

Attachment 6

To Operations Group Factual Report

DCA13FA094

Piedmont Abnormal Checklists for Gear Unsafe, Alternate
Extension, and Emergency Landing



+

**Dash 8 Model 102
Non-Normal & Emergency checklist**

+

+

+

+

+

+

+

+

+

+

ILLUMINATION OF RED LANDING GEAR UNSAFE LIGHT(S)

If any red landing gear unsafe light remains illuminated:

- 1) Proceed to the **ALTERNATE LANDING GEAR EXTENSION** checklist on Page **37**.
- 2) Illumination of Red Landing Gear Unsafe Light(s) checklist Complete

ALL LANDING GEAR FAIL TO RETRACT

If all 3 green Gear Locked Down advisory lights are illuminated with the landing gear lever selected up:

• Note •

Landing gear doors may be open or closed (amber doors open advisory lights illuminated or out).

- 1) Landing Gear selector leverDown
- 2) Confirm 3 green gear locked down advisory lights remain illuminated.
- 3) Do not select the landing gear back up.
- 4) Land as soon as practicable.
- 5) All Landing Gear Fail To Retract checklist..... Complete

ALTERNATE LANDING GEAR EXTENSION

LDG GEAR INOP or Loss of #2 Hydraulic Quantity or Landing Gear Malfunction

- | | |
|-------------------------------------|-----------------------------|
| 1) Maximum Airspeed | 140 KIAS |
| 2) LDG GEAR INHIBIT Switch..... | Inhibit |
| 3) Landing Gear Selector Lever..... | Down |
| 4) Main Gear Release Handle | Open door & pull fully down |
| 5) Nose Gear Release Handle..... | Open door & Pull fully up |
| 6) Verify..... | 3 Green Lights Illuminated |

- 7) LANDING GEAR ALTERNATE RELEASE and LANDING GEAR ALTERNATE EXTENSION DoorsLeave Fully Open
- 8) LDG GEAR INHIBIT Switch Leave at INHIBIT
- 9) Anti-skid switch..... Test

After landing:

- 10) Install main-gear safety-lock pins, and engage nose-gear lock as soon as possible after engine shutdown.

WARNING

- On aircraft 815 & 816 the TAXI light switch must be OFF when confirming the nose gear is down and locked using the alternate landing gear indication system.

Caution

- Landing Gear cannot be retracted following extension by Alternate Extension Procedure.
- Do not select PTU to Manual during approach.
- Nose Wheel Steering is inoperative following Alternate Landing Gear Extension.

• Note •

If LEFT and/or RIGHT green gear locked down advisory lights do not illuminate, insert hydraulic pump handle in socket and operate until green LEFT and RIGHT green gear locked down advisory lights illuminate.

• Note •

Gear release handle forces required to release the up-locks can be extremely high, and may require additional attempts to free the gear from its up-lock.

- 11) Alternate Landing Gear Extension checklist Complete

**FORCED LANDING WITH BOTH ENGINES INOPERATIVE
(Continued)**

(Continued)

WARNING

- Make the approach and landing into the wind, maintaining airspeed at Vref until immediately prior to the flare. The flare should be commenced so as to achieve zero vertical velocity immediately prior to ground contact.

12) Emergency/Parking brakeAs required

13) Evacuate

• **Note** •

- If the decision is made to land with the landing gear retracted, proceed as above. Maintaining a nose-up pitch attitude not exceeding 6° prior to ground contact to avoid a nose-down slam on touchdown. Land into the wind if conditions permit.
- If the above landing is to be undertaken on a water surface, the landing gear must be left in the retracted position, and the aircraft should be brought into contact with the water as gradually as conditions permit while avoiding pitch attitudes in excess of 10° nose up.

14) Forced Landing with Both Engines Inoperative checklist.....Complete

EMERGENCY LANDING PROCEDURES

When it is known that a landing must be performed which could be identified as an emergency landing due to the presence of factors which introduce a hazard to the airplane and its occupants, the following points should be addressed as applicable:

- Instruct flight attendant to brief and prepare passengers as appropriate to the emergency.
- If possible, ensure that no passengers are seated in the rotational plane of the propellers.
- Secure all loose items in the flight compartment and cabin.
- Complete all necessary radio communications concerning the intended landing with ground support personnel.
- Review the procedures to be followed, covering all aspects of crew actions and coordination.
- Consider the suitability of a practice approach.
- Ensure that both pilots' shoulder harnesses are secure and locked.
- Deactivate the GPWS by pulling GPWS circuit breakers **B3** and **B9** on the avionics circuit breaker panel.
- Cabin altitude Auto/Man/Dump switch Dump
- Emergency light switch..... On
- Battery Master switch Off
- Emergency Landing Procedures checklist.....Complete

AIRCRAFT DITCHING

Preparation:

- 1) Emergency and distress signals Broadcast
- 2) Flight attendant..... Alert
- 3) Security of cargo and baggage Check
- 4) Crew life jackets Don
- 5) Seat belts and shoulder straps..... Secure and lock
- 6) Seat belt and no smoking sign On

Operational Considerations

- In rolling swell conditions: plan to touch down parallel to crest of swells, as much into the wind as possible
- In all other conditions, land into the wind

Approach

- 7) GPWS CBs B3, B9 on avionics CB panel..... Pull
- 8) LDG GEAR HORN CB E5 on left main CB panel..... Pull
- 9) Sync Off
- 10) Condition levers Max
- 11) Bleeds Off
- 12) Auto/Man/Dump switch Dump
- 13) Gear Up
- 14) Flaps..... 35°
- 15) Speed Vref flap 35°
- 16) Rate of descent 200 to 300 fpm
- 17) Emergency lights..... On
- 18) Landing lights As required
- 19) ELT On
- 20) PA..... Order to brace
- 21) Pitch attitude at touchdown 10°
- 22) Touch down with minimum speed and rate of descent. Do not stall the aircraft.

• Note •

- A transient nose-up pitching motion may result following touchdown. Over correction of this tendency could result in porpoising or nosing in.

After Touchdown:

- 23) Condition levers Fuel off
- If any engine does not shut down:
- 24) Appropriate fuel off handle Pull
 - 25) Battery Master Off
 - 26) Evacuate after airplane has stopped

• Note •

- The airplane will float with one wing in the water. The exits on the high side of the cabin should be used for evacuation

WARNING

- Do not open the front door on the lower side.

- 27) Aircraft Ditching checklist Complete