



## MINISTRY OF DEFENCE

### Military Aircraft Accident Summary

---

Aircraft:	Chinook HC MK1 ZA672
Date of accident:	6 May 1988
Parent Airfield:	RAF Gutersloh, Germany
Place of accident:	Hannover International Airport
Crew:	1 Pilot, 1 Navigator, 2 Crewmen 1 Pilot Supernumery Crew
Casualties:	3 Fatal, 1 Major, 1 Minor

---

#### Circumstances

1. On 6 May 1988 Chinook ZA672 was flown from Gutersloh to Hannover to position for a static display at the International Airshow to be held the following day. After landing on the runway the crew obtained clearance to taxi. A "follow me" vehicle led them towards the airport main terminal and indicated that the aircraft was to be parked between a line of static military aircraft and 2 passenger aircraft access walkways, Piers 9 and 10. Some distance short of the final parking area, the guide vehicle broke away leaving the aircraft to proceed on its own. However, the crew were concerned about the size of the designated parking area and the aircraft was stopped.

2. A crewman descended from the Chinook and was advised that towing equipment was available. However, he was concerned that the aircraft's rear rotor was obstructing the busy main taxiway and, although aware that 2 RAF groundcrew were on hand to marshal the aircraft, he elected to marshal the Chinook forward himself. The 2 RAF marshallers on their own initiative, and without direction by the crewman, subsequently positioned themselves to check rotor clearances either side of the aircraft. As the Chinook moved

forward slowly and cautiously, the crewman moved to the left-hand side of the aircraft to assess the clearance with Pier 9 which he estimated to be 12-15 feet. This partially obstructed the view of the `safety-man' on that side. Believing that the crewman had taken over responsibility for monitoring blade clearance, the `safety-man' turned away and went to indicate the aircraft's final parking position. The crewman then returned to the front of the aircraft and proceeded to guide the aircraft past Pier 10, unaware that an optical illusion was leading him to believe that good separation existed between the rotors and the pier when, in fact no such clearance was available. The illusion was caused by the raised and horizontally protruding configuration of the piers which did not provide a clear vertical reference for judging rotor clearance unless the observer was in line with the end of the pier or was standing under the edge of the rotor disc.

3. When the Chinook was abeam Pier 10 its front rotor struck the underside of the walkway and the aircraft started to rock violently. It then reared up, nose first, until the fuselage was almost vertical before falling to the left and coming to rest on top of Pier 10. Debris was scattered over a wide area and some people in the vicinity were injured. Several nearby aircraft sustained damage. A major fire developed at the back end of the fuselage which spread rapidly throughout the whole length of the aircraft. Rescue services arrived within 2 minutes but the fire was not finally extinguished for some 35 minutes. Three of the crew were fatally injured and 1 sustained major injury. The aircraft was totally destroyed.

#### **Cause**

4. The rotor impact occurred because the Chinook was taxied into a very confined space without the crew being aware of the acute dangers they faced.

### **Subsequent Actions**

5. Disciplinary action has been taken against the captain of the aircraft. Studies are to be set in hand to examine the need for formal ground marshalling instruction for helicopter crewmen and to investigate all aspects of Chinook captaincy training. The possibility for introducing a minimum rotor clearance for ground taxiing helicopters is to be reviewed.

### **Claims for Compensation**

6. As a result of the accident a number of claims have been made which are presently being processed.