



**Australian Government**

**Australian Transport Safety Bureau**

# Runway incursion between a Fairchild SA227, VH-UZP and a Bell 47G, VH-UTF

Ballina Airport, New South Wales, 9 October 2013

**ATSB Transport Safety Report**  
Aviation Occurrence Investigation  
AO-2013-177  
Final – 20 January 2014

Released in accordance with section 25 of the *Transport Safety Investigation Act 2003*

#### **Publishing information**

**Published by:** Australian Transport Safety Bureau  
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#### **Addendum**

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# Runway incursion between a Fairchild SA227, VH-UZP and a Bell 47G, VH-UTF

## What happened

On 9 October 2013, at about 1720 Eastern Daylight-savings Time,<sup>1</sup> the pilot of a Fairchild SA227 aircraft, registered VH-UZP (UZP), was preparing for a freight charter flight from Ballina/Byron Gateway Airport (Ballina) to Coffs Harbour, New South Wales.

At the same time, the flight instructor and pilot of a Bell 47G helicopter, registered VH-UTF (UTF), had completed about 15-20 minutes of circuit training at Ballina. After landing, the pilot broadcast on the common traffic advisory frequency (CTAF) that UTF was entering runway 06 to conduct left hand circuits.<sup>2</sup> Shortly after, UTF departed and recommenced circuit training.

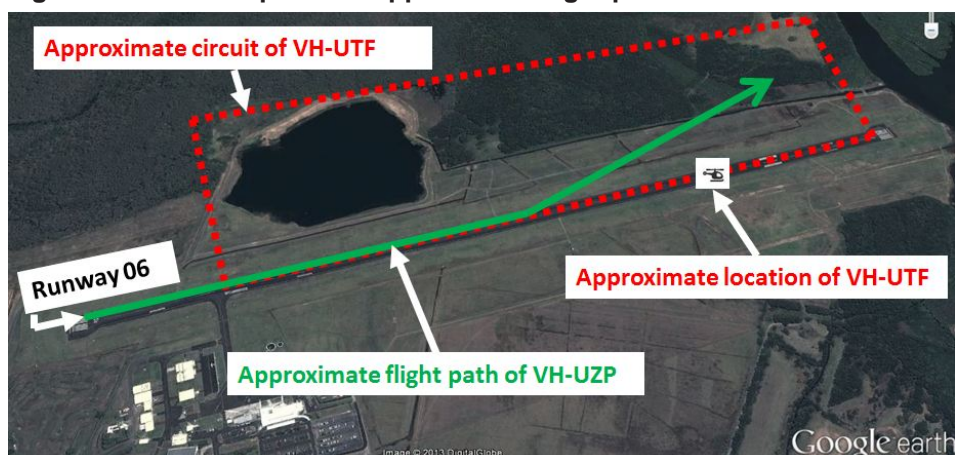
At about 1723, the pilot of UTF broadcast turning onto a left base for runway 06. Soon after, UTF landed about two-thirds of the way along the runway and came to a stop, facing east (Figure 1). The instructor briefed the pilot prior to commencing a further circuit.

The pilot of UZP observed UTF during the landing. At about 1724, he broadcast a taxi call and commenced taxiing to runway 06. After hearing no further broadcasts from the pilot of UTF, the pilot of UZP broadcast on the CTAF that he was entering and backtracking runway 06. The pilot again received no response, and after waiting about 5 seconds, he taxied UZP onto the runway and lined up on runway 06. At about 1727, the pilot broadcast a lining up and rolling call, which was acknowledged by the pilot of another aircraft inbound to Ballina.

At about 1728, the pilot of UZP looked along the runway and commenced the take-off run. Just prior to rotation, he sighted UTF stopped on the runway, towards the departure end. He elected to continue the take-off and increased the climb angle to provide separation with UTF.

The instructor of UTF then attempted to contact UZP, with nil response received. He then realised that the radio volume had been turned down. UTF then vacated the runway.

**Figure 1: Ballina Airport and approximate flight paths**



Source: Google earth and pilot recollections

<sup>1</sup> Eastern Daylight-savings Time (EDT) was Coordinated Universal Time (UTC) + 11 hours.

<sup>2</sup> Recordings of the transmissions made on the CTAF indicated that the broadcast was partially over-transmitted.

### ***Pilot comments (VH-UZP)***

The pilot of UZP provided the following comments:

- He expected UTF to be conducting right hand circuits, which was the normal circuit direction at Ballina. When at the runway 06 holding point, the right hand circuit was positioned behind the pilot.
- He expected UTF to be on early downwind when he entered the runway. He did not expect UTF to have stopped on the runway.
- His attention was directed inside the cockpit after lining up, and he then looked along the runway prior to commencing the take-off run.

### ***Pilot comments (VH-UTF)***

The flight instructor of UTF provided the following comments:

- It was the end of a long hot day.
- They had been making the appropriate calls on the CTAF, but did not hear any broadcasts from other aircraft. While this could have indicated a potential radio issue, it was not unusual to have low traffic volume at Ballina at that time.
- As the 'student' pilot was a commercial pilot, the instructor was not monitoring the pilot's actions as closely as he would have for a low hour student.
- Ballina Airport has an aerodrome frequency response unit (AFRU),<sup>3</sup> which provides an automatic response to pilots when transmitting on the CTAF. The 'beep backs' from the AFRU would not have been heard as the radio volume had been turned down.

## **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-UZP***

As a result of this occurrence, the operator of VH-UZP has advised the ATSB that they will be highlighting the importance of communications and situational awareness with all company pilots.

### ***Operator of VH-UTF***

As a result of this occurrence, the operator of VH-UTF has advised the ATSB that they have made an addition to the start-up checklist, with the pilot having to check the automatic weather information service (AWIS). As well as providing weather information, this enables the pilot to confirm that the radio is on and audible.

## **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-towered aerodromes [www.atsb.gov.au/safetywatch/safety-around-aeros.aspx](http://www.atsb.gov.au/safetywatch/safety-around-aeros.aspx).




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<sup>3</sup> AFRU: A facility installed at certain non-towered aerodromes that provides an automatic response to pilots when transmitting on the CTAF. The AFRU indicates to the pilot that the correct radio frequency has been selected and confirms the operation of the aircraft's transmitter, receiver and volume setting. The pilot will receive either a voice identification, for example 'Leinster aerodrome CTAF', or a 300 millisecond tone or 'beep'.

An ATSB research report identified over 200 occurrences between 2003 and 2008 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. This included instances of where the incorrect radio frequency had been selected, the radio volume had been turned down, faulty radio equipment, not making broadcasts, or other distractions.

Broadcasting and monitoring the CTAF and maintaining a good lookout are useful strategies to improve safety at non-towered aerodromes. The publication, *Staying safe in the vicinity of non-towered aerodromes*, is available from the ATSB website at [www.atsb.gov.au/publications/2008/ar-2008-044\(1\).aspx](http://www.atsb.gov.au/publications/2008/ar-2008-044(1).aspx).

In addition, where available, the AFRU is also a useful tool for pilot to confirm that the correct radio frequency and volume has been selected.

## General details

### Occurrence details

Date and time:	9 October 2013 – 1730 EDT	
Occurrence category:	Serious incident	
Primary occurrence type:	Runway incursion	
Location:	Ballina/Byron Gateway Airport, New South Wales	
	Latitude: 28° 50.03' S	Longitude: 153° 33.75' E

### Aircraft details: VH-UTF

Manufacturer and model:	Bell Helicopter Company	
Registration:	VH-UTF	
Serial number:	25026	
Type of operation:	Flying training - dual	
Persons on board:	Crew – 2	Passengers – Nil
Injuries:	Crew – Nil	Passengers – Nil
Damage:	Nil	

### Aircraft details: VH-UZP

Manufacturer and model:	Fairchild Industries Inc.	
Registration:	VH-UZP	
Serial number:	AC-498	
Type of operation:	Charter – freight	
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.