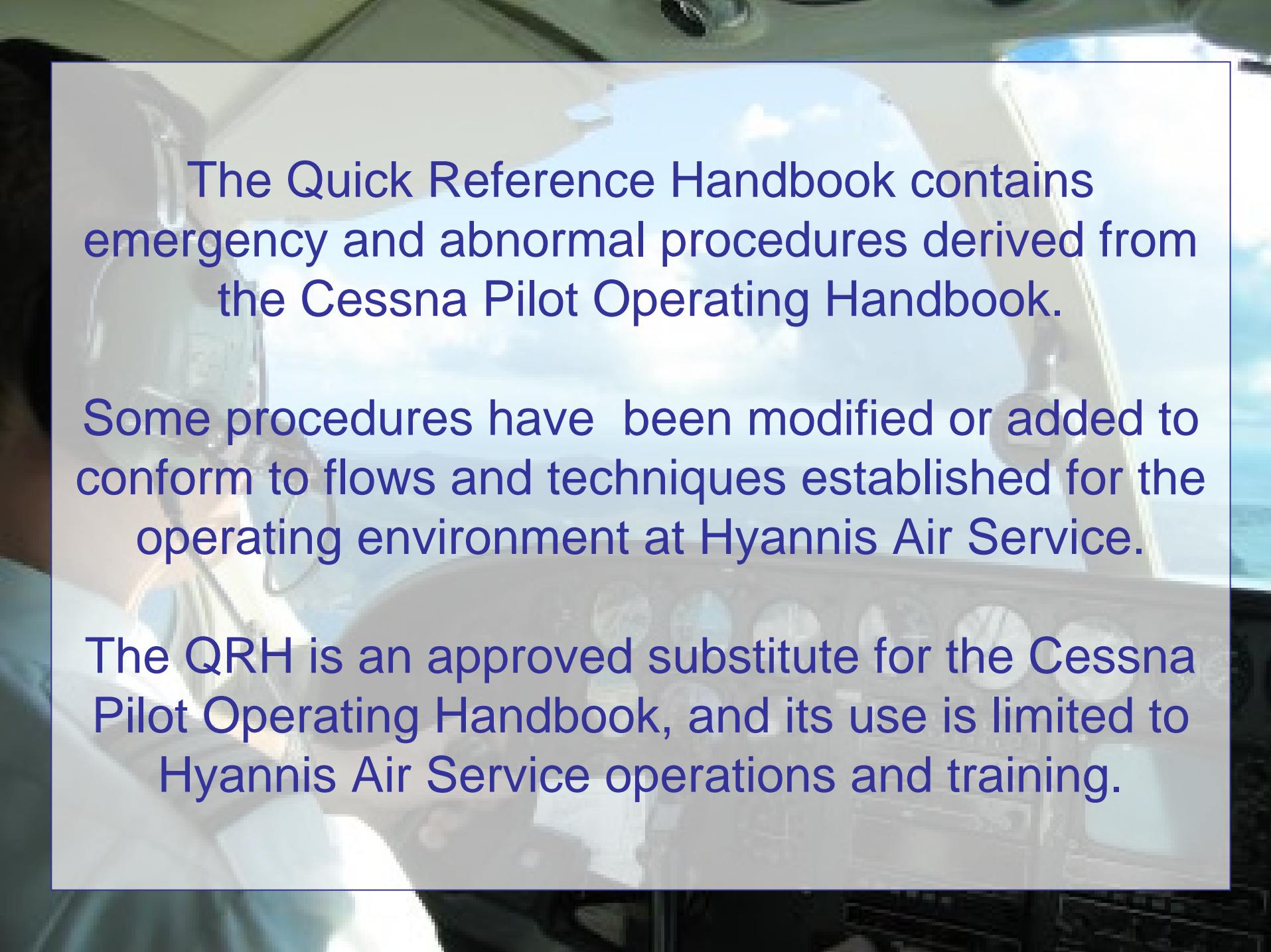


# Cape Air/Nantucket Airlines Cessna 402C



## Quick Reference Handbook



The Quick Reference Handbook contains emergency and abnormal procedures derived from the Cessna Pilot Operating Handbook.

Some procedures have been modified or added to conform to flows and techniques established for the operating environment at Hyannis Air Service.

The QRH is an approved substitute for the Cessna Pilot Operating Handbook, and its use is limited to Hyannis Air Service operations and training.

# ABNORMAL PROCEDURES

## ALTERNATOR FAILURE (SINGLE)

# CAUTION

The need for a second alternator should be carefully considered before resetting the circuit breaker of a malfunctioning alternator circuit.

# 1. Electrical Load – Monitor remaining alternator. 80 Amps Maximum.

Is the alternator circuit breaker open?

YES



1. Affected Alternator – OFF
2. Wait Three Minutes
3. Affected Alternator Circuit Breaker – RESET
4. Affected Alternator - ON

Does the Circuit Breaker Reopen?

YES



1. Affected Alternator – OFF

NO



End



# 1. Electrical Load – Monitor remaining alternator. 80 Amps Maximum.



Is the alternator circuit breaker open?

NO



Is output normal on Voltameter?

YES



1. ALT OUT light – Disregard  
(Have checked after landing)

# 1. Electrical Load – Monitor remaining alternator. 80 Amps Maximum.

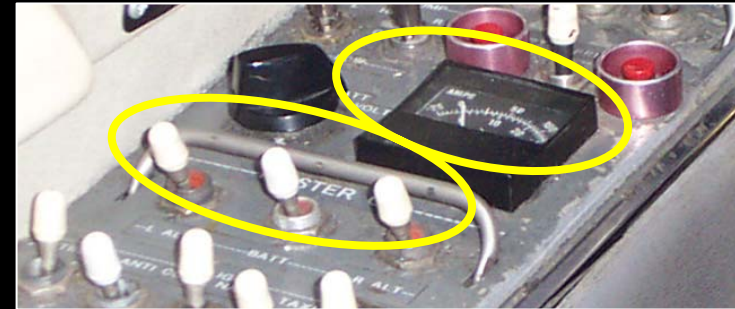


Is the alternator circuit breaker open?

NO

Is output normal on Voltammeter?

NO



## 1. Affected Alternator – OFF

### 2. Affected Alternator Field Fuse - REPLACE

### 3. Affected Alternator - ON

### 4. Voltammeter – CHECK

- If alternator charging, leave on and disregard
- If alternator not charging, turn off alternator
- If an intermittent ALT OUT light indication accompanied by a voltammeter fluctuation is observed, turn off affected alternator.

## 5. Electrical Load – MONITOR 80 AMPS MAXIMUM

# ABNORMAL PROCEDURES

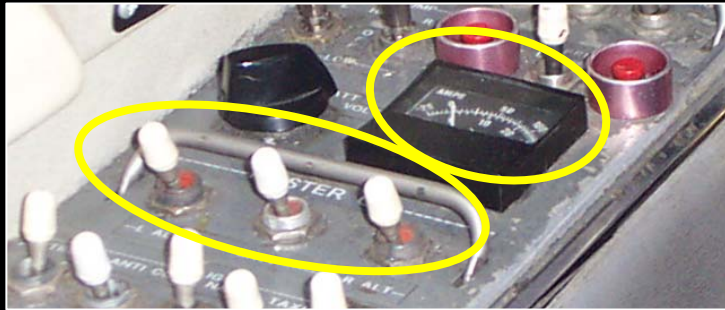
## ALTERNATOR FAILURE (DUAL)



# 1. Electrical Load – REDUCE

Are the alternator circuit breakers open?

YES



## 1. Alternators – OFF

2. Wait Three Minutes

3. Left Alternator – ON

4. Voltammeter:

a. If alternator is charging, leave on and disregard ALT OUT light.

b. If alternator not charging, turn alternator off.

5. Right Alternator – ON

6. Voltammeter:

a. If alternator is charging, leave on and disregard ALT OUT light.

b. If alternator not charging, turn alternator off.

7. If unable to establish alternator power:

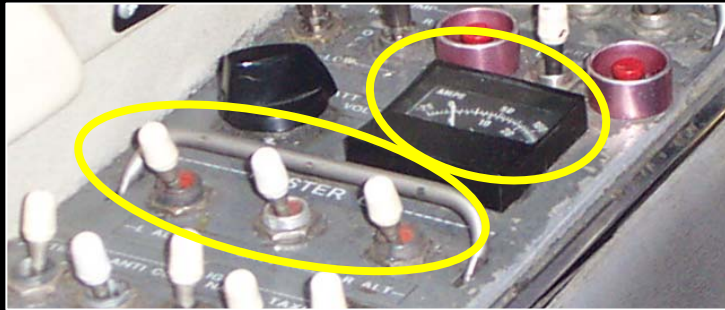
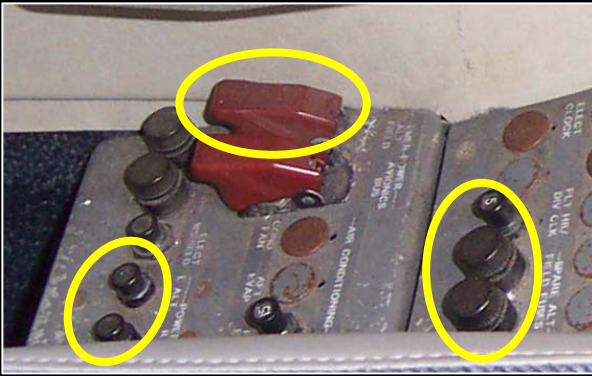
a. Non-essential electrical items – OFF

b. As soon as practical - LAND

Are the alternator circuit breakers open?

NO

## 1. Electrical Load – REDUCE



### 1. Alternators – OFF

#### 2. Alternator Field Fuses - REPLACE

#### 3. Left Alternator – ON

#### 4. Voltammeter:

a. If alternator is charging, leave on and disregard ALT OUT light.

b. If alternator not charging, turn alternator off.

#### 5. Right Alternator – ON

#### 6. Voltammeter:

a. If alternator is charging, leave on and disregard ALT OUT light.

b. If alternator not charging, turn alternator off.

#### 7. If unable to establish alternator power:

a. Emergency Alternator Field Switch - ON

b. Steps 3-6 – REPEAT

#### 8. If still unable to establish alternator power:

a. Non-essential Electrical Items – OFF

b. As soon as practical - LAND

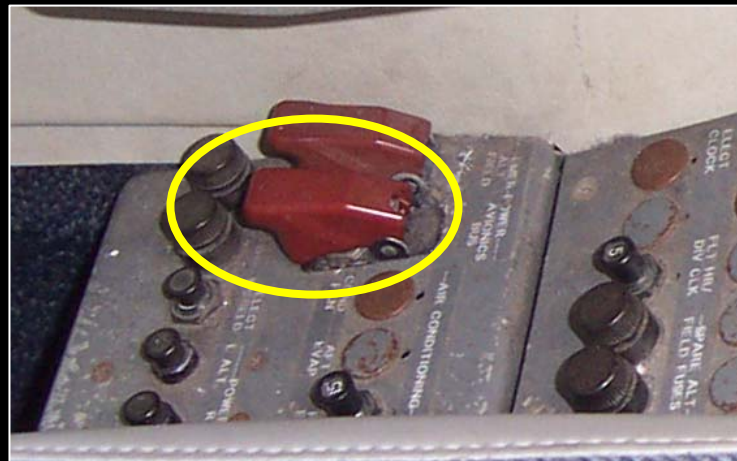
# ABNORMAL PROCEDURES

## AVIONICS BUS FAILURE

## 1. Avionics Bus Switch - OFF



## 2. Emergency Avionics Bus Switch - ON



# ABNORMAL PROCEDURES

## ENGINE PURGING PROCEDURES

# NOTE

If the primer is activated for excessive periods of time with the engine inoperative on the ground or during flight, damage may occur to the engine and/or airplane due to fuel accumulation in the cylinder intake ports. Similar conditions may develop when the engine is shutdown with the auxiliary fuel pump on LOW/HIGH

# NOTE

Should fuel priming or auxiliary fuel pump operation periods in excess of 60 seconds occur, the cylinders must be purged by one of the following procedures.





1. Aux Fuel Pumps - OFF





2. Magnetos - OFF



3. Mixture – IDLE CUT OFF





4. Throttles – FULL FORWARD



5. Starter – Press for 15 Revolutions

# ABNORMAL PROCEDURES

## FLOODED ENGINE START PROCEDURE

# CAUTION

Starter Limit is 30 seconds, then 5 minutes of cooling.

# NOTE

A Flooded Start is characterized by a mis-start with black puffs of smoke.





1. Throttle – Open  $\frac{1}{2}$





2. Mixture – IDLE CUT OFF



3. Primer – OFF





## 4. Starter – ENGAGE



5. Throttle – IDLE AS ENGINE FIRES





6. Mixture – FULL RICH

# ABNORMAL PROCEDURES

## ZERO DEGREE WING FLAP LANDING

# NOTE

Total landing distance may  
increase by 35%



1. Landing Gear Handle - DOWN



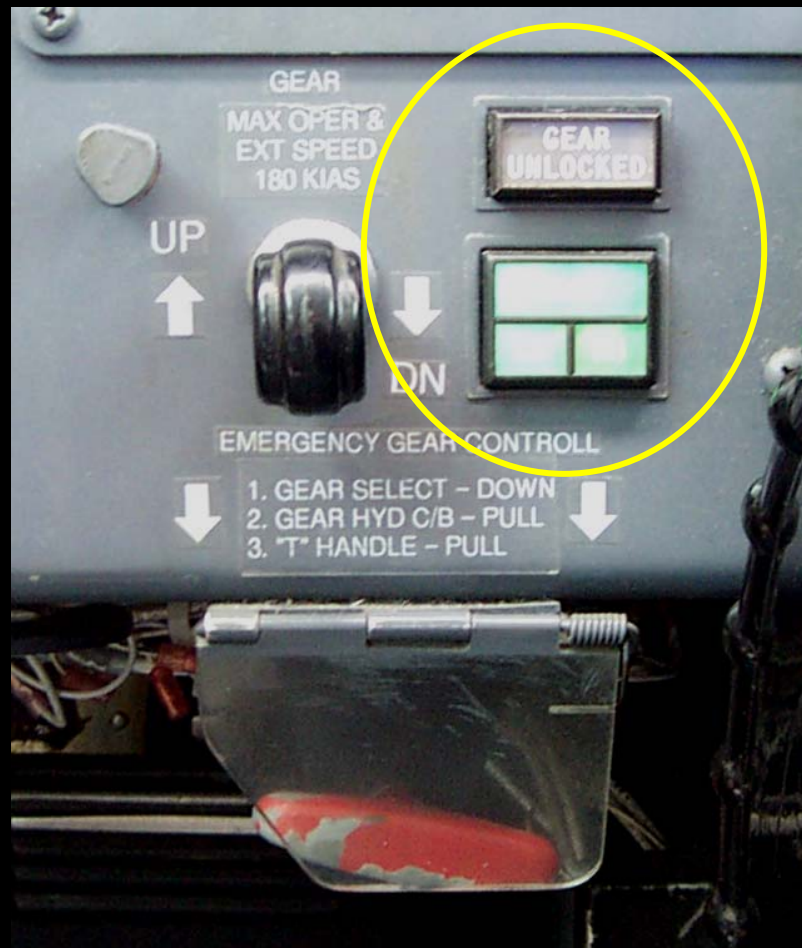


2. Mixture – FULL RICH OR LEAN AS  
REQUIRED FOR SMOOTH OPERATION



3. Propellers – FULL FORWARD





4. Gear Down Lights – 3 GREEN,  
UNLOCK LIGHT OFF



5. Switches – AS REQUIRED





6. Approach Speed – 120 KIAS



**7. Minimum Landing Speed – ADD  
13 KNOTS TO LANDING SPEED**

# ABNORMAL PROCEDURES

HYDRAULIC PRESSURE  
LIGHT ILLUMINATED AFTER  
THE GEAR CYCLE

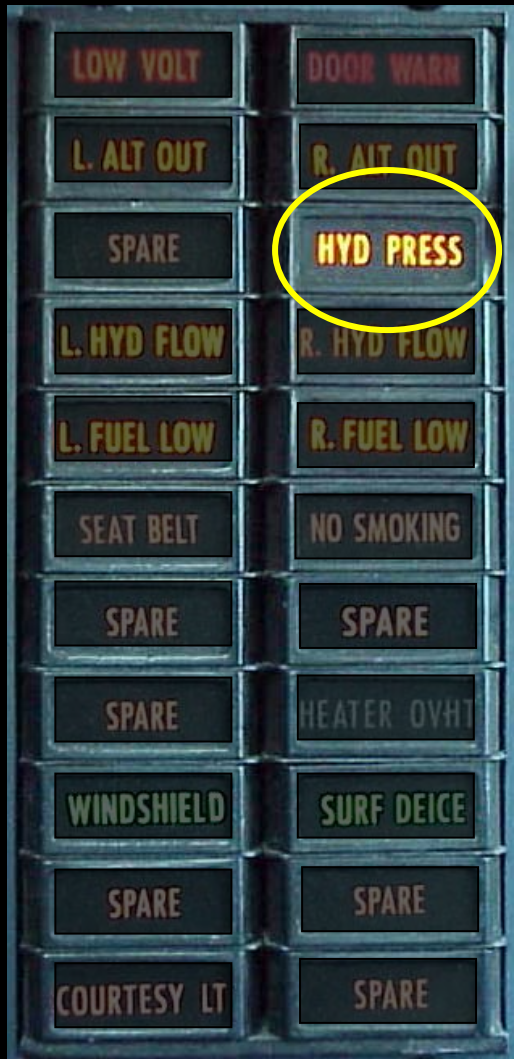
# NOTE

Ensure the GEAR HYD circuit breaker is reset before further extension or retraction of the landing gear is attempted.





1. Landing Gear Switch – RAPIDLY RECYCLE



If *HYD PRESS* light is still illuminated:

a. Landing Gear – AS DESIRED

b. *GEAR HYD* Circuit Breaker – PULL

c. If *HYD PRESS* light remains illuminated:

- Land as soon as practical to prevent damage to the hydraulic systems and/or components.

# ABNORMAL PROCEDURES

LANDING GEAR WILL NOT  
EXTEND HYDRAULICALLY

# CAUTION

The landing gear cannot be retracted  
inflight once the Emergency gear  
extension T-Handle has been pulled.  
Ground servicing is required.

# NOTE

Lower indicated airspeeds will reduce airloads on the nose gear and increase the probability of a successful gear extension.





# 1.Landing Gear Indicator Lights – Check with PRESS TO TEST.

*If a light does not illuminate, refer to  
“CHANGING LANDING GEAR INDICATOR  
LIGHT BULB” checklist*



2. Airspeed – 130 KIAS OR LESS

3. Landing Gear Switch - DOWN

#### 4. GEAR HYD Circuit Breaker - PULL



#### 5. Emergency Gear Extension T-Handle - PULL





6. Gear Down Lights – 3 GREEN, UNLOCK LIGHT OFF
7. If Main Gear Does Not Lock Down – YAW AIRPLANE  
*Airloads will lock main gear down if the up-locks have released.*
8. Gear Warning Horn – CHECK
9. Landing Checklist – COMPLETE
10. As Soon as Practical - LAND



# ABNORMAL PROCEDURES

LANDING GEAR  
DOWN AND LOCKED  
LIGHT ILLUMINATED WITH  
THE GEAR HANDLE UP AND  
HYD PRESS LIGHT OUT

# NOTE

Failure of any one of the three down and lock switches in the down position may result in the gear not locking down during the gear down cycle if the other two gear lock down first. The down and locked light for the affected gear may remain on continually regardless of actual position.

1. Perform “LANDING GEAR WILL  
NOT EXTEND HYDRAULICALLY”  
checklist.

# ABNORMAL PROCEDURES

LANDING GEAR WILL NOT  
RETRACT HYDRAULICALLY



# NOTE

This checklist will NOT be used when one landing gear down and locked light is illuminated with the gear handle up and the hydraulic pressure light out. See checklist above. Otherwise this checklist will be used for all other gear retraction abnormalities.



1. Landing Gear Switch – DOWN



2. Gear Down Lights – 3 GREEN, UNLOCK LIGHT OFF
3. Gear Warning Horn – CHECK
4. As Soon as Practical - LAND

# ABNORMAL PROCEDURES

CHANGING LANDING GEAR  
INDICATOR LIGHT BULB





1. Gear Warning Circuit Breaker - PULL



Gear indicator cube in extended position.

2. Gear Indicator Cube – REMOVE
3. Affected Light Bulb – REMOVE AND REPLACE
4. Gear Indicator Cube – EXTEND AND REINSTALL



## 6. Gear Warning Circuit Breaker – RESET



6. Press to test – PUSH; VERIFY 3 GREEN



# ABNORMAL PROCEDURES

LEFT/RIGHT HYDRAULIC  
FLOW LIGHT ILLUMINATED

# Are Both Hydraulic Flow Lights On?



YES



Review “LANDING GEAR WILL NOT EXTEND HYDRAULICALLY” Checklist. Prepare to execute at normal gear extension point.

# Are Both Hydraulic Flow Lights On?



NO



Is the light **STEADY** or **FLICKERING**?

STEADY



Remaining Hydraulic Pump  
will operate the gear.

# Are Both Hydraulic Flow Lights On?

NO



Is the light STEADY or FLICKERING?

FLICKERING



Then it is probably a hydraulic leak.  
If light becomes steady, then  
remaining Hydraulic Pump will  
actuate the landing gear.





# **ABNORMAL PROCEDURES**

**CABIN DOOR OPEN  
INFLIGHT**

# CAUTION

If Cabin Door becomes ajar in flight,  
DO NOT attempt to re-secure.

1. Flight – CONTINUE
2. Passengers – ADVISE
3. As Soon as Practical - LAND

# ABNORMAL PROCEDURES

CREW DOOR OPEN  
INFLIGHT

# CAUTION

If Crew Door becomes ajar in flight,  
DO NOT attempt to re-secure.

1. Flight – CONTINUE
2. Passengers – ADVISE
3. As Soon as Practical - LAND



# ABNORMAL PROCEDURES

BAGGAGE/WING LOCKER  
DOOR OPEN INFLIGHT

1. Flight – CONTINUE

2. Passengers – ADVISE

3. As Soon as Practical - LAND

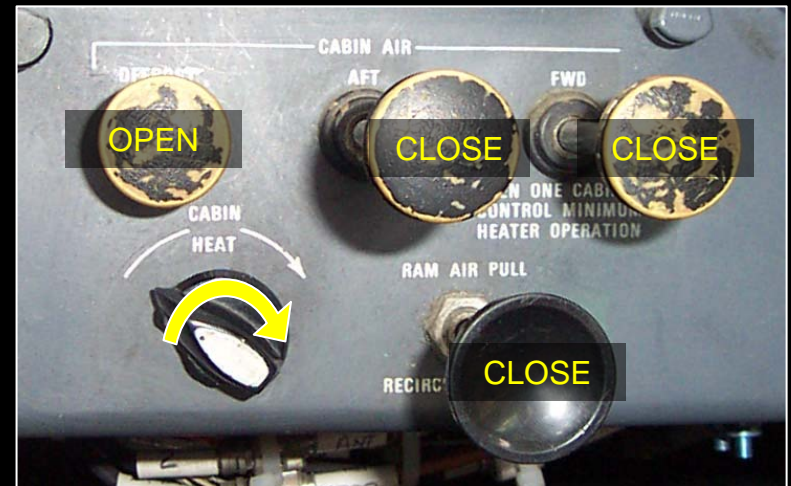
# ABNORMAL PROCEDURES

## WINDSCREEN ANTI-ICING FAILURE

# WARNING

Failure of any aircraft icing system in moderate or worse icing conditions is an emergency situation. Immediately exit icing conditions or land as soon as practical.





1. Windshield Anti-Icing Circuit Breaker – RESET
2. Cabin Heat – ON
3. Cabin Fan – HIGH
4. Cabin Temperature Knob – FULL CLOCKWISE
5. Defrost Knob – FULL OPEN
6. Ram Air/Fwd Cabin/Aft Cabin Knobs – FULL CLOSED

# ABNORMAL PROCEDURES

## PROPELLER DE-ICING FAILURE

# WARNING

When uneven deicing of the propeller blades is indicated, it is imperative that the propeller deice system be turned off. Uneven deicing of the blades can result in propeller unbalance and engine failure.

1. Propeller Circuit Breaker – RESET

2. Propeller – Exercise to MAX RPM

If Vibration Continues:

3. Propeller Ammeter – CHECK GREEN ARC

- a. Heating Period 1 – Right Outboard Blade
- b. Heating Period 2 – Right Inboard Blade
- c. Heating Period 3 – Left Outboard Blade
- d. Heating Period 4 – Left Inboard Blade

4. If ammeter indicates uneven heating of one propeller

- a. Affected Side Propeller Circuit Breaker – PULL

5. If ammeter indicates uneven heating of both propellers

- a. Propeller De-Ice Switch – OFF

