

**Aviation Safety Investigation Report
199802719**

**de Havilland Canada
Dash 8
McDonnell Douglas Corporation
Hornet**

13 July 1998

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NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at www.atsb.gov.au.

Occurrence Number: 199802719 **Occurrence Type:** Incident
Location: 2km NW Williamtown, Non Directional Beacon
State: NSW **Inv Category:** 4
Date: Monday 13 July 1998
Time: 1127 hours **Time Zone:** EST
Highest Injury Level: None

Aircraft Manufacturer: de Havilland Canada
Aircraft Model: DHC-8-102
Aircraft Registration: VH-TNG **Serial Number:** 041
Type of Operation: Air Transport Domestic Low Capacity Passenger Scheduled
Damage to Aircraft: Nil
Departure Point: Williamtown NSW
Departure Time: 1126 EST
Destination: Coolangatta Qld

Aircraft Manufacturer: McDonnell Douglas Corporation
Aircraft Model: F/A-18A
Aircraft Registration: **Serial Number:**
Type of Operation: Non-commercial Other (including military)
Damage to Aircraft: Nil
Departure Point: Williamtown NSW
Departure Time:
Destination: Williamtown NSW

Approved for Release: Friday, April 30, 1999

A DeHavilland Canada DHC-8 (Dash 8) had been cleared to takeoff on runway 30, with a request to make an early right turn to track to Point Lookout. The aircraft was rolling when the crew heard traffic information being issued by the aerodrome controller to an inbound formation of three McDonnell Douglas F-18A (Hornet) fighter aircraft. The Dash 8 crew also heard the controller advise the formation pilots that an early "pitch" (a 180 degree turn onto downwind) was available. The Dash 8 crew subsequently commenced a right turn at about 350 ft. At an altitude of about 700 ft they saw a Hornet to their right, passing from left to right about 300 ft higher than them. The Dash 8 crew arrested their rate of climb as the Hornet passed over them and was lost from view.

It was subsequently determined that the Hornet pilots had sighted the Dash 8 prior to entering the circuit at 1,500 ft. The first two aircraft were able to "pitch" early, passing behind the Dash 8. The third Hornet commenced to "pitch" just astern of the Dash 8 but overtook that aircraft during the turn. The Hornet pilot assessed that the Dash 8 was at approximately 700 ft, with a moderate rate of climb, and that adequate vertical separation would be maintained.

The aerodrome controller did not use separation assurance techniques to establish separation between the departing Dash 8 and the arriving fighters. As a result, separation became reliant on the judgement of the Hornet pilots, rather than by the use of air traffic control traffic conflict strategies.

