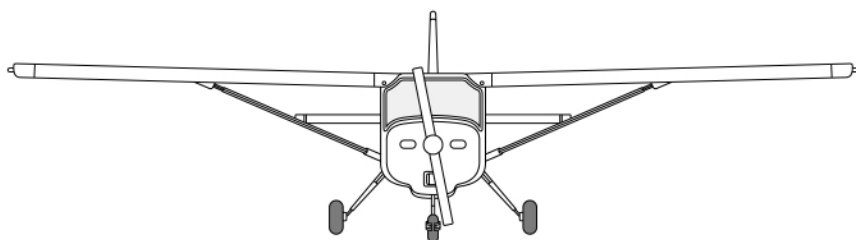




## Quick Reference Handbook (QRH)



 **Cessna**  
**C162**

# ABOUT THE QRC & QRH

## General

Checklists may be found in two resources: the Quick Reference Checklist (QRC) and the Quick Reference Handbook (QRH). Most checklists correspond to a light, alert or other indication. In many cases, the G1000 will provide alert to indicate the non-normal condition. These lights, alerts and other indications are the cues to select and follow the associated checklist.

Emergency checklists can have both memory (recall) and reference items. Actions designated as recall items (bold print) are considered time-critical steps that must be done before reading the checklist. Reference items are actions to be done while reading the checklist (read and do).

## Quick Reference Checklist (QRC)

The QRC is a double-sided checklist including normal and emergency procedures. Normal procedures should be completed as a flow pattern followed by checklist use to verify all items completed correctly. The emergency checklists do not appear in entirety on the QRC. The beginning of the checklist is presented in the QRC and should be used to stabilize the situation. If indicated, the checklist should be continued in QRH as conditions allow. After transition to the QRH it is not necessary to repeat steps already performed.

## Quick Reference Handbook (QRH)

All emergency and abnormal checklists are divided into sections by similar condition. After all recall items have been accomplished, the checklist should be used to verify all items have been completed.





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# 1 | PREFLIGHT

---

## INTERIOR PREFLIGHT CHECKLIST

- |                                |                                |
|--------------------------------|--------------------------------|
| 1. POH/G300 Pilot Guide        | 11. AVN Master ON              |
| 2. Emergency Kit               | 12. Check Avionics Cooling Fan |
| 3. ARROW Documents             | 13. Check PFD/MFD              |
| 4. Fire Extinguisher           | 14. No Red X on PFD ADAHRS     |
| 5. Parking Brake Set           | 15. Check LOW VOLTS Annun.     |
| 6. Remove Control & Gust Locks | 16. Trim Set for Takeoff       |
| 7. Extend Flaps                | 17. Record Hobbs/Tach Time     |
| 8. Fuel Qty. Check             | 18. Check Lights               |
| 9. Magneto Switch OFF          | 19. AVN Master OFF             |
| 10. Master Switch ON           | 20. Master Switch OFF          |

## EXTERIOR PREFLIGHT CHECKLIST

### START

1. Pilot Cabin Door
2. Left Main Tire
3. Left Brake Line
4. Fresh Air Vent
5. Fuel Quantity
6. Fuel Filler Caps
7. Fuel Sump Drains
8. Fuel Tank Vent
9. Tie Downs Removed
10. Pitot Tube Cover
11. Landing Light
12. Strobe/NAV Light
13. Left Aileron
14. Left Flap
15. Com Antenna
16. Control Surfaces

17. Trim Tab
19. ELT/GPS Antenna
20. Right Flap
21. Right Aileron
22. Strobe/NAV Light
23. Stall Warning Vent
24. Right Main Tire
24. Right Brake Line
25. Passenger Cabin Door
26. Fresh Air Vent
27. Engine Cooling Inlets
28. Prop/Spinner
29. Air Filter
30. Nose Wheel
31. Engine Exhaust
32. Engine Oil
33. Static Port

### FINISH

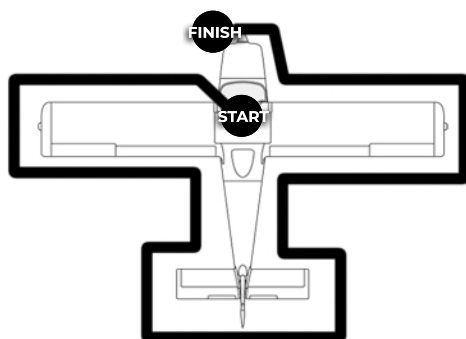


Figure 1-1 Exterior Preflight Flow

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# 2 | LIMITATIONS

---

## AIRSPEEDS FOR EMERGENCY OPERATIONS

### ENGINE FAILURE AFTER TAKEOFF

|                                 |         |
|---------------------------------|---------|
| Wing Flaps UP . . . . .         | 70 KIAS |
| Wing Flaps 10° - FULL . . . . . | 65 KIAS |

### MAX. OPERATING MANEUVERING SPEED

|                      |         |
|----------------------|---------|
| 1320 POUNDS. . . . . | 89 KIAS |
| 1200 POUNDS. . . . . | 85 KIAS |
| 1100 POUNDS. . . . . | 80 KIAS |

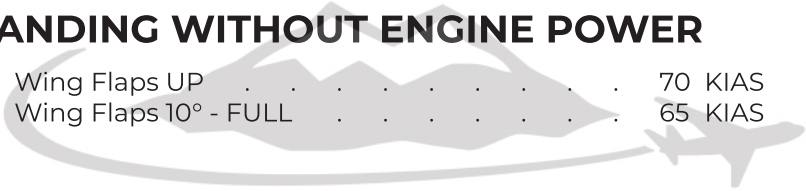
### DESIGN MANEUVERING SPEED 102 KIAS

### MAXIMUM GLIDE . . . . . 68 KIAS

### PRECAUTIONARY LANDING W/ ENGINE POWER . . . . . 60 KIAS

### LANDING WITHOUT ENGINE POWER

|                                 |         |
|---------------------------------|---------|
| Wing Flaps UP . . . . .         | 70 KIAS |
| Wing Flaps 10° - FULL . . . . . | 65 KIAS |



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# 3 | ENGINE FAILURE

---

## ENGINE FAILURE DURING TAKEOFF ROLL

1. **Throttle Control - IDLE (pull full out)**
2. **Brakes - APPLY**
3. Wing Flaps - RETRACT
4. Mixture Control - IDLE CUTOFF (pull full out)
5. MAGNETOS Switch - OFF
6. MASTER Switch (ALT and BAT) - OFF

**CHECKLIST COMPLETE**

## ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

1. **Airspeed - 70 KIAS - Flaps UP**  
**65 KIAS - Flaps 10° - FULL**
2. Mixture Control - IDLE CUTOFF (pull full out)
3. FUEL SHUTOFF Valve - OFF (pull full out)
4. MAGNETOS Switch - OFF
5. Wing Flaps - AS REQUIRED (FULL recommended)
6. MASTER Switch (ALT and BAT) - OFF
7. Land - STRAIGHT AHEAD
8. Secondary Interior Door Latch (if installed) - OPEN
9. Primary Interior Door Latch - OPEN (just prior to touchdown)

**CHECKLIST COMPLETE**

## ENGINE FAILURE DURING FLIGHT (Restart Procedures)

1. **Airspeed - 70 KIAS (best glide speed)**
2. **THROTTLE Control - IDLE (pull full out)**
3. **CARB HEAT Control Knob - ON (pull full out)**
4. **FUEL SHUTOFF Valve - ON (push full in)**
5. **MIXTURE Control - RICH (if restart has not occurred)**
6. PRIMER (if installed) - IN and LOCKED
7. MAGNETOS Switch - BOTH (or START if propeller is stopped)

### NOTE

If the propeller is windmilling, engine will restart automatically within a few seconds. If propeller has stopped (possible at low speeds), turn MAGNETOS switch to START, advance throttle slowly from idle and lean the mixture from full rich as required to obtain smooth operation.

**CHECKLIST COMPLETE**



# 3 | ENGINE FAILURE

---

## OIL PSI INDICATOR IN RED BAND RANGE (Red Digits)

1. OIL °F - CHECK

**IF OIL °F ABOVE GREEN BAND RANGE OR OIL °F RISING  
(engine failure imminent)**

2. Throttle Control - REDUCE POWER IMMEDIATELY
3. Airspeed - 70 KIAS (best glide speed)
4. Land as soon as possible (refer to EMERGENCY LANDING WITHOUT ENGINE POWER)

**IF OIL °F WITHIN GREEN BAND RANGE**

2. OIL °F - MONITOR
3. OIL PSI - MONITOR
4. Land as soon as practical. (nearest suitable airport recommended)

**CHECKLIST COMPLETE**

## CARB °F INDICATOR IN YELLOW BAND RANGE (Yellow Digits)

1. ENGINE - MONITOR FOR ROUGHNESS AND/OR RPM LOSS

### NOTE

Carb °F indicator in yellow band range indicates temperatures may support carb icing information.

**IF ENGINE ROUGHNESS AND/OR RPM LOSS IS DETECTED**

2. CARB HEAT Control Knob - ON (pull full out)
3. THROTTLE Control - FULL (push full in)
4. MIXTURE Control - LEAN (as required)
5. CARB °F Indicator - CHECK

**IF ENGINE ROUGHNESS CONTINUES**

6. CARB °F Indicator - Monitor
7. ALTITUDE - CONSIDER CHANGE (to warmer or drier air mass if terrain permits)
8. Land as soon as practical.

**IF ENGINE ROUGHNESS AND/OR RPM LOSS IS NOT DETECTED**

2. CARB °F Indicator - MONITOR
3. CARB HEAT Control Knob - AS REQUIRED
4. Continue flight as normal.

**CHECKLIST COMPLETE**





# 4 | FORCED LANDING

---

## EMERGENCY LANDING WITHOUT ENGINE POWER

1. Seats and Seat Belts - SECURE
2. Airspeed - 70 KIAS - Flaps UP  
65 KIAS - Flaps 10° - FULL
3. Mixture Control - IDLE CUTOFF (pull full out)
4. FUEL SHUTOFF Valve - OFF (pull full out)
5. Radio - ALERT ATC or TRANSMIT MAYDAY ON 121.5 MHZ, (give location, intentions and SQUAWK 7700)
6. MAGNETOS Switch - OFF
7. Wing Flaps - AS REQUIRED (FULL recommended)
8. MASTER Switch (ALT and BAT) - OFF (when landing is assured)
9. ELT - ACTIVATE
10. Secondary Interior Door Latch (if installed) - OPEN
11. Primary Interior Door Latch - OPEN (just prior to touchdown)

### CAUTION

NON-EMERGENCY FLIGHT WITH DOOR(S) OPEN IS PROHIBITED.

### NOTE

Both cabin doors are equipped with gas struts and should open automatically when unlatched. Delaying opening until just prior to shutdown will reduce cabin buffeting and wind noise.

12. Touchdown - SLIGHTLY TAIL LOW
13. Brakes - APPLY HEAVILY

**CHECKLIST COMPLETE**

## PRECAUTIONARY LANDING WITH ENGINE POWER

1. Pilot and Passenger Seat Backs - MOST UPRIGHT POSITION
2. Seats and Seat Belts - SECURE
3. Airspeed - 65 KIAS
4. Wing Flaps - 20°
5. Selected Field - FLY OVER (noting terrain and obstructions)
6. Wing Flaps - FULL (on final approach)
7. Airspeed - 65 KIAS
8. STBY BATT Switch - OFF
9. MASTER Switch (ALT and BAT) - OFF (when landing assured)
10. Doors - UNLATCHED PRIOR TO TOUCHDOWN
11. Touchdown - SLIGHTLY TAIL LOW
12. Mixture Control - IDLE CUTOFF (pull full out)
13. MAGNETOS Switch - OFF
14. Brakes - APPLY HEAVILY

**CHECKLIST COMPLETE**

(Continued Next Page)



# 4 | FORCED LANDING

---

## WATER DITCHING

1. Radio - TRANSMIT MAYDAY on 121.5 MHz, (give location, intentions and SQUAWK 7700)
2. Heavy Objects (in baggage area) - SECURE OR JETTISON (if possible)
3. Seats and Seat Belts - SECURE
4. Wing Flaps - 25° - FULL
5. Power - ESTABLISH 300 FT/MIN DESCENT AT 60 KIAS

### NOTE

If no power is available, approach at 70 KIAS with Flaps UP or at 65 KIAS with Flaps 10°

6. Approach
  - High Winds, Heavy Seas - INTO THE WIND
  - Light Winds, Heavy Swells - PARALLEL TO SWELLS
7. ELT - ACTIVATE
8. Secondary Interior Door Latch (if installed) - OPEN
9. Primary Interior Door Latch - OPEN (just prior to touchdown)

### CAUTION

NON-EMERGENCY FLIGHT WITH DOOR(S) OPEN IS PROHIBITED.

### NOTE

Both cabin doors are equipped with gas struts and should open automatically when unlatched. Delaying opening until just prior to touchdown will reduce cabin buffeting and wind noise.

10. Touchdown - LEVEL ATTITUDE AT ESTABLISHED 300 FT/MIN DESCENT
11. Face - CUSHION AT TOUCHDOWN (with folded coat)
12. Airplane - EVACUATE THROUGH CABIN DOORS

**CHECKLIST COMPLETE**





# 5 | FIRE

---

## DURING START ON GROUND

**1. MAGNETOS Switch - START (continue cranking to start the engine)**

### **IF ENGINE STARTS**

2. Power - 1800 RPM (for a few minutes)
3. Engine - SHUTDOWN (inspect for damage)

### **IF ENGINE FAILS TO START**

- 2. Throttle Control - FULL (push full in)**
- 3. Mixture Control - IDLE CUTOFF (pull full out)**
- 4. MAGNETOS Switch - START (continue cranking)**
- 5. FUEL SHUTOFF Valve - OFF (pull full out)**
- 6. MAGNETOS Switch - OFF**
- 7. MASTER Switch (ALT and BAT) - OFF**
8. Engine - SECURE
9. Parking Brake - RELEASE
10. Fire Extinguisher - OBTAIN (have ground attendants obtain if not installed)
11. Airplane - EVACUATE
12. Fire - EXTINGUISH (using fire extinguisher, wool blanket, or dirt)
13. Fire Damage - INSPECT (repair or replace damaged components and/or wiring before conducting another flight)

**CHECKLIST COMPLETE**

## ENGINE FIRE IN FLIGHT

- 1. Mixture Control - IDLE CUTOFF (pull full out)**
- 2. FUEL SHUTOFF Valve - OFF (pull full out)**
- 3. MASTER Switch (ALT and BAT) - OFF**
4. Cabin Vents - OPEN (as needed)
5. CABIN HEAT Control Knobs - OFF (push full in to avoid drafts)
6. Airspeed - 85 KAIS (If fire is not extinguished, increase glide speed to find an airspeed, within airspeed limitations, which will provide an incombustible mixture)
7. Forced Landing - EXECUTE (refer to EMERGENCY LANDING WITHOUT ENGINE POWER)

**CHECKLIST COMPLETE**

## ELECTRICAL FIRE OR CABIN FIRE IN FLIGHT

- 1. MASTER Switch (ALT and BAT) - OFF**

### **WARNING**

**OUTSIDE VISUAL REFERENCE MUST BE USED TO MAINTAIN SITUATIONAL AWARENESS. ALL FLIGHT INSTRUMENTS, RADIOS, AND PITCH TRIM WILL BE INOPERATIVE WHEN MASTER SWITCH IS TURNED OFF.**

(Continued Next Page)





# 5 | FIRE

---

## ELECTRICAL FIRE OR CABIN FIRE IN FLIGHT (Continued)

- 2. Cabin Vents - CLOSED (to avoid drafts)
- 3. CABIN HEAT Control Knob - OFF (push full in to avoid drafts)
- 4. Fire Extinguisher - ACTIVATE (if available)
- 5. AVN Master Switch - OFF
- 6. All Other Switches (except MAGNETOS switch) - OFF

### IF FIRE HAS NOT BEEN EXTINGUISHED

- 7. MASTER Switch (ALT and BAT) - ON
- 8. Rapid Descent - EXECUTE (Perform sideslip to rapidly lose altitude and shorten exposure time).
- 9. AVN MASTER Switch - ON
- 10. Radio - ALERT ATC or TRANSMIT MAYDAY ON 121.5 MHZ, (give location intentions, and SQUAWK 7700)
- 11. Forced Landing - EXECUTE (refer to PRECAUTIONARY LANDING WITH ENGINE POWER)

### NOTE

The G300 self-test and ADAHRS alignment may take several minutes to establish thus delaying display of flight instrument data. It may be necessary to execute landing without airspeed or altitude information.

### IF FIRE HAS BEEN EXTINGUISHED AND ELECTRICAL POWER IS NECESSARY FOR CONTINUED FLIGHT TO NEAREST SUITABLE AIRPORT OR LANDING AREA

### WARNING

**AFTER THE FIRE EXTINGUISHER HAS BEEN USED, MAKE SURE THAT THE FIRE IS EXTINGUISHED BEFORE EXTERIOR AIR IS USED TO REMOVE SMOKE FROM THE CABIN.**

- 7. Cabin Vents - OPEN (when sure that fire is completely extinguished)
- 8. CABIN HEAT Control Knob - ON (pull full out) (when sure that fire is completely extinguished)
- 9. Circuit Breakers - CHECK (for OPEN circuit(s), do not reset)
- 10. MASTER Switch (ALT and BAT) - ON
- 11. AVN MASTER Switch - ON
- 12. Land the airplane as soon as possible to inspect for damage.

**CHECKLIST COMPLETE**

(Continued Next Page)



# 5 | FIRE

---

## WING FIRE

1. LDG Light Switch - OFF
2. NAV Light Switch - OFF
3. STROBE Light Switch - OFF

### NOTE

Perform a sideslip to keep the flames away from the fuel tank and cabin.

4. Land as soon as possible.

**CHECKLIST COMPLETE**



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# 6 | ELECTRICAL

---

## LOSS OF ALL ELECTRICAL POWER

1. MAIN CB RESET Switch - PRESS MOMENTARILY

### **IF ELECTRICAL POWER RESUMES NORMAL OPERATION**

2. Continue flight and land as soon as practical.

### **IF ELECTRICAL POWER REMAINS INOPERATIVE (EXCEPT PFD)**

2. Land as soon as possible.

#### **NOTE**

The PFD will be operating on the secondary battery only. The secondary battery is not a back-up battery. It is included in the electrical system to limit display presentation issues that might arise during the voltage drop which occurs during engine start. In good condition, the secondary battery may provide 5 to 10 minutes of PFD operation.

3. Prepare for total loss of electrical power and PFD. Refer to ABNORMAL LANDINGS, LANDING WITH PARTIAL OR NO FLIGHT INSTRUMENT INFORMATION.



**CONTINUED FROM QRC**

## LOW VOLTS ANNUNCIATOR COMES ON OR VOLTS INDICATION BELOW GREEN BAND RANGE OR VOLTS LESS THAN 12.5

#### **NOTE**

Volts indication below the green band range or less than 12.5 volts may occur during low RPM conditions with an electrical load on the system such as during a low RPM taxi. Under these conditions, the volts indication will increase into the green band range (12.5 - 15.0 volts) at higher RPM. The master switch need not be recycled since an overvoltage condition has not occurred to deactivate the alternator system.

1. AVN MASTER Switch - OFF

#### **NOTE**

Radio, Transponder, Pitch Trim, and options (MFD, Autopilot, and PS Intercom), if installed, will be inoperative with AVN MASTER Switch in the OFF position.

(Continued Next Page)



# 6 | ELECTRICAL

---

## LOW VOLTS ANNUNCIATOR COMES ON OR VOLTS INDICATION BELOW GREEN BAND RANGE OR VOLTS LESS THAN 12.5 (Continued)

2. START/ALT Circuit Breaker - CHECK IN (if open, reset (close) circuit breaker. If circuit breaker opens again, do not reset)
3. MASTER Switch (ALT Only) - OFF
4. MASTER Switch (ALT Only) - ON
5. MAIN CB RESET Switch - PRESS MOMENTARILY
6. VOLTS - CHECK 13.5 Volts (minimum)
7. AMPS - CHECK CHARGING (positive)
8. AVN MASTER Switch - ON (only if VOLTS are 12.5 and AMPS are charging)

### IF VOLTS INDICATION REMAINS BELOW GREEN BAND RANGE OR LESS THAN 12.5

9. MASTER Switch (ALT Only) - OFF
10. Electrical Load - REDUCE as follows:
  - a. LDG Light Switch - OFF (use as required for landing)
  - b. NAV Light Switch - OFF
  - c. STROBE Light Switch - OFF
  - d. AVN Master Switch - OFF



#### NOTE

Radio, Transponder, Pitch Trim, and options (MFD, Autopilot, and PS Intercom), if installed, will be inoperative with AVN MASTER Switch in the OFF position.

11. Land as soon as practical.

#### NOTE

A fully charged battery in good condition should provide power under reduced load for 30 minutes.

**CHECKLIST COMPLETE**

## VOLTS INDICATION ABOVE GREEN BAND RANGE OR VOLTS MORE THAN 15

1. MASTER Switch (ALT Only) - OFF
2. Electrical Load - REDUCE as follows:
  - a. LDG Light Switch - OFF (use as required for landing)
  - b. NAV Light Switch - OFF
  - c. STROBE Light Switch - OFF
  - d. AVN MASTER Switch - OFF

(Continued Next Page)



# 6 | ELECTRICAL

---

## VOLTS INDICATION ABOVE GREEN BAND RANGE OR VOLTS MORE THAN 15 (Continued)

**NOTE**

Radio, Transponder, Pitch Trim, and options (MFD, Autopilot, and PS Intercom), if installed, will be inoperative with AVN MASTER Switch in the OFF position.

3. Land as soon as practical.

**NOTE**

A fully charged battery in good condition should provide power under recuded load for 30 minutes.

**CHECKLIST COMPLETE**



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## INADVERTENT ICING ENCOUNTER DURING FLIGHT

### **1. Turn back or change altitude to exit icing conditions.**

Consider lateral or vertical flight path reversal to return to last "known good" flight conditions (to obtain an outside air temperature that is less conducive to icing). Maintain VFR flight.

### **WARNING**

**FAILURE TO ACT QUICKLY MAY RESULT IN AN UNRECOVERABLE ICING ENCOUNTER.**

### **2. CABIN HEAT Control Knob - ON (pull full out)**

**3. A/P DISC/CWS (if installed) - PRESS** (verify autopilot disengages and aural alert is heard)

### **WARNING**

**DO NOT ENGAGE AUTOPILOT WITH VISIBLE ICE ON AIRFRAME OR AFTER ENCOUNTERING ICING CONDITIONS.**

4. Watch for signs of induction air filter icing and apply carburetor heat as required. Monitoring the G300 Carb °F Indicator may assist early detection. A loss of engine RPM could be caused by carburetor ice blocking the air intake filter. Adjust the throttle as necessary to hold engine RPM. Adjust mixture as necessary for any change in power settings or if carburetor heat is used continuously.

5. Watch for ice accretion on pitot tube and signs of pitot-static icing. Airspeed and altimeter indications may become unreliable.

### **CONTINUED FROM QRC**

a. Attitude and Heading information will remain reliable in event of airspeed and altimeter failure. Use attitude indicator to monitor pitch and bank.

b. Referenced GS (ground speed in conjunction with GPS derived wind information to determine an approximate airspeed.

c. Reference GPS ALTITUDE on MFD INFO page (if installed) or select G300 TERRAIN Profile page. GPS Altitude is provided by the white arrowhead on the left side of the TERRAIN Profile display.

d. Navigate using Heading Strip, Lateral Deviation, and GPS moving map (GPS moving map and TERRAIN Profile can not be displayed at the same time).

(Continued Next Page)



## INADVERTENT ICING ENCOUNTER DURING FLIGHT (Continued)

### NOTE

GPS information is not as accurate as barometric data but will provide an approximate value for comparison to pitot-static instruments or a back-up if barometric instruments become unreliable.

6. Plan a landing at the nearest airport. With an extremely rapid ice build-up, select a suitable off airport landing site.

7. With an ice accumulation of 0.25 inch (6.35 mm) or more on the wing leading edges, be prepared for significantly higher power requirements, higher approach and stall speeds, and a longer landing roll. Gently pitch and yaw the airplane periodically to keep ice bridging on the controls to a minimum.

8. Leave wing flaps retracted. With a severe ice build-up on the horizontal tail, the change in wing wake airflow direction caused by wing flap extension could result in a loss of elevator effectiveness.

9. Perform a landing approach using a forward slip, if necessary, for improved visibility.

10. Approach at 65 to 70 KIAS (estimated 70 KTS if using GPS for airspeed indication) depending upon the amount of ice accumulation.

11. Perform landing in level attitude.

12. Go arounds should be avoided whenever possible because of severely reduced climb capability.

**CHECKLIST COMPLETE**





# 8 | ABNORMAL LANDING

---

## LANDING WITH A FLAT MAIN TIRE

1. Approach - NORMAL
2. Wing Flaps - FULL
3. Touchdown - GOOD MAIN TIRE FIRST (hold airplane off flat tire as long as possible with aileron control)
4. Directional Control - MAINTAIN (using rudder and brake on good wheel as required)

**CHECKLIST COMPLETE**

## LANDING WITH A FLAT NOSE TIRE

1. Approach - NORMAL (choose longest runway if possible)
2. Wing Flaps - AS REQUIRED
  - a. 65 to 70 KIAS - Flaps UP - 10°
  - b. Below 65 KIAS - Flaps 10° - FULL
3. Touchdown - ON MAINS (tail slightly low)
4. Elevator - continue stick to full aft as airplane slows (hold nosewheel off the ground as long as possible)
5. When nosewheel touches down, maintain full up elevator as airplane slows to stop.
6. Directional Control - Maintain (using full rudder control) Attempt to limit differential braking.
7. Braking - Use brakes only as needed to lessen chance of prop strike. Rolling drag of the flat nose tire will increase braking effect.

**CHECKLIST COMPLETE**

## LANDING WITH PARTIAL OR NO FLIGHT INSTRUMENT INFORMATION

1. Transponder - Select Pressure Alt display using FUNC button (ADAHRS may be providing altitude information to transponder).
2. Selected Field - FLY OVER (noting terrain, obstructions, and any visual cues that may be used for speed references (i.e. traffic on nearby highway, etc))
3. Approach - NORMAL
4. Wing Flaps - AS REQUIRED (FULL recommended)
5. Speed - Use best pilot judgment and experience to reference speed cues such as flap extension forces, slipstream sounds, etc. Stall warning horn will function and provide approximately 5 knot stall warning.
6. Touchdown - NORMAL
7. Directional Control - MAINTAIN

(Continued Next Page)

# 8 | ABNORMAL LANDING

---

## LANDING WITH PARTIAL OR NO FLIGHT INSTRUMENT INFORMATION (Continued)

### NOTE


Without accurate speed information, landing may be made at faster than normal speeds. Gently apply brakes while continuing to "fly" the airplane during roll-out. Loss of directional control may result from locked brakes and skidding tires due to over braking.

**CHECKLIST COMPLETE**

## DOOR OPEN IN FLIGHT

### WARNING

**INTENTIONAL FLIGHT WITH DOOR(S) OPEN IS PROHIBITED.**

1. AVIATE-NAVIGATE-COMMUNICATE. FLY THE AIRPLANE.
  2. CABIN DOOR - LEAVE OPEN (do not attempt to close)
  3. THROTTLE Control - REDUCE (as necessary)
  4. Airspeed - 80 KIAS (or less)
  5. Seat Belts - CHECK (verify secure and tight)
  6. Cabin - CHECK (stow loose materials)
  7. Land as soon as practical.
- 

**CHECKLIST COMPLETE**

## LANDING WITH DOOR OPEN

1. Wing Flaps - AS REQUIRED
  - a. 65 to 70 KIAS - Flaps UP - 10°
  - b. Below 65 KIAS - Flaps 10° - FULL
2. Landing Approach - NORMAL (limit sideslip angle if possible)
3. Touchdown - NORMAL

**CHECKLIST COMPLETE**



## 9 | ADAHRS

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### **RED X - PFD OR MFD INDICATORS (AIRSPEED, ALTITUDE, HORIZONTAL SITUATION INDICATOR (HSI), OR ENGINE INDICATING SYSTEM (EIS))**

1. ADAHRS Circuit Breaker - CHECK IN
  - a. If open, reset (close) circuit breaker. If circuit breaker opens again, do not reset.
  - b. If closed, pull (open) ADAHRS Circuit Breaker, and pull (open) SEC PWR Circuit Breaker (overhead Panel Light will go off) then reset (close) both circuit breakers.
2. Affected Indicator (other than EIS) - RED-X STILL DISPLAYED
  - a. Reference GS (ground speed) in conjunction with GPS derived wind information to determine an approximate airspeed.
  - b. Select COMPASS ARC from G300 MAP SET-UP for approximate GPS derived heading information or monitor magnetic compass (if installed).
  - c. Reference GPS ALTITUDE on TERRAIN PROFILE page (GPS altitude is the white arrowhead on left side) or MFD INFO page (if installed) for approximate altitude.
  - d. Navigate using pilotage and GPS moving map if available.
  - e. Land as soon as possible.
3. EIS Engine Indicating System - RED-X STILL DISPLAYED
  - a. If only the EIS is RED X (no other PFD or MFD RED X is present), continue monitoring. Non-emergency full throttle operation should be limited to prevent engine overspeed or exceeding temperatures. Descents should be made at idle with carburetor heat applied.
  - b. Land as soon as possible.
4. Affected Indicator - RED-X HAS CLEARED (indicator normal)
5. Land as soon as practical.

**CHECKLIST COMPLETE**

### **PFD/MFD DISPLAY MALFUNCTION OR FAILURE**

1. PANEL LIGHTS Control Knob - FULL BRIGHT (full clockwise rotation)
2. PFD/MFD Circuit Breaker - CHECK IN
  - a. If open, reset (close) circuit breaker. If circuit breaker opens again, do not reset.
  - b. If closed, pull (open) PFD/MFD Circuit Breaker, and pull (open) SEC PWR Circuit Breaker (overhead Panel Light will go off) then reset (close) both circuit breakers.

(Continued Next Page)





## 9 | ADAHRS

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### **PFD/MFD DISPLAY FUNCTION OR FAILURE (Continued)**

3. Affected Display - CONTINUED BLACK SCREEN  
(No information displayed) - Use other display (if installed).
  - a. Transponder - Select Pressure Alt display using FUNC button (ADAHRS may be providing altitude information to transponder).
  - b. Navigate using pilotage and magnetic compass (if installed) to nearest suitable landing site.
  - c. Land as soon as possible. Refer to LANDING WITH PARTIAL OR NO INSTRUMENTATION INFORMATION.
4. Affected Display - NORMAL SCREEN
  - a. Land as soon as practical.

**CHECKLIST COMPLETE**

### **PFD OR MFD DISPLAY INFORMATION NOT UPDATING**

1. Pull (open) the following circuit breakers:
  - a. ADAHRS Circuit Breaker - OPEN
  - b. PFD/MFD Circuit Breaker - OPEN
  - c. SEC PWR Circuit Breaker - OPEN (overhead panel light will go off)
2. Reset (close) all three circuit breakers
  - a. ADAHRS Circuit Breaker - CLOSE
  - b. PFD/MFD Circuit Breaker - CLOSE
  - c. SEC PWR Circuit Breaker - CLOSE
3. Affected Display(s) - NOT UPDATING (use other display) (if installed)
  - a. Transponder - Select Pressure Altitude display using FUNC button (ADAHRS may be providing altitude information to transponder).
  - b. Navigate using pilotage and magnetic compass (if installed) to nearest suitable landing site.
  - c. Land as soon as possible. Refer to LANDING WITH PARTIAL OR NO INSTRUMENTATION INFORMATION.
4. Affected Display - NORMAL SCREEN
  - a. Land as soon as practical.

**CHECKLIST COMPLETE**

### **ELECTRIC PITCH TRIM FAILURE**

1. AVN MASTER Switch - VERIFY ON

(Continued Next Page)



## **ELECTRIC PITCH TRIM FAILURE (Continued)**

2. TRIM/AP Circuit Breaker - CHECK IN
  - a. If open, reset (close) circuit breaker. If circuit breaker opens again, do not reset.
  - b. If closed, pull (open) TRIM/AP Circuit Breaker, then reset (close) the circuit breaker.

## **IF ELECTRIC PITCH TRIM SYSTEM REMAINS INOPERATIVE**

3. Reduce pitch control forces by changing speed or flap configuration (within airspeed limitations).
4. CRUISE - Consider range reduction and destination change if cruise speed is reduced by flap speed limitations.
5. APPROACH - Establish stabilized approach using normal speed is preferred. This may include change of destination for longer runway.
6. LANDING WITH FAILED TRIM - Consider making Flaps UP landing if pitch control force increases uncomfortably when lowering landing flaps.
7. Land as soon as practical.

## **IF ELECTRIC PITCH TRIM RESUMES NORMAL OPERATION**

3. Land as soon as practical.

**CHECKLIST COMPLETE**

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## MISCELLANEOUS MESSAGE ADVISORIES

| Message                       | Comments  |
|-------------------------------|---|
| Approaching Target Altitude   | Within 200 feet of final VNAV target altitude.  |
| Approaching VNAV Profile      | The aircraft is within one minute of reaching the initial VNAV decent point.  |
| Arriving at XXX               | The aircraft is nearing the destination.  |
| Can't Unlock Maps             | No applicable unlock code for one or more maps was found. All MapSource maps are not accessible.  |
| Database Error                | Internal problem with the system. Contact your dealer or Garmin Product Support to have the unit repaired.  |
| Fuel Tank                     | A reminder for switching fuel tanks. The reminder message repeats at the specified interval after the beginning of each trip.                       |
| Lost Satellite Reception      | The system is unable to receive satellite signals.  |
| Memory Full                   | System memory is full, no further data can be saved.  |
| Proximity Alarm XXXXX         | You have reached the distance set for a proximity waypoint.   |
| Next DTK XXX                  | The aircraft is nearing a turn in a route.  |
| No XM Signal                  | The XM antenna is not receiving a signal.   |
| Proximity Alarm Memory Full   | No additional proximity waypoints can be saved.   |
| Proximity Waypoints Overlap   | The radius of two proximity waypoints overlap.  |
| Route Already Exists          | A route name that already exists has been entered.  |
| Route Memory Full             | No additional routes can be saved.  |
| Route Truncated               | Uploaded route from another device has more than 300 waypoints.   |
| Route Waypoint Memory Full    | No additional route waypoints can be saved.   |
| Saving XM Program Information | An XM Radio channel lineup change has occurred and the unit is saving the channel lineup to memory.   |
| Steep Turn Ahead              | Approaching a turn that requires a bank angle in excess of 25 degrees to stay on course.  |
| Track Already Exists          | A saved track with the same name already exists.  |
| Track Log Full                | The track log is full and track recording was turned off. To record more track points, you need to clear the track log and turn track recording on. |
| Track Memory Full             | No more track data can be stored. Delete the old track data to store the new data.  |

(Continued Next Page)

MISCELLANEOUS MESSAGE ADVISORIES (Continued)

| Message                 | Comments   |
|-------------------------|--|
| Track Truncated         | A complete uploaded track will not fit in memory. The oldest track log points have been deleted. |
| Transfer Complete       | Data transfer was completed.   |
| VNAV Cancelled          | VNAV function has been cancelled due to a change in the active route.                            |
| Waypoint Already Exists | A waypoint with the same name already exists.  |
| Waypoint Memory Full    | The unit has stored the maximum number of waypoints.   |

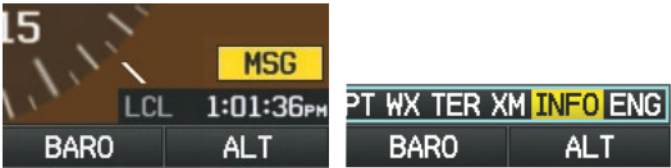
AIRSPACE MESSAGES

| Message                           | Comments  |
|-----------------------------------|---|
| Inside Airspace                   | Inside the boundaries of the airspace.  |
| Airspace Near and Ahead           | Within two nautical miles of an airspace and your current course takes you inside the airspace. |
| Airspace Ahead, Within 10 Minutes | The projected course takes you inside an airspace within the next 10 minutes or less.           |
| Near Airspace, Within 2 nm        | Within two nautical miles of an airspace but not projected to enter it.                         |

SYSTEM STATUS INFO PAGE

The 'INFO' Page on the Navigation Bar will flash yellow if there is a System Status Message (Single Display or Dual Display MFD).

A yellow **MSG** (Message) alert will flash in the bottom right corner of the Single Display PFD Page or Dual Display PFD to alert the pilot of System Status Messages on the **INFO** Page.



System Status Message Alert (Single Display PFD Page & Dual Display PFD)

System Status Message Alert (Single Display & Dual Display MFD)

(Continued Next Page)



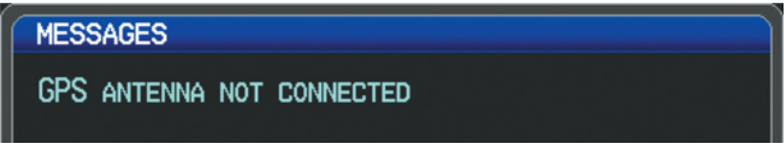
SYSTEM STATUS INFO PAGE  
(Continued)

Accessing the Info Page System Status Message:

- 1. When the 'INFO' Page on the Page Navigation Bar is flashing, use the **FMS** Joystick to access the Info Page.
- 2. Press the yellow **MESSAGES** Softkey. The Messages Page is displayed.



System Status Message Alert (Info Page)  
(Single Display)



Messages Page (Single Display)

- 3. To return to the Info Page, press the **FMS** Joystick, **CLR** Key, or **EXIT** Softkey. The Info Page will stop flashing, but remain yellow until the message is resolved.

The following system status messages may appear on the Info Page.

SYSTEM STATUS MESSAGES

| Message                                | Comments  |
|--|---|
| AHRS extended operation in no-GPS mode | The AHRS is operating exclusively in no-GPS mode. The G300 system should be serviced.   |
| AHRS fault detected                    | A fault has been detected in the AHRS. The G300 system should be serviced.  |
| AHRS magnetic-field model out of date  | The AHRS Earth magnetic field model is out of date. Update magnetic field model when practical.   |
| AHRS not calibrated                    | The AHRS is either not calibrated or requires post installation calibration procedures to be conducted. The G300 system should be serviced.                                 |
| AHRS not receiving airspeed data       | The AHRS is not receiving true airspeed from the air data computer. The AHRS relies on GPS information in the absence of true airspeed. The G300 system should be serviced. |

(Continued Next Page)



## SYSTEM STATUS MESSAGES (Continued)

| Message  | Comments  |
|--|---|
| <b>AHRS extended operation in no-GPS mode</b>        | The AHRS is operating exclusively in no-GPS mode. The G300 system should be serviced.   |
| <b>AHRS fault detected</b>                           | A fault has been detected in the AHRS. The G300 system should be serviced.  |
| <b>AHRS magnetic-field model out of date</b>         | The AHRS Earth magnetic field model is out of date. Update magnetic field model when practical.   |
| <b>AHRS not calibrated</b>                           | The AHRS is either not calibrated or requires post installation calibration procedures to be conducted. The G300 system should be serviced.                                 |
| <b>AHRS not receiving airspeed data</b>              | The AHRS is not receiving true airspeed from the air data computer. The AHRS relies on GPS information in the absence of true airspeed. The G300 system should be serviced. |
| <b>AHRS not receiving airspeed data</b>              | The AHRS is not receiving true airspeed from the air data computer. The AHRS relies on GPS information in the absence of true airspeed. The G300 system should be serviced. |
| <b>AHRS not receiving GPS information</b>            | The AHRS is not receiving any or any useful GPS information. The G300 system should be serviced.  |
| <b>AHRS too far north/south for magnetic heading</b> | The aircraft is outside geographical limits for approved AHRS operation. Heading is flagged as invalid.   |
| <b>Autopilot fault detected</b>                      | The remote autopilot unit has detected an internal fault and needs service.   |
| <b>Check XM antenna</b>                              | The display that is configured for a XM antenna connection does not have an XM signal.  |
| <b>Config module error</b>                           | The GDU has encountered unexpected configuration settings. The G300 system should be serviced.  |
| <b>Config module missing</b>                         | The PFD config module is not connected.   |
| <b>Demo Mode - Do not use for navigation</b>         | The system is in demo mode, do not use for navigation.  |
| <b>GDU software version mismatch</b>                 | The PFD and MFD do not have the same software version installed. Display crosstalk is disabled. Ensure all installed display software matches.                              |
| <b>GPS antenna not connected</b>                     | The display that is configured for a GPS antenna connection does not detect any antenna current draw from the GPS antenna RF connector.                                     |
| <b>GPS antenna shorted to ground</b>                 | The display that is configured for a GPS antenna connection detects the GPS antenna RF connector is shorted to ground.  |

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## SYSTEM STATUS MESSAGES (Continued)

| Message                                   | Comments   |
|---|--|
| GSU 73 configuration error                | The GSU configuration settings do not match the configuration settings stored in backup memory. The G300 system should be serviced.  |
| GSU 73 needs service                      | The GSU should be serviced when possible.  |
| GSU 73 not responding                     | The GDU has lost communication with the GSU.   |
| GSU 73 software update available          | A software update for the GSU 73 is available. Consult the install manual for instructions on performing a GSU 73 software update..  |
| GSU 73 temperature too low                | The GSU temperature is too low. If the problem persists, the G300 system should be serviced.   |
| GSU 73 temperature too high               | The GSU temperature is too high. If the problem persists, the G300 system should be serviced.  |
| Magnetic anomaly - Check mag installation | An anomaly has been detected in the magnetometer data. Heading may or may not be flagged invalid.  |
| Check XM antenna                          | The display that is configured for a XM antenna connection does not have an XM signal.   |
| Check XM antenna                          | The display that is configured for a XM antenna connection does not have an XM signal.   |
| Magnetometer failure                      | Communication has been lost or a fault has been detected in the GMU. Heading is flagged invalid and the AHRS will use GPS for backup mode operation. The G300 system should be serviced. |
| Navigation database mismatch              | The PFD and MFD have different navigation database versions installed. Install the correct navigation database on all displays.  |
| Network fault - Duplicate GDU detected    | A duplicate GDU has been detected on the CAN bus. If the problem persists, the G300 system should be serviced.   |
| Not receiving autopilot RS-232 data       | Not receiving RS-232 data from integrated autopilot unit.  |
| Obstacle database mismatch                | The PFD and MFD have different obstacle database versions installed. Install the correct obstacle database on all displays.  |
| Obstacle database missing                 | The obstacle database is missing. Install the correct obstacle database on all displays.   |
| Terrain database mismatch                 | The PFD and MFD have different terrain database versions installed. Install the correct terrain database on all displays.  |
| Terrain database missing                  | The terrain database is missing. Install the correct terrain database on all displays.   |
| XM receiver needs service                 | The display should be serviced when possible.  |

(Continued Next Page)



TERRAIN ALERTS

• "Five Hundred" - When the aircraft descends through 500 feet above the destination airport.

The following aural terrain alerts are issued when flight conditions meet parameters that are set within the software algorithms, and are dependent on the sensitivity level set in the Terrain Setup Menu.

| Severity | Terrain  | Obstacle  | Descent Rate                        |
|----------|--|---|-------------------------------------|
| Caution  | "caution, terrain"<br>"caution, terrain ahead"                     | "caution, obstacle"<br>"caution, obstacle ahead"                      | "caution, sink rate"                |
| Warning  | "terrain ahead! pull up!"<br>"terrain! terrain! pull up! pull up!" | "obstacle ahead! pull up!"<br>"obstacle! obstacle! pull up! pull up!" | "sink rate, pull up!"<br>"pull up!" |

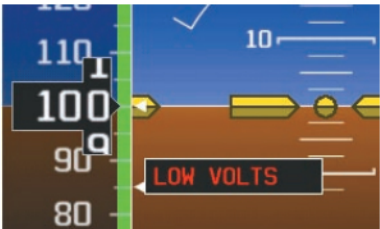
Aural Alerts Summary

CAS MESSAGES

The G300 Crew Alerting System (CAS), as installed in the Cessna SkyCatcher, uses two alert levels.

• **WARNING:** This level of alert requires immediate attention.

Warning annunciation text is shown in red in the CAS Annunciation Window on the PFD.



Low Voltage Warning

• **ADVISORY:** This level of alert provides general information.

Advisory annunciation text is shown in white in the CAS Annunciation Window.

(Continued Next Page)



## CAS MESSAGES (Continued)



Set Baro Advisory

## TERRAIN ANNUNCIATIONS

In addition to the Terrain Pop-Up Alert in the lower left corner of the page, terrain and obstacle annunciations appear on the PFD in the upper left corner of the Attitude Indicator. Refer to the Hazard Avoidance Section for more information.

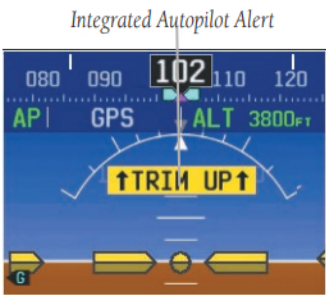


Terrain Alerts  
(PFD or PFD Page)

(Continued Next Page)



INTEGRATED AUTOPILOT ALERTS



Integrated Autopilot Alerts

STATUS ALERTS

If the commanded operation cannot be achieved, the following messages are displayed over the pitch ladder. The annunciation is removed once the condition is resolved.

| Alert Condition             | Annunciation  | Description  |
|-----------------------------|---------------|--|
| Up-elevator Trim Required   | ↑ TRIM UP ↑   | The autopilot does not have the required elevator authority. |
| Down-elevator Trim Required | ↓ TRIM DOWN ↓ |  |

Status Alerts

The following messages are displayed in the G300 Autopilot Status Box.

| Alert Condition      | Annunciation | Description           |
|----------------------|--------------|-----------------------|
| System Failure       | AP           | Autopilot inoperative |
| Manual Disengagement | AP           | Autopilot Disengaged  |

Integrated Autopilot System Alerts

SPEED ALERTS

If the airspeed limitations have been reached, the following messages are displayed over the pitch ladder. The annunciation is removed once the condition is resolved.

| Alert                 | Annunciation | Description  |
|-----------------------|--------------|--|
| Overspeed Protection  | MAX SPEED    | External autopilot unit will raise the nose to limit the aircraft's speed.                   |
| Underspeed Protection | MIN SPEED    | External autopilot unit will lower the nose to prevent the aircraft's speed from decreasing. |

Speed Alerts

