

**Aviation Safety Investigation Report  
199600219**

**Boeing Co  
B747**

**24 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](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>	199600219	<b>Occurrence Type:</b>	Incident
<b>Location:</b>	278km N Cairns, Aerodrome		
<b>State:</b>	QLD	<b>Inv Category:</b>	4
<b>Date:</b>	Wednesday 24 January 1996		
<b>Time:</b>	1353 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>	JA8163	<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>	Cairns QLD	
<b>Departure Time:</b>	1332 EST	
<b>Destination:</b>	Tokyo Japan	

**Approved for Release:** Thursday, March 21, 1996

## FACTUAL INFORMATION

The B747 transferred from Cairns area to Brisbane Sector 10 without prior coordination. Consequently, Brisbane Sector 10 was unable to provide 30 minutes notice of the flight to the next control agency. This was contrary to international agreement.

The Cairns controller misread the flight strip annotations to indicate actions completed. However, notification of the aircraft's departure by voice communications had not been done. Consequently, Brisbane Sector 10 was not expecting the aircraft when it transferred from Cairns.

A departure message, dispatched via the Aeronautical Fixed Telecommunications Network (AFTN), was received in Brisbane Area Approach Control Centre but was not used to confirm the aircraft's departure with the sector controller.

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.

Departures from Cairns to the north have approximately 40 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 leaves approximately ten minutes for coordination to be implemented. The time available provides little room for error should coordination be delayed or fail to be implemented. Additionally, there is no redundancy in procedures to provide a safety net.

The Cairns controller is required to annotate each flight strip with a 'B' to indicate a requirement to coordinate with Brisbane Control. When an aircraft departs, the 'B' is subsequently ticked when a message is dispatched via the AFTN and, again, when the controller notifies Brisbane by voice. Thus, coordination is complete when the strip is annotated with two ticks.

The controller, on checking all flight strips, misread the B747 aircraft's strip as having two ticks when there was only one. A departure message had been dispatched via the AFTN, but the controller had not notified the departure by voice.

Some controllers use additional methods to assist them in remembering which flight strips require further action. However, in this incident the controller used one method and had no other cues to assist him once he misread the flight strip annotations.

While departure message, dispatched via the AFTN, are received in Brisbane Area Approach Control Centre, they are not passed to sectors to check that coordination has been implemented. Messages are retained for reference only.

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

## **FINDINGS**

1. The B747 flight planned and departed Cairns as scheduled.
  2. A departure message was dispatched via the AFTN to Brisbane Area Approach Control Centre.
  3. The Cairns controller misread the flight strip.
  4. The Cairns controller did not notify Brisbane sector of the departure by voice communications.
  5. Brisbane Area Approach Control Centre personnel did not use the AFTN departure message to confirm departure with the sector.
  6. The aircraft transferred to Brisbane sector without coordination.
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#### **SIGNIFICANT FACTOR**

1. There was no safety net available to the air traffic system should there be 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 Cairns to provide notification of taxi and departure of northbound aircraft, to Brisbane Sector 10.

