Aviation Safety Investigation Report 198800727

Mooney M20-J

17 August 1988

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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: 198800727 Occurrence Type: Accident

Location: Moolooloo Station NT

Date: 17 August 1988 **Time:** 703

Highest Injury Level: Nil

Injuries:

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

Aircraft Details: Mooney M20-J Registration: VH-HVV Serial Number: 24-1452 Operation Type: Private

Damage Level: Substantial

Departure Point: Moolooloo Station NT

Departure Time: 0702

Destination: Halls Creek WA

Approved for Release: February 23rd 1989

Circumstances:

The pilot made an early morning DEPARTURE from the station strip. He reported that as the aircraft accelerated past 65 to 70 knots he selected gear up, however, the gear did not immediately retract and the gear safety override warning activated. The gear then retracted but shortly afterwards he heard a "clanging" noise which he assumed was coming from the engine. He immediately reduced power, selected gear down and turned back towards the strip for a forced landing. The turn was commenced from about 150 to 200 feet above the terrain, but after turning through about 160 degrees the aircraft stalled. The aircraft collided with the ground and after a ground run of approximately 122 metres the left wing struck two trees which yawed it through 180 degrees. The gear collapsed and the aircraft skidded backwards for 32 metres. An examination of the aircraft failed to detect any pre-impact malfunction with the engine or propeller. The source of the "clanging" noise reported by the pilot could not be established, although the post impact damage may have destroyed the evidence of the noise source. There was no other evidence of power loss. The pilot had been working very long hours over the preceding three days and was fatigued. It is possible that the level of fatigue had a deleterious affect on the pilot's ability to rapidly and correctly assess the action required. The pilot mistakenly identified a noise from an unknown source as an engine or propeller malfunction and reduced power by a substantial amount. The pilot then selected gear down and attempted a turn back manoeuvre from only 150 to 200 feet above ground level without increasing power. The aircraft subsequently stalled. The activation of the gear safety override system probably added to the confusion and reinforced in the pilot's mind that the aircraft had a serious malfunction.

Significant Factors:

It was considered that the following factors were relevant to the development of the accident

- 1. The pilot incorrectly identified a noise from an unknown source as an engine or propeller malfunction.
- 2. Given the substantial reduction of power and the gear down selection, the aircraft was at too low an altitude to successfully complete a turn back manoeuvre.
- 3. The pilot was affected by fatigue.