



Australian Government

Australian Transport Safety Bureau

Grounding of pilot launch *PV Corsair*

Port Phillip Heads (near Point Lonsdale) Victoria, on 5 October 2023

ATSB Transport Safety Report
Marine Occurrence Investigation
MO-2023-003
Preliminary – 22 December 2023

This investigation is being conducted under the *Transport Safety Investigation Act 2003* (Cth) by **Victoria's Chief Investigator, Transport Safety** under an agreement with the Chief Commissioner of the Australian Transport Safety Bureau.

Released in accordance with section 25 of the *Transport Safety Investigation Act 2003*

Publishing information

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Addendum

Page	Change	Date

Preliminary report

This preliminary report details factual information established in the investigation's early evidence collection phase and has been prepared to provide timely information to the industry and public. Preliminary reports contain no analysis or findings, which will be detailed in the investigation's final report. The information contained in this preliminary report is released in accordance with section 25 of the *Transport Safety Investigation Act 2003*.

The occurrence

Prior to the incident

At about 1900 local time on 5 October 2023, the night shift crew (the coxswain¹ and deckhand) of the pilot launch *PV Corsair* reported on duty at the launch wharf in Queenscliff harbour. They were informed by the pilot despatch office that their first job that evening was to pick up the pilot from the outbound container ship *MV Rio Grande*. After preparing the launch for service, they waited in the crew quarters at the launch station.

Later that evening, *Rio Grande* departed Melbourne with a pilot on board. It would transit Port Phillip before departing through Port Phillip Heads (the Heads).² Once the ship was clear of the entrance,³ the pilot would disembark onto the pilot launch and be transported back to the pilot station at Queenscliff.

At about 2230, the pilot called the launch crew and advised them that *Rio Grande* was expected to be at the Heads at about 2300. The coxswain of *Corsair* reported the weather conditions to the pilot and advised that they would rendezvous with *Rio Grande* about 2 nautical miles (NM)⁴ offshore and to the south-west of the entrance, in relatively calmer water away from the main ebb tide. It was agreed that *Rio Grande* would create a lee on its starboard side for the launch to come alongside to retrieve the pilot.

The grounding

At about 2252, *Corsair* met *Rio Grande* just inside the entrance as they proceeded outbound. At that time there was a strong ebb tide of about 5.6 knots⁵ and the height of tide was about 0.6 m above the charted depth. The wind was from the south-south-west direction at an average speed of 22 knots with gusts of up to 26 knots.⁶ The recorded wave height outside the Heads was about 2.4 m.⁷

Soon after passing Point Lonsdale, *Rio Grande* altered its course to starboard, to keep the wind and the sea on its port side, creating a lee on the starboard side to allow the pilot launch to come alongside.

¹ Consistent with the operator's terminology, the master of *Corsair* is referred to in this report as its coxswain.

² Port Phillip Heads is defined as the waters between an imaginary line drawn between Shortland Bluff and Point Nepean, and the seaward limits of an imaginary line consisting the arc of a circle with a radius of 3 nautical miles centred on Point Lonsdale.

³ The 'entrance' to Port Phillip is demarcated by an imaginary line drawn between Point Lonsdale and Point Nepean.

⁴ 1 nautical mile (nm) is 1,852 km or 1852 m.

⁵ 1 knot is 1.852 km/h.

⁶ Recorded at Point Lonsdale Light House.

⁷ Significant wave height recorded by a wave buoy located about 3.5 NM south-east of the entrance.

At about 2306, the pilot disembarked into the pilot launch and soon after, from a position about 2.3 NM south-west of Point Lonsdale, *Corsair* commenced heading back to the entrance on a course of about 070°⁸ and at a speed of about 24 knots (Figure 1).⁹

Figure 1: The track of PV *Corsair* for pilot transfer from *Rio Grande*



The figure also shows the tracks of PV *Corsair* through the Heads on its previous trip.
Source: Ports Victoria with annotations by the Office of the Chief Investigator

At about 2310, *Corsair* was about 1.4 NM south-west from Point Lonsdale when it commenced a slow alteration in course to port. At about 2312, when about 205° and 0.54 NM from Point Lonsdale, the launch steadied on a course of about 051° and its speed was still about 24 knots.

At about 2313 *Corsair* entered the shallow water surrounding the reef and ran aground. The launch came to rest in a rock pool about 500 m from Point Lonsdale.

Following the grounding

Several calls were made from *Corsair* seeking assistance, the first by mobile phone to the crew of the sister launch, *PV Nepean*. A Mayday distress broadcast was subsequently transmitted from *Corsair* on VHF radio. The distress call was heard by Ports Victoria Vessel Traffic Services (VTS) which contacted the Victoria Police Search and Rescue Squad. Victoria Police then activated the Australian Volunteer Coast Guard at Queenscliff, the Southern Peninsula Rescue Squad at Blairgowrie, and its own rescue response team. Several vessels responded to the emergency and the three occupants of *Corsair* were subsequently brought aboard the Coast Guard vessel at about 0132 on 6 October. They were uninjured.

The pilot launch was destroyed on the reef during the night and the debris recovered the following day.

⁸ All bearings and course headings are measured clockwise from the True north (000°).
⁹ The passage of *PV Corsair* was recorded by Melbourne Vessel Traffic Services (VTS).

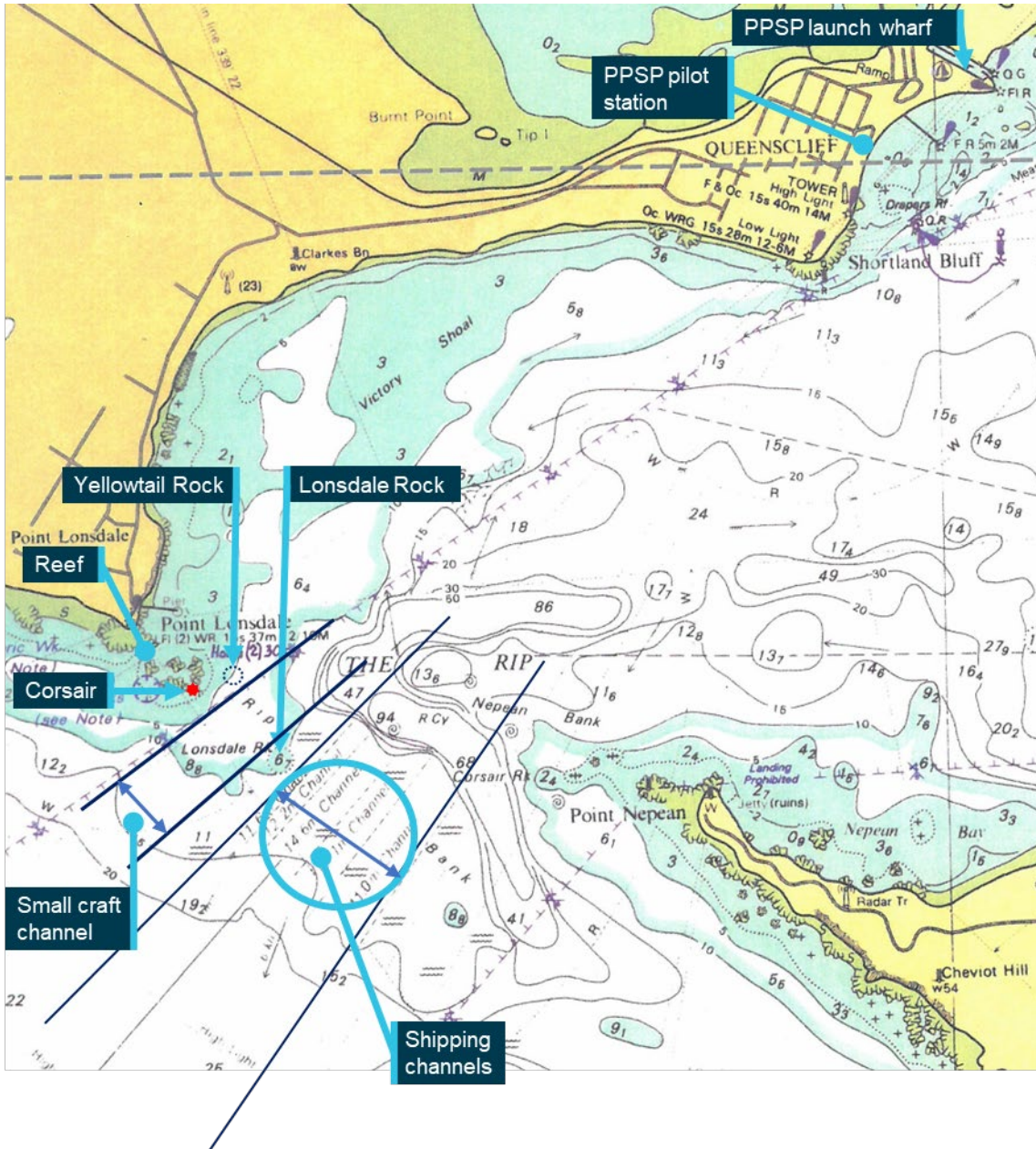
Context

Location

Port Phillip Heads

Port Phillip Heads, also known as The Heads or The Rip, is a narrow waterway that connects Port Phillip to Bass Strait and is the only access for ships visiting the ports of Melbourne and Geelong (Figure 2).

Figure 2: Port Phillip Heads and entrance channels



Source: Crawford's Mariners Atlas. Royal Australian Navy charts © 1997 Commonwealth of Australia with annotations by the Office of the Chief Investigator

There are five designated channels for larger ships to use when transiting the Heads. From east to west, they are Outer Eastern Channel (10.1 m depth), Eastern Ship Channel (11.9 m), Great Ship Channel (17.0 m), Western Ship Channel (11.4 m), and Outer Western Channel (10.3 m). At the entrance to Port Phillip, the combined width of these shipping channels is about 740 m and the western edge of the Outer Western Channel is about 1480 m from Point Lonsdale.

West of the Outer West Channel lies the Small Craft Channel, which was used by smaller boats, fishing vessels and the pilot launches. The channel ran between Yellowtail Rock and Lonsdale Rock (Figure 2).¹⁰ The defined western edge of the channel was about 50 m off Yellowtail rock. The width of the channel at that section was about 300 m and its depth between 5 and 10 m.

Point Lonsdale Reef

Point Lonsdale Reef is an outcrop of flat-topped rocks extending up to about 540 m south-east of Point Lonsdale (Figure 3). The extent of the reef’s exposure and its visibility varies with tide and sea conditions.

Figure 3: Point Lonsdale Reef



Point Lonsdale Reef photographed from Point Lonsdale the day after the grounding.
 Source: Elstone Diving Services Pty Ltd

Locations for pilot transfer

The designated pilot boarding ground was 5 NM south-west of the entrance however pilots could disembark outbound ships between 2 and 5 NM to seaward of the entrance. Pilots usually boarded inbound ships between 5 and 8 NM from the entrance.

Port Phillip Sea Pilots

Corsair was owned and operated by Port Phillip Sea Pilots (PPSP). The company was established in Victoria in June 1839 and was licensed to provide pilotage services in the Victorian ports of Melbourne, Geelong, Hastings and Corner Inlet and it also provided relief pilots to the Port of Portland pilotage service. PPSP had 24 active pilots.

¹⁰ These rocks were not exposed features and were well below the low water mark. The charted depth at Lonsdale Rock was 6.1 m and the depth at Yellowtail Rock 1.7 m.

The pilot despatch office (pilot station) was located in Queenscliff. The organisation had two dedicated pilot launches (*PV Corsair* and *PV Nepean*) stationed at Queenscliff for the transfer of pilots to/from the pilot boarding grounds outside the entrance.

PV Corsair

The pilot launch *Corsair* was a dedicated pilot transfer vessel of monohull design constructed in 2014 by Hart Marine in Mornington, Victoria (Figure 4). It had an overall length of 18.55 m, breadth of 5.5 m, depth of 2.3 m and a loaded draught of about 1.55 m. Propulsion was by two Cummins QSK 19-M marine diesel engines of 597 kW at 2100 rpm, each driving a fixed pitch propeller. The launch had a maximum speed of about 30 knots.

Figure 4: *PV Nepean*, the sister vessel of *PV Corsair*



Source: Office of the Chief Investigator

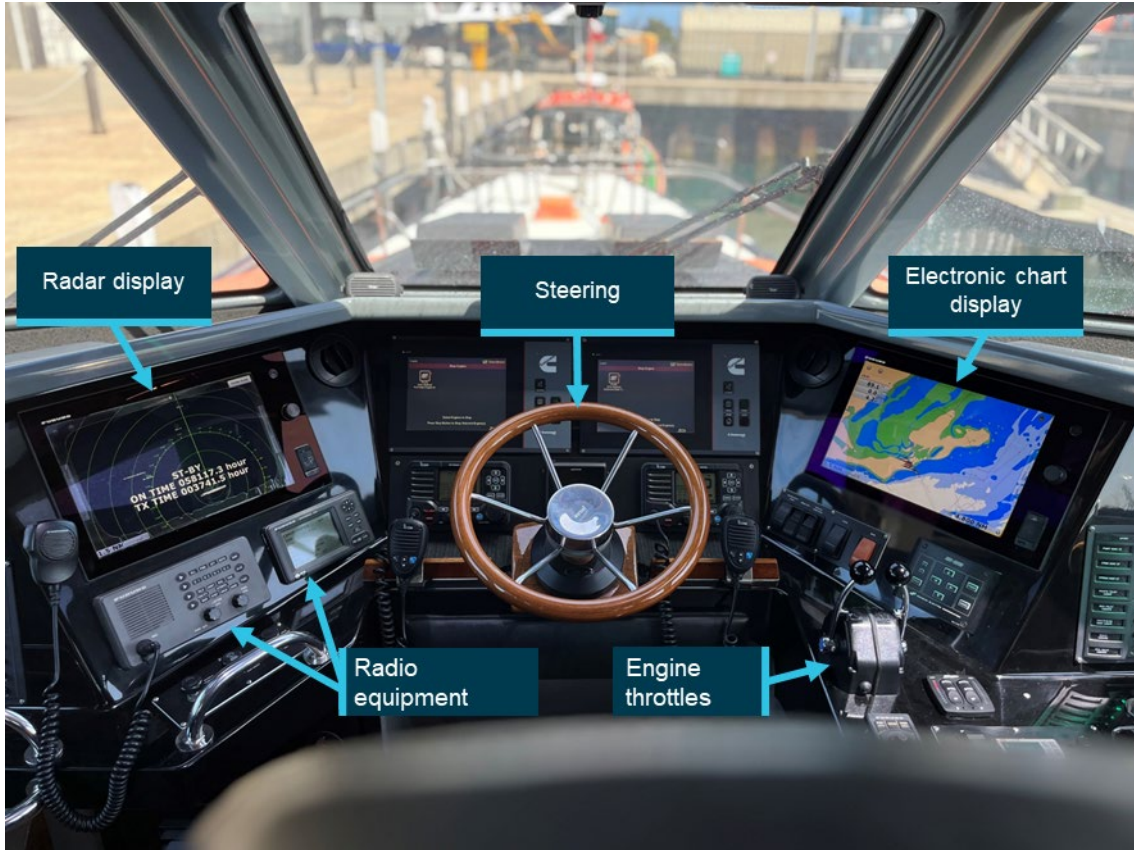
The launch was used primarily for pilot transfers, transporting pilots to/from the PPSP pilot despatch station at Queenscliff. It was occasionally engaged in relief work at the other pilotage areas within Port Phillip and Westernport.

PV Corsair was registered with the Australian Maritime Safety Authority (AMSA) as a domestic commercial vessel (DCV). At the time of the incident, it had a Certificate of Survey issued on 6 October 2020 valid until 28 May 2025 and a Certificate of Operations valid until 2 September 2024. The certificates permitted *Corsair* to operate as a pilot vessel, with a total crew of two and carrying up to 6 special personnel.¹¹ The crew on board at the time of the incident were appropriately qualified to operate *Corsair*.

The launch was fitted with a central navigational console with two navigation screens, one on each side of the conning position (Figure 5). The screen to the right of the conning position was set to display the electronic charting system and the screen to the left had the radar display. The depth sounder was connected to the charting display. All navigational equipment was reported to be operational at the time of the incident.

¹¹ "Special personnel" means all persons who are not passengers or members of the crew or children of under one year of age and who are carried on board in connection with the special purpose of that ship or because of special work being carried out aboard that ship.

Figure 5: *PV Corsair* navigation equipment demonstrated on *PV Nepean*



Source: Office of the Chief Investigator

Further investigation

To date, the ATSB has:

- interviewed relevant personnel including the crew of the pilot launch
- conducted relevant vessel inspections
- examined recordings of the pilot launch track on this and previous transits of the Heads
- reviewed recordings of relevant communications

The investigation is continuing and will include further examination of:

- the operation of the pilot launch including bridge resource management
- relevant safety management systems
- vessel data recordings

Should a critical safety issue be identified during the course of the investigation, the ATSB will immediately notify relevant parties so appropriate and timely safety action can be taken.

A final report will be released at the conclusion of the investigation.

General details

Occurrence details

Date and time:	5 October 2023 EST	
Occurrence class:	Serious incident	
Occurrence categories:	Grounding	
Location:	515 metres from Point Lonsdale, Queenscliff Victoria	
	Latitude: 38° 17.76' S	Longitude: 144° 37.01' E

Launch details

Name:	PV Corsair	
UVI number:	433560	
Flag:	Australian	
Classification authority:	Australian Maritime Safety Authority	
Departure:	Pilot boarding ground	
Destination:	PPSP Pilot station	
Ship type:	Pilot launch	
Builder:	Hart Marine, Victoria	
Year built:	2014	
Owner(s):	Port Phillip Sea Pilots	
Manager:	Port Phillip Sea Pilots	
Length Overall:	18.55 metres	
Measured breadth:	5.5 metres	
Measured depth:	2.3 metres	
Main engine(s):	2 x Cummins QSK 19M marine diesel engines	
Total power:	2 x 597 kW	
Speed:	30 knots	
Injuries:	Crew – no injuries reported	Special personnel – no injuries reported
Damage:	Total wreck	

Australian Transport Safety Bureau

About the ATSB

The ATSB is an independent Commonwealth Government statutory agency. It is governed by a Commission and is entirely separate from transport regulators, policy makers and service providers.

The ATSB's purpose is to improve the safety of, and public confidence in, aviation, rail and marine transport through:

- independent investigation of transport accidents and other safety occurrences
- safety data recording, analysis and research
- 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, as well as participating in overseas investigations involving Australian-registered aircraft and ships. It prioritises investigations that have the potential to deliver the greatest public benefit through improvements to transport safety.

The ATSB performs its functions in accordance with the provisions of the *Transport Safety Investigation Act 2003* and Regulations and, where applicable, international agreements.

About the Office of the Chief Investigator (OCI)

OCI is the office performing the functions of the Chief Investigator, Transport Safety, a statutory position established in 2006 to conduct independent, no-blame investigation of transport safety matters in Victoria. OCI has a broad safety remit that includes the investigation of rail, marine and bus incidents. Investigations conducted by OCI may be conducted under Victorian legislation or, where agreed with the ATSB, under the Commonwealth *Transport Safety Investigation Act 2003*.

Purpose of safety investigations

The objective of a safety investigation is to enhance transport safety. This is done through:

- identifying safety issues and facilitating safety action to address those issues
- providing information about occurrences and their associated safety factors to facilitate learning within the transport industry.

It is not a function of the ATSB to apportion blame or provide a means for determining 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. The ATSB does not investigate for the purpose of taking administrative, regulatory or criminal action.

Terminology

An explanation of terminology used in ATSB investigation reports is available on the ATSB website. This includes terms such as occurrence, contributing factor, other factor that increased risk, and safety issue.