

**Aviation Safety Investigation Report  
199703781**

**Cessna Aircraft Company  
Conquest  
British Aerospace Plc  
BAe 146**

**16 November 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](http://www.atsb.gov.au).**

**Occurrence Number:** 199703781                      **Occurrence Type:** Incident  
**Location:** 37km S Meekatharra, VOR  
**State:** WA    **Inv Category:** 4  
**Date:** Sunday 16 November 1997  
**Time:** 1735 hours                                      **Time Zone**                      WST  
**Highest Injury Level:** None

**Aircraft Manufacturer:** Cessna Aircraft Company  
**Aircraft Model:** 441  
**Aircraft Registration:** VH-LBY                      **Serial Number:** 4410023  
**Type of Operation:** Charter                      Passenger  
**Damage to Aircraft:** Nil  
**Departure Point:** Plutonic WA  
**Departure Time:** 1703 WST  
**Destination:** Perth WA

**Aircraft**                                      British Aerospace Plc  
**Manufacturer:**  
**Aircraft Model:** BAe 146-100  
**Aircraft Registration:** VH-NJZ    **Serial**                      E1009  
**Number:**  
**Type of Operation:** Air Transport                      Domestic High Capacity Passenger  
Scheduled  
**Damage to Aircraft:** Nil  
**Departure Point:** Perth WA  
**Departure Time:** 1650 WST  
**Destination:** Paraburdoo WA

**Approved for Release:** Friday, February 13, 1998

A Cessna Conquest, VH-LBY was flying at FL240 from Plutonic to Perth via the Meekatharra and Mount Magnet radio navigation aids. A BAE 146, VH-NJZ was flying at FL250 from Perth to Paraburdoo via the Rusty reporting point and the Meekatharra aid. A second Conquest, VH-NFD was tracking to Mount Magnet, also via Rusty and the Meekatharra aid at FL250. At 0931, the pilot of LBY requested a climb to FL260 but the sector air traffic controller advised that the level was unavailable due to opposite direction traffic, (a second BAe 146, VH-NJN). VH-NJN was behind NJZ at the non-standard level of FL260. The Sector controller then cleared NJN to climb to the standard FL270. At 0935, the controller cleared LBY to climb to FL260 with a requirement for the aircraft to achieve the level by 0940. Approximately 1 minute later, the controller apparently recognised that a breakdown in separation may be possible between LBY and NJZ. He requested a level check from the pilot of LBY that indicated that the aircraft were vertically separated by 300 ft. He did not issue traffic information to either aircraft. Soon after, the pilot of NJZ requested the position of LBY and the aircraft were 17 NM apart and closing. The controller then instructed LBY to expedite the climb. Three seconds later, the pilot of LBY reported maintaining FL260.

The pilot of NJZ subsequently reported that he had calculated a time of passing with LBY of 0940 and when he heard LBY was cleared to climb, he began an immediate visual scan of the area ahead and turned the aircraft's landing lights on. The pilot of NJZ reported that approximately 1 minute after the pilot of LBY reported maintaining FL260, he sighted LBY. The pilot of LBY reported that approximately 2 minutes after establishing FL260, he sighted NJZ passing below. A breakdown of separation had occurred because the required 10 minutes separation, based on the time the aircraft expected to pass each other, had not been achieved. The aircraft had not been issued with the required traffic information when the controller became aware that the aircraft were in unsafe proximity to each other.

Whilst the controller had 3 sectors combined at the time of the incident, the workload was reported as being light to moderate and not considered excessive. Personnel were available to provide assistance if requested and evidence indicated that the controller was not under pressure at the time of the incident. The controller had not calculated a time of passing between LBY and NJZ because the aircraft were to be separated by 1,000 ft and were not in conflict. The controller's requirement for LBY to reach FL260 by 0940 was 10 minutes before the calculated time of LBY passing NFD, therefore, it is likely that the calculated separation requirement was based on LBY's passing of NFD, not NJZ.

The controller appears to have been preoccupied with ensuring separation between LBY and NFD. Therefore, he overlooked separation requirements with NJZ. This oversight subsequently led to a breakdown in separation between NJZ and LBY.

