

MINISTRY OF DEFENCE

Military Aircraft Accident Summaries

MILITARY AIRCRAFT ACCIDENT SUMMARY

AIRCRAFT ACCIDENT TO ROYAL AIR FORCE

JAGUAR XX754

Date:

13 November 1990

Parent Airfield:

RAF Coltishall

Place of Accident:

Saudia Arabia

Crew:

One

Casualties:

1 Fatal

CIRCUMSTANCES

1. The aircraft was engaged on a low-level training sortie as part of the in-theatre work up for Operation Granby. It was flying as the number 6 of a 6 aircraft tactical formation on the final leg of the route. The formation had become displaced through manoeuvring to evade a simulated fighter threat, so the main element of the formation, comprising numbers 1 - 4, began to overtake numbers 5 and 6 on the right hand side. When number 5 saw the formation passing on his right hand side he called his pair to turn left in order to effect a join up with the rest of the formation. As he was making this call he saw a fireball on his port side; the number 6 aircraft had struck a low ridge without the pilot attempting to eject.

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CAUSE

2. The cause of the accident was that the pilot inadvertently flew his aircraft into a ridge. The aircraft was destroyed. The major contributory factor to the accident was the featureless desert terrain which produced 3 distinct optical effects in the location of the accident. First, the ground on track before the ridge and to aircraft's right was a partially

scrub covered flat plain that had a generally well defined horizon. Secondly, the ridge could not easily be seen because of obscuration by a higher ridgeline beyond. Thirdly, the ridge was formed from featureless white sand which rose insignificantly to 87 feet above the level of the preceding plain; at operational heights and speeds the pilot could not have noticed the ridge until about 2 seconds before impact. The pilot would have had good cause to concentrate his lookout towards his formation leader who was slightly behind him on the right hand side and, therefore, he may have been deceived into assuming that the flat plain out to the right continued forward into his flightpath. These effects combined to produce a definite but insidious visual illusion which may have been compounded by the pilot being distracted by something inside the cockpit or by looking towards his formation leader at the vital moment when the ridge became visible

SUBSEQUENT ACTIONS

3. A Ground Proximity Warning System is under development and is being flown in a Jaguar aircraft. The results of the trial so far are promising.