Europa, G-BVGF

AAIB Bulletin No: 11/99 Ref: EW/G99/08/14 Category: 1.3

Aircraft Type and Registration: Europa, G-BVGF

No & Type of Engines: 1 Rotax 912-UL piston engine

Year of Manufacture: 1996

Date & Time (UTC): 14 August 1999 at 1614 hrs

Location: Brunton Airfield, Northumberland

Type of Flight: Private

Persons on Board: Crew - 1 - Passengers - 1

Injuries: Crew - Minor - Passengers - None

Nature of Damage: Severe damage to cockpit area, wings, and tailplane plus cracks

in fuselage and damaged propeller blade

Commander's Licence: Private Pilot's Licence

Commander's Age: 59 years

Commander's Flying

Experience:

463 hours (of which 206 were on type)

Last 90 days - 35 hours

Last 28 days - 9 hours

Information Source: Aircraft Accident Report Form submitted by the pilot plus

telephone enquiries

Brunton aerodrome has three runways which intersect forming a triangle near the centre of the airfield. The runways are fenced on each side to maximise the land area available for agriculture and the central triangle has trees which are about 30 feet high. The weather late in the afternoon was showers with scattered towering cumulus base 2,000 feet and a wind from the west of 15 kt.

The pilot had already made three successful flights that day when he lined up on Runway 26 for departure with the intention of carrying out circuit flying practice. At the time there was a large rain shower passing a mile or two to the north of the aerodrome but its presence appeared to the pilot to be having no affect on his intended circuit flying. Initially the take off proceeded normally until at about 20 feet agl when the aircraft was blown sideways to the left of the runway by a strong gust of wind; this placed the aircraft on a collision course with trees in the central triangle. The pilot assessed that he had insufficient climb performance to clear the trees so he decided to land back on Runway 26. He succeeded in making an 'S turn' to align the aircraft over the runway but on

touchdown just before the intersection with Runway 02/20 the aircraft bounced and swung to the left. He could not correct the swing in time to prevent the aircraft crossing the width of Runway 02/20, crashing through the fence on the far side and entering the trees near the apex of the triangle, about 20 metres displaced from the left hand edge of Runway 26. The pilot attributed the accident to unexpected air turbulence which he thought was probably related to the heavy shower passing nearby. Despite the severe damage to the cockpit area, he and his colleague were restrained by their four-point harnesses and escaped major injury, although the pilot was taken to hospital for treatment to a puncture wound to his chest.

After the accident one of the rudder actuator cables was found to be excessively worn and broken. Had this cable broken before the aircraft crashed through the fence it would have prevented the application of left rudder. Consequently cable failure seems an unlikely explanation for the pilot's handling difficulties.