



MINISTRY OF DEFENCE

Military Aircraft Accident Summaries

MOD
ADASTRAL LIBRARY

S/76787

623 746 656 7.08

GB MOD. P.2.

25.7.83

MAAS 21/83

12 July 1983

ACCIDENT TO ROYAL AIR FORCE PHANTOM FGR2 XT912

Date:	14 April 1982
Parent Airfield:	RAF Coningsby Lincolnshire
Place of Accident:	½ mile SE of Walcot, Lincs
Crew:	Two
Casualties:	Two major injuries.

Circumstances

1. On 14 April 1982 a student crew at the Phantom Operational Conversion Unit (OCU) were programmed to fly an air defence training sortie which consisted of low level route navigation to the operating area and practice interceptions. During the initial stages the sortie was to be led by the student pilot, flying in Phantom XT903 with an OCU staff navigator. The staff pilot, flying in Phantom XT912 with a student navigator, planned to assume the lead after the pair had taken off in close formation, and he briefed that he would move out into line abreast position during the first planned turn after getting airborne. The take-off was uneventful; the pair levelled at about 1,000 feet and began a gentle turn to the right to take up the outbound heading. As the turn was established, the staff pilot who was flying on the inside of the turn, dropped down and back to cross to the outside. Having passed below and behind the leading aircraft, he accelerated towards it to prevent his aircraft from dropping further back. During this manoeuvre, both he and his navigator became aware of the development of a dangerous convergence between the two aircraft. The navigator shouted a warning and the pilot moved the control column fully forward in an attempt to avoid a collision. This action had little effect and when a collision seemed inevitable the pilot applied full left aileron and left rudder in an attempt to prevent the aircraft's canopies taking the brunt of the impact. At the same time, he attempted to transmit a warning to the crew of XT903 but before he could do so the aircraft collided. The canopies

/...

of XT912 shattered and the aircraft rolled to the left and began to vibrate violently. The navigator ejected almost immediately, but the pilot, concerned that his canopy frame might hit the navigator, delayed his ejection. The aircraft was by now practically inverted, in an apparently steep descent; the vibration ceased but the aircraft did not respond to the pilot's controls and he also ejected. Both ejections were successful, although both pilot and navigator sustained spinal injuries. XT912 continued in a shallow inverted dive until it impacted in open farmland and disintegrated.

2. The crew in XT903 were aware of a thump and a lurch to the left, which they initially attributed to severe turbulence or to a serious birdstrike. The pilot transmitted that he was rolling out and pulling up before he initiated a gentle climb to 6,000 feet and headed for the coast. During the transit he reported the problem to Air Traffic Control (ATC). At this stage, the crew noticed a pall of smoke on the ground behind them, and being unable to make contact with the crew of XT912, they realised that a mid-air collision had occurred, and that XT912 had crashed, and that their own aircraft had sustained structural damage. A visual inspection by another Phantom confirmed that the right hand wing trailing edge and tailplane had been damaged, that the right underwing fuel tank was missing, and that the fuselage underside was buckled and holed in places. In view of the damage to the right wing, the crew opted to make left hand turns only and decided to jettison the left underwing fuel tank in order to attempt to restore symmetry. The jettisoning was carried out in a clear area over the sea, and after a low speed handling check to confirm the aircraft's controllability, the crew made an uneventful recovery to base and landed. The aircraft stopped on the runway with the aid of the airfield arrester gear and the overall damage it suffered was repairable. Last December, the pilot was awarded the Queens Commendation for valuable service in the air.

Cause

3. The reason for the convergence between the 2 aircraft could not be determined. The pilot of XT912, reported that his aircraft pitched nose up of its own accord. A detailed examination of the wreckage of XT912 failed to reveal evidence of any technical malfunction; however, some components of the longitudinal control system were not recovered and a failure in this system could have caused the symptom reported by the pilot. Furthermore, aircraft such as the Phantom which are equipped with an autostabilisation system, have been known to experience Uncommanded Control Movements (UCMs), some of which remain unexplained. Thus, despite an exhaustive investigation it was

not possible to conclude whether or not a technical failure had led to the collision. Specialist evidence revealed that it was highly unlikely that any aerodynamic flow effects from XT903 had significantly affected XT912. Although the possibility that pilot error had caused the collision was fully explored, this could not be firmly established.

Claims

4. Claims totalling £3731,25 have been received in respect of this accident, of which £1667,28 has so far been paid.

Issued by - Public Relations
Ministry of Defence
Main Building
Whitehall
London
SW1A 2HB
01-218-3253/3254