Australian Government
Australian Transport Safety Bureau

ATSB TRANSPORT SAFETY INVESTIGATION REPORT
Aviation Occurrence Report –200700766
Final

Airprox
28 km south-west Camden Aerodrome, NSW
14 February 2007
VH-BMX
Cessna Aircraft Company 182T
VH-DTX
Cessna Aircraft Company 210L

Australian Government

Australian Transport Safety Bureau

ATSB TRANSPORT SAFETY INVESTIGATION REPORT

Aviation Occurrence Report
200700766
Final

Airprox– 28 km south-west Camden Aerodrome, NSW 14 February 2007

VH-BMX

Cessna Aircraft Company 182T

VH-DTX

Cessna Aircraft Company 210L

Published by: Australian Transport Safety Bureau
Postal address: PO Box 967, Civic Square ACT 2608
Office location: 15 Mort Street, Canberra City, Australian Capital Territory
Telephone: 1800 621 372; from overseas + 61 2 6274 6440
Accident and incident notification: 1800 011 034 (24 hours)
Facsimile: 02 6247 3117; from overseas + 61 2 6247 3117
E-mail: atsbinfo@atsb.gov.au
Internet: www.atsb.gov.au

ISBN and formal report title: see 'Document retrieval information' on page iii.

DOCUMENT RETRIEVAL INFORMATION

Report No.	Publication date	No. of pages	ISBN
200700766	22 August 2007	8	978-1-921165-17-7

Publication title

Airprox – 28 km south-west Camden Aerodrome, NSW – 14 February 2007 - VH-BMX, Cessna Aircraft Company 182T - VH-DTX, Cessna Aircraft Company 210L

Prepared by

Australian Transport Safety Bureau
PO Box 967, Civic Square ACT 2608 Australia
www.atsb.gov.au

Reference No.

Aug2007/DOTARS 50338

Abstract

On 14 February 2007 at about 1127 Eastern Daylight-saving Time, the pilot of a Cessna Aircraft Company 182T (182) was positioning to conduct a sector entry for an area navigation (RNAV) global navigation satellite system (GNSS) arrival procedure to runway 06 at Camden Aerodrome, NSW. The aircraft was approaching the aerodrome from the east. At the same time, the pilot of a Cessna Aircraft Company 210L (210) was approaching Camden from the south-west with the intention of conducting a Camden runway 06 straight-in RNAV (GNSS) approach. The two aircraft had similar estimated times of arrival at the approach commencement waypoint. They were both being operated under the instrument flight rules (IFR), in Class G airspace.

The air traffic controller provided the pilots with mutual radar based traffic information. The pilot of the 210 contacted the controller and was provided with traffic information about the 182. The pilot of the 182 climbed the aircraft to minimise the risk of a collision as he was unsure of the intentions of the pilot of the 210. Recorded radar data showed that, when the aircraft passed, there was 500 ft vertically and 2.1 NM laterally between them.

THE AUSTRALIAN TRANSPORT SAFETY BUREAU

The Australian Transport Safety Bureau (ATSB) is an operationally independent multi-modal Bureau within the Australian Government Department of Transport and Regional Services. ATSB investigations are independent of regulatory, operator or other external bodies.

The ATSB is responsible for investigating accidents and other transport safety matters involving civil aviation, marine and rail operations in Australia that fall within Commonwealth jurisdiction, as well as participating in overseas investigations involving Australian registered aircraft and ships. A primary concern is the safety of commercial transport, with particular regard to fare-paying passenger operations. Accordingly, the ATSB also conducts investigations and studies of the transport system to identify underlying factors and trends that have the potential to adversely affect safety.

The ATSB performs its functions in accordance with the provisions of the *Transport Safety Investigation Act 2003* and, where applicable, relevant international agreements. The object of a safety investigation is to determine the circumstances in order to prevent other similar events. The results of these determinations form the basis for safety action, including recommendations where necessary. As with equivalent overseas organisations, the ATSB has no power to implement its recommendations.

It is not the object of an investigation to determine blame or liability. However, it should be recognised that an investigation report must include factual material of sufficient weight to support the analysis and findings. That material will at times contain information reflecting on the performance of individuals and organisations, and how their actions may have contributed to the outcomes of the matter under investigation. At all times the ATSB endeavours to balance the use of material that could imply adverse comment with the need to properly explain what happened, and why, in a fair and unbiased manner.

Central to the ATSB's investigation of transport safety matters is the early identification of safety issues in the transport environment. While the Bureau issues recommendations to regulatory authorities, industry, or other agencies in order to address safety issues, its preference is for organisations to make safety enhancements during the course of an investigation. The Bureau prefers to report positive safety action in its final reports rather than making formal recommendations. Recommendations may be issued in conjunction with ATSB reports or independently. A safety issue may lead to a number of similar recommendations, each issued to a different agency.

The ATSB does not have the resources to carry out a full cost-benefit analysis of each safety recommendation. The cost of a recommendation must be balanced against its benefits to safety, and transport safety involves the whole community. Such analysis is a matter for the body to which the recommendation is addressed (for example, the relevant regulatory authority in aviation, marine or rail in consultation with the industry).

FACTUAL INFORMATION

On 14 February 2007, the pilot of a Cessna Aircraft Company 182T (182) aircraft, registered VH-BMX, was conducting an instrument flight rules (IFR) training flight from Wollongong to Camden Aerodrome, NSW, with the intention of conducting an area navigation (RNAV) global navigation satellite system (GNSS) approach to runway 06 via waypoint SCNWB. The pilot of the 182 had commenced descent to achieve the approach entry altitude of 5,400 ft by SCNWB and was required to complete a sector entry.

The aircraft was operating within Class G airspace. That airspace classification complied with Phase 2b of the National Airspace System (NAS), which became effective from 27 November 2003. In accordance with the NAS, pilots of aircraft operating under the IFR in class G airspace were entitled to receive information from air traffic control on other relevant aircraft operating under IFR.[1]

At about 1125 Eastern Daylight-saving Time[2], the air traffic controller responsible for the airspace encompassing waypoint SCNWB received coordination on VH-DTX, a Cessna Aircraft Company 210L (210) being operated on an IFR flight from Griffith, NSW, to Camden Aerodrome. The pilot of the 210 was tracking in Class G airspace from Bindook to SCNWB for a runway 06 RNAV (GNSS) approach. A sector entry was not required as the inbound track fell within the prescribed capture zone[3] for waypoint SCNWB.

The controller complied with the requirements of the Manual of Air Traffic Services[4] and transmitted relevant traffic information to the pilot of the 182 on the area frequency. Receipt of this traffic information was acknowledged by that pilot at 1126:30.

At 1126:36, the pilot of the 210 contacted the controller on the area frequency and was provided with traffic information on the 182. The controller advised that there was traffic ‘in your 12 o’clock, 4 miles, opposite direction, crossing right to left at 5,800 ft’ and ‘tracking for the RNAV approach to Camden’. Civil Aviation Regulation (CAR) 162 states that, in regard to converging aircraft, the ‘aircraft having the other on its right shall give way’.

At 1127, the pilot of the 210 acknowledged receipt of the traffic information and requested an updated location of the 182. The controller advised that the 182 was at 3 miles, in the pilot’s 12 o’clock and at the same level. About 10 seconds later, the pilot of the 182 reported climbing his aircraft to 6,500 ft. This was in accordance with CAR 161, which requires a pilot in command to ‘take such actions as will best avert collision’.

The pilot of the 210 later reported that, on receipt of the updated location of the 182, he commenced a right turn and broadcast that action on the area frequency.

---

1 The Manual of Air Traffic Services part 5, section 2, p. 5-20, effective 25 November 2004.

2 The 24-hour clock is used in this report to describe the local time of day, Eastern Daylight-saving Time (EST), as particular events occurred. Eastern Daylight-saving time was Coordinated Universal Time (UTC) + 11 hours.

3 Aeronautical Information Publication, Enroute, p. ENR 1.5-15, effective 25 November 2004.

4 The Manual of Air Traffic Services part 5, section 2, p 5-21, effective 16 March 2006.

There was no evidence of those actions by the pilot recorded on the air traffic control radar or audio tapes. However, it is possible that any minor or momentary deviation in aircraft heading was of insufficient magnitude to be observable on radar.

The controller continued to provide position and altitude information on the 182 to the pilot of the 210. At 1127:17, the controller advised the pilot of the 210 that the traffic was ‘now 11 o’clock, 1 mile and above [the 210]’.

Analysis of recorded radar data indicated that the aircraft were no closer than 3.5 NM apart while they were at the same altitude and that, after the pilot of the 182 commenced the climb to 6,500 ft, the horizontal distance decreased to 2.1 NM and the vertical spacing increased to 500 ft.

ANALYSIS

The traffic information provided by the controller was timely and compliant with the documented requirements. The traffic updates provided to the pilot of the 210 ensured that the situational awareness of both pilots was maintained during the period of possible conflict.

The pilot of the 182, although having the right of way as specified in Civil Aviation Regulation (CAR) 162, ensured the safety of the flight by climbing to 6,500 ft. That action was appropriate considering that there was likely to be insufficient time for the pilot of the 182 to coordinate mutual avoidance action with the pilot of the 210.