

**Aviation Safety Investigation Report  
199000102**

**Piper PA31**

**30 September 1990**

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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:** 199000102  
**Location:** Marble Bar WA  
**Date:** 30 September 1990  
**Highest Injury Level:** Nil  
**Injuries:**

**Occurrence Type:** Accident

**Time:** 725

	Fatal	Serious	Minor	None
Crew	0	0	1	1
Ground	0	0	0	-
Passenger	0	0	0	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>

**Aircraft Details:** Piper PA31  
**Registration:** VH-DER  
**Serial Number:** 31-7912110  
**Operation Type:** Aerial Work  
**Damage Level:** Substantial  
**Departure Point:** Port Hedland WA  
**Departure Time:** 0645  
**Destination:** Marble Bar WA

**Approved for Release:** 27th November 1990

#### **Circumstances:**

The aircraft entered the circuit, on the crosswind leg, for a normal approach and landing. The downwind checks were started abeam the upwind end of the airstrip with the pilot referring to a printed roller style check list. The first check, flaps selected to first stage, was carried out normally. Although the pilot lowered full flap during the approach, no other checklist items were completed. The aircraft landed with the landing gear retracted. The investigation indicated that the prime factors leading to this accident were pilot fatigue and channelised attention. The pilot's sleeping patterns had been disrupted during the five days preceding the accident because of health problems with his children. He was awoken five to six times each night and the pilot's longest period of rest, during the evening prior to the accident, was three hours. The pilot reported that he was not aware that he might have been suffering from fatigue and he had not thought to draw his supervisors attention to his lack of regular sleep. On arrival over Marble Bar the pilot observed a 20-25 knot wind which required a landing on an airstrip he had only used once before. The pilot concentrated on his approach and landing, in the strong wind conditions, and it is likely that this coupled with fatigue led to his failure to complete his prelanding checks. A higher than normal power setting was used during the final approach and the landing gear warning horn did not sound until the throttles were closed during the flare. Even when the horn sounded the pilot did not associate it with the landing gear position but instead wondered why the stall warning had sounded at such an early stage in the landing. The pilot advised that the landing gear warning horn was not sufficiently distinctive and, as a result, it did not alert him to the approaching problem.

#### **Significant Factors:**

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

1. The pilot was probably suffering from sleep pattern related fatigue however he was not aware of this nor did he think to draw his supervisors attention to a possible potential problem.
2. The pilots attention was channeled towards the approach and landing on an unfamiliar strip in strong wind conditions.
3. The distraction of the approach and the pilot's fatigue probably led to his failure to complete all the the necessary check list items and the aircraft landed with the landing gear retracted.
4. The landing gear warning was not distinctive enough to warn the pilot of impending disaster. This accident was not the subject of an on-scene investigation.