



The Porthole

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The newsletter of the South Australian Branch of the Company of Master Mariners of Australia PO Box 1, PORT ADELAIDE, SA 5015
Branch Patron: His Excellency the Honorable Hieu Van Le AC



Branch Master's Comments

I have nothing to report at a Federal level this month; the next Federal Court meeting is scheduled before the end of the year.

I will be absent at this month's branch meeting while I am showing off our State to visiting family members. As I mentioned last month, please consider becoming a Branch Court member next year.

Locally BP has announced it will not be taking up its option to drill for oil and gas in the Great Australian Bight; it is a sign of Government attitudes to the Australian Merchant Navy that the persons most affected by BP's decision will be overseas workers on 457 visas.

Uncertainty has again clouded the building of new submarines for the Royal Australian Navy. Not only is there uncertainty as to which Minister is the senior Defence Minister, but there is again uncertainty on how much of the submarines will be built in Australia and how much will be built in France.

Take care until November.

Best Wishes

Paul P

Branch Master

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Speaker:

To be advised

The next Branch meeting will be held at
the Largs Pier Hotel, 198 The Esplanade, Largs Bay,
on Wednesday, 26th October 2016 at 1145 for 1200.

Please confirm your attendance at the lunch or register your apology before
1200 on Monday, 24th October 2016 with

Ian Dickson (8396 1030)
or
Paul Phillips (0407 779 209)



The Company of Master Mariners of Australia Ltd. is a Company established to promote and further the efficiency of the Sea Service generally, and uphold the Status, Dignity, and Prestige of Master Mariners in particular.

Finding Baudin: A summary of a talk given by Ms Lindl Lawton, Senior Curator of the South Australian Maritime Museum. to the October 2016 meeting of the South Australian Branch of the Master Mariners

Ms Lawton's talk started with her description of her visit to the Le Havre Maritime Museum. There, sitting on display among a number of chronometers, was the chronometer used by Baudin on his voyage to Australia. However, while the other chronometers had details of their owners, Baudin's noted only the name of the clockmaker and the number 31. Commenting on this, Ms Lawton reflected that, while Baudin's voyage was one of the most important scientific expeditions of its time, he was a nonentity in French maritime history. While voyages that preceded and followed Baudin's were well remembered and celebrated, his was virtually forgotten. Ms Lawton explained that Baudin's voyage had been fraught by difficulty and friction from the outset. Baudin, a commoner whose first duty was the safe navigation of his ship, had difficulties with the more aristocratic scientists. When the ship arrived at the Isle de France (Mauritius), a number of the scientists left the ship and sent letters back to France criticising Baudin's command. On the voyage to France at the conclusion of the expedition, Baudin took ill and died in the Isle de France. The official report of the expedition by the head scientist, Peron, excluded Baudin's achievements on the voyage; Peron mentioned Baudin only once in his report and that was to report Baudin's death, and Baudin's journal was left unpublished.



Entrance to the exhibition, incorporating a copy of a drawing, made on the expedition, of a puffer fish.

Ms Lawton illustrated her talk with images of the fine water-colours made on the voyage of flora, fauna, indigenous persons and topography. These had been well preserved in the Le Havre Maritime Museum and retained their freshness in colour. She noted how the collection had been moved to a safe place during World War II and thus avoided destruction when the city of Le Havre was severely damaged in the hostilities.

While Baudin's work had been unrecognised in France, Australian historians, particularly in South Australia, had researched and produced an account of his voyage. This stimulated an interest in France and a translation of the Australian material into the French language. Given this background, when the decision was made to refurbish the Le Havre Maritime Museum, the museum took the opportunity to invite the South Australian Maritime Museum to collaborate in presenting an exhibition of selected exhibits in Australian locations surveyed by Baudin.

Ms Lawton also touched on the seeds and native fauna collected on the exhibition and taken back to France. Much of this collection was taken by the Empress Josephine for her Chateau de Malmaison estate, including kangaroos and black swans. While few traces now remain of the Australian collection at Malmaison, Ms Lawton suggested that many of the eucalypts growing on the Mediterranean coast probably had their origins from seed originally collected on the Baudin expedition.

In concluding her talk, Ms Lawton returned to the subject of Baudin's chronometer and suggested that if any Branch members ever find themselves in Le Havre and visit the Museum, they look to see whether there is attribution to the chronometer's original ownership by Baudin.



The copper plate in the case is the engraving used to print the chart on the left

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Exhibition travelling dates

South Australian Maritime Museum - 30 June to 11 December 2016

Queen Victoria Museum and Art Gallery (Launceston) - 7 January to 20 March 2017

Tasmanian Museum and Art Gallery (Hobart) - 7 April to 9 July 2017

Australian National Maritime Museum (Sydney) - 31 August to 26 November 2017

National Museum of Australia (Canberra) - 15 March to 11 June 2018

Western Australian Museum (Perth) - September to December 2018 - exact dates to be confirmed

ATLANTIK CONFIDENCE

Cargo Insurers “break limits” in unprecedented judgment, October 2016

Following the fire and sinking of the bulk carrier *ATLANTIK CONFIDENCE* off the coast of Oman in April 2013, the



owners of the vessel sought to constitute a limitation fund pursuant to the Convention on Limitation of Liability for Maritime Claims 1976 (as amended, the Convention) in the Admiralty Court, and obtain a declaration that they were entitled to limit their liability in accordance with the Convention, due to the size of potential claims advanced against the owners.

Cargo Insurers sought to “break limits” by defending the application on the basis that the loss of the vessel, along with her cargo, was caused by the “personal act or omission” of the owners. Therefore, the exception in Article 4 of the Convention applied. Cargo Insurers argued that the only credible explanation for the sinking of the vessel, which was consistent with all of the evidence, was that she was deliberately sunk by her crew on the

direction of her owners. They argued that the “innocent” explanation for the vessel sinking, put forward by the owners, required a series of improbable fortuities, which, when viewed in the context of the other evidence, such as the change of routing of the vessel into deeper water, the Master and Chief Engineer’s behaviour and response to the fire, and the difficult financial circumstances of the owners’ principal, meant that the only credible conclusion could be that the loss was caused by a deliberate act.

Legal test

Article 4 of the Convention provides as follows:

“A person liable shall not be entitled to limit his liability if it is proved that the loss resulted from his personal act or omission, committed with the intent to cause such loss, or recklessly and with knowledge that such loss would probably result.”

This provision is the only basis upon which the limits afforded by the Convention will not apply.

Burden of proof

It was common ground in the case that Cargo Insurers had to prove its case on the balance of probabilities, and that, in determining whether Cargo Insurers had discharged that burden, the Court’s approach should be the same as where a shipowner makes a claim on the hull policy, and the insurer alleges the ship was scuttled.

In this regard, Mr Justice Teare cited, with approval, the decision in *Brownsville Holdings Ltd v Adamjee Insurance Co. (The Milasan)* [2000] 2 Lloyds Reports 458, where Mr Justice Aikens made clear that scuttling is a serious charge, and the standard of proof will not fall far short of the criminal standard, and that by the nature of these cases, it will not normally be possible for insurers to obtain any direct evidence so the Court can consider all relevant indirect and circumstantial evidence. Further, that the insurers do not have to prove a motive if the facts are unambiguous. The Judge also had in mind the possibility that, where the evidence is limited, then it may simply not be possible to reach a finding on the cause of the loss citing the *POPI M* [1985] 2 Lloyds Law Reports 1.

In conclusion on the burden of proof issue Mr Justice Teare said:

*“The court will only be able to draw such inference when the case is established on the balance of probabilities. Shipowners do not generally resort to scuttling, and an allegation that a shipowner has done so is a grave charge to make..... In *Strive Shipping v Hellenic Mutual War Risks Association (the GRECIA EXPRESS)* [2002] 2 Lloyds Rep. 88 at pp. 97-99 Colman J. concluded that it must be “highly improbable” that the vessel was lost accidentally, and that there must be derived from the whole of the evidence “a high level of confidence that the allegation is true.” As Aikens J. said in *The Milasan*, the facts proved against the owner must be “sufficiently unambiguous” to establish that the owner was complicit in the casting away of his vessel.”*

Factual background

During February and March 2013 the *ATLANTIK CONFIDENCE* (vessel) loaded various project cargoes in Oktyabrsk, Ukraine, Odessa, Ukraine and Gemlik, Turkey, for discharge in various ports in Oman, UAE, Saudi Arabia and Pakistan. On completion of loading she progressed via the Suez Canal to the Gulf of Aden.

Shortly before dawn on 30 March 2013, a fire broke out in the engine room of the vessel on the starboard side of the second deck by the generators and the store room. At the time the vessel was 138NM off Masirah Island. Less than three hours later the Master had taken the decision to abandon the vessel. For four hours the crew remained in lifeboats in the vicinity of the vessel during which time the Master and Chief Engineer returned to the vessel twice. They were then picked up by a passing vessel and eventually repatriated to Turkey. By this time it was clear that the fire had been out for some time.

The weather was relatively calm and the vessel remained in the vicinity for some time. She adopted a port list and a stern trim

which gradually increased until the early hours of 3 April 2016 when she finally sank.

Following the sinking, the owners of the vessel sought to establish a limitation fund in accordance with the Convention (see previous update). Thereafter they applied for a declaration that the owners were entitled to limit their liability. The Cargo Insurers objected to this application. They contended that the vessel had been deliberately scuttled by the crew on the instruction of the owners.

Owners' case

The owners argued that the vessel's loss was accidental. Their case was that the fire was accidental and caused water ingress to the engine room and ballast tanks. Their case was predicated on there having been an accidental fuel oil leak on no.2 generator, which sprayed from the generator to the generator flat to the store room, and then changed direction back to port to ignite on a hot turbo charger casing, which would need to have been unlagged. The judge held that the *"aggregation of such unlikelihoods, coupled with the lack of support for a fire on the no.2 generator from the observations of the engineers, suggests that the possibility that the cause of the fire in the store room was a fire at the no.2 generator caused by an oil leak is no more than a remote possibility."*

This fire was then said to have developed substantially in the store room, to such an extent that it caused a crack in the shell plating of the vessel below the water line in or around the vicinity of the store room, which allowed water ingress to the store room. At the same time the fire caused the "hot-wiring" of the vessel's ballast system in such a way that it operated automatically to open certain ballast valves, but not others. For the hot wiring theory to be correct, the judge said *"a number of conditions had to be satisfied and a number of events had to occur."*

Lastly, flooding the engine room and the ballast tanks would not sink the vessel. It was agreed between the experts that it was necessary for another compartment to be flooded. As a result, the owners argued that there had been unrelated corrosion or damage to the sounding pipe and/or ballast pipe between the top and bottom side tanks in Hold no. 5.

Cargo Insurer's case

Cargo Insurers argued that the Master and the Chief Engineer, on the instruction of the principal, deliberately opened the sea chests in the engine room and the valves to the ballast system, to allow an ingress of water to the vessel. On Cargo Insurer's case, the fire was deliberately started in the store room by the Chief Engineer or Master to hide the deliberate ingress of water. Cargo Insurers case was that owners' sequence of events was wholly implausible and could not be the reason why the vessel sank.

Cargo Insurers also sought to rely on other evidence which they said pointed to a scuttling. These were described by the judge as *"matters of cumulative suspicion"* which *"individually, might not justify a finding of a deliberate loss but, when looked at collectively, suggest a deliberate loss"*.

1. The change of course

A few days before the fire, the vessel changed her course to take her further away from the Coast of Oman and into the Indian Ocean. This took her further from assistance and into much deeper water. The owners were unable to give any credible reason for this change of course despite trying to argue that the change of route arose as a result of the risk of piracy.

2. The HEATHER

The owners directed another vessel in their fleet, the *HEATHER*, to attend the vessel once the crew had abandoned. The *HEATHER* was diverted from her duties to collect two super-intendents from the owners' office in Turkey, who would rendezvous with her in Oman before steaming to the vessel. Crucially the *HEATHER* called in Muscat at the same time the appointed salvors were mobilising, yet did not assist them in any way or even make them aware of their presence. The *HEATHER* arrived significantly before the salvors. Whilst their evidence was that the superintendents wanted to get on board *"neither was able, when cross-examined, to identify what precisely they intended to do"*.

3. The conduct of the Master and Chief Engineer

The response of the Master and Chief Engineer in the aftermath of the fire was suspicious. The Chief Engineer prevented other crew members from entering the engine room to fight the fire. There was no investigation into the cause of the list. No distress message was sent until nearly two hours after the fire had broken out, just before the vessel was abandoned. The Master did not inform the office of the decision to abandon ship. The Master and the Chief Engineer returned to the vessel twice, and at no time was the working chart retained. No written report of the casualty was ever produced by the Master.

4. The financial circumstances of the principal

The vessel was part of a wider fleet of vessels, all of which were significantly over-insured, including the vessel. It was demonstrated that all of the companies in the group structure were balance sheet insolvent, and had no prospect of trading their way out of their debt.

They were in *"real financial difficulty"* and it was likely that the principal *"was under pressure from his bank"*. The sinking of the vessel meant that the borrowings to the mortgagee bank not only in relation to the vessel but to four other vessels in the fleet, were substantially reduced.

Judgment

In a very detailed and considered judgment which followed extensive expert evidence and argument on both sides during a six-week hearing, Teare J agreed with Cargo Insurers and concluded that the sinking was a deliberate scuttling:

"Having considered the totality of the evidence in this case and the opposing arguments I have concluded that the chief engineer, with the knowledge and agreement of the master, deliberately set a fire in the store room and deliberately caused ATLANTIK CONFIDENCE to sink. They denied that they did so but I cannot accept their evidence. When their evidence is placed in the context of the case as a whole it cannot be true."

Moreover, he found that it was undertaken at the instruction of the principal:

"The vessel was deliberately sunk by the master and chief engineer at the request of Mr. Agaoglu, the alter ego of the Owners. In those circumstances the loss of the cargo resulted from his personal act committed with the intent to cause such loss. The loss of the cargo was the natural consequence of his act as he must have appreciated. There can be no doubt that he intended the cargo to be lost just as much as he intended the vessel to be lost. It follows that the Owners' claim for a limitation decree must be dismissed."

The judge considered that *"whilst the improbable can happen it is difficult to accept that three improbable events (an accidental fire, an accidental flooding of the engine room caused by the fire and an accidental flooding of two double bottom tanks on the portside caused by the fire) may have occurred in rapid succession to each other."*

As a result, the owners' application for a limitation decree was refused. It is not yet known whether any of the parties will seek to appeal.

Commentary

This was an exceptionally technical and detailed dispute with many strands of expert and factual evidence for the judge to consider. As far as we are aware, this is the only time in the UK that limits have successfully been broken under the Convention in 40 years. In our view this is a decision which turns on its own unique facts. Therefore, we do not see that this decision changes the interpretation or application of Article 4 or in any way lowers the threshold for breaking limits. It should not open the floodgates to parties seeking to break limits as the facts of this case as found by the Court are, thankfully, highly unusual. We suggest that all this case demonstrates is that, in the correct factual scenario, the Admiralty Court will be willing to take a decision to *"break limits"*. We do not consider the judgment breaks any new ground in relation to the legal test or burden of proof.

Source: HWF Maritime (Holman Fenwick Willan) Briefing October 2016.

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The Ports are Closed!

Members who are readers of The Advertiser may have noticed a sentence almost lost in the many pages of coverage of the statewide blackout and flooding. It advised that ports in South Australia had been closed to shipping due to the storms being encountered around the state.

MONDAY, 26th SEPTEMBER:

At 14:00 AEST the Bureau of Meteorology (BoM) issued a warning for a deepening Low, at that time about 250 n. miles south of Esperance, that was forecast to develop on Tuesday and overnight into Wednesday. By Wednesday gale force winds were expected to develop on the western flank of the Low, which was expected to move East during Wednesday and overnight into Thursday, intensifying as it did so. There was the possibility of Storm force winds, over 88 km/h, impacting the Central Coast and Gulf Waters of South Australia.

TUESDAY, 27th SEPTEMBER:

At 15:00 AEST BoM had issued Gale Warnings for all waters from Two Rocks, just north of Perth, in the west, extending to the Murray River Mouth in the east. The strongest winds were forecast on the western side of the Low, but gusty Northerly winds were forecast ahead of the fronts to the north of the Low. The forecast also advised that the Low may intensify, causing Storm force winds to impact the South Australian Central Coast, accompanied by large seas of 8 to 10 metres.

At Port Lincoln YANGTZE ETERNAL arrived from Singapore and anchored at 09:00, and remained at anchor throughout the period covered by this report.

At Thevenard CSL THEVENARD arrived from Geelong, and anchored at 19:00 where she remained until Friday.

WEDNESDAY, 28th SEPTEMBER:

At 16:00 AEST, BoM advised that dangerous conditions existed and that thunderstorm warnings were in force. Storm warnings were in force for the Upper and Lower West Coast areas, with Gale warnings in force for remaining areas between the Esperance Coast (Bremer Bay), W.A. to the NSW/QLD border, including North-East and North-West coasts of Tasmania. Wind gusts of 90 to 120 km/h could be expected in South Australian coastal regions. The Low was expected to be about 50 n. miles SSW of the Eyre Peninsula on Thursday morning and was forecast to move East, south of Kangaroo Island and cross the South Australian coast around the Coorong. Gusty Northerly winds were forecast ahead of the frontal system and strong winds were expected to extend inland.

On the same day Flinders Ports issued the following Press Release:

With the worst storm event in decades predicted to hit South Australia tonight, Flinders Ports has closed all seven of its ports to shipping and operations for safety reasons. The ports are unlikely to reopen again until Friday morning. 'This is unprecedented for Flinders Ports. It's the first time in our 15-year history that we will close our ports for this period of time,' said Mr Vincent Tremaine, Chief Executive Officer, Flinders Port Holdings.

Ship movements and operations were halted at the state's regional ports at 2pm today and shipping and operations stopped at Port Adelaide from 3:30pm.

In the run up to the storm event, Flinders Ports staff have been working against the clock, adding extra mooring lines to safeguard ships berthed in port and securing any plant and equipment that could create a hazard in high winds. At the container terminal, where containers are stacked three high, operations teams have been moving containers to additional storage areas to reduce stack heights to a maximum of two high.

'We know that storm force conditions are dangerous and wave heights of 10 metres and wind gusts of 90 kph are predicted. Ships can run aground, or detach from their moorings. It's vital that our employees and stakeholders are not placed at avoidable risk', said Mr Tremaine.

The company is also urging recreational port users, such as kayakers and fishing enthusiasts, to stay safe and avoid coastal waters until the storm subsides.

Flinders Ports monitors tidal levels for the state, and the company's HydroSurvey experts will be on high alert monitoring tide levels and wave heights throughout the gale force conditions."

The first ship to be affected by the port closures was HECTOR, which arrived off Adelaide overnight and went to anchor instead of berthing at Outer Harbor 8. HECTOR was followed by GLORY ATLANTIC, cement carrier, scheduled for H berth. This being a more sheltered location she berthed at 05:33 and remained alongside throughout the period of this report.

At Port Pirie, the ANDREW WILSON arrived from Whyalla and berthed 2 Berth at 06:30 and remained alongside throughout.

ACCOLADE II sailed from K berth at 07:29 but on arrival at Klein Point she anchored at 11:45 and remained at anchor throughout Thursday. The berth face at Klein Point lies roughly NW / SE and is exposed to winds from the North clockwise to the South-West. The closest weather recording station is at Edithburgh to the south, where winds on Wednesday were generally from the North-West at about 30 km/h, with a maximum gust of 74 km/h at 13:15.

She berthed at Klein Point at 07:03 on Friday and departed at 12:24 the same day for her return passage to Adelaide

ZENITH EXPLORER, general cargo, was working alongside Thevenard 1N. Thevenard jetty extends in a Westerly direction on the north side of Murat Bay. The jetty is exposed to weather from the South-west. It is about 6 km from Ceduna Airport, the closest weather recording station. She completed in time to depart at 11:06 for what was probably an uncomfortable passage to Auckland. At 09:00 on Wednesday, the wind at Ceduna Airport was Northerly at 37 km/h, but by 15:00 was Westerly 63 km/h with a maximum gust of 89 km/h at 15:04.

ALAM SINAR, a bulk carrier, was alongside at Wallaroo 2N. The Wallaroo jetty extends from the west coast of the Yorke Peninsula in a WNW'ly direction and is exposed from the North through West to the South-West. but the vessel would shift to anchorage at 14:12 and remain there until after Friday midday. Wallaroo is about mid-way between Port Pirie and Port Lincoln where the closest weather recording stations are located; both are mentioned elsewhere in this article.

At Penneshaw on Kangaroo Island, based on the latest forecast received, the 13:30 ferry sailing to Cape Jervis was held alongside waiting for the Low to pass clear off the island's south coast, but the Low was by now tracking NW instead of W, and the ferry sailed from Penneshaw at 15:30 for what was a very uncomfortable and longer than usual crossing to Cape Jervis. The remaining four sailings for the day were cancelled, as were all sailings for Thursday. The schedule was resumed with the 09:00 sailing from Cape Jervis on Friday. At Kingscote Airport, the wind was NNE'ly about 30 to 35 km/h during the day, with a gust to

78 km/h at 12:14. The wind backed (moved counter-clockwise) during the night to SW'ly and increased in strength. It was SW'ly 46 km/h by 09:00 on Thursday but decreased thereafter, although there were still occasional strong gusts, 83 km/h at 15:26 being the strongest.

At Port Adelaide Outer Harbor, two container ships, OOCL NORFOLK and XIN QUAN ZHOU, were working on berths OHT6 and OHT7 respectively. These berths, which lie in a north-east / south-west direction, on the north-west end of the Le Fevre Peninsula, a low-lying featureless area, are exposed to weather from all directions. On Wednesday morning, the wind was NNE/ENE'ly at 40 – 50km/h with gusts up to 61 km/h. Both ships were able to shift from their berths to anchorage in the afternoon, XIN QUAN ZHOU anchoring at 15:02, and OOCL NORFOLK at 15:32. The front came through around 16:20 when the wind changed direction from NE to NW in 11 minutes but with no appreciable speed change at the time, 33 – 40 km/h, although gusts were higher. Around 21:00 wind speeds had increased to over 50 km/h with gusts to 70 km/h.

The two remaining ship movements of the day were two arrivals from sea to anchorage:

NAVE VELOCITY anchored off Port Lincoln at 21:00. The front passed Port Lincoln before 15:00 but the strongest wind gust of the day occurred after NAVE VELOCITY anchored, at 23:26; WNW at 96 km/h.

BRITISH NAVIGATOR anchored off Port Adelaide at 22:00. The change had come through at about 17:00, with the strongest gusts recorded at 17:20; W at 85 km/h.

The closest weather recording station to Outer Harbour is the Black Pole Beacon about 5 n. miles to the north north west, and about the same distance from the nearest land to the east. At 00:01 the wind was NE 22 km/h. By 14:30 the wind was still NE but had increased in strength to 50 km/h with gusts to 69 km/h. At 16:19 it was still from the NE and had eased to 33 km/h but by 16:25 it was N 35 km/h and NW 41 km/h with gusts to 76 km/h by 16:30. For the remainder of the day the wind varied between N and W between 40 – 50 km/h with gusts to 85 km/h.

THURSDAY, 29th SEPTEMBER:

At 16:00 AEST, BoM reported that over the previous 24 hours a line of severe thunderstorms over South Australia had produced large hail and a few tornadoes and locally destructive winds. The intense Low in the Great Australian Bight had altered course and tracked north-east, almost over the top of Adelaide. There were widespread severe wind gusts: 115 km/h at Ceduna and Cummins (in the state's west) and 113 km/h at Yunta (in the state's north-east). The forecast contained Storm warnings for the Spencer Gulf, Central Coast, Investigator Strait, and South Central Coast, and Gale warnings were in force for the Far, Upper and Lower West Coast area, the Gulf of St. Vincent and Adelaide Metropolitan waters. The, by now, complex Low was forecast to cause a renewed surge of gale and storm force SSW'ly winds into South Australia from Thursday, 20:00 onwards.

All South Australian ports remained closed throughout Thursday, 29 September, during which time there were four arrivals, all going to anchor: IRON CHIEFTAIN, dry bulk, from Port Kembla to Whyalla at 09:02; BW PRINCE, gas tanker, from Melbourne to Port Bonython at 17:00; MSC EUGENIA, container, from Melbourne to Adelaide at 18:00 and BULK PEACE, dry bulk, from Hong Kong to the Spencer Gulf Cape-size anchorage, Whyalla (SPN), at 23:00.

At the Black Pole, off Outer Harbour, the wind continued between N and W at about 60 km/h, with several gusts up to 96 km/h, until at about 08:30 the wind changed to WSW 60 km/h, with gusts to 80 km/h and remained in the direction W – WSW for the remainder of the day but maintaining 60 – 65 km/h and gusting to 91 km/h.

The Master of one of the ships at anchor off Port Adelaide later described conditions at the anchorage as "not too bad".

FRIDAY, 30th SEPTEMBER:

At 12:00 AEST there were no storm or gale warnings applicable to South Australian waters.

The BoM recapitulation of the previous days advised that a flow of moist tropical air from the Indian Ocean over Central Australia and down into South Australia, and very cold dry air coming up from the Southern Ocean over the top of the low air masses combined to create an environment which caused the Low to develop quite rapidly.

On Friday, 30 September, conditions were moderating and all ports re-opened. The wind remained between SSW and WSW until 08:30, when records cease, and eased to less than 40 km/h, and gusts less than 50 km/h. The first arrival of the day was CMA CGM PUCCINI, container, from Melbourne; she went to anchor at 04:00 as both Outer Harbour 6 and 7 were required for OOCL NORFOLK and XIN QUAN ZHOU to return to berth, which they did at 14:19 and 09:19 respectively. CHALLENGE PROCYON, tanker, also arrived from Melbourne and anchored at 10:00.

The first ship to berth on Friday was CSL THEVENARD, general cargo, from Geelong, which berthed at Thevenard 1S at 07:00. She was joined on Thevenard 1N at 10:16 by DONNACONA, dry bulk, from Geraldton. At Port Lincoln, NAVE VELOCITY, tank-

er from Port Adelaide, berthed at 8 berth at 09:00.

At Adelaide, BRITISH NAVIGATOR, which had been at anchor since 22:00 on Wednesday, berthed at 11:20 at Outer Harbour 4, and, finally, HECTOR, which, during our visit to the Vessel Traffic System, we had seen briefly at anchorage before it was lost in the rain, berthed at 11:50 at Outer Harbour 8.

Thanks for assistance to Captain David Sleath, Operations Manager, Flinders Adelaide Container Terminal, and also Captain Carl Kavina, General Manager Marine Operations, Flinders Ports, and Cathleen Wallis, Marine Operations Manager, Sealink South Australia. Shipping Movements are taken from the Flinders Ports website, as was the copy of the Media Release. Except for the Black Pole data, other weather data was found on the Bureau of Meteorology (BoM) website and the forecasts are transcripts of the BoM forecast videos, (which do not mention air pressure) archived on YouTube.

STS Tenacious



Three sailing vessels in Port Adelaide, 19 October 2016. Left to right: One and All, Failie and Tenacious

STS Tenacious, the UK based sail training ship, has been in Port Adelaide for 10 days. She is the largest wooden tall ship to have been built in the United Kingdom in the last 100 years. She has been especially fitted out to accommodate anyone over 16 years with a disability.

Her particulars are as follows:

Name:	STS <i>Tenacious</i>
Owner:	<u>Jubilee Sailing Trust</u>
Builder:	Jubilee Yard (Merlin Quay), Southampton
Laid down:	6 June 1996
Launched:	3 February 2000
Commissioned:	1 September 2000
Tons Gross:	586 tons
Tons displacement	714 tons
Length:	54 m (177 ft) hull, 65 m (213 ft) including bowsprit
Beam:	10.6 m (35 ft)
Draught:	4.58 m (15. ft) in summer
Propulsion:	Sails: 1,217 m ² (13,10 sq ft) Engines: 2x400bph
Sail plan:	<u>Barque</u> (three-masted)
Speed:	11 knots (20.3 km/h) under sail, 8 knots (14.82 km/h) under power
Complement:	Permanent crew approx 11 (incl. 3 volun- teers) Voyage crew up to 40 (50% of whom may be sensory impaired or physically disabled)



STS Tenacious at Istanbul in 2010