Cessna 172 Checklist — **Dayton Aviaton Services, LLC**

PREFLIGHT INSPECTION CABIN

1) A.R.O.W.	LOCATE
2) Hobbs/Tach Time	RECORD
3) Parking Brake	SET
4) Control Wheel Lock	REMOVE; CHECK
5) Ignition Switch	OFF
6) Avionics	OFF
7) Master Switch	ON
8) Fuel	CHECK QUANTITY
9) Flaps	LOWER
10) Lights	CHECK
11) Master Switch	OFF
12) Alternate Static Air	OFF
13) Fuel Selector	BOTH
14) Fuel Sample Bottle	OBTAIN

EXTERIOR INSPECTION

FUSELAGE/EMPENNAGE

1) Body Surface	CHECK
2) Baggage Door	SECURED & LOCKED
3) Control Surfaces	FREE and CORRECT
4) Tail Tie Down	REMOVE

RIGHT WING

1) Flap & Aileron	CHECK
2) Wing	CHECK
3) Wing Tie Down	REMOVE
4) Wheel Assembly	CHECK
5) Fuel	DRAIN
6) Fuel Quantity	CHECK VISUAL
7) Fuel Filler Cap	SECURE

NOSE

1) Cowling	SECURE
2) Oil Quantity	6-7 Qts
3) Fuel Strainer	DRAIN
4) Propeller and Spinner	CHECK
5) Air Inlets	CLEAR
6) Carburetor Air Filter	CHECK
7) Nose Strut and Wheel	CHECK
8) Static Port	CLEAR
9) Windshield	CLEAR

LEFT WING

1) Pitot Tube	REMOVE COVER; CHECK
2) Fuel Tank Vent	CHECK
3) Wing	CHECK
4) Wing Tie Down	REMOVE
5) Flap & Aileron	CHECK
6) Wheel Assembly	CHECK
7) Fuel	DRAIN
8) Fuel Quantity	CHECK VISUAL
9) Fuel Filler Cap	SECURE

BEFORE STARTING ENGINE

1) Exterior Preflight	COMPLETE
2) Brakes	TEST and SET
3) Passenger Briefing	COMPLETE
4) Seats, Belts, Harneses	ADJUST and LOCK
5) Radio Master, Autopilot,	OFF
6) Electrical Equipment	OFF

STARTING ENGINE

1) Fuel Selector Valve	BOTH (or START)
2) Trim Tab	Set for TAKE-OFF
3) Mixture	RICH (below 3000 ft.)
4) Throttle	OPEN 1/8 to 1/4 INCH
5) Carburetor Heat	COLD
6) Rotating Beacon	ON
7) Circuit Breakers	CHECK
8) Ignition Switch	OFF
9) Prime	AS REQUIRED (MAX 2)
10) Master Switch	ON
11) Propeller Area	CLEAR
12) Ignition Switch	START; then release
13) Oil Pressure	CHECK
14) Throttle	ADJUST (800-1000 RPM)

BEFORE TAXI

1) Flaps	RETRACT
2) Mixture	LEAN for Taxi
3) Throttle	1000 RPM
4) Radio Master	ON
5) Transponder	Set to ALT and SQUAWK
6) Radios & Instruments	SET
7) Weather	LISTEN
8) Nav Lights	ON

ENGINE RUN-UP

1) Brakes	SET
2) Flight Controls	FREE and CORRECT
3) Lights	AS REQUIRED
4) Fuel Selector	BOTH (or START)
5) Mixture	RICH (below 3000 ft.)
6) Throttle	1700 RPM
a. Carburetor Heat	CHECK (for RPM drop)
b. Magnetos	CHECK DROP
<125 RPM and <50 RPM difference	
c. Engine Instruments	CHECK
d. Suction Gauge	CHECK
e. Throttle to Idle	CHECK
(then back to 1000 RPM)	

BEFORE TAKE-OFF

1) Friction Lock	ADJUST
2) Flight Instruments and Radios	SET
3) Autopilot (If Installed)	OFF
4) Doors and Windows	CLOSED and LOCKED
5) Seats, Belts, Harness	SECURED

TAKE - OFF

Normal Take-Off

1) Wing Flaps	SET
2) Carburetor Heat	COLD
3) Transponder	ALT and SQUAWK
4) Throttle	1500 RPM
5) Engine Instruments Ammeter, Vacuum	GREEN
6) Throttle	FULL
7) Rotate	52 KTS (60 MPH)
8) Climb Speed	65(75) to 74(85)

Maximum Performance Take-Off

1) Wing Flaps	SET
2) Carburetor Heat	COLD
3) Lights	AS REQUIRED
4) Transponder	ALT and SQUAWK
5) Brakes	APPLY
6) Throttle	1500 RPM
7) Engine Instruments, Ammeter, Vacuum	GREEN
8) Throttle	FULL
9) Rotate	55 KTS (60 MPH)
10) Climb Speed	65(75) to 74(85)

V-SPEEDS	KTS(MPH)
V_R	52 (60)
V_X	59 (68)
V_Y	70(80)
V_{FE}	87(100)
V_A	97(112)
V_{NO}	126(145)
V_{NE}	158(182)
V_{SO}	47(54)
V_{S1}	53(61)

ENROUTE CLIMB

1) Airspeed	70(80) to 78(90)
2) Throttle	FULL
3) Mixture	FULL RICH

CRUISE

1) Power	2200 to 2700 RPM (no more than 75%)
2) Trim	ADJUST
3) Mixture	LEAN

LET-DOWN

1) Mixture	RICH
2) Power	AS DESIRED
3) Carburetor Heat	AS REQUIRED

BEFORE LANDING

1) Fuel Selector	BOTH
2) Mixture	RICH
3) Carburetor Heat	ON
4) Airspeed	60 KTS(70 MPH) to 70(80)
5) Lights	AS REQUIRED
6) Wing Flaps	AS DESIRED
7) Short Final Airspeed	55(65) to 65(75)

BALKED LANDING/ GO AROUND

1) Throttle and Carb Heat	FULL FWD; COLD
2) Wing Flaps	20°
3) Airspeed	55 KTS (65 MPH)
4) Wing Flaps	RETRACT SLOWLY

NORMAL LANDING

1) Touchdown	MAIN WHEELS FIRST
2) Landing Roll	LOWER NOSE GENTLY
3) Braking	MINIMUM REQUIRED

AFTER LANDING

1) Wing Flaps	UP
2) Carburetor Heat	COLD
3) Landing Light	OFF

ENGINE SHUTDOWN & SECURING

1) Avionics Switch	OFF
2) Throttle	1000 RPM
3) Mixture	IDLE CUT-OFF
4) Ignition Switch	OFF
5) Master Switch	OFF
6) Hobbs and Tach	RECORD
7) Control Lock, Belts, Tiedowns	SECURE

EMERGENCY PROCEDURES

ENGINE FAILURE AFTER TAKE-OFF

1) Airspeed	65 KTS (75 MPH)
[flaps DOWN]	61 KTS (70 MPH)
2) Mixture	IDLE CUT-OFF
3) Fuel Selector	OFF
4) Ignition Switch	OFF
5) Wing Flaps	AS REQUIRED (40°)
6) Master Switch	OFF

ENGINE FAILURE DURING FLIGHT

1) BEST GLIDE	70 KTS (80 MPH)
.2) Fuel Selector	BOTH (or START)
3) Mixture	RICH
4) Carburetor Heat	ON
5) Ignition Switch	BOTH (or START)
6) Primer	IN and LOCKED

ENGINE FIRE IN FLIGHT

1) Mixture	IDLE CUT OFF
2) Fuel Selector	OFF
3) Master Switch	OFF
4) Cabin Heat & Air	OFF
5) Airspeed	87KTS (100MPH)
IF NOT EXTINGUISHED, INCREASE GLIDESPEED AND FIND AIRSPEED TO PROVIDE INCOMBUSTBALE MIXTURE	
6) Forced Landing	EXECUTE

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