

Cessna 152, G-BNSV

AAIB Bulletin No: 6/97 Ref: EW/G97/03/19 Category: 1.3

Aircraft Type and Registration:	Cessna 152, G-BNSV
No & Type of Engines:	1 Lycoming O-235-L2C piston engine
Year of Manufacture:	1980
Date & Time (UTC):	22 March 1997 at 1510 hrs
Location:	Near Poslingford, Suffolk
Type of Flight:	Private
Persons on Board:	Crew - 1 - Passengers - 1
Injuries:	Crew - None - Passengers - None
Nature of Damage:	Crankshaft destroyed
Commander's Licence:	Private Pilot's Licence
Commander's Age:	39 years
Commander's Flying Experience:	56 hours (of which 49 were on type) Last 90 days - 4 hours Last 28 days - 2 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot and discussion with the CFI of the Flying Club

The aircraft had been airborne for 20 minutes and was at an altitude of 5,000 feet when the pilot noticed a slight change in engine tone which caused him to check throttle, mixture and carb heat. During these checks, which only took a second or two, the propeller stopped completely without any windmilling. All checks and indications of engine performance prior to the failure had been normal and the failure did not produce any smoke or noise.

A 'MAYDAY' call was made to Cambridge and the pilot prepared for an emergency landing following standard procedures. The area was mainly farmland, so the selection of a suitable field was relatively easy. The landing itself was made into a rolled wheatfield and was completed in a fully satisfactory manner without injury to the occupants or damage to the aircraft or property. The Police, Fire Service, Ambulance Service and an RAF helicopter attended the scene of the forced landing.

The CFI noted that the recently qualified pilot had performed a text book forced landing caused by a failure of the crankshaft across a web of the centre main journal, which remained intact. The engine had been overhauled to zero hours 2032 hours before the failure, and no information of the crankshaft's previous service was available. A search of the CAA's SDU database did not reveal any similar problems on Lycoming engines. A metallurgical examination of the failed crankshaft was not carried out because the lack of service history meant that no significant conclusions could be derived from any observations made.