

NORMAL CHECKLIST

FFOD		CRUISE																					
PASSENGER / CREW BRIEF	COMPLETE	POWER	SET																				
PF/PM AIRWORTHINESS ACCEPTANCE	COMPLETE	MIXTURE	LEANED																				
PF/PM PREFLIGHT	COMPLETE	LIGHTS	SET																				
BEFORE START		DESCENT																					
PF/PM SEAT-BELTS	CHECKED	APPROACH BRIEFING	COMPLETE																				
FUEL SELECTOR	BOTH	FUEL SELECTOR	BOTH																				
TRIM	TAKEOFF	MIXTURE	SET																				
MIXTURE	SET	LIGHTS	SET																				
EXTERIOR / INTERIOR LIGHTS	SET	COMS / NAVS	SET																				
CARBURETOR HEAT	OFF	PF/PM ALTIMETER	___ / SET																				
CIRCUIT BREAKERS	CHECKED	PF/PM SEAT-BELTS	CHECKED																				
AVIONICS SWITCH	OFF	AFTER LANDING																					
AFTER START		TRIM	TAKEOFF																				
ENGINE INSTRUMENTS	CHECKED	FLAPS	___																				
AMMETER	CHECKED	MIXTURE	LEAN																				
ANNUNCIATORS	CHECKED	CARBURETOR HEAT	OFF																				
MIXTURE	LEANED	PITOT HEAT	OFF																				
BEFORE TAXI		LIGHTS	SET																				
TAKEOFF BRIEFING	COMPLETE	SHUTDOWN / SECURE																					
FLIGHT INSTRUMENTS	CHECKED	AVIONICS MASTER	OFF																				
PF/PM ALTIMETER	___ / SET	MAGNETO GROUNDING	CHECK																				
COMS / NAVS	SET	MIXTURE	IDLE CUT-OFF																				
BEFORE TAKEOFF		ELECTRICAL SWITCHES	OFF																				
FLIGHT CONTROLS	CHECKED	MASTER SWITCH	OFF																				
FUEL SELECTOR	BOTH	AIRCRAFT	SECURE																				
TRIM	TAKEOFF	POSTFLIGHT	COMPLETE																				
RUNUP	COMPLETE	Reference																					
MIXTURE	SET	<table><tr><th colspan="4">CRITICAL AIRSPEEDS</th></tr><tr><td>V<sub>R</sub></td><td>55 KIAS</td><td>V<sub>FE</sub></td><td>85 KIAS</td></tr><tr><td>V<sub>X</sub></td><td>59 KIAS</td><td>LANDING SPEED</td><td>60 KIAS</td></tr><tr><td>V<sub>Y</sub></td><td>73 KIAS</td><td>V<sub>A</sub> 2300 lbs</td><td>97 KIAS</td></tr><tr><td>BEST GLIDE</td><td>65 KIAS</td><td>V<sub>REF</sub></td><td>54 KIAS</td></tr></table>		CRITICAL AIRSPEEDS				V <sub>R</sub>	55 KIAS	V <sub>FE</sub>	85 KIAS	V <sub>X</sub>	59 KIAS	LANDING SPEED	60 KIAS	V <sub>Y</sub>	73 KIAS	V <sub>A</sub> 2300 lbs	97 KIAS	BEST GLIDE	65 KIAS	V <sub>REF</sub>	54 KIAS
CRITICAL AIRSPEEDS																							
V <sub>R</sub>	55 KIAS	V <sub>FE</sub>	85 KIAS																				
V <sub>X</sub>	59 KIAS	LANDING SPEED	60 KIAS																				
V <sub>Y</sub>	73 KIAS	V <sub>A</sub> 2300 lbs	97 KIAS																				
BEST GLIDE	65 KIAS	V <sub>REF</sub>	54 KIAS																				
BUGS	(PF) ___ / SET																						
COMS / NAVS	SET																						
TRANSPONDER	SET																						
MIXTURE	TAKEOFF																						
PF/PM FLAPS	___ ° / CONFIRMED																						
ANNUNCIATORS	CHECKED																						
ENGINE INSTRUMENTS	CHECKED																						
AMMETER	CHECKED																						
DOORS / WINDOWS	CLOSED																						
CLIMB																							
PF/PM FLAPS	UP / CONFIRM																						
MIXTURE	LEAN																						
LIGHTS	SET																						
PITOT HEAT	SET																						



**EMERGENCY QUICK REFERENCE CHECKLIST****ENGINE FAILURE DURING TAKEOFF RUN**

THROTTLE	IDLE
BRAKES	APPLY
WING FLAPS	RETRACT
MIXTURE	IDLE CUT-OFF
IGNITION SWITCH	OFF
MASTER SWITCH	OFF

**ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF**

AIRSPPEED	
IF FLAPS UP	65 KIAS
IF FLAPS DOWN	60 KIAS
MIXTURE	IDLE CUT-OFF
FUEL SELECTOR VALVE	OFF
IGNITION SWITCH	OFF

WING FLAPS	AS REQUIRED
MASTER SWITCH	OFF

**ENGINE FAILURE DURING FLIGHT**

AIRSPPEED	65 KIAS
CARBURETOR HEAT	ON
FUEL SELECTOR VALVE	BOTH
MIXTURE	RICH
IGNITION SWITCH	
IF PROPELLER WINDMILLING	BOTH
IF PROPELLER STOPPED	START
PRIMER	IN AND LOCKED

**DURING START ON GROUND**

CRANKING	CONTINUE
<b>TO GET A START WHICH WOULD SUCK THE FLAMES AND ACCUMULATED FUEL THROUGH THE CARBURETOR AND INTO THE ENGINE.</b>	
<b>IF ENGINE STARTS:</b>	
POWER 1700 RPM FOR A FEW MINUTES. ENGINE SHUTDOWN AND INSPECT FOR DAMAGE.	
<b>IF ENGINE FAILS TO START:</b>	
THROTTLE	FULL OPEN
MIXTURE	IDLE CUT-OFF
CRANKING	CONTINUE
FIRE EXTINGUISHER	OBTAIN

**ELECTRICAL FIRE IN FLIGHT**

MASTER SWITCH	OFF
AVIONICS POWER SWITCH	OFF
ALL OTHER SWITCHES	OFF
VENTS/CABIN AIR/HEAT	CLOSED

FIRE EXTINGUISHER	ACTIVATE
-------------------	----------

**CABIN FIRE**

MASTER SWITCH	OFF
VENTS/CABIN AIR/HEAT	CLOSED

FIRE EXTINGUISHER	ACTIVATE
-------------------	----------

**ENGINE FIRE IN FLIGHT**

MIXTURE	IDLE CUT-OFF
FUEL SELECTOR VALVE	OFF
MASTER SWITCH	OFF
CABIN HEAT AND AIR	OFF
AIRSPPEED	100 KIAS

**CARBON MONOXIDE INDICATION**

CABIN HEAT	OFF
CABIN AIR	ON
CABIN VENTS	OPEN
CABIN WINDOWS	OPEN



**AHRS ALIGN  
ANNUNCIATIONS****EMERGENCY CHECKLIST****ENGINE FAILURES****ENGINE FAILURE DURING TAKEOFF RUN****ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF****ENGINE FAILURE DURING FLIGHT****FORCED LANDINGS****EMERGENCY LANDING WITHOUT ENGINE POWER****DITCHING****PRECAUTIONARY LANDING WITH ENGINE POWER****FIRES****DURING START ON GROUND****ENGINE FIRE IN FLIGHT****ELECTRICAL FIRE IN FLIGHT****CABIN FIRE****WING FIRE****ICING****INADVERTENT ICING ENCOUNTER****STATIC SOURCE BLOCKAGE****ELECTRICAL POWER SUPPLY SYSTEM  
MALFUNCTIONS****AMMETER SHOWS EXCESSIVE RATE OF CHARGE****AIRCRAFT ELECTRICAL SYSTEM FAILURE****LANDINGS****LANDING WITH A FLAT MAIN TIRE****NO FLAP LANDING****AVIONICS****Loss of Primary Flight Information****Synthetic Vision Malfunction****Navigation Data Failure (VOR/LOC/GS)****ANNUNCIATED PROCEDURES****CARBON MONOXIDE INDICATION****ADC Failure****ATTITUDE, ALT, or IAS monitor CAUTION****GPS Data Failure****Backup Battery Malfunction****Display Over temperature**

## ENGINE FAILURES

### ENGINE FAILURE DURING TAKEOFF RUN

THROTTLE	IDLE
BRAKES	APPLY
WING FLAPS	RETRACT
MIXTURE	IDLE CUT-OFF
IGNITION SWITCH	OFF
MASTER SWITCH	OFF

**END.**

### ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

AIRSPEED	
<b>IF FLAPS UP</b>	65 KIAS
<b>IF FLAPS DOWN</b>	60 KIAS
MIXTURE	IDLE CUT-OFF
FUEL SELECTOR VALVE	OFF
IGNITION SWITCH	OFF
WING FLAPS	AS REQUIRED
MASTER SWITCH	OFF

### EMERGENCY LANDING WITHOUT ENGINE POWER →

#### ENGINE FAILURE DURING FLIGHT

AIRSPEED	65 KIAS
CARBURETOR HEAT	ON
FUEL SELECTOR VALVE	BOTH
MIXTURE	RICH
IGNITION SWITCH	
<b>IF PROPELLER WINDMILLING</b>	BOTH
<b>IF PROPELLER STOPPED</b>	START
PRIMER	IN AND LOCKED

### IF UNABLE TO REACH LAND DITCHING →

### IF LANDING AREA ASSURED EMERGENCY LANDING WITHOUT ENGINE POWER →



## FORCED LANDINGS

### EMERGENCY LANDING WITHOUT ENGINE POWER

AIRSPEED

**IF FLAPS UP**

65 KIAS

**IF FLAPS DOWN**

60 KIAS

MIXTURE

IDLE CUT-OFF

FUEL SELECTOR VALVE

OFF

IGNITION SWITCH

OFF

WING FLAPS (40° RECOMMENDED)

AS REQUIRED

MASTER SWITCH

OFF

DOORS UNLATCH PRIOR TO TOUCHDOWN.

TOUCHDOWN SLIGHTLY TAIL LOW.

BRAKES

APPLY HEAVILY

**END.**

### DITCHING

RADIO

TRANSMIT

**MAYDAY ON 121.5 MHZ, GIVING LOCATION AND INTENTIONS**

SQUAWK

7700

HEAVY OBJECTS SECURE OR JETTISON

APPROACH

**IF HIGH WINDS, HEAVY SEAS**

INTO THE WIND.

**IF LIGHT WINDS, HEAVY SWELLS** PARALLEL TO SWELLS.

WING FLAPS

20° - 40°

POWER ESTABLISH 300 FT/MIN DESCENT AT 55 KIAS.

**IF NO POWER IS AVAILABLE, APPROACH AT 65 KIAS WITH FLAPS UP OR AT 60 KIAS WITH 10° FLAPS.**

CABIN DOORS

UNLATCH

TOUCHDOWN LEVEL ATTITUDE AT ESTABLISHED RATE OF DESCENT.

FACE CUSHION AT TOUCHDOWN WITH FOLDED COAT.

AIRPLANE EVACUATE THROUGH CABIN DOORS.

IF NECESSARY, OPEN WINDOW AND FLOOD CABIN TO EQUALIZE PRESSURE SO DOORS CAN BE OPENED.

LIFE VESTS AND RAFT

INFLATE

**END.**

### PRECAUTIONARY LANDING WITH ENGINE POWER

WING FLAPS

20°.

AIRSPEED

60 KIAS.

SELECTED FIELD

FLY OVER

**NOTING TERRAIN AND OBSTRUCTIONS, THEN RETRACT FLAPS UPON REACHING A SAFE ALTITUDE AND AIRSPEED**

AVIONICS POWER SWITCH

OFF

ELECTRICAL SWITCHES

OFF

WING FLAPS

40°

AIRSPEED

60 KIAS

MASTER SWITCH

OFF

DOORS UNLATCH PRIOR TO TOUCHDOWN.

TOUCHDOWN SLIGHTLY TAIL LOW.

IGNITION

OFF

BRAKES

APPLY HEAVILY

**END.**



## FIRES

### DURING START ON GROUND

CRANKING CONTINUE

**TO GET A START WHICH WOULD SUCK THE FLAMES AND ACCUMULATED FUEL THROUGH THE CARBURETOR AND INTO THE ENGINE.**

#### IF ENGINE STARTS:

POWER 1700 RPM FOR A FEW MINUTES.  
ENGINE SHUTDOWN AND INSPECT FOR DAMAGE.

#### IF ENGINE FAILS TO START:

THROTTLE	FULL OPEN
MIXTURE	IDLE CUT-OFF
CRANKING	CONTINUE
FIRE EXTINGUISHER	OBTAIN

#### ENGINE SECURE:

MASTER SWITCH	OFF
IGNITION SWITCH	OFF
FUEL SELECTOR VALVE	OFF

FIRE EXTINGUISH

#### USING FIRE EXTINGUISHER. WOOL BLANKET, OR DIRT.

FIRE DAMAGE INSPECT, REPAIR DAMAGE OR REPLACE DAMAGED COMPONENTS OR WIRING BEFORE CONDUCTING ANOTHER FLIGHT.

END.

### ENGINE FIRE IN FLIGHT

MIXTURE	IDLE CUT-OFF
FUEL SELECTOR VALVE	OFF
MASTER SWITCH	OFF
CABIN HEAT AND AIR	OFF
AIRSPEED	100 KIAS

#### IF FIRE IS NOT EXTINGUISHED

INCREASE GLIDE SPEED TO FIND AN AIRSPEED WHICH WILL PROVIDE AN INCOMBUSTIBLE MIXTURE.

#### IF FIRE IS EXTINGUISHED

FORCED LANDING EXECUTE

#### EMERGENCY LANDING WITHOUT ENGINE POWER →

### ELECTRICAL FIRE IN FLIGHT

MASTER SWITCH	OFF
AVIONICS POWER SWITCH	OFF
ALL OTHER SWITCHES	OFF
VENTS/CABIN AIR/HEAT	CLOSED
FIRE EXTINGUISHER	ACTIVATE

**AFTER DISCHARGING AN EXTINGUISHER WITHIN A CLOSED CABIN, VENTILATE THE CABIN.**

**IF FIRE APPEARS OUT AND ELECTRICAL POWER IS NECESSARY FOR CONTINUANCE OF FLIGHT**

MASTER SWITCH	ON
CIRCUIT BREAKERS	CHECK

#### FOR FAULTY CIRCUIT, DO NOT RESET.

RADIO SWITCHES OFF  
AVIONICS POWER SWITCH ON  
RADIO/ELECTRICAL SWITCHES ON ONE AT A TIME WITH DELAY AFTER EACH UNTIL SHORT CIRCUIT IS LOCALIZED.

#### IF FIRE IS EXTINGUISHED

VENTS/CABIN AIR/HEAT	OPEN
----------------------	------

#### PRECAUTIONARY LANDING WITH ENGINE POWER →

### CABIN FIRE

MASTER SWITCH	OFF
VENTS/CABIN AIR/HEAT	CLOSED
FIRE EXTINGUISHER	ACTIVATE

**AFTER DISCHARGING AN EXTINGUISHER WITHIN A CLOSED CABIN. VENTILATE THE CABIN.**

**LAND THE AIRPLANE AS SOON AS POSSIBLE TO INSPECT FOR DAMAGE.**

#### PRECAUTIONARY LANDING WITH ENGINE POWER →



**WING FIRE**

NAVIGATION LIGHT SWITCH	OFF
PITOT HEAT SWITCH	OFF
STROBE LIGHT SWITCH	OFF

**NOTE**

PERFORM A SIDESLIP TO KEEP THE FLAMES AWAY FROM THE FUEL TANK AND CABIN, AND LAND AS SOON AS POSSIBLE USING FLAPS ONLY AS REQUIRED FOR FINAL APPROACH AND TOUCHDOWN

**PRECAUTIONARY LANDING WITH ENGINE POWER →**



## ICING

### INADVERTENT ICING ENCOUNTER

TURN PITOT HEAT SWITCH	ON
CABIN HEAT	FULL
DEFROSTER OUTLET	OPEN
CABIN AIR	MAXIMUM
THROTTLE	INCREASE
NEAREST AIRPORT	LAND
LANDING	FLAPS UP
APPROACH SPEED	75 KIAS

**TURN BACK OR CHANGE ALTITUDE TO OBTAIN AN OUTSIDE AIR TEMPERATURE THAT IS LESS CONDUCTIVE TO ICING.**

PULL CABIN HEAT CONTROL FULL OUT AND OPEN DEFROSTER OUTLET TO OBTAIN MAXIMUM WINDSHIELD DEFROSTER AIRFLOW. ADJUST CABIN AIR CONTROL TO GET MAXIMUM DEFROSTER HEAT AND AIRFLOW.

OPEN THE THROTTLE TO INCREASE ENGINE SPEED AND MINIMIZE ICE BUILD UP ON PROPELLER BLADES

WATCH FOR SIGNS OF CARBURETOR AIR FILTER ICE AND APPLY CARBURETOR HEAT AS REQUIRED. AN UNEXPLAINED LOSS IN ENGINE SPEED COULD BE CAUSED BY CARBURETOR ICE OR AIR INTAKE FILTER ICE. LEAN THE MIXTURE FOR MAXIMUM RPM. IF CARBURETOR HEAT IS USED CONTINUOUSLY.

PLAN A LANDING AT THE NEAREST AIRPORT.

**WITH AN EXTREMELY RAPID ICE BUILD-UP, SELECT A SUITABLE "OFF AIRPORT" LANDING SITE.**

WITH AN ICE ACCUMULATION OF 1/4 INCH OR MORE ON THE WING LEADING EDGES, BE PREPARED FOR SIGNIFICANTLY HIGHER STALL SPEED.

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.

OPEN LEFT WINDOW AND, IF PRACTICAL, SCRAPE ICE FROM A PORTION OF THE WINDSHIELD FOR VISIBILITY IN THE LANDING APPROACH.

PERFORM A LANDING APPROACH USING A FORWARD SLIP, IF NECESSARY, FOR IMPROVED VISIBILITY. APPROACH AT 65 TO 75 KIAS DEPENDING UPON THE AMOUNT OF THE ACCUMULATION.

**END.**

### STATIC SOURCE BLOCKAGE

(ERRONEOUS INSTRUMENT READING SUSPECTED)

ALTERNATE STATIC SOURCE VALVE PULL ON  
AIRSPEED CONSULT APPROPRIATE CALIBRATION  
TABLES IN SECTION 5

**END.**





## ELECTRICAL POWER SUPPLY SYSTEM MALFUNCTIONS

### AMMETER SHOWS EXCESSIVE RATE OF CHARGE (FULL SCALE DEFLECTION)

ALTERNATOR	OFF
NONESSENTIAL ELECTRICAL EQUIPMENT	OFF
FLIGHT	TERMINATE

END.

### AIRCRAFT ELECTRICAL SYSTEM FAILURE

#### OPERATION ON BACKUP BATTERY

DISPLAYS EQUIPPED WITH A BACKUP BATTERY WILL CONTINUE TO OPERATE AFTER A LOSS OF AIRCRAFT ELECTRICAL POWER.

OPERATION ON BATTERY POWER IS INDICATED BY THE PRESENCE OF A BATTERY ICON ON THE AFFECTED DISPLAY.

GREEN BATTERY INDICATION	60MINS
YELLOW BATTERY INDICATION	59MINS - 15MINS
RED BATTERY	LESS THAN 15MINS

BACKUP BATTERY TEMPERATURE	CHECK
----------------------------	-------

#### IF TEMP -19°C - 79° C

BATTERY CHARGE	CHECK
FLIGHT	TERMINATE

#### IF BATT TEMP OUTSIDE OPERATING RANGE

BACKUP BATTERY POWER	OFF
FLIGHT CONDITIONS	VFR
FLIGHT	TERMINATE

### NOTE

FOR PROTECTION, BACKUP BATTERY OPERATION IS INHIBITED IF THE BATTERY'S TEMPERATURE DROPS BELOW -20° C OR EXCEEDS 80° C. BATTERY

### CAUTION

TO CONSERVE POWER AND TO PRESERVE THE DISPLAY OF PRIMARY FLIGHT DATA AND DIRECT-TO NAVIGATION CAPABILITIES WITH THE OPTIONAL VGPS RECEIVER, GI 275 BACKUP BATTERY OPERATION INTERNALLY LOAD-SHEDS INTERFACES, WHICH WILL DISABLE THE NORMAL INTERFACE WITH CERTIFIED NAVIGATORS OR OTHER HAZARD AWARENESS SYSTEMS. DEPENDING ON HOW THESE WERE INSTALLED AND CONFIGURED TO THE GI 275, SOME INFORMATION FROM THESE CONFIGURED SYSTEMS WILL NOT BE AVAILABLE WHEN THE GI 275 IS OPERATING ON ITS BACKUP BATTERY.

END.



LANDINGS

LANDING WITH A FLAT MAIN TIRE

APPROACH NORMAL  
TOUCHDOWN GOOD TIRE FIRST,  
HOLD AIRPLANE OFF FLAT TIRE AS LONG AS POSSIBLE.  
  
END.

NO FLAP LANDING

APPROACH 70 KIAS  
  
END.

AVIONICS

LOSS OF PRIMARY FLIGHT INFORMATION

IF THE PRIMARY GI 275 ADI FAILS (LOSS OF SOME OR ALL PRIMARY FLIGHT INFORMATION, DISPLAY IS BLANK, FROZEN, OR UNRESPONSIVE).  
  
STANDBY INSTRUMENTS REFERENCE  
NAVIATION SOURCES REFERENCE  
FLIGHT CONDITIONS VFR  
FLIGHT TERMINATE

END.

SYNTHETIC VISION MALFUNCTION

IF THE SYNTHETIC VISION DEPICTION IS KNOWN OR SUSPECTED TO BE INACCURATE OR MALFUNCTIONING:  
  
SYNTHETIC TERRAIN OFF  
  
TURN OFF SYNTHETIC TERRAIN USING THE MENU → OPTIONS → TERRAIN SVT MENU ON THE ADI.

END.

NAVIGATION DATA FAILURE (VOR/LOC/GS)

NAVIGATION DATA FAILURE MAY BE INDICATED BY ANY OR ALL OF THE FOLLOWING:  
  
LOSS OF COURSE DEVIATION INFORMATION ON ADI  
LOSS OF GLIDESLOPE/GLIDEPATH INFORMATION ON ADI  
LOSS OF BEARING POINTER ON HSI  
  
NAVIGATION SOURCE CHANGE  
EXTERNAL NAVIGATION SOURCE USE  
  
END.



## ANNUNCIATED PROCEDURES

### CARBON MONOXIDE INDICATION

CABIN HEAT	OFF
CABIN AIR	ON
CABIN VENTS	OPEN
CABIN WINDOWS	OPEN
FLIGHT	TERMINATE

END.

### LOW-VOLTAGE LIGHT ILLUMINATES DURING FLIGHT (AMMETER INDICATES DISCHARGE)

#### NOTE

ILLUMINATION OF THE LOW-VOLTAGE LIGHT MAY OCCUR DURING LOW RPM CONDITIONS WITH AN ELECTRICAL LOAD ON THE SYSTEM SUCH AS DURING A LOW RPM TAXI. UNDER THESE CONDITIONS, THE LIGHT WILL GO OUT AT HIGHER RPM. THE MASTER SWITCH NEED NOT BE RECYCLED SINCE AN OVER-VOLTAGE CONDITION HAS NOT OCCURRED TO DE-ACTIVATE THE ALTERNATOR SYSTEM.

AVIONICS POWER SWITCH	OFF
MASTER SWITCH	OFF
MASTER SWITCH	ON
LOW-VOLTAGE LIGHT	CHECK OFF
AVIONICS POWER SWITCH	ON

#### IF LOW-VOLTAGE LIGHT ILLUMINATES AGAIN:

ALTERNATOR	OFF
NONESSENTIAL RADIO	OFF
ELECTRICAL EQUIPMENT	OFF
FLIGHT	TERMINATE

#### AIRCRAFT ELECTRICAL SYSTEM FAILURE →

### ADC FAILURE

ADC FAILURE IS INDICATED BY:

**RED X** OVER THE AIRSPEED AND ALTITUDE TAPES  
**YELLOW X** OVER THE DIGITAL VERTICAL SPEED VALUE

STANDBY INSTRUMENTS	REFERENCE
NAVIATION SOURCES	REFERENCE
FLIGHT CONDITIONS	VFR
FLIGHT	TERMINATE

#### IF VALID GPS DATA IS AVAILABLE:

THE GI 275 WILL AUTOMATICALLY REVERT TO DISPLAY GPS-CALCULATED ALTITUDE RELATIVE TO

MEAN SEA LEVEL. GPS ALTITUDE IS DISPLAYED IN MAGENTA, IN THE SAME LOCATION AS NORMAL OPERATION.

END.

### ATTITUDE, ALT, OR IAS MONITOR CAUTION

IF AN ATTITUDE, ALT, OR IAS MISCOMPARE CAUTION IS DISPLAYED IN YELLOW ON THE ATTITUDE DISPLAY OR AIRSPEED/ALTITUDE TAPE:

STANDBY INSTRUMENTS	CROSSCHECK
NAVIATION SOURCES	REFERENCE
FLIGHT CONDITIONS	VFR
FLIGHT	TERMINATE

#### NOTE

WHITE ATTITUDE/ALT/IAS NO COMPARE ANNUNCIATIONS INDICATE THAT THE OTHER AHRS/ADC SOURCE IS NOT AVAILABLE.

END.

### GPS DATA FAILURE

GPS DATA FAILURE MAY BE INDICATED BY ANY OR ALL OF THE FOLLOWING:

LOSS OF GPS COURSE DEVIATION INFORMATION ON HSI  
YELLOW "LOI" TEXT ON THE ADI  
YELLOW "DR" TEXT ON THE MOVING MAP  
YELLOW "NO GPS POSITION" TEXT ON THE MOVING MAP.  
LOSS OF WAYPOINT BEARING/DISTANCE INFORMATION

CDI SOURCE	CHANGE
------------	--------

END.

### BACKUP BATTERY MALFUNCTION

A MALFUNCTION OF THE BACKUP BATTERY IS INDICATED BY THE FOLLOWING INDICATION IN THE UPPER LEFT CORNER OF THE SCREEN WITH A SYSTEM ADVISORY MESSAGE:

FLIGHT CONDITIONS	VFR
FLIGHT	TERMINATE

END.



**DISPLAY OVER TEMPERATURE**

IF THE DISPLAY IS IN AN OVERHEATING CONDITION, THE SYSTEM WILL ALERT THE PILOT WITH A SYSTEM MESSAGE. THE SYSTEM MESSAGE WILL READ “DISPLAY OVER TEMPERATURE”

STANDBY INSTRUMENTS  
NAVIATION SOURCES

REFERENCE  
REFERENCE

**LOSS OF PRIMARY FLIGHT INFORMATION →****AHRS ALIGN**

IF AN “AHRS ALIGN / KEEP WINGS LEVEL” ANNUNCIATION IS DISPLAYED ON THE ATTITUDE INDICATOR IN FLIGHT, LIMIT AIRCRAFT OPERATION TO:

±10° BANK  
±5° PITCH  
200 KTAS OR LESS






**CAUTION**

EXCEEDING THESE VALUES MAY DELAY OR PREVENT AHRS ALIGNMENT.

**END.**









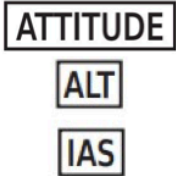





## ANNUNCIATIONS

<b>3.3.1 WARNING Annunciations – Red</b>		
<i>Annunciation</i>	<i>Pilot Action</i>	<i>Cause</i>
HDG Fail 	Use Standby Magnetic Compass or GPS track information	Display system is not receiving valid heading input from the ADAHRS or AHRS; accompanied by a red X through the digital heading display.
Red X 	Reference the data source or alternate equipment.	A red X through any display field, indicates that display field is not receiving data or is corrupted.
Red EIS Alert Banner 	Observe the warning indication on the EIS display and take appropriate action.	One or more engine parameters have exceeded a warning threshold.
Red Engine Parameter 	Take appropriate action to correct condition causing engine parameter exceedance	The engine parameter has exceeded the warning threshold.
Terrain warning 	Take appropriate action to maneuver the aircraft away from the conflicting terrain	Terrain warning due to aircraft proximity to surrounding terrain



### 3.3.2 CAUTION Annunciations – Yellow





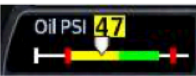



<i>Annunciation</i>	<i>Pilot Action</i>	<i>Cause</i>
AHRS ALIGN – Keep Wings Level  	Limit aircraft attitude to $\pm 10^\circ$ bank and $\pm 5^\circ$ pitch as AHRS Aligns - OK to taxi.	Attitude and Heading Reference System is aligning. AHRS may not align with excessive pitch/bank angles.
AHRS NOT READY – Do Not Takeoff  	Remain stationary and allow AHRS to finish initialization and allow navigators to acquire sufficient GPS position.	AHRS sensors are not ready for flight. Additionally, the interfaced navigator does not have sufficient GPS position.
LOI  	Loss of Integrity Monitoring	GPS integrity is insufficient for the current phase of flight.
No GPS Position  	Use alternate information for positional and situational awareness	GPS data is unavailable.
Yellow X  	Reference the data source or alternate equipment.	A yellow X through any display field, indicates that display field is not receiving data or is corrupted.
ATTITUDE  	Fly aircraft manually and crosscheck attitude indication with standby attitude indicator and other sources of attitude information (airspeed, heading, altitude, etc.)	The ADI attitude monitors have detected an AHRS malfunction or an error between AHRS sources (if multiple sources installed). Autopilot may disconnect if AHRS is being used to drive the autopilot.




<b>3.3.3 Advisories – White</b>		
<i>Annunciation</i>	<i>Pilot Action</i>	<i>Cause</i>
ATTITUDE, ALT, or IAS (text on ADI) 	Be aware that the other (unselected) AHRS/ADC source is not available	The other (unselected) AHRS/ADC source is unavailable.
AHRS 1/2/3 	Confirm intended AHRS source selection	The ADI is using the cross-side AHRS sensor (multiple ADI and ADC installations only).
ADC 1/2/3 	Confirm intended ADC source selection	The ADI is using the cross-side ADC sensor (multiple ADI and ADC installations only).
Messages Icon 	View and consider advisory messages. Refer to the GI 275 Pilot Guide for appropriate pilot or service action.	Typically, these indicate system or database status, or data communication issues within the GI 275 System.
Terrain Inhibited 	Use vigilance, traffic system will not provide alerting.	Terrain is inhibited or a terrain test is in progress
External Navigator Message Icon 	View and consider advisory messages on interfaced navigator. Refer to Pilot Guide for the external navigator for appropriate pilot of service action.	Typically, these indicate system or database status.

<b>Aural Alert</b>	<b>Annunciation All Pages</b>	<b>Annunciation Terrain Page</b>	<b>Action</b>
“Terrain, Terrain Pull up, Pull up” -OR- “Obstacle, Obstacle Pull up, Pull up” -OR- “Wire, Wire Pull up, Pull up” -OR- “Warning, Terrain, Terrain” -OR- “Warning, Obstacle, Obstacle” -OR- “Warning, Wire, Wire” -OR- “Pull up”	<b>TER</b>	<b>PULL UP</b> -OR- <b>TERRAIN</b> -OR- <b>OBSTACLE</b> -OR- <b>WIRE</b>	Disconnect autopilot and initiate maximum performance climb (maximum takeoff power and best angle of climb airspeed)  NOTE: Only the climb maneuver is recommended, unless operating in VMC or it is determined, based on all available information, that turning in addition climbing is the safest course of action.
“CAUTION, Terrain” -OR- “CAUTION, Obstacle” -OR- “CAUTION, Wire”	<b>TER</b>	<b>TERRAIN</b> -OR- <b>OBSTACLE</b> -OR- <b>WIRE</b>	Take corrective action until the alert ceases. Using all available information to determine the appropriate action, alter the flight path away from the threat by stopping descent, climbing, and/or turning.
“Too low, Terrain”		<b>TERRAIN</b>	Establish climb to the minimum altitude for present position/procedure
“Sink Rate”		<b>TERRAIN</b>	Decrease rate of descent
“Don’t sink”		<b>TERRAIN</b>	Establish a positive rate of climb





ALT and/or IAS (text on ADI) 	Cross-check the flagged information against other sources to identify erroneous information.	Differences detected between displayed airspeed and/or altitude (multiple ADC installations only).
AHRS 1/2/3 	Confirm intended AHRS source selection	The ADI is using the cross-side AHRS sensor and AHRS monitor is indicating a miscompare or no-compare (multiple ADI and AHRS installations only).
ADC 1/2/3 	Confirm intended ADC source selection	The ADI is using the cross-side ADC sensor and ADC monitor is indicating a miscompare or no-compare (multiple ADI and ADC installations only).
Yellow Alert Banner on EIS 	Observe the caution indication on the EIS display and take appropriate action.	One or more engine parameters have exceeded a caution threshold.
Yellow EIS Parameter 	Take appropriate action to correct condition causing engine parameter exceedance.	The engine parameter has exceeded the caution threshold.
Traffic Caution 	Visually acquire the traffic to see and avoid.	The interfaced traffic system has determined that nearby traffic may be a threat to the aircraft.
Terrain Caution 	Take appropriate action to maneuver the aircraft away from the conflicting terrain	Terrain caution due to aircraft proximity to surrounding terrain
TAWS N/A, TAWS FAIL 	Use vigilance, terrain depiction and TAWS alerting are no longer provided.	External system that is providing TAWS alerting has failed, or the GI 275 cannot communicate with the system.

<p><b>Battery Fault</b></p> 	<p>Observe the fault condition on the GI 275 by entering the system messages for further details. Seek VFR flight conditions or land as practical.</p>	<p>The Internal battery has detected an issue which may not allow the battery to charge or discharge properly. Such as “Charge Inhibited - unable to charge the battery”</p>
<p><b>GPSS Invalid</b></p> 	<p>Set an active GPS leg to engage GPSS mode or select HDG as the function.</p>	<p>GPSS mode invalid, wings level command sent to autopilot, no active GPS leg, GPS not selected on HSI/ADI 1.</p>
<p><b>GLIDE</b></p> 	<p>Smart Glide is active on the GTN.</p>	<p>Reference the GTN Xi AFMS for Smart Glide details and pilot actions.</p>