



Australian Government

Australian Transport Safety Bureau

Runway loss of separation between Bombardier DHC-8-202, VH-ZZJ and Aerospatiale AS332 L1, VH-LOJ

Darwin Airport, Northern Territory, 4 September 2012

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Runway loss of separation between Bombardier DHC-8-202, VH-ZZJ and Aerospatiale AS332 L1, VH-LOJ

What happened

Between 1440 and 1533 Central Standard Time¹, on 4 September 2012, an Aerospatiale AS332 L1 helicopter, registered VH-LOJ (LOJ), was being used to conduct flying training operations on runway 36, at Darwin Airport, Northern Territory (Figure 1). For the majority of the time, LOJ was restricted to operate south of runway 29.

At 1524, a Bombardier DHC-8-202, registered VH-ZZJ (ZZJ), reported ready for departure on runway 29 and was instructed to line-up behind a landing aircraft from taxiway Echo 2 (E2). The landing aircraft vacated the runway and, while ZZJ was still taxiing onto the runway at 1526, the Aerodrome Controller (ADC) cleared the aircraft for takeoff.

At 1528, and before ZZJ had commenced the takeoff roll on runway 29, LOJ called ready on runway 36 for departure to the north. The ADC cleared LOJ for takeoff and instructed the pilot to maintain upwind. The instruction to 'maintain upwind' effectively cancelled the restriction on LOJ to operate south of runway 29 and required the helicopter to continue tracking northbound after takeoff, i.e. not to turn left or right.

The pilot of ZZJ heard the transmission and, believing that there would have been a risk of a collision if he commenced takeoff, delayed his departure until after LOJ had crossed the intersection of the two runways.

Defence investigation

Air traffic services at Darwin are provided by the Department of Defence (Defence). The Defence investigation found that an unsafe takeoff clearance had been issued to LOJ, resulting in a runway separation breakdown. Further, the ADC failed to monitor both ZZJ and LOJ during the takeoff, a critical phase of operation. The actions of the pilot of ZZJ, by delaying the takeoff, reduced the potential severity of the incident.

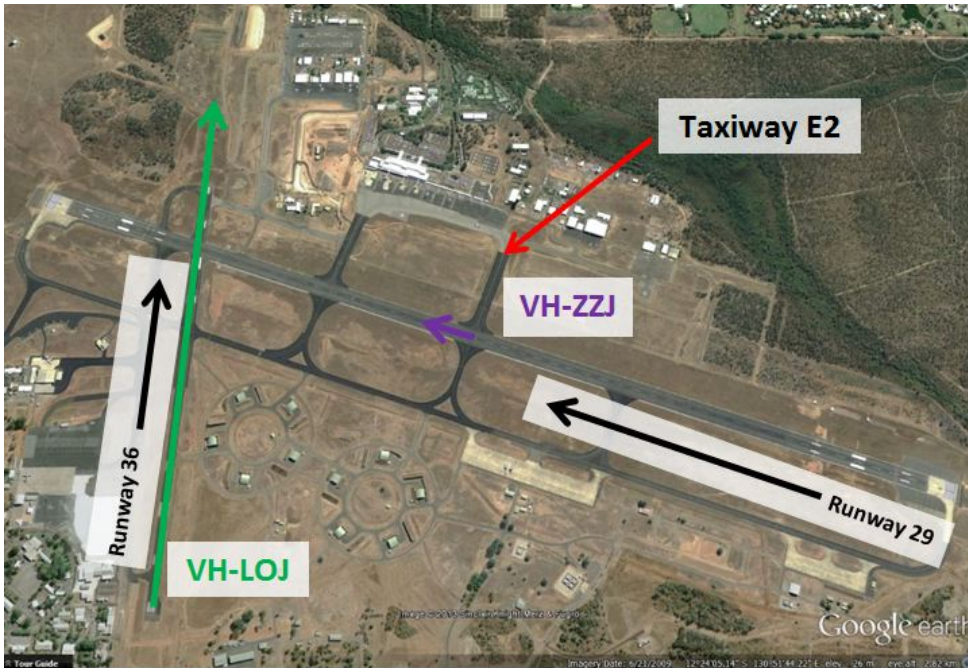
Darwin Airport



Source: Google Earth

¹ Central Standard Time (CST) was Coordinated Universal Time (UTC) + 9.5 hours.

Figure 1: Track of VH-LOJ (green) and position of VH-ZZJ (purple)



Source: Google Earth

ATSB comment

The pilot of ZZJ did not query the ADC’s instructions at the time and did not report the incident until two days later. The pilot of LOJ was not aware of the incident and the ADC did not recall the incident.

General details

Occurrence details

Primary occurrence type:	Loss of separation assurance	
Occurrence category:	Incident	
Location:	Darwin Airport, Northern Territory	
	Latitude: S 12° 24.88'	Longitude: E 130° 52.60'

Bombardier DHC-8-202, VH- ZZJ

Manufacturer and model:	Bombardier DHC-8-202
Registration:	VH- ZZJ
Type of operation:	Aerial work
Damage:	None

Aerospatiale AS.332L1, VH- LOJ

Manufacturer and model:	Aerospatiale AS.332L1
Registration:	VH- LOJ
Type of operation:	Flying training
Damage:	None

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.