

① CABIN

- 1. Pilots Operating Handbook AVAILABLE IN COCKPIT
- 2. Hobbs Meter Reading RECORD
- 3. Control Wheel Lock REMOVE
- 4. Ignition Switch OFF
- 5. Avionics Power (Bus 1 & Bus 2) OFF
- 6. Beacon ON

(WARNING

When turning "ON" any electrical switches, using an external power source or turning the propeller by hand, TREAT THE PROPELLER AS IF THE IGNITION SWITCH IS "ON". Do not stand or allow anyone to stand within the propeller blade arc, because a loose or broken wire or a malfunction of a component may cause the propeller to turn.

- CLEAR AREA** **VISUAL & VERBAL WARNING**
- 8. Master Switch ON

CABIN -- (Continuation)

- 9. Primary Flight Display (PFD) VERIFY "ON"
- 10. Engine Hours Reading RECORD
- 11. Fuel Quantity (L & R) CHECK QUANTITY
FUEL ANNUNCIATORS AREF"OFF"
- 12. Oil Pressure Annunciator VERIFY "ON"
- 13. Low Volts Annunciator VERIFY "ON"
- 14. Low Vacuum Annunciator VERIFY "ON"
- 15. Avionics (Bus 1) ON
 - a. Forward Avionics Fan Check "Audible"
 - b. Avionics Bus 1 OFF
- 16. Avionics (Bus 2) ON
 - a. Aft Avionics Fan CHECK "AUDIBLE"
 - b. Avionics Bus 2 OFF
- 17. Pitot Heat (If Flight May Encounter Visible Moisture)
..... ON for 30 seconds, then OFF
- 18. Static Air Pressure Alternate Source Valve OFF
- 19. Flaps DOWN
- 20. Fuel Selector BOTH
- 21. Elevator Trim TAKEOFF POSITION
- 22. Fire Extinguisher CHECK
- 23. Master Switch (Alt & Batt) OFF

② FUSELAGE - EXTERIOR & EMPENNAGE

- 1. Baggage Door, Windows & Fuselage CHECK
- 2. Autopilot Static Source CHECK
- 3. Antennas CHECK
- 4. LH Stabilizer & Elevator CHECK
- 5. Rudder CHECK
- 6. Flashing Beacon & Tail NAV Light CHECK FOR BREAKAGE
- 7. Tail Tie-Down UN-TIE
- 8. RH Elevator, Trim Tab & Stabilizer CHECK
- 9. Autopilot Static Source, Fuselage & Windows CHECK

PREFLIGHT INSPECTION

CESSNA
172S NAV III

3 RIGHT WING

- 1. Flap CHECK
- 2. RH Wing Top Skin CHECK
- 3. Aileron CHECK
- 4. Wing Tip, NAV & Strobe Lights CHECK
- 5. Wing Leading Edge & Bottom Skin CHECK
- 6. Wing Tie-Down UN-TIE
- 7. Wing Lift Strut CHECK
- 8. Flap Hinge, Tracks & Rollers CHECK
- 9. Main Wheel Fairing, Tire & Brake CHECK
- 10. Fuel Tank Sump Drains (5) DRAIN & CHECK SAMPLES
- 11. Fuel Quantity MEASURE QUANTITY & SECURE CAP

4. NOSE

- 1. Fuel Selector Drain Valve (Fuselage Bottom) DRAIN
- 2. Reservoir Drain Valve (Fuselage Bottom) DRAIN
- 3. Fuel Strainer Drain (Cowl Bottom) DRAIN
- 4. Engine Oil Supply CHECK QUANTITY (Min. 5 Qts)
..... & Access Door
- 5. Cowling CHECK SECURITY
- 6. Cowl Front Openings CHECK for ARTICLES THAT MAY
OBSTRUCT AIR FLOW or CREATE
A FIRE HAZARD.
- 7. Propeller & Spinner CHECK
- 8. INDUCTION AIR FILTER CHECK for CLOGGING BY DIRT
- 9. Nose Gear, Tire & Fairing CHECK
- 10. Static Pressure Port CHECK
- 11. Windshield CHECK

5 LEFT WING

- 1. Fuel Quantity Measure & Secure Cap
- 2. Pitot Tube CHECK
- 3. Stall Warning Opening CHECK
- 4. Wing Tie-Down UN-TIE
- 7. Wing Lift Strut CHECK
- 8. Fuel Overflow & Vent Tube CHECK

3

PREFLIGHT INSPECTION

CESSNA
172S NAV III

LEFT WING -- Continuation

- 7. Landing & Taxi Lights & Lense CHECK
- 8. Leading Edge & Bottom Skins CHECK
- 9. Wing Tip, NAV & Strobe Lights CHECK
- 10. Aileron CHECK
- 11. Wing Top Skin CHECK
- 12. Flap CHECK
- 13. Flap Hinges Tracks & Rollers CHECK
- 14. Main Wheel Fairing, Tire & Brake CHECK
- 15. Fuel Tank Sump Drains (5) DRAIN, & CHECK SAMPLES
- 16. All Exterior Lights & Pitot Heat --(If After Sunset or
IFR FUNCTIONAL CHECK

BEFORE STARTING ENGINE

- 1. Preflight Inspection COMPLETE
- 2. Passenger Briefing COMPLETE
- 3. Seats & Seat Belts ADJUST & LOCK
- 4. Brakes TEST & SET
- 5. Circuit Breakers CHECK ENGAGED (IN)
- 6. Electrical Equipment OFF
- 7. Avionics Switch (Bus 1 & Bus 2) OFF

(WARNING)

Avionics Switch (Bus 1 & Bus 2 must be OFF during Engine Start to Avoid Avionics Damage.

- 8. Fuel Selector Valve BOTH
- 9. Fuel Shut-Off Valve ON (Push Full-In)

ENGINE START -- NORMAL

- 1. Throttle OPEN 1/4 INCH
- 2. Mixture IDLE CUT-OFF
- 3. Flashing Beacon ON
- 4. Propeller & Blast Areas..CLEAR (visual & Verbal Warning)
- 5. MASTER Switch ON

(Continued)

4

ENGINE START -- NORMAL (Continuation)

- 5. STBY Battery Switch:
 - a. TEST -- Hold for 10 Seconds, VERIFY GREEN TEST LIGHT remains "ON"
 - b. ARM -- VERIFY PFD Comes "ON"
 - 6. Engine Indicators CHECK PARAMETERS (VERIFY NO RED X's ON ENGINE PAGE INDICATORS)
 - 7. BUS E Volts VERIFY 24 VOLTS MINIMUM
 - 8. M Bus Volts VERIFY 1.5 VOLTS or LESS
 - 9. Batt S Amps VERIFY DISCHARGE (NEGATIVE)
 - 10. STBY Batt Annunciator CHECK PFD (Verify Annunciator is Shown)
 - 11. Avionics Switch Bus 1 & 2 OFF
- If external power is used CONNECT**

- 12. MASTER SWITCH (Alt & Batt) ON
- 13. M Bus Volts CHECK (Verify 24 to 28 Volts)

- 14. Master Switch ON
- 15. M Bus Volts CHECK (Verify 24 to 28 Volts)

(NOTE)

If engine is warm, omit priming Procedures of Steps 16, 17, and 18.

- 16. Throttle FULL OPEN
- 17. Mixture FULL RICH
- 18. Aux Fuel Pump ON until Fuel Flow Stabilizes then "OFF"
- 19. Throttle OPEN 1/4 Inch
- 20. Propeller Area RECHECK "CLEAR"
- 21. Ignition Switch START (Release when engine starts)
- 22. Mixture ADVANCE SMOOTHLY TO FULL RICH As Engine Starts.

(NOTE)

If Engine Primed Too Much (FLOODED) ---

- a. Mixture IDLE CUT-OFF
- b. Throttle 1/2 OPEN
- c. Ignition START

(CONTINUED)

ENGINE START (Continuation)

- d. Mixture ADVANCE SMOOTHLY to FULL RICH AS ENGINE STARTS
- e. Throttle RETARD PROMPTLY to 1000 to 1200 RPM

23. Oil Pressure CHECK (Green Zone IN 30 to 60 Seconds)

If External Power USED Due To Weak Battery --

- 24. External Power DISCONNECT
- 25. Engine RPM APPROX. 1500 RPM FOR SEVERAL MINUTES TO RE-CHARGE BATTERY

- 26. AMPS (M Batt & S Batt) CHECK (Positive Charge)
- 27. LOW VOLTS Annunciator CHECK PFD (Verify Annunciator Not Shown)

BEFORE TAXI

- 1. Flashing Beacon ON
- 2. Nav Lights (If Dark or Near Sunset) ON
- 3. Avionics Switch (Bus 1 & 2) ON
- 4. Radios SET FREQUENCIES & ADJ. VOLUME
- 5. Transponder SET
- 6. Wing Flaps UP

TAXIING

- 1. Brakes TEST (Before Taxiing More Than The Length of ~~the~~ Fuselage)
- 2. Throttle USE MINIMUM POWER, ADJUST as NEEDED. Use Brakes to Supplement Power Adjustments When Needed

BEFORE TAKEOFF (Run-up)

1. Parking Brake SET
2. Throttle 1200 RPM
3. Seat Backs UPRIGHT POSITION
4. Seats & Seat Belts CHECK SECURE
5. Cabin Doors CLOSED & LOCKED
6. Flight Controls **MOVE FREE IN CORRECT DIRECTIONS.**
7. Flight Instruments (PFD) CHECK (NO RED X's)
8. Altimeters:
 - a. PFD (BARO) SET
 - b. Standby Altimeter SET
 - c. King Autopilot (BARO) (If Installed) SET
9. G1000 ALT SEL SET
10. King Autopilot Altitude Preselect SET

(NOTE)

There is no connection between the G1000 ALT SEL and the King Autopilot. Altitudes are set independently.

11. Standby Flight Instruments CHECK
12. Fuel Quantity CHECK

(WARNING)

DO NOT TAKEOFF WITH BOTH FUEL GAUGES IN YELLOW ZONE.

13. Mixture RICH
14. Fuel Selector Valve BOTH
15. Manual/Electric Trim (MET) TEST
On Pilot's Control Yoke --
 - a. LH Switch PUSH FORWARD (DN Position) & HOLD
 - b. RH Switch Pull AFT (UP POSITION) and HOLD

IF TRIM WHEEL MOVES -- THE SYSTEM HAS FAILED

16. Elevator Trim SET IN TAKEOFF POSITION.

(NOTE)

If MET System has failed, The Autopilot Circuit Breaker Should Be Pulled To Deactivate the Autopilot.

BEFORE TAKEOFF -- (Continuation)

17. Throttle 1,800 RPM
 - a. Magnetos CHECK
(RPM Drop Should Not Exceed 150 RPM On A Single Magnetos, or 50 RPM Difference Between The Magnetos.)
 - b. Vacuum Indicator CHECK
 - c. Engine Indicators CHECK
 - d. Ammeters & Voltmeters CHECK
(Verify No Annunciators Are Lighted)
 - e. Throttle CHECK IDLE
 - (a) Idle RPM 575 to 625 RPM VERIFY ENGINE SMOOTH
 - (b) Throttle 1100 to 1200 RPM

18. Throttle Friction Lock ADJUST
19. COM Frequencies & Volumes SET
20. NAV Frequencies SET
21. FMS/GPS Flight Plan AS DESIRED
22. XRDR SET
23. CDI Soft Key SELECT NAV SOURCE
24. Autopilot OFF
25. Wing Flaps SET FOR TAKEOFF
26. Strobe & Taxi Lights ON
27. Windows CLOSED & LOCKED
28. Brakes RELEASE

The School recommends using a Taxi Light or Landing Light while in or within ONE Mile of the Airport Traffic Pattern to aid other Pilots in seeing you.

CRUISE

1. Power 65% (Usually Obtained by 2400 RPM)
 2. Elevator Trim ADJUST
 3. Mixture LEAN to BEST POWER SETTING
- Excessive Leaning May Damage Engine Severely.**

DESCENT

1. Fuel Selector BOTH
2. Power AS DESIRED

(WARNING)

Reducing Power Below 1500 RPM Without Reducing Airspeed May cause Excessive Engine Cooling Shock Cooling.

3. Mixture ADJUST for SMOOTH OPERATION
- For Idle Power FULL Rich
4. Flaps AS DESIRED
5. Elevator Trim ADJUST
6. Altimeters:
 - a. PFD (BARO) SET
 - b. Standby Altimeter SET
 - c. King Autopilot (BARO) (If Installed) SET
7. G1000 Autopilot Altitude Preselect SET

NOTE

G1000 and King Autopilot Altimeters Are Set Independently.

9. CDF Soft Key SELECT NAV SOURCE
10. FMS/GPS (If IFR) REVIEW & BRIEF OBS/SUSP SOFT KEY OPERATION FOR HOLDING PROCEDURE

(CAUTION)

The G1000 HSI Does Not Have a Warning Flag When Not Receiving A Valid NAV Signal. The Course Deviation Bar (D-BAR) Will Not Show On The HSI Compass Card.

(Continued)

DESCENT -- Continuation

(WARNING)

If the HSI NAV Source is changed from GPS to NAV-1 (Using the CDI Soft Key) or Manually from NAV 2 to GPS, When The King Autopilot is in NAV, APR or REV MODE, the NAV Signal to the Autopilot is Interrupted. The Autopilot Will Default to The ROL Mode. No Warning Is Provided. The Previous NAV Mode Symbol Will Be Flashing. The ROL Mode Only Provides "Wings Level" Operation. To RESET The Autopilot -- Set HDG Bug to Correct Heading and Select the Correct NAV Source on the HSI, Using The CDI Soft Key, Before Engaging The Autopilot In Any Other Mode.

BEFORE LANDING

1. Seat Backs MOST UPRIGHT POSITION
2. Seats & Seat Belts SECURED & LOCKED
3. Fuel Selector BOTH
4. Mixture RICH
5. Taxi or Landing Light ON
6. Autopilot OFF
7. Radios FREQUENCIES SET
VOLUMES ... SET

LANDING -- NORMAL

1. Power ADJUST FOR APPROACH
2. Flaps 0° to 10° BELOW 110 Kts
10° to 30° BELOW *% Kts
4. Airspeed 65 to 70 Kts
4. Elevator Trim ADJUST
5. Mixture RICH
6. Touchdown MAIN WHEELS FIRST
7. Landing Roll ALLOW NOSE WHEEL to LOWER VERY GENTLY
8. Brakes MINIMUM REQUIRED (Aerodynamic Braking recommended to supplement wheel brakes.)

NORMAL OPERATION

CESSNA
172S NAV III

LANDING -- SHORT FIELD

1. Airspeed 65 to 70 Kts
2. Flaps EXTEND AS NEEDED UNTIL 30°
3. Airspeed on Final Approach 61 Kts UNTIL FLARE-OUT
4. Elevator Trim ADJUST
5. Mixture RICH
6. Power REDUCE to IDLE When **OBSTACLES CLEARED**
7. Touchdown MAIN WHEELS FIRST
8. Brakes (When Firmly On Ground) APPLY HEAVILY
***** DO NOT SKID TIRES *****
9. Flaps RETRACT If Having Difficulty With Traction

LANDING -- SOFT or ROUGH FIELD

Manufacturers do not provide "Soft or Rough Field" Recommended Operating Procedure. The Sch Recommends That you Consult The FAA Manual "Airplane Flying Handbook" FAA-H-3A.

BALKED LANDING GO-AROUND

1. Power FULL Throttle
2. Flaps RETRACT to 20° or 10° (Prefer 10°)
3. Airspeed 60 Kts UNTIL OBSTACLES CLEARED
4. Flaps 0° AFTER REACHING 65 Kts
5. Climb Airspeed 74 Kts (Vy)

AFTER LANDING (Before Leaving Vicinity of Runway)

1. Taxi & Landing Lights OFF
2. Trim RE-SET to TAKEOFF POSITION
3. Flaps UP
4. Transponder (On Airports With Radar) STANDBY

BEFORE ANOTHER TAKEOFF

1. Taxi Light ON
2. Trim SET for TAKEOFF
3. Flaps 0°
4. Mixture RICH
5. Transponder ALTITUDE & PROPER CODE
6. Radios CHECK FREQUENCIES & VOLUME
7. Flight Instruments CHECK
8. Fuel Gauges CHECK
9. Engine Instruments CHECK

NORMAL OPERATION

CESSNA
172S NAV III

SECURING AIRPLANE

1. Parking Brake SET
2. Throttle 100 to 1200 RPM
3. Avionics Power OFF
4. Lights & Other Electrical Equipment OFF
(Flashing Beacon LEAVE "ON")
5. Mixture IDLE CUT-OFF
6. Ignition Switch OFF
7. Master Switch OGG
8. Fuel Selector Valve LEFT or RIGHT TANK to Prevent Cross Feeding
9. Control Lock INSTALL
10. Parking Brake RELEASE
11. Tach (Enging Hours) Reading RECORD
12. STBY Battery OFF
13. HOBBS METER READING RECORD
14. External Security..... TIE-DOWN AIRPLANE or CHOCK WHEELS
15. Cabin Doors & Windows CLOSE & LOCK

*** *** ***

This CHECKLIST is NOT A SUBSTITUTE FOR A Thorough knowledge of the PILOTS OPERATING HANDBOOK.

PILOTS EMERGENCY CHECKLISTS

CESSNA
172S

Emergency Items Requiring IMMEDIATE ACTION are shown in boxes and SHOULD BE MEMORIZED.

AIRSPEEDS FOR EMERGENCY OPERATIONS

ENGINE FAILURE AFTER TAKEOFF

Flaps 0°	68 Kts
Flaps 30°	68 Kts

FOR MAXIMUM GLIDE DISTANCE 68 Kts

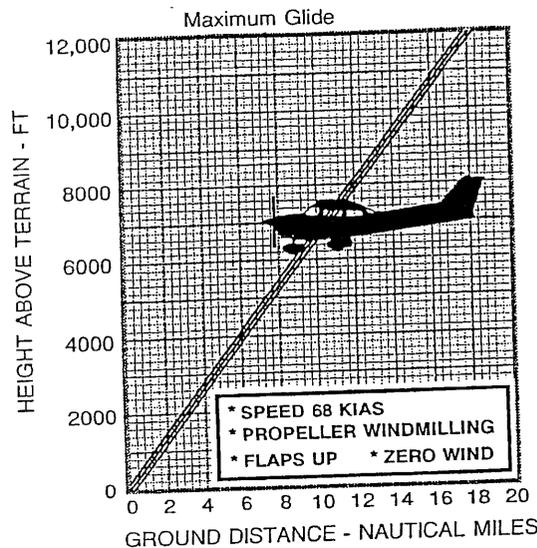
PRECAUTIONARY LANDING with ENGINE POWER 68 Kts

LANDING WITHOUT ENGINE POWER

Flaps 0°	70 Kts
Flaps 30°	68 Kts

MANEUVERING SPEEDS [Turbulent Air Penetration]

2550 lbs	105 Kts
2200 lbs	98 Kts
1900 lbs	90 Kts



EMERGENCY OPERATIONS

CESSNA
172S

ENGINE FAILURES

ENGINE FAILURE -- During Takeoff Roll

- | | |
|--------------------------|---------------------------|
| 1. Throttle | CLOSED |
| 2. BRAKES | APPLY (Stop the Airplane) |
| 3. Flaps | 0° RETRACT |
| 4. Mixture | IDLE CUT-OFF |
| 5. Ignition Switch | OFF |
| 6. Master Switch | OFF |

ENGINE FAILURE -- Immediately After Takeoff

- | | |
|--|---|
| Before Altitude Loss | |
| 1. Airspeed | 68 Kts WITH FLAPS 0°
68 Kts WITH FLAPS 30° |
| 2. Mixture | IDLE CUT-OFF |
| 3. Fuel Shut-Off Valve | OFF (Pull Full Out) |
| 4. IGNITION | OFF |
| 5. Flaps | AS REQUIRED |
| (Full Flaps before touchdown, if possible, without causing you to land short of safe point.) | |
| 6. ELT | ACTIVATE |
| 7. STBY BATT Switch | OFF |
| 8. Master Switch | OFF |
| 9. Elevator Trim | ADJUST to "HANDS-OFF CONDITION" |
| 10. Cabin Door | UNLATCH |
| 11. Land | "NOSE" HIGH |
| 12. Brakes | APPLY HEAVILY |

(E-2)

EMERGENCY CHECKLIST

CESSNA
172S NAV III

ENGINE FAILURE -- RESTART -- During Flight

1. Airspeed (Before Losing Altitude) 68 Kts
2. Throttle START POSITION
3. Fuel Shut-Off Valve PUSH ON
4. Fuel Selector BOTH
5. Mixture RICH
6. Ignition Switch BOTH (If Propeller Is Turning)
START (If Propeller Is Stopped)
7. Aux. Fuel Pump (If Re-Start Has Not Occurred)... ON
8. Throttle (If Engine Running) OPEN SMOOTHLY
9. Mixture (If Engine Running Rough).. ADJUST to SMOOTH
10. Aux Fuel Pump OFF
If Fuel Flow drops to Zero, Fuel Pump ON

FORCED LANDINGS

EMERGENCY LANDING -- Without Engine Power

1. Airspeed, Before Losing Any Altitude 68 Kts
2. Flaps UP
3. Landing Area SELECT
4. All Seat Backs UPRIGHT
5. Seats & Seat Belts SECURE & TIGHT
6. ELT ACTIVATE
7. Transponder CODE 7700
8. Mixture IDLE CUT-OFF
9. Fuel Shut-Off Valve PULL OFF
10. Ignition Switch OFF
11. STBY BATT Switch OFF
12. Flaps AS NEEDED
Full Flaps before touchdown, if possible, without causing you to land short of safe point.
13. Master Switch OFF
14. Cabin Doors UNLATCH
15. Touchdown NOSE HIGH
16. Brakes APPLY HEAVILY

EMERGENCY CHECKLISTS

CESSNA
172S NAV III

PRECAUTIONARY LANDING -- WITH ENGINE POWER

1. All Seat Backs UPRIGHT
2. Seats & Seat Belts SECURE & TIGHT
3. Airspeed 68 Kts
4. Flaps 20°
5. Selected Field..FLY OVER, CHECK TERRAIN & OBSTRUCTIONS
After Reaching SAFE Airspeed & Altitude
FLAPS UP
6. Trim ADJUST to "HANDS-OFF" CONDITION
7. Avionics Switch (Bus 1 & Bus 2) OFF
8. Electrical Equipment Switches OFF
9. Approach Traffic Pattern ESTABLISH
10. Flaps 30°
11. Airspeed 68 Kts UNTIL FLARE
12. STDBY BATT Switch OFF
13. Master Switch OFF
14. Cabin Doors UNLATCH
15. Touchdown NOSE HIGH
16. Mixture IDLE CUT-OFF
17. Fuel Shut-Off Valve PULL OFF
18. Ignition Switch OFF
19. Brakes APPLY HEAVILY

LANDING WITHOUT ELEVATOR CONTROL

1. Throttle 2,000 RPM
2. Elevator Trim **ADJUST PROMPTLY to MAINTAIN LEVEL FLIGHT**
3. Flaps 20°
Move Flap Switch Slow Enough to Prevent Nose From Pitching Up Abruptly.
4. Airspeed (By Adjusting Trim & Throttle) 65 Kts
5. **Do Not Change Trim Control Setting.**
6. Glide Angle CONTROL WITH THROTTLE ONLY
7. Flare with Trim ADJUST NOSE UP SO AIRPLANE
WILL BE LEVEL OR HIGHER TO
AVOID NOSE WHEEL TOUCHING
DOWN FIRST.
8. Throttle ADJUST AS NEEDED
9. Throttle CLOSE IMMEDIATELY AFTER TOUCHDOWN

EMERGENCY CHECKLISTS

CESSNA
172S NAV III

DITCHING

1. ELT ACTIVATE
2. Radio TRANSMIT "MAYDAY" on 121.5 MHZ
Give Location, Intentions & Squawk 7700
3. Transponder CODE 7700
4. Heavy Objects SECURE or JETTISON
5. All Seat Backs UPRIGHT
6. Seats & Seat Belts SECURE & TIGHT
7. Power (If Available) 1600 RPM
 - a. Airspeed 65 Kts
 - b. Rate of Descent TRIM to 300 Ft/min.

Power Not Available:

- a. Airspeed (Flaps 0°) 70 Kts
(Flaps 10°) 65 Kts

8. Approach
 - a. High Winds, Heavy Seas INTO THE WIND
 - b. Light Winds, Heavy Swells .. PARALLEL to SWELLS

Maintain Steady RATE OF DESCENT at 65 Kts.

9. Cabin Doors..UNLATCH & JAM OPEN WITH CARPET or CLOTHING
10. Face & Head (Before Touchdown)....Cushion With Clothing
11. Touchdown LEVEL to 5° NOSE UP ATTITUDE
IN STEADY DESCENT REATE.

Evacuate through cabin doors. if necessary, open window & Flood cabin to equalize pressure so doors can be open

12. Life Vests & Raft INFLATE AFTER CLEAR OF AIRPLANE

LANDING WITH FLAT MAIN TIRE

1. Approach NORMAL
2. Flaps 30°
3. Touchdown "GOOD TIRE" FIRST
HOLT WEIGHT OFF FLAT TIRE AS LONG AS POSSIBLE WITH
AILERONS.
4. Directional Control USE BRAKE ON GOOD WHEEL

EMERGENCY CHECKLISTS · CESSNA
172S NAV III

LANDING WITH FLAT NOSE TIRE

1. Approach NORMAL
2. Flaps 30°
3. Touchdown ON MAIN WHEELS ONLY
4. Nose Wheel HOLD OFF THE GROUND AS LONG AS POSSIBLE
5. Elevator Control..WHEN NOSE WHEEL TOUCHES DOWN, USE FULL
ELEVATOR UP AS YOU SLOW TO A STOP.

ENGINE FIRES

ENGINE FIRE -- DURING START

1. Cranking CONTINUE to GET A START TO SUCK
FLAMES & FUEL INTO THE CYLINDERS

If Engine Starts --

2. Power 1800 RPM for 4 or 5 minutes
3. Engine SHUT DOWN & HAVE MECHANIC INSPECT FOR DAMAGE

If engine Fails to Start --

- | | |
|------------------------------|---------------------|
| 1. Throttle | FULL OPEN |
| 2. Mixture | IDLE CUT-OFF |
| 3. Cranking | CONTINUE |
| 4. Fuel Shut-Off Valve | OFF (PULL FULL OUT) |
| 5. Aux Fuel Pump | OFF |

9. Ignition Switch OFF
10. STBY BATT Switch OFF
11. Master Switch OFF
12. Fire EXTINGUISH, USING FIRE EXTINGUISHER
WOOL BLANKET or DIRT
13. Parking Brake RELEASE
14. Fire Damage INSPECT. Do Not Attempt to Start
Engine Until a Mechanics Inspection & Approval for Return to
Service.

EMERGENCY CHECKLISTS

CESSNA
172S NAV III

ENGINE FIRE IN FLIGHT

- | | |
|------------------------------|---------------------|
| 1. Mixture | IDLE CUT-OFF |
| 2. Fuel Shut-Off Valve | OFF (Pull Full-Out) |
| 3. Aux Fuel Pump | OFF |
| 4. Master Switch | OFF |

- 5. Cabin Heat & AirOFF, EXCEPT OVERHEAT VENTS
- 6. Airspeed 100 Kts
If Fire Is Not Extinguished, Increase Glide Speed to Find An Airspeed That Will Cool The Burning Materials Enough That They Will Not Burn.
- 7. Forced Landing EXECUTE

See **EMERGENCY LANDING WITHOUT ENGINE POWER CHECKLIST.**

CABIN FIRE

- 1. STBY BATT Switch OFF
- 2. Master Switch OFF
- 3. Cabin Vents/Cabin Air/Cabin Heat OFF
- 4. Fire Extinguisher ACTIVATE

(WARNING)

After Using Fire Extinguisher, make sure the fire is out before any exterior air is used to clear the smoke.

- 5. Cabin Vents/Cabin Air/ Cabin Heat ON
- 6. Land as soon as practical, Inspect for damage.

WING FIRE

- 1. Landing & Taxi Lights OFF
- 2. Nav Lights OFF
- 3. Strobe Lights OFF
- 4. Pitot Heat OFF
- 5. Side Slip..TO KEEP FLAMES AWAY FROM FUEL TANKS & CABIN
- 6. Land AS SOON AS POSSIBLE USING FLAPS ONLY AS REQUIRED ON FINAL APPROACH & TOUCHDOWN.

EMERGENCY CHECKLISTS

CESSNA
172S NAV III

ELECTRICAL FIRE -- IN FLIGHT

- 1. STBY BATT Switch OFF
- 2. Master Switch OFF
- 3. Cabin Vents, Cabin Heat, Cabin Air OFF
- 4. Fire Extinguisher ACTIVATE
- 5. Avionics (Bus 1 & Bus 2) OFF
- 6. All Other Switches Except Ignition OFF

(WARNING)

After Using Fire Extinguisher, Make Sure The Fire Is Out

(WARNING)

After Using Fire Extinguisher, Make Sure The Fire Is Out Before Any Exterior Air Is Used To Clear Smoke.

When Fire Is Completely Extinguished --

- 7. Cabin Vents, Cabin Heat, Cabin Air ON
If Fire is COMPLETELY EXTINGUISHED & Electrical Power Is Necessary For Continued Flight To Nearest Suitable Airport Or Landing Area --
- 8. Circuit Breakers CHECK FOR TRIPPED BREAKER
DO NOT RE SET A TRIPPED BREAKER
- 9. Master Switch ON

Wait a minute or so Before Turning "ON" Another Switch.

Repeat Waiting Procedure Before Turning "ON" Each Switch. If Smoke Re-appears, Turn "OFF" The Last Switch Activated.

- 10. Avionics (Bus 1) ON
- 11. Avionics (Bus 2) ON

STATIC PRESSURE PORT BLOCKAGE

If Suspected **ERRONEOUS** Airspeed, Altimeter or **VERTICAL** Speed Readings --

- 1. Static Pressure Alternate Source Valve PULL "ON"
- 2. Cabin Heat FULL "ON"
- 3. Cabin Air FULL "ON"
- 4. Vents (Upper & Lower) CLOSED
- 5. Airspeed SEE SECTION 5, Fig. 5-1
AIRSPEED CALIBRATION -- ALTERNATE STATIC SOURCE

INADVERTENT ICING ENCOUNTER

1. Pitot Heat ON
2. Turn 180° or Change Altitude to Obtain Temperature Above Freezing
3. Cabin Heat FULL ON
4. Windshield Defroster Outlets FULL OPEN
5. Engine Problems With Icing:
 - a. Engine RPM UNEXPLAINED DECREASE
 - b. Throttle ADJUST to OBTAIN MAX. RPM
(Possible Increase or Decrease Throttle Setting)
 - c. Mixture ADJUST for MAXIMUM RPM
6. Landing --
 - a. PLAN FOR NEAREST AIRPORT
If Ice Building Very Rapidly -- SELECT "OFF AIRPORT" LANDING SIGHT
 - b. If Ice 1/4 Inch or More On Wing Leading Edges --
EXPECT MUCH HIGHER STALL SPEEDS & LONGER LANDING ROLL.
 - c. Flaps DO NOT USE
Flaps May Cause Loss of Elevator and/or Rudder Control
 - d. Windshield OPEN LEFT WINDOW, if practical,
SCRAPE ENOUGH ICE FROM WINDSHIELD for VISIBILITY DURING LANDING APPROACH.
 - e. FOR BETTER VISIBILITY DURING LANDING APPROACH...SLIP LEFT
 - f. Airspeed 65 to 75 Kts, Depending on Amount Of Ice
 - g. Touchdown IN LEVEL ATTITUDE

AIR DATA SYSTEM FAILURE

PFD AIRSPEED INDICATOR -- RED X

1. ADC/AHRS Circuit Breakers CHECK
(ESS BUS & AVN BUS 1)

If Circuit Breaker Is Tripped RE-SET
If Circuit Breaker Trips Again DO NOT RE-SET

2. Standby Airspeed Indicator USE FOR AIRSPEED INFO

PFD ALTITUDE INDICATOR -- RED X

1. ADC/AHRS Circuit Breaker CHECK
(ESS BUS & AVN BUS 1)

If Circuit Breaker Is Tripped RESET BREAKER
If Circuit Breaker Trips Again DO NOT RESET

2. Standby Altimeter USE FOR ALTITUDE INFO

ATTITUDE & HEADING REFERENCE SYSTEM (AHRS) FAILURE

PFD ATTITUDE INDICATOR -- RED X

1. ADC/AHRS Circuit Breaker CHECK
(ESS BUS & AVN BUS 1)

If Circuit Breaker Tripped RESET
If Circuit Breaker Trips Again DO NOT RESET

2. Standby Attitude Indicator USE FOR ATTITUDE INFO

HORIZONTAL SITUATION INDICATOR (HSI) -- RED X

1. ADC/AHRS Circuit Breaker CHECK
(ESS BUS & AVN BUS 1)

If Circuit Breaker Tripped RESET
If Circuit Breaker Trips Again DO NOT RESET

2. Magnetic Compass USE FOR HEADING INFO

PILOTS EMERGENCY CHECKLIST

CESSNA
172S NAV III

PFD 1 COOLING or MFD 1 COOLING ANNUNCIATOR

- 1. Cabin Heat REDUCE
- 2. Forward Avionics Fan CHECK
(Feel For Airflow From Screen On Glareshield)

IF FORWARD AVIONICS FAN HAS FAILED

- 1. STBY BATT Switch (Unless Needed For Emergency Power).. OFF
If PFD 1 Cooling or MFD 1 Cooling Annunciator Does Not Go "OFF" Within 3 minutes or If Both PFD 1 & MFD 1 Cooling Annunciators Come "ON" ---

- 2. STBY BATT Switch OFF
- 3. Land AS SOON AS PRACTICAL

LOW VACUUM ANNUNCIATOR COMES "ON"

[WARNING]

If Vacuum Pointer Indicates Less Than The Green ARC During Flight or GYRO Flag Shows On Standby Attitude Indicator, The STANDBY ATTITUDE INDICATOR MUST NOT BE USED.

- 1. Vacuum Indicator (VAC) CHECK EIS SYSTEM PAGE
(Make Sure Vacuum Pointer Is In Green Arc)

PILOTS EMERGENCY CHECKLIST

CESSNA
172S NAV III

ELECTRICAL POWER MALFUNCTIONS

IF THE ALTERNATOR CONTROL UNIT (Voltage Regulator) PERMITS THE VOLTS TO EXCEED APPROXIMATELY 31.5 VOLTS, AN OVER-VOLTAGE UNIT WITHIN THE VOLTAGE REGULATOR SHOULD BREAK THE ALTERNATOR FIELD CIRCUIT AND RENDER THE ALTERNATOR INOPERABLE.

HIGH BATTERY CHARGE RATE (M Bat AMPS more than 40)

- 1. Master Switch (ALT Side) OFF
- 2. Non-Essential Electrical Equipment OFF
- 3. Avionics (BUS 1 & BUS 2) OFF
- 4. Flight TERMINATE AS SOON AS PRACTICAL

LOW VOLTS ANNUNCIATOR

[NOTE]

The Low Volts Annunciator May Come "ON" When the Engine RPM Is Low With A High Electrical Load, Such As During Landing Approach or Taxiing. In This Case, the "VOLTS" Annunciator Should Go Out At Higher RPM. Verify That The M BATT AMPS Shows Positive (Charging) At Higher RPM.

- 1. Avionics (BUS 1 & BUS 2) OFF
- 2. Alternator Circuit Breaker (ALT FIELD) CHECK ENGAGED
- 3. Master Switch (Both Halves) OFF
- 4. Master Switch ON (To Re-Set ALT. CONTROL UNIT)
- 5. Low Volts Annunciator (LOW VOLTS) CHECK OFF
- 6. M BUS VOLTS CHECK 27.5 V MINIMUM
- 7. M BATT AMPS CHECK Charging (+)
- 8. AVIONICS (BUS 1 & BUS 2) ON

IF LOW VOLTS COMES ON AGAIN

- 1. Master Switch (ALT Only) OFF
- 2. Non-Essential Avionics OFF
- 3. Non-Essential Electrical Equipment OFF
- 4. Flight TERMINATE AS SOON AS PRACTICAL