# Piper PA-22-160, G-ARSX

**AAIB Bulletin No: 9/2001** **Ref: EW/G2001/07/07** **Category: 1.1**

| | |
|---|---|
| **Aircraft Type and Registration:** | Piper PA-22-160, G-ARSX |
| **No & Type of Engines:** | 1 Lycoming O-320-B2B piston engine |
| **Year of Manufacture:** | 1956 |
| **Date & Time (UTC):** | 6 July 2001 at 1130 hrs |
| **Location:** | 5 miles south of Portadown, Northern Ireland |
| **Type of Flight:** | Ferry Flight |
| **Persons on Board:** | Crew - 1 - Passengers - None |
| **Injuries:** | Crew - Minor - Passengers - N/A |
| **Nature of Damage:** | Damaged beyond economic repair |
| **Commander's Licence:** | Private Pilots Licence |
| **Commander's Age:** | 37 years |
| **Commander's Flying Experience:** | 132 hours (of which 90 were on type) |
| | Last 90 days - 6 hours |
| | Last 28 days - 1 hour |
| **Information Source:** | Aircraft Accident Report Form submitted by the pilot |

The pilot had planned to conduct a ferry flight from Tayto Castle to Newtownards. He carried out the external and internal pre-flight actions, engine oil was replenished and the fuel drains checked. After engine start temperatures and pressures, magnetos checks and carburettor heat control were satisfactory. The aircraft was taxied with the left fuel tank selected and the engine run-up checks, prior to departure, were carried out with the right tank selected.

The pilot took off into wind on a heading of 330° (surface wind 330°/10 kt) with the intention of turning right onto a track of 060°. In the climbing turn at 200 feet agl with approximately 10° of bank applied the engine stopped. The pilot immediately checked the magnetos, fuel selector and throttle. Realising that there was not enough time to attempt a re-start he continued turning right towards a clear area and carried out a forced landing with second stage flap selected. The pilot, who was wearing a 4 point harness, vacated the aircraft with minor injuries to his back.

The pilot's notes for the aircraft describe the left fuel tank as the main tank and the right tank as the auxiliary. It states that, when the contents of the auxiliary (right) tank are less than a third it must be used in level flight only. The total right tank capacity is 72 litres and its contents at the time of the accident were 30 litres thus an adequate fuel supply should have been assured. Post accident examination of the fuel system however revealed evidence of fuel in the gascolator, a fully serviceable carburettor but with no evidence of fuel within the carburettor bowl. The aircraft had been parked in the open for a month prior to this flight and subject to a wide range of temperatures and weather conditions. The pilot, in consultation with the maintenance engineers, assessed that the cause of the power loss was probably due to a vapour lock within the fuel feed from the auxiliary (right) tank.