No: 12/90

Ref: EW/G90/09/05

Category: 1c

Aircraft Type

and Registration:

Piper PA-34-220T, G-DARA

No & Type of Engines:

2 Continental TSIO-360-KB1 piston engines

Year of Manufacture:

1983

Date and Time (UTC):

18 September 1990 at 1200 hrs

Location:

Oxford (Kidlington) Airport

Type of Flight:

Private

Persons on Board:

Crew - 1

Passengers - 1

Injuries:

Crew - None

Passengers - None

Nature of Damage:

Severe

Commander's Licence:

Private Pilot's Licence with IMC rating

Commander's Age:

52 years

Commander's Total

Flying Experience:

302 hours (of which 140 were on type)

Information Source:

Aircraft Accident Report Form submitted by the pilot and AAIB

examination of the aircraft.

The aircraft was flown from Sturgate Airfield to Oxford Airport where an approach was flown to Runway 27. This is a grass runway with a landing distance available of 884 metres, paralleled on its northern side by another grass runway, Relief Runway 27. Runway 27 was provided with a PAPI and with edge lighting which was illuminated at the time of the accident. The reported wind was approximately 10-20 kt from 240°M, the cloud base was 2000 feet agl and visibility was good.

The pilot reported that after a normal final approach with full flap, throttles fully retarded and propeller levers at fine pitch, the aircraft suddenly veered sharply right, when at about 15 feet over the runway threshold. Pressure on the left rudder pedal did not correct the deviation and the aircraft landed on its right mainwheel on the right edge of the runway while heading 40-50° right of the runway direction. The aircraft bounced from the right mainwheel to the left mainwheel and then onto the nosewheel. From the ATC tower, the aircraft had been seen to apparently pitch up when around 6 feet agl and then to drop to the ground.

Examination of the aircraft showed that both wings had distorted, with skins wrinkled and rivets sheared; the right wing nacelle had nodded several degrees nose down; the tip of each of the three

propeller blades on both engines had been bent backwards; and the nose landing gear support structure had been damaged. Inspection during aircraft disassembly by the repairers found that rudder cable tension was slightly low, consistent with the effects of the nose landing gear support structure damage. No evidence was found of a pre-accident defect that could have affected control of the aircraft.

Approximately 8-9 flying hours before the accident the aircraft had suffered damage to the nose landing gear and propeller tips when the pilot landed at Biarritz Airport, France. After rectification, the aircraft had been flown back to the UK and had subsequently made seven flights, mainly for test purposes. Apart from an auto-pilot problem, possibly related to an electrical defect, there were no reports of aircraft handling difficulties during these flights.