Aviation Safety Investigation Report 199801510

Airbus A320 Cessna Aircraft Company P206

03 May 1998

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Occurrence Number: 199801510 Occurrence Type: Incident

Location: 74km SE Perth, Aerodrome

State: WA Inv Category: 4

Date: Sunday 03 May 1998

Time: 1500 hours Time Zone WST

Highest Injury Level: None

Aircraft Manufacturer: Cessna Aircraft Company

Aircraft Model: P206

Aircraft Registration: VH-SIR Serial Number: P2060108

Type of Operation: Miscellaneous Parachute Jump

Damage to Aircraft: Nil

Departure Point: Dale River WA **Departure Time:** 1450 WST

Destination: Dale River WA

Aircraft Airbus

Manufacturer:

Aircraft Model: A320-211

Aircraft Registration: VH-HYA Serial 022

Number:

Type of Operation: Air Transport Domestic High Capacity Passenger

Scheduled

Damage to Aircraft: Nil

Departure Point:Adelaide SADeparture Time:1227 WSTDestination:Perth WA

Approved for Release: Monday, July 13, 1998

FACTUAL INFORMATION

The pilot of the Cessna 206 was conducting repetitive parachute jumping exercises at the Dale River drop zone. He was operating in Class C airspace and communicating with the air traffic controller at Perth Approach on the radar advisory frequency. He advised his intention for the parachutists to jump and was cleared by the controller to operate to a ceiling of flight level (FL) 110. Soon after the pilot of the Cessna received his clearance to drop, the pilot of an Airbus A320 contacted Perth on the approach frequency, advising that he was on descent to FL120. The Airbus was inbound to Perth from the south-east on a track that passed close to the Dale River Drop Zone. The Cessna pilot reported that he had the Airbus sighted. The air traffic controller then assigned the pilot of the Cessna responsibility for maintaining separation visually from the Airbus but the Cessna pilot did not respond. Because the two aircraft were on different frequencies, the pilot of the Airbus was unaware of the Cessna and that the pilot of the Cessna had been assigned a requirement to remain visually clear of the Airbus.

At the time of the incident, the Cessna was tracking southbound and had just turned left with the Airbus passing about 1.25 NM to the North. The controller then cleared the Airbus to descend to 8,000 ft. As the Airbus left FL120 on descent, the crew received a traffic alert and collision avoidance system (TCAS) traffic advisory (TA) closely followed by a resolution advisory (RA) instruction to reduce sink rate with which the crew complied. The crew of the Airbus reported sighting the Cessna 400 ft below their aircraft and climbing. Radar evidence indicated that the nearest the aircraft came to each other was approximately 700 ft vertically and 1.25 NM laterally.

The Aeronautical Information Publication (AIP) Air Traffic Rules and Services (RAC) noted that air traffic control (ATC) will provide separation between instrument flight rules (IFR) and visual flight rules (VFR) flights. In this situation, ATC would have normally been expected to direct the aircraft such that a minimum separation of 5 NM laterally or 2,000 ft vertically between the aircraft was maintained. However, it also stated that "under certain conditions, the pilot of one aircraft may be given the responsibility for separation with other aircraft". The Manual of Air Traffic Services (MATS) section 8 prescribed the application of visual separation and there was no requirement for the pilots of aircraft that had not been assigned separation responsibility to be advised that visual separation standards applied. There was also no requirement for the aircraft to be on the same frequency.

Whilst Civil Air Regulation 163 stated that an aircraft must not be flown so close to another aircraft as to create a collision hazard, it did not prescribe a minimum separation requirement. Therefore, the pilot given the responsibility for maintaining visual separation was at liberty to fly close to another aircraft so long as no collision hazard was created.

Although the air traffic controller had assigned a visual separation requirement in accordance with the AIP and MATS, he had not sought confirmation from the Cessna pilot regarding the assignment of the separation responsibility. However, there was no evidence to indicate that the Cessna pilot did not maintain such separation from the Airbus. Because the aircraft were on different frequencies and the air traffic controller had not advised the Airbus pilot that the Cessna was assigned separation responsibility, the Airbus pilot was unaware of the Cessna and the reduced separation standard being applied. He had no opportunity to accept or reject the reduced separation standards and his first indication of the presence of the Cessna was the TCAS alert to which he properly responded.

SAFETY ACTION

In 1996, a similar event occurred involving a Boeing 767 departing from Darwin and a Partenavia P68C which was conducting aerial work at Darwin. As a result of the investigation into that incident, the Bureau issued interim recommendation IR970027 to Airservices Australia. The interim recommendation stated, in part, that "Airservices Australia should introduce a requirement for a controller to advise the crew of an IFR-category aircraft that the pilot of another aircraft has been assigned visual separation responsibility and to pass traffic information on the other aircraft". On 31 October 1997, the Bureau received a response from Airservices Australia which stated, in part, that "Airservices will seek a review, in conjunction with CASA, of the visual separation standards applicable to aircraft operating below FL125, at the earliest opportunity. On completion of the review, BASI will be advised of any outcomes".

Response classification: OPEN

As at 11 July 1998 the Bureau had received no further advice on the proposed review.

As a result of this occurrence (9801510), the Bureau is investigating further safety aspects related to visual separation procedures and responsibilities. Any safety outputs resulting from this investigation will be published in the Quarterly Safety Deficiency Report.