

Socata MS 880B Rallye, G-BIOR

AAIB Bulletin No: 8/2004	Ref: EW/G2004/02/13	Category: 1.3
Aircraft Type and Registration:	Socata MS 880B Rallye, G-BIOR	
No & Type of Engines:	1 Continental Motors O-200-A piston engine	
Year of Manufacture:	1968	
Date & Time (UTC):	21 February 2004 at 1250 hrs	
Location:	Eddsfield Airfield, Yorkshire	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Right landing gear collapsed, engine shockloaded, damage to right flap and right wing root	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	67 years	
Commander's Flying Experience:	91 hours (of which 23 were on type)	
	Last 90 days - 0 hours	
	Last 28 days - 0 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and further enquiries by the AAIB	

History of the flight

The aircraft was established on a visual approach to Runway 09 (grass) at 70 KIAS with full flap. The pilot reported that there was a gusty crosswind of approximately 10 kt from the left. On short final the pilot noticed a smell of fuel. He estimated that he was within gliding distance of the runway threshold so he immediately closed the throttle. Just prior to crossing the runway threshold the aircraft began to sink so the pilot raised the nose to compensate. During the flare a gust of wind lifted the left wing causing the right main landing gear to hit the ground with sufficient force to collapse it. The propeller also struck the ground and the aircraft veered off the runway to the right before coming to a rest. The pilot and his passenger were able to vacate the aircraft unassisted.

Aircraft examination

An examination of the aircraft revealed that there was some fuel in the pilot's footwell and that a union on the fuel pressure gauge above the footwell was leaking. The union was missing its locking wire.

Maintenance history

The aircraft had been stored for a year and had just had its Certificate of Airworthiness renewed; the annual star inspection was completed on 4 November 2003. No work was performed that involved removal of any fuel pressure gauge union. According to the Light Aircraft Maintenance Schedule (LAMS) an inspection of: "tanks, filler caps, selector valves, pumps, pipelines, hoses, carburettor, injector systems, throttle, mixture controls, fuel selector controls, [and] filler point placards" must be carried out during an annual star inspection. When the accident occurred, the aircraft had logged four hours since this inspection.

Discussion

The reasons for the hard landing were probably a combination of the gusty crosswind and insufficient airspeed to arrest the sink and correct the bank angle. A contributory factor to the accident was the leaking union on the fuel pressure gauge. The smell of fuel from this leak caused the pilot to retard the throttle to idle and carry out a glide approach. The smell of fuel would probably also have served as a distraction to the pilot.

The loose union on the fuel pressure gauge should have been wire-locked. Although this union may not have been disturbed during the annual star inspection, a visual check should have been performed to verify that the union had been secured with locking wire.