

ACCIDENT

Aircraft Type and Registration:	Reims Cessna F152, G-IBRO	
No & Type of Engines:	1 Lycoming O-235-N2C piston engine	
Category:	1.3	
Year of Manufacture:	1985	
Date & Time (UTC):	3 March 2005 at 0905 hrs	
Location:	1 km north of Runway 04, Leicester Airport, Leicestershire	
Type of Flight:	Training	
Persons on Board:	Crew - 2	Passengers - None
Injuries:	Crew - 2 (Minor)	Passengers - N/A
Nature of Damage:	Damage to right main and nose landing gear, propeller, tail fin, elevator, wings, both forward door posts and engine cowling	
Commander's Licence:	Commercial Pilot's Licence	
Commander's Age:	64 years	
Commander's Flying Experience:	5,724 hours (of which 3,626 were on type) Last 90 days - 117 hours Last 28 days - 33 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and further enquiries by the AAIB	

The training flight was to commence with a demonstration, by the instructor, of the procedure for an engine failure after takeoff (EFATO). He had briefed that after closing the throttle he would carry out touch drills for the exercise rather than complete the actual selections, with the exception that he would operate the carburettor heat and the flaps. The student, who was sitting in the left seat, had been pilot flying (PF) for the takeoff and the instructor had taken control during the climb out. Before taking control the instructor advised ATC of the practice 'fan stop' and that he would call 'climbing away'. The demonstration then commenced when the aircraft was at about 700 ft above airfield level (aal).

The instructor closed the throttle, selected the carburettor heat to 'hot' and, with the aircraft descending at 65 kt IAS, carried out the touch drills, announcing each item out loud. He reported that he then selected full flap because the aircraft was slightly high for an approach to the field which he had nominated. The speed was reduced to 55 kt IAS; the instructor selected the carburettor heat to 'cold' and opened the throttle to commence a go-around, however the engine did not respond. The instructor operated the throttle gently twice more, without success, and checked the correct setting for the mixture control. He transmitted a MAYDAY call and carried out a forced landing into the ploughed field that had already been nominated, avoiding a set of telegraph wires in the

process. The aircraft bounced about 10 ft into the air, landed again on its nose wheel, flipped forwards and came to rest inverted.

Having checked that the student was alright, the instructor asked him to turn off the master switch and ignition switch, because he, the instructor, was unable to reach them from his position. The instructor turned off the electrics and the fuel cock. They then exited the aircraft through the doors, which they had opened prior to striking the ground, having sustained only minor injuries. The aircraft was extensively damaged but did not catch fire. The crew borrowed a mobile telephone from the driver of a car parked nearby and informed their flying club of the accident. The instructor later recalled that when he exited the aircraft he did not have to climb over the flaps, indicating that they had remained retracted and not travelled to the fully extended position, as selected.

During a subsequent discussion about the accident the student informed the instructor that he had switched the ignition switch to OFF during the touch drills. The instructor had not seen the student take that action but he believed that the master switch may also have been switched off at the same time, because the flaps had not travelled to the selected setting before the forced landing and his MAYDAY transmission had, apparently, not been heard by Air Traffic Control. The student's recollection was that he had not turned the master switch off until they were on the ground, hanging upside down in their seats.

Two days before the accident the instructor had given the student the flying club handouts for the exercises which

they were due to complete during the flight and had briefly run through what they would entail. He reported that immediately prior to the flight he gave the student a comprehensive briefing on EFATOs and Go Arouns as well as reviewing the handouts for these exercises. He also explained that after the student had completed the takeoff he would take control and demonstrate an EFATO, before handing control back to the student, who would fly a normal circuit until late on the approach when the instructor would again take control and demonstrate a 'Go Around'. The instructor stated that he fully briefed the EFATO emergency procedure, clearly indicating that these would be touch drills, so that the student would subsequently get practice at touching the appropriate controls. The exceptions were that the carburettor heat and flaps would be operated.

The student, who had completed just under eight hours of instruction before the flight, commented that he had found it hard to fly the aircraft and listen to the instructor at the same time and that he had not been clear what to do during the exercise. He had not understood that the exercise would only involve touch drills, which was why he had turned off the Ignition Switch during the EFATO. The instructor stated that it was his intention for the student to carry out the EFATO exercise and associated touch drills after the go around at the end of the first circuit.

It seems that after the briefing for the exercise, which the instructor described as comprehensive, the student, who was at a very early stage of his flying training, was still unclear about the intended procedures during the flight.