Reims Cessna F172H, G-AXBH

AAIB Bulletin No: 10/2000	Ref: EW/G2000/07/17 Category: 1.3
Aircraft Type and Registration:	Reims Cessna F172H, G-AXBH
No & Type of Engines:	1 Continental O-300-D piston engine
Year of Manufacture:	1969
Date & Time (UTC):	13 July 2000 at 1418 hrs
Location:	Popham Airfield, Hampshire
Type of Flight:	Private
Persons on Board:	Crew - 1- Passengers - 1
Injuries:	Crew - None - Passengers - None
Nature of Damage:	Collapsed nosewheel; propeller blades bent and engine shock loaded; damage to engine fairing
Commander's Licence:	Private Pilot's Licence
Commander's Age:	51 years
Commander's Flying Experience:	164 hours (of which 59 were on type)
	Last 90 days - 4 hours
	Last 28 days - 2 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot and telephone enquiries by the AAIB

The pilot was flying an approach to Runway 26 with the intention of making a 'touch-and-go' landing. He reported that he had selected 20° flap and established an approach speed of 75 mph. As required by the airfield procedures, he made an offset approach to avoid buildings at the eastern end of the airfield. Runway 26 has a grass surface and has a total length of 941 metres. The pilot assessed the surface wind as 330°/10 to 15 kt.

On landing, the aircraft made a "long low bounce followed by a series of low hops". As he landed, the pilot recalled that 'touch-and-goes' were prohibited on Runway 26 and decided to allow the aircraft to slow for a full stop landing. After each bounce, he considered that the aircraft landed on the main wheels. Towards the end of the landing roll, the pilot saw an exit to his right and applied brakes to turn off at this point. As he did so, he was aware of the nosewheel collapsing at an estimated aircraft speed of 20 to 30 mph.

The pilot considered that his initial error was in attempting a 'touch-and-go' when he should have been established for a full stop landing; insufficient flap was selected and resulted in a high speed on landing. Then, when the pilot saw the exit, he applied brakes at too high a speed; he subsequently commented that the runway surface was bumpy at the point of brake application and that this may have resulted in the nosewheel making a hard impact with the surface. However, he also commented that there had been previous reports of 'nosewheel shimmy' on this aircraft and that a failure of the nosewheel support assembly may have contributed to the accident. The repair agency subsequently reported that there was no obvious sign of any pre-existing defect with the nosewheel assembly.