MINISTRY OF DEFENCE

Military Aircraft Accident Summary

Aircraft:

Bulldog TMk1 XX712

Date of accident:

2 March 1988

Parent Airfield:

RAF Woodvale

Place of accident:

Southport beach

Crew:

One

Casualties:

1 Fatal

Circumstances

- 1. On 2 March 1988, a University Air Squadron (UAS) student pilot took-off from RAF Woodvale for a solo general handling sortie in the local flying area. The sortie was briefed and authorised to consist of advanced turning, aerobatics, stalling, practice forced landings and circuits. The weather was good with 7/8 cloud at 3500 ft, visibility of 20 kms and surface wind of 270/15 kts. After take-off the aircraft climbed to circuit height and cleared the airfield before descending towards the local seaside town. The aircraft flew across the town at very low level before entering a climbing turn. At the apex of the turn, at an estimated height of about 600 ft, the aircraft flicked, entered a spin and crashed onto the beach.
- 2. The aircraft struck the ground spinning left in a fairly level attitude with a high rate of descent but low forward speed. It was extensively damaged, the wing fuel tanks were ruptured and a fire started below the engine compartment. Within minutes witnesses arrived and removed the canopy but despite valiant efforts, they were unable to release the incapacitated pilot before the fire took hold. The fire brigade arrived shortly afterwards but the pilot had died.

Cause

- 3. The investigation established that the pilot disregarded his briefed sortie profile in order to make an unauthorised low pass over the local town. It was assessed that, during an extreme manoeuvre at low level, he mishandled the controls causing the aircraft to enter a spin from which he had insufficient height and time to recover.
- 4. Despite the seat harness being secure, the pilot was knocked unconscious during the crash. Due to the heavy impact, the seat back locking pins became disengaged allowing the seat back, to which the harness straps are attached, to rotate forward. Tragically, witnesses were unaware of the release operation of the harness and did not see the fire extinguisher from just outside the cockpit.

Subsequent Action

5. In order to improve seat security and crew compartment integrity during a crash, a reinforcing bar is being mounted behind the Bulldog seats, to which the seat backs can be attached. External locator markers for fire extinguishers are being applied to the Bulldog fuselage.