

**Aviation Safety Investigation Report
199603764**

**Rockwell International
Commander**

03 November 1996

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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.

The Bureau did not conduct an on scene investigation of this occurrence. The information presented below was obtained from information supplied to the Bureau.

Occurrence Number: 199603764 **Occurrence Type:** Accident
Location: Parafield, Aerodrome
State: SA **Inv Category:** 4
Date: Sunday 03 November 1996
Time: 1600 hours **Time Zone** CSuT
Highest Injury Level: None

Aircraft Manufacturer: Rockwell International
Aircraft Model: 114
Aircraft Registration: VH-KTJ **Serial Number:** 14278
Type of Operation: Instructional Dual
Damage to Aircraft: Substantial
Departure Point: Parafield SA
Departure Time: 1500 CSuT
Destination: Parafield SA

Crew Details:

Role	Class of Licence	Hours on Type	Hours Total
Pilot-In-Command	Commercial	93.0	664

Approved for Release: Tuesday, November 19, 1996

During a training flight the pilot noticed that the landing gear "in transit" light remained illuminated after the gear retracted. Recycling the gear rectified the problem.

When the aircraft returned to the circuit area air traffic control (ATC) queried the pilot as to whether he had a safe indication for the landing gear. The gear was in the retracted position, but the pilot extended it and a safe indication was obtained.

Three circuits and landings were then carried out before the aircraft was taxied back to the parking area. The pilot reported having difficulty in maintaining directional control, and thought the aircraft may have suffered a flat tyre.

An inspection of the aircraft revealed that the nut had unscrewed from the right main landing gear leg rear attachment bolt, allowing the bolt to withdraw and the gear to droop. This prevented the gear from retracting completely, which ATC had mistaken for a partially extended landing gear.

The additional load placed on the forward attachment bolt during gear operation and landings caused severe distortion and bending of the front spar web adjacent to the gear attachment fitting.

The reason for the nut to unscrew off the bolt could not be determined. The pilot failed to notice the missing nut during the pre-flight inspection.

