

**Aviation Safety Investigation Report  
198900015**

**Cessna 172M**

**12 August 1989**

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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:** 198900015                      **Occurrence Type:** Accident  
**Location:** Mills Cross (6km South of Bungendore) NSW  
**Date:** 12 August 1989                      **Time:** 1206  
**Highest Injury Level:** Nil  
**Injuries:**

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

**Aircraft Details:** Cessna 172M  
**Registration:** VH-MGZ  
**Serial Number:** 17266694  
**Operation Type:** Aerial Work  
**Damage Level:** Substantial  
**Departure Point:** Canberra ACT  
**Departure Time:** 1145  
**Destination:** Canberra ACT

**Approved for Release:** 23rd April 1990

#### **Circumstances:**

At the completion of a gliding turn, during a period of dual instruction, the engine failed to respond when the student re-opened the throttle. The instructor took control of the aircraft and attempted, unsuccessfully, to regain engine power by manipulation of the throttle. Leaving the engine idling, he selected a waterlogged paddock and commenced a flapless approach at approximately 60 knots. On short final it became apparent to the pilot that the aircraft was undershooting the paddock landing site. He selected 20 degrees of flap in an attempt to balloon the aircraft over a ditch and fence. The nosewheel touched the fence, and the aircraft landed heavily on the nose and left mainwheel, bounced, then skidded in the mud with the nosewheel sinking into the soft surface. This caused the aircraft to overturn. Both occupants were uninjured and evacuated the inverted aircraft without assistance. An inspection of the area surrounding the accident site indicated that a roadway parallel to the selected paddock would have afforded a better forced landing site. The pilot stated that he did not consider the roadway as he had been pre-conditioned or had pre-conditioned himself to carry out practice forced landings in paddocks. Examination of the engine revealed that the throttle control cable assembly outer flexible casing had separated from the staked joint of the rigid conduit at the carburettor attachment end. This prevented the inner cable from moving when the throttle was operated, therefore the carburettor throttle butterfly remained on the idle stop. The Aircraft Manufacturer's Service Manual specifies a requirement to inspect the staked joint of this throttle control cable assembly. The maintenance of this aircraft had been preformed with reference to CAO 100.5.1 and no such specific inspection was called for in the schedule.

#### **Significant Factors:**

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

1. Failure of the throttle control cable assembly.
2. Failure of the pilot to select the best available landing site.
3. The Civil Aviation Authority maintenance inspection schedules do not reflect manufacturers specific inspection requirements.

**Reccomendations:**

1. It is recommended that the Civil Aviation Authority review, and amend as necessary, CAO 100.5.1 Appendix 4 inspection schedules, to include a requirement for operators (who elect to maintain Aircraft, Engines and Equipment to these schedules) to comply with and observe, all of the Manufacturers Specific Inspections and Component Replacement Life Limits.
2. It is recommended that the Civil Aviation Authority, pending the review and consideration of the above item 1, notify all operators of Cessna 172, and similarly affected aircraft, of the specific throttle control check (detailed in the Cessna Service Manual) and initiate retrospective action to ensure compliance.