



Australian Government

Australian Transport Safety Bureau

Aircraft proximity event between a Piper PA-44, VH-TYS and a Cessna 172S, VH-EUH

1 km NW Point Cook Aerodrome, Victoria, 19 March 2013

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Addendum

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Aircraft proximity event between a Piper PA-44, VH-TYS and a Cessna 172S, VH-EUH

What happened

On 19 March 2013 at about 1016 Eastern Daylight-saving Time,¹ the pilot of a Cessna 172S aircraft, registered VH-EUH (EUH), made a 10 NM inbound broadcast on the Point Cook common traffic advisory frequency (CTAF) abeam Station Pier, a visual flight rules (VFR) reporting point south of Melbourne. In the broadcast, the pilot advised that he intended to track overhead Point Cook for Avalon at 2,500 ft.

At about the same time, a Piper PA-44-180 aircraft, registered VH-TYS (TYS), became airborne at Point Cook, for an instrument flight rules (IFR) training flight.

The pilot of EUH reported monitoring both the Point Cook CTAF and Melbourne Centre frequency and remembered hearing broadcasts on the CTAF, specifically one from an aircraft lining up. Although he reported seeing an aircraft airborne over the runway at Point Cook, he did not remember hearing a departure broadcast.

The pilot under training of TYS was flying under the hood² and the instructing pilot was making all radio calls to Melbourne Centre and broadcasts on the CTAF. The flight crew of TYS did not hear the 10 NM CTAF broadcast made by EUH.

As TYS tracked southbound about 3 NM east of Point Cook and passing about 2,000 ft on climb to 3,000 ft, the instructing pilot deselected the CTAF as the aircraft would shortly be entering controlled airspace. The pilot flying then turned right to track in a northerly direction, in anticipation of an airways clearance to enter Melbourne controlled airspace.

At about the same time, as EUH passed abeam Point Cook to the north-west, the pilot broadcast that he was leaving 2,500 ft for 4,500 ft.

At 1022, as TYS was levelling off at 3,000 ft about 1 NM west of Point Cook, the instructing pilot looked to the right and observed a C172 in their 2 o'clock position about 100 m away at the same level (Figure 1). He called 'taking over' and immediately pushed the control column forward to descend below the traffic. The C172 flew about 50 to 100 ft above and about 9 to 12 m behind TYS. The instructing pilot then climbed the aircraft to 3,000 ft and the flight continued with no further incident. While the incident was recorded on Airservices Australia radar system, the incident occurred outside of controlled airspace. The lower limit for controlled airspace was 4,500 ft.

The pilot of EUH reported that he did not see TYS.

A pilot of another aircraft operating in the Point Cook circuit at the time reported hearing a broadcast by EUH on the CTAF.

Point Cook aerodrome

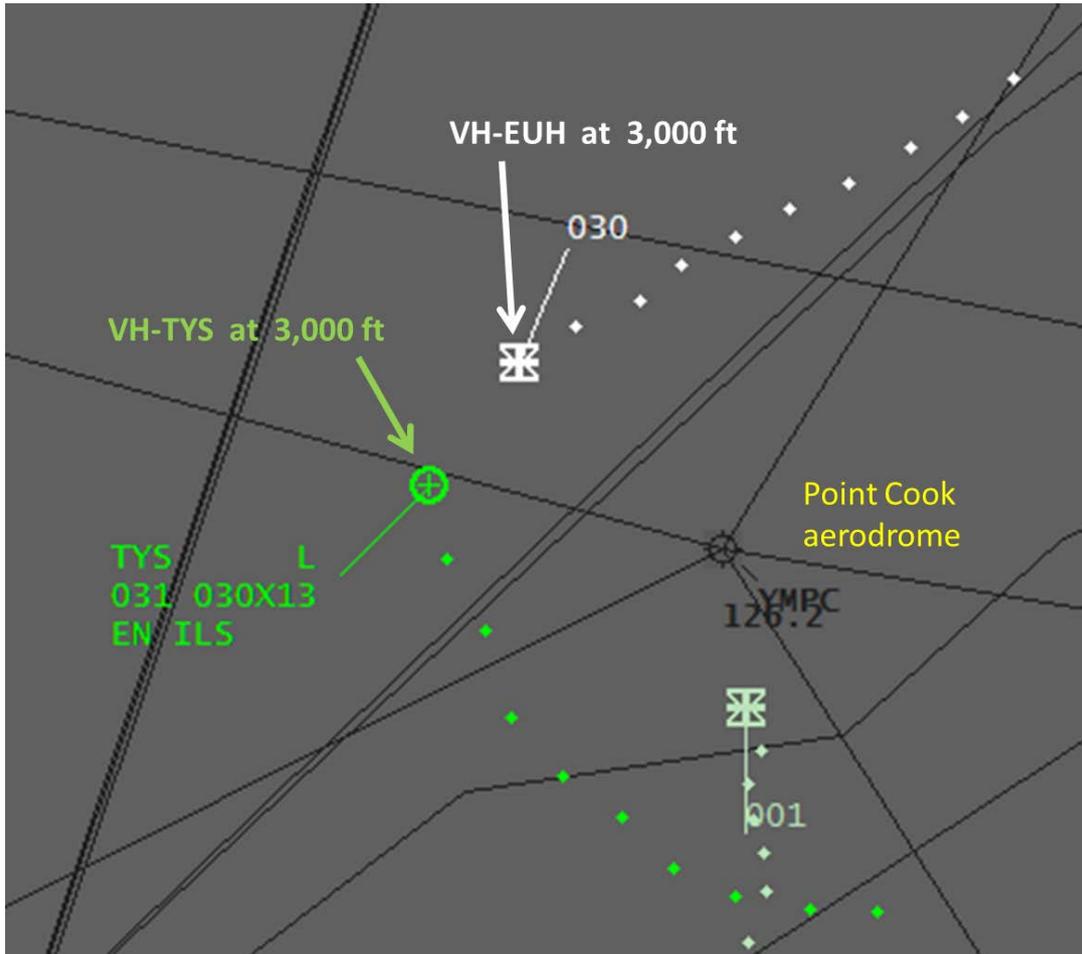


Source: Airservices Australia

¹ Eastern Daylight-saving Time (EDT) was Coordinated Universal Time (UTC) + 11 hours.

² Under the hood – instrument flight training in which the student is prevented from seeing outside the aircraft.

Figure 1: Aircraft positions at 1022, lateral distance 0.4 NM and reducing



Source: Airservices Australia

Safety message

The ATSB often receives reports from pilots that another aircraft is flying too close to them in uncontrolled airspace. Three quarters of these reports involve pilots flying within 10 NM of a non-towered aerodrome. As a result, the ATSB has highlighted safety around non-towered aerodromes as one of its SafetyWatch priorities.

The ATSB publication *A pilot's guide to staying safe in the vicinity of non-towered aerodromes*, AR-2008-044(1), noted that over 200 occurrences between 2003 and 2008 were found where pilots flying within 10 NM of a non-towered aerodrome may not have been broadcasting or maintaining a continuous listening watch on the CTAF.

Broadcasting on and monitoring the CTAF are key ways for pilots to establish traffic awareness, in the vicinity of non-towered aerodromes. The ATSB's *Limitation of the see-and-avoid principle* study has shown that the effectiveness of a search for other traffic is eight times greater under alerted see-and-avoid circumstances, when a radio is used effectively in combination with a visual lookout, than when just un-alerted, when no radio is used.

The following ATSB publications provide additional information:

- SafetyWatch: Safety around non-towered aerodromes
www.atsb.gov.au/safetywatch/safety-around-aeros.aspx
- A pilot's guide to staying safe in the vicinity of non-towered aerodromes, AR-2008-044 (1)
[www.atsb.gov.au/publications/2008/ar-2008-044\(1\).aspx](http://www.atsb.gov.au/publications/2008/ar-2008-044(1).aspx)

- Limitation of the see-and-avoid principle
www.atsb.gov.au/publications/1991/limit_see_avoid.aspx

General details

Occurrence details

| | | |
|--------------------------|--|------------------------|
| Primary occurrence type: | Airprox | |
| Occurrence category: | Serious incident | |
| Location: | 1 km NW Point Cook Aerodrome, Victoria | |
| | Latitude: 37° 55.60' | Longitude: 144° 44.28' |

Piper Aircraft Corporation PA-44-180

| | | |
|-------------------------|--------------------------------------|------------------|
| Manufacturer and model: | Piper Aircraft Corporation PA-44-180 | |
| Registration: | VH-TYS | |
| Type of operation: | Flight training | |
| Persons on board: | Crew – 2 | Passengers – 0 |
| Injuries: | Crew – Nil | Passengers – Nil |
| Damage: | Nil | |

Cessna Aircraft Company 172S

| | | |
|-------------------------|------------------------------|------------------|
| Manufacturer and model: | Cessna Aircraft Company 172S | |
| Registration: | VH-EUH | |
| Type of operation: | Flying training | |
| Persons on board: | Crew – 1 | Passengers – 0 |
| Injuries: | Crew – Nil | Passengers – Nil |
| 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.