

**Aviation Safety Investigation Report
198902541**

Beagle 206-2

7 February 1989

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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: 198902541

Occurrence Type: Accident

Location: Coffs Harbour NSW

Date: 7 February 1989

Time: 1556

Highest Injury Level: Nil

Injuries:

	Fatal	Serious	Minor	None
Crew	0	0	1	1
Ground	0	0	0	-
Passenger	0	0	0	1
Total	0	0	0	2

Aircraft Details: Beagle 206-2

Registration: VH-UNL

Serial Number: B206-047

Operation Type: Charter

Damage Level: Minor

Departure Point: Coolangatta QLD

Departure Time: 1405

Destination: Coffs Harbour NSW

Approved for Release: March 17th 1989

Circumstances:

The pilot was cleared to conduct a straight in approach at the destination aerodrome. At a position 15 kilometres from touchdown, he commenced the prelanding checks and selected gear down. The gear selector panel indication of three green lights and a visual inspection from the cockpit windows, which included the use of an engine cowl mounted mirror to view the nose landing gear, confirmed that the landing gear was fully extended. Shortly after touchdown, the right main gear collapsed causing the aircraft to veer from the runway. An inspection of the gear and its systems revealed two defects which are considered to have contributed to this accident. The throttle warning horn had been rendered unserviceable due to a blown fuse in the warning system electrical circuit. The down-lock pin had failed to locate in the lower dragstay due to a worn bearing, allowing the stay to be misaligned from the lock pin. The down-lock microswitch is attached to the lower dragstay and does not come into contact with the down-lock pin. It is therefore possible for the gear to be fully extended, the electrical circuit to be made and three greens indicating, but for the down-lock pin to be disengaged. It is considered that the gear extended fully prior to touchdown, providing the pilot with three green indications, but remained in an unlocked state due to the misalignment of the lock assembly. As the weight of the aircraft transferred onto the gear during the landing roll, the unlocked gear collapsed. The pilot was deprived of an aural warning, due to the failed aural warning electrical warning circuit. The investigation also revealed a potential problem with the main gear ground handling lock pin system, which is used to prevent the down-lock pin from dislocating. If the down-lock pin has not correctly located in the lower dragstay, the ground handling pin is ineffective. This accident was not the subject of an on-site investigation.

Significant Factors:

The following factors were considered relevant to the development of the accident

1. The gear down-lock pin misaligned with its receptacle and failed to locate in the locked position, due to a worn bearing in the lower dragstay.
2. The gear aural warning system did not operate due to an unserviceable fuse in the gear electrical warning circuit.

Reccomendations:

It is recommended that the Civil Aviation Authority gives consideration to publishing an Airworthiness Directive relating to the inspection of the Beagle 206 main gear down-lock system serviceability. This should include the integrity of the ground handling locking system.