

C-172RG OPERATING INFORMATION

Airspeed Limitations:

	Speed Name/Remarks	Indicated Airspeed	
		Knots	MPH
V _{NE}	Never Exceed Speed	164	188
V _{NO}	Max structural cruising speed	145	166
V _A	Maneuvering speed		
	2650 Pounds	106	121
	2250 Pounds	98	112
	1850 Pounds	89	102
V _{FE}	Maximum flap extended speed		
	To 10° Flaps	130	149
	10° – 30° Flaps	100	115
V _{LO}	Maximum Landing Gear Operating Speed	140	161
V _{LE}	Maximum Landing Gear Extended Speed	164	188
	Maximum window open speed	164	188
V _S	Stall speed (No Flaps)	50	57
V _{S0}	Stall speed in landing configuration	42	48
	Demonstrated Crosswind capability	15	17

C-172RG OPERATING INFORMATION

Optimum/Recommended Speeds:

	Speed Name/Remarks	Indicated Airspeed	
		Knots	MPH
V _X	Best angle of climb (Sea Level)	67	77
V _Y	Best rate of climb (Sea Level)	84	96
V _R	Normal rotation	55	63
	Normal climb	70 – 80	80 - 92
	Normal landing (no flaps)	70 – 80	80 - 92
	Normal landing (full flaps)	60 – 70	69 - 80
	Demonstrated Crosswind capability	15	17
	Max performance approach	63	72
	Maximum Glide Speed		
	2650 Pounds	73	84
	2250 Pounds	67	77
	1850 Pounds	61	70

C-172RG OPERATING INFORMATION

C-172RG OPERATING INFORMATION

Maneuvering Limits:

Speed Name/Remarks	Max Indicated Airspeed	
	Knots	MPH
Chandelles	Use V_A for weight	
Lazy Eights	Use V_A for weight	
Steep Turns	Use V_A for weight	
Spins	Not Approved	
Stalls (except whip stalls)	Use V_A for weight	

Stall Speed Table (Max Gross/CG Forward):

Angle of Bank	0° Flaps		30° Flaps	
	KIAS	MPH	KIAS	MPH
0°	50	56	42	48
30°	54	62	45	52
45°	59	68	50	56
60°	71	82	59	68

C-172RG OPERATING INFORMATION

C-172RG 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 70 KIAS (Flaps up)
65 KIAS (Flaps down)
Fly runway heading to emergency landing site
Mixture Idle cutoff
Fuel Selector Off
Ignition switch Off
Flaps As required
30⁰ Recommended
Master switch Off
Doors Ajar

C-172RG OPERATING INFORMATION

C-172RG 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 (73 KIAS - 84 MPH).
- 2. Airspeed - Optimum glide speed 73 KIAS (84 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**
Carburetor Heat..... On (out)
Fuel Selector..... Both
Mixture Rich (in)
Auxiliary Fuel Pump..... On (if pressure is less than 0.5 PSI)
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..... 75 KIAS (Flaps up)
65 KIAS (flaps down)
- 2. Prepare aircraft for landing**
Mixture Idle cutoff
Fuel Selector Off
Ignition Switch Off
Landing Gear..... Down (Up if terrain rough or soft)
Flaps As required (30° recommended)
Doors Unlatch prior to touchdown
Master Switch Off when landing is assured.
- 3. Landing**
Touchdown Slightly tail low
Brakes..... Apply heavily

C-172RG OPERATING INFORMATION

C-172RG OPERATING INFORMATION

Precautionary Landing With Engine Power:

1. Fly the airplane
Flaps 20°
Airspeed 65 KIAS
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
Landing Gear Down (Up if terrain is rough or soft)
Flaps 30° (On final approach)
Airspeed 65 KIAS on final
Doors Unlatch prior to touchdown
Master Switch Off
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
Landing Gear Up
Approach
High wind / Heavy seas - Into the wind
Light winds / Heavy swells - Parallel to the swells
Flaps 20° - 30°
Power 300 ft./min. descent, 60 KIAS.
No-Power Approach 70 KIAS – Flaps up or 65 KIAS with 10° Flaps
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-172RG OPERATING INFORMATION

C-172RG 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 Shut down and inspect for damage.
- If Engine Fails to Start**
- Throttle** Full Open
Mixture Idle Cutoff
Cranking Continue 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.

Engine Fire In Flight:

- Mixture** Idle cutoff
Fuel Selector Off
Master Switch Off
Cabin Heat and Air Off (except overhead vents)
Airspeed 105 KIAS
If that does not extinguish the fire increase airspeed to that which produces an incombustible mixture.
Be aware of critical speeds; V_{NO} (145 KIAS) and V_{NE} (164 KIAS).
- Landing** Forced Landing Without Power

C-172RG OPERATING INFORMATION

C-172RG OPERATING INFORMATION

Electrical Fire In Flight:

1. Extinguish Fire
Master Switch Off
Avionics Power..... Off
Ignition On
All other Switches Off
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 Switches All off
Avionics Power..... On
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-172RG OPERATING INFORMATION

Wing Fire:

Navigation lights Off
Landing/Taxi Light Switches 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-172RG OPERATING INFORMATION

Inadvertent Icing Encounter:

Pitot Heat On
Turn back or change altitude to obtain an OAT less conducive to icing.
Cabin Heat/Defroster Full on
RPM Increase to minimize prop icing
Carburetor Heat Use as necessary
Land At nearest airport if possible

NOTES:

With ¼ inch of ice or more stall speed is significantly increased.

Do not use flaps. They will disrupt airflow over the horizontal stabilizer enough to possibly cause a loss of elevator effectiveness.

If possible open window and scrape ice from windshield.

Perform landing using forward slip to improve visibility.

Approach at 80 – 90 KIAS depending on the amount of ice accumulation.

Land in a level attitude.

C-172RG OPERATING INFORMATION

Static Source Blockage:

Alternate static source..... On

Airspeed and Altitude will be incorrect. See table in POH for correction factors.

Windows Closed

Landing Gear Fails to Retract:

Master Switch On

Landing Gear Lever Check full up

Landing Gear Circuit Breaker Check In

Gear Pump Circuit Breaker Check In

Gear Up Light Check

Landing Gear Lever Recycle

Gear Motor Check Ammeter & Noise

C-172RG OPERATING INFORMATION

Landing Gear Fails to Extend:

Master Switch On

Landing Gear Lever..... Down

Landing Gear Circuit Breaker..... Check In

Gear Pump Circuit Breaker..... Check In

Emergency Pump Extend Handle and pump perpendicular to handle until resistance becomes heavy (about 35 strokes)

Gear Down Light..... On

Pump Handle Stow

Gear Up Landing:

Landing Gear Lever..... Up

Landing Gear Circuit Breaker..... Check In

Gear Pump Circuit Breaker..... Check In

Runway Longest hard surface or smooth sod available

Flaps 30° On Final Approach

Airspeed..... 65 KIAS

Doors Unlatch prior to touchdown

Avionics Power Off when landing assured

Master Switch Off when landing assured

Touchdown Tail slightly low

Mixture Idle cutoff

Ignition Off

Fuel selector..... Off

Evacuate airplane

C-172RG OPERATING INFORMATION

C-172RG OPERATING INFORMATION

Landing Without Gear Locked Indication:

Before Landing Checklist..... Complete
Approach..... Normal (30° Flaps)
Landing Gear Circuit Breaker Check In
Gear Pump Circuit Breaker Check In
Landing Tail low as smooth as possible
Braking Minimum necessary
Taxi Slowly
Engine Shutdown before inspecting gear

Landing With a Flat Main Tire:

Approach..... Normal (30° Flaps)
Touchdown Good tire first hold bad wheel off as long as possible with aileron control
Directional control Maintain as best as possible with brake on good wheel

Landing With Defective Nose Gear (or Flat Nose Tire):

Moveable load Transfer to baggage area
Passenger..... Move to rear seat
Before Landing Checklist Complete
Runway Hard surface or smooth sod
Flaps 30°
Doors Unlatch prior to touchdown
Avionics Power Off when landing assured
Master Switch Off when landing assured
Touchdown Tail slightly low
Mixture Idle cutoff
Ignition Off
Fuel selector Off
Elevator..... Hold nose off as long as possible
Evacuate airplane as soon as it stops

C-172RG OPERATING INFORMATION

C-172RG OPERATING INFORMATION

Ammeter Shows Excessive Rate of Charge:

Alternator Switch..... Off
Alternator Circuit Breaker Pull out
Nonessential Electrical..... Off
Flight..... Terminate as soon as
practical

Low Voltage Light Illuminates During Flight (Ammeter Indicates Discharge):

Avionics Power..... Off
Alternator Circuit Breaker Check In
Master Switch Off (Both sides)
Master Switch On
Low Voltage Light Check Off
Avionics Power..... On

If Low Voltage Light Illuminates Again:

Alternator Off
Nonessential Electrical..... Off
Flight..... Terminate as soon as
practical.

C-172RG 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 cap is not blocked.
Wing Tops..... **Inspect for loose screws, rivets and damage**
2. **Cockpit**
Control wheel lock..... **Remove**
Ignition switch..... **Off**
Avionics Switch..... **Off**
Landing Gear Lever **Down**
Master switch **On (both sides)**
Fuel gauges **Check quantity**
Gear Down Indicator Light **Check On**
Avionics Cooling Fan..... **Check Audibly for Operation**
Flaps **10°**
Pitot Heat..... **On - observe Ammeter drop - then off**
Strobe/Beacon..... **On - visually check - off**
Master Switch **Off**
Fuel shut-off valve **Both**
Alternate Static Source..... **Off**
Paperwork..... **Check**

C-172RG OPERATING INFORMATION

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**
Left Wing Fuel Sump..... **Check for Water & Dirt**
Left Main Wheel Well..... **Check for foreign objects**
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.**
Right Main Wheel Well **Check for foreign objects**

C-172RG OPERATING INFORMATION

7. Right Wing
- Fuel Sump..... Check for Water & Dirt
 - Flaps..... Check actuator and rollers
 - Aileron..... Check freedom, hinge pins and counterweights
 - Wing tip..... Check for cracks
 - Check navigation light
 - Leading edge..... 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
8. Nose
- Right Static source..... Check not blocked
 - Engine Oil..... Check level (5 Qt. Minimum)
 - Prop/Spinner..... Check for nicks, security and oil leaks
 - Nose Gear Doors..... Check for security; Check for foreign objects in wheel well.
 - 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 leaking fluids
 - Nose tie-down..... Disconnect

C-172RG OPERATING INFORMATION

- Fuel bowl drain..... Check sample for water/dirt and fuel type (100LL - Blue)
 - Left Static source..... Check not blocked
9. Left Wing
- Leading edge..... Check for dents, cracks, etc.
 - Pitot tube..... Remove cover check for blockage
 - Stall warning..... Check
 - Fuel Tank Vent..... Check for blockage
 - Wing tie-down..... Disconnect
 - Wing tip..... Check for cracks
 - Aileron..... Check navigation light
 - Check freedom, hinge pins and counterweights
 - Flaps..... Check actuator and rollers
 - 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-172RG OPERATING INFORMATION

Normal Engine Starting Checklist:

1. Before Starting
 - Preflight Inspection..... Completed
 - Passenger Briefing..... Completed
 - Seat position..... Adjust & ensure locked
 - Seal belts/harness..... Adjust and lock
 - Fuel Selector..... Both
 - Circuit Breakers..... Check all in
 - Avionics Power..... Off
 - Autopilot..... Off
 - Landing Gear Lever Down
 - Cowl Flaps Open
 - Brakes Test and set
2. Starting Engine
 - Carburetor heat..... Cold (in)
 - Propeller..... High RPM
 - Mixture Rich (in)
 - Throttle Pump once or twice; leave 1/4 Inch open
 - Fuel Pump On if hot; Otherwise off
 - Primer..... In and Locked
 - 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

C-172RG OPERATING INFORMATION

3. Before Taxiing
 - Avionics Master Switch..... On
 - Radios On and set to appropriate frequency. Call for radio check
 - Transponder..... Standby
 - Beacon/Strobe On
 - Nav. Lights/Strobes..... On if required
 - Autopilot..... Off
 - 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

C-172RG OPERATING INFORMATION

C-172RG OPERATING INFORMATION

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-172RG OPERATING INFORMATION

C-172RG OPERATING INFORMATION

Cold Weather Starting Without Pre-Heat:

1. Before Starting
Preflight Inspection..... Completed
Passenger Briefing..... Completed
Seat position..... Adjust & ensure locked
Seal belts/harness..... Adjust and lock
Fuel Selector..... Both
Circuit Breakers..... Check all in
Avionics Power..... Off
Autopilot..... Off
Landing Gear Lever Down
Cowl Flaps Open
Brakes Test and set
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 4 to 8 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..... High RPM
Mixture Rich
Propeller Area Clear
Master Switch On
Throttle Pump rapidly to full open twice; leave open 1/4 inch

Ignition Switch Start

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-172RG OPERATING INFORMATION

Cold Weather Starting With Pre-Heat:

1. Before Starting
Preflight Inspection..... Completed
Passenger Briefing..... Completed
Seat position..... Adjust & ensure locked
Seal belts/harness..... Adjust and lock
Fuel Selector..... Both
Avionics Power..... Off
Autopilot..... Off
Landing Gear Lever Down
Cowl Flaps Open
Brakes Test and set
Circuit Breakers..... Check all in

2. Starting Engine

- Ignition Off (take key out and hang it up)
Throttle Closed
Mixture Idle cutoff
Master Switch Off (both sides)
Prime

With ignition switch off and throttle closed, prime the engine 2 to 4 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.

- Primer..... In and locked
Throttle..... Open 1/4 inch
Propeller..... High RPM
Mixture Rich
Master Switch On

C-172RG OPERATING INFORMATION

- Propeller Area Clear
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.

3. Perform steps 3 through 5 on normal start checklist

C-172RG OPERATING INFORMATION

Before Takeoff Checklist:

1. Final Cockpit Check
 - Brakes On
 - Seat belts/Shoulder Harnesses Secure
 - 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
 - Fuel Quantity Check
 - 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
 - Auxiliary Fuel Pump..... On
 - Check for rise in pressure then off
 - Cowl flaps Open
 - Throttle 1,800 RPM
 - Magnetos Check
 - RPM drop should not exceed 150 RPM on either magneto.
 - RPM difference between magnetos should not exceed 50 RPM.

C-172RG OPERATING INFORMATION

- Carburetor Heat On
 - Check for RPM drop then back to off
- Propeller Cycle from high to low RPM and back to high 3 times.
- Check for RPM Drop, Oil Pressure Drop and Manifold Pressure increase.
- Engine instruments Check
 - Oil pressure/Temperature
- 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

C-172RG OPERATING INFORMATION

C-172RG OPERATING INFORMATION

Normal Takeoff and Climb Procedures

Flaps..... Full up (Check both visually)
Elevator Trim Takeoff position
Rudder Trim..... Takeoff position
Heading indicator..... Calibrate against compass
Carburetor Heat..... Cold (in)
Mixture Rich
Propeller..... High RPM
Cowl Flaps Open
Throttle..... Full open (in)
Engine Instruments..... Check while starting roll
RPM
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)
Brakes Apply momentarily when airborne
Landing Gear Retract when no chance of landing on runway

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
Elevator Trim..... Takeoff position
Rudder Trim Takeoff position
Heading indicator..... Calibrate against compass
Carburetor Heat..... Cold (in)
Mixture..... Rich
Propeller..... High RPM
Cowl Flaps..... Open
Throttle..... Full open (in)
Engine Instruments..... Check before starting roll
RPM
Oil Pressure - In the green
Oil Temperature - In the green
Suction - In the green
Brakes..... Release
Airspeed..... Building
Elevator..... Slightly tail low
Climb Speed..... 63 KIAS with obstacles ahead.
Brakes..... Apply momentarily when airborne
Landing Gear..... Retract when no chance of landing on runway

C-172RG OPERATING INFORMATION

C-172RG OPERATING INFORMATION

After Takeoff Checklist

1. Climbout
Airspeed 70 - 80 Knots (90 - 92 MPH)
Brakes Apply momentarily when airborne
Landing Gear Retract when no chance of landing on runway
Flaps Up (in 10° increments if more than that in use)
Manifold Pressure 25"
Propeller 2,500 RPM

2. At Cruise Altitude
Attitude Level
Airspeed Let build to desired cruise speed
Cowl Flaps Closed
Throttle Reduce to desired cruise setting (23" Hg)
Propeller 2,300 RPM
Heading Indicator Calibrate against compass

3. Above 3,000 MSL
Mixture Lean for maximum RPM or appropriate EGT reading

C-172RG OPERATING INFORMATION

Enroute Climb:

Normal Airspeed..... 85 - 95 KIAS
Propeller..... 2,500 RPM
Throttle 25" Hg.
Carburetor Heat..... Cold (in)
Mixture Rich below 3,000 ft.
Cowl Flaps Open as required

Maximum Performance Climb:

Normal Airspeed..... 84 KIAS @ Sea level;
77 KIAS @ 10,000 ft.
Propeller..... 2,700 RPM
Throttle Full Open (in)
Carburetor Heat..... Cold (in)
Mixture Rich below 3,000 ft.
Fuel selector Both
Cowl Flaps Full open

C-172RG OPERATING INFORMATION

Cruise:

Propeller 2,100 – 2,700 RPM
Power 15" - 25" Hg.
Elevator and Rudder Trim..... Adjust
Cowl flaps..... Closed

Descent:

Fuel selector..... Both
Power As desired
Mixture Richen as required
Carburetor heat..... Full heat as required
Cowl Flaps..... Closed
Wing flaps..... As desired

C-172RG OPERATING INFORMATION

C-172RG OPERATING INFORMATION

Normal Approach and Landing Procedures:

1. Pre-Landing (Downwind) check
Fuel selector Both
Carburetor heat On (Out)
Landing Gear Down (below 140 KIAS)
Mixture Rich (In)
Propeller High RPM (Short final)
Seat belts/Harnesses Adjust and lock
Autopilot Off
Cowl flaps Closed
2. Approach and Landing
Airspeed 70 – 80 KIAS (Flaps up)
60 – 70 KIAS (Flaps down)
Flaps Use as desired
Trim Adjust
Touchdown Main wheels first
Landing Roll Lower nose gently
Braking Minimum required

Short Field Landing:

1. Pre-Landing (Downwind) check
Fuel selector Both
Carburetor heat On (Out)
Landing Gear Down (below 140 KIAS)
Mixture Rich (In)
Propeller High RPM (Short final)
Seat belts/Harnesses Adjust and lock
Autopilot Off
Cowl flaps Closed
2. Approach and landing
Airspeed 70 – 80 (Flaps Up)
Flaps 30° (below 100 KIAS)
Airspeed Maintain 63 KIAS
Trim Adjust
Touchdown Main wheels first
Brakes Apply heavily
Flaps Retract for maximum
braking

C-172RG OPERATING INFORMATION

C-172RG OPERATING INFORMATION

Balked Landing (Go Around):

Propeller..... High RPM
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°.
Landing gear..... Retract
Cowl Flaps Open
Airspeed 55 KIAS initially; increase to 65 KIAS once climb is established.
Throttle..... 25" Hg.
Propeller..... 2,500 RPM
Flaps..... Retract in 10° increments

Post-Landing Checklists:

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

C-172RG OPERATING INFORMATION

C-172RG OPERATING INFORMATION

Before Leaving Home

1. Self Check
 - Feeling ok..... Yes
 - Under any stress No more than usual
 - Taking any medication No
 - Alcohol in last 12 Hrs..... No
2. Flight Planning/Navigation Equipment
 - Current Charts
 - A/FD
 - POH
 - Airport Guide
 - E6-B
 - Plotter
 - Calculator
 - Timer
 - Custom Checklists
 - Flight Plans
 - Weather Reports
 - Pencils
 - Clipboards
3. Emergency Items
 - Hand Compass
 - Knife
 - Flashlights
 - Batteries
 - Bulbs
 - Cell Phone (Charged)
 - Spare Glasses
 - Sun Glasses