



Australian Government

Australian Transport Safety Bureau

Two airspace related events at Nagambie (ALA)

Nagambie (ALA), Victoria, 3 and 8 May 2013

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Addendum

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Two airspace related events at Nagambie (ALA)

What happened

The ATSB was advised of two airspace related events in the vicinity of the Nagambie aeroplane landing area (ALA), Victoria on 3 and 8 May 2013. The first incident on 3 May 2013 was an aircraft proximity event between VH-FZW and VH-EFY. The second incident on 8 May 2013 involved VH-CHA, which was observed to pass in proximity to airborne parachutists.

Occurrence 1

VH-FZW and VH-EFY

Pilot recollection

On 3 May 2013, the pilot of a Cessna 182 aircraft, registered VH-EFY (EFY), was conducting parachute operations overhead Nagambie (ALA), Victoria. While taxiing, the pilot of EFY reported hearing a taxi call on the Mangalore/Nagambie common traffic advisory frequency (CTAF) from the pilot of an aircraft operating at Mangalore. Soon after, the pilot of EFY broadcast a call advising he was rolling on runway 23. After take-off, the pilot broadcast another call on the CTAF and Melbourne Centre Low frequency¹ advising that he had departed and was on climb to flight level (FL)² 120 to conduct a parachute drop overhead Nagambie (ALA). During the climb, the pilot contacted Melbourne Centre High air traffic control and received a clearance to climb to FL 120.³

At about the same time, the pilot of a Piper PA-28 aircraft, registered VH-FZW (FZW), broadcast on the CTAF advising he was taxiing at Mangalore. The pilot was conducting a private ferry flight from Mangalore to Bendigo. Shortly after takeoff, he broadcast another call advising he had departed Mangalore. The pilot planned to track from Mangalore to the Nagambie Township and then to Bendigo, to avoid a Restricted Area,⁴ R351, and a parachute operations Danger Area,⁵ D360 (Figure 1). The pilot also reported hearing a broadcast from an aircraft operating in the Nagambie area, but was not aware of that aircraft's intentions.

In preparation for the parachute drop, the pilot of EFY broadcast a '4 minutes to drop' call on the CTAF and Melbourne Centre Low frequency; a '3 minute to drop' call on the Melbourne Centre High frequency and a '1 minute to drop' call on the CTAF. After completing the drop, the pilot broadcast a call on the CTAF, the Melbourne Centre High and Melbourne Centre Low frequencies advising that the drop had been completed and the aircraft was on descent.

The pilot of EFY conducted a circling descent, about 5 NM to the west of the Nagambie ALA. The boundary of the Danger Area is a 3 NM radius around the ALA and the aircraft's descent is not wholly contained in that area. EFY joined the base leg of the circuit for runway 02 at Nagambie, at about 4,500 ft, and made a broadcast on the CTAF.

¹ Melbourne Centre Low frequency is used for operations below 8,500 ft, while operations conducted above 8,500 ft use the Melbourne Centre High frequency.

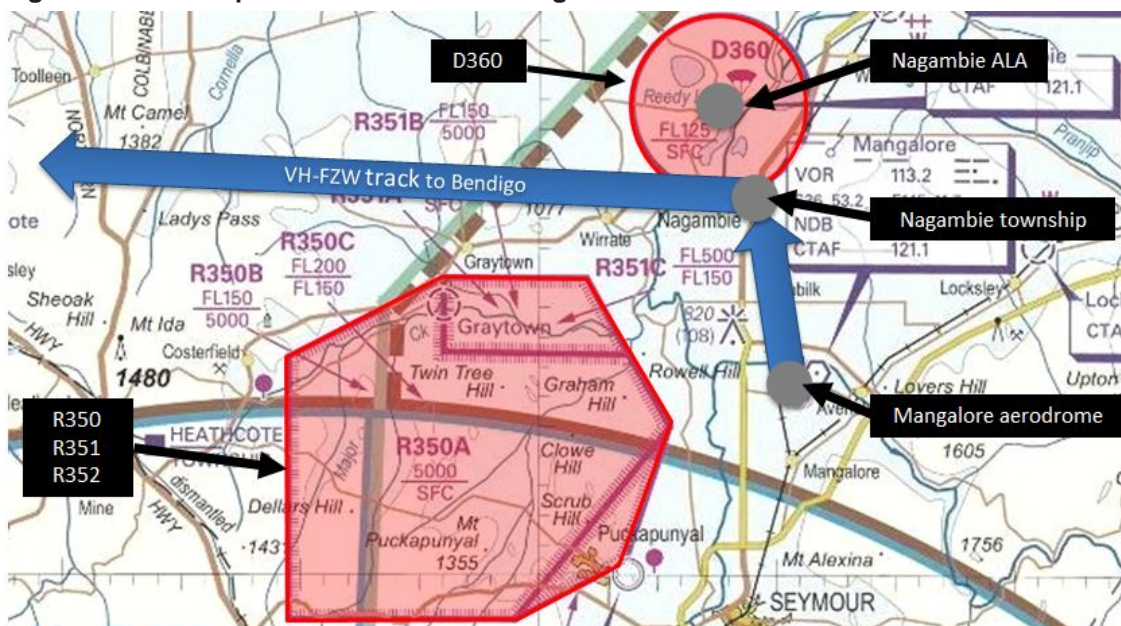
² At altitudes above 10,000 ft, an aircraft's height above mean sea level is referred to as a flight level (FL). FL 120 equates to 12,000 ft.

³ The aircraft was fitted with two radio systems (COMM 1 and COMM 2). The pilot reported that COMM 1 was used to broadcast and monitor the Melbourne Centre frequencies, while the CTAF was selected on COMM 2.

⁴ An airspace of defined dimensions above the land areas or territorial waters of a State, within which the flight of aircraft is restricted in accordance with certain specified conditions (Aeronautical Information Publication GEN 2.2 Section 1).

⁵ An airspace of defined dimensions within or over which activities of potential danger to aircraft flying over the area may exist (Aeronautical Information Publication GEN 2.2 Section 1).

Figure 1: VH-FZW planned track and the Nagambie area



Source: Airservices Australia

The pilot of FZW reported that he was about 6-7 NM to the west of the Nagambie Township, maintaining 2,500 ft, when he observed an aircraft (EFY) above, on descent, tracking from left to right. The pilot immediately banked left 10-15° and pitched 10° nose down. He reported that FZW flew about 100 ft below EFY.

The pilot of EFY reported that, as he re-entered the Danger Area, descending through 2,000 ft, he sighted an aircraft (FZW) in his 12 o'clock⁶ position taking avoiding action. The pilot banked the aircraft heavily to avoid FZW and estimated the aircraft came within 50 ft of each other.

After the incident, the pilot of EFY attempted to contact FZW on the CTAF. The pilot of EFY stated that he did not receive a response to any of his calls made on the CTAF.

The pilot of FZW reported that he normally changed from the CTAF to the Melbourne Centre Low frequency when overhead the Nagambie Township, however, he could not recall when he changed frequencies on that flight. He did not hear any broadcasts from the pilot of EFY.

Occurrence 2

VH-CHA and parachutists

On 8 May 2013, the pilot of a Bell 206 helicopter, registered VH-CHA (CHA), was preparing for a private flight from Mangalore to Echuca, Victoria. In preparation for the flight, the pilot obtained knowledge of the area from a local pilot and discussed the Restricted Areas. The pilot planned to track via the Nagambie Township to avoid the Restricted Areas to the west of Mangalore (Figure 1). The pilot reported being aware of the Nagambie ALA Danger Area (D360), but was not aware of the scale of parachute operations in the area.

The pilot of CHA made a broadcast at Mangalore on the Mangalore / Nagambie CTAF advising he was taking off parallel to runway 05 and tracking to the north. After receiving a response from an

⁶ The clock code is used to denote the direction of an aircraft or surface feature relative to the current heading of the observer's aircraft, expressed in terms of position on an analogue clock face. Twelve o'clock is ahead while an aircraft observed abeam to the left would be said to be at 9 o'clock.

aircraft in the circuit, he made a call to that aircraft advising he would track to the east to remain clear.

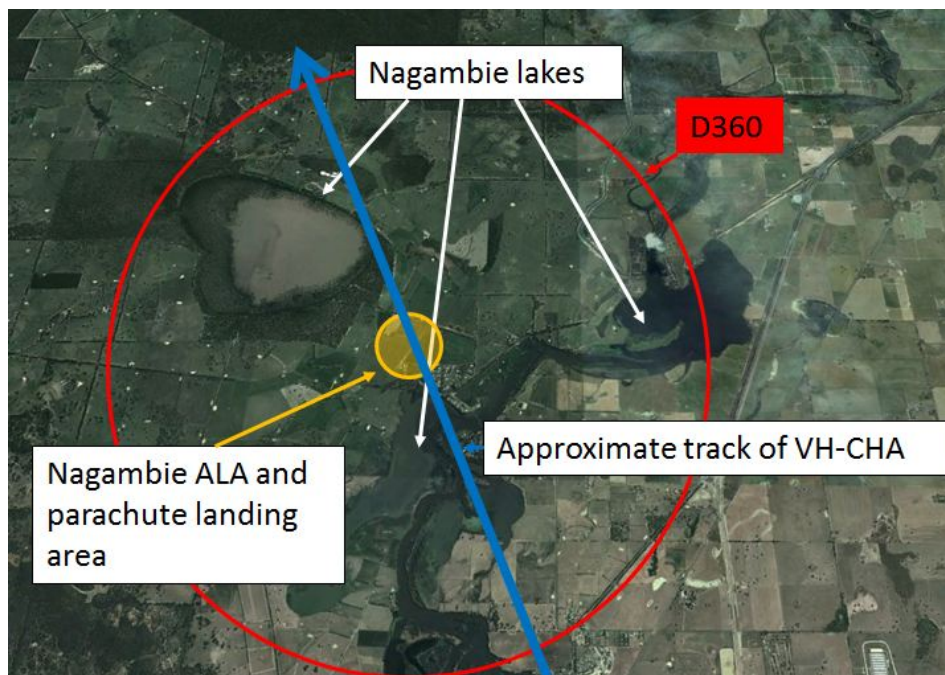
The helicopter departed Mangalore and commenced tracking for the Nagambie Township and subsequently turned more westerly on a track to Echuca, maintaining 1,000 ft.

At about the same time, the pilot of parachuting aircraft, registered VH-XLS (XLS), broadcast taxi and rolling calls on the Mangalore / Nagambie CTAF. The aircraft then departed on climb to FL145. The pilot reported broadcasting the following calls: airborne on the CTAF and Melbourne Centre Low frequency; a call to Melbourne Centre High for an airways clearance; '4 minutes to drop' on the CTAF and Melbourne Centre Low; '3 minutes to drop', and a clearance request to drop and descend on Melbourne Centre High and a '1 minute to drop' call on the CTAF. After the drop had been completed, the pilot broadcast on the CTAF, Melbourne Centre High and Melbourne Centre Low that the aircraft was on descent and inbound to Nagambie.

After passing in the vicinity of the Nagambie Lakes area (Figure 2), the pilot of CHA received a call on the CTAF from the drop zone safety officer on the ground at Nagambie ALA advising him that he had just flown over a parachute landing area. At that time, five parachutists had just landed and six were still airborne, operating below 2,000 ft. The safety officer reported observing CHA transit the Danger Area in a north-westerly direction at an estimated 500 ft. The pilot of CHA reported that he transited the zone at 1,000 ft.

The pilot of the parachuting aircraft reported that he normally made a joining circuit call on the CTAF. However, on this flight, the drop zone safety officer was contacting CHA on the CTAF at that time.

Figure 2: Nagambie Lakes and D360



Source: Google earth

Pilot comments (VH-CHA)

The pilot of CHA provided the following comments regarding the incident:

- he would have avoided transiting the Danger Area if he had known parachute operations were active at the time
- he did not recall hearing any broadcasts from the drop aircraft

- he had become distracted by the scenery and by talking to his passenger while looking at the Nagambie Lakes area
- his priority was to avoid the restricted area, which removed his focus from the danger area

Pilot comments (VH-XLS)

The pilot of XLS suggested that the comments about the Danger Area, as published in the En Route Supplement Australia (ERSA), be printed on the relevant charts. In this instance, the text “Intense PJE OPS SFC-FL145 WI 3NM HJ 7 days a week” could be printed within the Danger Area identified on the Visual Navigation Chart (VNC) or in the margin.

Nagambie parachute operations

Due to the regularity of parachute operations at the Nagambie ALA, the area had been classified as a Danger Area (D360). The Airservices Australia Designated Airspace Handbook stated that the lateral limit of D360 was a 3 NM radius from the ALA and the vertical limit was from the surface to FL125, with parachuting operations conducted from sunrise to sunset.

The En Route Supplement Australia extract for Nagambie also stated that there was intense parachute operations within 3 NM, 7 days per week up to FL140. In addition, parachuting aircraft would broadcast calls on the CTAF, the Melbourne Centre Low and Melbourne Centre High frequencies.

Safety message

The Aeronautical Information Publication ENR 1.4 paragraph 5.3.5 stated that:

Approval for flight within an active Danger Area outside controlled airspace is not required. However it is the responsibility of the PIC [pilot in command] to be aware of the dangerous activity and take appropriate precautions.

It is crucial that pilots are aware of the potential hazards that exist on their planned flight routes. When operating near, or within a Danger Area, they should be mindful of the activity within that area and take any appropriate precautions.

Issues associated with unalerted see-and-avoid have been documented in an Australian Transport Safety Bureau (ATSB) research report *Limitations of the See-and-Avoid Principle*. Unalerted see-and-avoid relies entirely on the ability of the pilot to sight the other aircraft. A traffic search in the absence of traffic information is less likely to be successful than a search where traffic information has been provided because knowing where to look greatly increases the chance of sighting the traffic.

The *Limitations of See-and-Avoid Principle* is available at

www.atsb.gov.au/publications/2009/see-and-avoid.aspx

Research published by the Australian Transport Safety Bureau determined that, between 1997 and 2004, pilot distraction was cited in 325 occurrences. The distraction source was identified in 237 of these, with some having multiple sources. Therefore, the number of distractions identified was 247. Of this, 7.3 per cent were attributed to passengers, with the majority caused by passenger commentary and interactive conversations between the pilot and the passenger. This incident is a reminder to pilots to be mindful of the impact distractions can have on aircraft operations. A copy of the ATSB Research report is available on the ATSB website here:

www.atsb.gov.au/publications/2005/distraction_report.aspx

General details

Occurrence 1 details

Occurrence category:	Incident	
Primary occurrence type:	Aircraft proximity event	
Location:	near Nagambie (ALA), Victoria	
	Latitude: 36° 44.2' S	Longitude: 145° 07.6' E

Piper PA-28, VH-FZW

Manufacturer and model:	Piper Aircraft Corporation PA-28-151	
Registration:	VH-FZW	
Type of operation:	Private	
Persons on board:	Crew – 1	Passengers – Nil
Injuries:	Crew – Nil	Passengers – Nil
Damage:	Nil	

Cessna 182, VH-EFY

Manufacturer and model:	Cessna Aircraft Company 182L	
Registration:	VH-EFY	
Type of operation:	Private	
Persons on board:	Crew – 1	Passengers – Nil
Injuries:	Crew – Nil	Passengers – Nil
Damage:	Nil	

Occurrence 2 details

Occurrence category:	Incident	
Primary occurrence type:	Airspace event	
Location:	near Nagambie (ALA), Victoria	
	Latitude: 36° 44.2' S	Longitude: 145° 07.6' E

Bell 206, VH-CHA

Manufacturer and model:	Bell Helicopter Textron Canada Ltd. 206B	
Registration:	VH-CHA	
Type of operation:	Private	
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 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.