MINISTRY OF DEFENCE

Military Aircraft Accident Summaries

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AIRCRAFT ACCIDENT INVOLVING ROYAL AIR FORCE WHIRLWIND HAR 10 XN127

Date:	8 May 1980
Parent Airfield:	Royal Air Force Shawbury, Shrewsbury, Shropshire
Place of Accident:	Royal Air Force Shawbury
Crew:	One Pilot, three crewmen
Casualties:	Three crewmen slightly injured One crewman seriously injured

CIRCUMSTANCES

1. The crew of Whirlwind helicopter XN127 were to carry out a practise demonstration of winching techniques on their base airfield. To begin the practise the pilot approached the airfield in a descending turn. At about 80 knots and at a height of about 50 ft the aircraft suddenly and violently rolled to the left and pitched nose down. The pilot found that his control inputs could not correct the aircraft's flight path and he was unable to prevent the rotor blades striking the ground. The fuselage bounced, cartwheeled and broke up before coming to rest on its starboard side.

2. The pilot and two of the crewmen were only slightly hurt. They freed themselves quickly and removed the seriously injured crewman from the wreckage which was leaking large quantities of fuel. Rescue services arrived on the scene within 90 seconds and there was no fire. There were no civilian casualties and damage was confined to the aircraft - which was destroyed - and the surface of the airfield.

CAUSE

3. A joint in the linkage between the pilot's flying controls and one of the hydraulic jacks which control the movement of the main rotor blades was found to be disconnected. Tests on another aircraft on the ground showed that if this bolt was removed, the hydraulic jack would move to full travel producing the flight path experienced by the pilot. In such circumstances there was nothing he could have done to prevent the accident.

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4. The nut and bolt which should have secured the disconnected joint were found in the wreckage; the nut had screwed off the bolt over a period of time. This nut should have been locked in position by a split pin to prevent it working loose through vibration. Whilst the evidence is not conclusive, it is possible the pin was not fitted when the joint was last reconnected during servicing two months, and some 30 hours flying time, before the accident.

SUBSEQUENT ACTIONS

5. The vital importance of flying control connections being correctly made has been re-emphasised to servicing personnel throughout the Service.

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