**ACCIDENT**

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| **Aircraft Type and Registration:** | Europa XS, G-BYFG |
| **No & Type of Engines:** | 1 Jabiru Aircraft Pty 3300A piston engine |
| **Year of Manufacture:** | 2003 |
| **Date & Time (UTC):** | 13 February 2008 at 1500 hrs |
| **Location:** | Tatenhill Airfield, Staffordshire |
| **Type of Flight:** | Private |
| **Persons on Board:** | Crew - 1 Passengers - None |
| **Injuries:** | Crew - None Passengers - N/A |
| **Nature of Damage:** | Nose leg bent and wheel lost, propeller damage, engine shock-loaded and minor fibreglass damage |
| **Commander's Licence:** | National Private Pilot's Licence |
| **Commander's Age:** | 57 years |
| **Commander's Flying Experience:** | 110 hours (of which 3 were on type)<br>Last 90 days - 7 hours<br>Last 28 days - 4 hours |
| **Information Source:** | Aircraft Accident Report Form submitted by the pilot |

**Synopsis**

Whilst landing on his second solo flight in this type of aircraft, the pilot over-controlled the elevator and power settings and the nosewheel struck the ground and detached.

**History of the flight**

The pilot was one of a syndicate which owned the aircraft. He had trained on, and flown regularly, the Cessna 152 type and was converting to the Europa, which was fitted with a tricycle landing gear. He had logged some 1 hour 50 minutes dual, during which time he had accomplished about 16 landings and, after a successful solo circuit, he was pronounced proficient to fly the aircraft.

After a break for lunch, the aircraft was refuelled and the pilot decided to do further circuit practice. The first approach, at just under 70 kt IAS and with 30º flap, was steady and, upon flaring for touchdown, he reduced the throttle setting. This caused an excessive sink rate which he tried to correct by applying more back pressure on the control column. Although the rate of descent decreased, the aircraft adopted a very nose-high attitude and, when it touched down on the mainwheels, bounced into the air again. Applying power seemed to increase the nose-high attitude, which the pilot tried to correct by pushing the column forward, by his own admission too much, and the nosewheel struck the ground. He opened the throttle for a go-around and the aircraft became airborne but, as

he suspected, the nosewheel had detached although there were no indications that the propeller had contacted the ground. He completed the circuit after receiving confirmation that the nosewheel had indeed detached.

Touching down on the mainwheels at about 60 kt after a long, steady, final descent, the pilot held the nose high for as long as possible, before it dropped and the propeller contacted the runway. After completing the shutdown drill, he evacuated the aircraft normally and without injury. There was no fire or release of fuel or oil.

**Analysis**

The pilot supplied a thorough analysis of the factors which he considered led to the accident, summarised as follows:

Without the weight of the instructor, the aircraft was 'livelier' than he had expected, requiring gentler adjustments to stick and throttle positions.

The Europa was also much livelier than the Cessna 152, on which his previous flying experience had been gained, mostly with two people on board.

He had reduced the throttle setting too much as he started to flare, and this had a marked effect on sink rate, which he tried to counter with aft movement of the stick.

The combination of high nose attitude and excess speed, due to the early touchdown, launched the aircraft back into the air. The subsequent rapid application of power pitched the nose further upwards and he instinctively pushed forward on the stick to contain the situation.

The degree of forward stick application was again excessive and the nosewheel struck the ground.

He was probably fatigued by the intensive preceding period of dual instruction.

However, the pilot described the second landing as 'good' and commented that the circuit preceding it gave him time to prepare for the prospect of landing without a nosewheel.