

Gulfstream AA-5B Tiger, G-DONI, 21 July 2002

AAIB Bulletin No: 11/2002	Ref: EW/G2002/07/24	Category: 1.3
Aircraft Type and Registration:	Gulfstream AA-5B Tiger, G-DONI	
No & Type of Engines:	1 Lycoming O-360-A4K piston engine	
Year of Manufacture:	1979	
Date & Time (UTC):	21 July 2002 at 1520 hrs	
Location:	Compton Abbas, Wiltshire	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Nose landing gear destroyed, propeller tips bent, engine bulkhead and underside of cowl distorted	
Commander's Licence:	Private Pilots Licence	
Commander's Age:	43 years	
Commander's Flying Experience:	158 hours (of which 2 were on type)	
	Last 90 days - 15 hours	
	Last 28 days - 7 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and telephone enquiries to the repair agency	

At the end of a cross-country flight from Shoreham the pilot joined the circuit, crosswind, to land at Compton Abbas. Although the wind was from the north-north-east at about 7 kt, Runway 26 was in use, resulting in a slight tailwind component down the runway. The pilot touched down, using full (40°) flap and an airspeed of about 75 kt at the threshold, but because he assessed that he would not be able to stop the aircraft by the end of the runway, he decided to abort the landing and go around, which he accomplished successfully.

As the pilot turned the aircraft downwind for his second approach, the AFISO broadcast that after the two aircraft in the circuit (one of which was G-DONI) had landed and two waiting aircraft had departed, the runway in use would be changed to '08'. The pilot of G-DONI called and indicated

that he would defer landing until the runway change had been made, as did the other aircraft in the circuit, and both held off until the two aircraft on the ground had departed. The pilot rejoined the circuit, downwind for Runway 08, and, having completed all his checks, made another approach to land. This was again made with full flap selected and a speed of 75 kt at the threshold reducing to 70 kt for touchdown.

The aircraft touched down on the main wheels, quickly followed by the nose-wheel, and bounced back into the air. The pilot corrected for a left wing drop tendency and held up the nose of the aircraft for the second touchdown. At the second touchdown, a loud 'bang' was heard, the aircraft pitched forward onto its nose and slid to a halt on the runway. The pilot made the fuel and electrical systems safe before the occupants vacated the aircraft unaided. It was later moved clear of the runway.

Subsequent inspection of the aircraft by the maintenance organisation showed that the nose leg had folded backwards, from a point just ahead of the shock absorber attachments, and the wheel had finished up against the fuselage underside. The suspension torque tube had fractured about eight inches either side of the nose-leg attachment at the centre of the tube and there had been local damage to the firewall bulkhead at this location.