Aviation Safety Investigation Report 198901528

Grumman American Aviation Corporation AA-1B

19 January 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.

Occurrence Number: 198901528 **Occurrence Type:** Accident
Location: Moorooduc Airstrip VIC
Date: 19 January 1989 **Time:** 1030
Highest Injury Level: Serious
Injuries:

	Fatal	Serious	Minor	None
Crew	0	1	0	0
Ground	0	0	0	-
Passenger	0	1	0	0
Total	**0**	**2**	**0**	**0**

Aircraft Details: Grumman American Aviation Corporation AA-1B
Registration: VH-ERQ
Serial Number: AA1B-0308
Operation Type: Private
Damage Level: Substantial
Departure Point: Moorooduc VIC
Departure Time: N/A
Destination: Moorooduc VIC

Approved for Release: 15th May 1990

Circumstances:

The pilot reported that the engine run up checks were normal, with the engine operating for about ten minutes before the take off was commenced. During take off no amomalies were noted by the pilot, however, at about 100 feet the engine lost nearly all power. The pilot attempted to turn back in order to land on the strip. During the turn, control was lost and the aircraft struck the ground. The area beyond the strip where the power loss occurred was mainly open farmland. The occurrence of a major power loss at low height gave the pilot little time to assess the situation. Inspection of the aircraft did not reveal any mechanical defects which might have caused the engine power loss. The pilot had been using a mixture of Avgas and unleaded motor fuel. This aircraft type was not approved to operate using automotive fuels. Atmospheric conditions were conducive to the formation of significant carburettor ice under all engine power conditions. The use of automotive fuel may have increased the possibility of this occurring. Inspection of the stall warning system revealed that the screws securing the connections to the wing mounted vane assembly were loose, and the system had been inadequately maintained. It was likely that the system was not operating at the time of the accident.

Significant Factors:

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

1. Conditions conducive to carburettor ice formation.

2. Use of non approved fuel.

3. Engine power loss at a low height.

4. Pilot attempted to turn back to land on the strip from too low an altitude.

5. Poor condition of the stall warning system.

6. Pilot did not ensure adequate airspeed was maintained.