Australian Government
Australian Transport Safety Bureau

Airspace related event between Cessna 172, VH-EPB and Piper Warrior, VH-BZE

Moorabbin Airport, 27 August 2012

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Postal address: PO Box 967, Civic Square ACT 2608
Office: 62 Northbourne Avenue Canberra, Australian Capital Territory 2601
Telephone: 1800 020 616, from overseas +61 2 6257 4150
Accident and incident notification: 1800 011 034 (24 hours)
Facsimile: 02 6247 3117, from overseas +61 2 6247 3117
Email: atsbinfo@atsb.gov.au
Internet: www.atsb.gov.au

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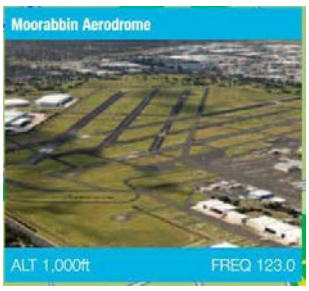
What happened

On 27 August 2012, at about 1330 Eastern Standard Time[1] a Piper PA-28 (Warrior) aircraft, registered VH-BZE (BZE), departed Moorabbin Airport on a private flight to Colac, Victoria. The pilot was the only person on board.

At the same time, a Cessna 172 aircraft, registered VH-EPB (EPB), was conducting circuits on runway 35R at Moorabbin. On board were a student pilot and flying instructor.

Visual Pilot Guide: Melbourne



Source: CASA

While en-route to Colac and overhead Point Cook, the pilot of BZE decided to return to Moorabbin due to the severity of turbulence. When overhead Brighton, the pilot of BZE contacted the Tower 2 controller at Moorabbin and received a clearance to join left base for runway 35L.

At about 1350 EST, while turning onto finals, BZE started to drift off the centreline of runway 35L towards the centreline of runway 35R. The pilot of BZE contacted the tower 2 controller and requested a late change of runway to 35R, as she was experiencing difficulty controlling the aircraft. The tower 2 controller then re-cleared BZE for landing on runway 35R. Due to the late request for a change in runway from a pilot who was experiencing difficulty, there was not time to provide an alert to EPB or for coordination between the tower controllers.

BZE then passed in front of and in close proximity to EPB who was on short finals for runway 35R. EPB contacted the tower 1 controller and informed them that an aircraft had just passed in front of, EPB and they were performing go-around[2] as they were unable to follow BZE.

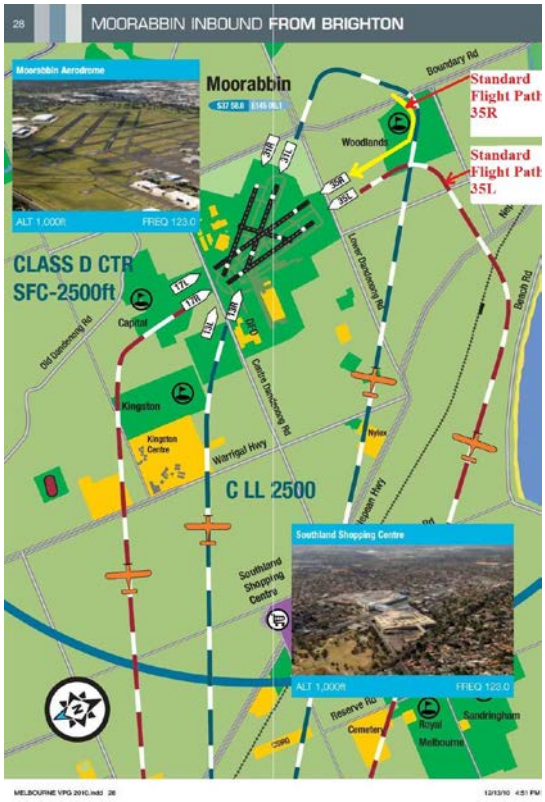
Moorabbin airport

Moorabbin has two sets of parallel runways and by day, simultaneous contra-circuits may be conducted using separate tower frequencies. Operations are regulated independently in each circuit, and ATC approval is required to enter the opposite circuit airspace (Figure 1).

[1] Eastern Standard Time (EST) was Coordinated Universal Time (UTC) + 10 hours.

[2] Make another circuit

Figure 1: Melbourne basin visual flight guide



Source: ***Airservices Australia***

Pilot experience and comments

The pilot of BZE held a Private Pilot Licence and had 150 hours total time and 120 hours on type. The pilot reported being familiar with Moorabbin, having conducted all of her flying training there. The pilot commented that she noted that the weather forecast predicted light to moderate turbulence. She stated that it was the first time that she had flown with forecast turbulence, however she was building hours towards a Commercial licence and thought that it would be valuable experience. The pilot added that it was not until she was airborne that she gained an appreciation as to the severity of the turbulence and decided to return to Moorabbin.

The flying instructor on board EPB held a Commercial Pilot Licence with Grade 2 Instructor rating and had 1,300 hours total time and 900 hours instructing. The instructor commented that he did not become aware of BZE until the aircraft had passed in front of EPB and that he did not have time to take any avoiding action. The instructor estimated that BZE came within 100 ft of EPB.

Weather

The TAF[3] for Moorabbin at the time forecast the wind as 350 at 12 knots. The ATIS[4] current at the time recorded the wind as gusting to 27 knots.

[3] Aerodrome Forecasts are a statement of meteorological conditions expected for a specific period of time, in the airspace within a radius of 5 NM (9 km) of the aerodrome.

[4] An automated pre-recorded transmission indicating the prevailing weather conditions at the aerodrome and other relevant operational information for arriving and departing aircraft.

Safety message

Pilots should always know and stay within their personal minimums. When set, personal minimums provide a safety buffer between the skills required for a flight, and the skills available to an individual pilot through training, experience, currency, and proficiency.

The *CASA Flight Planning Kit* contains a 'Standing personal minimums checklist' that can aid a pilot to address issues related to themselves, the aircraft, the environment and external pressures. A document in the kit describes how the checklist should be used to make smart go /no-go decisions.

For further reading on setting personal minimums see:

- *Getting the maximum from Personal Minimums* by Susan Parson, available from the May/June 2006 FAA Aviation News: www.faa.gov/news/safety_briefing/
- The *CASA Flight Planning Kit* is available from the CASA online store: www.thomaslogistics.com.au/casa/index.html

Aircraft information:

VH-BZE, Piper PA-28 (Piper Warrior)

Manufacturer and model:	Piper Aircraft Company PA-28	
Registration:	VH-BZE	
Type of operation:	Private	
Location:	Moorabbin Airport	
Occurrence type:	Airspace related event	
Persons on board:	Crew – 1	Passengers – 0
Injuries:	Crew – 0	Passengers – 0
Damage:	Nil	

VH-EPB, Cessna 172

Manufacturer and model:	Cessna Aircraft Company 172	
Registration:	VH- EPB	
Type of operation:	Flying training	
Location:	Moorabbin Airport	
Occurrence type:	Airspace related event	
Persons on board:	Crew – 2	Passengers – 0
Injuries:	Crew – 0	Passengers – 0
Damage:	Nil	

About the ATSB

The Australian Transport Safety Bureau (ATSB) is an independent Commonwealth Government statutory agency. The Bureau is governed by a Commission and is entirely separate from transport regulators, policy makers and service providers. The ATSB's function is to improve safety and public confidence in the aviation, marine and rail modes of transport through excellence in: independent investigation of transport accidents and other safety occurrences; safety data recording, analysis and research; and fostering safety awareness, knowledge and action.

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.

The ATSB performs its functions in accordance with the provisions of the *Transport Safety Investigation Act 2003* and Regulations and, where applicable, relevant international agreements.

The object of a safety investigation is to identify and reduce safety-related risk. ATSB investigations determine and communicate the safety factors related to the transport safety matter being investigated.

It is not a function of the ATSB to apportion blame or determine liability. At the same time, an investigation report must include factual material of sufficient weight to support the analysis and findings. 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.

About this report

Decisions regarding whether to conduct an investigation, and the scope of an investigation, are based on many factors, including the level of safety benefit likely to be obtained from an investigation. For this occurrence, a limited-scope, fact-gathering investigation was conducted in order to produce a short summary report, and allow for greater industry awareness of potential safety issues and possible safety actions.