

C-172N OPERATING INFORMATION

Airspeed Limitations:

	Speed Name/Remarks	Indicated Airspeed	
		Knots	MPH
V_{NE}	Never Exceed Speed Do not exceed this speed in any operation	160	184
V_{NO}	Max structural cruising speed Do not exceed this speed except in smooth air and then only with caution	128	147
V_A	Maneuvering speed 2300 Pounds 1950 Pounds 1600 Pounds	97 89 80	111 102 92
V_{FE}	Maximum flap extended speed	85	97
	Maximum window open speed	158	184
V_S	Stall speed (No Flaps)	47	54
V_{SO}	Stall speed in landing configuration	41	47
	Demonstrated Crosswind capability	15	17

C-172N OPERATING INFORMATION

Optimum/Recommended Speeds:

	Speed Name/Remarks	Indicated Airspeed	
		Knots	MPH
V_X	Best angle of climb	59	68
V_Y	Best rate of climb	73	84
V_R	Normal rotation	55	63
	Normal climb	70 - 80	80 - 92
	Normal landing (no flaps)	60 - 70	69 - 80
	Normal landing (full flaps)	55 - 65	63 - 75
	Powered landing (no flaps)	65	75
	Powered landing (full flaps)	60	69
	Max performance approach	60	69
	Optimum glide	65	75

C-172N OPERATING INFORMATION

C-172N OPERATING INFORMATION

Maneuvering Limits

Speed Name/Remarks	Max Indicated Airspeed	
	Knots	MPH
Chandelles	105	120
Lazy Eights	105	120
Steep Turns	95	109
Spins	Use slow deceleration	
Stalls (except whip stalls)	Use slow deceleration	

Stall Speed Table (Max Gross/CG Forward):

Angle of Bank	0° Flaps		40° Flaps	
	KIAS	MPH	KIAS	MPH
0°	47	54	41	47
30°	51	59	44	51
45°	56	64	49	56
60°	66	76	58	67

C-172N OPERATING INFORMATION

C-172N OPERATING INFORMATION

Engine Failure During Takeoff Run:

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

Engine Failure Immediately After Takeoff

1. If enough runway remaining to land:
Throttle Idle
Land airplane
Brakes Apply
Flaps Up
Mixture Idle cutoff
Ignition Switch Off
Master Switch Off
2. Not enough runway to land
Airspeed 60 KIAS (69 MPH)
Fly runway heading to emergency landing site
Mixture Idle cutoff
Fuel Selector Off
Ignition switch Off
Flaps As required
Master switch Off
Doors Ajar

C-172N OPERATING INFORMATION

C-172N OPERATING INFORMATION

Engine Failure In Flight:

- 1. Gain all the altitude you can!**
Pull back (gently) to use the aircraft's momentum to gain altitude until airspeed falls off to the optimum glide speed (65 KIAS - 75 MPH).
- 2. Airspeed - Optimum glide speed 65 KIAS (75 MPH)**
Trim the airplane for optimum glide speed..
- 3. Find a suitable place to land and fly to it**
If altitude and distance to selected site permit, try to set up a normal landing pattern. If that's not possible, take what you can get. Regardless of whether or not a full pattern can be set up, make sure the approach results in a landing parallel to any furrows in the selected field.
- 4. If time permits, try to correct the problem**
Fuel Selector..... Both
Mixture Rich (in)
Throttle 1/4 Inch
Carburetor Heat..... On (out)
Primer..... In and Locked
Master Switch On (Both sides)
Ignition switch..... Both magnetos
Start - if propeller is stopped.
- 5. If still have time communicate**
Transponder 7700
Comm Radio 121.5

Emergency Landing Without Engine Power:

- 1. Fly the airplane**
Airspeed..... 65 KIAS / 75 MPH (flaps up)
60 KIAS / 69 MPH (flaps down)
- 2. Prepare aircraft for landing**
Mixture Idle cutoff
Fuel Selector Off
Ignition Switch Off
Flaps As required (40° recommended)
Master Switch Off
Doors Unlatch prior to touchdown
- 3. Landing**
Touchdown Slightly tail low
Brakes..... Apply heavily

C-172N OPERATING INFORMATION

C-172N OPERATING INFORMATION

Precautionary Landing With Engine Power

1. Fly the airplane
Airspeed 60 KIAS (69 MPH)
Flaps 20°
Selected Field Inspect
Fly over field noting terrain and obstructions then retract flaps upon reaching a safe altitude and airspeed.
2. Prepare airplane for landing
Radios and Electrical Off
Flaps 30° (On final approach)
Airspeed 55 KIAS (64 MPH) on final
Master Switch Off
Doors Unlatch prior to touchdown
3. Landing
Touchdown Tail slightly low
Ignition Switch Off
Brakes Apply heavily

Ditching:

1. Prepare for ditching
Radio Transmit MAYDAY on 121.5
Give location, situation and intentions.
Note, if you were already communicating with ATC, report situation to controller, as opposed to using 121.5.
Transponder 7700
Heavy Baggage Secure or jettison
2. Fly the airplane
Approach
High wind / Heavy seas - Into the wind
Light winds / Heavy swells - Parallel to the swells
Flaps 20° - 40°
Power 300 ft./min. descent, 55 KIAS (64 MPH).
Cabin Doors Unlatch prior to touchdown
3. Landing
Touchdown Level attitude at 300 ft./min. descent
Face Cushion with folded coat
Evacuate Through doors.
If necessary, open windows to allow cabin to flood to equalize pressure so doors can be opened.
Life Vests and Raft Inflate

C-172N OPERATING INFORMATION

Engine Fire During Start Up:

Cranking..... Continue

Getting the engine to start will suck flames and accumulated fuel into the engine.

If Engine Starts

Power - 1,700 RPM for a few minutes
Engine - Shutdown and inspect for damage.

If Engine Fails to Start

Throttle - Full Open
Mixture - Idle Cutoff
Continue cranking for 2 to 3 minutes.
Obtain fire extinguisher
Master Switch - Off
Ignition Switch - Off
Fuel Selector - Off
Extinguish fire with extinguisher, seat cushion, blanket, etc. or dirt.
Inspect for damage and have repairs made before attempting another flight.

C-172N OPERATING INFORMATION

Engine Fire In Flight:

Mixture..... Idle cutoff

Fuel Selector..... Off

Master Switch..... Off

Cabin Heat and Air..... Off (except overhead vents)

Airspeed..... 100 KIAS (115 MPH)

If that does not extinguish the fire increase airspeed to that which produces an incombustible mixture.

Be aware of critical speeds; V_{NO} (128 KIAS/147 MPH) and V_{NE} (158 KIAS/181 MPH).

Landing..... Forced Landing Without Power

C-172N OPERATING INFORMATION

C-172N OPERATING INFORMATION

Electrical Fire In Flight:

1. Extinguish Fire
Master Switch Off
All other Switches Off
Ignition On
Vents, Cabin Heat/Air Closed
Fire Extinguisher Activate
2. If fire appears to be out and electrical equipment is needed
Master Switch On
Circuit Breakers Check for faulty circuit - do not reset.
Radio/Electrical On one at a time, with delay between until short circuit is localized.
Vents, Cabin Heat/Air Open once it is ascertained that the fire is completely extinguished.

Cabin Fire:

- Master Switch Off
Vents, Cabin Heat/Air Closed
Fire Extinguisher Activate
After using fire extinguisher within a closed cabin ventilate the cabin.
Landing As soon as possible

C-172N OPERATING INFORMATION

C-172N OPERATING INFORMATION

Wing Fire

Navigation lights Off

Strobe Lights Off

Pitot Heat..... Off

Attitude

Perform side-slip to keep the flames away from the fuel tank and cabin.

Land **ASAP**

Do not use flaps.

C-172N OPERATING INFORMATION

C-172N OPERATING INFORMATION

Pre-Flight Inspection Checklist:

- 1. Wing Tops/Fuel Tanks**
Fuel Level..... **Both Wings - Visual check**
If needed get gas (AVGAS 100) before proceeding with other fuel tank related items.
Filler caps..... **Both Wings - Secure**
Make sure vent on right wing cap is not blocked.
Wing Tops..... **Inspect for loose screws, rivets and damage**
- 2. Cockpit**
Control wheel lock..... **Remove**
Ignition switch..... **Off**
Master switch **On (both sides)**
Fuel gauges **Check quantity**
Flaps..... **10°**
Pitot Heat..... **On - observe Ammeter drop - then off**
Strobe/Beacon..... **On - visually check - off**
Master Switch **Off**
Fuel shut-off valve **On**
Paperwork:
Airworthiness certificate
Registration
Radio station license
Operating limitations (POH)
Weight/loading data
- 3. Cockpit - Night Flights**
Nav Lights & Strobes..... **On**
Walk around plane and visually check to see that all are operating.

Landing Light..... **On**

Visually check from outside if not dark enough to see that it's on from inside the cockpit.

Instrument Lights **On**

4. Fuselage - Left Side

Baggage Door **Locked with key**

Radio antennas **Check security**

Miscellaneous **Check for loose screws/rivets, etc.**

5. Empennage

Rudder gust lock **Remove**

Tail tie-down..... **Disconnect**

Control surfaces **Check freedom of movement, actuators, security, loose rivets, damage.**

6. Fuselage Right Side

Miscellaneous **Check for loose screws/rivets, etc.**

Fuel strainer drain (belly) **Check sample for water/dirt (some models)**

C-172N OPERATING INFORMATION

7. **Right Wing**
Flaps Check actuator and rollers
Aileron Check freedom, hinge pins and counterweights
Wing tip Check for cracks
Leading edge Check navigation light
..... Check for dents, cracks, etc.
Wing tie-down Disconnect
Main wheel tire Check for proper inflation/wear
..... Check cotter pin in wheel nut
Main wheel brake Check for fluid leaks
..... Check brake pads
Fuel drain Check sample for water/dirt and fuel type (100LL - Blue)
8. **Nose**
Engine Oil Check level
Note: Different versions of C-172 have different oil capacities
Fuel bowl drain Check sample for water/dirt and fuel type (100LL - Blue)
Prop/Spinner Check for nicks and security
Air filter Check for restrictions & excessive dirt
Landing Light Check condition and cleanliness
Cowling Look for birds or nests inside
Nose wheel Check for proper inflation/wear; Check for

C-172N OPERATING INFORMATION

- cotter pins in wheel nuts;
..... Check for leaking fluids
Nose tie-down Disconnect
Static source opening Check not blocked
9. **Left Wing**
Wing tie-down Disconnect
Leading edge Check for dents, cracks, etc.
Pitot tube Remove cover check for blockage
Stall warning opening Check for blockage
Fuel Tank Vent Check for blockage
Wing tip Check for cracks
..... Check navigation light
Aileron Check freedom, hinge pins and counterweights
Flaps Check actuator and rollers
Fuel drain Check sample for water/dirt and fuel type (100LL - Blue)
Main wheel tire Check for proper inflation/wear
..... Check cotter pin in wheel nut
Main wheel brake Check for fluid leaks
..... Check brake pads

C-172N OPERATING INFORMATION

C-172N OPERATING INFORMATION

Normal Engine Starting Checklist:

1. Before Starting
 - Preflight Inspection..... Completed
 - Seat position..... Adjust & ensure locked
 - Seal belts/harness..... Adjust and lock
Brief passengers on use of belts/harnesses and requirements for wearing them.
 - Fuel Selector..... Both
 - Radios/electrical..... Off
 - Autopilot..... Off
 - Brakes Test and set
 - Circuit Breakers..... Check all in
2. Starting Engine
 - Mixture Rich (in)
 - Carburetor heat..... Cold (in)
 - Primer..... Prime if required
Make sure locked in
 - Throttle..... 1/8 Inch
 - Key In ignition
 - Master Switch On (both sides)
 - Propeller Area Call "Clear" & check prop area and behind plane
 - Ignition Start - release on start
 - Throttle..... 1,000 RPM
 - Oil Pressure Check in green
3. Before Taxiing
 - Radios On and set to appropriate frequency. Call for radio check
 - Transponder Standby
 - Beacon/Strobe On

- Nav. Lights/Strobes On if required
 - Flaps Full up (normal takeoff)
4. Taxiing
 - Clearance Check for things in way of wings
Check for people ahead of and behind plane
 - Flight Controls Set for existing wind conditions
 - Brakes Come to full stop immediately after starting taxi roll
 5. IFR Instrument Checks
 - Turn Coordinator..... Should indicate turn in proper direction while taxiing.
 - Attitude Indicator..... Very little change due to turns; Slight pitch indications due to acceleration or deceleration.
 - Heading Indicator Should track headings.
 - Altimeter When set to current altimeter setting should indicate within 75 ft. of airport elevation.
 - VSI Should indicate zero. If not, note indication and use for level indication in flight.
 - VORs..... Check at local ground check point or against each other based on some receivable signal.

C-172N OPERATING INFORMATION

C-172N OPERATING INFORMATION

Cold Weather Starting Without Pre-Heat:

1. Before Starting
Preflight Inspection..... Completed
Seat position..... Adjust & ensure locked
Seal belts/harness..... Adjust and lock
Brief passengers on use of belts/harnesses and requirements for wearing them.
Fuel Selector..... Both
Radios/electrical..... Off
Autopilot..... Off
Brakes Test and set
Circuit Breakers..... Check all in

2. Starting Engine

Ignition Off (take key out and hang it up)

Master Switch Off (both sides)
Prime

With ignition switch off and throttle closed, prime the engine four to ten strokes as the propeller is being turned by hand. Use heavy primer strokes for best atomization of fuel.

If doing this by yourself, tie the plane down securely and set parking brake, in case engine starts.

Treat propeller as if the ignition is on and engine could start.

Leave primer charged and ready for a stroke.

Propeller Area Clear

Master Switch On

Mixture Full Rich

Throttle Open 1/8 inch

Ignition Switch..... Start

Throttle Pump to full open twice then return to 1/8 inch open position.

Primer Continue to prime until engine is running smoothly. Alternately pump throttle rapidly over first 1/4 of travel.

Oil Pressure..... In the green

This might take a little time since the engine is cold. If pressure doesn't come up in about 30 seconds, shut the engine down.

Carburetor Heat Full on after engine started. Leave on until running smoothly.

Primer In and locked.

Caution:

If engine does not start during the first few attempts, or if engine firing diminishes in strength, it is probable that the spark plugs have frosted over. Pre-heat must be used before another start is attempted.

Caution:

Pumping the throttle may cause raw fuel to accumulate in the intake air duct, creating a fire hazard in the event of a backfire. If this occurs, maintain a cranking action to suck flames into the engine. An outside attendant with a fire extinguisher is advised for cold starts without pre-heat.

3. Perform steps 3 through 5 on normal start checklist

C-172N OPERATING INFORMATION

C-172N OPERATING INFORMATION

Cold Weather Starting With Pre-Heat:

- Before Starting**
 - Preflight Inspection**..... Completed
 - Seat position**..... Adjust & ensure locked
 - Seal belts/harness**..... Adjust and lock
Brief passengers on use of belts/harnesses and requirements for wearing them.
 - Fuel Selector**..... Both
 - Radios/electrical**..... Off
 - Autopilot**..... Off
 - Brakes** Test and set
 - Circuit Breakers**..... Check all in
- Starting Engine**
 - Ignition** Off (take key out and hang it up)
 - Master Switch** Off (both sides)
 - Prime**
 - With ignition switch off and throttle closed, prime the engine two to four strokes (up to seven without pre-heat) as the propeller is being turned by hand. Use heavy primer strokes for best atomization of fuel.
 - If doing this by yourself, tie the plane down securely and set parking brake, in case engine starts.
 - Treat propeller as if the ignition is on and engine could start.
 - Primer**..... In and locked
 - Propeller Area**..... Clear
 - Master Switch** On
 - Mixture** Full Rich
 - Throttle** Open 1/8 inch
 - Ignition Switch**..... Start
 - Throttle** 1,000 RPM.

Oil Pressure..... In the green

This might take a little time since the engine is cold. If pressure doesn't come up in about 30 seconds, shut the engine down.

- Perform steps 3 through 5 on normal start checklist**

C-172N OPERATING INFORMATION

Before Takeoff Checklist:

1. Final Cockpit Check
Cabin doors Closed and latched
Windows Closed
Flight Controls Free and correct
Elevator trim Takeoff position
Rudder trim Takeoff position
Flight Instruments Check and set
Set attitude indicator to level flight position
Set altimeter to runway altitude or locally reported altimeter setting
Set heading indicator to magnetic compass
Comm Radio/VOR Set to appropriate freqs
Beacon/Strobe On
Nav Lights/Strobes On if required
Autopilot Off
2. Engine Run-up
Fuel Selector Both
Mixture Rich (in)
Parking brake Set or hold foot brakes
Throttle 1,700 RPM
Magnetos Check
RPM drop should not exceed 125 RPM on either magneto.
RPM difference between magnetos should not exceed 50 RPM.
Carburetor Heat On
Check for RPM drop then back to off
Engine instruments Check
Oil pressure/Temperature
Ammeter - Create electrical load with landing light.
Make sure no more than needle width deflection.

C-172N OPERATING INFORMATION

- Vacuum Check in green
Throttle Idle
Carburetor heat On – Make sure engine keeps running
Throttle 1,000 RPM
Throttle friction lock Adjust
Alternator switch Off – Check low voltage light on – Switch back to on
Flaps Appropriate takeoff position
Transponder Set to mode C/Altitude

Alweer een service van het [luchtvaartminnend bedrijf www.aeronoord.nl](http://www.aeronoord.nl) hellaas kunnen aan deze mededelingen geen rechten worden ontleen

C-172N OPERATING INFORMATION

Normal Takeoff and Climb Procedures

Flaps..... Full up
Carburetor Heat..... Cold (in)
Elevator Trim Takeoff position
Rudder Trim..... Takeoff position
Heading indicator Calibrate against compass
Throttle Full open (in)
Engine Instruments..... Check while starting roll
RPM - 2600 (Top of green arc)
Oil Pressure - In the green
Oil Temperature - In the green
Suction - In the green
Airspeed Building
Elevator Lift nose wheel at 55 KIAS
(63 MPH)
Climb Speed..... 70 - 80 KIAS (80 - 92 MPH)

C-172N OPERATING INFORMATION

Maximum Performance Takeoff (Short Field):

Taxi..... Maximum runway usage
Takeoff procedure should be started using ALL available
runway. Taxi to end of runway and align with centerline.
Brakes..... Set and hold
Flaps Full up
Carburetor Heat Cold (in)
Elevator Trim..... Takeoff position
Rudder Trim Takeoff position
Heading indicator Calibrate against compass
Throttle Full open (in)
Engine Instruments Check before starting roll
RPM - 2600 (Top of green arc)
Oil Pressure - In the green
Oil Temperature - In the green
Suction - In the green
Brakes..... Release
Airspeed..... Building
Elevator..... Slightly tail low
Climb Speed 59 KIAS (68 MPH) with
obstacles ahead.

C-172N OPERATING INFORMATION

Soft Field Takeoff:

- Taxi Keep rolling to avoid bogging down
- Flaps 10°
If 10° flaps are used, with obstacles ahead, leave them extended until the obstacle is cleared and at a safe altitude.
The exception is in high density altitude takeoff where the climb would be marginal with the flaps at 10°.
- Carburetor Heat..... Cold (in)
- Elevator Trim Takeoff position
- Rudder Trim Takeoff position
- Heading indicator Calibrate against compass or runway heading
- Throttle Full open (in)
- Engine Instruments..... Check as starting roll
RPM - 2600 (Top of green arc)
Oil Pressure - In the green
Oil Temperature - In the green
Suction - In the green
- Airspeed Building
- Elevator Slightly tail low
Allow the airplane to lift off as soon as possible (before reaching safe climb speed). Level off at a few feet above the ground and fly in ground effect until reaching normal climb speed.
- Climb Speed..... 55 KIAS (63 MPH) with obstacles ahead.
- Flaps..... Retract at safe altitude with positive rate of climb.

C-172N OPERATING INFORMATION

After Takeoff Checklist

1. Climbout
Airspeed..... 70 - 80 Knots (90 - 92 MPH)
Altitude.....Above 300 AGL
Flaps Up (in 10° increments if more than that in use)
2. At Cruise Altitude
Attitude Level
Airspeed.....Let build to desired cruise speed
Throttle Reduce to desired cruise setting
Heading Indicator Calibrate against compass
3. Above 3,000 MSL
Mixture Lean for maximum RPM

Enroute Climb:

- Normal Airspeed 70 - 85 KIAS (80 - 98 MPH)
Max Performance..... See POH Climb Table in Section 5
Throttle Full Open (in)
Carburetor Heat..... Cold (in)
Mixture Rich (in) below 3,000 ft.
Leaned for maximum RPM above 3,000.

C-172N OPERATING INFORMATION

C-172N OPERATING INFORMATION

Normal Approach and Landing Procedures:

1. Pre-Landing (Downwind) check
Seat belts/Harnesses Adjust and lock
Mixture Rich (In)
Carburetor heat On (Out)
Fuel Selector Both
Autopilot Off
 2. Approach and Landing
Power Reduce to 1,300 to 1,500 RPM abeam approach end of runway
Airspeed Let bleed off to less than 85 KIAS (95 MPH)
Flaps Use as desired
Under light (less than 10 Knots) wind conditions 10° descending on the end of the downwind leg, 20° on base, and full flaps over the threshold.
In heavier winds 20° or less is good flap setting for landing.
Use minimum flap setting possible for cross wind landing
- Airspeeds**
Downwind through base 65 - 75 KIAS (75 - 86 MPH)
Final approach 60 - 70 KIAS (70 - 80 MPH)
In gusty winds add 1/2 difference between gust and average wind speed to approach speed.

Touchdown

Just above stalling speed - main wheels first.

Landing Roll

Lower nose wheel gently

Braking

Minimum required.

Short Field Landing:

1. Pre-Landing (Downwind) check
Seat belts/Harnesses Adjust and lock
Mixture Rich (In)
Carburetor heat On (Out)
Fuel Selector Both
Autopilot Off
 2. Approach and landing
Power Reduce to 1,300 to 1,500 RPM abeam approach end of runway
Airspeed Let bleed off to less than 85 KIAS (95 MPH)
Flaps
Under light (less than 10 Knots) wind conditions 10° descending on the end of the downwind leg, 20° on base, and full flaps on final.
- Airspeeds**
Downwind through base 65 - 75 KIAS (75 - 86 MPH)
Final approach 60 KIAS (69 MPH)
In gusty winds add 1/2 difference between gust and average wind speed to approach speed.

Touchdown

Just above stalling speed - power off - main wheels first.

Roundout must be done much faster than usual due to low airspeed.

Landing Roll Lower nose wheel quickly.

Braking Maximum possible without sliding tires.

Flight Controls Raise flaps to decrease lift and improve braking.
Hold full nose up elevator

Alweer een service van het luchtvaartminnend bedrijf www.aeronoord.nl hellaas kunnen aan deze mededelingen geen rechten worden ontleen

C-172N OPERATING INFORMATION

C-172N OPERATING INFORMATION

Soft Field Landing:

1. Pre-Landing (Downwind) check
Seat belts/Harnesses Adjust and lock
Mixture Rich (In)
Carburetor heat On (Out)
Fuel Selector Both
Autopilot Off
2. Approach and Landing
Power Reduce to 1,300 to 1,500 RPM abeam approach end of runway
Airspeed Let bleed off to less than 85 KIAS (95 MPH)

Flaps

Under light (less than 10 Knots) wind conditions 10° descending on the end of the downwind leg, 20° on base, and full flaps over the threshold.

In heavier winds 20° or less is good flap setting for landing.

Use minimum flap setting possible for cross wind landing

Airspeeds

Downwind through base 60 - 70 KIAS (69 - 80 MPH)

Final approach 55 - 65 KIAS (63 - 75 MPH)

In gusty winds add 1/2 difference between gust and average wind speed to approach speed.

Touchdown

Just above stalling speed - power off - main wheels first.

Landing Roll

Hold nose wheel off as long as possible.

Braking As required

Flight Controls Full up elevator

Balked Landing (Go Around):

Throttle Full Open (in)

Carburetor Heat Cold (in)

Flaps To 20°

If more than 20° of flaps were in when the go-around is initiated, retract immediately to 20°.

Continue to retract flaps in 10° increments only after establishing a positive rate of climb and reaching a safe altitude.

Airspeed 59 KIAS (68 MPH)

C-172N OPERATING INFORMATION

C-172N OPERATING INFORMATION

Post-Landing Checklists:

1. After Landing - Clear of Runway
 - Flaps Full up (visual check)
 - Carburetor Heat..... Off (in)
 - Elevator Trim Takeoff position
 - Rudder Trim..... Takeoff position
2. If Hard Landing
 - ELT Listen for on 121.5 on communications radio
3. Engine Shutdown
 - Radios/Electrical All off
 - Throttle 1,000 RPM
 - Mixture Idle cutoff
 - Ignition Off
 - Master Switch Off
4. Securing the Airplane
 - Parking Brake Set
 - Control Lock..... Install
 - Tiedown..... Wings and Tail
 - Pitot Cover Install
 - Double Check
 - All electrical equipment - Off
 - Master Switch - Off
5. Close your Flight Plan