Katana DV20, G-BWFW, 15 September 1996

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Aircraft Type and Registration:	Katana DV20, G-BWFW
No & Type of Engines:	1 Rotax 912-A3 piston engine
Year of Manufacture:	1995
Date & Time (UTC):	15 September 1996 at 0930 hrs
Location:	North of Sedburgh, Cumbria
Type of Flight:	Private
Persons on Board:	Crew - 1 - Passengers - 1
Injuries:	Crew - Minor - Passengers - None
Nature of Damage:	Aircraft destroyed
Commander's Licence:	Commercial Pilot's Licence
Commander's Age:	26 years
Commander's Flying Experience:	1,020 hours (of which 33 were on type) Last 90 days - 220 hours Last 28 days - 70 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot and telephone enquiries by AAIB

The aircraft departed from Kirkbride Airfield, near Carlisle,which is at an elevation of 38 feet; the weather at Kirkbridewas good and the surface wind was calm. The planned destinationwas Leeds/Bradford Airport, elevation 682 feet, where the forecastconditions were CAVOK (no low cloud and visibility greater than10 km) with a surface wind of 250º/8 kt. The planned route,across the Peak District, was through an area where the heightof many of the hills exceeds 2,000 feet. An en route weatherforecast was not obtained by the pilot.

During the flight the two occupants agreed that the passenger,who was a student pilot with 30 hours experience, would fly atminimum level before climbing away and then orienting herselfand pinpointing the aircraft's position using available landmarks. This had not been pre-briefed for this flight but the passengerhad previously experienced this type of operation.

With the passenger (student pilot) flying, the aircraft was turnedinto a valley, below the ridge line, whereupon the pilots wereconfronted with a peak about 2 nm away. The passenger was

immediatelytold to climb the aircraft but, once settled in the climb, thecommander noted that the vertical speed indicator was showinga rate of climb of only 100 feet per minute. He then took control,confirmed that full power and the correct RPM were set and adjustedthe speed to attain the best angle of climb. He judged that hedid not have the space or airspeed to manoeuvre the aircraft nordid he have the performance to clear the high ground ahead, hetherefore decided deliberately to stall the aircraft onto therising high ground. Both pilots were wearing full harness assembliesand evacuated via the normal exit having suffered only minor injuriesin the impact.

The commander believes that the aircraft was caught in a downdraft which exceeded its performance capabilities. He later estimatedthe strength of the wind at the crash site as 10 to 15 kt. Thecrew of the SAR helicopter, which was despatched to the accidentscene, estimated the surface wind as 10 to 20 kt and was surprisedat the strength of the down draft as the helicopter was manoeuvredfor landing at the crash site.