

ACCIDENT

Aircraft Type and Registration:	Glos-Airtourer Super 150, G-AZHI	
No & type of Engines:	1 Lycoming O-320-E1A piston engine	
Year of Manufacture:	1971	
Date & Time (UTC):	20 October 2006 at 1545 hrs	
Location:	1 mile north of Leeds Castle, Kent	
Type of Flight:	Private	
Persons on Board:	Crew -1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Starboard upper engine cowl missing, scratched windscreen and punctured elevator skin and tailplane leading edge	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	31 years	
Commander's Flying Experience:	250 hours (of which 112 were on type) Last 90 days - 12 hours Last 28 days - 2 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

Prior to the flight the pilot carried out an 'A' Check on the aircraft which required the opening of both upper engine cowls. Following the check he closed the cowls and recalls securing all the over-centre cowl latches. After levelling off, following some aerobatic manoeuvres, the upper right engine cowl became unlocked and after a few seconds departed the aircraft. The cowl was recovered and, together with the aircraft, was examined by a licensed aircraft engineer. The engineer could find no evidence of distress or damage on the three over-centre latches or the latch receivers.

History of the flight

Prior to the flight the pilot, who was part owner of the aircraft, carried out an 'A' Check during which he opened both upper engine cowls. After checking the engine oil contents, using the dipstick located on the right side of the engine, he closed the right upper engine cowl and recalls securing all three over-centre cowl latches.

The purpose of the flight was to practise some aerobatic manoeuvres. Having carried out a number of manoeuvres, the pilot levelled the aircraft at 3,000 ft, with an airspeed of about 120 kt. At this point the right upper engine cowl became unlatched and started to oscillate violently between fully open and fully closed. The pilot immediately cut the engine power and raised

the aircraft's nose to reduce the airspeed. After about 5 seconds the cowl departed from the aircraft, struck the windscreen and disappeared from the pilot's view. The pilot made an RTF PAN call and successfully returned to his departure airfield and landed. He noted that the accelerometer mounted on the instrument panel indicated +3g and -1g.

Engineering examination

The engine cowl was recovered and, together with the

aircraft, was examined by a licensed aircraft engineer. The engineer could find no evidence of distress or damage on the three over-centre latches or the latch receivers. The engineer informed the AAIB that the aircraft was booked in to have a scheduled maintenance check two weeks after the accident. Part of that maintenance check was to upgrade the upper engine cowl fasteners.