Aviation Safety Investigation Report 198802392

Gulfstream AA5A

14 September 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: 198802392 Occurrence Type: Accident

Location: "Kalev" (8 km SW Bredbo) NSW

Date: 14 September 1988 **Time:** 1730

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: Gulfstream AA5A

Registration: VH-SZW
Serial Number: AA5A-0351
Operation Type: Private
Damage Level: Destroyed
Departure Point: Cooma NSW

Departure Time: 1716

Destination: Canberra ACT

Approved for Release: 27th October 1989

Circumstances:

The pilot was making the return leg of a flight to his home base when the engine commenced to run roughly and a strong fuel odour was detected in the cabin. He immediately changed fuel tanks, returned the mixture control to rich and turned the fuel pump on. This aggravated the situation and caused the engine to rich cut. While preparing for the inevitable forced landing and carrying out the emergency checks, the pilot turned the fuel off. The engine immediately regained power before cutting again. By moving the fuel selector between the off and on positions he was able to keep the engine operating until he had positioned the aircraft over a more hospitable, but not ideal, area for a forced landing. During the approach the pilot turned all systems off and stopped the engine. The landing was towards the west into the setting sun, which obscured his vision and caused him to overshoot his selected landing area. He then had to land in the next paddock which was uphill with windrows built across it. During the landing, the pilot was able to dodge two windrows, but failed to see another one further up the hill and collided with it, causing damage to the nose area of the aircraft, and possibly dislodging the battery from the firewall. The pilot was able to exit the aircraft before a fierce fire broke out and consumed the aircraft. The Civil Aviation Authority has published material relating to the possibility of aromatics in low leaded Av gas and motor spirits affecting composite material carburettor floats, which can cause carburettor flooding. Although the aircraft's carburettor had been badly burnt it was possible to identify that the charred remains of the float had been of a composite material, but not if it had been affected by the fuel. These types of floats are no longer available as replacement items.

Significant Factors:

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

1. The engine lost power due to an over-rich condition.

- 2. The reason for the over-rich condition could not be positively determined.
- 3. The pilot was committed to a forced landing in unsuitable terrain.
- 4. The pilot's vision was obscured by sunglare.