ACACG – Detailed Check List C172 R/SP *(English version 2.0)* – ACACG

PREFLIGHT

Fuel

- Drain tanks (1st flight of the day) ... x13
- Fuel (L & R) ..... CHECK VISUALLY

Cockpit

- Control wheel lock..... REMOVE
- Fuel X- feed ..... BOTH
- Ignition switch ..... OFF / KEY OUT
- TRIM control …….CHECK / SET T/O
- Avionics master..... OFF
- Master switch ..... ON
- Fuel gauge ..... CHECK
- Flaps ..... OUT (30°)
- Lights / Nav / Strob / BCN ..... CHECK
- Master switch .....OFF
- Life jackets (& dinghy).....ON BOARD

Left Wing

- Flap .....CONDITION / LOOSENESS
- Aileron.....CONDITION / FREEDOM
- Wing tip / Nav / Strob ..... CHECK
- Leading Edge / lights..... CHECK
- Fuel tank vent opening..... CHECK
- Stall warning opening..... CHECK
- Pitot tube cover ..... REMOVE

Left landing gear

- Tire… CONDITION / INFLATION(3bar)

Nose

- Static source opening..... CHECK
- Engine cowling..... CHECK
- Air intakes / Filter ..... CHECK
- Propeller / Spinner ..... CHECK
- Alternator belt……..CHECK

Oil

- Level (5 to 8 qt)..... CHECK
  If < 6 qt…….ADD 1 QT
- Oil tank..... CLOSE ACCESS DOOR

Nose gear

- Tire..CONDITION / PRESSURE(2.5bar)
- Gear shock absorber ..... PRESSURE
- Tow bar..... REMOVE

Right gear ..... AS LEFT GEAR

Right wing..... AS RIGHT WING

Top wing surface

- Antennas..... CHECK
- Fuel filler cap.....PROPERLY CLOSED

Fuselage – right side

- Condition..... CHECK
- Antennas..... CHECK

Tail

- Elevator.....CONDITION / FREEDOM
- Rudder .....CONDITION / FREEDOM
- BCN bulb condition ..... CHECK

Fuselage – left side

- Condition..... CHECK
- A/P static source opening ..... CHECK
  (If Applicable)
- Baggage door ..... LOCKED

Shocks ..... REMOVE

BEFORE STARTING ENGINE

- PAX briefing ..... ISSUE
- **PREFLIGHT INSP. ..... COMPLETE**
- Parking brake ..... SET
- Acft documents ..... ON BOARD
- Time meter ..... LOG
- Seats & Restraints ..... SET
- Doors ..... CLOSE (gently)
- Controls……FREE/CHECK
- TRIM control ..... T/O pos.
- Alternate static source..... PUSH
- Fuel endurance ..... LOG
- Weight & Balance..... CONSIDER
- Airspeed & Vert. speed Ind. ..... CHECK
- Master switch ..... ON
- Avionics master..... ON

Fan / Frequencies / ATIS / NAV-GPS/Contact Twr/ Squawk

- Avionics master..... OFF
- Alarm panel ..... TEST
- Fuel engine shutoff..... PUSH
- Fuel X-feed ..... BOTH
- Breakers..... CHECK
- BCN ..... ON

STARTING ENGINE

- Ignition Switch..... KEYS ON
- Safety check ..... "*CLEAR PROP*"
- Brakes..... APPLY

- Throttle..... ½ cm
- Mixture ..... FULL LEAN
- Fuel Pump..... ON
- Mixture ..... FULL RICH (5 sec)
- Mixture ..... FULL LEAN
- Fuel Pump..... OFF
- Ignition ..... START *(max 10 sec)*
- Mixture ..... Progressively set to RICH
- Oil pressure..... CHECK
- Throttle..... 1200 RPM

After 2 unsuccessful trials, always wait 3 min

If engine warm (stopped less than 15min, or flooded).

- Throttle..... HALF WAY
- Mixture ..... FULL LEAN
- Ignition ..... START *(max 10 sec)*
- Mixture ..... Progressively set to RICH
- Oil pressure..... CHECK
- Throttle..... 1200 RPM

AFTER STARTING ENGINE

- Throttle..... 1200 RPM
- Suction (4 to 5)..... CHECK
- Alternator ..... ON
- Charge ..... CHECK
- Avionics master..... ON
- Directional gyro ..... SET
- Altimeter..... SET
- QNH GPS & A/P *(if applicable)* ..... SET
- Squawk ..... GND or SBY
- Flaps ..... UP
- Doors ..... CLOSE
- Taxi clearance..... REQUEST
- Off block time ..... NOTE DOWN

TAXI

- Taxi light ..... ON
- Parking brake..... RELEASE
- Brakes..... CHECK
- Attitude Instruments ..... CHECK

ENGINE RUN-UPS

- Brakes..... APPLY
- Taxi light ..... OFF
- Oil temp & pressure ..... CHECK
- Throttle..... 1800 RPM
- Right & Left magneto loss ... < 150 RPM
- Magneto loss difference ..... < 50 RPM
- Suction ..... CHECK
- Idle ..... 575 to 725 RPM
- Throttle..... 1200 RPM

BEFORE TAKE-OFF

- Restraints.....SET
- Doors .....LOCK
- Throttle friction .....AS NECESSARY
- Mixture ..... FULL RICH
- Master switch + Alternator..CHECK ON
- Magnetos ..... CHECK BOTH
- Breakers..... CHECK
- Engine instruments ..... CHECK
- Flaps .....AS NECESSARY (0° or 10°)
- Electric TRIM control (*if appl.*).. CHECK
- TRIM .....SET T/O
- VOR / NDB / GPS ....SET as necessary
- Squawk ..... Code + ALT
- A/P .....OFF
- Controls..... FREE
- Windows .....CLOSE
- LDG light ..... ON
- Strob.....ON
- Parking brake ..... RELEASE

- **Briefing (T/O & DEPARTURE)**
QFU / Wind / Engine failures during T/O / Intentions after departure

LINED-UP

- Directional gyro ..... SET to QFU
- T/O time ..... LOG

TAKE-OFF

- Heels.....ON THE FLOOR
- Throttle..... FULL, > 2300 RPM
- Airspeed.....ALIVE
- Alarm..... NONE

AFTER TAKE-OFF

- Airspeed..... Constant
- Engine instruments ..... CHECK
- Flaps ..... UP *(300 ft AGL)*
- LDG light .....OFF

CRUISE

- **F**uel..... REM. ENDURANCE
- **R**adio .....NEXT REPORT / FREQ
- **E**ngine..POWER / MIXTURE / OIL T&P
- **D**irectional gyro .....SET
- **A**ltimeter ..... CHECK / SET

WAYPOINT

- **W**eather ahead .....ANTICIPATE
- **H**eading .....TURN / RESET DG
- **A**ltitude ADAPT TO TRACK / TERRAIN
- **T**ime.....ESTIMATE

CRUISE DESCENT

- **Briefing (ARRIVAL)**
ATIS / Weather / Rwy in use / Top of Descent / Arrival / Frequencies

- **F**uel..... REM. ENDURANCE
- **R**adioNEXT CONTACT / FREQUENCY
- **E**ngine... POWER / MIXTURE / Oil T&P
- **D**irectional gyro .....SET
- **A**ltimeter ..... CHECK / SET

BEFORE LANDING

- **Briefing (LANDING)**
Wind / Chosen airspeed & configuration / Touchdown point / Missed approach

- **B**rakes ..... CHECK
- **G**as .....BOTH
(**- U**ndercarriage..... DOWN)
- **M**ixture ..... FULL RICH
(**- P**rop ..... FULL FORWARD)
- **S**witches .....LDG light ON
- **Flaps** .....10° (below 110 KTS)

FINAL APPROACH

Flaps ..... AS REQUIRED (Std = 20°)
Heels..... ON THE FLOOR

AFTER LANDING

- Flaps ..... UP
- Strob ..... OFF
- Squawk ..... GND or SBY

ENGINE SHUTOFF

- Parking brake ..... SET
- Block time ..... LOG
- Avionics master switch ..... OFF
- Lights ..... OFF (except BCN)
- Alternator switch ..... OFF
- Power ..... < 1000 RPM
- Magneto dead-cut check ..... PERFORM
- Power ..... 1500 RPM for 15 sec
- Mixture ..... IDLE CUT-OFF

- Magnetos ..... OFF / KEYS OUT
- Master switch ..... OFF

- VHF / Radionav / GPS ..... OFF
- Time meter ..... LOG
- Control wheel lock ..... SET
- TRIM control ..... SET T/O
- Fuel X- feed ..... LEFT
- Pitot tube cover ..... SET
- **Shocks** ..... SET
- Parking brake ..... Release

LIMITATIONS

V_{S_0} 48 Kts	VNE 163 Kts	VFE 10° 110 Kts
Vs 53Kts	VNO 130 Kts	VFE >10° 85 Kts

CROSSWIND DEMONSTRATED VELOCITY : 15 KTS

FLAPLESS LANDING :
Add 50% to standard landing distance

TAILWIND LANDING :
Add 10% per 2kts of tailwind

SETTINGS

PHASE	Flaps	IAS (Kts)
Take-Off (full throttle)	0 /10°	55
Initial climb (full throttle)	0 /10°	75 / 70
Normal Climb (full throttle)	0°	80
Best rate of climb (full throttle)	0°	75
Best angle of climb (full throttle)	0°/10°	65/60
Economy 2000' (2300 RPM) Cruise 6000' (2400 RPM)	0° 0°	105 110
Standard 2000' (2400 RPM) Cruise 6000' (2500 RPM)	0° 0°	110 115
Fast 2000' (2550 RPM) Cruise 6000' (2650 RPM)	0° 0°	115 120
Normal descent (2100 RPM)	0°	115
Fast descent (2400 RPM)	0°	130
Level flight-Holding pattern (1800 RPM)	0°	80
Level flight – Approach (1800 RPM)	10°	75
Descent – Approach (1500 RPM)	10°	75
Normal Landing	30°	65 +Wc
Flapless landing	0°	70 +Wc
Short landing	30°	60 +Wc
Best glide speed	0°/30°	70 / 65
Go Around : Flaps 30° → 20° Flaps 20° → 10° → 0°		 60 mini 65 mini

WIND CORRECTION Wc

Less than 5 Kts Headwind	Wc = 0 Kts
5 to 15 Kts Headwind	Wc = 5 Kts
More than 15 Kts Headwind	Wc = 10 Kts

FUEL FLOW

FULL FUEL CAPACITY	56 USG (210 litres)
USABLE CAPACITY	**53 USG (201 litres)**
HOLD 1800 RPM (40%).....	6 USG
ECO CRUISE (55%).....	8 USG
STD CRUISE (65%).....	9 USG
FAST CRUISE (75%).....	10 USG

ENGINE FAILURE DURING TAKE-OFF RUN

- Throttle.....IDLE
- Brakes.....APPLY
- Engine / Switches.....OFF

ENGINE FAILURE DURING FLIGHT

A - Airspeed ..... BEST GLIDE SPEED
L - Landing site.....FIND ONE
E - Engine .....TROUBLESHOOT
R - Radio ..... 121.5/ MAYDAY/ELT ON
T – Transponder ..... SET TO 7700
S – Seatbelts ..... ON

- **Airspeed**.....70 KTS +
.....Flaps 30° : 65 KTS +

During initial climb out, lower the nose, land ahead

Engine troubleshoot

- Alt Air *(if applicable)* .....PULL
- Mixture ..... FULL RICH
- Fuel .....OPEN
...X-FEED BOTH
- Ignition switch .....BOTH / START

Radio ..... 121.5/ MAYDAY/ELT ON

FORCED LANDING

- Fuel shutoff .....PULL
- Ignition switch .....OFF
- Doors .....OPEN
- Flaps .....AS NECESSARY
- Master switch / Alternator.....OFF

PRECAUTIONARY LANDING WITH ENGINE POWER

- Radio.....121.5/ MAYDAY/ELT ON
- Selected airfield .....FLY OVER
.....(75kts<->40m/s)
- Short final..... FORCED LANDING C/L