Europa, G-BVLV, 25 May 1996

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Aircraft Type and Registration: Europa, G-BVLV

No & Type of Engines: 1 Rotax 912 piston engine

Year of Manufacture: 1996

Date & Time (UTC): 25 May 1996 at 1430 hrs

Location: Runway 28, Leicester Aerodrome

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 1

Injuries: Crew - None Passengers - None

Nature of Damage: Propeller, tailwheel and adjacent fuselagearea, port wing outrigger mount

Commander's Licence: Private Pilot's Licence

Commander's Age: 50 years

Commander's Flying Experience: 355 hours (of which 20 wereon type)

Last 90 days - 21 hours

Last 28 days - 19 hours

Information Source: Aircraft Accident Report Form submittedby the pilot, telephone enquiries made of pilot and aerodrome operators

The aircraft type is equipped with a large retractable mainwheelon the centreline, a steerable tailwheel coupled to the rudderpedals and outrigger legs well outboard on the wings.

The pilot reported that he entered Runway 28 and received a radioreport of the wind as 280 degrees/10 kt. The wind recordedat about that time at the field was 280 degrees 10 degrees,10 kt gusting 20. An aftercast provided by the Met-Officefor that time and location indicates 260 degrees/10 kt. It was also reported that at about that time a student pilot wassent on a first solo flight which was completed successfully.

The pilot of G-BVLV reported that he lined up on the centre-line,applied full power and maintained the centre-line using into-windaileron (believing that there was some wind component from theleft) and slight aft control input to keep the tailwheel on theground. He had no difficulty initially in

keeping the aircraftstraight. Soon after he raised the tailwheel, however, the aircraftsuddenly swung to the left and although the pilot arrested theswing once it had progressed to about 30-40 degrees off the runwayheading he was not able to bring the aircraft back onto that headingbefore it ran onto the grass.

He believes that the effect of the bump as the aircraft left therunway projected the machine into the air and he then consideredit unwise to attempt to land on the grass as its surface was ofunknown quality.

As he was by now heading for a row of parked aircraft, but wastravelling into wind, he attempted to accelerate in the air, initiallykeeping the aircraft level a few feet above the ground, althoughsome witnesses believe the aircraft progressively gained height. After approximately 80 yards, the aircraft stalled, dropped theleft wing and struck the ground, coming to rest at approximately90 degrees to the runway heading.

At the time of the accident, the aircraft was equipped with theoriginal design of main landing-gear which consisted of the largediameter central wheel and tyre mounted on a swinging arm witha plastics material block acting as a springing medium. Experiencehas shown that, without the addition of damping, the characteristicsof this gear on rough surfaces or during all but the smoothestlandings are not very satisfactory. It is reported by the pilotthat during take-off from anything other than a smooth surface,the action of the undamped suspension tended to project the aircraftinto the air well below a safe flying speed. In addition thepilot reported that the aircraft normally dropped a wing in thestall.

A modification to add a damper has become available and was incorporatedon G-BVLV during the repair after this accident. The pilot reportsthat this greatly improves take off, landing and taxiing characteristics,enabling the aircraft to take off from rough surfaces withoutbecoming prematurely and involuntarily airborne. No defects werefound with the aircraft during the repair other than damage resultingfrom the ground impact.