No: 9/90 **Ref: EW/G90/07/26** **Category: 1c**

Aircraft Type and Registration:	Piper PA-28-180, G-ATUL
No & Type of Engines:	1 Lycoming O-360-A3A piston engine
Year of Manufacture:	1966
Date and Time (UTC):	30 July 1990 at 0845 hrs
Location:	Isle of Jura, Scotland
Type of Flight:	Private
Persons on Board:	Crew - 1 Passengers - 3
Injuries:	Crew - None Passengers - None
Nature of Damage:	Damage to nose-wheel strut, propeller and left wingtip; engine posibly shock-loaded.
Commander's Licence:	Basic Commercial Pilot's Licence (A) restricted with Instructor rating
Commander's Age:	69 years
Commander's Total Flying Experience:	1,911 hours (of which 135 were on type)
Information Source:	Aircraft Accident Report Form submitted by the pilot

The pilot intended to fly from the grass airstrip at Jura to Sleap in Cheshire. The weather was clear and the surface wind was estimated to be 160°/10 kt gusting to 20 kt. The pilot paced the available runway length and found it to be 1,375 feet in the take-off direction of 09. The pilot stated that he estimated his fuel load to have been 200 lb and the weight of the occupants to have been 615 lb, giving a weight on take-off of 2,217 lb, 183 lb below the maximum authorised weight for take-off.

The take-off run using two stages of flap appeared to be normal, with the aircraft leaving the ground approximately two-thirds of the way along the runway. Soon after lift-off the aircraft appeared to sink and the wheels passed through tall bracken, which caused the aircraft to lose flying speed and sink on to a sandbank. On impact with the ground the aircraft nosed over momentarily before coming to rest in an upright position. The occupants were uninjured and vacated the aircraft without difficulty.

The Owner's Handbook for the aircraft showed that at maximum take-off weight, for a take-off from a smooth hard surface in zero wind using 25 deg flap, the ground roll was expected to be 900 feet and the take-off run required (to a height of 50 feet) was 1,700 feet.

After the accident the pilot stated that he thought the accident might have been caused by an increase in cross-wind at the take-off end of the runway together with a possible reduction of ground effect caused by a gully which ran below the take-off flight path.