

**Aviation Safety Investigation Report
199600218**

**British Aerospace Plc
BAe 146-300**

23 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: 199600218	Occurrence Type: Incident
Location: 33km NE Mount Isa, Non Directional Beacon	
State: QLD	Inv Category: 4
Date: Tuesday 23 January 1996	
Time: 1541 hours	Time Zone: EST
Highest Injury Level: None	

Aircraft Manufacturer: British Aerospace Plc	
Aircraft Model: BAe 146-300	
Aircraft Registration: VH-NJL	Serial Number:
Type of Operation: Air Transport Domestic High Capacity Passenger Scheduled	
Damage to Aircraft: Nil	
Departure Point: Cairns QLD	
Departure Time: 1431 EST	
Destination: Alice Springs NT	

Approved for Release: Wednesday, March 20, 1996

VH-NJL was maintaining flight level (FL) 240 on a flight from Cairns to Alice Springs and the crew had reported their position to air traffic control at BIDEB at 1537 EST estimating GAFER at 1619. The crew also made a request for climb to FL 280 at this time.

The air traffic controller denied this request and explained that climb would be subject to a sighting and passing of an opposite direction BAe146. The time of passing was expected to be 1540 and the controller instructed both crews to report sighting and passing each other.

VH-JJU was maintaining FL 250 on a flight from Alice Springs to Cairns and reported passing GAFER at 1510 with an estimate for BIDEB of 1545.

At 1541, the crew of NJL reported their distance from Mount Isa as 38 DME. The crew of JJU immediately reported that they were 28 DME Mount Isa. The controller acknowledged these reports and cleared NJL to climb to FL 280.

The captain of NJL had not seen the other aircraft and did not climb his aircraft, instead he queried air traffic control stating that he was now 35 DME and the other aircraft had just reported 28 DME.

The controller then asked both crews to report their DME distances from Mount Isa again. Before this could be carried out, the crew of NJL reported sighting and passing JJU at 34 DME Mount Isa. The crew of JJU then reported that they had sighted and were passing NJL.

With this information recorded, the controller again cleared NJL to climb to FL 280. The crew acknowledged and reported leaving FL 240.

As NJL did not leave FL 240 prior to the mutual sighting and passing, no breakdown in separation standards occurred.

The controller would have required the two aircraft to have passed by 10 DME in order to approve a climb for NJL if a mutual sighting and passing was not achieved. It is probable that, on hearing the initial DME reports 10 NM apart, the controller's mind set about this standard led him to think that the aircraft had passed by that distance. In fact, they had not yet passed.

Traffic levels at the time of the occurrence were high and complexity increased by virtue of several weather diversions by aircraft under his control.

Findings

1. Both aircraft were operating at approved levels at the time of the level change request by the crew of NJL.
2. The time of passing calculation by the air traffic controller was sufficiently accurate for control purposes.
3. The controller most probably misinterpreted the DME reports of NJL and JJU to indicate a passing of the aircraft by 10 NM when, in fact, they were 10 NM prior to passing.
4. The air traffic controller issued a clearance for NJL to climb to FL 280 when the appropriate separation standard did not exist.
5. The crew of NJL did not initiate the approved climb due to their assessment of the position of the other aircraft.
6. The two crews subsequently sighted and passed each other.
7. There was no breakdown in separation standards.

Significant Factor

The air traffic controller was busy at the time of the occurrence and misinterpreted the information available to him.
