

GROUND OPERATION PROCEDURES

Cessna 182Q

N735LH

CABIN

1. Required Documents..... A.R.O.W.
2. Control Wheel Lock REMOVE
3. Ignition Switch OFF / KEY ON DASH
4. Avionics Power Switch OFF
5. Master Switch ON
6. Avionics Master Switch ON
7. Avionics Cooling Fan AUDIBLE
8. Avionics Master Switch OFF
9. Fuel Quantity Indicators CHECK
10. Flaps FULL DOWN
11. Cowl Flaps OPEN
12. All Exterior Lights ON
13. Pitot Cover..... REMOVED
14. Pitot Heat ON
15. Check Operation of :
..... Nav/Strobe, Beacon, and Landing Light
16. Stall Warning CHECKED
17. Pitot Tube..... CLEAR / WARM
18. Exterior Lights All OFF, BEACON ON
19. Pitot Heat OFF
20. Master Switch OFF
21. Alternate Static DRAINED/CLOSED
22. Fuel Selector BOTH
23. Oil Level: Loosen dipstick and let oil settle

EMPENNAGE

1. Baggage Door CHECK
2. Rudder Gust Lock (if installed) REMOVE
3. Tail Tie-Down DISCONNECT
4. Control Surfaces CHECK
5. Airplane Antennas CHECK

RIGHT WING

1. Flap and Aileron CHECK
2. Wing Tip CHECK
3. Leading Edge CHECK
4. Wing Tie-Down REMOVE
5. Overhead Cabin Vent Inlets CHECK
6. Main Wheel Tire / Brake CHECK
7. Fuel Tank Sump DRAIN / CHECK
8. Fuel Quantity CHECK VISUALLY
9. Fuel Filler Cap..... *vent unobstructed* SECURE

NOSE

1. Static Source Opening (both sides) CHECK
2. Propeller and Spinner CHECK
3. Landing Light Covers CHECK
4. Carburetor Air Inlet CHECK
5. Nose Wheel Strut and Tire CHECK
6. Nose Tie-Down REMOVE

7. Engine Cowling CHECK
8. Engine Oil Level *5-8 quarts* CHECK
9. Fuel Strainer *4 seconds* PULL

LEFT WING

1. Overhead Cabin Vent Inlets CHECK
2. Main Wheel Tire / Brake CHECK
3. Fuel Tank Sump DRAIN / CHECK
4. Fuel Quantity CHECK VISUALLY
5. Fuel Filler Cap..... *vent unobstructed* SECURE
6. Leading Edge CHECK
7. Stall Warning Vane CHECK
8. Fuel Tank Vent Opening CHECK
9. Wing Tie-Down REMOVE
10. Wing Tip CHECK
11. Aileron and Flap CHECK



V-SPEEDS

INFO

Vso	45	Oil (full/min)	12 / 9
Vs1	48	Fuel [use]	61 [56]
Vr	50	Weight TO	2950
Vx	54	Weight Lnd	2950
Vy	78	Demo Xwind	15
Vg	70		
Vfe/10°	140	App FL DN	60 - 70
Vfe/>10	95	App FL UP	70 - 80
Va	89-111		
Vno	143		
Vne	179		

BEFORE STARTING ENGINE

1. Preflight Inspection COMPLETE
2. Passenger Briefing COMPLETE
3. Seats/SeatBelts ADJUST, LOCK
4. Fuel selector valve BOTH
5. Av. Pwr Switch, Elect. Equip..... OFF
6. Brakes TEST; SET/HOLD
7. Cowl Flaps OPEN
8. Circuit Breakers..... CHECK IN

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STARTING ENGINE (With Battery)

1. Beacon..... ON
2. Mixture..... RICH
3. Propeller..... HIGH RPM
4. Carburetor Heat COLD
5. Throttle..... OPEN 1/2"
6. Prime..... As Required
7. Propeller area CLEAR
8. Master switch..... ON
9. Ignition switch START
10. Oil pressure CHECK
11. Throttle..... 1000 RPM or LESS
12. Mixture..... LEAN, If Required
13. Nav, strobe lights..... ON, as REQ'd
14. Avionics power switch & radios ON
15. Transponder ALT
16. Flaps RETRACT
17. GPS Initial fuel; Runway diagram
18. ATIS / Altimeter SET
19. Taxi Lights..... ON as REQ'd

RUNUP

1. Parking Brake SET or HOLD
2. Seat & Seat Belts CHECK SECURE
3. Doors & Windows CLOSED/LOCKED
4. Flight controls..... FREE and CORRECT
5. Flight Instruments CHECK & SET
..... (Heading & Altimeter)
6. Fuel Quantity..... CHECK
7. Fuel Selector Valve BOTH
8. Mixture..... RICH
9. Elevator/Rudder Trim..... set for TAKEOFF
10. Throttle 1700 RPM
 - a. Magnetos..... CHECK BOTH (175/50)
 - b. Carburetor heat CHECK/COLD
 - c. Propeller..... CYCLE high-low-high 3x
 - d. Engine instruments..... CHECK
 - e. Suction Gage CHECK
 - f. Ammeter CHECK alt with load
 - g. Throttle 1000 RPM
11. Throttle friction lock..... ADJUST
12. Radios and Avionics..... SET
13. Navigaton/GPS SET as REQ'd
14. Autopilot TEST, OFF

BEFORE TAKEOFF

1. Doors & Windows CLOSED/LOCKED
2. Fuel Quantity..... CHECK
3. Fuel Selector Valve BOTH
4. Carb Heat COLD
5. Mixture..... RICH

6. Propeller HIGH RPM
7. Cowl Flaps OPEN
8. Elevator/Rudder Trim..... set for TAKEOFF
9. Wing flaps..... as REQ'd
10. At runway Lights As Req'd;

INFLIGHT CHECKS ON SECOND CARD

SECURING AIRPLANE

1. Parking Brake..... SET or HOLD
2. Throttle..... 1500 RPM
 - a. Mixture..... LEANED, 20 seconds
 - b. Avionics CHECK 121.5
3. Throttle..... REDUCE as REQ'd
4. Parking Brake RELEASED
5. All lights..... As Req'd
6. Power IDLE
7. Avionics Pwr Switch, Elect. Equip..... OFF
8. Exterior, Interior & Panel Lights OFF
9. Beacon Light..... ON
10. Magneto Ground..... CHECK
11. Mixture..... IDLE CUT OFF
12. Ignition Switch..... OFF
13. Aircraft Keys ON DASH
14. Master Switch..... OFF
15. Fuel Selector..... RIGHT TANK
16. Gust Lock INSTALLED
17. Pitot Cover..... INSTALLED
18. Wheel Chocks..... INSTALLED
19. Tie Downs INSTALLED
20. Tires and Aircraft..... INSPECTED
21. Shade/Cover INSTALLED

FIRE DURING START

1. Cranking CONTINUE
- If engine starts:**
2. Power 1,700 RPM for a few minutes
 3. Engine SHUTDOWN
- If engine fails to start:**
4. Throttle FULL OPEN
 5. Mixture..... IDLE CUT OFF
 6. Cranking CONTINUE
 7. Fire Extinguisher OBTAIN
 8. Master Switch OFF
 9. Ignition Switch..... OFF
 10. Fuel Selector..... OFF
 11. Fire Extinguisher..... ACTIVATE
 12. Airplane EVACUATE

IN-FLIGHT NORMAL PROCEDURES

NORMAL TAKEOFF

1. Wing Flaps..... 0 - 20°
2. Carburetor Heat..... COLD
3. Throttle..... FULL OPEN and 2400 RPM
4. Rotate **50 kts**
5. Climb Speed 70 kts (flaps 20°)
..... **80 kts (flaps Up)**
6. Wing Flaps..... RETRACT
7. Noise abatement @ 500': 23" and 2100rpm

SHORT FIELD TAKEOFF

1. Wing Flaps..... 20°
2. Carburetor Heat COLD
3. Brakes.....APPLY
4. Throttle FULL OPEN and 2400 RPM
5. Mixture..... RICH (LEAN max RPM > 3000')
6. Brakes..... RELEASE
7. Elevator Control SLIGHTLY TAIL LOW
8. Climb Speed **57 kts** until over obstacles
9. Wing flaps..... RETRACT after 70 kts

ENROUTE CLIMB

1. Airspeed.....85-100 kts
2. Throttle 23" and 2400 RPM
3. Fuel selector valve BOTH
4. Mixture RICH (LEAN max RPM > 5000')
5. Cowl flaps..... OPEN, as Req'd

CRUISE

1. Power 15-23", 21k-24k RPM (75% Max)
2. Elevator/Rudder trim ADJUST
3. Mixture..... LEAN as REQ'd
4. Cowl flaps..... CLOSED, as REQ'D

DESCENT

1. Power..... as REQ'd
2. Carburetor Heat..... FULL, as req'd
3. Mixture..... ENRICHEN, as REQ'd
4. Cowl flaps..... CLOSED
5. ATIS/Altimeter SET
6. NAV/GPS Switch..... SET
7. Fuel selector valve BOTH
8. Wing Flaps..... AS DESIRED

BEFORE LANDING

1. Seats/SeatBelt..... UPRIGHT,ADJUST,LOCK
2. Fuel Selector Valve BOTH
3. Mixture..... RICH (or as REQ'd)
4. Carburetor Heat ON
5. Propeller..... HIGH RPM
6. Landing/Taxi Lights..... ON
7. Autopilot DISCONNECT

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NORMAL LANDING

1. Wing flaps as DESIRED (< 140/95 kts)
2. Airspeed... **70-80 kts (flaps UP)** . Airspeed
..... **60-70 kts (flaps down)**
3. Touchdown MAIN WHEELS FIRST
4. Landing Roll..... LOWER NOSE WHEEL
5. Braking..... MINIMUM REQUIRED

SHORT-FIELD LANDING

1. Wing Flaps.....FULL DOWN 40°
2. Airspeed 60 kts
3. Throttle CLOSED after obstacles
4. Touchdown..... MAIN WHEELS FIRST
5. Brakes.....APPLY HEAVILY–don't lock brakes
6. Wing flaps..... RETRACT

BALKED LANDING

1. Throttle FULL OPEN and 2400 RPM
2. Carburetor Heat..... COLD
3. Wing Flaps..... RETRACT TO 20°
4. Climb speed 55 kts
5. Wing Flaps..... RETRACT after 70 kts
6. Cowl Flaps..... OPEN

AFTER LANDING

1. Wing Flaps..... UP
2. Carburetor Heat COLD
3. Cowl Flaps OPEN
4. Taxi & Landing Light ON as REQ'd
5. TransponderALT

STOP & GO / FULL STOP TAXI BACK

1. Doors & Windows CLOSED/LOCKED
2. Fuel Selector Valve..... BOTH
3. Elevator / Rudder Trimset for TAKEOFF
4. Cowl Flaps OPEN
5. Wing flapsas REQ'd
6. Mixture RICH
7. Propeller FULL
8. Carburetor Heat..... COLD
9. At runway-All lights..... ON

Vso	45	Oil (full/min)	12 / 9
Vs1	48	Fuel [use]	61 [56]
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Vx	54	Weight Lnd	2950
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IN-FLIGHT EMERGENCY PROCEDURES

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ENGINE FAILURE DURING FLIGHT

1. Airspeed 70 kts
2. Carburetor Heat ON
3. Fuel Selector Valve BOTH
4. Mixture..... RICH
5. Ignition Switch..... BOTH or START
6. Primer..... IN and LOCKED

ENGINE FIRE IN FLIGHT

1. Mixture..... IDLE CUT OFF
2. Fuel Selector Valve OFF
3. Master Switch OFF
4. Cabin Heat/Air. OFF(except overhead vents)
5. Airspeed 100 kts (To extinguish fire)
6. Forced Landing..... EXECUTE

EMERGENCY LANDING NO POWER

1. Airspeed 70 kts (flaps UP)
..... 65 kts (flaps DOWN)
2. Mixture..... IDLE CUT OFF
3. Fuel Selector Valve OFF
4. Ignition Switch..... OFF
5. Wing Flaps.... AS REQ'D (40° recommended)
6. Doors..... UNLATCH prior to touchdown
7. Master Switch OFF (landing assured)
8. Touchdown..... SLIGHTLY TAIL LOW
9. Brakes..... APPLY HEAVILY

DITCHING

1. Radio TRANSMIT MAYDAY on 121.5
2. TransponderSQUAWK 7700
3. ELT ACTIVATE
4. Heavy objects SECURE or JETTISON
5. Flaps20°-40°
6. Power Set for 300 fpm descent @ 60 kts
7. Approach:
High winds, heavy seas: INTO THE WIND
Light winds, heavy swells PARALLEL TO SWELLS
8. No power.... 70 kts flaps up / 65 kts flaps 10°
9. Cabin doors UNLATCH
10. Touchdown..... LEVEL ATTITUDE
11. Face CUSHION at touchdown
12. Airplane . Evacuate by door (open window)
13. LifeVests/Raft CLEAR of A/C INFLATE

ELECTRICAL FIRE IN FLIGHT

1. Master Switch OFF
2. Vents/Cabin Air/Heat CLOSED
3. Fire ExtinguisherACTIVATE
4. Avionics Master Switch OFF
5. All Other Switches (except ignition) OFF
- If Fire is CONFIRMED OUT: Ventilate Cabin
6. Vents/Cabin Air/Heat OPEN (if fire is out)
- If fire is out & elec. power is necessary:
7. Master Switch ON
8. Circuit Breakers CHECK (Don't RESET)
9. Radio Switches OFF
10. Avionics Master Switch ON
11. Radio/Electrical SwitchesON(1 at time)

CABIN FIRE

1. Master Switch OFF
2. Vents/Cabin Air/Heat . CLOSED(avoids draft)
3. Fire ExtinguisherACTIVATE
- If Fire is CONFIRMED OUT: Ventilate Cabin
4. Vents/Cabin Air/Heat OPEN (if fire is out)
5. Land the airplane as soon as possible

WING FIRE

1. Landing/Taxi Light Switches OFF
2. Navigation Light Switch OFF
3. Strobe Light Switch..... OFF
4. Pitot Heat Switch..... OFF
5. Sideslip NOSE TO SIDE WITH FIRE

OVER-VOLTAGE LIGHT ILLUMINATES

1. Avionics Power Switch OFF
2. Master Switch OFF (both sides)
3. Master SwitchON (both sides)
- If VOLTS stays off: Avionics Pwr Switch ON
- If VOLTS comes on: Flight TERMINATE

AMMETER SHOWS DISCHARGE

1. Alternator OFF
2. Nonessential Electrical Equip OFF
3. Flight..... LAND as soon as practical.

AUTOPILOT or TRIM MALFUNCTION

1. Control WheelGRASP FIRMLY & CONTROL
2. A/P..... DISCONNECT
3. AircraftRE-TRIM manually as needed
4. Autopilot Circuit BreakerPULL