

**Aviation Safety Investigation Report
199800193**

**Cessna Aircraft Company
402C**

22 January 1998

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NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at www.atsb.gov.au.

Occurrence Number: 199800193 **Occurrence Type:** Accident
Location: Cairns, Aerodrome
State: QLD **Inv Category:** 4
Date: Thursday 22 January 1998
Time: 1215 hours **Time Zone** EST
Highest Injury Level: None

Aircraft Manufacturer: Cessna Aircraft Company
Aircraft Model: 402C
Aircraft Registration: VH-JOC **Serial Number:** 402C0486
Type of Operation: Charter Passenger
Damage to Aircraft: Substantial
Departure Point: Pormpuraaw Qld
Departure Time: 0923 EST
Destination: Cairns Qld

Crew Details:

Role	Class of Licence	Hours on Type	Hours Total
Pilot-In-Command	Commercial	500.0	2645

Approved for Release: Wednesday, January 28, 1998

The pilot reported that on departure from Pormpuraaw he selected gear up and the gear cycled normally. Passing approximately 2,500 ft on climb to 9,000 ft he noticed the left hydraulic flow light illuminate. Shortly after, the right hydraulic flow light illuminated. The pilot recycled the gear and nothing happened. He then noticed hydraulic fluid leaking from the top of the cowl on the right engine. The pilot realised that there was no hydraulic fluid remaining in the system and that he would have to use the emergency system to lower the gear. The pilot said he continued towards Cairns due to the fact that there were no maintenance facilities at Pormpuraaw, the aircraft was operating normally, and Cairns was better equipped to handle any emergency situation.

On arrival in the circuit at Cairns, the pilot pulled the emergency gear extension handle after performing all the necessary cockpit checks but the gear did not extend. Further attempts to lower the gear were also unsuccessful. The pilot subsequently landed the aircraft wheels-up about 90 minutes later.

Subsequent investigation revealed that a burst hydraulic hose had allowed the contents of the hydraulic system to escape. The emergency gear extension system blow down bottle was fully charged, but the releasing mechanism did not function. When at full travel, the emergency gear extension operating handle (which was attached to a cable) failed to operate the release valve on the bottle. This appeared to be due to distortion of the cable casing when the cable was placed under tension.

