

Aircraft type and registration:	Cessna 150 G-ATKD (Light single engined fixed wing aircraft)	
Year of Manufacture:	1966	
Date and time (GMT):	21 April 1984 at 0815 hrs.	
Location:	About 5 nm north of Cranfield Aerodrome, Bedfordshire	
Type of flight:	Training	
Persons on board:	Crew — 2	Passengers — Nil
Injuries:	Crew — 2 (minor)	Passengers — N/A
Nature of damage:	Aircraft destroyed	
Commander's Licence:	Commercial Pilot's Licence with Instructor's rating	
Commander's Age:	38 years	
Commander's total flying experience:	Reported to be 2500 hours (of which 350 hours were on type)	
Information Source:	Accident Report Pro-forma by the pilot and other witnesses	

The aircraft was on a dual instruction flight from Cranfield Aerodrome. After completing some upper air work, the commander reports that he decided to require the student pilot to carry out a practice engine failure and forced landing procedure. The student pilot selected what initially appeared to be a suitable field, and commenced to fly an approach for a simulated forced landing. At a height of about 1500 feet above ground level, the student pilot informed the instructor that he was changing the approach to a more suitable field, approximately 10 degrees to the right, as he considered that the available landing distance was larger and the approach had fewer obstructions. The instructor did not disagree with this decision. At a height of about 800 feet above ground level the instructor took control of the aircraft. He continued the approach and, as the aircraft crossed the boundary of the field, the flaps were selected. The approach was continued down to an estimated height of about 30 feet above ground level, when the overshoot was initiated and full power selected. The instructor then turned the aircraft to the left through some 100 degrees which positioned it on a course towards some woods that had previously been parallel to the direction of flight. When it became apparent that the aircraft would not clear the woodland area, the instructor again operated the flap selector switch, and the aircraft settled abruptly into the trees. The two pilots escaped with minor cuts and bruises; however the aircraft was destroyed. Subsequent examination revealed that the aircraft, at impact, had been under power and that full flap had been deployed.

The wing flaps on the Cessna 150 are electrically operated. They are controlled by a switch on the lower centre of the instrument panel, and flap position is mechanically indicated by a pointer housed in the left front doorpost. In order to extend the flaps, the switch should be depressed and manually held in the DOWN selection until the desired degree of extension is reached. When flap retraction is required the switch should be moved to the UP selection, and should remain in that position, without manual assistance, due to an over centre mechanism within the switch. However in G-AKTD, the over centre mechanism within the flap selector switch operated in the reverse sense. Thus when the flap selector switch was selected to DOWN, it was mechanically held in that position. In order to raise the flaps it was necessary to select the switch to the UP position, and manually hold it in that position until flap retraction was complete; an operation that should normally take about 6 seconds. It follows that, on the accident flight, when the overshoot was initiated, if the flap selector switch was selected to the UP position and immediately released, then flap retraction could not have taken place.

There was no warning of this condition placarded in the aircraft cockpit.