

**Aviation Safety Investigation Report  
199001959**

**Grumman G164-B**

**5 January 1990**

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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](http://www.atsb.gov.au).**

**Occurrence Number:** 199001959 **Occurrence Type:** Accident

**Location:** "Bodoca" Agricultural Strip (12 km E Griffith) NSW

**Date:** 5 January 1990 **Time:** 650

**Highest Injury Level:** Nil

**Injuries:**

	Fatal	Serious	Minor	None
Crew	0	0	1	1
Ground	0	0	0	-
Passenger	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>

**Aircraft Details:** Grumman G164-B

**Registration:** VH-HCR

**Serial Number:** 5B

**Operation Type:** Aerial Work

**Damage Level:** Substantial

**Departure Point:** "Bodoca" NSW

**Departure Time:** N/K

**Destination:** Bodoca NSW

**Approved for Release:** 1st May 1990

**Circumstances:**

The aircraft was landing downwind on an agricultural strip. During the landing roll the aircraft departed the left side of the strip following the failure of the right brake coming to rest inverted in a rice paddy. The investigation found the right brake master cylinder had buckled in the reservoir area. The buckling and resultant misalignment of the piston rod caused a bending failure of the rod and liberation of the piston with a subsequent loss of hydraulic pressure to the right brake. The reason for the failure of the master cylinder was not determined. There are no other recorded accidents involving master cylinder failures in this type of aircraft. The failure is therefore considered an isolated case.

**Significant Factors:**

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

1. Material failure of the right brake master cylinder piston rod.
2. Loss of hydraulic pressure to the right brake.
3. The pilot was unable to maintain directional control on the landing roll.