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Aviation Safety Investigation Report 198902535

Air Parts Fletcher FU24-950M

25 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.

This accident was not the subject of an on-site investigation.

Occurrence Number: 198902535 Occurrence Type: Accident

Location: Tamworth NSW

Date: 25 January 1989 **Time:** 1052

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

Air Parts Fletcher FU24-

Aircraft Details: Air Parts Fletcher FU24

950M

Registration: VH-HVO

Serial Number: 102

Operation Type: Aerial work **Damage Level:** Minor

Departure Point: "Amaroo" 44km SW

Quirindi NSW

Departure Time: 1010

Amaroo 44km SW Quirindi

Destination: NSW

Approved for Release: March 17th 1989

Circumstances:

The pilot was conducting superphosphate spreading operations from a short narrow agricultural strip. During the landing roll on the trip prior to the accident the pilot felt something unusual about the landing gear so he inspected the wheels but found nothing abnormal. The oleos and torque links were not inspected. During the subsequent take off the left mainwheel and oleo strut separated from the landing gear assembly fracturing the hydraulic brake line. The pilot flew the aircraft to his base aerodrome and carried out a landing on the grass strip without further damage. An inspection of the landing gear showed that the left main torque link attachment bolt had failed allowing the oleo and wheel to separate from the landing gear assembly. The bolt was not recovered therefore the precise reason for the failure of the bolt was not determined. The investigation revealed that this is a recurring problem with this aircraft type due to shear load fatigue of the attachment bolt.

Significant Factors:

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

- 1. The torque link attachment bolt separated from the landing gear assembly.
- 2. The lower oleo assembly and wheel separated from the aircraft due to the torque link attachment bolt separating from the landing gear assembly.

Reccomendations:

A modification approved by the Civil Aviation Authority is currently available as an option to provide a more reliable torque link attachment. It is recommended that the Civil Aviation Authority give consideration to publishing details of the modification in an Airworthiness Advisory Circular or similarly circulated document drawing the attention of Fletcher FU24 operators to the existence of the modification.