

## Pro Flite Aviation

## Cessna 172 SP

## For Reference Only

## Refer to Approved POH

### Cabin Preflight

Aircraft Doc (ARROW)	Check
Control Wheel Lock	Remove
Hobbs/Tach	Record
Ignition	Off
Avionics Master	Off
Master Switch	On
Fuel Quantity	Check
Pitot Heat	Check
Avionics Master	On
Avionics Cooling Fan	Audible
Avionics Master	Off
Alt Static Source	Check
Annunciators	Test
Flaps	Down
Master Switch	Off

### Fuselage & Empennage

Baggage Door	Locked
Tail Tie-Down	Disconnect
Control Surfaces	Check
Trim Tab	Check
Antennas	Check

### Right Wing

Flaps	Secure
Aileron	Secure
Wing Lights	Check
Wing Tie-Down	Disconnect
Main Wheel/Brakes	Check
Fuel Sump	Sample
Fuel Quantity	Verify
Fuel Cap	Secure

### Nose

Windscreen	Clean
Engine Oil 6-8	Check
Fuel Strainers	Check
Propeller & Spinner	Check
Alternator Belt	Check
Air Intake	Check
Air Filter	Check
Nose Strut/Wheel	Check
Static Source	Check

### Left Wing

Main Wheel/Brakes	Check
Fuel Sump	Sample
Fuel Quantity	Verify
Fuel Cap	Secure
Pitot Tube	Check
Fuel Vent	Check
Stall Warning	Check
Landing Light	Check
Wing Tie-down	Disconnect
Wing Lights	Check
Aileron	Secure
Flaps	Secure

### Before Starting Engine

Preflight Inspection	Complete
Passenger Briefing	Complete
Seat/Seat Belts	Secure
Doors	Closed & Locked
Brakes	Test & Set
Circuit Breakers	Check In
Avionic Master	Off
Fuel Selector Valve	Both
Fuel Shutoff Valve	On

### Fire on Start Procedure

Cranking	Continue
<u>If engine starts:</u>	
Power	1800 RPM
Engine	Shutdown & Inspect
<u>If engine fails to start:</u>	
Throttle	Full Open
Mixture	Idle Cut Off
Fuel Shut Off Valve	Off
Master Switch	Off
Ignition Switch	Off

### Starting Engine

Master Switch	On
Beacon	On
Throttle	1/4 Inch
Boost Pump	On
Mixture	rich 5 sec then cut off
Boost Pump	Off
Propeller	Clear
Ignition	Start
Mixture	rich when engine fires
Oil Pressure	Green
Ammeter	Check

### After Start / Before Taxi

Mixture	Ground Lean
Avionics Master	On
Flaps	Up
ATIS	Obtain
Clearance	Obtain
Instruments	Set
Radios	Test & Set

### Taxi

Clearance	Obtain
Brakes	Test
Flight Inst.	Check

### Before Takeoff

Brakes	Set
Doors	Locked
Flight Controls	Free & Correct
Flight Instruments	Recheck
Fuel Quantity	Recheck
Fuel Selector Valve	Both
Trim	Takeoff
Mixture	Rich
Engine Temp	Min. for Run Up
Throttle	1800 RPM
Magnetos	Check
Vacuum	Check
Engine Instrument	Green
Annunciators	Check
Ammeter	Check
Throttle	1000 RPM
Radios	Set
Transponder	ALT
Lights	As Desired
Takeoff Briefing	Complete

### Takeoff

Flaps	0-10°
Throttle	Full
Mixture	Rich
Engine Gauges	Green
Rotate	55 KIAS
Climb	74 KIAS
Flaps	Retract

### Climb

Airspeed	70-85 KIAS
Throttle	Full
Mixture	Rich Below 3000 Ft

### Cruise

Pitch	Set
Throttle	2100-2700 RPM
Trim	Set
Mixture	Lean

### Descent / Approach

Fuel Selector Valve	Both
Mixture	Adjust
Power	As Desired
ATIS	Obtain
Flight Instruments	Set
Radios	Set
Approach	Briefed
Lights	As Required

### Landing

Autopilot	Off
Fuel Selector	Both
Mixture	Rich
Flaps	As Required
Airspeed	65 KIAS
Braking	Minimum

### After Landing

Flaps	Up
Mixture	Ground Lean
Transponder	STBY
Lights	As Required

### Securing Aircraft

Avionics Master	Off
Throttle	Idle
Mixture	Idle Cut Off
Ignition	Off
Master Switch	Off
Control Lock	Install
Pitot Cover	Install
Hobbs/Tach	Record

## Pro Flite Aviation

### Short Field Takeoff

Before Takeoff Checklist	Complete
Flaps	10°
Taxi	Max Runway
Brakes	Hold
Throttle	Full
Engine Gauges	Green
Brakes	Release
Climb	56 KIAS
Obstacle	Cleared
Accelerate	74 KIAS
Flaps	Retract

### Short Field Landing

Approach	61 KIAS
Flaps	Full
Throttle	Maintain Glide
Touchdown	Power Off
Flaps	Up
Elevator	Full Aft
Braking	Heavy as Required

### Soft Field Takeoff

Before Takeoff Check	Complete
Flaps	10°
Taxi	Keep Rolling
Rotate	In Ground Effect
Climb	56 KIAS
Accelerate	74 KIAS
Flaps	Retract

### Soft Field Landing

Approach	61 KIAS
Flaps	Full
Throttle	Above Idle
Touchdown	Softly
Elevator	Hold Hose Wheel Up
Braking	Minimum

### Go-Around

Throttle	Full
Flaps	20°
Climb	60 KIAS
Flaps	10°
Climb	65 KIAS
Flap	UP
Climb	74 KIAS

## Cessna 172 SP

### V-Speeds (KIAS)

Stall Dirty	Vso	40
Stall Clean	Vs	48
Rotate	Vr	55
Best Angle	Vx	62
Best Rate	Vy	74
Maneuvering	Va	105
Flaps	Vfe	85
Normal Max	Vno	129
Never Exceed	Vne	163
Max Glide	L/D max	68
Final Approach	Flaps	60-70
	No Flaps	65-75

### Cruise Performance

#### Best Power Mixture

ALT	RPM	%HP	TAS	GPH
2000	2550	77	118	10.5
	2400	65	110	9.0
	2300	55	104	8.1
4000	2600	77	120	10.4
	2500	69	115	9.5
	2300	55	102	7.7
6000	2650	77	122	10.4
	2500	65	114	9.0
	2400	57	108	8.2
8000	2700	77	124	10.4
	2600	68	119	9.4
	2400	55	106	7.8
10000	2700	72	123	9.8
	2600	65	117	9.0
	2500	57	111	8.2

## For Reference Only

### Emergency Procedures

#### Engine Failure During Takeoff

Throttle	Idle
Brakes	Apply
Flaps	Retract
Mixture	Idle Cut Off
Ignition	Off
Master Switch	Off

#### Engine Failure After Takeoff

Airspeed	68 KIAS
Mixture	Idle Cut Off
Fuel Shutoff Valve	Off
Ignition	Off
Flaps	As Required
Master Switch	Off
Cabin Doors	Unlatched
Land	Straight Ahead

#### Engine Failure During Flight

Airspeed	68 KIAS
Landing Site	Selected
Fuel Selector	Both
Fuel Shutoff Valve	On
Mixture	Rich
Aux Fuel Pump	On
Ignition	Both
Primer	Locked

#### Forced Landing

Airspeed	68 KIAS
Fuel Shutoff Valve	On
Mixture	Idle Cut Off
Ignition	Off
Squawk	7700
Transmit	121.5
Flaps	As Required
Master Switch	Off
Cabin Doors	Unlatched
Touchdown	Tail Low

#### Engine Roughness

Magnetos	Check
Mixture	Adjust

## Refer to Approved POH

### Emergency Procedures

#### Engine Fire During Flight

Mixture	Idle Cut Off
Fuel Selector	Off
Master Switch	Off
Cabin Air / Heat	Off
Airspeed	100 KIAS
Proceed to Forced Landing Check	

#### Electrical Failure

Ammeter	Verify
Alternator	Off
Reduce load to Minimum	
Circuit Breakers	Check & Reset
Alternator	On
If power is not restored	
Alternator Off	Land As soon as Practical

#### Electrical Overload

Master Switch	Off
Master Switch	On
Over-Voltage Light	Off
Or Terminate Flight ASAP	

#### ATC Light Signals

Signal	Ground	Flight
Steady Green	Takeoff	Land
Flashing Green	Taxi	Return to Land
Steady Red	Stop	Give way
Flashing Red	Clear Runway	Do Not Land
Flashing White	Return to Ramp	
Red Green Alternating	Use Caution	