ACCIDENT

Aircraft Type and Registration: Guimbal Cabri G2, G-UIMB

No & Type of Engines: 1 Lycoming O-360-J2A piston engine

Year of Manufacture: 2011

Date & Time (UTC): 26 October 2011 at 1251 hrs

Location: Cotswold Airport (Kemble), Gloucestershire

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 1

Injuries: Crew - None Passengers - None

Nature of Damage: Damage to skid bows, skid bow mountings and

empennage

Commander's Licence: Commercial Pilot's Licence

Commander's Age: 35 years

Commander's Flying Experience: 1,850 hours (of which 6 were on type)

Last 90 days - 129 hours Last 28 days - 48 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

Synopsis

During the approach into Kemble, just before touchdown, the pilot lost control of the helicopter in yaw. The engine then stopped, probably due to fuel sloshing due to the high yaw rate, and the helicopter landed heavily.

General

The Guimbal Cabri G2 is a two-seat helicopter manufactured in France. It features a 7-bladed fenestron in place of a conventional tail rotor and the 3-bladed main rotor rotates clockwise when viewed from above. It was awarded an EASA Type Certificate in December 2007 and G-UIMB was the first of the type to be registered in the UK, having been delivered in September 2011.

History of the flight

The helicopter was approaching to land at Cotswold Airport (Kemble) after a short flight to the north of the airfield. The pilot rejoined the circuit left-hand downwind for Runway 26; the wind was from 200° at 17 kt. He turned finals to the south of the runway and, as he passed the airfield boundary, turned the helicopter into wind. However, during the final stages as he levelled off at about 5 feet, the helicopter started to yaw gently to the left. The pilot continued applying right yaw pedal but, as it reached about 45-60° to the wind direction, the yaw rate increased dramatically and he pulled the collective to clear the ground. As anticipated, this increased the yaw rate and the helicopter turned through about three to six complete revolutions, during which time he checked

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that he was applying the correct pedal input. The engine then stopped. Still yawing left, he attempted to cushion the landing, but the helicopter landed heavily. The right skid collapsed completely and the front left skid bow also broke. The tailboom partially fractured just forward of the horizontal stabiliser but the pilot and passenger were uninjured and were able to vacate the helicopter normally.

The pilot stated that he believed that "slow application of right yaw pedal" was the cause of the accident. The manufacturer also believes that prolonged yawing can cause the engine to stop through fuel sloshing. It is understood that no pre-impact mechanical anomalies were found after inspection.

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