ACCIDENT

Aircraft Type and Registration:	Rans S6-ES Coyote II, G-CDGH
No & Type of Engines:	1 Rotax 912-UL piston engine
Year of Manufacture:	2005
Date & Time (UTC):	25 August 2007 at 1400 hrs
Location:	Broadmeadow Farm, 3 miles South of Hereford
Type of Flight:	Private
Persons on Board:	Crew - 2 Passengers - None
Injuries:	Crew - None Passengers - N/A
Nature of Damage:	Broken propeller, damaged wings, cracked fibreglass cowling, damaged landing gear. Extensive damage to two parked aircraft
Commander's Licence:	Private Pilot's Licence
Commander's Age:	69 years
Commander's Flying Experience:	435 hours (of which 354 were on type) Last 90 days - 3 hours Last 28 days - 1 hour
Information Source:	Aircraft Accident Report Form

Synopsis

A new syndicate member was making his second familiarisation flight in the aircraft, in the company of an experienced syndicate member. During takeoff, the aircraft drifted to the left of the runway and collided with two parked flex-wing microlight aircraft, causing substantial damage to all three aircraft. It was concluded by the more experienced pilot that the accident occurred because the aircraft took off with insufficient airspeed, combined with the full-throttle torque effect, which occurred in the opposite direction to that on aircraft previously flown by the new pilot. The handling pilot considered that there may have been an increase in the crosswind component that was not apparent prior to takeoff.

Background

Earlier in the day, the aircraft had departed its home airfield of Long Marston, near Stratford-upon-Avon and landed at Broadmeadow Farm, near Hereford. The aircraft was owned by a syndicate and the purpose of the flight was to familiarise a new syndicate member with the aircraft. In fact, this pilot had more hours on type than his companion, who was the syndicate trustee, but his previous experience had been with Rotax 582 engined Rans S6 aircraft, in which the propeller rotates in the opposite direction to that of the Rotax 912 engine, which powered the subject aircraft.

History of the flight

The new syndicate member occupied the right seat for the flight to Broadmeadow Farm. He carried out the takeoff, during which he noted that the aircraft had a marked tendency to swing to the left, this being the opposite direction to that of aircraft on which he had gained most of his experience. Once airborne, he handed control to the pilot-in charge in the left seat. The flight was uneventful and a landing was made on Runway 28, which had a slight downhill gradient, with a 10 mph wind from approximately 300°, thus giving a small crosswind component from the right.

For the return trip, approximately one and a half hours later, the new pilot occupied the left seat. The wind conditions were unchanged from those at the time of their landing, and the same runway was in use. During the takeoff roll, the pilot in the right seat reiterated to the new pilot of the need for "full throttle and plenty of right rudder". The nosewheel lifted at approximately 35 mph and the aircraft became airborne at 45 mph, but started to drift to the left. The right seat pilot called for the stick to be moved forward to increase airspeed and, shortly afterwards, took control. The aircraft then contacted the ground with all three wheels and veered sharply to the left, subsequently colliding with two flex-wing microlight aircraft that were parked, unattended, beyond the left side of the runway. All three aircraft sustained substantial damage but no one was injured.

In his analysis of the accident, the experienced syndicate member concluded that the aircraft took off with insufficient airspeed on rotation, which, in combination with a slight crosswind and full-throttle torque effect, caused the aircraft to drift to the left. Application of forward stick to regain adequate flying speed did not become effective in time to prevent the collision with the parked aircraft. After the accident, the handling pilot considered that there may have been an increase in the crosswind component that was not apparent prior to the takeoff.

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