

GROUND PROCEDURES

Cessna 172N

N739BT

CABIN

1. Required Documents..... A.R.O.W.
2. Control Wheel Lock REMOVE
3. Ignition Switch OFF / KEY ON DASH
4. Avionics Master Switch OFF
5. Master Switch ON
6. Fuel Quantity Indicators CHECK
7. Avionics Master Switch ON
8. Avionics Cooling Fan AUDIBLE
9. Avionics Master Switch OFF
10. Flaps FULL DOWN
11. All Exterior Lights ON
12. Pitot Cover REMOVED
13. Pitot Heat ON
14. Check Operation of :
..... Nav/Strobe, Beacon, and Landing Light
15. Stall Warning CHECKED
16. Pitot Tube..... CLEAR / WARM
17. Exterior Lights All OFF, BEACON ON
18. Pitot Heat OFF
19. Master Switch OFF
20. Fuel Selector BOTH
21. Elevator Trim..... SET for takeoff

EMPENNAGE

1. Baggage Door CHECK
2. Rudder Gust Lock REMOVE
3. Tail Tie-down DISCONNECT
4. Elevator CHECK
5. Rudder..... CHECK
6. Trim Tab CHECK
7. Airplane Antennas CHECK

RIGHT WING

1. Flap and Aileron CHECK
2. Wing Tip CHECK
3. Leading Edge CHECK
4. Wing Tie-Down REMOVE
5. Main Wheel Tire / Brake CHECK
6. Fuel Quick Drain Valves..... CHECK
7. Fuel Quantity CHECK VISUALLY
8. Fuel Filler Cap.... vent unobstructed SECURE

NOSE

1. Fuel Quick Drain Valves..... CHECK
2. Engine Oil/Filler Cap..... CHECK (4-7 qts)
3. Engine Cooling Air Inlets CLEAR
4. Propeller and Spinner CHECK
5. Carburetor Air Filter CHECK
6. Nose Wheel Strut and Tire CHECK
7. Left Static Source Opening CHECK

LEFT WING

1. Fuel Quantity CHECK VISUALLY
2. Fuel Filler Cap vent unobstructed SECURE
3. Fuel Quick Drain Valves CHECK
4. Main Wheel Tire / Brake CHECK
5. Leading Edge CHECK
6. Pitot Tube Cover REMOVE
7. Fuel Tank Vent Opening CHECK
8. Stall Warning Opening CHECK
9. Wing Tie-Down REMOVE
10. Landing Light..... CHECK
11. Wing Tip CHECK
12. Aileron and Flap..... CHECK



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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. Circuit Breakers..... CHECK IN

STARTING ENGINE (With Battery)

1. Beacon ON
2. Carburetor Heat..... COLD
3. Throttle OPEN 1/8"
4. Mixture FULL RICH

NOTE: if engine is warm, omit priming

5. Prime..... As REQ'D (2-6 strokes)
6. Propeller area CLEAR
7. Master switch ON
8. Ignition switch..... START
9. Oil pressure..... CHECK
10. Throttle 1000 RPM or LESS
11. Nav, strobe lights ON, as REQ'd
12. Avionics power switch & radios ON
13. Transponder..... ALT
14. Flaps RETRACT
15. GPS..... Initial fuel; Runway diagram
16. ATIS / Altimeter SET
17. Taxi Lights ON as REQ'd

RUNUP

1. Parking Brake(s) 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. Throttle 1700 RPM
 - a. Magnetos CHECK BOTH (125/50)
 - b. Carburetor Heat CHECK then COLD
 - c. Engine instruments CHECK
 - d. Suction Gage..... CHECK
 - e. Ammeter CHECK
10. Throttle CHECK IDLE
11. Throttle 1000 RPM
12. Throttle friction lock ADJUST
13. Autopilot (if installed) OFF
14. Elevator Trim SET for TAKEOFF
15. Radios, Avionics, GPS, Nav SET
16. Wing flaps as REQ'D
17. Lights..... as REQ'D

BEFORE TAKEOFF

1. Doors & Windows CLOSED/LOCKED
2. Fuel Quantity..... CHECK
3. Fuel Selector Valve BOTH
4. Elevator Trim SET for takeoff
5. Mixture..... RICH (LEAN max RPM > 3000')
6. Wing flaps..... as REQ'D
7. At runway Lights as REQ'd
8. GPS Zoom SET

**INFLIGHT CHECKS
CONTINUED ON SECOND CARD**

SECURING AIRPLANE

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

FLIGHT NORMAL PROCEDURES

NORMAL TAKEOFF

1. Doors & Windows.....CLOSED/LOCKED
2. Fuel Quantity.....CHECK
3. Fuel Selector Valve BOTH
4. Elevator Trim..... SET for takeoff
5. Mixture..... RICH (LEAN max RPM > 3000')
6. Wing Flaps..... 0°
7. Carburetor heat..... COLD
8. Throttle FULL OPEN
9. Mixture..... RICH (LEAN max RPM > 3000')
10. Rotate..... **55 KIAS**
11. Climb Speed (Vy = 76 KIAS) **70 - 80 KIAS**

SHORT FIELD TAKEOFF

1. Steps 1-5 of Normal Takeoff
2. Wing Flaps..... 0°
3. Carburetor Heat COLD
4. Brakes.....APPLY
5. Throttle FULL OPEN
6. Mixture.....RICH (LEAN max RPM > 3000')
7. Engine Instruments CHECK
8. Brakes..... RELEASE
9. Elevator Control SLIGHTLY TAIL LOW
10. Climb Speed ... **59 KIAS** until over obstacles

NOTE: SOFT FIELD TAKEOFF use 10° flaps and 55KIAS until clear of obstacles.

ENROUTE CLIMB

1. Airspeed **70 - 85 KIAS**
2. Throttle FULL OPEN
3. Mixture.....RICH (LEAN max RPM > 3000')

CRUISE

1. Power 2200-2700 RPM (75% max)
2. Elevator trim ADJUST
3. Mixture..... LEAN, as REQ'd

DESCENT

1. Power as REQ'd
2. Mixture.....ADJUST, Full Rich for Idle
3. Carburetor Heat ON, as Req'd
4. ATIS/Altimeter.....SET
5. Fuel selector valve..... BOTH

BEFORE LANDING

1. Seats/SeatBelt UPRIGHT,ADJUST,LOCK
2. Fuel Selector Valve BOTH
3. Mixture..... RICH (or as REQ'd)
4. Carburetor Heat ON, as Req'd
5. Landing/Taxi Lights..... ON
6. Wing Flaps AS DESIRED

Cessna 172N

NORMAL LANDING

1. Wing flaps as DESIRED (< 110/85 KIAS)
2. Airspeed..... **60 - 70 KIAS (flaps UP)**
3. Airspeed..... **55 - 65 KIAS (flaps DOWN)**
4. Touchdown MAIN WHEELS FIRST
5. Landing Roll LOWER NOSE WHEEL
6. Braking..... MINIMUM REQUIRED

SHORT-FIELD LANDING

1. Airspeed..... 60 - 70 KIAS (flaps UP)
2. Wing Flaps FULL DOWN (40°)
3. Airspeed **60 KIAS**
4. Throttle IDLE after obstacles
5. Touchdown MAIN WHEELS FIRST
6. Brakes..... APPLY HEAVILY—don't lock brakes
7. Wing flaps RETRACT

BALKED LANDING

1. Throttle FULL OPEN
2. Carburetor Heat..... COLD
3. Wing Flaps RETRACT TO 20°
4. Climb speed **55 KIAS**
5. Wing Flaps 10° (until over obstacles)
6. Wing Flaps **RETRACT after 60 KIAS**

AFTER LANDING

1. Wing Flaps UP
2. Carburetor Heat..... COLD
3. Taxi & Landing Light.....ON as REQ'd
4. Transponder ALT
5. Airport Diagram Displayed

V-SPEEDS

INFO

Vso	41	Oil (full/min)	7 / 4
Vs1	47		
Vr	55	Usable Fuel	40
Vx	59	Weight TO	2300#
Vy	73	Weight Lnd	2300#
Vg	65	Demo Xwind	15
Vfe	85	App FL DN	55 - 65
Va	80 - 97	App FL UP	60 - 70
Vno	128	Vfire	100
Vne	160		

ENGINE FAILURE DURING FLIGHT

1. Airspeed..... **65 KIAS**
2. Carburetor Heat..... ON
3. Landing areaSELECT
4. Fuel Selector Valve BOTH
5. Mixture RICH
6. Ignition Switch BOTH or START
7. Primer IN and LOCKED
8. Transponder 7700; Mayday call

N739BT

FLIGHT EMERGENCY PROCEDURES

ENGINE FIRE IN FLIGHT

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

EMERGENCY LANDING NO POWER

1. Passenger Seat Backs.....MOST UPRIGHT
2. Seats and Seat Belts..... SECURE
3. Airspeed..... 65 KIAS (flaps UP)
..... 60 KIAS (flaps DOWN)
4. Mixture IDLE CUT OFF
5. Fuel Selector OFF
6. Ignition Switch OFF
7. Wing Flaps..... AS REQ'D (FULL recommended)
8. Doors..... UNLATCH prior to touchdown
9. Master Switch OFF (landing assured)
10. TouchdownSLIGHTLY TAIL LOW
11. BrakesAPPLY HEAVILY

ELECTRICAL FIRE IN FLIGHT

1. Master Switch OFF
 2. Avionics Master Switch.....OFF
 3. All Other Switches (except ignition).....OFF
 4. Vents/Cabin Air/Heat..... CLOSED
 5. Fire Extinguisher ACTIVATE
- If Fire is CONFIRMED OUTVentilate Cabin
6. Vents/Cabin Air/Heat..... OPEN (if Fire is out)

If fire is out & elec. power is necessary:

7. Master SwitchON
8. Circuit Breakers..... CHECK (Don't reset)
9. Radio SwitchesOFF
10. Avionics Master Switch..... ON
11. Radio/Electrical Switches..... ON (1 at time)

WING FIRE

1. Navigation Light Switch OFF
2. Pitot Heat Switch OFF
3. Strobe Light Switch OFF
4. Sideslip NOSE TO SIDE WITH FIRE

CABIN FIRE

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

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N739BT

DITCHING

1. Radio TRANSMIT MAYDAY (location)
2. TransponderSQUAWK 7700
3. ELTACTIVATE
4. Heavy objectsSECURE or JETTISON
5. Passenger Seat Backs MOST UPRIGHT
6. Seats and Seat Belts SECURE
7. Wing Flaps20°-40°
8. Power 300 fpm descent @ 55 KIAS
Without power 65 KIAS flaps up OR
..... 60 KIAS flaps 10°
9. Approach:
High winds, heavy seas.....INTO THE WIND
Light winds, heavy swells ...PARALLEL TO SWELLS
10. Cabin doors UNLATCH
11. Touchdown..... LEVEL ATTITUDE
12. Face CUSHION at touchdown
13. AirplaneEvacuate by door
(open window 1st)
14. Life Vests/Raft CLEAR OF A/C INFLATE

AMMETER SHOWS DISCHARGE

1. Alternator OFF
2. Non-essential radio/electrical e OFF
3. Flight.....LAND as soon as practical

OVER VOLTAGE LIGHT ILLUMINATES

1. Avionics Power Switch..... OFF
 2. Master Switch..... OFF (both sides)
 3. Master Switch..... ON
- If over voltage light off:
4. Avionics Power Switch..... ON
- If over-voltage light illuminates again:
5. Flight.....LAND as soon as practical