

# PREFLIGHT

## PREPARATION

Covers/Plugs/Tiedowns/Streamers... Remove  
Windshield... Check/Clean

Note: Use only clean microfiber towels on glass

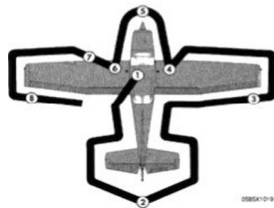
## INTERIOR

Control Lock... Remove  
Avionics Master Switch... OFF  
Master Switch (BAT only)... ON  
Fuel Selector Valve... BOTH  
Fuel Shutoff Valve... IN  
Flaps... Extend  
Alt Static Source Valve... OFF  
Ignition Key... Out  
G3X Database... Check/Continue  
EIS Tape... Touch for Engine Page  
Tach (Engine Hours)... Check/Record  
Hobbs (Total Hours)... Check/Record  
Ext. Lights/Pitot & Heat/Stall Horn... Check  
Master Switch (BAT)... OFF

## EXTERIOR

Static Port (left side)... Check  
Empennage... Check  
Control Surfaces... Check free and secure  
Static Port (right side)... Check  
Rt. Tire/Brake... Check inflation/wear

Rt. Flap/Aileron... Check secure/condition  
Fuel Tank Vent... Check clear  
Fuel Sumps... Drain & Inspect  
Fuel & Filler Cap... Check qty & Secure  
Oil Dipstick... Check (5-8 qts & condition)  
Engine Cooling Inlets... Clear  
Prop, Spinner... Check (nicks, secure, leaks)  
Air Filter... Check for restrictions  
Nose Strut & Tire... Check (inflation/condition)  
Static Port (left fwd) ... Check  
Left Wing... Same as right



# BEFORE STARTING ENGINE

Pre-Flight Inspection... Complete  
Seats/Belts/Harnesses... ON  
Fuel Selector... BOTH  
Fuel Shutoff Valve... IN  
Circuit Breakers... Checked IN  
Electrical Equipment (except BCN)... OFF  
Brakes... Parking Brake OFF / Brakes Hold

# STARTING ENGINE

Master Switch (BAT only)... ON  
Mixture... IDLE CUTOFF

Throttle... OPEN 1/4"  
EIS Tape... Touch for Engine Page

### Cold Engine

Fuel Pump... ON  
Mixture... RICH 3-5 sec. (note FF) then IDLE  
Fuel Pump ... OFF  
Propeller Area... "CLEAR"  
Ignition Switch... START  
*when engine fires:*  
MIXTURE... Smoothly move to RICH

### Warm Engine

Ignition Switch... START  
*when engine fires:*  
MIXTURE... Smoothly move to RICH

### Flooded Engine

Fuel Pump... OFF  
Mixture... IDLE CUTOFF  
Throttle ... MID position  
Ignition Switch... START  
*when engine fires:*  
MIXTURE... Promptly move to RICH  
Throttle... Promptly close to 1000 RPM

Master Switch (ALT)... ON  
Oil Pressure... Check  
Ammeter... Check  
Voltage... Check  
Mixture... (Consider) LEAN  
Flaps... UP  
Avionics Master... ON  
GTN Database... Check/Continue  
HSI NAV Source... Verify "GPS1"

Fuel Calc... Touch to check/set fuel QTY  
[Noise Canceling/Flightstream... ON/Pair]

# BEFORE TAXI

Weather... Obtain  
G3X, GTN, COM... Set and check  
Exterior lights... As required  
Brakes... Roll forward/Test

# BEFORE TAKEOFF

- Autopilot... Engage
- Flight Controls... Check Resistance
- Autopilot DISC Button... Press
- Flight Director (FD)... OFF

Flight Controls... Free & Correct  
Fuel Selector... BOTH  
Mixture... RICH

- Throttle... 1800 RPM
- Magneto Check... (150 max drop/50 diff)
- Eng. Instruments... Check all
- Throttle... Check IDLE, then 1000 RPM

### \*Before Lineup Items\*

Elevator Trim... Set for Takeoff  
Flaps... Set for Takeoff  
G3X, GTN, COM, FD... As required  
Throttle Friction Lock... Adjust  
Lights... As required  
Mixture... RICH  
Cabin Doors & Windows... Closed & Locked

**NORMAL TAKEOFF**

Flaps..... 0° - 10°  
 Throttle..... Full OPEN  
 Elevator..... Lift nose at 55KTS  
 Climb Spd. .70kts(Flaps 10) 80kts(Flaps UP)  
 Flaps.....Retract

**SHORT FIELD TAKEOFF**

Flaps..... .10°  
 Brakes..... .Apply  
 Throttle..... Full OPEN  
 Brakes..... .Release  
 Elevator..... Slightly Tail low  
 Climb Spd... .56 KTS (until clear of obstacles)  
 Flaps.....Retract slowly >60KTS

**CLIMB**

Flaps..... UP  
 Throttle..... Full OPEN  
 Airspeed (clear of obstacles)..... 80KTS  
 Mixture in Climb....RICH<3000', LEAN above

**CRUISE**

Power..... .Set for Cruise  
 Mixture..... .LEAN  
 Lights..... .As required

	RPM	Pitch	Airspeed	VSI	Flaps
Cruise Climb	2,600	10°	80	750	0°
Level Approach	2,100	2°	90	0	10°
Precision Approach Descent	1,900	-2°	90	-500	10°
Non-Precision Approach Descent	1,600	-4°	90	-800	10°
Vy Climb	2,600	12°	74	800	0°

**DESCENT**

Mixture..... .Enrich as required  
 Flaps..... .As required  
 <110KTS = 10°  
 <85KTS = 10° - 30°

**BEFORE LANDING**

Seats and Harnesses..... .Check secure  
 Fuel Selector..... BOTH  
 Mixture..... RICH  
 Landing Light..... ON

**NORMAL LANDING**

Flaps..... 10° (<110KTS), 10°-30° (<85KTS)  
 Airspeed (Flaps UP)..... 65-75KTS  
 Airspeed (Flaps DOWN)..... 60-70KTS

**SHORT-FIELD LANDING**

Flaps..... .30° (<85KTS)  
 Airspeed..... .61KTS  
 Power..... .IDLE after clearing obstacles

**GO AROUND**

Throttle..... Full OPEN  
 Flaps..... Retract to 20°  
 Climb Spd..... 60KTS (until obstacles cleared)  
 Flaps...Retract slowly after 65KTS & Safe alt.

**AFTER LANDING**

Flaps..... UP  
 Mixture..... (Consider) LEAN  
 Lights..... As required

**SHUTDOWN-SECURING**

Parking Brake..... .Only if required  
 Electrical Equipment (except BCN)..... OFF  
 Avionics Master Switch..... OFF  
 Mixture..... IDLE CUT OFF  
 Ignition Switch..... OFF (remove key)  
 EIS Tape..... Touch for Engine Page  
 Tach (Engine Hours)..... .Check/Record  
 Hobbs (Total Hours)..... .Check/Record  
 Master Switch..... OFF  
 Fuel Selector Valve..... LEFT or RIGHT  
 Control Lock..... Install

- \*Blue Book
- \*Personal items, Tie-Downs, Chocks & Cover
- \*Blue Sky Credit Card – IN GLOVE BOX
- \*Do you need to CLOSE FLIGHT PLAN?

**CESSNA C-172S**

Engine..... Textron Lycoming  
 360-L2A 180 HP 4cyl.  
 Wingspan..... 36'1"  
 Length..... 27'2"  
 Height..... 8'11"  
 Fuel..... .2 x 28GAL (53GAL usable)  
 Oil..... .5-8QTS (12QTS capacity)

**WEIGHTS**

Max Ramp..... 2558LBS  
 Max T/O..... 2550LBS  
 Max LDG..... 2550LBS  
 Max Baggage..... 120LBS (areas2 =50LBS)

**SPEEDS**

Va..... 105-90KTS (2550-1900LBS)  
 Vfe..... 10°=110KTS, 30°=85KTS  
 Vno..... 129KTS  
 Vne..... 163KTS  
 Vy..... 74KTS  
 Vx..... 62KTS  
 Best Glide [Flaps UP] ..... 68KTS – 2550LBS  
 Max Dem'strd X-wind..... 15KTS

**LIMITATIONS**

Service ceiling..... 12,000'  
 No aerobatics, spins, bank >60°, pitch >30°  
 Fuel..... T/O and LDG w fuel sel in BOTH  
 LEFT or RIGHT=Level Flight only  
 Baggage.... 120LBS (120LBS fwd, 50LBS aft)  
 Flaps..... .T/O: 0°-10°, LDG: 0°-30°  
 Pre-Heat Temp..... 32°F (2hrs prior)