

No:9/91

Ref: EW/G91/07/12

Category: 3

Aircraft Type and Registration: Lightning DS/Puma, G-MBXB

No & Type of Engines: 1 Fuji-Robin EC-44-PM piston engine

Year of Manufacture: 1980

Date & Time (UTC): 6 July 1991 at 1715 hrs

Location: Graveley Hill Farm, Hertfordshire

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Nose and a main landing gear axle damaged

Commander's Licence: Private Pilot's Licence

Commander's Age: 40 years

Commander's Flying Experience: 83 hours (of which 16 were on type)

Information Source: Aircraft Accident Report Form submitted by the pilot

On the day of the accident a BMAA inspector was conducting an examination of the aircraft following a rebuild by the owner. After checking the aircraft the inspector, who was also a microlight pilot, carried out an engine run. Having flown the aircraft two years previously the inspector felt that the thrust being produced by the propeller was less than he expected. Utilising two assistants to observe the aircraft's acceleration and to mark a safe stopping point on the runway, the inspector carried out two accelerate/stop runs into wind. During these runs he noted that the engine was producing approximately 6000 rpm and that the aircraft started to lift from the ground after about 150 yds, which appeared to indicate to him that the performance was less than when he had previously flown this aircraft. The engine/propeller drive system was checked and approximately 2 hours later a third accelerate/stop run was carried out.

Because the inspector could only just reach the foot throttle, he used both the foot and hand throttle. With the engine producing about 6000 rpm and after 150 yds of a ground run, with the control bar in the neutral position, the aircraft started to become airborne. The inspector closed both throttles, but the engine continued to produce power. Having become airborne and having passed the observer marking the safe stopping point, the inspector attempted to turn off the engine ignition but found that he could not reach the ignition switch on the instrument panel. He then realised that the aircraft's climb rate was

not sufficient to clear obstacles that lay ahead and so he "stalled it" into an adjacent corn field which sloped uphill.

Subsequent examination by the inspector found that the throttles were stuck at about 3/4 open. However they 'sprung' to the closed position when the splitter box was opened. No evidence of a foul or foreign object was found and the throttle slide-tube lubricant appeared to be of the correct type. He concluded that although the correct size of propeller was fitted, the engine had not produced sufficient power.

On the day of the accident a BMAA inspector was conducting an examination of the aircraft following a report of the owner. After checking the aircraft the inspector, who was also a microflight pilot, concluded that the engine had stalled. Having flown the aircraft two years previously the inspector felt that the propeller was not the correct size. He noted that the propeller was less than he expected. Obtaining two assistants to observe the aircraft, a calculation was made of the stall speed. The inspector carried out two stall calculations into wind. During these runs he noted that the engine was producing approximately 4000 rpm and that the aircraft started to lift from the ground after about 150 yds, which appeared to indicate that the performance was less than when he had previously flown this aircraft. The engine/propeller drive system was checked and approximately 2 hours later a third stall calculation was carried out.

He then the inspector could only just reach the first throttle he used both the foot and hand throttles. The engine produced about 2000 rpm and after 150 yds of a ground run, with the control bar in the neutral position, the aircraft started to become airborne. The inspector closed both throttles, but the engine continued to produce power. Having had one airborne and having passed the observer marking the stall stopping point, the inspector attempted to turn off the engine (ignition) but found that he could not start the ignition with the instrument panel. He then realised that the aircraft's climb rate was