



Australian Government

Australian Transport Safety Bureau

Near collision involving a Cessna 172, VH-EOT, and a Jabiru J120, 24-5340

at Latrobe Valley Airport, Victoria, on 6 September 2015

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Addendum

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Near collision involving a Cessna 172, VH-EOT, and a Jabiru J120, 24-5340

What happened

On 6 September 2015, the pilot of a Jabiru 120 aircraft, registered 24-5340 (J5340), conducted a flight from Wangaratta to Latrobe Valley Airport, Victoria. Another Jabiru aircraft (J1) had departed Wangaratta about 2 minutes before J5340, and also travelled to Latrobe Valley. At about 1540 Eastern Standard Time (EST), the pilot of J5340 broadcast on the common traffic advisory frequency (CTAF) when 10 NM to the north of the aerodrome, stating the current position of the aircraft and advising that J5340 was on descent and inbound to Latrobe Valley. The pilot of J1 had broadcast about 2 minutes earlier inbound to the airfield at 10 NM, and reported hearing the broadcast from the pilot of J5340.

Following the broadcast by the pilot of J5340, the pilot of a Cessna 172 aircraft, registered VH-EOT (EOT), broadcast on the CTAF, that EOT was 10 NM from the aerodrome and inbound from the west. The pilot of EOT reported that he heard the broadcast from the pilot of J5340, who estimated his arrival time at the circuit at 1544. The pilot of EOT broadcast an estimated arrival time of 1543. The pilot of EOT reported that he then called the pilot of J5340 asking where he was, to which the pilot replied 'north'. The pilot of EOT did not see a Jabiru aircraft at that time.

The pilot of J5340 reported that he broadcast again, when 5 NM from the airfield, advising his intention to join the circuit on a long downwind for runway 03. Then, when approaching abeam the northern threshold of the runway and on the downwind leg of the circuit, the pilot of J5340 broadcast joining downwind at circuit height for runway 03.

The pilot of J1 reported also having broadcast at 5 NM and when joining downwind, and was on late downwind when J5340 joined the circuit.

The pilot of EOT reported hearing a Jabiru aircraft broadcast joining final for runway 21, and then amending that to turn right to join on downwind for runway 03. However, both Jabiru pilots reported that at no stage did they broadcast or intend to join on final or to use runway 21.

About 15 to 20 seconds after the pilot of J5340 broadcast joining downwind, the pilot of EOT broadcast joining on a midfield crosswind leg for runway 03 (Figure 1). The pilot of J1, then on late downwind, sighted EOT and reportedly called the pilot of EOT, asking whether he had J1 in sight, and received the response 'yes'. The pilot of J5340 then sighted EOT approaching from his left at the same height, about 300 m away, and reportedly also called asking whether the pilot of EOT had J5340 in sight. He reported that the pilot of EOT again responded 'yes', but the pilot of EOT later reported that he had not seen either Jabiru at that time.

The pilot of J5340 assessed that a collision with EOT was imminent, and immediately applied full power, conducted a steep climb and sharp right turn. As he levelled the aircraft off, after climbing about 200-300 ft, EOT passed directly underneath and then turned left onto downwind. The pilot of J5340 then broadcast a call to the pilot of EOT advising that he was above him and to his right and asked whether he had J5340 in sight. The pilot of EOT then sighted the Jabiru (J5340) above him to his right, and responded 'yes'.

The pilot of EOT asked what the Jabiru (J5430) pilot's intentions were. The pilot of J5340 responded that he would follow EOT, and extended the downwind leg to ensure adequate separation existed between the two aircraft. J1 had landed by that time, and both EOT and J5340 subsequently landed safely.

Pilot experience and comments

Pilot of VH-EOT

The pilot of EOT had recently passed his private pilot licence exam but had not yet received the associated paperwork. The pilot was conducting a navigation exercise towards the commercial pilot licence and had about 110 hours experience.

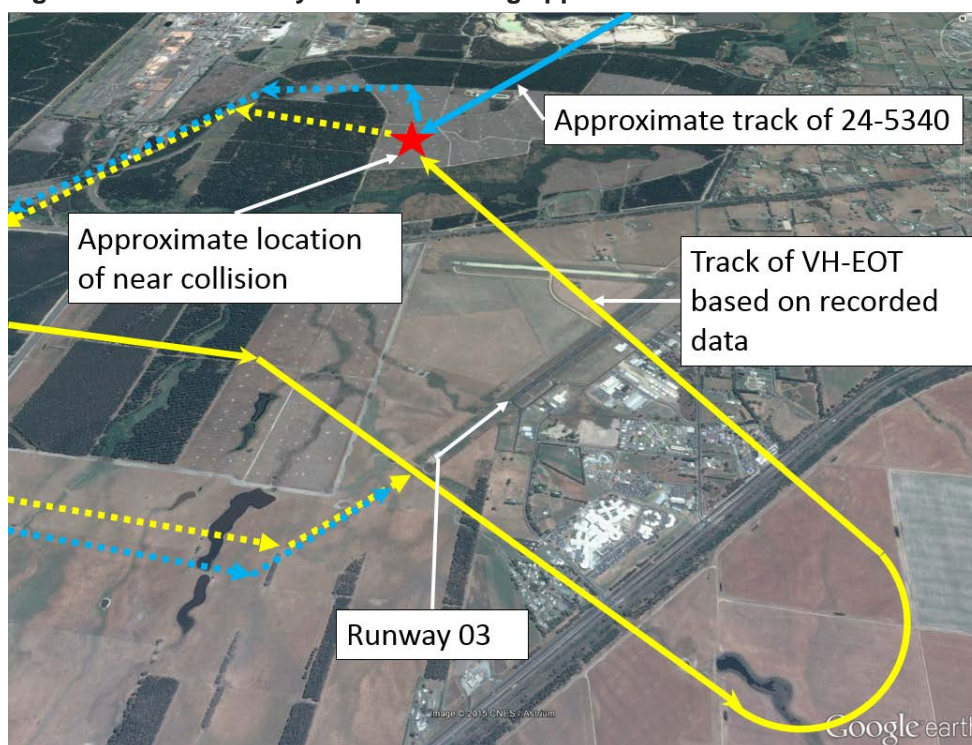
The pilot of EOT did not see J5340 until it had passed overhead. He did not see the other Jabiru (J1), or hear any broadcasts from the pilot of J1, at any time either in the air or after landing.

Pilot of Jabiru 24-5340

The pilot of Jabiru 24-5340 held a Recreational Aviation Australia licence and had approximately 700 hours experience as pilot in command.

The pilot of J5340 prefaced each broadcast with 'Jabiru 53-40' and the pilot of J1 also prefaced each broadcast with Jabiru and the aircraft registration number. The pilot of J1 reported that he read out each digit of the registration to make a clearer distinction between the two Jabiru aircraft.

Figure 1: Latrobe Valley Airport showing approximate aircraft tracks



Source: Google earth – annotated by the ATSB

ATSB comment

The CTAF at Latrobe Valley was not recorded, and the ATSB was unable to verify any of the reported transmissions. The pilots of both Jabiru aircraft reported hearing each other's broadcasts as stated. The ATSB obtained radar data, however none of the aircraft operating in the area at the time were visible. The operator of EOT provided recorded flight data of the aircraft track.

Safety message

Pilots operating under the visual flight rules are required to maintain vigilance so as to see and avoid other aircraft. [Civil Aviation Advisory Publication \(CAAP\) 166-2\(1\)](#), stated:

Lookout is the principal method for implementing see-and-avoid. Effective lookout means seeing what is ‘out there’ and assessing the information that is received before making an appropriate decision.

Broadcasting on the CTAF is known as radio-alerted see-and-avoid, and assists by supporting a pilot’s visual lookout for traffic. An alerted search is more likely to be successful as knowing where to look greatly increases the chances of sighting traffic.

Following a broadcast, it is important for other pilots in the vicinity to ensure they have the aircraft sighted. Issues associated with unalerted see-and-avoid have been detailed in the ATSB research report [Limitations of the See-and-Avoid Principle](#).

The ATSB SafetyWatch highlights the broad safety concerns that come out of our investigation findings and from the occurrence data reported to us by industry. One of the safety concerns is [safety around non-towered aerodromes](#).



As detailed in the booklet [A pilot’s guide to staying safe in the vicinity of non-towered aerodromes](#), ATSB research found that, between 2003 and 2008, there were 709 airspace-related events at, or in the vicinity of non-towered aerodromes. This included 60 serious incidents and six accidents (mid-air and ground collisions). Most of the 60 serious incidents were near mid-air collisions.

The ATSB investigated a mid-air collision at Latrobe Valley Airport on 1 December 2007, [AO-2007-065](#), in which a Cessna 172 collided with an Avid aircraft on final approach to runway 09.

General details

Occurrence details

Date and time:	6 September 2015 – 1545 EST	
Occurrence category:	Serious incident	
Primary occurrence type:	Near collision	
Location:	Latrobe Valley Airport, Victoria	
	Latitude: 38° 12.43' S	Longitude: 146° 28.22' E

Aircraft details: VH-EOT

Manufacturer and model:	Cessna Aircraft Company, 172S	
Registration:	VH-EOT	
Serial number:	172S10317	
Type of operation:	Flying training	
Persons on board:	Crew – 1	Passengers – Nil
Injuries:	Crew – Nil	Passengers – Nil
Damage:	Nil	

Aircraft details: 24-5340

Manufacturer and model:	Jabiru Aircraft J120-C	
Registration:	24-5340	
Serial number:	004	
Type of operation:	Private – Pleasure/Travel	
Persons on board:	Crew – 1	Passengers – Nil
Injuries:	Crew – Nil	Passengers – Nil
Damage:	Nil	

About the ATSB

The Australian Transport Safety Bureau (ATSB) is an independent Commonwealth Government statutory agency. The ATSB 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.