Aviation Safety Investigation Report 198903836

Maxair Drifter

4 May 1989

Readers are advised that the Australian Transport Safety Bureau investigates for the sole purpose of enhancing transport safety. Consequently, Bureau reports are confined to matters of safety significance and may be misleading if used for any other purposes.

Investigations commenced on or before 30 June 2003, including the publication of reports as a result of those investigations, are authorised by the CEO of the Bureau in accordance with Part 2A of the Air Navigation Act 1920.

Investigations commenced after 1 July 2003, including the publication of reports as a result of those investigations, are authorised by the CEO of the Bureau in accordance with the Transport Safety Investigation Act 2003 (TSI Act). Reports released under the TSI Act are not admissible as evidence in any civil or criminal proceedings.

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: 198903836 Occurrence Type: Accident

Location: Kyanda (43 km E Roma) QLD

Date: 4 May 1989 **Time:** 1345

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: Maxair Drifter **Registration:** 20-6025

Serial Number: N/K

Operation Type: Sport Aviation
Damage Level: Substantial
Departure Point: Kyanda QLD

Departure Time: 1345

Destination: Kyanda QLD

Approved for Release: 5th July 1989

Circumstances:

At about 400 feet above ground level, on climb out after takeoff, the engine suddenly lost power. The pilot was faced with landing on unsuitable terrain and as a result the aircraft was substantially damaged. The cause of the power loss was determined to have been spark plug carbon fouling due to an excessively rich fuel mixture. During previous maintenance by the aircraft owner, the mixture slide needle had been refitted incorrectly to the piston slide assembly. This positioned the needle about three millimetres higher than it should have been, resulting in the mixture being over-rich throughout the throttle range. This occurrence was not the subject of an on-site investigation.

Significant Factors:

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

- 1. Inadequate maintenance of the carburrettor resulting in an over-rich mixture.
- 2. The over-rich mixture caused the spark plugs to become carbon fouled and resulted in a loss of power.
- 3. The aircraft was landed on unsuitable terrain.

Reccomendations:

The investigation revealed the mixture needle could be fitted either below or above the nylon spring retainer assembly at the base of the air mixture piston. A minor modification to the nylon retainer would remove this ambiguity and not allow the mixture needle to be fitted incorrectly. The recommendation is made that the above

information be communicated to all operators of this aircraft type and that the engine manufacturer be approached with a view to modifying the part.