Aviation Safety Investigation Report 198802350

Cessna 172 RG

February 25th 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: 198802350 **Occurrence Type:** Accident
Location: Bankstown NSW
Date: February 25th 1988 **Time:** 1333
Highest Injury Level: Nil
Injuries:

	Fatal	Serious	Minor	None
Crew	0	0	2	2
Ground	0	0	0	-
Passenger	0	0	0	0
Total	**0**	**0**	**0**	**2**

Aircraft Details: Cessna 172 RG
Registration: VH-NDM
Serial Number: 172RG0569
Operation Type: Aerial Work (Dual Instruction)
Damage Level: Substantial
Departure Point: Bankstown NSW
Departure Time: N/A
Destination: Bankstown NSW

Approved for Release: November 8th 1988

Circumstances:

The flight was the first session of the Private Pilot's constant speed unit and retractable landing gear training. The aircraft was taking off on Runway 11 Centre for the training area. The pilots reported that at a height of about 50 feet, the engine failed completely, surged briefly, then failed completely again. The instructor took over control and landed the aircraft. The aircraft overran the runway, passed over the top of a 4 to 5 metre deep drainage ditch, and impacted heavily on the top of the far bank, approximately 190 metres from the end of the bitumen runway. Lost movement was found between the fuel selector pointer and the fuel selector valve, and with the selector pointer positioned by sight the valve may have been in such a position as to restrict fuel flow at high power settings. The accident highlighted the airmanship which should be exercised when making a fuel selection, by feeling for a detent and not simply relying on the position of a pointer. Although such a defect would normally be discovered and rectified during regular servicing, lost motion may develop from a stiff selector valve, eventually resulting in disagreement between a position indicator and valve position.

Significant Factors:

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

1. Lost movement between the fuel selector pointer and the fuel selector valve, resulting in possible disagreement between indicated valve position and actual valve position.