



**Australian Government**

**Australian Transport Safety Bureau**

# Collisions with kangaroos involving a Fairchild SA227 (Metroliner) VH-HPE, at Thangool Airport and a King Air B200, VH-FDB

Thangool Airport, Queensland, 1 September 2015

Barcardine Airport, Queensland, 2 September 2015

**ATSB Transport Safety Report**  
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#### **Addendum**

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# Collisions with kangaroos involving a Fairchild SA227 (Metroliner), VH-HPE, and a King Air B200, VH-FDB

## What happened

On 1 September 2015, the pilot of a SA227 (Metroliner) aircraft, registered VH-HPE (HPE), was conducting a scheduled freight run from Brisbane, to Emerald, via Thangool Airport, Queensland.

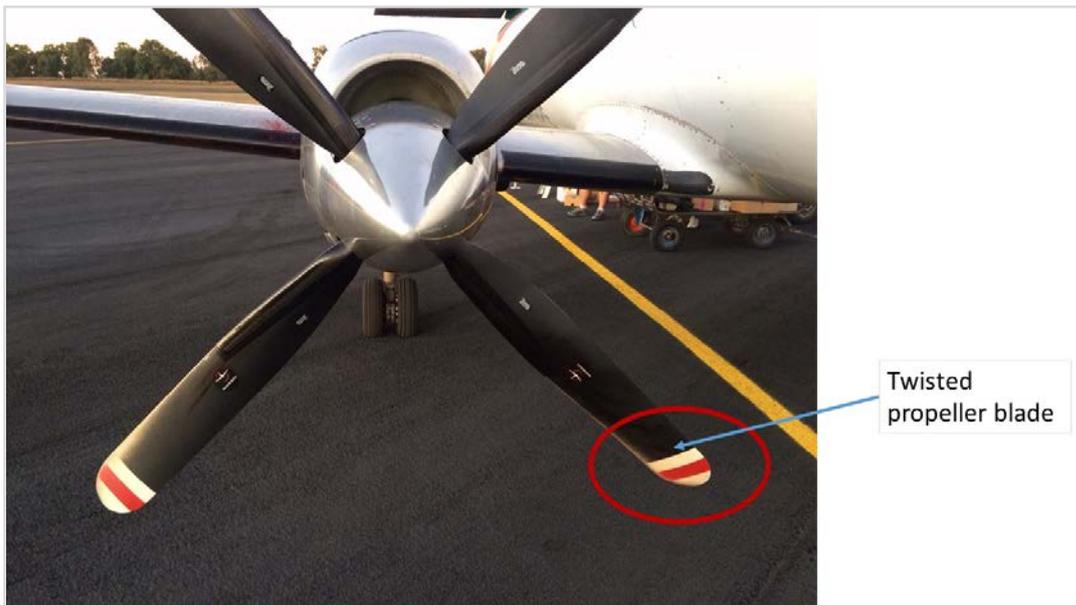
Approaching Thangool, the pilot conducted a Distance Measuring Equipment (DME) arrival with a left circuit onto runway 28, touching down at 0545 Eastern Standard Time, just before first light.

Shortly after touchdown, and with all landing gear wheels in contact with the ground, the pilot saw the glimpse of an animal flash from left to right in front of the aircraft. At the time, the aircraft was travelling at about 80 kt. The right propeller then struck the animal, later identified as a small kangaroo. The pilot reported that following the large bang associated with the propeller striking the animal, there was a lot of vibration throughout the aircraft, but no abnormal engine indications. The pilot continued the landing roll, and used ground idle rather than reverse thrust to slow the aircraft.

The pilot taxied the aircraft to the parking bay, shut down the engines, then carried out an external inspection and found that one of the propeller blades attached to the right engine was twisted (Figure 1). The pilot was not injured.

Following the incident, the operator replaced the right engine and propeller and arranged for the original engine to be further assessed by engineering staff.

**Figure 1: Damage to propeller blade on VH-HPE**



Source: Pilot

## ***Pilot experience and comments***

The pilot held an Airline Transport Pilot Licence (Aeroplane) (ATPLA) and had about 4,900 flying hours, with about 1,310 hours on Metroliner aircraft. The pilot stated that there were no relevant NOTAMS for Thangool Airport, nor any alerting radio calls regarding wildlife. During the approach,

the pilot had activated the pilot activated lighting (PAL), which provides runway and airport lighting, however no wildlife was evident on the runway.

**Thangool Aerodrome Safety Officer comments**

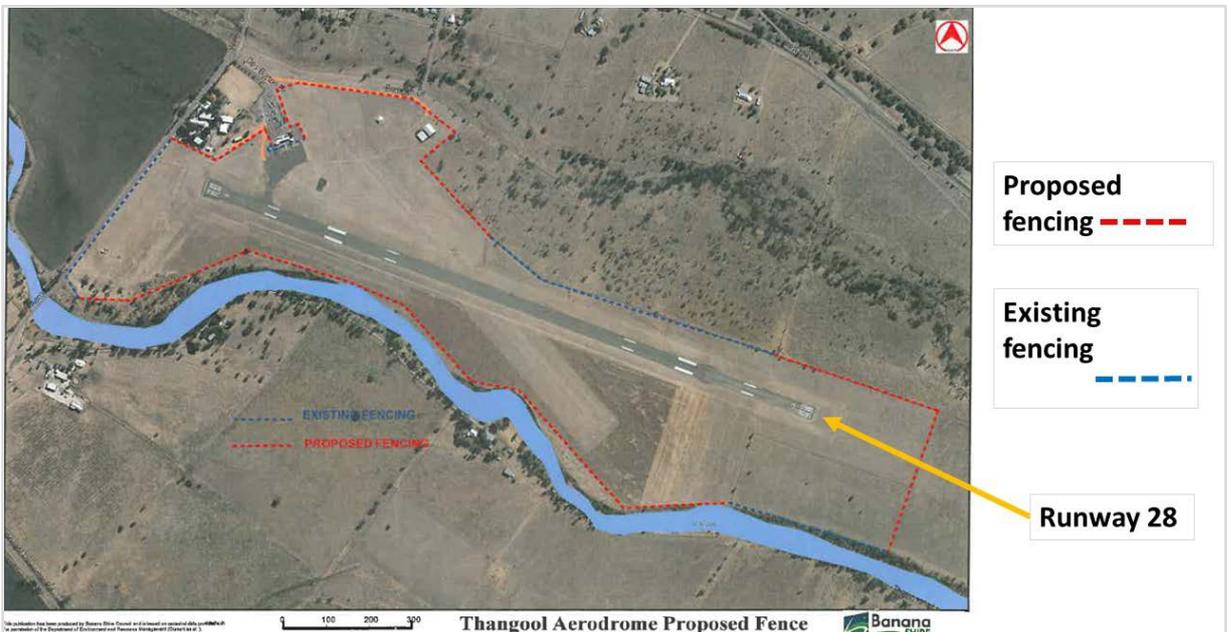
The aerodrome safety officer (ASO) reported that, due to continual pro-active mitigation strategies, such as animal culling, there have been no reported kangaroo strikes at the airport in the last 28 years.

The ASO also commented that they had conducted a runway inspection about 20 minutes prior to the Metroliner landing. No animals were evident during that inspection.

**Banana Shire Council comments**

Sections of the Thangool Airport had wildlife protective fencing however, it is not fully fenced. At the time of publication, the Banana Shire Council, who own and operate the airport, had a funding application lodged with the Australian Government’s Regional Aviation Access Programme to enable the remainder of the airport fencing to be completed (Figure 2).

**Figure 2: Thangool airport with current and proposed fencing marked**



Source: Banana Shire Council

**Additional wildlife strike**

On 2 September 2015, another kangaroo strike was reported to the ATSB (ATSB occurrence number 201503915). In this occurrence, a Raytheon B200 aircraft, VH-FDB, was on a medical retrieval mission from Townsville to Barcaldine Airport, Queensland. As the aircraft touched down in the early hours of the morning, at about 0141 EST the pilot caught a last moment glimpse of the animal before the aircraft struck a small kangaroo. The pilot reported that engine indications were normal, with no noticeable vibration as they completed the landing roll and then shut down the left engine while on the runway. They then taxied clear of the runway using the remaining engine. The strike caused damage to the three propeller blades attached to the left engine and disabled the aircraft (Figure 3)

**Operator comment**

The operator commented that although the Enroute Supplement Australia (ERSA) entry for Barcaldine Airport warns that both an animal and bird hazard exists, the local base had never sighted any animals, and therefore were somewhat inclined to discount it as a likely occurrence.

The operator/crew had not requested a “roo inspection” prior to the landing. They have also advised the ATSB that apart from the propeller damage, the left engine power module may also need replacing.

**Figure 3: VH-FDB showing twisted propeller blades**



Source: Operator

***Barcaldine Regional Council***

A council representative advised the ATSB, that a 6 ft chain mesh fence, with locked gates surrounded Barcaldine Airport. The airport staff conducted regular wildlife inspections at the airport, and also upon request with prior notice. They advised that due to drought conditions, there has been a noticeable increase in kangaroo numbers in the prior months. This increase was due to the animals seeking feed.

**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-FDB***

As a result of this occurrence, the aircraft operator of VH-FDB has advised the ATSB that they are taking the following safety actions:

***Strip inspection***

The operator is amending their internal procedures, to automatically request a strip inspection for animals at any airport in the ERSA where an animal hazard is listed. This new procedure will also extend to requesting a strip inspection at any aeroplane landing area (ALA) when deemed appropriate.

## Safety message

Occurrences involving aircraft striking wildlife, particularly birds, are the most common occurrences reported to the ATSB. They are a significant economic risk for aerodrome and airline operators as well as a potential safety risk. The ATSB regularly publishes a statistical report on the number and frequency of wildlife strikes. The aim of the report is to give information back to pilots, aerodrome and airline operators, regulators, and other aviation industry participants to assist them with managing the risks associated with bird and animal strikes. This is available on the ATSB [website](#).

Both animal strikes and bird strikes remain a mandatory reporting item under the Transport Safety Act 2003. Reporting obligations are available on the ATSB [website](#).



Source: ATSB

## General details

### Occurrence details – VH-HPE

Date and time:	1 September 2015– 0600 EST	
Occurrence category:	Serious Incident	
Primary occurrence type:	Collision with wildlife	
Location:	Thangool Airport, Queensland	
	Latitude: 24° 29.63'S	Longitude: 150° 34.57' E

### Aircraft details – VH-HPE

Manufacturer and model:	Fairchild Industries Inc SA227-DC	
Registration:	VH-HPE	
Serial number:	DC-823B	
Type of operation:	Charter - Freight	
Persons on board:	Crew – 1	Passengers – Nil
Injuries:	Crew – Nil	Passengers – N/A
Damage:	Substantial	

### Occurrence details – VH-FDB

Date and time:	2 September 2015– 0200 EST	
Occurrence category:	Serious Incident	
Primary occurrence type:	Collision with wildlife	
Location:	Barcaldine Airport, Queensland	
	Latitude: 23° 33.9 S	Longitude: 145° 18.4' E

### Aircraft details – VH-FDB

Manufacturer and model:	Raytheon Aircraft Company B200	
Registration:	VH-FDB	
Serial number:	BB-1977	
Type of operation:	Aeromedical	
Persons on board:	Crew – 2	Passengers – 1
Injuries:	Crew – Nil	Passengers – N/A
Damage:	Substantial	

## 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.

