

**Aviation Safety Investigation Report
199600299**

**Fairchild Industries Inc
Metro 23
Boeing Co
B737-400**

26 January 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: 199600299 **Occurrence Type:** Incident
Location: 15km S Sydney, Aerodrome
State: NSW **Inv Category:** 4
Date: Friday 26 January 1996
Time: 1442 hours **Time Zone** ESuT
Highest Injury Level: None

Aircraft Manufacturer: Fairchild Industries Inc
Aircraft Model: SA227-DC
Aircraft Registration: VH-DMI **Serial Number:** DC-839B
Type of Operation: Air Transport Domestic Low Capacity Passenger Scheduled
Damage to Aircraft: Nil
Departure Point: Sydney, NSW
Departure Time: 0340 ESuT
Destination: Moruya, NSW

Aircraft Manufacturer: Boeing Co
Aircraft Model: 737-476
Aircraft Registration: VH-TJL **Serial Number:** 24437
Type of Operation: Air Transport Domestic High Capacity Passenger Scheduled
Damage to Aircraft: Nil
Departure Point: Adelaide, SA
Departure Time:
Destination: Sydney, NSW

Approved for Release: Monday, April 22, 1996

The crew reported for duty for a scheduled flight from Sydney to Moruya. The co-pilot was to be the handling pilot for the sector. He had recently been endorsed on the Fairchild Metro 23, and was undergoing line training under the supervision of the pilot in command.

After takeoff, the aircraft was cleared to climb to 5,000 ft. This instruction was acknowledged by the crew. As the Metro was climbing to the south, opposite direction traffic was a Boeing 737 maintaining 6,000 ft, inbound to Sydney. A short time later the Metro was observed on radar to be approaching 5,600 ft, in close proximity to the B737. The departures controller asked the crew of the Metro to report their altitude, whereupon the aircraft was observed to commence a descent. The Metro passed below the B737 while descending to 5,000 ft.

Recorded radar data later showed that separation between the aircraft was reduced to 1.3 NM laterally, and some 600 ft vertically, at their closest point of approach. The Manual of Air Traffic Services specified that 1,000 ft vertical or 3 NM lateral separation was required at the time.

Both the pilot in command and the co-pilot of the Metro did not recall noticing an altitude alert, which should have provided the crew with both aural and visual warnings 1,000 ft before the aircraft reached the selected altitude. The pitch trim control was being used during the climb, which also provided an aural annunciation through the cockpit loud speaker. Company procedures required the non-handling pilot to alert the handling pilot some 500 ft prior to the aircraft reaching its cleared altitude. In this instance that procedure was not carried out.

The pilot in command later reported that he had been completing paperwork during the initial climb, but felt that the co-pilot appeared to be handling the departure sequence adequately and did not require close supervision. However, the co-pilot said he had working hard to cope with the workload and may have channelised his attention on the speed control of the aircraft.

The breakdown of separation in this occurrence resulted from a combination of factors. These included; the attention of the handling pilot being unduly focussed on the speed control of the aircraft, at the expense of monitoring altitude; and the attention of the pilot in command being diverted from monitoring and supporting the performance of the handling pilot. The aural annunciation of the pitch trim control may have masked the sound of the altitude alerting system .

As a result of this occurrence, the standard operating procedures of the company will be amended to provide additional defences designed to prevent a recurrence.



