Aviation Safety Investigation Report 198400012

**Bryan HP18** 

10 March 1984

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 <u>www.atsb.gov.au</u>.

Occurrence Number: Location:		198400012 Kingaroy QLD			Occurrence Type: Accident	
					<b>Time:</b> 1618	
Hignest Injury	Level:	Fatal				
Injuries:						
			Fatal	Serious	Minor	None
		Crew	1	0	0	0
		Ground	0	0	0	-
		Passenger	0	0	0	0
		Total	1	0	0	0
Aircraft Details:	Bryan H	HP18				
<b>Registration:</b>	VH-GJZ					
Serial Number:						
<b>Operation Type:</b>	Air Test					
Damage Level:	Destroyed					
<b>Departure Point:</b>	: Kingaroy QLD					
Departure Time:	1551	-				
Destination:	Kingaroy QLD					

Approved for Release: 6th September 1984

## **Circumstances:**

The aircraft was undergoing its second test flight since construction had been completed. After the test sequence had been completed satisfactorily the pilot positioned the aircraft for landing. When the glider was about 150 feet agl the pilot reported by radio "something broke". The aircraft was observed to enter a steep spiral descent which continued until ground impact. The glider had been built by the owner from a kit of parts which had included the fuselage for one glider type and the wings of a different type. This anomaly was not detected until the wings were being fitted to the fuselage. The aircraft kit manufacturer then advised the builder on ways to overcome the problem. The builder had carried out the modifications but found that the flap drivers did not fit correctly into the flap ends. Plates were then added to the flap drivers to provide more engagement with the flap ends. Following the first test flight the pilot, an approved sailplane engineer, undertook to carry out work on the aircraft to correct various faults discovered during the flight. These faults included problems with the flap actuating mechanism. The alterations were carried out with the wings removed from the aircraft. When the aircraft was assembled prior to the second test flight the pilot apparently failed to notice during his inspection that the flap drivers were not adequately engaged in the flap ends. During the approach to land the left hand flap driver had become disengaged and the flap retracted. The resulting asymetric flap condition led to loss of control of the aircraft.