

**Aviation Safety Investigation Report
199401566**

**Short Bros Pty Ltd
Shorts 360**

15 June 1994

Readers are advised that the Australian Transport Safety Bureau investigates for the sole purpose of enhancing transport safety. Consequently, Bureau reports are confined to matters of safety significance and may be misleading if used for any other purposes.

Investigations commenced on or before 30 June 2003, including the publication of reports as a result of those investigations, are authorised by the Executive Director of the Bureau in accordance with Part 2A of the Air Navigation Act 1920.

Investigations commenced after 1 July 2003, including the publication of reports as a result of those investigations, are authorised by the Executive Director of the Bureau in accordance with the Transport Safety Investigation Act 2003 (TSI Act). Reports released under the TSI Act are not admissible as evidence in any civil or criminal proceedings.

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: 199401566 **Occurrence Type:** Incident
Location: 84km SW Canberra
State: NSW **Inv Category:** 3
Date: Wednesday 15 June 1994
Time: 1125 hours **Time Zone** EST
Highest Injury Level: None

Aircraft Manufacturer: Short Bros Pty Ltd
Aircraft Model: SD360-300
Aircraft Registration: VH-MJH **Serial Number:** SH3758
Type of Operation: Air Transport Low Capacity Passenger Scheduled
Damage to Aircraft: Nil
Departure Point: Wagga NSW
Departure Time: 1107 EST
Destination: Sydney NSW

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 1st Class	2500.0	11100
Co-Pilot/1st Officer	ATPL 1st Class	2000.0	6650

Approved for Release: Wednesday, January 3, 1996

The aircraft taxied for departure to Sydney about 90 minutes behind schedule due to fog at Wagga. Although the First Officer was the handling pilot for the flight, the Captain taxied the aircraft as it was not fitted with dual nose wheel steering controls.

During taxi, the First Officer read the pre-takeoff checklist. At the flight and navigation instruments check, he incorrectly read the outbound track from the flight plan as 118, which was the distance in nautical miles from Wagga to the TAPIO reporting point enroute to Sydney. The correct track was 053 degrees magnetic and as neither pilot had recognised the error, they set 118 on both HSI's.

After issuing an airways clearance for the aircraft to proceed to Sydney via Bindook at 9,000 ft, the Wagga tower controller cleared the aircraft to takeoff on runway 05 and to make a right turn.

The First Officer assumed the handling pilot duties when the Captain handed over control of the aircraft during the takeoff roll. The tower controller, who was monitoring the departure, said he lost sight of the aircraft due to low cloud while it was maintaining runway heading. Following a request from the tower controller the Captain advised that the cloud base was 1,000 ft above terrain. When the aircraft was established on the 118 radial of the Wagga VOR, the Captain passed the departure message. He advised the tower controller that the aircraft was tracking 053, which he read correctly from the flight plan, and was climbing to 9,000 ft.

At cruising altitude the aircraft was above two layers of cloud, through which the crew had occasional glimpses of the ground. About 10 minutes after departure the Captain decided to climb to FL 110 due to moderate turbulence, and to avoid cloud build-ups ahead. ATC requested the crew to squawk code 1000 with ident prior to issuing a clearance for the change of level. The aircraft was then located 70 NM to the right of the planned track, to the south west of Canberra. This error was subsequently recognised by the Captain who advised ATC. The aircraft was issued with a clearance to track via Canberra and Bindook to Sydney. There was no confliction with other IFR traffic.

Significant Factors.

The First Officer misread tracking information from the flight plan during the pre-takeoff checks.

Neither pilot verified the orientation of the selected track by reference to the appropriate map or chart.

Weather conditions prevented the tower controller from adequately monitoring the aircraft's outbound track.