Aviation Safety Investigation Report 199002033

Avions Pierre R2160

06 December 1990

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NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at www.atsb.gov.au.

This accident was not formally investigated by the Bureau.

Occurrence Number: 199002033 Occurrence Type: Accident

Location: 5 km NW Camden NSW

Date: 06 December 1990 **Time:** 1007

Highest Injury Level: Nil

Injuries:

	Fatal	Serious	Minor	None
Crew	0	0	1	1
Ground	0	0	0	-
Passenger	0	0	0	1
Total	0	0	0	2

Aircraft Details: Avions Pierre R2160

Registration: VH-SXY
Serial Number: C196
Operation Type: Private
Damage Level: Substantial
Departure Point: Bankstown I

Departure Point: Bankstown NSW

Departure Time: 950

Destination: Bankstown NSW

Approved for Release: 5th December 1991

Circumstances:

The occasion of the flight was a photographic shoot to illustrate a pilot's perspective while spinning an aircraft. The pilot had recently completed a course on aerobatics and spinning. At 6000 feet he commenced the entry to a left spin, using the technique taught by the school. After about one and three quarter turns, when the spin appeared 'unusual', he decided to recover, releasing the control column and applying full right rudder. He then noticed the airspeed increasing at an alarming rate but was unable to stop the rotation. The airspeed rapidly increased through maximum permitted airspeed to 180/190 kts, at which point the pilot centralised the controls. The aircraft stopped rotating and the pilot recovered from the dive at about 700 ft agl. He then noticed severe overstress wrinkling on both wings and elected to carry out an immediate power-off emergency landing. The aircraft suffered further damage when it struck a small embankment during the landing roll. The wing damage indicated a rolling overstress consistent with a high speed spiral dive to the right. After analysis and experimentation, the pilot's chief flying instructor was able to reproduce the symptoms and concluded that control relaxation at a critical time in the spin entry resulted in a reversal of direction from a 'left spin' to a very steep and rapid spiral dive to the right. Due to the nature of the rotation, the pilot had not been able to identify the direction.