



MINISTRY OF DEFENCE

Military Aircraft Accident Summary

MILITARY AIRCRAFT ACCIDENT SUMMARY

AIRCRAFT ACCIDENT TO ROYAL AIR FORCE

HAWK T1A XX334

Date: 30 September 1992

Parent Airfield: RAF Chivenor

Place of Accident: RAF Chivenor

Crew: One Weapons Instructor Pilot
One Student Weapons Instructor Pilot

Casualties: One Fatal
One Slight Injury

CIRCUMSTANCES

1. At an airfield with a single runway, an aircraft which suffers a failure of its only engine after take-off can, under certain circumstances, be manoeuvred to land on the reciprocal of the departure runway. This manoeuvre is called a "turnback" and Hawk pilots operating from such airfields regularly practise it. The student, who was undergoing an advanced course of instruction, was unfamiliar with this manoeuvre, so his instructor had been directed to demonstrate it to him.

2. Shortly after take-off, at 250 knots and 380 feet, the instructor, in the front seat, initiated the practice engine failure by setting the throttle to idle. He initially turned left whilst climbing to height. He reversed the turn to the right and at 1230 feet, looking over his shoulder, decided that he had sufficient height to make a successful approach. As he turned the aircraft towards the runway, although not ideally positioned, he still judged that he could complete the manoeuvre. Whilst still in the righthand turn, he selected undercarriage down and full flap for landing.

3. As he approached the runway's extended centre-line, he reversed his turn to the left to line up with the runway. At 160 feet and significantly slower than the recommended speed, the instructor realised that he would be unable to reach the runway so he selected full power and rolled to wings level. However, sensing that he would land short, he attempted to cushion the impact by pulling the stick fully back. Despite doing this, he

realised that the impact would be severe and ejected successfully. The rear-seat pilot, who had not been flying the aircraft at any time, did not eject. The aircraft struck the ground with wings level, 70 metres short of the runway threshold and caught fire. The fire crews reacted rapidly to the crash and rescued the rear-seat pilot from the smouldering wreckage. Although he was taken immediately to a local hospital by helicopter, he died 10 days later from the severe burns which he had sustained.

4. The RAF fire crews, who had made a number of brave attempts to penetrate the fire before they were able to rescue the unconscious pilot, were subsequently commended for their selfless determination.

CAUSE

5. The cause of the accident was that, having misjudged the "turnback" manoeuvre, the pilot did not take standard stall recovery action and did not overshoot in sufficient time. The reason why the rear-seat pilot did not eject is not known. It is possible that he did not realise until a very late stage that the manoeuvre was going wrong and thus had insufficient time to eject. He could not eject after impact because he had been rendered unconscious.

SUBSEQUENT ACTIONS

6. All Hawk pilots have been reminded of current training instructions and aircraft handling procedures. The RAF has reviewed its policy concerning the teaching of the "turnback" and concluded that the manoeuvre should be retained, not only because it could save a valuable aircraft, but because the alternative, in the event of an engine failure after take-off, would be abandonment which would place the local population and its property at risk. The Central Flying School of the RAF has been directed to review the techniques of flying the emergency "turnback" manoeuvre.

CLAIMS

7. There have been no claims made to date.