

**Aviation Safety Investigation Report
199703936**

**Boeing Co
B747
Israel Aircraft Industries Ltd
Westwind**

01 December 1997

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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.

Occurrence Number: 199703936 **Occurrence Type:** Incident
Location: Tindal, VOR
State: NT **Inv Category:** 4
Date: Monday 01 December 1997
Time: 1911 hours **Time Zone** CST
Highest Injury Level: None

Aircraft Manufacturer: Israel Aircraft Industries Ltd
Aircraft Model: 1124
Aircraft Registration: VH-JPW **Serial Number:** 317
Type of Operation: Air Transport Cargo Domestic Low Capacity Scheduled
Damage to Aircraft: Nil
Departure Point: Darwin NT
Departure Time: 1843 CST
Destination: Alice Springs NT

Aircraft Manufacturer: Boeing Co
Aircraft Model: 747
Aircraft Registration: G-BNLS **Serial Number:**
Type of Operation: Air Transport High Capacity International Passenger Scheduled
Damage to Aircraft: Nil
Departure Point: Brisbane Qld
Departure Time:
Destination: Singapore

Approved for Release: Friday, January 9, 1998

Sequence of events

At the time of the incident, Brisbane ATC Sector 11K Radar and Sector 11 Procedural were being operated as a combined control position. Tindal radar was out of service. A Sector 11K Radar trainee, who was already rated on Sector 11 Procedural, was operating the combined position under the supervision of a training officer.

A Westwind aircraft was tracking Darwin - Tindal - Alice Springs and climbing to Flight Level 330 (FL330), with an estimate for overhead Tindal of 1911 CST. A Boeing 747 (B747) was tracking in the opposite direction to the Westwind and estimating overhead Tindal at 1912. The Westwind was still displayed on radar, but the B747 was outside radar coverage.



Two other aircraft were also under the control of the trainee. The trainee initiated co-ordination with Melbourne ATC to amend the clearance for one of these aircraft. Before Melbourne ATC answered, the pilot of the Westwind requested an amended level of FL370. The trainee immediately cleared the Westwind to this level. Shortly afterwards, the crew of the B747 reported that there was traffic 1,000 feet below their aircraft. (The crew later advised that they had received a Traffic alerting and Collision Avoidance System (TCAS) traffic alert on the other aircraft.) The Westwind was observed on radar to be climbing and approaching FL340. The controller instructed the Westwind pilot to maintain FL340 and, immediately afterwards, to descend to FL330. He informed the Westwind pilot of the relative position of the B747.

The investigation determined that the two aircraft had passed with approximately 1.5 NM lateral separation, as the Westwind descended through FL335 and the B747 maintained FL350. In the procedural control environment existing at the time, the required vertical separation standard was 2,000 ft. The required lateral separation standard was 10 minutes combined flight time.

Neither the trainee controller, nor the training officer, checked the flight progress strips for the two aircraft prior to the Westwind being cleared to climb to FL370. The training officer was checking lateral separation calculations for other traffic on a map at the time and was not closely monitoring the trainee.

