Australian Government
Australian Transport Safety Bureau

Ground proximity event involving a Cessna 208, VH-LNI and a vehicle

Jurien Bay (ALA), Western Australia, 31 December 2013

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Aviation Occurrence Investigation
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Published by: Australian Transport Safety Bureau
Postal address: PO Box 967, Civic Square ACT 2608
Office: 62 Northbourne Avenue Canberra, Australian Capital Territory 2601
Telephone: 1800 020 616, from overseas +61 2 6257 4150 (24 hours)
Accident and incident notification: 1800 011 034 (24 hours)
Facsimile: 02 6247 3117, from overseas +61 2 6247 3117
Email: atsbinfo@atsb.gov.au
Internet: www.atsb.gov.au

Addendum

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Ground proximity event involving a Cessna 208, VH-LNI and a vehicle

What happened

On 31 December 2013, at about 0945 Western Standard Time (WST),[1] the driver of an ambulance received a telephone call from the Western Australian State Operations Centre to meet a rescue helicopter at the Jurien Bay aeroplane landing area (ALA), Western Australia, and collect patients to be transferred to the local medical centre.

At about 0950, the pilot of a Cessna 208 aircraft, registered VH-LNI (LNI), landed at Jurien Bay to embark parachutists, and, while taxiing, received a radio broadcast on the common traffic advisory frequency (CTAF) from the pilot of the rescue helicopter. The helicopter pilot advised that they had landed at the beach about 0.5 NM from the aerodrome to transfer the patients to the ambulance. He advised that he would broadcast on the CTAF when subsequently proceeding to the aerodrome to refuel.

LNI then parked at the northern apron (Figure 1), with the engine running, in preparation for the arrival of the parachutists. The northern apron was in front of the Royal Flying Doctor Service (RFDS) terminal and the southern area of that apron was restricted to patient transfer operations. According to an agreement with the Dandaragan Shire Council, the skydiving aircraft were permitted to use the northern apron for parachute loading, but not to be parked to the east or north of the RFDS building on that apron at any time, or to impede access of emergency services vehicles.

About two minutes later, a second aircraft landed, vacated the runway, and taxied to the southern apron. The skydiving hangar and aerodrome access gate were located at the southern apron.

At about 0955, the ambulance arrived at the aerodrome at the RFDS gate, which was secured and accessible only by emergency services personnel. The driver stopped the ambulance and unlocked the gate and was required to cut rope barriers that had been erected and were blocking ambulance access to the RFDS terminal.

The driver attempted to communicate with the pilot of LNI, using hand signals. The ambulance driver reported that he used one hand indicating ‘stop’ and the other a ‘scissors’ action to indicate to the pilot to remain stationary. The pilot reported that he interpreted the hand gestures from the driver to imply that he was to leave the area.[2]

The ambulance then entered the airport and proceeded via the RFDS apron towards the runway. The driver reported that the ambulance deviated past the standing aircraft leaving about 14 m distance from the aircraft propeller. The pilot of LNI estimated the distance to be about 3 m.

The ambulance driver then proceeded to the runway and stopped prior to entering the runway. The driver reported that he and his ambulance partner conducted a thorough visual inspection for aircraft approaching and on the runway. The ambulance then entered the runway and drove towards the helipad, about 300 m south of the RFDS apron (Figure 2).

The pilot of LNI then broadcast on the CTAF, his intention to taxi to the southern apron, and commenced taxiing. While driving along the runway, the ambulance driver received a call from the Operations Centre advising that the helicopter was at the Jurien Bay marina awaiting the ambulance for patient transfer. He made a U turn and returned via the same route, and reported again deviating around the stationary aircraft maintaining a safe distance. The pilot of LNI reported

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1 Western Standard Time (WST) was Coordinated Universal Time (UTC) + 8 hours.

2 The ambulance operations manager advised that there was no standard specified regarding the use of hand signals for communication with pilots.

that when he sighted the ambulance returning he immediately stopped taxiing and that the ambulance passed within about 2 m of the aircraft wingtip.

Figure 1: Jurien Bay (ALA)

Source: Google earth

Ambulance driver / sub-centre manager

The ambulance driver provided the following comments:

- There were no written procedures regarding access to or use of the aerodrome from St John Ambulance.
- Ambulance crews have been tasked by the RFDS Operations Centre to conduct runway wildlife inspections prior to RFDS aircraft landing.
- A 'Sub Centre Circular' had been promulgated on 4 April 2011 providing guidelines regarding ambulance movement around RFDS aircraft.
- The ambulance personnel did not communicate directly with flight crew. All communications were by phone via the operations centre in Perth.
- He followed the local procedure to stop, look and listen for aircraft prior to entering the runway.
- He had made a submission to the shire council requesting that aircraft other than emergency services aircraft be prevented from accessing the RFDS terminal. The shire agreed to remove the sign permitting general aircraft parking from the RFDS apron.

Training manager

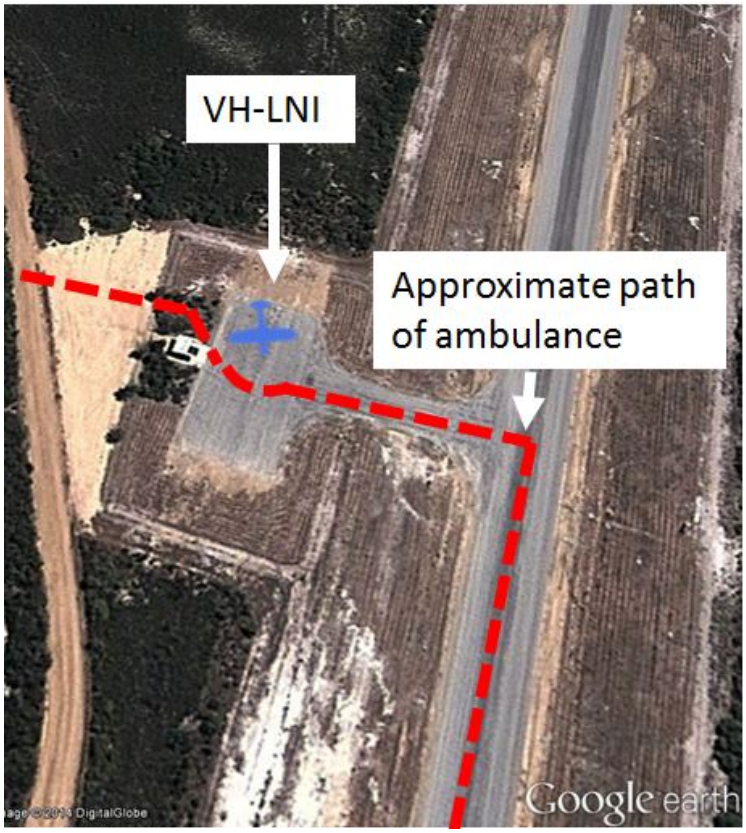
The ambulance training manager advised that there were no training procedures regarding operations around aerodromes. There was an emphasis on the first priority for all ambulance personnel being to assess for danger. They will henceforth incorporate a specific focus in the training regarding dangers that apply to aerodrome operations.

Ambulance operations manager

The ambulance operations manager provided the following comments:

- The Emergency Management Manual provided procedures for Perth International Airport and applied to other airports where an Aviation Security Identity Card (ASIC) was required for entry. The manual instructed ambulance personnel to wait at the security gate until a security escort arrives.
- There were no procedures for non-secured aerodromes. The aerodrome operators were responsible for any local operating procedures or agreements with emergency services personnel.
- The rural ambulance centres operate according to local procedures. In this incident, they expected that standard operating procedures at the aerodrome existed and that they would be provided and promulgated by the aerodrome operator.

Figure 2: Jurien Bay (ALA)



Source: Google earth and pilot recollection

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.

Shire council

As a result of this occurrence, the Dandaragan Shire Council has advised the ATSB that they have spoken to representatives of both parties involved in an attempt to prevent further incidents occurring and that a further meeting is scheduled. The Council intends to undertake works at the airport including construction of additional hangars and a taxiway in front of the hangars.

Safety message

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-controlled aerodromes www.atsb.gov.au/safetywatch/safety-around-aeros.aspx.

This incident highlights the importance of understanding local procedures around non-controlled aerodromes, in particular having agreements between users of a facility. At aerodromes where operators are not required to have radio communication capability, the need for pilots to keep a good lookout is amplified.

General details

Occurrence details

Date and time:	31 December 2013 – 0955 WST	
Occurrence category:	Serious incident	
Primary occurrence type:	Ground proximity event	
Location:	Jurien Bay (ALA), Western Australia	
	Latitude: 30° 18.20' S	Longitude: 115° 03.32' E

Aircraft details

Manufacturer and model:	Cessna Aircraft Company 208	
Registration:	VH-LNI	
Serial number:	20800298	
Type of operation:	Private – parachute operations	
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.