



# MINISTRY OF DEFENCE

## Military Aircraft Accident Summaries

MAAS 25/85

12 November 1985

### AIRCRAFT ACCIDENT TO ROYAL AIR FORCE

#### HARRIER T4 XW933

Date: 18 February 1985  
Parent Airfield: RAF Gutersloh, Germany  
Place of Accident: 12nm North-West of RAF Gutersloh  
Crew: Two Pilots  
Casualties: One Pilot Killed; One Major Injury.

#### CIRCUMSTANCES

1. On the morning of 18 February 1985 a Harrier T4 aircraft took off from RAF Gutersloh for a routine sortie with the front seat pilot flying the aircraft. The weather was good with bright sunshine, clear skies, slight haze and a visibility in excess of 10km. Once clear of the Gutersloh Air Traffic Zone the pilot took up a North-Westerly heading at 500 ft above ground level for the initial portion of the sortie. Shortly afterwards, he made a slight alteration of heading to avoid over-flying a built-up area and he then re-directed his attention towards look-out and route navigation. Having completed a visual scan from left to right encompassing the area 120° either side of the aircraft's nose, he was just returning his scan to the front when he saw a German Federal Marine F104 appear in his 10'o-clock at 50 yds range and slightly high; there had been no

warning call from the rear-seat pilot. Although a collision appeared unavoidable, the pilot bunted and rolled his aircraft to the right in an attempt to miss the other aircraft. Almost immediately there was a loud bang as the two aircraft collided, and the Harrier pilot instinctively ducked as the F104 passed above him. He then felt his aircraft move violently to the right and experienced a momentary loss of vision. Shortly afterwards his vision returned and he realised that the Harrier was in a steep descent, not responding to control inputs, and that a crash was inevitable. He shouted 'ejecting', and did so. He was subsequently rescued by helicopter and flown to hospital where he was found to have suffered compression fractures to 2 vertebrae. However, the rear-seat pilot was killed instantly in the collision.

2. The F104 was on a low level visual navigation flight. Approaching the area to the North West of Gutersloh, the pilot was consulting his map when he felt an impact and sensed a slight retardation. Suspecting that he might have suffered a birdstrike, he climbed and turned right onto a heading for RAF Gutersloh whilst declaring an emergency on their approach frequency. Some 20 to 30 seconds later the aircraft's fuel low level and fire warning lights illuminated and the pilot then saw that the aircraft's starboard wing had been damaged. He transmitted that his aircraft was on fire, and ejected successfully approximately 12km North of RAF Gutersloh. He was subsequently rescued by helicopter and taken to RAF Gutersloh where he was treated for slight injuries.

## CAUSE

3. A reconstruction of the collision geometry showed that the aircraft had approached one another along a line of constant bearing and from backgrounds against which their camouflage was at its most effective; neither aircraft was fitted with High Intensity Strobe Lights which would have helped make the aircraft more conspicuous. The importance which relative motion has on the ability of the human eye to detect conflicting objects is well documented and the absence of relative movement, as in this particular case, makes detection that much more difficult. It was concluded that the aforementioned factors combined to delay or prevent visual acquisition of the aircraft by the crews until it was too late to avoid a collision.

## SUBSEQUENT ACTION

4. A programme of fitting High Intensity Strobe Lights to RAF fast-jet aircraft which operate at low level is already underway.

## CLAIMS

5. Ten claims were received in respect of damage to land, trees and buildings. Eight have been settled for a total amount of 48.350DM (approximately £12,400). The other two claims are still under consideration.

Issued by: Public Relations  
Ministry of Defence  
Main Building  
Whitehall  
London SW1A 2HB  
01-218 3253/3254 (Royal Air  
Force)