Aviation Safety Investigation Report 199001173

Cessna 172-N

22 December 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 <u>www.atsb.gov.au</u>.

Occurrence Number: Location: Date: Highest Injury Level: Injuries:		French Island VIC 22 December 1990			Occurrence Type: Accident Time: 1730	
9			Fatal	Serious	Minor	None
		Crew	0	0	1	1
		Ground	0	0	0	-
		Passenger	0	0	0	2
		Total	0	0	0	3
Aircraft Details:	Cessna	172-N				
Registration:	VH-NAX					
Serial Number:	172-71874					
Operation Type:	Private					
Damage Level:	Substantial					
Departure Point:	French Island VIC					
Departure Time:	N/A					
Destination:	Moorabbin VIC					

Approved for Release: 5th April 1991

Circumstances:

The pilot was attempting to take off from a 550 metre grass airstrip. His aircraft was approximately 30 kilograms below maximum takeoff weight. The temperature was about 27 degrees Celsius and the wind was calm. The airstrip had been mown recently leaving low bracken stubble and grass. There were low trees beyond the end of the strip. Prior to takeoff the pilot selected 10 degrees of flap and held the aircraft on the brakes until engine RPM was passing about 2100. After a takeoff roll of about 400 metres, the aircraft lifted off at 50 knots and climbed to about ten feet. The stall warning began to sound. The pilot became concerned that the aircraft might not clear the trees off the end of the strip. He closed the throttle, landed straight ahead on the strip, and applied the brakes. The aircraft overran the end of the strip, at a groundspeed of about 15 knots, and collided with a farm fence. The nose wheel was torn off, the wheel strut dug into the ground and the aircraft overturned. The pilot did not acquire the appropriate advice about the airstrip before landing or attempting to take off. He did not refer to the aircraft's performance charts prior to the take off. The charts indicate that the takeoff ground roll distance available was sufficient but that the airstrip was too short to enable the aircraft to out-climb a 50 foot obstacle at the end of the strip. Also, the aircraft did not achieve sufficient airspeed after lift off for it to climb efficiently. No mechanical fault has been found which might have contributed to the accident.

Significant Factors:

1. The pilot did not calculate the length of strip required prior to commencing the takeoff.

2. The strip length available was inadequate for the operation. This accident was not the subject of an on-scene investigation.