

Cessna 172 R & S



PREFLIGHT

COCKPIT	
Pitot Tube Cover	REMOVE
Pilots Operating Handbook	AVAILABLE
Wt and Balance	CHECK
Parking Brake	SET
Control Lock	Remove
Ignition Switch	OFF
Avionics Power	OFF
Master switch	ON
Fuel gauges	CHECK
Fuel annunciators	CHECK OFF
Avionics Power	ON
Avionics Cooling Fan	AUDIBLE
Avionics Power	OFF
Alternate Static	OFF
Annunciator Panel	TEST
Fuel Selector	BOTH
Fuel Shutoff	ON
Flaps	EXTEND
Pitot Heat	ON - CHECK
Pitot Heat	OFF
Master switch	OFF
Elevator Trim Tab	TAKEOFF
Baggage Door	CHECK
Autopilot static source	CHECK

EMPENNAGE	
Rudder Gust Lock	REMOVE
Tail Tiedown	REMOVE
Control Surfaces	CHECK
Elevator Trim Tab	CHECK
Antennas	CHECK

RIGHT WING	
Aileron	CHECK
Flap	CHECK

PREFLIGHT (CONT.)	
RIGHT WING cont.	
Wing Tiedown	REMOVE
Main Wheel / Tire	CHECK
Fuel sump(s)	DRAIN
Fuel Quantity	CHECK VISUALLY
Fuel Filler Cap	SECURE

NOSE/POWERPLANT	
Fuel Strainer	DRAIN
Engine Oil Dipstick	CHECK
Cowling Inlets	CHECK
Propellor & Spinner	CHECK
Air Filter	CHECK
Exhaust Stack	CHECK
Alternator Belt	CHECK
Nosewheel Strut and Tire	CHECK
Static Source Opening	CHECK

LEFT WING	
Leading Edge	CHECK
Fuel Quantity	CHECK VISUALLY
Fuel Filler Cap	SECURE
Fuel sump(s)	DRAIN
Main Wheel / Tire	CHECK
Fuel Vent	CHECK
Pitot Tube	CHECK
Stall Warning	CHECK
Wing Tiedown	REMOVE
Landing/Taxi Lights	CHECK
Aileron	CHECK
Flap	CHECK

BEFORE STARTING ENGINE	
Preflight Inspection	COMPLETE
Passenger Briefing	COMPLETE
Seats / Seatbelts	ADJUSTED/LOCKED
Brakes	TEST & SET
Circuit Breakers	CHECK IN
Electrical Equipment	OFF
Avionics	OFF
Fuel Selector	BOTH
Fuel shutoff Valve	ON
Avionics circuit Breakers	CHECK IN

STARTING ENGINE	
Throttle Control	Open 1/4 inch
Mixture	Idle/Cutoff
Propellor area	"Clear"
Master Switch	ON
Beacon	ON
Aux Fuel Pump	ON
Mixture Control	RICH until 5 gpm
Mixture Control	Idle/Cutoff
Aux Fuel Pump	OFF
Ignition Switch	START
Mixture	Advance at start
Oil Pressure	GREEN ARC
Navigation Lights	ON
Avionics Power	ON
Radios	ON
Flaps	RETRACT

FREQUENCIES	
UNITED FLIGHT	123.5
HOOKS UNICOM	122.95
HOOKS ATIS	128.375
HOOKS GROUND	121.8
HOOKS TOWER	118.4
APPROACH	123.80 / 124.35
FLIGHT SERVICE	122.4

BEFORE TAXI	
Radios	SET
Transponder	ALTITUDE
Instruments	CHECK / SET
Area	CLEAR
Brakes	RELEASE / TEST

TAXI	
Taxi Light	OFF
Flight Controls	AS NEEDED
Compass	FLUID / HEADINGS
6 Flight Instruments	SET / CHECK
Coms / Navs	CHECK OPS

BEFORE TAKEOFF	
Parking Brake	SET
Seatbacks	MOST UPRIGHT
Seats/Seatbelts	CHECK SECURE

BEFORE TAKEOFF (CONT.)	
Doors / Windows	CLOSED
Flight Controls	FREE/CORRECT
Flight Instruments	CHECK SET
Fuel Quantity	CHECK
Mixture Control	RICH
Fuel Selector	RECHECK BOTH
Throttle	1800 RPM
Magnetos	CHECK
Suction	CHECK
Instruments / Ammeter	CHECK
Annunciator Panel	NO LIGHTS
Throttle	IDLE
Throttle	1000 RPM or LESS
**VERIFY SMOOTH ENGINE AT 575-625 RPM	
Throttle Lock	ADJUST
Strobes	AS DESIRED
Radios & Avionics	SET
NAV / GPS switch	SET
Auopilot	OFF
Trim	TAKEOFF
Flaps	SET FOR TAKEOFF
Brakes	RELEASE
Approach Path	VISUALLY CLEAR
Transponder	ALTITUDE
Takeoff Briefing - Emerg. Procedures	
Line Up Check	"THAT'S"

TAKEOFF	
--- NORMAL ---	
Flaps	0 DEGREES
Throttle Control	FULL
Mixture	RICH
Engine Instruments	GREEN ARC
Rotate	55 KIAS
Climb	70 - 80 KIAS
Flaps	RETRACT
--- SHORT FIELD---	
Flaps	10 DEGREES
Brakes	APPLY
Throttle Control	FULL
Mixture Control	RICH
Brakes	RELEASE
Elevator	SLIGHT TAIL LOW
Rotate - Clear Obstacle	57 KIAS
Flaps (Above 60 KIAS)	RETRACT

CRUISE CLIMB	
Airspeed	70 - 85 KIAS
Throttle	FULL OPEN
Mixture Control	LEAN AS REQUIRED

CRUISE	
Power	2000 - 2400 RPM
Elevator and Rudder	ADJUST
Mixture	LEAN

DESCENT	
Power	AS NEEDED
Mixture	ADJUST
Altimeter	SET
Nav / GPS switch	SET
Fuel Valve	BOTH
Flaps	AS NEEDED

BEFORE LANDING	
Seatbacks	MOST UPRIGHT
Seals/Seatbelts	CHECK SECURE
Fuel Valve	BOTH
Mixture control	RICH
Landing/Taxi Lights	ON
Autopilot	OFF
GUMPS C	COMPLETE

LANDING	
--- NORMAL ---	
Airspeed (flaps up)	65- 75 KIAS
Flaps	AS REQUIRED
Airspeed (flaps down)	60 - 70 KIAS
Touchdown	MAINS FIRST
Landing Roll	Lower Nose Gently
Braking	Minimum required

--- SHORT FIELD ---	
Airspeed (Flaps Up)	65 - 75 KIAS
Flaps	30 DEGREES
Airspeed (until flare)	62 KIAS
Power (after obstac.)	IDLE
Touchdown	MAINS FIRST
Braking	MAXIMUM
Flaps	RETRACT

LANDING (CONT.)	
---GO AROUND ---	
Throttle control	FULL
Flaps	TO 20 DEGREES
Climb speed	65 KIAS
Flaps	10 DEGREES
Obstacle	CLEAR
Flaps	RETRACT

AFTER LANDING (off active runway)	
Flaps	RETRACTED
Transponder	STANDBY
Lights	AS NEEDED
Mixture	LEAN FOR TAXI

SHUTDOWN	
Parking Brake	SET
Electrics	OFF
Avionics	OFF
Mixture Control	IDLE CUTOFF
Ignition Switch	OFF
Master Switch	OFF
Control Lock	INSTALL
Fuel Selector	LEFT OR RIGHT
Hobbs / Tach	RECORD
Tiedowns	SECURE

FREQUENCIES	
UNITED FLIGHT	123.5
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HOOKS ATIS	128.375
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ENGINE FAILURES	
--- TAKEOFF RUN ---	
Throttle control	IDLE
Brakes	APPLY
Flaps	VERIFY / RETRACT
Mixture	CUTOFF
Ignition	OFF
Master	OFF
---CLIMBOUT ---	
Airspeed (Flaps Up)	65 KIAS
Airspeed (Flaps Dn)	60 KIAS
Mixture	CUTOFF
Fuel Valve	OFF
Throttle control	IDLE
Ignition switch	OFF
Flaps	AS REQUIRED
Master	OFF
Cabin Door	UNLATCH
Land	STRAIGHT AHEAD

INFLIGHT RESTART	
Airspeed	65 KIAS
SELECT FIELD	FLY TO IT
Fuel Shutoff	ON
Fuel Valve	BOTH
Aux. Fuel Pump	ON
Mixture	RICH
Ignition	
Prop Turning	CYCLE / BOTH
Prop Stopped	START
Aux. Fuel Pump	OFF

V SPEEDS		
	R	S
Vso	33	40
Vs	44	48
Vx	60	62
Vg	66	68
Vy	79	74
Vfe	85	85
Va	92 - 99	90 - 105
Vno	129	129
Vne	163	163

FORCED LANDING	
Seat Backs	Most Upright
Seatbelts	Secure
Airspeed (Flaps UP)	65 KIAS
Airspeed (Flaps down)	60 KIAS
Transponder	SQUAWK 7700
Radios (transmit MAYDAY)	121.5
Mixture	IDLE CUTOFF
Fuel Valve	OFF
Ignition	OFF
Wing Flaps	AS REQUIRED
Master Switch	
when landing is assured	OFF
Doors (prior to touchdown)	UNLATCH
Touchdown	SLIGHTLY TAIL LOW
Brakes	APPLY HEAVILY

NOTES: