

AAIB Bulletin No: 9/93

Ref: EW/G93/06/24

Category: 1c

Aircraft Type and Registration: Rans S6-ESD Coyote II, G-MYHI

No & Type of Engines: 1 Rotax 503 piston engine

Year of Manufacture: 1992

Date & Time (UTC): 25 June 1993 at 1400 hrs

Location: Weston Zoyland airfield, Somerset

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - Minor Passengers - N/A

Nature of Damage: Damage to landing gear, propeller, engine cowling and exhaust

Commander's Licence: Private Pilot's Licence

Commander's Age: 69 years

Commander's Flying Experience: 79 hours (of which 7 were on type)
Last 90 days - 6 hours
Last 28 days - 2 hours

Information Source: Aircraft Accident Report Form submitted by the pilot, an engine report submitted by the UK distributor and subsequent AAIB enquiries

An approach was flown to Runway 16; the surface wind was southerly at less than 5 kt. The pilot was not satisfied with the approach speed, which was higher than ideal, and decided to go-around. Full throttle was applied but the engine did not respond and a forced landing was made, in a field of corn, to the south of the airfield. The pilot was wearing a lap and diagonal harness and escaped with only minor injuries.

The Rotax engine was sent to the UK distributor for examination. A shock load test was carried out and no damage due to propeller impact was found. The only anomaly found during the detailed examination of the engine and its accessories was that the spark plugs indicated that the mixture had been rich immediately prior to the failure; in this condition, the engine may not have responded cleanly to the application of full throttle. This could have been caused by the engine being operated at a low

power setting for a significant time prior to the go-around; other possible causes were identified in the report on the engine examination. These were:

1. Leakage from the primer system into the inlet manifold.
2. Excessive vibration while operating the engine at a low power setting, due to hard engine anti-vibration mounts; this could cause the carburettor to flood.
3. An over-rich carburettor air screw setting.
4. The idling speed set too low.

It was recommended that the engine should be reinstalled and a ground test carried out to check the primer system, adjust the carburettor and observe the amount of vibration present at low power settings.