Piper PA-46-310P Malibu, N88PL

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Aircraft Type and Registration:	Piper PA-46-310P Malibu, N88PL
No & Type of Engines:	1 Continental TSIO-550-C1B piston engine
Year of Manufacture:	1985
Date & Time (UTC):	28 August 2000 at 1430 hrs
Location:	Grove Fields Farm, Warwickshire
Type of Flight:	Private
Persons on Board:	Crew - 1 - Passengers - 5
Injuries:	Crew - None - Passengers - None
Nature of Damage:	Landing gear and propeller damage
Commander's Licence:	Private Pilot's Licence with Instrument Rating
Commander's Age:	57 years
Commander's Flying Experience:	3,240 hours (of which 1,300 were on type) Last 90 days - 45 hours Last 28 days - 45 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot and results of engine test run

Two previous flights had been completed without incident, using the same take-off direction, when a third take off was initiated. On this third take off the pilot believed the weight of the aircraft was less than on the previous two departures; carrying a similar passenger load with no baggage and less fuel. The aircraft became airborne at the 'normal position' but the engine then lost power. The pilot landed the aircraft straight ahead and applied maximum braking but with power off it continued skidding on the grass. The aircraft went through the fence at the end of the runway and stopped relatively gently 35 metres into the next field.

The pilot thought that 'over-fuelling of the engine' might be a possible cause of the power loss, as the spark plugs and exhaust appeared particularly black and sooty.

The engine had been subject to a shock load inspection and was repaired in March 2000, following an earlier accident in August 1999 at Grove Fields Farm. (AAIB Bulletin No 10/99). The engine was re-assembled using new seals, gaskets, main and big end bearings and a new crankshaft was fitted. The exhaust studs were replaced in cylinders No 1, 2, 4 and 6. Following a normally

aspirated proof test run, carried out on a dynamometer, the engine was released for continuation of life at 126.5 hours.

The engine was removed and during a test bed run performed to specification. The aircraft is under repair and if any defects associated with the engine installation are identified they will be notified to the AAIB and reported in a subsequent AAIB Bulletin issue.