No: 6/92

Ref: EW/G92/03/05

Category: 1c

Aircraft Type and Registration:

Piper PA-28R-200 Cherokee Arrow II, G-TOBE

No & Type of Engines:

1 Lycoming IO-360-C1C piston engine

Year of Manufacture:

1974

Date & Time (UTC):

6 March 1992 at 1605 hrs

Location:

Near Headcorn, Kent

Type of Flight:

Private

Persons on Board:

Crew - 2

Passengers - None

Injuries:

Crew - None

Passengers - N/A

Nature of Damage:

Aircraft beyond economic repair

Commander's Licence:

Private Pilot's Licence with IMC rating

Commander's Age:

44 years

Commander's Flying Experience: 1,721 hours (of which 683 were on type)

Information Source:

Aircraft Accident Report Form submitted by the pilot

and enquiries by AAIB

The aircraft had been refuelled at Headcorn for a 12 miles flight to Sedlescombe. A rolling take-off was carried out after the power check and the aircraft was climbed out to 1000 feet QNH on track for Sedlescombe. When approximately four miles southwest of Headcorn the pilot felt that the engine was not running as usual and, as he was carrying a passenger, immediately changed heading to return to Headcorn. The other fuel tank was selected and the electric pump selected, without any improvement. The engine continued to lose power, and as the pilot realised that he was not going to reach Headcorn he carried out an emergency landing. The aircraft did not have sufficient height to glide into the pilot's nominated field and landed in an adjoining field where it rolled through a five-bar gate.

The power reduction had been smooth and was not accompanied by rough running or the smell of fuel in the cockpit. The aircraft suffered extensive damage, which included the displacement of the engine and supporting structure by several inches.

The pilot switched off the magnetoes and the electrics and evacuated the aircraft with his passenger. A portable telephone was used to summon help from Headcorn and a driver arrived with an aircraft engineer. The engine cowlings were removed revealing that fuel was pouring from the main flexible

fuel pipe between the injector pump and the distributor unit; the fuel cock was therefore turned off and the aircraft battery removed. The pilot and his passenger were returned to Sedlescombe and the driver returned to the aircraft where the loose flexible fuel pipe was examined by several people, who variously described the fuel pipe union as being from 'finger tight' to 'five flats loose'.

The aircraft had completed an annual inspection $2^{1}/_{2}$ hours prior to the accident, during which all the flexible fuel pipes in the engine compartment had been changed.

The engine is to be examined in detail and possibly test run, if any further defects are discovered which could have contributed to the power loss they will be reported in a later AAIB Bulletin.