No: 5/87 **Ref: 1c**

Aircraft type and registration:	Piper PA-20-135 Pacer G-BFAO	
No & Type of engines:	1 Lycoming 0-290-D2 piston engine	
Year of Manufacture:	1952	
Date and time (UTC):	6 January 1987 at 1515 hrs	
Location:	Farm strip near Walliswood, Surrey	
Type of flight:	Private (pleasure)	
Persons on board:	Crew — 1	Passengers — None
Injuries:	Crew — None	Passengers — N/A
Nature of damage:	Slight damage to fin, rudder, propeller and cowls. Damage to wing struts	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	44 years	
Commander's Total Flying Experience:	670 hours (of which 115 were on type)	
Information Source:	Aircraft Accident Report Form submitted by the pilot and subsequent telephone conversation with the pilot and CAA.	

The pilot was returning to land at the farm strip where he based his aircraft and, because of the 20 to 30 knot winds, decided to approach at an airspeed 10 knots faster than usual and directly into wind. The aircraft touched down gently but, during the ground roll, the pilot became aware of greater than normal retardation followed by a severe retardation and lifting of the tail. The pilot had already pulled the control yoke fully back, but the aircraft tipped forward and rotated around the spinner to land on its back.

A later examination showed that the main wheels had sunk into the very wet ground. Prior to flight the pilot had inspected the strip which, although rather soft, had appeared suitable for use, particularly as the aircraft was fitted with balloon tyres (the Pacer is a tail-wheel type).

The pilot's full harness performed properly and he was uninjured. However, he was then totally unable to release the harness in his inverted position, and became alarmed as fuel began to seep into the cabin. He was able to turn off the master switch and magnetos but, despite using both hands, could not move the harness release catch. By loosening the shoulder straps and taking part of his weight on his head, he was eventually able to reduce the pressure of the lap strap sufficiently to release the catch and escape.

The pilot considers that, had he been injured, he probably would not have been able to escape unassisted. He intends to change the existing harness to one of a different type: the existing harness is marked "Indiana Mills and Mfg. Inc. Model IMM 11040-8". This model of harness is not on the list of equipment currently approved by the Civil Aviation Authority (CAA), and the

relevant BCAR specification has requirements for release while inverted. Normal practice, however, has been for UK certification of US-manufactured light aircraft to be based on the Federal Aviation Administration (FAA) certification.