

Piper PA-22-150, G-ARAX

AAIB Bulletin No: 10/99 **Ref:** EW/G99/08/06 **Category:** 1.3

Aircraft Type and Registration: Piper PA-22-150, G-ARAX

No & Type of Engines: 1 Lycoming O-320-A2B piston engine

Year of Manufacture: 1956

Date & Time (UTC): 1 August 1999 at 1107 hrs

Location: 5 miles west of Old Sarum Airfield, Wiltshire

Type of Flight: Private

Persons on Board: Crew - 1 - Passengers - 1

Injuries: Crew - None - Passengers - None

Nature of Damage: Shattered windscreen

Commander's Licence: Private Pilot's Licence with IMC and Night Ratings

Commander's Age: 52 years

Commander's Flying Experience: 900 hours (of which 700 were on type)
Last 90 days - 50 hours
Last 28 days - 10 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

The aircraft, whilst making a local flight from Old Sarum Airfield, was descending in a tight turn from 3,000 feet. As the pilot levelled the aircraft at 2,500 feet in turbulence, the windscreen suddenly shattered. He immediately reduced airspeed by pulling back on the control yoke and was assisted in this by his passenger in an instinctive reaction. The pilot then returned to the airfield and landed without further incident. He thought that the windscreen may have failed due to unusual stress on the airframe as a result of turning tightly whilst in turbulence.

The maintenance organisation responsible for the aircraft established that no permanent deformation of the airframe had occurred and, by re-constituting the windscreen fragments, that it had not been struck by any object. During the aircraft's last Annual Inspection, a small crack in the windscreen had been 'stop- drilled' and repaired in accordance with accepted practice, however it was also reportedly established that the windscreen failure had not originated from this repair.