

ANNUNCIATORS



**BATT
O'TEMP**

>160

Flashes, when battery temp exceeds 145° F.
Activates **MASTER WARNING**

Flashes, when battery temp exceeds 160° F. Also flashes the upper element and **MASTER WARNING** lights.

**ENG
VIB**

L R

Illuminates steady to indicate a vibration has been detected in the respective engine.

CABIN ALT

Flashes when cabin altitude exceeds **10,000ft** or **14,500** ft if a high altitude airport is selected (8000ft and above) and aircraft is below 24,500 ft.
Activates **MASTER WARNING**

**OIL
FLTR BP**

L R

Light flashes to advise that bypass of the respective oil filter is impending.

Activates **MASTER CAUTION** steady.

**LO OIL
PRESS**

L R

Flashes when left and/or right engine Oil pressure drops below **20 psid**

Activates **MASTER WARNING**

**GND
IDLE**

**NO
TAKEOFF**

Illuminates steady on ground. Normal with EEC's in AUTO. Flashes in flight and activates **MASTER CAUTION** steady.

Illuminates steady on ground with **Speed Brakes Extended, Horiz. Stab in Cruise Position and Flaps and/or Pitch Trim not in T/O Pos.** Advancing throttles to T/O, light flashes, **MASTER CAUTION** on steady and aural warning

**LO HYD
FLOW**

L R

Light flashes after **5 seconds** of steady illumination to indicate Hydraulic fluid flow rate is below normal. Indicates pump failure. Activates **MASTER CAUTION** lights steady.

**P / S
HTR**

L R

Illuminates steady on ground. Flashes in flight to indicate loss of DC power to left and right Pitot Static system. Activates **MASTER CAUTION** steady

**LO HYD
LEVEL**

**HYD
PRESS**

Light flashes to indicate low fluid quantity in the hydraulic reservoir. Activates **MASTER CAUTION** steady

Light flashes after **40 seconds** of steady illumination to indicate Hydraulic Control Valve has closed and the hydraulic system is pressurized. Activates **MASTER CAUTION** steady

**EMER
PRESS**

**ACM
O'HEAT**

Flashes to indicate Emergency Pressurization has activated manually /automatically.

Flashes to indicate ACM has overheated. Emer pressurization automatically activates and shuts down ACM. **MASTER CAUTION** Steady, EMER PRESS flashes.

**STAB
MIS COMP**

**SPD BRK
EXTEND**

Illuminates steady on ground and activates NO TAKEOFF steady. In flight, flashes if stabilizer position doesn't agree with flap handle position after **30 seconds**. Activates **MASTER CAUTION** steady in flight.

Illuminates steady to indicate the SPEED BRAKES are extended.

**AP PITCH
MISTRIM**

**AP ROLL
MISTRIM**

Flashes to indicate the elevators are out of trim with the autopilot. **MASTER CAUTION** steady.

Flashes to indicate the ailerons are out of trim with the autopilot. **MASTER CAUTION** steady.

AHRS AUX POWER	
1	2

Illuminates steady to indicate respective AHRS and/or FMS is powered by stdby aux AHRS battery pack due to loss of normal DC power. Battery charge is sufficient for 30 minutes of operation on its own. (180 min. XLS)

ENG ANTI-ICE	
L	R

Illuminates steady for maximum of **4 minutes 45 seconds** after turning engine anti-ice system on. After **4 minutes 45 seconds**, if light is still on, it will flash to indicate the engine lip heat is too cold and/or the stator vane valve did not open. If light goes out, indicating normal operation, and then comes back on it will flash immediately.

FUEL GAUGE	
L	R

Flashes to indicate a fault is detected in the fuel gauging system. **MASTER CAUTION** steady
Check BITE indicators on the Fuel Quantity Signal Conditioner prior to placing the battery switch off during shut down.

LO FUEL LEVEL	
L	R

Flashes to indicate fuel quantity remaining in respective tank is **360lbs +/- 20lbs**. **MASTER CAUTION** steady.

** Turn respective fuel boost pump on.*

EEC MANUAL	
L	R

Illuminates steady to indicate the respective Electronic Engine Control (EEC) has tripped to manual mode or the EEC switch was placed in MAN.

GEN OFF	
L	R

Flashes in flight (illuminates **MASTER CAUTION** steady) or illuminates steady on the ground to indicate the respective generator power relay is open and the generator is off line. In flight, both lights flashing will trigger the **MASTER WARNING** flashers and **MASTER CAUTION** lights steady.

AFT J – BOX	
LMT	CB

LMT Flashes to indicate an open 225 amp current limiter in electrical J-box in tailcone.

CB Flashes to indicate an open 5 amp start control circuit breaker on the electrical J-box in the tailcone. Both activate the **MASTER CAUTION** steady.

AC BEARING	
L	R

Illuminates steady to indicate respective alternator bearing failure impending within the next 20 hours of operation

RUDDER BIAS	
FIRE BOTL LOW	

Flashes to indicate rudder bias system fault rudder bias valve not in commanded position or uncommanded rudder deflection.

Flashes to indicate either main engine fire extinguisher bottle pressure is low or discharged. Both activate **MASTER CAUTION** lights steady

FUEL FLTR BP	
L	R

Flashes to indicate the respective fuel filter is bypassing or bypass is impending due to filter blockage. Activates **MASTER CAUTION** lights steady.

LO BRK PRESS	
ANTI-SKID INOP	

Flashes to indicate loss of power brake pressure. ANTI-SKIS INOP light will also flash. Activates **MASTER CAUTION** lights steady

Flashes to indicate the ANTI-SKID system is inoperative, in test mode or the ANTI-SKID switch is off. **MASTER CAUTION** lights steady.

STBY P/S HTR	
AOA HTR FAIL	

Light flashes in flight to indicate a loss of DC power to the Stby Pitot Static heat system. Activates **MASTER CAUTION** lights steady.

Flashes to indicate loss of DC power to the AOA probe heater. **MASTER CAUTION** steady. Both lights illuminate steady on ground with Pitot Static Anti-Ice switch OFF.

AIR DUCT O'HEAT	
CKPT	CAB

Light flashes to indicate the aft end of the respective air supply duct (Cabin or Cockpit) has overheated. Activates **MASTER CAUTION** lights steady.

LO FUEL PRESS	
L	R

Light flashes to indicate low fuel pressure. Will activate respective fuel boost pump if switch is in NORM, and light will extinguish. Activates **MASTER CAUTION** steady. Light illuminates steady prior to engine start.

RADOME FAN	

Light flashes to indicate a failure of the radome cooling fan. Activates **MASTER CAUTION** steady. In flight, continue normal operations. On ground, operation limited to 30 minutes and dispatch in VMC conditions.

W/S FAULT	
L	R

After engines are started, the light flashes to indicate a controller and/or alternator failure. May illuminate with a W/S O'HEAT L/R annunciator. Activates **MASTER CAUTION** steady. On ground prior to engine starts, light illuminates steady for 8 seconds to indicate controller failure and after 8 seconds starts flashing and activates **MASTER CAUTION** steady.

TAIL DEICE FAIL	
L	R

Light flashes to indicate the horizontal stabilizer deice boots are not inflating properly. Activates **MASTER CAUTION** lights steady.

F/W SHUT OFF	
L	R

Flashes to indicate both respective Fuel and Hydraulic Firewall Shutoff valves are closed. Activates **MASTER CAUTION** steady. The shutoff valves are opened and closed by depressing respective Engine Fire switchlight.

TAIL DEICE PRESS	
L	R

Lights illuminate steady to indicate the horizontal stabilizer boots are inflating and cycling properly. AUTO, 18 second cycle (L on, both off, R on). Manual, both ON simultaneously while switch is held in MANUAL.

FIRE DET SYS	
L	R

Flashes to indicate a failure in the respective engine fire detection system. Activates **MASTER CAUTION** steady. If light is illuminated prior to the Fire Warn test (rotary switch), the respective ENGINE FIRE light will not illuminate.

FUEL XFEED	

Light illuminates steady to indicate the fuel crossfeed valve has opened after selecting fuel crossfeed. Light flashes and activates the **MASTER CAUTION** lights steady, if fuel crossfeed is selected OFF and the crossfeed valve did not close.

ACC DOOR UNLOCK	
NOSE	TAIL

Light flashes to indicate the nose compartment access door(s) or tailcone access and/or tailcone baggage compartment door(s) is/are not properly latched closed. Activates **MASTER CAUTION** lights steady.

FUEL BOOST	
L	R

Light flashes only if respective pump is activated by low fuel pressure and the Boost Pump switch is in NORM, and activates **MASTER CAUTION** lights steady. Light illuminates steady if Boost Pump(s) are activated by crossfeed, engine start, or boost pump(s)- ON.

DOOR SEAL	
CABIN DOOR	

Light flashes to indicate low pressure in the primary cabin door seal. Activates **MASTER CAUTION**, illuminates steady on ground prior to engine start.

Flashes to indicate cabin door is not properly locked. Illuminates steady on ground. Check visual indicators on door frame.

**EMER
EXIT**

**LAV
DOOR**

Flashes to indicate the emergency exit door is not properly locked. Activates **MASTER CAUTION** steady.

Flashes in flight with flaps in any position other than UP to indicate the LAV door(s) are not latched open. MASTER CAUTION steady. On ground, light flashes regardless of flap position if LAV door(s) are not latched open.

**GPWS FLAP
NORM**

**GPWS FLAP
O'RIDE**

Switchlight indicates normal flap warning are active.

Switchlight indicates that normal flap warnings are inhibited.

**BLD AIR
O'HEAT**

L **R**

Flashes to indicate bleed air exiting the respective precooler has exceeded temp limits. Activates **MASTER CAUTION** steady. Respective wing anti-ice system will automatically shutdown when the associated light illuminates.

**GPWS
G/S**

O'RIDE

Switchlight indicates that normal glideslope warnings are active.

Switchlight indicates that normal glideslope warnings are inhibited.

**CHECK
PFD 1**

**CHECK
PFD2**

Flashes to warn of a wrap around failure in the pilots PFD system. (IAC-PFD-IAC)

Flashes to warn of a wrap around failure of the co-pilot's PFD system. (IAC-PFD-IAC) **MASTER CAUTION** steady.

**GPWS
TEST**

Switchlight is pressed to initiate the GPWS system test. GPWS TEST function is inhibited in flight.

Switchlight indicates normal operating mode. Allows normal audio ops through the overhead speakers and crew headsets.

**WING
O'HEAT**

L **R**

Flashes to indicate bleed air leak in respective wing leading edge next to the fuel enclosure. Activates **MASTER CAUTION** steady. Temp sensors in the ram air cooling duct on the front side of the wing fuel enclosure behind the bleed air heat shield, activate the light(s).

**AUDIO
SPK/HPH**

**AUDIO
HPH ONLY**

Switchlight indicates overhead speaker audio is inhibited by depressing the switchlight. Inhibits all avionics audio, TCAS, and EGPWS warnings through overhead speakers. Doesn't affect external warnings; gear, NO TAKOFF, etc.

**WING
ANTI-ICE**

L **R**

Light flashes to indicate the respective wing anti-ice bleed air temp is too low. Initially activating the wing anti-ice system, light illuminates steady. If operating temp is not reached within 4min. 45 sec. The light will start flashing. If operating temp becomes too cold after the light goes out, the light will immediately flash. Activates **MASTER CAUTION** lights.

**PHONE
CALL**

Light indicates an incoming HF radio phone call.

**FD/AP
PFD 1**

**FD/AP
PFD2**

Switchlight indicates the #1 Flight Director is controlling the autopilot.

Switchlight indicates the #2 Flight Director is controlling the autopilot.

AP OFF

YD OFF

Light indicates the autopilot has disengaged automatically or manually.

Light indicates the yaw damper has disengaged automatically or manually.

**TERR
NORM**

**TERR
PFD2**

Switchlight indicates Enhanced GPWS warnings will occur normally and the terrain map will be displayed on the MFD.

Switchlight indicates EGPWS warnings and terrain map on MFD will be inhibited.

**BIAS
HEATER
FAIL**

Light flashes to indicate the rudder bias heater is inoperative (will not activate MASTER CAUTION). Light reverts to steady illumination when pressed. Dispatch **prohibited** if light remains ON, on the ground.

BATT O TEMP > 160	CAB ALT ---	LO OIL PRESS L R	LO HYD FLOW L R	LO HYD LEVEL HYD PRESS	STAB MISCOMP SPD BRK EXTEND	ENG VIB L R	OIL FLTR BP L R	GND IDLE NO TAKEOFF	P/S HTR L R	EMER PRESS ACM O'HEAT	AP PITCH MISTRIM AP ROLL MISTRIM	AHRS AUX PWR L R	ENG ANTHICE L R
FUEL GAUGE L R	LO FUEL LEVEL L R	EEC MAUAL L R	GEN OFF L R	AFT J-BOX LMT CB	AC BEARING L R	RUDDER BIAS FIRE EXT LOW	FUEL FLTR BP L R	LO BRK PRESS ANTISKID INOP	STBY P/S HTR AOA HTR FAIL	AIRDUCT O'HEAT CKPT CAB	RADOME FAN ---	TL DEICE FAIL L R	TL DEICE PRESS L R
---	FUEL BOOST L R	LO FUEL PRESS L R	W/S FAULT L R	W/S O'HEAT L R	F/W SHUTOFF L R	FIRE DET SYS L R	ACC DOOR UNLOCKED NOSE TAIL	DOOR SEAL CABIN DOOR	EMER EXIT LAV DOOR	BLD AIR O'HEAT L R	CHECK PFD 1 CHECK PFD 2	WING O'HEAT L R	WING ANTHICE L R

MASTER WARNING - RED

When triggered, the Red Annunciators FLASH and cause the **Master Warning** switchlights to FLASH.

The **Master Warning** switchlights do not automatically reset if triggered if the problem is corrected. The switchlight must always be pressed to extinguish.

Amber Lights that cause the Master Warning Lights to Illuminate Flashing:

- Both GEN OFF L/R
- T/R ARM and/or UNLOCK

MASTER CAUTION - AMBER

Illuminate STEADY. Flashing **AMBER** and **WHITE** annunciators trigger the Master Caution switchlights.

The Master Caution switchlights will automatically extinguish and reset should the problem be corrected before one of the two switchlights are pressed.

If an amber annunciator illuminated steady, it will not illuminate the Master Caution switchlight. Some amber and white annunciators when flashing will trigger the Master Caution.

White Flashing Annunciators that trigger the Master Caution:

- FUEL XFEED
- GND IDLE

Turns on The **Master Warning (Red)**

- Batt Over Temp
- Cabin Alt
- Low Oil Pressure
- Dual Generator Failure
- T/R Deploy in Flight
- 225 Amp CL Fail/ Opposite Side

Fuel Boost Pump Caution Light On Steady Normal Operation.
Flashes During Abnormal (Low Fuel Press)

Master Warning – Will Not Reset automatically after Situation is Corrected

Master Caution - Will Reset automatically after Situation is Corrected