

MILITARY AIRCRAFT ACCIDENT SUMMARY
PUBLISHED BY THE MINISTRY OF DEFENCE
AIRCRAFT ACCIDENT TO ROYAL AIR FORCE
HARRIER GR7 ZD430

Date: 28 June 1993
Parent Airfield: RAF Laarbruch
Place of Accident: Heckington, Lincolnshire
Crew: One pilot
Casualties: One slight

CIRCUMSTANCES

1. Harrier GR7 ZD 430 was the No 2 of three aircraft flying at low level from RAF Leeming on return to its home base in Germany. As the aircraft passed five nautical miles to the west of RAF Coningsby the pilot of ZD430 felt a small thump on the right side of his aircraft. Suspecting a birdstrike, he checked the engine indicators and, as far as possible, airframe surfaces of his aircraft but they appeared normal. As the pilot of ZD430 initiated a diversion, the pilot of the No 3 aircraft in the formation informed him that fuel appeared to be leaking from his aircraft.

2. On visually re-checking his aircraft, the pilot of ZD430 noticed fluid leaking from the area of the right underwing stores and enveloping the whole of the wing with vapour. As the No 3 pilot closed in, he informed the No 2 of a flash fire on the right side of the aircraft. Simultaneously, ZD430's engine FIRE warning caption illuminated. The pilot retarded the throttle to idle, selected the engine's manual fuel system and checked for further signs of fire. He saw a glow reflected off an external underwing store and transmitted that he had a FIRE warning. He then noticed that a major fire had developed and spread to the inboard section of the wing. The FIRE warning persisted and, after 35 seconds, in accordance with instructions contained in the Harrier GR7 Flight Reference Cards, the pilot ejected successfully at an altitude of 3000 feet and a speed of 220 knots. ZD430 crashed into a field near Heckington and was destroyed. The pilot sustained slight injuries on ejection.

CAUSE

3. The accident was caused by external and internal fires resulting from a massive fuel leak which ignited on contact with the hot jet efflux nozzles and, inside the fuselage, on contact with the engine outer casing.

4. The most probable cause of the fuel leak was impact damage as a result of a birdstrike on the inboard leading edge of the right wing.

SUBSEQUENT ACTIONS

5. A review is being undertaken to examine the Harrier aircraft's resistance to birdstrike damage and to identify means of risk reduction. In addition, the design of the Harrier engine bay will be reviewed in the context of its resistance to propagation of fire.

CLAIMS

6. Claims settled to date total £11,497.