



Australian Government

Australian Transport Safety Bureau

Flight below minimum altitude involving a Beechcraft 200, VH-NMW

near Sydney Airport, New South Wales, 5 June 2014

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Addendum

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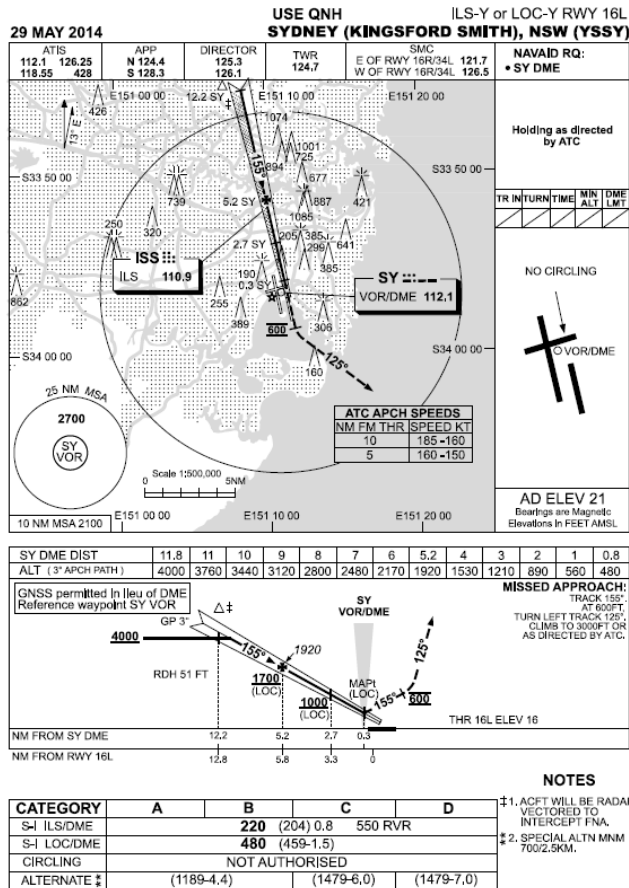
Flight below minimum altitude involving a Beechcraft 200, VH-NMW

What happened

On 5 June 2014, the pilot of a Beechcraft 200 aircraft, registered VH-NMW, conducted a private flight from Narrabri to Sydney Airport, New South Wales, with two passengers on board.

During the cruise, when in the vicinity of Scone, the pilot received a clearance from air traffic control (ATC) for a standard arrival route to Sydney, and entered the arrival and approach into the flight management computer. There were showers in the vicinity of Sydney airport and the pilot requested runway 16 Right (16 R) due to thunderstorm cells to the east, however ATC advised the pilot to expect an instrument landing system (ILS) approach to runway 16 Left (16 L) (Figure 1).

Figure 1: Sydney ILS-Y or LOC-Y RWY 16L



Source: Airservices Australia

The pilot was cleared by ATC to descend to 3,000 ft and, while on descent, was given radar vectors to intercept the localiser for runway 16 L. The pilot selected approach ('APP') mode on the flight guidance panel (FGP) and confirmed that the aircraft had intercepted the localiser. About 2 minutes later, the aircraft was cleared for the instrument landing system (ILS) approach on 16 L however the pilot did not observe that at this stage, the aircraft was below the glideslope.

The pilot was then temporarily distracted by explaining the multi-function display to the passenger seated in the front right seat. The controller queried whether the aircraft was on the glideslope and the pilot realised that the aircraft was below the glideslope. The pilot then selected altitude mode ('ALT') on the FGP to maintain the current altitude and continue level flight until the aircraft

intercepted the glideslope. Prior to intercepting the glideslope, ATC issued a safety alert¹ and advised the pilot that the aircraft was at 1,500 ft and below the lowest safe altitude.

Weather

The aerodrome terminal information service (ATIS) current at the time of the incident indicated that the visibility was 6 km, reducing to 3 km in passing showers; the cloud was scattered 400 ft, few at 1,000 ft and broken at 2,500 ft;² and there were thunderstorms to the east and south-east of the airport.

Pilot comments

The pilot provided the following comments

- The company's standard pre-flight briefing to passengers included advising that below 10,000 ft AMSL, a sterile cockpit was required. Had he adhered to that requirement, and not engaged in interaction with the passenger, his attention would have been focused on the glideslope.
- The absence of an outer marker for the 16 L approach, may have contributed to his omission to check the glideslope.

Safety message

This incident highlights the importance of continuously monitoring aircraft and approach parameters and the impact distractions can have on maintaining a stable approach profile.

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 handling approach to land, www.atsb.gov.au/safetywatch/handling-approach-to-land.aspx.



Research conducted by the ATSB found that distractions, or a change in routine, were an everyday part of flying and that pilots generally responded quickly and efficiently. It also revealed that 13 per cent of accidents and incidents associated with pilot distraction between January 1997 and September 2004 occurred during the approach phase of flight. The report, *Dangerous Distraction: An examination of accidents and incidents involving pilot distraction in Australia between 1997 and 2004* is available at: www.atsb.gov.au/publications/2005/distraction_report.aspx.

General details

Occurrence details

Date and time:	5 June 2014 – 0938 EST	
Occurrence category:	Incident	
Primary occurrence type:	Flight below minimum altitude	
Location:	near Sydney Airport, New South Wales	
	Latitude: 33° 56.77' S	Longitude: 151° 10.63' E

¹ The provision of advice to an aircraft when an air traffic services officer becomes aware that an aircraft is in a position which is considered to place it in unsafe proximity to terrain, obstructions or another aircraft.

² Cloud cover is normally reported using expressions that denote the extent of the cover. The expression Few indicates that up to a quarter of the sky was covered, Scattered indicates that cloud was covering between a quarter and a half of the sky. Broken indicates that more than half to almost all the sky was covered, while Overcast means all the sky was covered.

Aircraft details

Manufacturer and model:	Hawker Beechcraft Corporation	
Registration:	VH-NMW	
Serial number:	BY-196	
Type of operation:	Private	
Persons on board:	Crew – 1	Passengers – 2
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.