

**Aviation Safety Investigation Report  
199601186**

**Piper Aircraft Corporation, Santa  
Maria Division  
Aerostar  
de Havilland Canada  
Dash 8**

**12 April 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](http://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.

<b>Occurrence Number:</b>	199601186	<b>Occurrence Type:</b>	Incident
<b>Location:</b>	4 km N Canberra, Aerodrome		
<b>State:</b>	ACT	<b>Inv Category:</b>	4
<b>Date:</b>	Friday 12 April 1996		
<b>Time:</b>	1845 hours	<b>Time Zone</b>	EST
<b>Highest Injury Level:</b>	None		

<b>Aircraft Manufacturer:</b>	de Havilland Canada		
<b>Aircraft Model:</b>	DHC-8-102		
<b>Aircraft Registration:</b>	VH-TQQ	<b>Serial Number:</b>	204
<b>Type of Operation:</b>	Air Transport Domestic Low Capacity Passenger Scheduled		
<b>Damage to Aircraft:</b>	Nil		
<b>Departure Point:</b>	Sydney NSW		
<b>Departure Time:</b>	1809 EST		
<b>Destination:</b>	Canberra ACT		

<b>Aircraft Manufacturer:</b>	Piper Aircraft Corporation, Santa Maria Division		
<b>Aircraft Model:</b>	600A		
<b>Aircraft Registration:</b>	VH-AVS	<b>Serial Number:</b>	60-0604-7961194
<b>Type of Operation:</b>	Miscellaneous Unknown		
<b>Damage to Aircraft:</b>			
<b>Departure Point:</b>	Canberra ACT		
<b>Departure Time:</b>	1845 EST		
<b>Destination:</b>	Bankstown NSW		

**Approved for Release:** Thursday, October 17, 1996

Runway 17 was nominated as the duty runway, with runway 12 available for departures only. Aircraft movements included VH-DUP, flying practice Instrument Landing System (ILS) approaches for runway 35, and VH-TQN and VH-KDV, both to depart from runway 35 for Sydney. Before these two aircraft departed the tower co-ordinator attempted to pass to the approach controller a departure clearance for VH-AVS for departure from runway 35.

The approach controller initially did not acknowledge acceptance of this clearance, instead advising he did not hold details for this aircraft. Shortly after the approach controller obtained the details and also got the clearance from the tower controller for AVS. This was for a runway 35 radar departure tracking via Shelleys at 5,000 ft. The approach controller then passed to the tower the departure instructions for AVS which included a 90 deg right turn after take off.

A short time later the approach controller passed the approach sequence to the tower. This was for TQQ and EKN, both inbound from Sydney for runway 17 and for HYD, inbound from Melbourne for an ILS approach for runway 35. The crew of TQQ were initially told by the approach controller to take up a heading of 260 degrees to position for the final leg of the runway 17 VOR/DME approach. Shortly after this they reported visual and were given a visual approach. TQQ was then flown on a south-westerly track, with the aim of intercepting the extended centreline of runway 17.

AVS then became airborne off runway 35 and when the pilot contacted the approach controller he was instructed to cancel the right turn and to maintain runway heading. The approach controller then realised a conflict existed between TQQ, which was closing on the extended centreline for runway 17 and AVS which was flying on the runway 35 extended centreline in the opposite direction. The controller assessed that TQQ would pass behind AVS, but with less than the required radar separation of three miles. The pilot of AVS reported sighting TQQ but no traffic information was passed to the crew of TQQ. The two aircraft passed with a lateral separation of about two miles and about 400 ft vertical separation. In a situation where the minimum lateral separation of three miles does not exist the minimum required vertical separation is 1000 ft.

The instructions for the use of runways at Canberra did not preclude the use of reciprocal runways. Following this incident amended instructions were issued. These included the following:

'The duty runway nominated on the Canberra ATIS, or the runway nominated in the runway agreement, are the only runways that shall be used for departing and arriving aircraft. The runway agreement shall not include reciprocal ends of the same runway. The only exception to the above shall be an aircraft with an operational requirement to use another runway.'

The existing instructions did not exclude the use of reciprocal runway directions. The traffic situation was significantly complicated by the use of reciprocal runway directions for both departing and arriving aircraft. The procedures adopted by the approach controller did not provide for separation assurance and thus a loss of separation occurred.

