

**Aviation Safety Investigation Report
199800616**

**Cessna Aircraft Company
Citation II
Boeing Co
B737**

02 March 1998

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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: 199800616 **Occurrence Type:** Incident
Location: 46km E Cowra
State: NSW **Inv Category:** 4
Date: Monday 02 March 1998
Time: 0635 hours **Time Zone** ESuT
Highest Injury Level: None

Aircraft Manufacturer: Cessna Aircraft Company
Aircraft Model: 550
Aircraft Registration: VH-ING **Serial Number:** 5500141
Type of Operation:
Damage to Aircraft: Nil
Departure Point: Bankstown NSW
Departure Time:
Destination: Adelaide SA

Aircraft Manufacturer: Boeing Co
Aircraft Model: 737-376
Aircraft Registration: VH-TAY **Serial Number:** 23490
Type of Operation: Air Transport Domestic High Capacity Passenger
Scheduled
Damage to Aircraft: Nil
Departure Point: Sydney NSW
Departure Time:
Destination: Adelaide SA

Approved for Release: Friday, August 7, 1998

The Cessna Citation (C550) was on climb to flight level 310 (FL310), but had been restricted to FL280 due to opposite direction traffic on descent to FL290. The Sector 16 controller had coordinated the planned flight level with the next sector and had notated the flight strip accordingly.

A following Boeing 737 (B737) was on the same track and had planned to climb to FL350, but had also been restricted to FL280 due to the same conflicting traffic. The controller had also coordinated this flight with the following sector and had notated the flight strip accordingly.

The B737 reached FL280 first and began to increase speed as the aircraft maintained level flight. At this time the slower C550 was approximately 25 NM ahead of the B737, but still climbing. An opportunity to establish positive vertical separation was available at this time but the controller did not invoke separation assurance techniques.

The controller had intended to climb both aircraft to their respective flight planned levels after they had passed the opposite direction traffic, and expected to maintain the 5 NM radar separation standard prior to that event.

Changes to airspace procedures had taken place 3 days prior to the occurrence and it was the controller's first shift involving the new procedures since the introduction of Class "E" airspace. He had been on duty just 30 minutes when he received his first request for a clearance involving "E" airspace. This request resulted in him having to perform coordination tasks with both Flight Service and Sector 19. The consequent workload due to his unfamiliarity with the new procedures resulted in his attention being diverted from the radar display, as the B737 closed on the C550.

The C550 subsequently levelled at FL280. A controller not performing tasks related to Sector 16 noticed the rate of closure between the C550 and the B737, and brought this to the attention of the Sector 16 controller who immediately issued a radar vector to the crew of the B737. As the aircraft passed, the horizontal separation reduced to approximately 1/2 NM. The crew of the B737 did not sight the C550. Radar analysis indicated that the closing speed varied between 70 and 220 kts.

It had been planned that all Sector 16 controllers were to have undergone 5 simulator exercises prior to the implementation of "E" airspace. However, due to time constraints and technical difficulties, only 4 exercises had been developed. An agreement had been reached for all Sector 16 controllers to receive those 4 exercises. However, the controller on duty had only experienced 2 complete and 1 "over the shoulder" simulator exercises at the time of implementation. Moreover, the changes issued by the Civil Aviation Safety Authority, 7 days prior to implementation, resulted in a new version of Local Instructions for Sector 16 only becoming available to the controller 4 days before the occurrence. This limited the time available for adequate training of air traffic controllers.

SAFETY ACTION

As a result of this occurrence, the Bureau of Air Safety Investigation is currently investigating a perceived safety deficiency. The deficiency identified relates to air traffic controller training.

Any safety output issued as a result of this analysis will be published in the Bureau's Quarterly Safety Deficiency Report.
