No: 2/83   Ref: EW/G83/01/02

Aircraft: Piper PA31 Navajo G-BEZL

Year of Manufacture: 1977

Date and time (GMT):   5 January 1983 at 1545 hrs

Location: Leavesden Airport

Type of flight: Private (Business)

Persons on Board: Crew - 1   Passengers - 4

Injuries: Crew - Nil   Passengers - Nil

Nature of damage: Damage to nose, nosegear doors and two
                             pitot heads

Commander's Licence: Commercial Pilot's Licence

Commander's Age: 53 years

Commander's total   9630 hours (of which 1119 hours were
flying experience: on type)

After take-off from Bristol Lulsgate, the undercarriage failed to retract
correctly, with the left main undercarriage still indicating down and locked,
and the red light also illuminated. The latter is an indication that one
or more undercarriage legs are in an unlocked condition and/or both inboard
undercarriage doors are not completely closed. The pilot re-selected under-
carriage down to no avail and next tried the hydraulic hand-pump. He
succeeded in locking-down the right main undercarriage but subsequently
experienced a loss in pressure from the hand-pump before the nose under-
carriage had locked-down. He was able to confirm the partially extended
status of the nose undercarriage in his nacelle-mounted 'mirror'.

The pilot decided to continue to his intended destination, Leavesden, where
he made a radar assisted approach to Runway 24, feathering both engines on
late finals and switching magneto and fuel selections to 'off' before touch-
down on the main undercarriage. The pilot kept the nose undercarriage off
the runway for most of the ground-roll, assisted by the 18-25 kt wind down
the runway, before the nose finally made contact and the aircraft stopped
at the runway intersection. The occupants left the aircraft via the starboard
emergency window.

Subsequent inspection showed the 'down-line' hydraulic pipe for the nose
undercarriage had developed a 1 in. long split in its inner steel-braided
pipe at the back-union end. This had resulted in a loss in system
hydraulic pressure and fluid.