



**Australian Government**

**Australian Transport Safety Bureau**

# Separation issues involving a Cessna 404 and an American Champion 8KCAB

8 NM south-east of Moorabbin Airport, Vic., on 3 November 2022

**ATSB Transport Safety Report**

Aviation / Occurrence Brief

AB-2022-017

Final – 16 December 2022

# AB-2022-017

Occurrence Briefs are concise reports that detail the facts surrounding a transport safety occurrence, as received in the initial notification and any follow-up enquiries. They provide an opportunity to share safety messages in the absence of an investigation.

## What happened

On the morning of 3 November 2022, a Cessna 404 was conducting a freight charter flight from Devonport, Tasmania to Moorabbin, Victoria, operating under instrument flight rules (IFR). While on descent at about 8 NM from Moorabbin in instrument meteorological conditions (IMC), the pilot received traffic information from Moorabbin tower air traffic control (ATC) on an American champion 8KCAB operating under visual flight rules (VFR) on a converging track, departing the training area (Figure 1). The pilot of the Cessna 404 located the traffic on the aircraft's traffic advisory system (TAS) and made an initial assessment that the aircraft appeared to be at about the same altitude, climbing between clouds. The pilot increased the descent rate in an effort to increase the separation between the aircraft.

The flight tracks show that both aircraft were in the descent when the Cessna 404 pilot became visual with the American champion 8KCAB. The pilot estimated the other aircraft to be about 300 ft above and slightly right of track at the point of becoming visual.

**Figure 1: Image showing both aircraft tracks**



Source: Google earth with flightradar24 track overlays, annotated by ATSB.

## Safety message

ATC provides traffic information to IFR aircraft even when operating outside controlled airspace (OCTA), however, VFR traffic operating OCTA may change locations, altitudes and intentions without informing ATC. This incident highlights the importance of establishing two-way communication with traffic in the local area and using systems such as the TAS and ADS-B to ensure separation between aircraft is maintained in reduced visibility environments. The ATSB safety study, [Aircraft performance and cockpit visibility study supporting investigation into the mid-air collision involving VH-AEM and VH-JQF near Mangalore Airport, Victoria on 19 February 2020 \(AS-2022-001\)](#) discusses this in more detail. In this instance, the pilot was able to utilise the aircraft's systems to improve situational awareness and build a mental model of where the other aircraft was located to increase separation.

## 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, no investigation has been conducted and the ATSB did not verify the accuracy of the information. A brief description has been written using information

supplied in the notification and any follow-up information in order to produce a short summary report, and allow for greater industry awareness of potential safety issues and possible safety actions.

## General details

### Occurrence details

Date and time:	03 November 2022 – 1025 AEDT	
Occurrence category:	Incident	
Primary occurrence type:	Aircraft separation, issues	
Location:	8 NM south-east of Moorabbin airport, Vic.	
	Latitude: 38° 04' 46.4" S	Longitude: 145° 12' 30.6" E

### Aircraft one details

Manufacturer and model:	Cessna 404
Type of operation:	Part 135
Activity:	Freight
Sector:	Piston
Departure:	Devonport, Tas.
Destination:	Moorabbin, Vic.
Persons on board:	Crew – 1
Injuries:	Nil
Aircraft damage:	Nil

### Aircraft two details

Manufacturer and model:	American Champion 8KCAB
Type of operation:	Part 142
Activity:	Training
Sector:	Piston
Departure:	Moorabbin, Vic.
Destination:	Moorabbin, Vic.
Persons on board:	Crew – 2
Injuries:	Nil
Aircraft damage:	Nil