

Kolb Twinstar Mk 3 Microlight, G-MYOR, 4 June 1996

AAIB Bulletin No: 8/96 Ref: EW/G96/06/06 Category: 1.4

Aircraft Type and Registration: Kolb Twinstar Mk 3 Microlight,G-MYOR

No & Type of Engines: 1 Rotax 582 piston engine

Year of Manufacture: 1994

Date & Time (UTC): 4 June 1996 at 1905 hrs

Location: Kynsall Farm, Nr Audlem, Cheshire

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 1

Injuries: Crew - Serious Passengers - Serious

Nature of Damage: Severe damage to landing gear and cockpitstructure

Commander's Licence: Private Pilot's Licence

Commander's Age: 63 years

Commander's Flying Experience: 220 hours (of which 23 wereon type)

Information Source: Aircraft Accident Report Form submittedby the pilot and telephone inquiries

The aircraft had been used for a local flight during which a landingat another airstrip had been made. Whilst on the ground there,the fuel selector had been changed to draw fuel from the rightright tank. On return to their home airstrip, the left fuel tank wasrefilled and the fuel selector moved again to draw fuel from theleft tank.

Having completed the pre flight checks, the engine was startedand the pre take-off checks carried out. The aircraft then tookoff and climbed to about 20 to 30 feet when the engine suddenlystopped. The pilot realised that he had insufficient speed andheight to glide over a hedge which was ahead and so initiateda steep left hand descending turn. However, he was not able toavoid contacting the hedge and subsequently struck the groundheavily on the left main landing gear, which collapsed.

The two occupants were able to crawl out of the aircraft, butrealised that they were more seriously injured than they had atfirst thought and so rested until the emergency services arrived. Subsequently, both the pilot and his passenger were found tohave suffered severe spinal injuries.

After the accident, it was observed that the bulb type fuel pump in the cockpit was flat, indicating that it had been subjected to a vacuum. Further examination by a PFA inspector also revealed that the self-sealing quick-release fuel connector to the left tank had become disconnected.

As a result of the findings of the investigation into a previous accident to this type of aircraft (Bulletin 11/94, Ref:- EW/C94/7/3), in which the two occupants suffered fatal spinal injuries, and knowledge of an unreported heavy landing accident, in which the occupants suffered severe spinal injuries, AAIB made a Safety Recommendation (94-36), calling for consideration to be given to providing better protection to the occupants, in the event of a heavy landing.

This resulted in the introduction of an optional modification, by the UK distributor, which consisted of the substitution of the original canvas bottomed seat by one with an aluminium seatpan supplemented by a cushion of high density energy-absorbing foam. This modification, including the cushion, was fitted to this aircraft.