Switch..... Off
9. Hatches..... Unlatch

6 Forced Landing With Power

If Landing Due Low Oil Pressure, Wing Fire or Severe Ice, Omit Item 3

If Landing due Elect / Cabin Fire start at item 5

1. Mayday Call..... Transmit
- If no Contact and/or no Squawk Assigned**
2. Transponder..... 7700 / ALT
3. Landing Area..... Inspect (F20° 65 Kts)
4. Electrics / Avionics... Off
5. Brakes..... Off / Pressure Checked.
6. Mixture..... Rich
7. Carb. Heat..... Checked. / Reset Cold
8. Harness..... Secure
9. Hatches..... Unlatch
10. Master Switch..... On If Flaps Required
11. Flap Extension..... Complete
12. Master Switch..... Off
- On Touchdown**
13. Mags..... Off

7 Engine Fire in Flight

1. Fuel Selector..... Off
2. Mixture..... Idle Cut Off
3. Primer..... In and Locked
4. Mayday Call..... Transmit
5. Master Switch..... Off
6. Cabin Heat / Air..... Both Closed
7. Airspeed..... Vno / Vne
8. Apply **Forced Landing** Check 5

8 Electrics / Cabin Fire in Flight

1. Mayday Call..... Transmit
2. Master Switch..... Off
3. Electrics / Avionics.... All Off
4. Avionics Master..... Off
5. Vents..... All Closed
6. Cabin Heat / Air..... Both Closed
7. Fire Extinguisher..... Activate

If Fire Extinguished

8. Cabin..... Ventilate
9. Affected CBs..... **DO NOT** Reset

Pause after each switch action to check effect

10. Master Switch..... On
11. Avionics Master..... On
12. Essential Electrics On, One at a Time
13. Mayday..... Downgrade
14. Land at Nearest Suitable Airport

If Unable to Extinguish Fire

8. Cabin..... Ventilate
9. Landing Area..... Select
10. Apply **Forced Landing With Power** Check 6

9 Wing Fire

1. Nav. Lights..... Off
2. *Strobes*..... Off
3. Pitot Heat..... Off
4. Wing Vents..... Close
- Sideslip away from Flames**
5. Flaps..... Minimal Use
6. Landing Area..... Select
7. Apply **Forced Landing With Power** Check 6