Jodel D112, G-BHFF

AAIB Bulletin No: 11/2001	Ref: EW/G2001/09/01	Category: 1.3
Aircraft Type and Registration:	Jodel D112, G-BHFF	
No & Type of Engines:	1 Continental Motors Corp A65-8F piston engine	
Year of Manufacture:	1955	
Date & Time (UTC):	1 September 2001 at 1639 hrs	
Location:	4nm north-west of Marlborough	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Damage to engine, left landing gear and left wing	
Commander's Licence:	Private Pilots Licence	
Commander's Age:	54 years	
Commander's Flying Experience:	512 hours (of which 152 were on type)	
	Last 90 days - 14 hours	
	Last 28 days - 3 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and enquires by the AAIB	

The pilot was making a VFR flight from White Waltham Airfield to a farm airstrip near Colerne when, just to the north of Marlborough, the engine began to run roughly. The pilot reported this to Lynham ATC, from whom he was receiving a Flight Information Service. Whilst considering his options, the engine vibration suddenly became so severe that the pilot had no option but to shut it down. He transmitted a MAYDAY call which was acknowledged by Lynham ATC with instructions to report again when he had safely force-landed. Having just overflown an open area of fields, and because there were only fields of standing crop ahead, the pilot elected to turn back and land on the open ground. However, as he approached his intended field he realised that he would have to manoeuvre in an unsafe manner to effect a landing and so he was forced to attempt a landing in another nearby area. On touchdown the left wing was low and the aircraft was drifting slightly to the right, which caused collapse of the left landing gear. After relaying a message that he had landed safely to Lynham ATC, via an overflying aircraft, the pilot and the other occupant vacated the aircraft; neither occupant was injured.

Later examination of the engine revealed that the valve head of one of the exhaust valves had detached, causing damage to that cylinder and piston. The engine Log Book showed that some three years (72 operating hours) prior to the accident all the cylinders had been removed by an Inspector of the Popular Flying Association, because of low compressions, and that a 'top end' overhaul had been carried out. This overhaul had included lapping of all of the valves and fitment of new piston rings. The engine had a total recorded time of some 1,080 hours at the time of the accident. Unfortunately, the broken valve had not been retained for metallurgical examination.