ACCIDENT

Aircraft Type and Registration: Mainair Blade, G-MZIW

No & type of Engines: 1 Rotax 462 piston engine

Year of Manufacture: 1997

Date & Time (UTC): 17 July 2006 at 1950 hrs

Location: Nightfield Lane, Balderstone, Lancashire

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 1

Injuries: Crew - 1 (Minor) Passengers - 1 (Serious)

Nature of Damage: Severe damage to left wing and trike unit

Commander's Licence: National Private Pilot's Licence

Commander's Age: 48 years

Commander's Flying Experience: 164 hours (of which 147 were on type)

Last 90 days - 6 hours Last 28 days - 1.75 hours

Information Source: Aircraft accident report form submitted by the pilot,

report by BMAA official and other AAIB enquiries

Synopsis

The pilot attempted a precautionary landing following an unexpected 'jolt' in flight. The aircraft struck trees and was badly damaged. The cause of the 'jolt' remains undetermined

History of the flight

The pilot reported that 10 minutes into the flight he experienced a 'jolt' through the airframe and controls. He suspected a failure of the rigging or some other component and reduced the engine rpm to tick-over. He initiated a gentle descent into a large field for a precautionary landing. He then became aware that he was too high for the selected field so he opted to continue to another field approximately 1/4 mile to the east.

When the pilot attempted to turn to the left onto his final approach he considered that the aircraft felt very heavy and reluctant to turn. He therefore increased the angle of bank and raised the airspeed. This resulted in a rapid loss of height and it became clear that the aircraft would not complete the turn. The pilot therefore levelled the wings, applied full power and pushed the control bar forward in an attempt to clear the trees. Unfortunately the aircraft hit the tree canopy and fell through into the middle of a coppice. He turned off the ignition switch as the aircraft impacted the tree canopy, or shortly afterwards. The aircraft came to rest in a dry stream bed where the pilot evacuated the machine before checking the passenger and assisting him to evacuate also.

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The aircraft was reported to have been moderately heavily loaded and the ambient temperature, at the time of the accident, was high.

Examination of the wreckage

The wrecked aircraft was examined at the scene by an official of the BMAA who found that all the rigging wires were intact and that no pre-impact failure of the airframe was evident. It was his opinion that the aircraft had been fully airworthy up to the time of impact with the trees. The machine was subsequently removed to the premises of its manufacturer where a detailed examination was carried out. Again all the rigging wires were found to be

intact and all the failures of other structural parts were examined and found to be consistent with the effects of impact.

Pilot's comments

The pilot considers that he did not allow fully for the weight of the aircraft and the conditions of the evening, resulting in his being too low and slow and without full control authority when the approach was attempted. The 'jolt' which occurred 10 minutes into the flight caused him great concern and precipitated his desire to carry out a precautionary landing. The cause of this 'jolt' could not be determined.

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