

ACCIDENT

Aircraft Type and Registration:	Savannah VG Jabiru(1), G-WHYS	
No & Type of Engines:	1 Jabiru 2200 piston engine	
Year of Manufacture:	2010 (Serial no: BMAA/HB/404)	
Date & Time (UTC):	13 March 2017 at 1250 hrs	
Location:	In flight from Swanwick, Derbyshire to Swansea Airport, Wales	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Distorted lift strut attachment and wing rib	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	54 years	
Commander's Flying Experience:	624 hours (of which 6 were on type) Last 90 days - 15 hours Last 28 days - 8 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and additional enquiries by the AAIB	

Synopsis

Whilst moving the aircraft out of the hangar, the pilot noted that the right rear lift strut attachment was distorted. He had curtailed his last flight two days previously because of "violent turbulence" and was concerned that this might have caused the damage. Subsequent examination, however, concluded that the damage was pre-existing and unrelated to the flight.

History of the flight

The pilot was flying from Swanwick, Derbyshire to Swansea and had been airborne for approximately 90 minutes. As he approached Abergavenny, the cloud cover increased significantly but he was able to maintain 2,000 ft. Shortly thereafter, he encountered turbulence and reported: "I was lifted out of my seat hitting my head on the cabin roof". He slowed the aircraft, turned to the south and was eventually able to regain his track after the turbulence reduced.

With the weather continuing to deteriorate, he curtailed the flight and landed at his home airfield. Two days later, when he moved the aircraft out of the hangar, he observed that the right rear lift strut attachment bracket was bent forwards. It was apparent that the uppermost attachment bolt had contacted the lower surface of the wing, leaving a clear indentation (Figure 1).

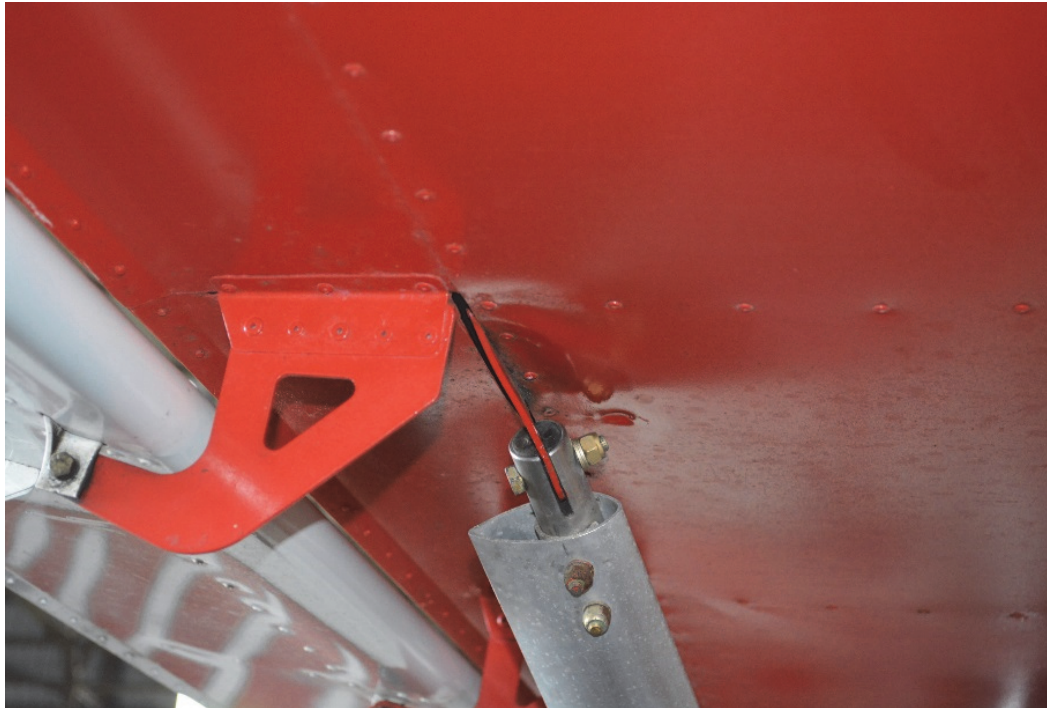


Figure 1

Distorted lift strut attachment

Aircraft examination

The right wing upper skin was removed, revealing damage on the rib adjacent to the lift strut attachment. Two visible cracks in the rib were surrounded by dirt and debris that had accumulated in localised areas of distortion. The evidence indicated that the damage was not recent.

Gust loads and testing

Calculations undertaken by the British Microlight Aircraft Association (BMAA) indicated that the gust loads in flight would have been below the limit loads.

The manufacturer reviewed the approval documentation and concluded that the damage was probably caused by adverse loading whilst on the ground.

Conclusion

The evidence indicated that the damage had existed for some time and was most likely caused by adverse loading on the ground. The cause was not established.

The BMAA intends to publish an article highlighting this occurrence and the possibility of 'hidden' damage, over and above that which may be identified during an external check.