

**Aviation Safety Investigation Report
199504412**

**Fokker B.V.
F50 (Fokker 50)
Boeing Co
B747**

04 December 1995

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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:	199504412	Occurrence Type:	Incident
Location:	18km SW Sydney, Aerodrome		
State:	NSW	Inv Category:	4
Date:	Monday 04 December 1995		
Time:	0718 hours	Time Zone	ESuT
Highest Injury Level:	None		
Aircraft Manufacturer:	Boeing Co		
Aircraft Model:	747-312		
Aircraft Registration:	VH-INK	Serial Number:	23028
Type of Operation:	Air Transport High Capacity International Passenger Scheduled		
Damage to Aircraft:	Nil		
Departure Point:	Kuala Lumpur Malaysia		
Departure Time:			
Destination:	Sydney NSW		
Aircraft Manufacturer:	Fokker B.V.		
Aircraft Model:	F27 MK 50		
Aircraft Registration:	VH-FNB	Serial Number:	20107
Type of Operation:	Air Transport Domestic High Capacity Passenger Scheduled		
Damage to Aircraft:	Nil		
Departure Point:	Sydney NSW		
Departure Time:	0712 ESuT		
Destination:	Canberra ACT		

Approved for Release: Tuesday, July 23, 1996

Factual Information

An F27 Mk50 (F50) departed Sydney for Canberra from runway 34L and was being radar vectored by Departures South (DepS) for a left turn to intercept the 207-degree radial from the Sydney VHF omni-range beacon (VOR). The controller had restricted the climb of the F50 so that it was maintaining 5,000 ft. This restriction was initiated in order to provide vertical separation from an arriving B747 that would be radar vectored from the west to make a left circuit to runway 34L.

The B747 was arriving at Sydney from Kuala Lumpur, Malaysia, and had been assigned 6,000 ft on descent in order to provide vertical separation from the F50. The crew had correctly read back the assigned level to Approach South (AppS) control who subsequently issued instructions for the B747 crew to turn their aircraft onto a downwind leg.

The radar vectors issued by DepS and AppS resulted in the two aircraft following flight paths that would cross each other approximately 10 NM south west of Sydney Airport. As the aircraft converged, the controllers noticed that the height readouts from the two aircraft became 'garbled' (unreadable) and it was only when the aircraft had passed, and were approximately 2 NM apart, that they became readable again. The AppS controller then observed that the height readout for the B747 showed 5,500 ft. At the same time the crew of the B747 queried their assigned altitude and were told that it was 6,000 ft.

By the time this conversation was completed, the aircraft were more than 3 NM apart and radar separation standard had been re-established. The AppS controller then instructed the crew of the B747 to continue descent to 5,000 ft.

The crew of the B747 had been involved in making a public address announcement to the passengers as the aircraft had been passing 7,000 ft. As a result, the attention of the crew was not totally on the altitude restriction and, as a result of high cockpit workload, the aircraft was allowed to descend below the assigned altitude.

The aircraft passed approximately 700-800 ft vertically apart, with no discernible horizontal displacement. As the applicable standard is either 1,000 ft vertically or 3 NM horizontally, a breakdown of separation standards occurred.

Analysis

The operator's Standard Operating Procedures specified that the public address system should not normally be used below the transition altitude (10,000 ft in Australia). The crew had been informed that the film being shown to the passengers was running late and the captain elected to wait until it had finished before making the public address announcements regarding arrival at Sydney.

Findings

1. The crew of the B747 allowed their aircraft to descend below the assigned level.
2. Both air traffic controllers acted in an appropriate manner.
3. The crew of the B747 made a public address announcement at a time that was contrary to company standard procedures.

Safety Action

As a result of the investigation the operating company reinforced its Standard Operating Procedures in respect to public address announcements below the transition altitude.

