



Australian Government

Australian Transport Safety Bureau

ATSB TRANSPORT SAFETY INVESTIGATION REPORT

Aviation Occurrence Investigation AO-2007-061

Preliminary

Collision with water
Approx 24 km SE Inverloch, Vic.
17 November 2007
VH-CHU
Cessna Aircraft Company C337G



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Acknowledgements

Figure 1: Country Fire Authority Victoria

Figure 2: Previous owner of VH-CHU

Figure 3: Bureau of Meteorology

Abstract

On 17 November 2007, the owner-pilot of a Cessna Aircraft Company C337G (Skymaster), registered VH-CHU, was conducting a private flight in accordance with the visual flight rules from Moorabbin Airport, Vic. to Merimbula, NSW. The pilot, who was accompanied by three passengers, had indicated that he would be tracking along the coast. The aircraft did not arrive at Merimbula and on 19 November 2007 aircraft wreckage and three of the deceased occupants were found on a beach between Venus Bay and Cape Liptrap, Vic. Some wreckage was later found in the sea, off the beach. There were no survivors.

The investigation is continuing.

THE AUSTRALIAN TRANSPORT SAFETY BUREAU

The Australian Transport Safety Bureau (ATSB) is an operationally independent multi-modal bureau within the Australian Government Department of Infrastructure, Transport, Regional Development and Local Government. ATSB investigations are independent of regulatory, operator or other external organisations.

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.

Purpose of safety investigations

The object of a safety investigation is to enhance safety. To reduce safety-related risk, ATSB investigations determine and communicate the safety factors related to the transport safety matter being investigated.

It is not the object of an investigation to determine blame or liability. However, 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.

Developing safety action

Central to the ATSB's investigation of transport safety matters is the early identification of safety issues in the transport environment. The ATSB prefers to encourage the relevant organisation(s) to proactively initiate safety action rather than release formal recommendations. However, depending on the level of risk associated with a safety issue and the extent of corrective action undertaken by the relevant organisation, a recommendation may be issued either during or at the end of an investigation.

The ATSB has decided that when safety recommendations are issued, they will focus on clearly describing the safety issue of concern, rather than providing instructions or opinions on the method of corrective action. As with equivalent overseas organisations, the ATSB has no power to implement its recommendations. It is a matter for the body to which an ATSB recommendation is directed (for example the relevant regulator in consultation with industry) to assess the costs and benefits of any particular means of addressing a safety issue.

About ATSB investigation reports: How investigation reports are organised and definitions of terms used in ATSB reports, such as safety factor, contributing safety factor and safety issue, are provided on the ATSB web site www.atsb.gov.au.

FACTUAL INFORMATION

The information contained in this preliminary report is derived from initial investigation of the occurrence. Readers are cautioned that there is the possibility that new evidence may become available that alters the circumstances as depicted in the report.

Sequence of events

On 17 November 2007, the owner-pilot of a Cessna Aircraft Company C337G (Skymaster), registered VH-CHU, was conducting a private flight under the visual flight rules from Moorabbin Airport, Vic. to Merimbula, NSW. The pilot, who was accompanied by three passengers, had indicated that he would be tracking along the coastline.

When the aircraft did not arrive at Merimbula as expected, the Australian Maritime Safety Authority was advised and a search was initiated. On 19 November 2007, wreckage of the aircraft and three of the deceased occupants were found washed up on the beach between Venus Bay and Cape Liptrap, Vic (Figure 1). There were no survivors.

Moorabbin Air Traffic Control Tower records show that the aircraft departed from runway 17L at about 1211 Eastern Daylight-saving Time¹. Recorded primary radar data indicates that the aircraft flew on a track of 137 degrees magnetic in the direction of Wilson's Promontory until leaving radar coverage at 1224. At that point, the aircraft was about 38 km from Inverloch, Vic.

A witness saw the aircraft fly over Leongatha, Vic. and a number of people reported that they heard or saw an aircraft matching the aircraft's description in the Inverloch area at times that were generally between 1200 and 1300. While witness recollections varied, they consistently reported that the aircraft was lower and louder than most aircraft that flew over that area. A couple of witnesses considered that the engines were 'labouring' or 'out of sync', but there were no reports of engine malfunction or any other abnormality.

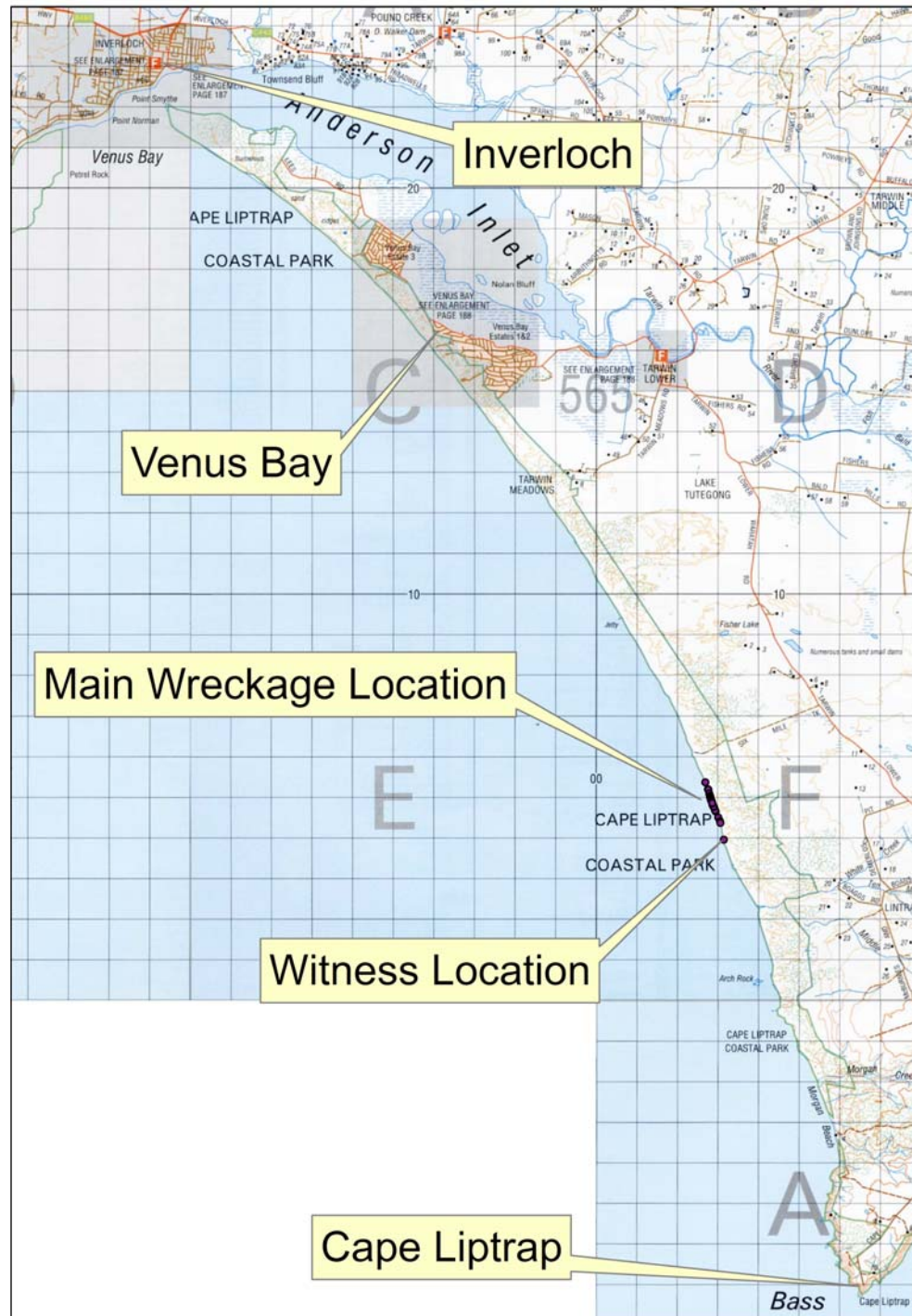
A witness at the Inverloch boat ramp saw the aircraft cross the mouth of Anderson Inlet before it disappeared behind trees on Point Smythe while tracking in the direction of Cape Liptrap. A few witnesses saw the aircraft fly over Venus Bay and Lower Tarwin, Vic. at low level.

The only sighting south or east of Venus Bay likely to be the aircraft was shortly after 1238 by two people on the beach about 13 km south-east of Venus Bay. They reported that they heard and then suddenly saw the aircraft coming from the Venus Bay direction. The aircraft emerged from fog at low level and was flying along the water line on the beach with the wings level. Within seconds it turned right to head out to sea. It turned through about 90 degrees at a steep angle of bank while maintaining height before disappearing from sight into the fog. They reported no

¹ The 24-hour clock is used in this report to describe the local time of day. Eastern Daylight-saving Time was Coordinated Universal Time (UTC) + 11 hours.

apparent problem with the engines and the aircraft appeared to be under control. About 2 seconds after the aircraft disappeared from view they heard a 'bang'. There were no further noises associated with the aircraft.

Figure 1: Map showing location of areas where aircraft was observed



Wreckage information

A number of items of aircraft wreckage were recovered from the beach and some items were retrieved by search and rescue police divers from the water, about 200

m out to sea. All of the recovered pieces had been bent, twisted or torn. At the time of writing the report, major items such as the engines, propellers, tail booms and most of the fuselage had not been found.

Aircraft information

The aircraft (Figure 2) was manufactured in the United States in 1977 and at the time of the accident had been operated for about 5,810 hours. The pilot purchased the aircraft in September 2007.

Figure 2: VH-CHU



The nominated aircraft maintenance schedule was the Civil Aviation Safety Authority maintenance schedule (schedule 5 of the Civil Aviation Regulations). The current maintenance release was found in the sand near the wreckage on the beach. It was issued on 29 August 2007 at 5,799.9 hours aircraft total time in service. There were no recorded aircraft defects or overdue maintenance requirements.

On 16 November 2007, the day before the accident, 274 L of aviation gasoline (Avgas) was added to fill the aircraft fuel tanks. A sample of fuel from the same batch of fuel from the refueller was tested² and was found to meet the specification for Avgas 100.

Pilot information

The pilot was issued with a private pilot (aeroplane) licence in 1963. His licence included endorsements for manual propeller pitch control, retractable undercarriage, tail wheel and single engine aeroplanes less than 5,700 kg MTOW³. The pilot also

² By a National Association of Testing Authorities accredited organisation.

³ Maximum Takeoff Weight.

held Mustang and Trojan aircraft endorsements. There was no record of any instrument flying training or qualifications.

The investigation was able to examine two pilot's logbooks, one covering the period 1982 to 1987 and the other after 1 September 2007. While the pilot logbooks did not include any totals, the pilot had stated a total of 5,600 flying hours at his recent pilot medical examination.

The pilot recorded 8.3 flight hours in VH-CHU between 1 and 7 September 2007. That flying was with an instructor and was for Cessna 337 endorsement (including centre-line thrust only multi-engine endorsement) and flight review purposes. The pilot's other recorded C337 flying was a local flight of 0.5 hour from Moorabbin on 10 October 2007.

The pilot completed a Class 2 pilot medical examination on 30 August 2007. The pilot's previous aviation medical was conducted in 1999.

Meteorological information

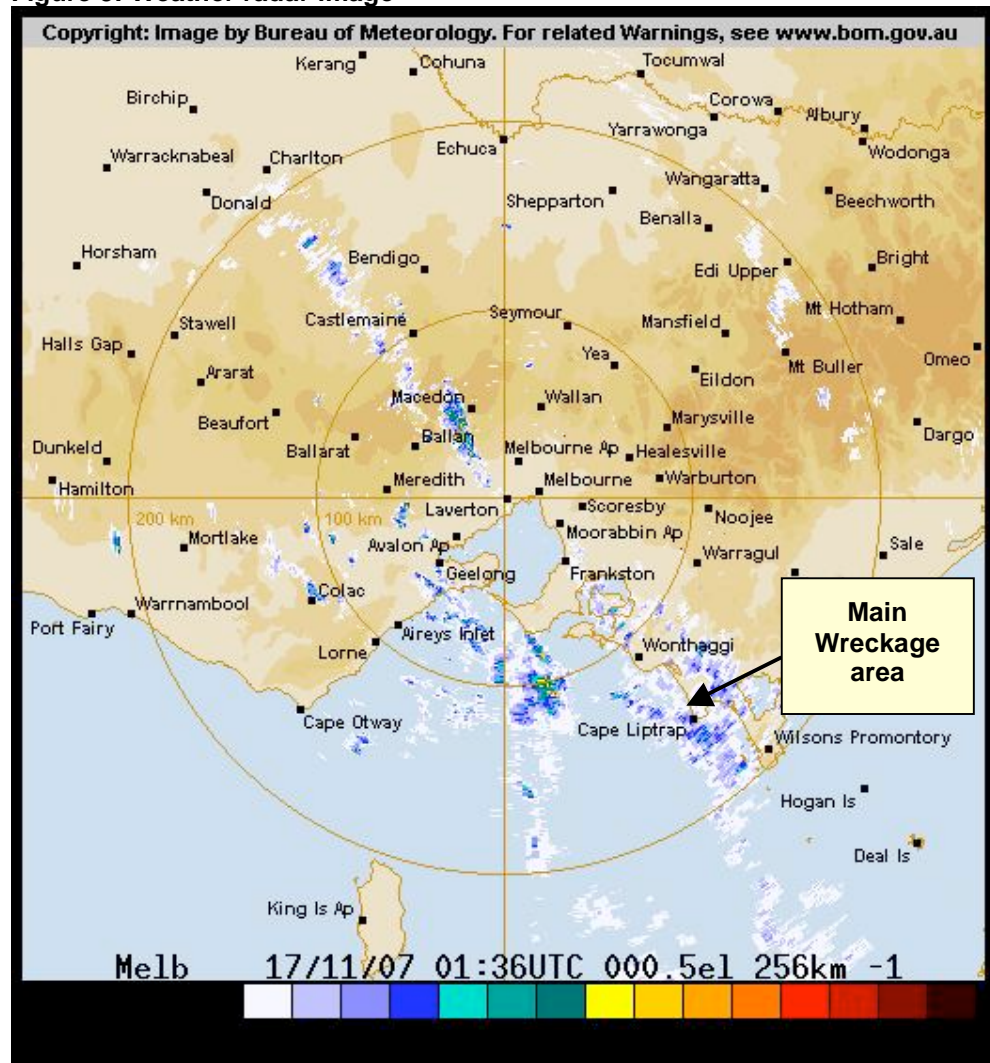
There was no record of the pilot accessing the National Aviation Information Processing System (NAIPS) from which aviation forecasts and reports are available. It is not known if the pilot accessed any other weather reporting service. The pilot called an aircraft operator in Merimbula prior to departing Moorabbin.

The applicable aviation area forecast produced by the Bureau of Meteorology was valid from 0800 to 2200. A trough was expected to move east over the Inverloch to Wilson's Promontory coastline after 1000. The forecast weather west of the trough included isolated showers/thunderstorms over the sea/coast, and low cloud over the sea/exposed coast. The low cloud was expected to be broken⁴ stratus between 800 ft and 2000 ft.

The Bureau of Meteorology produced a visible satellite picture (taken at approximately 1233) and radar imagery from the Melbourne Airport radar (Figure 3). The images show a band of scattered showers affecting the area between Wonthaggi and Wilson's Promontory between 1200 and 1300.

⁴ Five to seven eighths of the sky obscured by cloud

Figure 3: Weather radar image



Further investigation

The investigation is continuing and will include further examination of the wreckage and a review of the aircraft's maintenance history.

