

# The Traverse Board

Newsletter of the Friends Of The Paul McGuire Maritime Library Inc

November 2012

Proudly Supporting the Paul McGuire Collection of The State Library of South Australia.

## News From The Friends

My recent trip to New Zealand coincided with the 100th anniversary celebrations of the entry into service of the *TSS Earnslaw* on Lake Wakatipu in Otago in the South Island on 18th October 1912.

The *Earnslaw* continues to provide a daily excursion service from Queenstown.

Accordingly this edition is devoted to those events and a brief story of the *Earnslaw*.

There are a few other scenes from New Zealand as well to whet your appetites.

More detail on the *Earnslaw* centenary can be found on-line at <http://www.tssearnslaw.co.nz/>.

Another milestone being celebrated this year is the 50<sup>th</sup> anniversary of the Interislander roll-on/roll-off ferry service across Cook Strait. This Traverse Board describes the recent rebuild of the DEV *Aratere* in Singapore.

Neil Waller, Editor



Breeze – New Zealand Maritime Museum



William C Dalby Viaduct Harbour, Auckland



The Interislander ferry *Aratere* leaving Picton in the early evening on 15th October 2012.

### Next Meeting

Our next meeting is scheduled to be the AGM in late January or early February next year. Details will be in the January *Traverse Board*.

Friends are thanked for their continuing support.

The committee wishes all the compliments of the season.

### PRESIDENT'S REPORT - NOVEMBER 2012

Greetings once again, from sunny Outer Harbour, it's good to feel warm again. Just a quick note this time, and a happy one too, with the good news that the "One and All" is shaking off the odour of mothballs at last! I was aboard her yesterday for the Squadron Opening Day, and the mood among the crew was very bright. There are two voyages planned for the New Year, to Port Lincoln for Tunarama, then down to Hobart for the Wooden Boat Festival in February. In due course she will be taking young people aboard again, good news indeed.

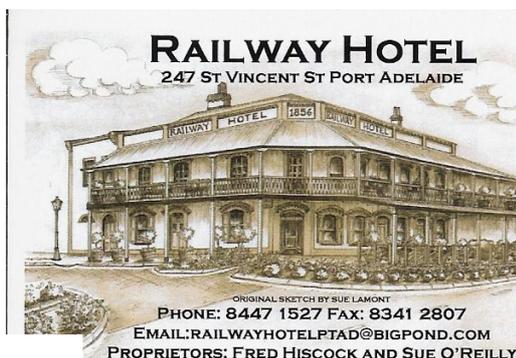
The showing of Neil's DVD about the "Wahine" disaster was dramatic, to say the least, and enthralled all who came along to our September meeting. The horror of the event, and the courage and bravery of those involved was incredible; it demonstrates how lives can be thrown into disarray by forces beyond anyone's control, especially at sea.

I do hope that there will be a good number of Friends and guests at our Annual Dinner next Friday, at the R.S.A.Y.S., Outer Harbour. Please ring me if you are coming, on 0414365294, any time. Sir Jim will be there, and who knows who else!

Please come along, enjoy the ala carte menu served up by our Chef, Greg.

That's all for now, see you Friday!

Regards, Julian.



ORIGINAL SKETCH BY SUE LAMONT  
PHONE: 8447 1527 FAX: 8341 2807  
EMAIL: RAILWAYHOTELPTAD@BIGPOND.COM  
PROPRIETORS: FRED HISCOCK AND SUE O'REILLY

The Traverse Board

Published by:

The Friends Of The Paul McGuire Maritime Library Inc

President: Julian Murray

Secretary/Treasurer Neil Waller

Postal Address: 2 Quigley Court  
ABERFOYLE PARK 5159

Email: [fpmml@internode.on.net](mailto:fpmml@internode.on.net)

Web: <http://www.fpmml.org.au>

## The TSS Earnslaw Turns 100



Captain Lisa McIlroy explaining the ship's workings to a passenger.



The Earnslaw's slip at Frankton.  
The ship comes out of the water for survey about 7 weeks every two years.  
The company also takes the opportunity to carry out general maintenance and improvements.



## The TSS Earnslaw Turns 100

The TSS Earnslaw has spent all of its long life on Lake Wakatipu, New Zealand's third largest lake, in the South Island.



It was built for the New Zealand Government Railways by McGregor and Company, Dunedin adjacent to the railway yards opposite the Dunedin Railway Station.

It was laid down in July 1911 and, when it was finished, it was disassembled and taken by train to Kingston at the southern end of Lake Wakatipu where it was reassembled and launched in February 1912 to enter service on 18th October 1912.

The New Zealand Railways used her and three other ships, the paddle steamers *Antrim* and *Mountaineer* and the steamer *Ben Lomond* in services from Kingston to Queenstown, and from there to other points around the lake carrying not only passengers but also produce including wool and sheep.

By 1968 the railways had no further use for it and its future looked bleak until it passed into the hands of Fiordland Travel (now Real Journeys).

That company completely restored the vessel in 1984 and it continues providing a daily service on the lake today.

The ship works fourteen hour days in the summer months and cruises for eleven months of the year, despite being over 99 years old. Visitors to the region can undertake a 1.5 hour cruise on board the TSS Earnslaw and view the workings of the steam engine and stokers.

Each year, the TSS Earnslaw undergoes an annual survey - typically from late May to early June - with every second year being taken out of the lake.

Each of the Earnslaw's screws is turned by a drive-shaft driven by a triple-expansion steam engine. Passengers have access to a walkway in the engine room, where they can observe the operation of the engines during the cruise. The Earnslaw is the oldest commercial coal-fired steamship in the southern hemisphere..

A ceremony was held at the magnificent Dunedin Railway Station on 18th October 2012 to make the centenary of the Earnslaw and the launch of the Steam Festival, a celebration of steam.

It was quite well attended despite the rather bleak weather.

The Mayor of the City Of Dunedin, Dave Cull, unveiled an information plaque about the ship.

It is to be mounted on the pedestrian over-bridge at the station.

At Queenstown a number of events were arranged to celebrate. These included a rare trip to Kingston at the southern end of Lake Wakatipu on the 18th October to re-enact her first trips and many trips over the New Zealand Labour Day weekend including to the stations up the lake that have traditionally relied on the Earnslaw and her sisters to carry produce out and supplies in.

One of these was a breakfast charter to the Frankton Arm of the lake carrying 100 members of the Mainline Steam Heritage Trust Rail Tour of New Zealand. Many were drawn like bees to a honey-pot by the Earnslaw's 2 locomotive type boilers and two triple expansion steam engines.

Captain Lisa McIlroy was excited to have so many steam enthusiasts aboard, and gave a most informative commentary.



Dunedin Mayor Dave Cull holds the Earnslaw information plaque.



Captain Lisa McIlroy providing commentary on the Frankton Arm Breakfast Trip 20th October 2012

## The TSS Earnslaw Turns 100

### Technical Specs

Type:	Siemens Martin Steel hulled twin screw steamer with Kauri decking
Naval Architect:	Hugh McRae of the New Zealand Government Railways Department, Dunedin
Builders:	John McGregor and Company Ltd., Dunedin.
Displacement:	329.55 gross registered tons, 155.43 net
Registered Length:	165 feet, 7 inches or 50.47 metres.
Length overall:	168 feet 51.2 metres.
Beam:	24 feet or 7.315 metres
Depth:	9 feet, 6 inches.
Draught:	6.6 feet.
Propulsion:	Twin coal fired triple expansion, jet condensing vertical marine engines producing 500 horsepower at 145 r.p.m.; cylinder diameters, 13 inches (high pressure), 22 inches (intermediate), 34 inches (low pressure); cylinder stroke, 18 inches
Boilers:	Two locomotive-type boilers with double safety valves; grate area, 48 sq. ft.; heating surfaces, 198 sq. ft. (firebox), 1,420 sq. ft. (tubes); working pressure, 180 lb. per sq. in. (reduced to 160 lb. in 1961); steam steering.
Speed (1912):	13 knots normal, 16 knots under forced draught 19 knots maximum.
Average cruising speed:	12 knots (120 rpm at 160 lb. psi).
Bunker capacity:	Initially 12 tons, later expanded to 14 tons.
Coal consumption at cruising speed:	One tonne per hour.
Passenger capacity (1912):	maximum, 1,035; cargo capacity, 100 tons (or 1,500 sheep, or 200 bales of wool, or 70 head of cattle).
Ship's company :	11
Port of registry:	Dunedin.
Livery:	The 36 feet high funnel, originally Buff, was repainted Red with a Black top in July 1959, as the former light colour soon became smoke-stained. The colour was changed again in June 1962 to light Stone with a Black cap, to conform to the livery adopted for the new Wellington-Picton ferry <i>Aramoana</i> ; monograms were added with the letters NZR in Yellow on a Green background on both sides of the funnel.



The *Sea Princess* arrives in Auckland Harbour at dawn on Thursday 11th October 2012.



The Wellington Waterfront at dusk.

## Extending the *Aratere*

In April 2011, Interislander sent its busiest ship, the *Aratere* on a journey to Singapore for an extreme makeover of epic proportions. The ship was literally cut in half with a new mid-section added to allow it to carry more passengers and freight.

The ambitious project was the equivalent of cutting an eight storey, 150 metre-long building in half, moving the pieces apart, inserting a new piece 30 metre section and joining it all up again.

While undergoing the extension the ship also got a new bow to improve its handling and performance as well as a major internal refurbishment with the creation of new lounge areas.

### Extending *Aratere* – the facts

Four months to complete with 800 labourers working around the clock and over a million man-hours expended

30 meter long, 1,500 tonne mid-section added

6,500 pipes and electrical connections cut and then restored

Room for 300 more passengers, 28% more rail lane metres and 32% more commercial vehicles.

### The timeline

13 April 2011 - *Aratere* leaves New Zealand

29 April 2011 - *Aratere* arrives in Singapore

25 May 2011 - *Aratere* cut in half and two sections are moved apart

4 June 2011 – Prefabricated mid-section inserted and reconnection of sections begins

9 September 2011 Re-Delivery to Interislander and vessel prepares to leave Singapore

23 September 2011 – *Aratere* arrives back in New Zealand

### The Project

#### Why stretch the ship?

Freight volumes are increasing and we needed more capacity in our fleet, fast.

The quickest and most cost effective way to do this was to extend one of our ships as buying a new ship simply costs more and takes longer to build.

*Aratere*, the youngest and busiest ship in our fleet was the logical choice for extension.

The red blocks highlighted in the drawing below shows the areas of the ship that would be worked on.



#### Cutting a ship in two

The extension project was a huge undertaking, from the planning in New Zealand, the work programme in Singapore and the return of the ship to New Zealand.

Once in Singapore the shipyard workers used circular saws for internal small pipework and cables and gas torches to cut the ship at the designed cut line. They cut through everything - the outer hull that was made from steel, the watertight inner hull, cables, pipes and the ventilation system. The cutting process took 12 days.

A large team of workers were involved, at times there were almost a thousand labourers on board, working away in sweltering hot conditions.

Once the cutting was complete the two sections, sitting on lubricated Teflon pads were slowly moved apart by a hydraulic ram.

The new mid-body was inserted into the gap and more than 6,500 pipes and electrical connections were restored.

At the same time new interiors were completed, including the luxury premium plus lounge, children's play area and food court.

Two new generators were also installed as well as new propellers and a new bow to allow smoother crossings in rougher weather.

*Aratere* was also fitted with a new 'duck tail' which is a slightly different profile from the old stern. This, plus the new bow and stern help to reduce the ships wake by around 25% which is better for the environment and safety.

KiwiRail Website: <http://www.kiwirail.co.nz/projects/major-projects/improved-aratere-ferry>



The *Aratere* in Wellington Harbour – Photo KiwiRail

### Archie turns 70!

The SA Maritime Museum and the Police Historical Society are holding an event to celebrate the 70<sup>th</sup> anniversary of the police launch Archie Badenoch at the Queens Wharf (by the market) from 2:30pm Sunday 25<sup>th</sup> November 2012. RSVP: Friday 9<sup>th</sup> November telephone 8207 6255 or email [maritime@history.sa.gov.au](mailto:maritime@history.sa.gov.au).

### The ship's back in business!

On Saturday 27<sup>th</sup> October the Friends of the One and All who have taken the One and All under their wing, took the ship out for a crew training day to induct those that hadn't sailed for six months or more.

They practised climbing, helming, line handling, and were shown the key safety features of the ship.

On Saturday, 3 November, the One and All headed out to the Royal SA Yacht Squadron to be the official reviewing boat for their Opening Day.

In early December, the ship will be taking a group of Australian Maritime Fisheries Academy-sponsored secondary students on a five-day voyage. The Friends are still looking for crew to help out on this voyage.

The ship is planning on sailing to Port Lincoln at the end of January for the Tunarama Festival, the Australian Wooden Boat Festival in Hobart in February, and the International Fleet Review in Sydney in October, so there's lots to look forward to.

If you're interested in getting involved with the ship again, please contact Gil Hollamby, the volunteer coordinator, at [gil.hollamby@bigpond.com](mailto:gil.hollamby@bigpond.com).

Stan Nowakowski via Facebook

