



Australian Government

Australian Transport Safety Bureau

Separation issue involving a Cessna 404, VH-ANM, and a Cessna 172, VH-MJK

Bathurst Island Airport, Northern Territory, on 15 August 2015

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Addendum

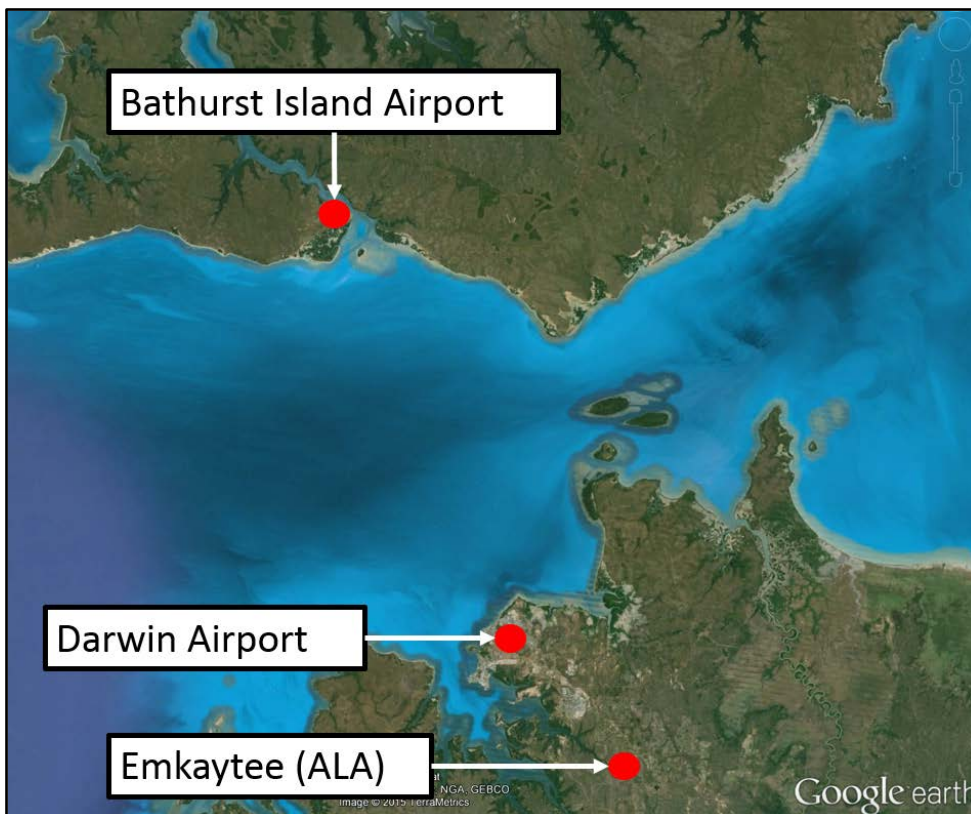
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Separation issue involving a Cessna 404, VH-ANM, and a Cessna 172, VH-MJK

What happened

On 15 August 2015, the student pilot of a Cessna 172 aircraft, registered VH-MJK (MJK) conducted a solo flight from Emkaytee aeroplane landing area (ALA) to Bathurst Island Airport, Northern Territory (Figure 1). There the student pilot completed touch-and-go circuits for about 30 minutes on runway 15.

Figure 1: Image showing Bathurst Island, Darwin and Emkaytee airports



Source: Google earth – annotated by the ATSB

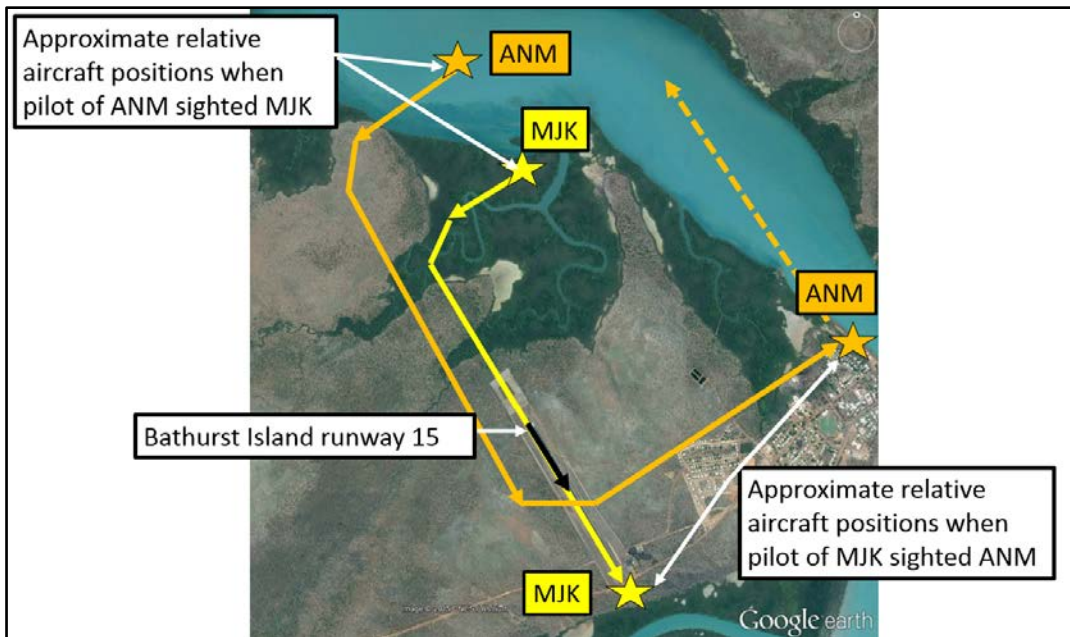
At about 1210 Central Standard Time (CST), a Cessna 404 aircraft, registered VH-ANM (ANM) and operated by Hardy Aviation, departed from Darwin Airport, Northern Territory, on a scheduled flight to Bathurst Island, with a pilot and five passengers on board. The pilot broadcast when inbound and about 15 NM from Bathurst Island Airport on the common traffic advisory frequency (CTAF) of 126.5 MHz, and did not receive any response. At about 1220, the aircraft joined on the downwind leg of the circuit for runway 15 at 1,000 ft above ground level and broadcast joining the circuit. As the aircraft turned onto base, the pilot sighted MJK also on base, at the same height, closer to the runway and estimated it was about 150 m away (Figure 2).

The pilot of ANM immediately manoeuvred the aircraft to the west to increase separation between the two aircraft. After unsuccessfully trying to contact the pilot of MJK on the CTAF, the pilot of ANM briefly selected frequency 126.7 MHz to try to communicate with the pilot of MJK, but again

did not receive a response. The pilot of ANM observed MJK conduct a touch-and-go, and kept that aircraft in sight, while overflying and re-joining the circuit on the crosswind leg.

After the touch-and-go, when upwind of the runway at about 500 ft above ground level, the pilot of MJK sighted ANM. ANM was then to the left, above MJK at 1,000 ft, and turning onto the downwind leg. The pilot of MJK then saw that the radio was selected to frequency 126.6 MHz. The pilot checked their flight plan, noted that the correct frequency was 126.5, and immediately changed the radio to that frequency. The pilot of MJK then broadcast a departure call on the CTAF. The pilot of ANM then contacted the pilot of MJK, who advised that the radio had been on the wrong frequency.

Figure 2: Bathurst Island Airport showing approximate aircraft tracks and relative positions

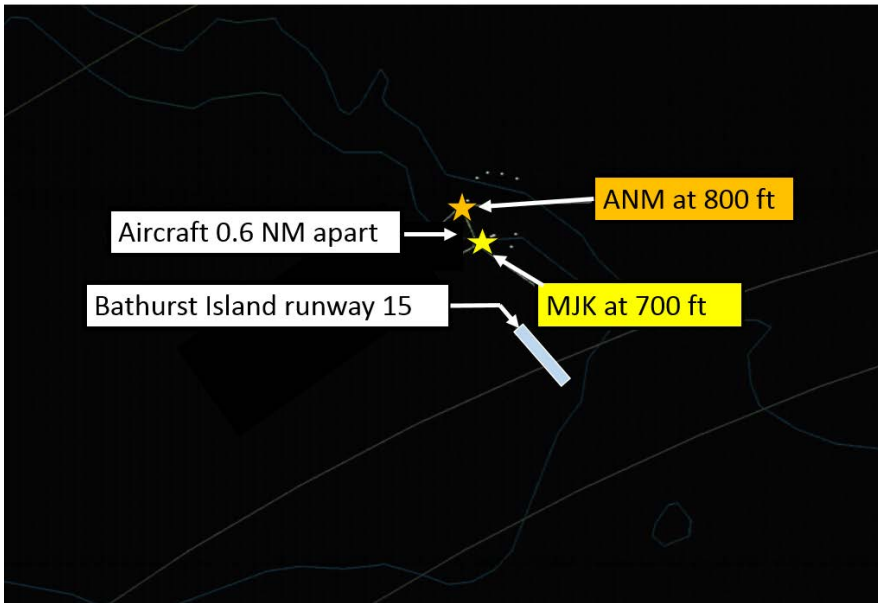


Source: Google earth – annotated by the ATSB

The pilot of ANM continued the approach, and landed at Bathurst Island, and MJK returned to Emkaytee without further incident.

The radar data provided to the ATSB by Darwin air traffic control, indicated the aircraft came within about 100 ft vertically and 0.6 NM at the closest proximity (Figure 3).

Figure 3: Radar display showing relative aircraft positions



Source: Department of Defence – annotated by the ATSB

Safety action

Whether or not the ATSB identifies safety issues in the course of an investigation, relevant organisations may proactively initiate safety action in order to reduce their safety risk. The ATSB has been advised of the following proactive safety action in response to this occurrence.

Operator of VH-ANM

As a result of this occurrence, the operator of VH-ANM advised the ATSB that they have taken following safety action:

Notice to company pilots

The Chief Pilot distributed a notice to all company pilots advising them of the incident. The notice stated that the Tiwi Islands continue to be a hot spot for traffic, and reminded pilots to be 'doubly aware' when operating in the area.

Safety message

The pilot of MJK commented that there were three important learnings from this incident:

- crosscheck the selected frequency against the flight planning notes
- ensure the selector reaches the detent when selecting a radio frequency
- listen for the 'beep-back' response from the CTAF to verify the correct frequency has been selected.

An aerodrome frequency response unit (AFRU) identifies correct radio frequency selection at non-towered aerodromes. The AFRU automatically responds to a transmission on the CTAF either with a pre-recorded voice message, if no transmission has been received in the previous five minutes, or with a beep-back.

Insufficient communication between pilots operating in the same area is the most common cause of safety incidents near non-towered aerodromes. 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](#).



The booklet [A pilot's guide to staying safe in the vicinity of non-controlled aerodromes](#) outlines many of the common problems that occur at non-towered aerodromes, and offers useful strategies to keep yourself and other pilots safe.

General details

Occurrence details

Date and time:	15 August 2015 – 1220 CST	
Occurrence category:	Incident	
Primary occurrence type:	Separation issue	
Location:	Bathurst Island Airport, Northern Territory	
	Latitude: 11° 46.15' S	Longitude: 130° 37.18' E

Aircraft details: VH-ANM

Manufacturer and model:	Cessna Aircraft Company 404	
Registration:	VH-ANM	
Operator:	Hardy Aviation	
Serial number:	4040010	
Type of operation:	Air transport low capacity - Passenger	
Persons on board:	Crew – 1	Passengers – 5
Injuries:	Crew – Nil	Passengers – Nil
Damage:	Nil	

Aircraft details: VH-MJK

Manufacturer and model:	Cessna Aircraft Company 172N	
Registration:	VH-MJK	
Serial number:	17268245	
Type of operation:	Flying training – solo	
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.