Avid Flyer, G-BUBB, 6 June 1998 at 1955 hrs

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Aircraft Type and Registration:	Avid Flyer, G-BUBB
No & Type of Engines:	1 Rotax 582 piston engine
Year of Manufacture:	1991
Date & Time (UTC):	6 June 1998 at 1955 hrs
Location:	Cambridge Airport
Type of Flight:	Private
Persons on Board:	Crew - 1 - Passengers - 1
Injuries:	Crew - None - Passengers - None
Nature of Damage:	Aircraft destroyed by fire
Commander's Licence:	Private Pilot's Licence
Commander's Age:	40 years
Commander's Flying Experience:	451 hours (of which 159 were on type) Last 90 days - 9 hours Last 28 days - 7 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

Approximately 15 minutes after taking off from Cambridge airport for a local flight, the occupants of the aircraft became aware of a strong smell of fuel. An immediate turn-back to the airfield was made, the passenger door was unlatched to aid ventilation and all electrical selections were avoided. When the aircraft arrived overhead the airfield, the fuel cock was turned off and a glide approach was made to grass Runway 23.

Following an uneventful landing, the aircraft was allowed to run onto the southern taxiway in order to clear the runway. As the occupants vacated the aircraft, the pilot noted a flash in the passenger footwell together with a flame travelling along the doped fabric of the right hand side of the fuselage. The aircraft quickly became engulfed by fire and had been damaged beyond repair by the time the Airfield Fire Service arrived.

The pilot's assessment of the event was that a fuel leak had occurred in the supply lines between the tanks in the wings and the fuel cock, leading to an accumulation of fuel on the floor of the cockpit. When forward motion had ceased, the fuel was able to drip onto the exhaust pipe beneath the passenger footwell, and be ignited by the hot carbon deposits commonly found on two-stroke systems. Unfortunately, the damage to the aircraft was too severe to identify the origin of the fuel leak. The pilot did however recollect that he had experienced a transient resistance to rudder pedal movement whilst taxiing the aircraft, and considered the possibility that a rudder pedal had fouled a fuel line which may have become unclipped from an adjacent part of the tubular steel fuselage framework.

This incident was similar to another which occurred, in January 1998, to an Avid Aerobat, G-BUDH, and which was reported in AAIB Bulletin 7/98. That aircraft also suffered a fire following a strong smell of fuel in the cockpit, and a loose 'T-piece' connector in the fuel line was suspected.