AAIB Bulletin No: 12/93 Ref: EW/G93/09/18 Category: 1.3

Aircraft Type and Registration: Piper-PA-28R-200-2 Cherokee Arrow II, G-BAIH

No & Type of Engines: 1 Lycoming IO-360-C1C piston engine

Year of Manufacture: 1973

Date & Time (UTC): 28 September 1993 at 1814 hrs

**Location:** Bournemouth (Hurn) International Airport

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - Minor Passengers - N/A

Nature of Damage: Damage to propeller and underside of nose

Commander's Licence: Private Pilot's Licence with IMC and Night Ratings

Commander's Age: 42 years

**Commander's Flying Experience:** 800 hours (of which 437 were on type)

Last 90 days - 36 hours Last 28 days - 16 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

After an uneventful flight from Southend, the aircraft joined long finals for Runway 26 at Compton Abbas. On selecting gear down, only two green lights were obtained as the nose landing gear did not lock down. The landing gear was recycled, but the nose landing gear light still did not illuminate. A fly-past of the tower confirmed that the nose landing gear had not extended. The pilot decided to leave the circuit and carried out the emergency landing gear extension procedure. After four attempts, a further fly-by confirmed the nose landing gear was still not down.

The pilot elected to divert to Bournemouth where there were full emergency facilities. Compton Abbas contacted Bournemouth by telephone to advise of the situation, and the aircraft was cleared to land on runway 17. An approach with full flap was made and, on crossing the threshold, the engine was shut down. The aircraft was landed on the main gear only; after a short run the nose dropped and touched the runway, and the aircraft skidded to a halt. The emergency services were in readiness, but there was no fire. The pilot, who was uninjured, switched off the electrical system and vacated the cabin without difficulty.

The aircraft was removed for repair. Landing gear functions were conducted and the nose gear was found erratic in operation. The nose gear jack was stripped and examined, but no defect was found. The jack was rebuilt with new seals, and the gear re-assembled and lubricated. Following this work the gear was functioned and worked correctly; the aircraft was later released to service.