

Cessna 182RG 1979

MAXIMUM TAKEOFF WEIGHT 3100 LBS
MAXIMUM BAGGAGE WEIGHT 200 LBS

STALL SPEED

V_{SO} 37 KIAS
 V_{S1} 42 KIAS

MANEUVERING SPEED

V_A 3100 lbs 112 KIAS
 V_A 2550 lbs 101 KIAS
 V_A 2000 lbs 89 KIAS

TAKEOFF & CLIMB

V_Y 81 KIAS
 V_X 65 KIAS
 V_R 50 KIAS
ENROUTE CLIMB SPEED 81 - 100 KIAS

OPERATING SPEEDS

V_{NE} NEVER EXCEED SPEED 182 KIAS
 V_{NO} MAXIMUM STRUCTURAL CRUISING SPEED 160 KIAS
 V_{FE} FLAP EXTENDED SPEED 95 KIAS
FLAP OPERATING RANGE 37 - 140 KIAS
NORMAL OPERATING RANGE 42 - 160 KIAS
CAUTION RANGE 160 - 182 KIAS
CRUISE 2100-2400 RPM
MAX. DEMONSTRATED CROSSWIND COMPONENT 18 KTS

DESCENT SPEEDS

NORMAL APPROACH (FLAPS UP) 70 – 80 KIAS
NORMAL APPROACH (FLAPS 30°) 63 – 75 KIAS
SHORT FINAL (Short Field Approach) 63 KIAS
 V_{GLIDE} (Flaps Up) 70 KIAS
GO AROUND MAX POWER, FLAPS 20°...75 KIAS

FUEL CAPACITY

Each Tank 46.0 gal
Usable fuel (Each tank) 44.0 gal

Cessna 182RG Checklist

PREFLIGHT INSPECTION

FLIGHT PLANNING

Airplane CHECK MAINTENANCE RECORDS
Route & Navigation Planning COMPLETE
Weather BRIEFING COMPLETE
Baggage WEIGHED
Weight & Balance/CG CALCULATED/WITHIN LIMITS
Performance Planning COMPLETE
Flight Plan FILED

CABIN

Aircraft Papers AROW
Fire Extinguisher (if aboard) CHECK
Headsets, Charts, Lapboard ON BOARD
Baggage STOW & SECURE
Control Lock REMOVE & STOW
Ignition Switch KEY OUT / OFF
Circuit Breakers IN
Landing Gear Lever VERIFY DOWN
Fuel Selector Valve BOTH
Avionics Power Switches OFF
Compass Deviation Card CHECK
Master Switch ON
Aircraft Hobbs and Tach VERIFY
Fuel Quantity Indicators CHECK QUANTITY
Landing Gear Position Ind Lights VERIFY ILLUMINATED
Wing Flaps EXTEND
External Lights/Pitot Heat ON/CHECK/OFF
Master Switch OFF
Static Pressure Alternate Source Valve TEST

EMPENNAGE-LEFT SIDE

Side and Rear Windows CHECK/CLEAN
Baggage Door SECURE
Empennage CHECK FOR DAMAGE
Static Source Opening CHECK
Horizontal Stabilizer – Leading Edge CHECK
Elevator – Left side CHECK MOVEMENT/COUNTER-WEIGHT
Tail Tie-Down DISCONNECT
Rudder CHECK MOVEMENT/COUNTER-WEIGHT

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EMPENNAGE – RIGHT SIDE

Elevator – Right Side..... CHECK MOVEMENT/COUNTER-WEIGHT
Elevator Trim Tab CHECK
Horizontal Stabilizer – Leading Edge CHECK
Empennage..... CHECK FOR DAMAGE
Static Source Opening.....CHECK
ELT Antenna CHECK SECURITY
Side and Rear Windows CHECK/CLEAN

RIGHT WING - TRAILING EDGE

Wing Flap..... CHECK SECURITY/FLAP TRACKS
Aileron CHECK MOVEMENT/COUNTER-WEIGHT
Wing Tip and Lights CHECK

RIGHT WING - LEADING EDGE

Leading Edge CHECK
Wing Tie-Down REMOVE
Fuel Tank Vent Opening.....CHECK
Air Inlets CHECK
Right Main Tire, Brakes, Hyd. Line, Strut..... CHECK
Tire Chocks.....REMOVE
Fuel Sump Drain DRAIN
Fuel Quantity CHECK VISUALLY
Fuel Tank Cap.....SECURE

NOSE

Windshield CHECK/CLEAN
Static Source Opening CHECK
Cowling Rt Side.....SECURE
Engine Oil level CHECK (5-8qts)
Fuel Sump Knob PULL/DRAIN 4sec/CHECK CLOSED
Cowl Flap.....CHECK
Exhaust CHECK
Nose Wheel Strut, Tire & Damper CHECK
Propeller & Spinner CHECK FOR NICKS & SECURITY
Cowling Openings CHECK
Lights..... CHECK SECURITY
Induction Air Opening..... CHECK CLEAR
Cowl Flap CHECK
Exhaust.....CHECK
Cowling Lt Side SECURE
Left Static Source..... CHECK

LEFT WING - LEADING EDGE

Air Inlets CHECK
Pitot Tube CHECK
Stall Warning Vane CHECK
Fuel Tank Vent Opening CHECK
Wing Tie-Down REMOVE
Leading Edge CHECK

LEFT WING - TRAILING EDGE

Wing Tip and Lights CHECK
Aileron CHECK MOVEMENT/COUNTER-WEIGHT
Wing Flap..... CHECK SECURITY/FLAP TRACKS
Right Main Tire, Brakes, Hyd. Line, Strut..... CHECK
Tire Chocks.....REMOVE
Fuel Sump Drain DRAIN
Fuel Quantity..... CHECK VISUALLY
Fuel Tank Cap SECURE

Pull Aircraft beyond tie-down cable and perpendicular to flight line

Cessna 182RG Checklist

TAXI CHECK

BEFORE STARTING ENGINE

Preflight Inspection.....COMPLETE
Passenger Briefing.....COMPLETE
Seats, Seat Belts, Harnesses ADJUST & LOCK
Circuit Breakers..... CHECK IN
Brakes TEST AND SET
Landing Gear Lever..... DOWN
Cowl Flaps OPEN
Fuel Selector Valve BOTH
ATIS/Altimeter LISTEN & SET
Avionics and Autopilot..... OFF

STARTING ENGINE

Mixture RICH
Propeller HIGH RPM
Throttle OPEN ¼ INCH
Carb Heat OFF
Rotating Beacon/NAV Lights..... ON
Prime AS NECESSARY
Master Switch..... ON
Propeller Area CLEAR
Ignition Switch START
Throttle 1000 RPM
Mixture LEAN approx 1/2" out
Oil Pressure CHECK
Ammeter CHECK
Wing Flaps RETRACT

NAV/COMM

Avionics Switch ON
PFD & MFD Pwr Switches..... ON
Intercom CHECK
Audio Control Panel & Marker Beacon SET & CHECK
COM/NAV 1 SET
Transponder 1200 & ALT
COM/NAV 2 SET
Autopilot..... OFF

Lights.....AS REQUIRED
Parking Brake RELEASE
Ground Control..... OBTAIN TAXI PERMISSION
Brakes & Steering CHECK
Flight Instruments CHECK

BEFORE TAKEOFF (RUNUP)

Parking Brake SET
Seats, Seat Belts, Shoulder Harness..... SECURE
Doors & Windows CLOSED & LATCHED
Flight Controls FREE & CORRECT
Trims SET FOR T/O
Fuel Selector Valve BOTH
Fuel Quantity CHECK
Flight Instruments CHECK & SET
Aux Fuel Pump ON (ck fuel pressure rise), OFF
Throttle 1700 RPM
 Mixture SET BEST POWER
 Magnetos CHECK (RPM <175 drop, <50 diff)
 Propeller CYCLE
 Carb Heat CHECK
 Vacuum Gage CHECK
 Engine Instruments/Ammeter/Volts CHECK
Throttle CHECK IDLE
Throttle 1000 RPM
Throttle Friction Lock ADJUST
Radios & Avionics SET
Transponder CHECK
Flaps SET for TAKEOFF (0° - 20°)
Landing & Strobe Lights AS REQUIRED
Takeoff Briefing COMPLETE
Parking Brake RELEASE

Cessna 182RG Checklist

NORMAL TAKEOFF

Wing Flaps 0° - 20°
Carburetor Heat OFF
Throttle FULL and 2400 RPM
Engine Instruments CHECK
Elevator Control LIFT NOSE WHEEL at 50 KIAS
Climb Airspeed 70 KIAS (flaps 20) 80 KIAS (flaps 0)
Brakes APPLY MOMENTARILY
Landing Gear RETRACT in climb out
Wing Flaps RETRACT

SHORT FIELD TAKEOFF

Flaps 20°
Carburetor Heat OFF
Brakes APPLY
Throttle FULL and 2400 RPM
Engine Gauges CHECK
Brakes RELEASE
Elevator Control SLIGHTLY TAIL LOW
Climb Speed 55 KIAS (until all obstacles are cleared)
Landing Gear RETRACT (when all obstacles cleared)
Wing Flaps RETRACT (slowly after reaching 75 KIAS)

CLIMB

Airspeed 90 – 100 KIAS
Throttle 23 in HG and 2400 RPM
Fuel Selector BOTH
Mixture LEAN as appropriate
Cowl Flaps OPEN as required
Landing Light OFF

MAXIMUM PERFORMANCE CLIMB

Airspeed 88 KIAS (sea level), 74 (10,000 ft)
Throttle FULL THROTTLE 7 2400 RPM
Fuel Selector Valve BOTH
Mixture LEAN as appropriate
Cowl Flaps FULL OPEN

CRUISE

Power (no more than 75% power) 15 -23 in hg, 2100 - 2400 RPM
Trim ADJUST
Engine Gauges CHECK
Mixture LEAN
Cowl Flaps CLOSE as reqd

Cessna 182RG Checklist

DESCENT

Power AS DESIRED
Carburetor Heat AS REQUIRED
Mixture ENRICHEN
Cowl Flaps CLOSE
Altimeters SET
Wing Flaps AS DESIRED

BEFORE LANDING CHECK

Seats, Seat Belts, Shoulder Harness SECURE
Fuel Selector Valve BOTH
Landing Gear EXTEND (below 140 KIAS)
Mixture ADJUST
Carburetor Heat ON
Propeller HIGH RPM
Landing/Taxi Lights ON
Autopilot OFF

NORMAL LANDING

Airspeed (Flaps Up) 70-80 KIAS
Wing Flaps AS DESIRED
Airspeed (Flaps Down) 65 – 75 KIAS
Trim ADJUST
Touchdown MAIN WHEELS FIRST
Landing Roll LOWER NOSE WHEEL GENTLY
Brakes MINIMUM REQUIRED

SHORT FIELD LANDING

Airspeed (Flaps Up) 70 - 80 KIAS
Wing Flaps FULL DOWN (40°)
Airspeed 63 KIAS (Until flare)
Trim ADJUST
Power REDUCE AFTER CLEARING OBSTACLE
Touchdown MAIN WHEELS FIRST
Wing Flaps RETRACT
Brakes APPLY HEAVILY

GO-AROUND

Throttle FULL and 2400 rpm
Carburetor Heat OFF
Wing Flaps RETRACT TO 20°
Climb Speed 75 KIAS
Wing Flaps RETRACT (slowly after reaching 75 KIAS)
Cowl Flap OPEN

AFTER LANDING

Wing Flaps RETRACT
Mixture ENSURE approx. 1" out
Carburetor Heat OFF
Cowl Flaps OPEN
Transponder ALT
Unnecessary Lights OFF

SHUTDOWN AND SECURING AIRCRAFT

Parking Brake SET
Throttle 1000 rpm
Magneto Safety Check PERFORM
Throttle 1700 rpm
Mixture LEAN MAX RPM
External Lights OFF (except BEACON)
PFD & MFD OFF
Avionics Master Switch OFF
Throttle 1200 rpm
Mixture IDLE CUTOFF
Ignition Switch & Key OFF & OUT
Hobbs and Tach LOG
Master Switch OFF
Fuel Selector Valve LEFT or RIGHT
Control Lock INSTALL
All Cabin Vents CLOSED
Doors/Windows CLOSED & LOCKED
Aircraft TIE DOWN

CLOSE FLIGHT PLAN?