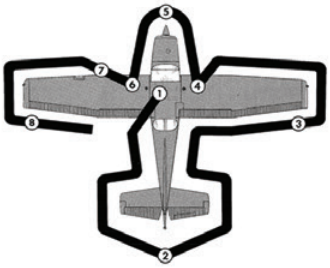
Cessna 172SP

Normal Procedures

SPARTAN FLIGHT ACADEMY

Initial

Required Docs	A.R.O.W.
Control Lock	Remove
Hobbs / Tach Times	Verify
Fuel Selector	Both
Fuel Shutoff	ON
Trim	Takeoff
Mixture	Idle Cutoff
Throttle	Closed
Magnetos	OFF
Avionics (Bus 1 and 2)	OFF
Master (ALT and BAT)	ON
Fuel Qty (L and R)	Check
Low Fuel Annunciators	Verify OFF
Avionics (1 & 2)	Check fans individually
Avionics Master Switch	OFF
Alternate Static Source	Test, then OFF
Flaps	Extend Full
All Light Switches	ON
Pitot Heat	ON
All Lights, Pitot Heat	Check Operation
All Light Switches	OFF
Pitot Heat	OFF
Master Switch	OFF
Fire Extinguisher	Check



Exterior

Fuel Quantity	Check
Fuel Quality	Check
Caps/Drains/Vents	Check
Oil	6-8 Quarts
Prop/Air Intake	Check
Exhaust System	Check
Surfaces and Controls	Check, No Damage
Pitot & Static Ports	Clear
Gear/Tires/Brakes	Check
Antennas	Check, No Damage
Stall Indicator	Clear
Ties/Chocks	Remove
Baggage Door	Closed
Final Walk Around	Complete

Before Start

Seatbelts	ON
Doors	Closed and Latched
Passenger Briefing	S.A.F.E.T.Y.
Circuit Breakers	Checked In
Electrical Equipment	OFF
Avionics	OFF
Brakes	Set

Starting Engine

Throttle	Open ¼ Inch
Mixture	Idle Cutoff
Master (ALT and BAT)	ON
Beacon	ON

Cold Start

Fuel Pump	ON
Mixture	RICH 3-5 Seconds
Mixture	Idle Cutoff
Fuel Pump	OFF

Flooded Start

Throttle	Full Open

Prop Area	Clear
Magnetos	Start
Mixture	RICH
Throttle	1000 RPM
Oil Pressure	Check
Ammeter	Verify Charge
Avionics	ON
Annunciators	Check None Shown
Nav Lights	As Required
Mixture	Lean for Taxi
Flaps	Up

Pre-Taxi

ATIS/AWOS	Listen
Altimeter	Set
Attitude Indicator	Set
Heading Indicator	Set to Compass
Taxi Light	ON
Brakes	Test

This checklist is not intended to replace procedures found in the Pilot's Operating Handbook. Always consult the POH in an emergnecy.

Run Up

Brakes.....Set
Flight Controls.....Free & Correct
Instruments.....Check
Autopilot.....Engage
Flight Controls.....Check (Overpower AP)
Autopilot.....Disengage
Manual Electric Trim.....Test
Trim.....Takeoff
Mixture.....Rich
Fuel Selector Valve.....Both
Throttle.....1800 RPM
Magnetos.....Check L & R (Max 150, max difference 50)
Vacuum.....Check
Engine Gauges.....Check
Amps / Volts.....Check
Annunciators.....Check None Shown
Throttle.....Check Idle
Throttle.....1000 RPM
Throttle Control Friction.....Set
Heading Bug.....Set
COM/NAV.....Set
Transponder.....Set
Takeoff Briefing.....Complete

Pre-Takeoff

Flaps.....0-10
Mixture.....Rich
Pitot Heat.....As Required
Doors/Windows.....Closed
Transponder.....Set
Strobes.....ON
Landing Light.....ON
Time.....Note

Takeoff

Throttle.....Full
Rotate.....55 KIAS
Climb.....70-80 KIAS
Flaps.....Up

Climb

Airspeed.....70-85 KIAS
Throttle.....Full
Mixture.....Rich
Taxi/Landing Light.....OFF

Cruise

Power.....Set
Mixture.....Lean
Instruments.....Check

Descent

Fuel Selector.....Both
Power.....Set
Mixture.....Adjust as needed
ATIS/AWOS.....Listen
Altimeter.....Set

Before Landing

Seatbelts.....ON
Fuel Selector.....Both
Mixture.....Rich
Landing Light.....ON
Autopilot.....OFF

After Landing

Flaps.....Up
Mixture.....Lean for Taxi
Trim.....Takeoff
Landing Light.....OFF
Strobes.....OFF
Taxi Light.....ON
Pitot Heat.....OFF

Securing

Transponder.....1200
Electrical Equipment.....OFF
Avionics.....OFF
Throttle.....Idle
Mixture.....Idle Cutoff
Magnetos.....OFF
Master.....OFF
Hobbs / Tach Times.....Record
Control Lock.....Install
Fuel Selector.....Left or Right

V Speeds

Vr....55
Vx....62
Vy....74
Vfe....85
Best Glide 68

Grand Prairie Airport VRF Departure/Arrival Procedures

Outbound Traffic 2,500 MSL
Inbound Traffic 2,000 MSL
Traffic Pattern All: 1,400 MSL
RWY 35: Rgt tfc RWY 17: Lft tfc

KGPM Tower: 128.55
GROUND: 121.15

Cessna 172SP

EMERGENCY PROCEDURES

SPARTAN FLIGHT ACADEMY

ENGINE FAILURES

ENGINE FAILURE DURING TAKEOFF ROLL

Throttle.....**Idle**
Brakes.....**Apply**
Flaps.....Retract
Mixture.....Idle Cutoff
Magnetos.....Off
Master (ALT and BAT).....Off

ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

A - Airspeed.....**70 KIAS (with flaps up)**
65 KIAS (flaps 10-Full)
B - Best place to land.....Straight or within 30°
C - Configure
- Mixture.....Idle Cutoff
- Fuel Shutoff Valve.....Off (pull full out)
- Magnetos.....Off
- Flaps.....As Required
- Master (ALT and BAT).....Off
- Cabin Door.....Unlatch

ENGINE FAILURE DURING FLIGHT

A - Airspeed.....**68 KIAS (with flaps up)**
B - Best place to land.....**Pilot's Discretion**
C – Configure
- **Fuel Selector**.....**Both**
- **Fuel Shutoff Valve**.....**On (full in)**
- **Mixture**.....**Rich**
- **Fuel Pump**.....**On**
- Magnetos.....L-R-Both
- Engine Instruments.....Check

D – Declare Emergency
- Squawk.....7700
- Contact.....ATC or 121.5

Proceed to Forced Landing

FORCED LANDINGS

FORCED LANDING WITHOUT ENGINE POWER

Seats/Seatbelts.....Upright/Secure
Airspeed.....70 KIAS (with flaps up)
65 KIAS (flaps 10-Full)
Mixture.....Idle Cutoff
Fuel Shutoff Valve.....Off (pull full out)
Magnetos.....Off
Flaps.....As Required
Master (ALT and BAT).....Off (when landing assured)
Doors.....Unlatch
Touchdown.....Slightly Tail Low
Brakes.....Apply

PRECAUTIONARY LANDING WITH POWER

Seats/Seatbelts.....Upright/Secure
Airspeed.....65 KIAS
Flaps.....20
Selected Field.....Fly Over (noting terrain)
Avionics and Electrical Equipment.....Off
Flaps.....Full (on final approach)
Airspeed.....65 KIAS
Master (ALT and BAT).....Off (when landing assured)
Doors.....Unlatch
Touchdown.....Slightly Tail Low
Mixture.....Idle Cutoff
Magnetos.....Off
Brakes.....Apply

DITCHING

Radio.....121.5
Transponder.....7700
Seats/Seatbelts.....Secure
Flaps.....20-Full
Power.....300 ft/min descent at 55 KIAS
If No Power.....70 KIAS (Flaps Up) / 65 KIAS (Flaps 10)
Approach
- High Winds / Heavy Seas.....Into Wind
- Light Winds / Heavy Swells.....Parallel to Swells

Doors.....Unlatch
Touchdown.....Level Attitude
Face Cushion at Touchdown
ELT.....Activate
Airplane.....Evacuate Through Cabin Doors

FIRES

DURING START ON GROUND

Magnetos.....**Start (Continue Cranking)**

IF ENGINE STARTS

Power.....1800 RPM (for a few minutes)
Engine.....Shutdown (inspect for damage)

IF ENGINE FAILS TO START

Throttle.....**Full Open**
Mixture.....**Idle Cutoff**
Magnetos.....**Start (Continue Cranking)**
Fuel Shutoff Valve.....**Off (pull full out)**
Fuel Pump.....**Off**
Fire Extinguisher.....Obtain
Master (ALT and BAT).....Off
Magnetos.....Off
Parking Brake.....Release
Airplane.....Evacuate
Fire.....Extinguish

Fires Continued
On Reverse Side

FIRES CON'T

ENGINE FIRE IN FLIGHT

Mixture.....Idle Cutoff
Fuel Shutoff Valve.....Off
Fuel Pump.....Off
Master (ALT and BAT).....Off
Cabin Vents.....Open (as needed)
Cabin Heat / Air.....Off (push full in)
Airspeed.....100 KIAS

If fire not extinguished, increase airspeed, within limitations, to create incombustible mixture

Forced Landing.....Execute

ELECTRICAL FIRE IN FLIGHT

Master (ALT and BAT).....Off
Cabin Vents.....Closed
Cabin Heat / Air.....Off (push full in)
Fire Extinguisher.....Activate
Avionics.....Off
All Other Switches (except Magnetos).....Off

ONCE FIRE IS EXTINGUISHED

Cabin Vents.....Open
Cabin Heat / Air.....On (pull full out)

IF ELECTRICAL POWER NECESSARY

Master (ALT and BAT).....On
Circuit Breakers.....Check (Do not reset)
Radio Switches.....Off
Avionics Bus 1.....On
Avionics Bus 2.....On
Radio/Electrical Switches.....On (one at a time)

CABIN FIRE

Master (ALT and BAT).....Off
Cabin Vents.....Closed
Cabin Heat / Air.....Off (push full in)
Fire Extinguisher.....Activate

ONCE FIRE IS EXTINGUISHED

Cabin Vents.....Open
Cabin Heat / Air.....On (pull full out)
Land.....As soon as possible

WING FIRE

Landing / Taxi Lights.....Off
Nav Lights.....Off
Strobes.....Off
Pitot Heat.....Off
Sideslip (using rudder pedal on same side as fire)
Land as soon as possible, flaps only as required

NOTICE:

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ELECTRICAL FAILURES

AMMETER EXCESSIVE RATE OF CHARGE

Master (ALT Only).....Off
Nonessential Electrical Equipment.....Off
Land.....As Soon as Practical

LOW VOLTS ANNUNCIATOR IN FLIGHT

Avionics.....Off
Alternator Circuit Breaker.....Check In
Master Switch.....Off
Master Switch.....On
Low Volts Annunciator.....Check Off
Avionics.....On

IF LOW VOLTS ANNUNCIATOR REMAINS ON

Alternator.....Off
Nonessential Electrical Equipment.....Off
Land.....As Soon as Practical

OTHER EMERGENCIES

LANDING WITH A FLAT NOSE TIRE

Approach.....Normal
Flaps.....As Required
Touchdown.....On Mains
Hold nosewheel off ground as long as possible
When nosewheel touches.....Maintain full up elevator

LANDING WITH A FLAT MAIN TIRE

Approach.....Normal
Flaps.....Full
Touchdown.....Good main tire first
Hold airplane off flat tire as long as possible w/ aileron
Directional Control.....Maintain
(Using brake on good wheel as required)

INADVERTENT ICING DURING FLIGHT

Pitot Heat.....On
Exit Icing Conditions ASAP
Cabin HT.....On (pull full out)
Defroster.....On
Cabin Air.....Adjust for max airflow

STATIC SOURCE BLOCKAGE

ALT Static Air.....On
Cabin Vents.....Closed
Cabin HT and Air.....On

EXCESSIVE FUEL VAPOR

Fuel Pump.....On
Mixture.....Adjust (as necessary for smooth engine)
Fuel Selector.....Select Opposite Tank
Fuel Pump.....Off (Once fuel flow is stable)