AAIB Bulletin No: 12/93

Ref: EW/G93/10/24

Category: 1.3

Aircraft Type and Registration:

Rans S6-116, G-BUWK

No & Type of Engines:

1 Rotax 582 piston engine

Year of Manufacture:

1993

Date & Time (UTC):

25 October 1993 at 1140 hrs

Location:

2 miles north east of Scaling Dam Reservoir,

North Yorkshire

Type of Flight:

Private

Persons on Board:

Crew - 1

Passengers - None

Injuries:

Crew - None

Passengers - N/A

Nature of Damage:

Extensive

Commander's Licence:

Private Pilot's Licence

Commander's Age:

38 years

Commander's Flying Experience:

83 hours (of which 10 were on type)

Last 90 days - 13 hours Last 28 days - 11 hours

Information Source:

Aircraft Accident Report Form submitted by the pilot,

telephone inquiries to repair agency

Approximately 1 hour into a local flight from Bagby to a farm strip at Egton, near Whitby, the pilot noticed a drop in engine RPM and changed fuel tanks in an effort to restore engine power. However, the engine subsequently stopped. The altitude at this time was 1,500 feet on the QNH, and the pilot made several attempts to restart the engine. On each attempt, the engine started and ran for about 10 seconds before stopping. After the third unsuccessful attempt, the pilot abandoned further efforts to restart and selected a field for a forced landing.

The aircraft overshot the intended field and touched down in an adjoining field, which had a significant downslope. At the bottom of this field, the nosewheel sank into soft ground and the aircraft nosed over, coming to rest semi-inverted with its fuselage resting against a small tree. The pilot, who was uninjured, managed to extricate himself from the aircraft via the left side door and walked to a public telephone to summon help. The pilot subsequently commented that the forced landing was made difficult by his unfamiliarity with the 'dead stick' glide characteristics of his aircraft.

The aircraft was subsequently recovered and the cause of the engine failure identified as a partial seizure caused by lack of oil. The 2-stroke Rotax 582 engine fitted to this particular aircraft ran on straight gasoline and was lubricated by means of an oil injection system, supplied by a separate oil tank, instead of the more usual pre-mix (fuel/oil) 2-stroke fuel. This oil tank should be filled before each flight and there is a notice to this effect, adjacent to the tank, warning pilots of this requirement. The pilot states that on this occasion, when checking the oil tank prior to the accident flight, he misinterpreted the sight gauge and, as a result, added insufficient fuel.