



MINISTRY OF DEFENCE

Military Aircraft Accident Summaries

4/91

27 March, 1991

AIRCRAFT ACCIDENT TO ROYAL AIR FORCE

WESSEX HC MK2 XV719

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| Date: | 27 April 1990 |
| Parent Airfield: | Royal Air Force Aldergrove |
| Place of Accident: | Bishops Court |
| Crew: | Three |
| Casualties: | Three with Major Injuries |

CIRCUMSTANCES

1. On the afternoon of 27 April 1990, the crew of Wessex HC Mk2 XV719 were authorised to carry out continuation training at Bishops Court airfield. A Training Captain occupied the left hand cockpit seat and another experienced helicopter pilot acted as Co-pilot and occupied the right hand seat.

2. On arrival at Bishops Court, the weather was good, and the pilots commenced their training with a series of handling exercises orientated along one of the runways. After the first

manoeuvre, the Co-pilot positioned the aircraft ready for the next exercise by executing a 'wing-over'. A wing-over is a convenient way of turning an aircraft onto a reciprocal heading in a relatively small area by using the vertical plane as well as the horizontal plane. It is carried out by initiating a climbing turn without applying power, and then allowing the aircraft to descend for the second half of the turn to re-establish its original height and speed.

3. The wing-over was completed successfully, and each of the pilots then alternately carried out further exercises along the runway until it was decided that the Co-pilot would carry out a final manoeuvre prior to returning to Royal Air Force Aldergrove. The Co-pilot elected to position the aircraft for this exercise, as he had done before, by flying a tear-drop shaped turn to the left followed by a gentle wing-over to the right.

4. The first part of the wing-over seemed to go as planned and, when the aircraft was half way round the turn, the Co-pilot increased the angle of bank from 30 degrees to 60 degrees. Shortly afterwards, he looked to his right to pick up more ground references and realised that the aircraft was much closer to the ground than he had expected. The Co-pilot tried to take corrective action and the Captain, who by this time had realised that all was not well, took control, attempted to level the aircraft and applied full collective pitch to cushion the impact he believed was inevitable.

5. The aircraft struck the ground very heavily in a tail down attitude. The tail section broke away and the aircraft became airborne again and travelled for a further 150 metres. The second impact was also very heavy and the aircraft came to rest, leaning 25 degrees to the right. There was no fire and, despite sustaining major injuries, the crew members were able to make the aircraft safe and vacate it without assistance.

CAUSE

6. The accident arose because the Co-pilot mishandled the wing-over manoeuvre, and the Captain did not take control of the aircraft in sufficient time to effect a safe recovery.

SUBSEQUENT ACTIONS

7. The aircraft has been assessed as beyond economic repair and will be scrapped.