FOR USE WITH N6403V

PREFLIGHT C – 172RG

1. Aircraft Documents - CK.
2. Weather - Suitable.
3. Baggage - Weighed, stowed, secured.
4. Weight and C.G. - CK.
5. Navigation - Planned.
6. Charts and Navaids - CK.
7. Performance - Determined
8. VOR Log (IFR) - CK.

INTERIOR

1. Hobbs / Tach time - CK.
2. P.O.H. - On board.
3. Control Lock - Remove.
4. Avionics - Off.
5. Electrical Switches - Off.
6. Primer – Locked
7. Landing Gear - Down
8. Carb Heat - Cold.
9. Mixture - I.C.O.
10. Cowl Flaps - Open
11. Master Switch -On/Call.
12. Fuel Quantity - CK.
13. Lights (Night) - CK.
14. Flaps - Down / CK.
15. Master Switch - Off.
16. Flight Controls - CK.
17. Fuel Selector - Both.
18. Trim - Neutral.
19. Windows - CK Clean.

EXTERIOR

AS PER MANUAL

BEFORE START

1. Preflight - Complete.
2. Passenger Briefing - Complete.
3. Cabin Doors - Closed.
4. Seats - Adjusted / Locked.
5. Belts / Harnesses –Secure
6. Landing Gear – Down
7. Cowl Flaps - Open
8. Circuit Breakers - CK In.
9. All Switches - Off.
10. Brakes - Set and Test.

START

1. Mixture - Rich.
2. Propeller – High RPM
3. Throttle - Open 1/4".
4. Prime – 3 shots if cold, 1-2 shots if hot
4. Master Switch - On / Call.
5. Flaps - UP.
6. Beacon - On.
7. Nav. Lights - As Req.
8. Prop Area - Clear / Call.
9. Starter - Engage.
10. Throttle - 700 RPM.
11. Oil Pressure - CK.
12. Mixture - Lean for Taxi.

PRE - TAXI

1. Radios - On / Set.
2. Transponder – Sby/1200
3. Radio Calls - As Req.
4. Taxi Area - Clear.
5. Throttle - Apply Smoothly.
6. Brakes - CK.

TAXI

Controls - Position for wind
Instruments - Ck on taxi

RUN - UP

1. Brakes - Set.
2. Fuel Selector - Both.
3. Mixture - Rich.
4. Aux Fuel Pump – On, Check pressure, then Off
5. Throttle - 1800 RPM.
6. Propeller - Cycled
7. Magnetos –
   Max Drop 125
   Max Diff 50
8. Carb Heat - CK.
9. Engine Instruments - CK.
10. Suction Gauge - CK.
11. Ammeter - CK.
12. Engine Idle- CK
13. Throttle - 700 RPM.
14. Mixture – Lean for Taxi

BEFORE TAKEOFF

1. Flight Instruments - Set.
2. Radios / Avionics - Set.
3. Engine Gauges - CK.
4. Mixture – Set for Takeoff
5. Carb Heat - Off.
6. Belts / Harnesses - CK.
7. Flaps - As Req.
8. Trim - Set for takeoff.
9. Controls - CK.
10. Doors / Windows - Latch.
11. Brakes - Recheck.

CROSSING HOLD LINE

Strobes - On
Transponder – Altitude
Mixture – Set for Takeoff

TAKEOFF

Normal Vr - 55 KTS
Landing Gear - Retract
Short / Soft - Per Manual

CLIMB

Vx - 63 KTS
Vy - 84 KTS
Cruise Climb – 95 KTS.
Cowl Flaps - Open

CRUISE

1. Power - Per Manual.
2. Propeller – Adjust per manual
3. Trim - Adjust.
4. Mixture - Set.
5. Cowl Flaps - Closed
6. Landing Light - Off.
7. Engine Instruments - CK.
8. Flight Instruments - Set.

PRE - DESCENT

1. Fuel Selector - Both.
2. Power - As Req.
3. Mixture - Enrichen.
4. Cowl Flaps - Closed
5. Carb Heat - As Req.
6. Flight Instruments - Set.
7. Engine Gauges - Monitor.

45 ENTRY / DOWNWIND CK

Fuel Selector - Both
Landing Gear - Down
Mixture - Full Rich
Throttle - As Req (100 KTS)
Propeller – High RPM
Landing Lts / Strobes - As Req.
Ignition - Both
Master Switch - On
Primer - Locked.
Belts / Harnesses - CK.

LANDING

Normal, Short, and Soft field As per manual.
Normal Final - 65 KTS.

ON FINAL

G. U. M.P.S.

AFTER LANDING

1. Throttle - 700 RPM.
2. Mixture - Lean for Taxi.
3. Carb Heat - Cold.
4. Cowl Flaps - Open
5. Flaps - Up.
6. Trim - Neutral.
7. Landing / Strobes - As Req.
8. Transponder - Sby / 1200.
9. Unnecessary Avionics - Off.
10. Radio Calls - As Req.

NOTE: The landing gear warning horn will sound when the flaps are extended beyond 20 Deg. With the landing gear retracted

SHUTDOWN / SECURING

1. Avionics / Electrical - Off.
2. Throttle – idle
3. P-lead - CK
2. Mixture - I.C.O.
5. Ignition - Off / Key on dash.
6. Master - Off.
7. All Switches - Off.
8. Windows - Close / Latch.
9. Seatbelts - Stow.
10. Control Lock - Install.
11. Fuel Selector – Left or Right
12. Hobbs / Tach times - Record
13. Aircraft - Properly Secure.
14. Discrepancies - Write Up.

V - SPEEDS	C – 172RG
Vso	42 KTS
Vs	50 KTS
Vr	55 KTS
Vx	63 KTS
Vy	84 KTS
Va (2650 #)	106 KTS
Vfe	100 KTS
Vle	164 KTS
Vno	145 KTS
Vne	164 KTS
Final Approach	65 KTS
Final (short field)	63 KTS
Best Glide	73 KTS

ENGINE FAILURES

TAKEOFF RUN

1. Throttle - Idle.
2. Brakes - Apply.
3. Wing Flaps - Retract.
4. Mixture - I.C.O..
5. Ignition - Off.
6. Master Switch - Off.

AFTER TAKEOFF

1. Airspeed - 70 KTS.
2. Mixture - I.C.O..
3. Fuel Selector - Off.
4. Ignition Switch - Off.
5. Wing Flaps - As Required.
6. Master Switch - Off.

DURING FLIGHT

1. Airspeed - 75 KTS.
2. Carb Heat - ON.
3. Primer - Locked.
4. Fuel Selector - Both.
5. Mixture - Rich.
6. Ignition Switch - Both.

FORCED LANDINGS

WITHOUT POWER

1. Airspeed –
   75 KTS (flaps up)
   65 KTS (flaps dn)
2. Mixture - I.C.O..
3. Fuel Selector - Off.
4. Ignition Switch - Off.
5. Landing Gear - Down
6. Wing Flaps - As Required.
7. Master Switch - Off.
8. Doors - Unlatch.
9. Touchdown - Tail Low.
10. Brakes - Apply Heavily.

WITH POWER

1. Airspeed - 65 KTS.
2. Wing Flaps - 20 Deg.
3. Field - Overfly/Inspect
   Retract Flaps at Safe altitude and airspeed.
4. Landing Gear – Down (UP if terrain is rough or soft)
5. Avionics / Electrical - Off.
6. Wing Flaps - 30 Deg. (final)
7. Airspeed - 65 KTS.
8. Master Switch - Off.
9. Doors - Unlatch.
10. Touchdown - Tail Low.
11. Ignition Switch - Off.
12. Brakes - Apply Heavily.

GEAR UP LANDING

1. Landing Gear Lever -Up
2. Landing Gear and Gear Pump Circuit Breakers-In
3. Runway – Longest Available
4. Wing Flaps – 30 Deg.
5. Airspeed – 65 KTS
6. Doors – Unlatch
7. Master – Off when landing assured
8. Touchdown – Tail Low
9. Mixture – I.C.O.
10. Ignition – Off
11. Fuel Selector – Off
12. Airplane - Evacuate

LANDING WITHOUT POSITIVE GEAR LOCKED INDICATION

1. Before Landing Check - Complete
2. Approach – Normal
3. Landing Gear and Gear Pump Circuit Breakers-In
4. Landing – Tail Low, Smoothly as possible
5. Braking – Minimum

LANDING WITH DEFECTIVE NOSE GEAR

1. Movable load – Transfer to baggage area
2. Passenger – Move to rear seat
3. Wing Flaps – 30 Deg.
4. Cabin Doors – Unlatch
5. Master – Off when landing assured
6. Touchdown – Tail Low
7. Mixture – I.C.O.
8. Fuel Selector – Off
9. Airplane - Evacuate

DITCHING

1. Radio - Transmit Mayday.
2. Heavy Objects - Secure/Toss
3. Approach - Into high winds.
   Parallel to swells in light winds.
4. Wing Flaps – 20-30 Deg.
5. Power - 300'/min @ 60 KTS.
6. Doors - Unlatch.
7. Touchdown - Level attitude @ 300'/min.
8. Face - Cushion at Impact.
9. Aircraft - Evacuate.
   Flood Cabin if necessary.
10. Life Vests / Rafts - Inflate.

FIRES

DURING START

1. Cranking - Continue.

If Engine Starts

2. Power - 1700 RPM (few min)
3. Engine - Shutdown
   Inspect for damage.

If Engine Fails to Start

4. Cranking - Continue.
5. Mixture – I.C.O.
6. Fire Extinguisher - Obtain.
7. Engine - SECURE.
   A. Master - Off.
   B. Ignition - Off.
   C. Fuel Selector - Off.
8. Fire - Extinguish.
9. Fire Damage - Inspect.

ENGINE FIRE IN FLIGHT

1. Mixture - I.C.O.
2. Fuel Selector - Off.
3. Master Switch - Off.
4. Cabin Heat and Air - Off. (except overhead vents)
5. Airspeed - 105 KTS. (faster if needed)
6. Forced Landing - Execute.

ELECTRICAL FIRE IN FLIGHT

1. Master Switch - Off.
2. All Other Switches - Off. (except ignition switch)
3. All Vents - Closed.
4. Fire Extinguisher - Activate.
5. Cabin - Ventilate.

If fire appears Out.

6. Master Switch - On.
7. Circuit Breakers - Check for faulty circuit don't reset.
8. Electrical Switches - On one at a time with delay until short circuit is localized.
9. Vents - Open as required.

CABIN FIRE

1. Master Switch - Off.
2. Vents - Close.
3. Fire Extinguisher - Activate.
4. Cabin - Ventilate.
5. Land Aircraft as soon as possible to inspect for damage.

WING FIRE

1. Nav Lights - Off.
2. Strobes - Off.
3. Pitot Heat - Off.
4. Side slip away from flames.

LANDING WITH A FLAT MAIN TIRE

1. Wing Flaps - As desired.
2. Approach - Normal.
3. Touchdown - Good tire first.

ELECTRICAL MALFUNCTIONS

OVER VOLTAGE LIGHT ON

1. Master Switch - Off (both sides).
2. Master Switch - On.
3. Over Voltage Light - Off.

If over voltage light remains on.

4. Flight - Terminate as soon as practical.

AMMETER SHOWS DISCHARGE

1. Alternator - Off.
2. Electrical Load - Reduce.
3. Flight - Terminate as soon as practical.

SPIN RECOVERY

1. Power - Idle.
2. Ailerons - Neutral.
3. Rudder - Opposite.
4. Elevator - Forward.
5. Recover from dive.

C-172RG CHECKLIST

CONSULT P.O.H. FOR DETAILED INFORMATION ABOUT THIS AIRCRAFT AND ITS PROCEDURES.