

SERIOUS INCIDENT

Aircraft Type and Registration:	Zenair CH 701SP, G-IMME
No & Type of Engines:	1 Rotax 912 ULS piston engine
Year of Manufacture:	2003 (serial no: PFA 187-14080)
Date & Time (UTC):	8 September 2013 at 1015 hrs
Location:	Overhead Pentland Firth, Scotland
Type of Flight:	Private
Persons on Board:	Crew - 1 Passengers - 1
Injuries:	Crew - None Passengers - None
Nature of Damage:	Damage to pilot's door and tailplane
Commander's Licence:	National Private Pilot's Licence
Commander's Age:	66 years
Commander's Flying Experience:	2,688 hours (of which 64 were on type) Last 90 days - 49 hours Last 28 days - 11 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

The aircraft was performing "gentle manoeuvres" at an airspeed of about 100 mph when the pilot noted that both cabin doors were bulging into the slipstream and then, almost instantly, the left door fractured and departed the airframe. The left tailplane skin was later found to be damaged.

The pilot is of the opinion that the doors were not rigid enough to resist the aerodynamic forces created by their bubble shape. They were of a later type of door which the manufacturer refers to as 'bubble' doors because they comprise a single transparent panel with a bulge moulded into it; this allows more elbow room and better visibility compared with the standard flat doors. Two types of bubble doors were marketed: the first used the original tubular door frame with the transparency screwed to it and the second used a composite frame. G-IMME was fitted with the later standard during build and had flown some 9 hours since then.

The Light Aircraft Association regards the bubble doors as an unapproved modification and will be writing to CH 701 owners to point this out. They may also highlight the situation in their magazine *Light Aviation*.