

ACCIDENT

Aircraft Type and Registration:	Rans S6-ESD XL Coyote II, G-MZCA	
No & Type of Engines:	1 Rotax 503-2V piston engine	
Year of Manufacture:	1996 (Serial no: PFA 204-12997)	
Date & Time (UTC):	24 August 2012 at 1334 hrs	
Location:	Private airstrip 13 nm south-south-east of Norwich	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Damage to propeller, engine cowling, nose undercarriage leg, wing struts and leading edges. Possible engine shock-loading	
Commander's Licence:	National Private Pilot's Licence	
Commander's Age:	52 years	
Commander's Flying Experience:	164 hours (of which 114 were on type) Last 90 days - 19 hours Last 28 days - 10 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

The aircraft became low and slow on final approach to a grass airstrip. A go-around was initiated but the aircraft appeared to stall and rolled to the right. The aircraft recovered quickly from the stall, but the manoeuvre left it heading towards a small tree which it subsequently struck.

History of the flight

The purpose of the flight was for the pilot's passenger (a qualified pilot with about 1,300 flying hours) to obtain flight data in support of a proposed modification application. Specifically, the intention was to obtain stall performance data and to calibrate the airspeed indicator. It was the passenger's first experience on type.

The first part of the flight was flown by the pilot/owner while his passenger, who occupied the right hand seat, observed and took notes. The passenger then carried out some general handling practice to gain familiarity with the type before returning to the airstrip for a landing. The passenger flew the rejoin under the pilot's supervision, and it had been agreed that the passenger would also carry out the landing. The grass airstrip was 620 m long and 25 m wide, and orientated 01/19. Weather conditions were good and Runway 19 was to be used for landing.

The pilot advised his passenger that the aircraft had a tendency to float during landing, and recommended

an approach speed of 50 to 60 mph. The passenger flew the approach at the higher speed initially, but the aircraft became low on approach. He applied power and reduced speed to about 50 mph, but with the aircraft's nose raised, the passenger lost sight of the airstrip. He applied more power, but still felt that the aircraft was undershooting so, at about 50 ft, he initiated a go-around, noticing a speed of 42 mph.

The aircraft pitched up and then rolled to the right. Recovery from the apparent stall occurred almost immediately and with minimal height loss, but the manoeuvre left the aircraft heading towards a small tree to the right of the runway threshold. There was insufficient room to steer around it and the aircraft's right wing root collided with the tree, about 10 ft above ground level. The aircraft came to rest at the base of the tree; both occupants were wearing full harnesses and were uninjured.

During the flight, a stall speed of 38 mph had been noted, with a tendency to drop a wing at the stall. The passenger had also noted a marked tendency for the

aircraft to pitch up on application of power, but had not allowed for this when he initiated the go-around. He considered that this, together with his late go-around decision, lack of experience on type and using the very beginning of the runway as his intended landing point, had contributed to the accident. The pilot observed that the aircraft, which had fixed flaps and modest engine power, required careful energy management for safe low speed flight. He felt the accident had highlighted the importance of adequate 'differences' training, particularly in approach techniques, which should be mastered at a safe altitude first.

Both the pilot and his passenger recognised that their relative experience levels had played a part in the accident. The pilot had deferred to some extent to his passenger's greater experience, and had been reassured by his competent aircraft handling beforehand, with the result that he did not intervene before the situation had become irrecoverable. The passenger recognised that he could have been more positive in establishing an environment in which the pilot felt more able and ready to intervene if necessary.