

Piper PA-28-180 Cherokee, G-AXOR

AAIB Bulletin No: 8/2003	Ref: EW/G2003/05/24	Category: 1.3
Aircraft Type and Registration:	Piper PA-28-180 Cherokee, G-AXOR	
No & Type of Engines:	1 Lycoming 0-360-A4A piston engine	
Year of Manufacture:	1969	
Date & Time (UTC):	31 May 2003 at 1030 hrs	
Location:	Cromer (Northrepps) Airfield, Norfolk	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 3
Injuries:	Crew - 1 (Minor)	Passengers - 1 (Serious) 2 (Minor)
Nature of Damage:	Landing gear detached, structure buckled and propeller dented	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	51 years	
Commander's Flying Experience:	343 hours (of which 261 were on type) Last 90 days - 7 hours Last 28 days - 3 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

The aircraft was on a cross-country flight from Redhill, Surrey to Cromer (Northrepps) Airfield in Norfolk. It was a warm day with a light south-easterly wind and the pilot decided to land on Runway 18. Having overflowed the airfield on a northerly heading, the pilot carried out a right descending turn on to final approach. The pilot lost sight of the airfield briefly during the turn and when he regained visual contact he realised he was slightly high. He immediately carried out the pre-landing checks, lowered full flap in stages and selected carburettor heat to ON. As the aircraft achieved the correct approach angle, the pilot applied about 1,700 RPM and reduced speed to the recommended approach speed of 70 mph.

In the final stages of the approach the aircraft became slightly high on the normal glide path and appeared to be overshooting the ideal landing area. Very shortly thereafter the aircraft started to sink rapidly and despite the application of full power, the pilot was unable to prevent the aircraft from striking the bank of an elevated road running across the approach path just short of the runway threshold. The impact caused all three landing gears to detach and the aircraft slid on its belly for a short distance before coming to a halt on the left side of the runway. The pilot and two of his passengers vacated the aircraft through the single exit door with minor injuries, but the passenger seated in the right rear seat had injured her back and was removed by the emergency services. The

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two front seat occupants were wearing lap and shoulder harnesses but the two rear seat passengers had only lap belts.

In his report, the pilot considered the likely cause of the accident to be a downdraft generated by differential heating of the tarmac road and the field short of the runway. Other factors may have been the relatively high gross weight of the aircraft, the need to land close to the runway threshold for landing performance reasons and the fact that carburettor heat was selected to ON. The pilot also thought that the injuries to the rear seat passengers might have been reduced if shoulder harnesses had been fitted and used.