

Aviation Safety Investigation Report
198903799

Cessna U206

17 July 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: 198903799
Location: Maggieville Station QLD
Date: 17 July 1989
Highest Injury Level: Nil
Injuries:

Occurrence Type: Accident
Time: 1500

	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: Cessna U206
Registration: VH- RXE
Serial Number: U206A-0610
Operation Type: Private
Damage Level: Substantial
Departure Point: Massacre Inlet QLD
Departure Time: 1300 hrs
Destination: Maggieville Station QLD

Approved for Release: 29th August 1989

Circumstances:

The pilot reported the following The right main landing gear collapsed, soon after touch down at Maggieville Station airstrip, at the completion of a two hour flight from Massacre Inlet. The aircraft had been configured for a short field landing, however, it had floated for a short distance along the airstrip before the main wheels touched down. As a result the pilot applied "full braking" as soon as the aircraft had settled on to the runway. At the same instant that the brakes were applied the right main landing gear folded backwards and collapsed. Investigation revealed that two of the three bolts which support the right main landing gear (including the main locating bolt) had sheared off, and the cast sections of both channel supports had been damaged. The pilot could find no evidence on the runway of an obstruction or pothole and has no recollection of any previous hard landings or wheel contacts, which might explain the damage. However, he did report that two of the right main wheel hub bolts, had failed and were replaced approximately one week prior to this accident. After carrying out temporary repairs, at Maggieville Station, the aircraft was flown to an approved maintenance facility in Mount Isa to have the right landing gear replaced. The chief engineer, a Licenced Aircraft Maintenance Engineer (LAME), at the maintenance facility in Mount Isa, inspected the damaged section of the landing gear. He reported that both halves of the right main wheel hub had been damaged in a manner which indicated impact with a large object. Examination of the remainder of the landing gear supported this premiss. Two of the three landing gear attaching bolts, had sheared off as a result of excessive side loads, and the remaining bolt was bent. Damage to the channel support was caused by the shearing action of the main landing gear exiting the fuselage attachment recess. The LAME stated that there was no evidence of corrosion, or any pre existing cracks, found on any of the damaged components. The failure was totally consistant with an overload failure. The investigation did not determine conclusively when the damage to the landing gear was sustained, but it may have been the reason the two wheel hub bolts had to be replaced the previous week.

Significant Factors:

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

1. Failure in overload of two of the right landing gear retaining bolts.
2. The landing gear had suffered previous impact damage.
3. Inadequate preflight inspection by the pilot