

AAIB Bulletin No: 8/94 **Ref:** EW/G94/06/02 **Category:** 1.3

Aircraft Type and Registration: Cessna 152, G-BSYX

No & Type of Engines: 1 Lycoming O-235-L2C piston engine

Year of Manufacture: 1978

Date & Time (UTC): 5 June 1994 at 1245 hrs

Location: Ince Blundell, near Formby, Merseyside

Type of Flight: Private

Persons on Board: Crew - 2 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Damaged beyond economic repair

Commander's Licence: Private Pilot's Licence

Commander's Age: 44 years

Commander's Flying Experience: 2,298 hours (of which 73 were on type)
Last 90 days - 14 hours
Last 28 days - 3 hours

Information Source: Aircraft Accident Report Form submitted by the pilot and telephone enquiries by the AAIB

The pilot was on a C of A flight test accompanied by another pilot as an observer; the commander's primary experience was in weight shift microlight aircraft in which he had 2,200 hours. The weather was good with some scattered cumulus cloud and a surface wind of 270°/15 kt.

After a takeoff from Barton Airfield the flight had progressed uneventfully until, just before the test profile had been completed and at 5,000 feet amsl, the aircraft engine began to run roughly. The pilot selected carburettor heat for 20 to 30 seconds but this seemed to have no beneficial effect; however, after approximately 2 minutes the engine returned to normal. The pilot set course for a return to Barton but shortly afterwards the engine again began to run roughly and then picked up again. When this happened for a third time the pilot decided to carry out a precautionary landing and selected a suitable field into wind. He established a glide at a constant 1,500 to 1,600 RPM and considered the approach good until, after a long descent, he realised that he was too high. He increased his rate of descent and closed the throttle, but his speed increased and was too high as the aircraft crossed the threshold. At this stage the pilot acknowledges that he reverted to type and attempted to raise the nose by pushing on

the controls. When his initial input appeared to have the opposite effect to that required, the pilot again pushed forward and the aircraft hit the ground in a nose low attitude and rolled over. During these last manoeuvres the other pilot had tried unsuccessfully to counter the control inputs.

Subsequently, the pilot was unable to establish the cause of the rough running engine because of the considerable impact damage to the engine. He stated that the forced landing was unsuccessful because natural instinct took over in a stressful situation. He also acknowledged that, in retrospect, his decision not to put out an emergency call when committed to a forced landing was unwise.