

**Aviation Safety Investigation Report  
199703683**

**Piper Aircraft Corp  
Navajo**

**10 November 1997**

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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](http://www.atsb.gov.au).**

**Occurrence Number:** 199703683                      **Occurrence Type:** Accident  
**Location:** Edmonton  
**State:** QLD                      **Inv Category:** 4  
**Date:** Monday 10 November 1997  
**Time:** 1405 hours                      **Time Zone** EST  
**Highest Injury Level:** None

**Aircraft Manufacturer:** Piper Aircraft Corp  
**Aircraft Model:** PA-31  
**Aircraft Registration:** VH-IHA                      **Serial Number:** 31-136  
**Type of Operation:** Miscellaneous Parachute Jump  
**Damage to Aircraft:** Substantial  
**Departure Point:** Cairns Qld  
**Departure Time:** 1343 EST  
**Destination:** Cairns Qld

**Crew Details:**

<b>Role</b>	<b>Class of Licence</b>	<b>Hours on Type</b>	<b>Hours Total</b>
Pilot-In-Command	Commercial	23.1	1038

**Approved for Release:** Friday, January 16, 1998

Soon after some parachutists had exited the aircraft and the pilot had commenced descent the lower section of the left engine cowl came free of the aircraft. The upper section of the cowl remained attached at its trailing edge and wrapped around the wing leading edge outboard of the engine.

Speed at the time of the failure was between 150 and 160 kt. The parachute drop had been conducted from 12,000 ft and the pilot thought that the cowl was lost around 10,500 ft.

The pilot reported that full aileron and almost full rudder deflection were required to maintain control of the aircraft during the descent. A speed of 120 kts, and full power on both engines was required to achieve sufficient control to land the aircraft.

The maintenance organisation responsible for the aircraft had conducted an inspection prior to the flight. One person had experienced difficulty in securing the cowl screws on the outboard side of the propeller spinner and had omitted to secure the inboard side. This error had not been detected by the supervising engineer nor the pilot during subsequent inspections.



The maintenance manual contains a warning about the need to maintain indicator patches on the cowls to indicate the locked position of the cowl fastener screw driver slot. These indicators were not fitted to the aircraft. The cowl fasteners also include an indicator pin which protrudes into the screw slot when the fastener is locked. The pilot was not aware of this feature at the time of this occurrence.

