No: 3/90

Ref: EW/G89/12/01

Category: 1c

Aircraft Type

and Registration:

Piper PA-34-200-T, G-MAIR

No & Type of Engines:

2 Continental Motors Corp piston engines, TSI0-360 KBCEB, LTSI0-

360 EB

Year of Manufacture:

1979

Date and Time (UTC):

3 December 1989 at 1838 hrs

Location:

Bristol Airport

Type of Flight:

Training

Persons on Board:

Crew - 4

Passengers - None

Injuries:

Crew - None

Passengers - N/A

Nature of Damage:

Both engines and propellers

Commander's Licence:

Private Pilot's Licence with Instrument, Night and Full Instructor

Ratings

Commander's Age:

37 years

Commander's Total

Flying Experience:

4,100 hours (of which 250 were on type)

Information Source:

Aircraft Accident Report Form submitted by the pilot and subsequent

examination by AAIB

After a training flight, which included several simulated single engine approaches from 4,000ft through cloud, the landing gear did not extend after a 'normal' selection. Two reselections failed to cure the problem so the aircraft was slowed to 85 kts and the landing gear was lowered using the 'emergency' system. Three greens were observed by all the occupants of the aircraft and the landing gear 'unsafe' light went out. After landing and a 50 metre ground roll the nose landing gear and the right main landing gear retracted.

The temperature recorded at Lulsgate at the time of the accident was 2°C.

A comprehensive engineering investigation failed to reveal the cause of the malfunction. The nose landing gear geometric lock was dimensionally satisfactory and no excessive wear or stiffness was found. A small amount of play was found in the top bush of the downlock link assembly, but this was not considered significant. The electric pump brushes and the up-solenoid were changed because of wear and intermittent operation, but no connection could be established between these faults and the landing gear collapse.