Aviation Safety Investigation Report 199400827

Cessna Aircraft Company
Golden Eagle
British Aerospace Plc
Jetstream

06 April 1994

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Aviation Safety Investigation Report

199400827

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: 199400827 **Occurrence Type:** Incident
Location: 33km SW Williamtown
State: NSW **Inv Category:** 4
Date: Wednesday 06 April 1994
Time: 0923 hours **Time Zone** EST
Highest Injury Level: None

Aircraft Manufacturer: British Aerospace Plc
Aircraft Model: 3207
Aircraft Registration: VH-TQM **Serial Number:** 868
Type of Operation: Air Transport Domestic Low Capacity Passenger Scheduled
Damage to Aircraft: Nil
Departure Point: Williamtown NSW
Departure Time: 0916 EST
Destination: Sydney NSW

Aircraft Manufacturer: Cessna Aircraft Company
Aircraft Model: 421B
Aircraft Registration: VH-SQV **Serial Number:** 421BO665
Type of Operation: Non-commercial Business
Damage to Aircraft: Nil
Departure Point: Bankstown NSW
Departure Time: 0855 EST
Destination: Coffs Harbour NSW

Approved for Release: Monday, April 29, 1996

Factual Information

VH-SQV departed Bankstown for Coffs Harbour at 0855 EST initially via West Maitland then operating outside controlled airspace (OCTA). Contact was established with Flight Information Service Sector 4 (FIS4) and the pilot requested a clearance into controlled airspace (CTA) via the 015 radial of the Sydney VOR on climb to 9,000 ft.

The Flight Service Officer (FSO) co-ordinated the request with Williamtown air traffic control (ATC) which approved the intent but withheld an airways clearance until the aircraft was closer to its airspace. This intention was passed by FIS4 to the pilot of VH-SQV who changed heading to intercept the 015 radial and continued to climb beneath the CTA steps.

VH-TQM departed Williamtown for Sydney at 0916 and was cleared by Williamtown ATC to leave and re-enter CTA on climb to FL120. This clearance was given after co-ordination with Sydney ATC but, due to a combination of workload on other tasks and the short taxi distance to runway 30 at Williamtown, FIS4 did not receive the co-ordination until two minutes after VH-TQM had departed.

The co-ordination was completed at 0919 and Williamtown ATC informed FIS4 that it would hand the aircraft (VH-TQM) off early for traffic, but did not mention the callsign. This occurred immediately after discussion regarding VH-SQV with the FSO.

At 0919, following the above co-ordination, the FSO, having already given the pilot of VH-SQV traffic on VH-TQM, asked him to report VH-SQV's distance from Sydney. The pilot incorrectly advised his distance as 65 DME Sydney which is approximately 10 NM south of Williamtown and in the Williamtown ATC area of responsibility (it is likely that he transposed an indicated "56" to "65" DME). The FSO believed the aircraft was closer to Williamtown than it actually was and immediately instructed VH-SQV to contact Williamtown ATC for an airways clearance. This transfer occurred at 0920.

Also at 0920 the crew of VH-TQM contacted FIS4, as instructed by Williamtown ATC, and reported at 12 NM south of Williamtown. The FSO therefore calculated that, as VH-SQV had reported 10 NM south of Williamtown approximately 1 minute earlier, the two aircraft had passed and that Williamtown ATC must have separated the aircraft in their airspace before giving the crew of VH-TQM its frequency transfer. The pilot of VH-TQM then reported leaving 7,500 ft and the FSO instructed him to contact Sydney ATC as per normal operation.

At 0921 while making the transfer to Sydney ATC, the crew of VH-TQM observed the other aircraft and estimated it was approximately 500 m away and about 1,000 ft below them. This sighting occurred at a distance of 15 NM south of Williamtown.

The pilot of VH-SQV contacted Williamtown ATC at 0921 and gave a correct position of 60 DME Sydney. The aircraft was identified by Williamtown ATC in that position which was 3 NM south of its airspace. This identification was at 0921:50 seconds.

Radar analysis indicates that at 0921:31, the aircraft were 3 NM apart with 900 ft vertical separation.

Analysis

The FSO acted in accordance with the incorrect position report from the pilot of VH-SQV and, had that report been correct, the assumption made would have been reasonable. However, the pilot appears to have transposed the digits on the DME reading and reported 65 DME when he was 56 DME. He made a correct report of 60 DME to Williamtown later in the sequence of events.

For aircraft departing via non-controlled airspace, Williamtown ATC is required to make the co-ordination while the aircraft is taxiing. In this case the Tower controller had to complete another task before initiating this co-ordination. When he was able to do this the FSO was busy and unable to answer the intercom line for about 2 minutes. This resulted in VH-TQM departing before FIS4 received the information and little time remained for the passing of traffic information. The co-ordination was therefore rushed and did not specify the callsign or adequately clarify the traffic information requirements.

A further factor was the relatively short distance for VH-TQM to taxi in order to reach the threshold of runway 30 and then the short distance between takeoff and the Williamtown CTA boundary.

Significant Factors

1. The pilot of VH-SQV gave an incorrect DME distance from Sydney when responding to a position report request from FIS4.

2. The co-ordination for VH-TQM between Williamtown ATS and FIS4 was delayed due to workload and was not of a specific nature.

Safety Action

As a result of the investigation Williamtown ATC has issued a Local Order that, in specified cases, will ensure that co-ordination between Williamtown ATC and Sydney ATS is completed before an aircraft departs.

As a result of this and other occurrences (9400523) the Civil Aviation Authority and the RAAF were advised of the co-ordination deficiencies by Safety Advisory Notice SAN 940093. The SAN states, in part:

The Bureau of Air Safety Investigation suggests that the CAA and the RAAF conduct a joint review of their procedures with respect to:

(a) The co-ordination of traffic information concerning aircraft departing Williamtown CTR for possible climb or cruise OCTA.