

N3080E

Cessna 172N Checklist

CABIN

Hobbs & Tach times VERIFY
Documents (AROW) CHECK
Control Wheel Lock REMOVE
Ignition & Avionics Power OFF
Master Switch ON
Fuel Quantity CHECK
Flaps DOWN
Exterior Lights CHECK
Master Switch OFF

CAUTION

*Keep battery operation to a minimum.
Extended battery use can cause significant
reduction in battery life & adversely affect
other systems.*

Alt. Static Source CLOSED
Fuel Selector Valve BOTH

FUSELAGE & EMPENNAGE

Baggage Door SECURE
Fuselage & tail cone CHECK
Tail Tie Down DISCONNECT
Elevator & Trim Tab CHECK
Radio Antennas CHECK

RIGHT WING

Flap & Aileron CHECK
Fuel Sump DRAIN & CHECK
Gear, Tire, Brake CHECK (29 psi)
Wing, Nav & Strobe Lights CHECK
Wing Tie-Down REMOVE
Fuel Quantity CHECK VISUALLY

NOSE

Windscreen & Windows CHECK
Engine Oil CHECK, 4 qts. Min
Fuel Strainer CHECK & CLOSED
Propeller & Spinner CHECK
Landing/Taxi Lights CHECK
Carburetor Air Filter CHECK
Nose Gear CHECK (31 psi)
Static Port CHECK

LEFT WING

Fuel Sump DRAIN & CHECK
Fuel Quantity CHECK VISUALLY
Pitot Tube CHECK
Wing Tie-Down REMOVE
Stall Warning Opening CHECK
Fuel Tank Vent CHECK
Wing, Nav & Strobe Lights CHECK
Aileron & Flap CHECK
Gear, Tire, Brake CHECK (29 psi)

BEFORE STARTING ENGINE

Preflight / Briefing COMPLETE
Seat Belts, Harnesses CHECK
Brakes TEST & HOLD
Avionics & Electrical OFF

Circuit Breakers IN
Fuel Selector Valve BOTH
Anti-Collision Beacon ON

STARTING ENGINE

Mixture RICH
Throttle OPEN 1/8 inch
Carburetor Heat COLD
Master Switch ON
Prime AS REQ'D (2-6 Strokes)
Propeller Area CLEAR!
Ignition Switch START
Oil Pressure CHECK

WARNING

***If no oil pressure within 30 seconds
shutdown the engine***

RPM SET 1000 RPM
Mixture LEAN for Taxi

Hot Start

Throttle ¼ INCH OPEN
Mixture FULL RICH
Ignition Switch START

Flooded Start

Mixture IDLE CUT-OFF
Throttle FULL OPEN
Prop Area CLEAR!
Ignition Switch START

As Engine Starts –

Mixture FORWARD
Throttle 1000 RPM
Oil Pressure CHECK (W/ 30 secs)
Mixture LEAN for TAXI

Starting with External Power

Master Switch OFF
External Power CONNECT

Execute Normal Start

External Power REMOVE
Master Switch ON

BEFORE TAXI

Avionics Power ON
Nav Lights (As Required) ON
Flaps UP
Comm, Nav & GPS SET
Transponder STBY or GND
Instruments SET

TAXI

Taxi Light As Required
Nose Wheel Steering CHECK
Brakes CHECK
Flight Instruments CHECK

BEFORE TAKEOFF

Brakes HOLD
Trim SET FOR TAKEOFF
Controls FREE & CORRECT
Fuel Quantity CHECK

Fuel Selector Valve..... BOTH
 Mixture..... RICH (*below 3000 feet*)
 Throttle..... 1700 RPM
 Magnetos..... CHECK (*Drop 125, 50 Diff*)
 Suction..... CHECK (*4 – 6 psi*)
 Engine Instruments..... CHECK
 Carb Heat..... ON (*RPM Drop*)
 Throttle..... IDLE (*RPM Stable*)
 Carb Heat..... OFF
 Throttle..... 1000 RPM
 Flight Instruments..... CHECK & SET
 Comm & Nav Radios..... SET
 E. P.s..... REVIEW
 Ground Run/Abort Point
 Eng. Fail Before Rotation
 Eng. Failure After Rotation
 Eng. Fail After T.O – Low
 Exchange of Flight Controls

IFR Departure Brief..... COMPLETE
 Pitot Heat..... ON (*As Required*)
 Transponder..... ALT

HOLD SHORT

Mixture..... RICH or (*Lean for Max RPM*)
 Doors & Windows..... SECURED
 Landing & Strobe Lights..... ON
 Time..... RECORD
 Final Approach..... CLEAR

NORMAL TAKEOFF

Flaps..... 0°-10°
 Carb Heat..... COLD
 Throttle..... FULL OPEN
 Elevator..... ROTATE @ 55 KIAS
 Climb..... 70-80 KIAS

SHORT FIELD TAKEOFF

Use all available runway
 Flaps..... 0°-10°
 Carb Heat..... COLD
 Brakes..... HOLD
 Throttle..... FULL (*≥ 2300 RPM*)
 Elevator..... SLIGHTLY TAIL LOW
 Climb..... 59 KIAS (*V_x Until Clear*)
 Accel..... 73 KIAS (*V_y*)
 Flaps..... UP

SOFT FIELD TAKEOFF

Flaps..... 10°
 Yoke..... FULL AFT
 Throttle..... FULL
 Level Off In Ground Effect.
 No Obstacle..... Accel 73 V_y
 50 ft Obstacle..... CLIMB 59 KIAS
 Once Clear..... Accel 73 V_y
 Flaps..... UP

CLIMB

Flaps..... UP
 Speed..... 70-85 KIAS
 Mixture..... LEAN as required

CRUISE

Power..... SET
 Mixture..... LEAN
 Trim..... ADJUST
 Heading Indicator..... CHECK & SET
 Landing Light..... OFF

DESCENT

Seat Belts & Harnesses..... SECURE
 Fuel Selector Valve..... BOTH
 Mixture..... Adjust
 Carb Heat..... AS REQUIRED
 Landing Light..... ON

NORMAL PATTERN & LANDING

(80 KIAS Downwind; 70 Base; 65 Final)

Mixture..... FULL RICH
 Power..... AS REQUIRED
 Carb Heat..... ON
 Flaps..... Extend Incrementally
 Touchdown..... MAIN WHEELS 1st
 Rollout..... LOWER NOSE GENTLY
 Braking..... MIN REQUIRED

SHORT FIELD LANDING

Carburetor Heat..... ON
 Flaps..... FULL DOWN 40°
 Airspeed..... 60 KIAS (*Until Flare*)
 Power..... IDLE (*After Clearing Obs*)
 Touchdown..... MAIN WHEELS 1st
 Flaps..... RETRACT
 Yoke..... FULL AFT
 Brakes..... APPLY; Do Not Skid Tires

SOFT FIELD LANDING

Carburetor Heat..... ON
 Flaps..... FULL
 Airspeed..... 65 or 60 (*Over Obstacle*)
 Power..... AS REQUIRED, IDLE
 Yoke..... AFT (*thru touchdown & rollout*)
 Nose Wheel..... LOWER GENTLY

BALKED LANDING

Throttle..... FULL
 Carburetor Heat..... COLD
 Cowling/Nose..... ON THE HORIZON
 Flaps..... 20° (*immediately*)
 Climb Speed..... 55 KIAS
 Flaps..... 10° (*Until Clear of Obstacles*)
 Flaps..... RETRACT (*At Safe Altitude*)

Touch & Go

Flaps..... UP
 Trim..... SET for Takeoff
 Carburetor Heat..... COLD
 Throttle..... FULL OPEN

LAND & TAXI BACK

Flaps..... UP
 Mixture..... LEAN FOR TAXI
 Carburetor Heat..... COLD
 Ldg & Taxi Lights..... As required
 Trim..... SET for Takeoff

Before Takeoff

Mixture RICH
 Doors & Windows SECURED
 Landing & Strobe Lights ON
 Final Approach CLEAR

AFTER LANDING

Flaps UP
 Mixture LEAN (for taxi)
 Carburetor Heat COLD
 Transponder GND or STBY
 Pitot Heat OFF
 Landing & Taxi Lights AS REQ'd

SHUTDOWN

Avionics Master Switch OFF
 All Lights Except Beacon OFF
 Throttle 1000 – 1200 RPM
 Mixture IDLE CUT OFF
 Ignition Switch OFF
 Keys SECURE
 Master Switch OFF
 Beacon OFF

SECURING AIRPLANE

Control Lock INSTALL
 Hobbs & Tach Times RECORD
 Sunscreen INSTALL
 Seatbelts & Shoulder Harnesses SECURE
 Pitot Cover INSTALL
 Aircraft POSTFLIGHT & TIE DOWN
 Trash REMOVE
 Windows & Doors SECURE & LOCHECK

EMERGENCY PROCEDURES

Procedures shown in **Bold Face** type are immediate action items and should be committed to memory.

ENGINE FIRE ON START

1. **Cranking** **CONTINUE**
 If engine starts:
2. **Power 1700 RPM** for a few mins
3. **Engine** **SHUTDOWN**
 If engine fails to start:
4. **Cranking** **CONTINUE**
5. **Throttle** **FULL OPEN**
6. **Mixture** **IDLE CUTOFF**
7. Fire Extinguisher OBTAIN
8. Engine SECURE
9. Fire EXTINGUISH

ABORT

1. **Throttle** **IDLE**
2. **Brakes** **APPLY**

ENGINE FAILURE DURING TAKEOFF ROLL

1. **ABORT**
2. Flaps RETRACT
3. Mixture IDLE CUT-OFF
4. Ignition Switch OFF
5. Master Switch OFF

ENGINE FAILURE AFTER TAKEOFF

1. **Airspeed65 KIAS (Flaps UP)**
 **60 KIAS (Flaps Down)**

2. LAND STRAIGHT AHEAD

- If time permits
3. Mixture IDLE CUT-OFF
 4. Fuel Selector Valve OFF
 5. Ignition Switch OFF
 6. Flaps AS REQUIRED
 7. Master Switch OFF

ENGINE FAILURE DURING FLIGHT (RESTART)

1. **Airspeed** **65 KIAS**
2. **Fuel Selector** **BOTH**
3. **Mixture** **RICH**
4. **Throttle** **FORWARD**
5. **Carburetor Heat** **ON**
6. **Ignition Switch** **BOTH**
7. **Primer** **IN & LOCKED**

EMERGENCY LANDING

WITHOUT ENGINE POWER

1. **Airspeed** 65 Flaps UP
 60 Flaps Down
2. Mixture IDLE CUTOFF
3. Fuel Selector OFF
4. Ignition Switch OFF
5. Transponder SET 7700
6. Radio Call MAYDAY
 ON ACTIVE FREQ or. 121.5
7. Flaps FULL DOWN
8. Master Switch OFF
9. Seatbelts SECURE & TIGHT
10. Doors UNLATCH
 PRIOR TO TOUCHDOWN
11. Touchdown .SLIGHTLY TAIL LOW
12. Brakes APPLY HEAVILY
 (DO NOT LOCK BRAKES!)

PRECAUTIONARY LANDING W/ENGINE POWER

1. Flaps 20°
2. **Airspeed** 60 KIAS
3. Selected Field OVERFLY
4. Avionics & Electrical Switches ...OFF
5. Flaps ..FULL (On Final Approach)

6. Airspeed 60 KIAS
7. Master Switch OFF
8. Doors UNLATCH
9. TouchdownSLIGHTLY TAIL LOW
10. Ignition Switch OFF
11. Brakes APPLY HEAVILY

ENGINE FIRE IN FLIGHT

1. Mixture **IDLE CUTOFF**
2. Fuel Selector **OFF**
3. Master Switch **OFF**
4. Cabin Heat & Air.....OFF
5. Airspeed..... 100 KIAS
Increase glide speed as required to provide an incombustible mixture
6. Forced Landing..... EXECUTE

ELECTRICAL FIRE INFLIGHT

1. Master Switch **OFF**
2. Avionics Master Switch .. **OFF**
3. All switches except ignition OFF
4. Vents/Cabin Air/Heat.....CLOSED
5. Fire ExtinguisherACTIVATE
If fire appears out & electrical power is necessary;
6. Master Switch ON
7. Circuit BreakersCHECK
Do not reset any popped CBs.
8. Radio Switches OFF
9. Avionics Power ON
10. Radio & Electrical Switches..... ON
One at a time.

CABIN FIRE

1. Master Switch **OFF**
2. Vents/Cabin Air/Heat **CLOSED**
3. Fire EXTINGUISH
4. Land as soon as practicable

WING FIRE

1. Navigation Lights **OFF**
2. Pitot Heat **OFF**
3. Strobe Lights **OFF**
Sideslip to keep the flames from fuel tank and cabin
4. Land as soon as possible

LANDING W/FLAT MAIN TIRE

1. ApproachNORMAL
2. Touchdown GOOD TIRE FIRST
(hold airplane off flat tire as long as possible)

INADVERTENT ICING

1. Pitot Heat Switch ON
2. Carb Heat ON
3. Turn Back or Change Altitude
4. Cabin heat FULL ON
5. Defroster outlets OPEN to max

6. Throttle Increase to minimize buildup on propeller blades
7. Land as soon as Practicable

STATIC SOURCE BLOCKAGE

1. Alternate Static Source.....PULL ON

LOW-VOLTAGE LIGHT INFLIGHT

1. Avionics Power SwitchOFF
2. Alternator Circuit Breaker CHECK IN
3. Master Switch OFF (Both Sides)
4. Master SwitchON
5. Low-Voltage Light OFF
6. Avionics Power SwitchON
If Light illuminates again:
7. AlternatorOFF
8. Nonessential Electrical Equipment OFF
9. Land as soon as practical

SPIN RECOVERY

1. THROTTLE **IDLE**
2. AILERONS**NEUTRAL**
3. RUDDER FULL OPPOSITE
DIRECTION OF ROTATION
4. YOKE**FORWARD** to break stall
5. HOLD THESE CONTROL INPUTS UNTIL ROTATION STOPS.
6. When Rotation Stops
.....NEUTRALIZE RUDDER, & MAKE A SMOOTH RECOVERY FROM THE RESULTING DIVE

Airspeeds KIAS		
Normal Operating Range	47-128	
Caution Range	128-160	
Never Exceed V _{NE}	160	
V _A	97	
V _X	56	V _{FE} - 85
V _Y	73	V _{NO} - 128
V _S	42 - 47	V _{SO} 36 - 41
Acft Servicing		
Fuel 100 LL		
Capacity54 Gal (50 Usable)	
Oil - W100+ SAE 50	...Max/Min - 6 qts/4 qt	
Tire InflationNose/Mains - 31/29 PSI	