



Australian Government

Australian Transport Safety Bureau

Pilot incapacitation involving Cessna 208, VH-NTQ

Near Horn Island, Queensland, 12 July 2016

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Addendum

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Pilot incapacitation involving Cessna 208, VH-NTQ

What happened

At 1446 Eastern Standard Time (EST) on 12 July 2016, a Westwing Aviation Cessna 208 aircraft, registered VH-NTQ (NTQ), departed Horn Island Airport, Queensland (Qld), for a scheduled passenger flight to Cairns, Qld, with a pilot and seven passengers on board.

As the aircraft climbed towards the planned cruising altitude of 9,000 ft, the pilot began to feel light-headed, dizzy and short of breath. The pilot levelled the aircraft at 9,000 ft and engaged the autopilot. They then attempted to identify a reason for the symptoms, selected air conditioning off, opened a fresh air vent and ate a snack. No reason for the symptoms could be identified. As the flight continued, the symptoms intensified, the pilot felt tingling in their hands and fingers, and large head movements caused severe nausea.

About 20 NM north of Lockhart River, the aircraft approached a significant over-water segment. The pilot assessed that the symptoms would not pass and elected to divert to Lockhart River (Figure 1).

The aircraft landed at Lockhart River without further incident, the pilot and passengers were not injured and the aircraft was not damaged.

Figure 1: Overview of planned flight



Source: Google Earth, modified by ATSB

Pilot comments

The pilot of NTQ provided the following comments:

- They were well rested and fit to fly prior to commencing the day's duties.

- Prior to departing Horn Island, they were well nourished and hydrated.
- While conditions were not perfect, they elected to conduct a visual approach as large head movements exacerbated their symptoms.
- They had no pre-existing conditions which may have contributed to the incident.
- After landing, the symptoms quickly subsided and have not recurred.

Operator comments

The operator of NTQ provided the following comments:

- An engineering inspection of NTQ identified no defects. The aircraft has returned to service with no abnormalities reported.
- The operator interviewed the passengers the following day. No passenger reported experiencing symptoms similar to the pilot.
- After landing, an inspection of passenger baggage and aircraft cargo identified no dangerous goods.

Medical examinations

The pilot underwent medical examinations after landing in Lockhart River and the following day in Cairns. No contributing irregularities were identified.

ATSB comment

While the pilot did not return to Horn Island at the onset of the symptoms, the pilot’s decision to divert to an en route airport as the symptoms intensified rather than continuing to the intended destination demonstrates appropriate cautiousness in the face of uncertainty about their own ability to continue the flight.

Safety message

The ATSB safety education publication [Pilot incapacitation occurrences 2010–2014 \(AR-2015-096\)](#) documents recent pilot incapacitation occurrences in high capacity air transport, low capacity air transport, and general aviation to help educate industry about the causes and risks associated with inflight pilot incapacitation.

The ATSB report [Pilot incapacitation: Analysis of medical conditions affecting pilots involved in accidents and incidents](#) examined medical conditions and incapacitation events between 1 January 1975 and 31 March 2006. This report concluded that the majority of pilot incapacitation events do not involve a chronic or pre-existing medical condition. They are largely unforeseeable events, often involving acute illnesses or injury. Many are not in themselves life-threatening, but are capable of impairing a pilot’s performance to the extent that safe operation of the aircraft may be adversely affected.

General details

Occurrence details

Date and time:	12 July 2016 – 1455 EST	
Occurrence category:	Incident	
Primary occurrence type:	Flight crew incapacitation	
Location:	near Horn Island Airport, Queensland	
	Latitude: 10° 35.180' S	Longitude: 142° 17.400' E

Aircraft details

Manufacturer and model:	Cessna Aircraft Company 208	
Registration:	VH-NTQ	
Operator:	Westwing Aviation	
Serial number:	20800183	
Type of operation:	Air Transport Low Capacity – Passenger	
Persons on board:	Crew – 1	Passengers – 7
Injuries:	Crew – 0	Passengers – 0
Aircraft 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 operations involving the travelling public.

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.