

**Aviation Safety Investigation Report
199602327**

**Cessna Aircraft Company
Citation
de Havilland Canada
Twin Otter**

25 July 1996

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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.

The Bureau did not conduct an on scene investigation of this occurrence. The information presented below was obtained from information supplied to the Bureau.

Occurrence Number: 199602327 **Occurrence Type:** Incident
Location: Sydney, Aerodrome
State: NSW **Inv Category:** 4
Date: Thursday 25 July 1996
Time: 1310 hours **Time Zone** EST
Highest Injury Level: None

Aircraft Manufacturer: de Havilland Canada
Aircraft Model: DHC-6 SERIES 320
Aircraft Registration: VH-KZQ **Serial Number:** 759
Type of Operation: Air Transport Domestic Low Capacity Passenger Scheduled
Damage to Aircraft: Nil
Departure Point: Aero Pelican, NSW
Departure Time:
Destination: Sydney NSW

Aircraft Manufacturer: Cessna Aircraft Company
Aircraft Model: 500
Aircraft Registration: VH-ICN **Serial Number:** 5000024
Type of Operation: Charter Passenger
Damage to Aircraft: Nil
Departure Point: Bankstown NSW
Departure Time:
Destination: Coolangatta QLD

Crew Details:

<u>Role</u>	<u>Class of Licence</u>	<u>Hours on</u>	
		<u>Type</u>	<u>Hours Total</u>
Pilot-In-Command	ATPL	850.0	5145

Approved for Release: Friday, October 11, 1996

A handwritten flight plan for a Cessna Citation to fly from Bankstown to Coolangatta was received by facsimile at the Melbourne Briefing Office at about 1040 EST. Personnel involved with the processing of the flight plan details interpreted the estimated time of departure as 2130 UTC (0730 EST) and presumed that the flight was planned for the following day. It was the intention of the crew of the Citation, however, to depart at 0230 UTC (1230 EST), about two hours after the flight plan had been submitted.

Details of the flight were forwarded to Bankstown Tower, and both Sydney and Brisbane Air Traffic Control centres. As the plan was considered to be for the following day, it was held at the Aviation Data System Operators' desks in the two centres, and flight progress strips were not issued to the appropriate sector controllers. Consequently, when the crew requested a clearance there was a delay of about 40 minutes to the planned departure as time was spent locating the plan and flight progress strips. Due to this delay, the crew elected to depart visually from Bankstown, via the lane of entry at 2,000 ft, outside controlled airspace.

The Bankstown tower coordinator controller notified Sydney Flight Service of the aircraft callsign, time of departure, tracking details and altitude. As the flight had been originally planned to remain within controlled airspace, this was the first time that the Flight Service officer was provided with information about the Citation. The officer annotated a flight progress strip for the aircraft with the details provided.

The crew of a Twin Otter reported departure from Aeropelican aerodrome and indicated that the aircraft was tracking 215 degrees M, on climb to 6,000 ft. The Flight Service officer did not pass mutual traffic information to the crews of the Citation or Twin Otter, as the nominated altitudes of the aircraft provided vertical separation and ensured the aircraft were not in conflict. When the Citation was north of the lane of entry, the pilot in command initiated a climb outside controlled airspace, anticipating that a clearance would become available which would allow the aircraft to continue climbing to the planned level of Flight Level 330. Recorded radio communications indicated that the Citation crew did not report climbing above 2,000 ft.

Shortly after the Twin Otter departed Aeropelican, the Flight Service officer handed over duty to another officer, a process which took about two minutes to complete. The new officer then became engaged in coordinating clearances into controlled airspace for the Citation and another aircraft, and responding to a number of calls from other aircraft in the officer's area of responsibility. The Citation was then instructed to contact Brisbane centre for a clearance. Just after the pilot transferred to the Brisbane frequency, the Flight Service officer was advised by the Sydney Departures radar controller that the aircraft had passed in close proximity to the Twin Otter, while outside controlled airspace. Neither crew were aware of the proximity of the other aircraft.

The Flight Service officer handing over was expecting the pilot of the Citation to receive a clearance with little delay. His impression was that the aircraft would soon enter controlled airspace and would therefore remain in his area of responsibility for only a short period. Consequently, he did not request additional tracking information on the Citation such as the next position and estimated time interval. As a result, the Flight Service officer assuming responsibility for the area had limited information to assist in resolving the conflict. The situation was further compounded by the high speed of the Citation, in comparison to other general aviation aircraft, and the rate of closure with the Twin Otter. As the new officer became distracted by other coordination tasks there was insufficient time to appreciate the lack of positional information on the flight progress strip. Without that information the officer was unable to establish if a traffic conflict was likely to occur.

The Flight Service officer may have been assisted in identifying a conflict if the departure report for the Citation, provided by the Bankstown tower coordinator controller, included details regarding the next reporting point and estimated time interval. Current procedures require Bankstown tower controllers to notify only those details which were provided in this occurrence.

The absence of a report by the crew of the Citation, advising that the aircraft had left 2,000 ft and was climbing, was an important cue not received by the Flight Service officer. Without this cue, the officer continued to assume that the Citation and Twin Otter were vertically separated and not in potential conflict. Consequently, traffic information was not provided to the crews of either aircraft.

Safety Action

The Bureau is researching safety issues highlighted during the course of this investigation concerning aspects of Air Traffic Control coordination. Any recommendations and responses will be published in the Bureau's Quarterly Safety Deficiency Report.

