

**Aviation Safety Investigation Report  
199600518**

**Boeing Co  
B747**

**19 February 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>	199600518	<b>Occurrence Type:</b>	Incident
<b>Location:</b>	MEMIG		
<b>State:</b>	Other	<b>Inv Category:</b>	4
<b>Date:</b>	Monday 19 February 1996		
<b>Time:</b>	1452 hours	<b>Time Zone</b>	EST
<b>Highest Injury Level:</b>	None		
<b>Aircraft Manufacturer:</b>	Boeing Co		
<b>Aircraft Model:</b>	747		
<b>Aircraft Registration:</b>	JA8106	<b>Serial Number:</b>	
<b>Type of Operation:</b>	Air Transport	High Capacity International Passenger	
	Scheduled		
<b>Damage to Aircraft:</b>	Nil		
<b>Departure Point:</b>	Sydney NSW		
<b>Departure Time:</b>			
<b>Destination:</b>	Kansai Japan		

**Approved for Release:** Friday, March 22, 1996

#### ACTUAL INFORMATION

The B747 flight was enroute from Sydney to Kansai, via overhead Cairns then A216. The aircraft had been processed by Sydney and Brisbane ATC sectors, and transferred to Cairns area. Cairns area radar position was manned by a trainee controller under supervision. This was the first occasion the trainee had manned the console.

The Cairns planner, who prepares flight strips for use by area radar controllers, did not include coordination annotations on the strip. Prior to handing the flight strip to the radar controller the planner should have annotated the strip with a 'B'. The radar controller places ticks alongside the 'B' to indicate completed coordination actions. Later, as the aircraft passed overhead Cairns, the training officer and trainee were so engrossed in training aspects that they failed to update the estimate to the next control agency (Brisbane Sector 10).

Overhead Cairns the aircraft was approximately ten minutes earlier than estimated. Consequently, the aircraft transferred to Brisbane sector earlier than expected. Brisbane sector was unable to provide Port Moresby air traffic service with the 30 minutes notice required by international agreement.

There was no breakdown in separation.

#### ANALYSIS

Brisbane Sector 10 uses procedural control methods and does not have access to radar information. Consequently, if estimates for aircraft transiting the sector are not notified or amended by adjacent sectors, there is no other means for air traffic controllers to maintain the disposition of air traffic.

Aircraft overflying Cairns northbound have approximately 35 minutes flying time before they enter the Papua New Guinea flight information region. The need to provide 30 minutes notice to the PNG air traffic service allows only a short period for coordination to be implemented. In turn, this limits opportunities to alleviate errors should coordination be delayed or fail to be implemented.

The Cairns planner controller was required to annotate each flight strip with a 'B' to indicate a requirement to coordinate with Brisbane Control. Normally, the 'B' would have reminded the radar controller (and trainee) to notify the estimate to Brisbane sector. However, on this occasion the lack of a visual cue and the controllers pre-occupation with training reduced the possibility of successful point to point coordination to such a degree that the system failed.

Point to point coordination is a logical process for transfer of flight information through an air traffic system. However, the lack of redundancy in the process means that the system fails if voice coordination is not implemented. Overall, the lack of a safety net for point to point voice coordination leaves little room for error.

## **FINDINGS**

1. The B747 crew planned and operated the flight as scheduled.
2. The aircraft was accepted by and handed off to Cairns area control.
3. The Cairns planner did not place coordination annotations on the flight strip.
4. Cairns area control failed to update the pilots estimate to Brisbane Sector 10.
5. The aircraft was transferred to Brisbane Sector 10 approximately ten minutes earlier than expected.
6. Brisbane Sector 10 was unable to provide 30 minutes notice to Port Moresby air traffic service.

## **SIGNIFICANT FACTOR**

1. There was a breakdown in point to point coordination.

## **SAFETY ACTION**

As a result of the investigation Airservices Australia Northern District has implemented a local instruction for sector controllers. Brisbane controllers are to check with the Cairns planner if an updated estimate for northbound aircraft is not received by an aircraft's Cairns estimate.

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