No: 4/87 Ref: 1c

Aircraft type

and registration: Piper PA23-250 G-WSFT

No & Type of engines: 2 Lycoming 10-250-C piston engines

Year of Manufacture: 1977

Date and time (UTC): 12 January 1987 at 1635 hrs

Location: Hurn Airport, Bournemouth

Type of flight: Training

**Persons on board**: Crew — 4 (incl 2 supernumerary) Passengers — None

Injuries: Crew — None Passengers — N/A

Nature of damage: Nose skin, nosewheel doors, aerials damaged and nose frame

structure twisted

Commander's Licence: Airline Transport Pilot's Licence

Commander's Age: 48 years

Commander's Total

Flying Experience: 7780 hours (of which 236 were on type)

Information Source: Aircraft Accident Report Form submitted by the pilot and

telephone enquiries.

The aircraft was being flown on a Type Rating Test during which several landing gear selections were made. When downwind in the circuit the nosegear green light failed to illuminate following a "down" selection. The airfield tower personnel confirmed that the nosegear was not fully down and the normal procedures failed to rectify the situation. An approach was set up with the right engine stopped and propeller feathered with its blades horizontal. On touchdown the other engine was shut down and, fortuitously, stopped with the blades horizontal. The aircraft came to a halt almost on the runway centreline.

About two weeks before the accident the aircraft had suffered propeller damage when it was inadvertantly taxied off a taxiway into soft ground reportedly at walking pace. The propeller had been replaced, and run-out checks carried out on the engine, and the aircraft was test flown on the day of the accident. After the accident it was found that the noseleg was jammed in the nosegear bay with the wheel not centralised. When the gear was lowered it was found that the leg was displaced to one side by one or two degrees and further investigation showed that the aircraft's welded tube nose structure was twisted.

Another factor which is reported as being of possible significance is the low ambient temperature on the day of the accident (—16°C being seen during the accident flight). As the aircraft was flown in this temperature with the landing gear extended and under asymmetric power it is possible that the shimmy damper (friction type) froze with the nose steering offset and prevented centralisation during retraction.