

PREFLIGHT CHECK

CABIN

- 1 Aircraft Log & Aircraft Papers CHECKED
- 2 Control Lock REMOVED & STOWED AWAY
- 3 Ignition Switch OFF & KEY REMOVED
- 4 Avionics Power Switch..... OFF
- 5 Master Switch ON
- 6 Fuel Quantity Indicators..... CHECKED (Endurance !)
- 7 Flaps FULL DOWN
- 8 Master Switch OFF

OUTSIDE

- 9 Outside Check ACCORDING AFM

PREFLIGHT CHECK COMPLETED

CHECK BEFORE ENGINE START

- 1 Cabin Doors & Windows CLOSED & LOCKED
- 2 Seats, Seat Belts & Shoulder Harness ADJUSTED & SECURED
- 3 Parking Brake SET
- 4 Fuel Selector BOTH
- 5 Master Switch ON
- 6 Flaps UP
- 7 Mixture..... RICH
- 8 Throttle OPEN 1 cm
- 9 Carburettor Heat..... COLD
- 10 Beacon Light ON
- 11 Circuit Breakers CHECKED

CHECK BEFORE ENGINE START COMPLETED

STARTING ENGINE & AFTER ENGINE START CHECK

- 1 Primer (cold engine only !)..... 1 – 6 STROKES
- 2 Propeller Area & Zone behind Aircraft CLEAR
- 3 Ignition Switch START
- 4 Throttle 1 000 rpm
- 5 Oil Pressure (after max 30") **WITHIN GREEN ARC**
- 6 Ammeter..... CHECKED
- 7 Ventilation, Heater, Defroster..... AS REQUIRED
- 8 Avionics Power Switch..... ON
- 9 Avionics SET AS REQUIRED
- 10 FLARM ON
- 11 Engine Warm Up AS REQUIRED
- 12 Parking Brake RELEASED

STARTING & AFTER ENGINE START CHECK COMPLETED – READY TO TAXI

TAXI CHECK

- 1 Brakes & Steering..... CHECKED
- 2 Gyro Instruments & Magnetic Compass CHECKED

TAXI CHECK COMPLETED

RUN UP

- 1 Parking Brake SET
- 2 Oil Temperature & Oil Pressure..... **WITHIN GREEN ARC**
- 3 Zone behind Aircraft CLEAR
- 4 Throttle 1 700 rpm
- 5 Carburettor Heat..... CHECK OPERATION
- 6 Mixture..... CHECK OPERATION (EGT)
- 7 Magnetos (L – B – R – B) CHECKED
(MAX. 125 rpm / MAX DIFF. 50 rpm)
- 8 Suction **WITHIN GREEN ARC**
- 9 Ammeter..... CHECKED
- 10 Throttle IDLE (Min. 500 rpm – Max. 700 rpm)
- 11 Throttle 1 000 rpm

RUN UP COMPLETED

CHECK BEFORE DEPARTURE

- 1 Seats, Seat Belts & Shoulder Harness (PAX) RECHECKED
- 2 Cabin Doors & Windows..... CLOSED & LOCKED
- 3 Fuel Quantity L & R CHECKED (Endurance !)
- 4 Fuel Selector BOTH
- 5 Flaps AS REQUIRED
- 6 Mixture..... RICH (below 3 000 ft AMSL)
- 7 Carburettor Heat..... COLD
- 8 Elevator Trim SET FOR TAKE OFF
- 9 Circuit Breakers CHECKED
- 10 Magnetos..... BOTH
- 11 Master Switch ON
- 12 Primer..... IN & LOCKED
- 13 Flight Instruments CHECKED & SET
- 14 Engine Instruments..... CHECKED
- 15 Flight Controls FREE & CORRECT
- 16 Departure & Emergency Briefing COMPLETED
- 17 Parking Brake RELEASED

CHECK BEFORE DEPARTURE COMPLETED – READY TO LINE UP

Approach Sector & Runway **FREE** / ENTER THE RUNWAY
 & LINE UP

LINE UP CHECK

- 1 Runway IDENTIFIED & DG SET
- 2 Wind CHECKED
- 3 Landing Light & Navigation Lights ON
- 4 Transponder "Mode ALT" DISPLAY "**GND**" (7 000)
- 5 Time NOTED

LINE UP CHECK COMPLETED

CLIMB CHECK

- 1 Power FULL POWER
- 2 Flaps UP (clear of obstacles,
 +ve ROC, SPEED > 60 kt)
- 3 Landing Light AS REQUIRED
- 4 Transponder "Mode ALT" DISPLAY "**ALT**" (7 000)

CLIMB CHECK COMPLETED

CRUISE CHECK

- 1 Altimeter SET AS REQUIRED
- 2 Directional Gyro RECHECKED
- 3 Cruise Power SET (according AFM)
- 4 Mixture LEANED
- 5 Fuel Quantity L or R CHECKED (Endurance !)
- 6 Engine Instruments **WITHIN GREEN ARC**

CRUISE CHECK COMPLETED

DESCENT CHECK

- 1 ATIS (if available) NOTED
- 2 Approach Briefing COMPLETED
- 3 Avionics SET
- 4 Directional Gyro RECHECKED
- 5 Mixture SET AS REQUIRED
- 6 Cabin & PAX SECURED

DESCENT CHECK COMPLETED

APPROACH CHECK

- 1 Altimeter SET QNH (D/W Altitude)
- 2 Landing Light ON
- 3 Carburettor Heat AS REQUIRED
- 4 Mixture RICH / AS REQUIRED
- 5 Fuel Quantity L & R CHECKED (Endurance !)
- 6 Fuel Selector BOTH

APPROACH CHECK COMPLETED

FINAL CHECK

- 1 Carburettor Heat..... *push* COLD
- 2 Mixture..... *push* RICH / AS REQUIRED
- 3 Flaps *down* SET FOR LANDING

FINAL CHECK COMPLETED

AFTER LANDING CHECK

- 1 Transponder “Mode ALT” DISPLAY “**GND**”
- 2 Landing Light & Navigation Lights OFF
- 3 Flaps UP
- 4 Elevator Trim SET FOR TAKE OFF

AFTER LANDING CHECK COMPLETED

PARKING & ENGINE SHUT DOWN

- 1 Parking Brake SET AS REQUIRED
- 2 Throttle **1 000 rpm !**
- 3 COM..... MONITOR 121.50
- 4 Avionics Power Switch..... OFF
- 5 FLARM OFF
- 6 Electrical Consumers (**except beacon light**) OFF
- 7 Throttle at Idle..... CHECK DEAD CUT
- 8 Mixture..... IDLE CUT OFF
- 9 Ignition Switch **OFF & KEY REMOVED**
- 10 Master Switch OFF
- 11 Beacon Light OFF
- 12 Fuel Selector RIGHT
- 13 Flight Data & Aircraft Log..... NOTED

PARKING & ENGINE SHUT DOWN CHECK COMPLETED

Important Data for Cessna C172P (according AFM) *check T/O performance according AFM*

V_R (Rotating speed).....	55 kt
V_X (Best angle of climb speed).....	56 kt
V_Y (Best rate of climb speed).....	75 kt
V_A (Manoeuvring speed).....	99 kt
V_G (Best glide speed) (<i>clean</i>).....	65 kt
V_{NO} (Max. structural speed).....	127 kt
V_{NE} (Never exceed speed).....	158 kt
V_{FE} (Max. flaps extend speed).....	85 kt
V_{FE 10°} (Max. flaps extend speed @10°)	110 kt
V_S (Stalling speed - clean).....	44 kt
V_{SO} (Stalling speed – full flap).....	33 kt
V_{initial}	90 kt
V_{intermediate}	75 kt
V_{final}	60 kt
V_{cruise climb}	85 kt
Max. Crosswind	15 kt
Service Ceiling	13 000 ft

Weights

MTOW	2 400 lb (1 089 kg)
Empty weight	1 491 lb (677 kg)
Max. useful load ...	909 lb (412 kg)

Fuel (AVGAS 100LL)

Max. capacity	54 US Gal (204 l)
Usable fuel	50 US Gal (189 l)
Fuel flow	8.5 US Gal/h (32 l/h)

Oil (15W40)

Max. capacity	8 US Quarts
Min. quantity	5 US Quarts

Tyre pressure

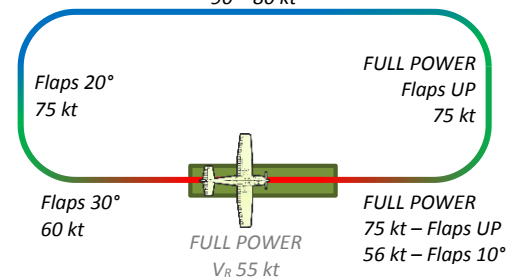
Nose wheel	1.9 bar (28 psi)
Main wheel	2.1 bar (30 psi)

Power settings(Mixture leaned, Temp. ISA)

Pressure Alt. 65 % bhp	75 % bhp
2 000 ft.....	2 350 rpm..... 2 500 rpm
4 000 ft.....	2 400 rpm..... 2 550 rpm
6 000 ft.....	2 450 rpm..... 2 550 rpm
8 000 ft.....	2 500 rpm..... 2 600 rpm
10 000 ft.....	2 500 rpm..... 2 600 rpm (70%)
12 000 ft.....	2 550 rpm (64%)

Circuit (Power, Speed, Configuration)

POWER 1900-2100 rpm
Flaps 10°
90 – 80 kt



Engine:..... Avco Lycoming O-320-D2J (160 hp @ 2 700 rpm)
Electrical system:..... 28 V DC
Battery:..... 24 V DC