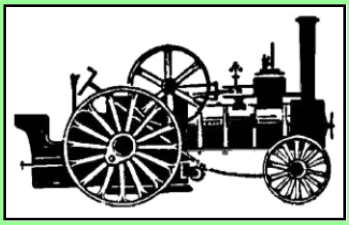
Issue 636 Jan 2024

A Wisp of STEAM SUPREME



Extracts from the Melbourne Steam Traction Engine Club Newsletter

Spiros Vlanakis helping Des Lang clean the Steam Section boiler prior to it's annual inspection

Also in this issue . Mirrlees big Diesel , Steam Shovel Progress, More Railway Bridges

Railway Latest Development

Ferrymeed Transport Museun

Solar Steam Engines

Ferrymead Brings it Together.

By Peter Lynch

The Ferrymead Heritage Park near Christchurch provides a unique opportunity to see New Zealand's industrial history in a period setting. This popular tourist attraction is now administered by Christchurch City Council and provides a home for fifteen different volunteer run societies each with their own interests and collections.

Ferrymead's central township area takes one back around 100 years with restored cottages, shops, church and other buildings from this era served by an early electric tramway. The day of our visit turned out to be a busy 'Toddler Thursday' with discounted ticket prices and additional activities such as pony rides, live music and face painting, This regular event plus others such as venue hire, weddings and night markets provide economies of scale to maintain operating revenue.

Heavy rail, tramway, miniature rail and trolleybus societies all have operating tracks within the site with the former benefitting from a connecting line providing access to the national network for excursion trips.

Sitting on the turntable was a 1960s vintage EO class electric loco which worked hauling freight trains through the Otira tunnel and later Wellington passenger services. A number of diesel locomotives and railcars seemed to be anticipating their next main line outing whilst a New Zealand Railways SB Bedford bus watched on from

Wandering away from the 'township' and railway yards reveals an extensive collection of farming equipment maintained by the Society of Rural History.

The tractors here might seem like hobby farm equipment today but were 'cutting edge' once and cultivated large acreages. Famous names such as McCormick-Deering, Case, Ferguson, Caterpillar and David Brown are all remembered and maintained in good order by skilled volunteers.

After a local run on a retired Wellington electric train, the area south of Moorhouse Station introduced many more interesting displays and collections. A 1920s era motor garage, the Fire Services Historical Museum and Radio Ferrymead all offer fascinating insights into New Zealand History.

One vehicle of particular interest was a Trekka cab chassis, as produced by Motor Holdings Ltd of Otahuhu (Auckland) between 1966 and 1972. Many Australia and British cars were assembled in New Zealand (to avoid steep import duties) but the Trekka was their only mass produced locally built vehicle (around 2500 in total) It used Skoda running gear in a two wheel drive configuration with either van or pickup bodywork.

Aviation Anoraks would delight at the restoration projects undertaken by the Ferrymead Aeronautical Society such as a ski equipped Douglas DC3, Vickers Viscount airliner and Bristol Freighter cargo plane. The piston engined Bristol Freighter proved ideal for inter island cargo services during the 1950s and bulky freight could be quickly loaded via the opening nose doors.

Tramway enthusiasts have to stretch their legs further to see the extensive collection of electric, cable, steam and horse drawn trams. Some older trams are on static display, the majority live in a large tram barn near the park entrance whilst others are hired to the City Council for inner city trips. The Ferrymead network includes a tram traversor and lifting bridge which is awaiting restoration. Of particular interest to steam enthusiasts is an 1881 Kitson steam tram but unfortunately this was not running on the day we visited.

The trolleybus fleet was also having a day off with this 1930s vintage Thorneycroft six wheeler ready for the weekend visitors. With renewed interest in low emission public transport it is possible that trolleybuses may be 're-invented' soon.

It has been a challenging period for Ferrymead, with the devastating 2010 Christchurch earthquake, COVID 19 shutdowns and an aging volunteer workforce but spirits remain high. The positive Kiwi attitude and 'glass half full' approach certainly gets things done. An increasing appreciation of local history and its educational value backed up by a supportive local council and modern marketing methods bodes well for them.

Peter Lynch.

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Secret Big Diesel

Your scribe was lucky enough to get a private viewing of a very large early diesel engine not too far away . It is a Mirrlees 6 cylinder of 1936 . Normal 450 HP at 300 RPM . Temporary 495 HP . Serial no 72303 built Stockport England .Originally full air blast but converted to an early form of solid injection that relies on multiplication of compression pressure to inject a solid stream of fuel . Although it worked it was not deemed a success . The engine is a similar height to our Willans but twice as long , being 6 cylinder not 3, making it a real monster.

It appears to be the next generation of Diesel engine with automatic lubrication and 1 piece cast crankcase instead of individual A frames and drip feed.

The cylinder heads and valve gear are carryover . It is still in it's last engine house and in going order but no longer in service . Lets hope it can enter preservation locally

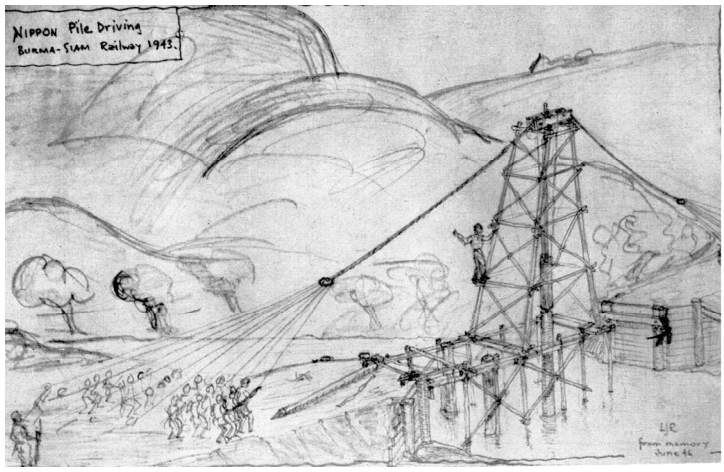
BRIDGE Follow Up

The feedback I received has been amazing with many readers enjoying the article and adding more detail or information on additional interesting bridges Thanks to everyone this sort of feedback is most encouraging as I spend at least 20 hours on each issue and that kind of response makes it feel all worthwhile

The Bridge On the River Kwai
The most famous Railway Bridge from a world wide perspective is probably the Bridge on the River Kwai

One of the 2 bridges specially built in Ceylon for the movie set Bridge on the River Kwai . Internet pic

Unfortunately we cannot count this bridge as it is fictitious being from the epic 1957 war film based on Pierrie Bouli 1952 book . It story is based highly on the Japanese WW2 building of the Thai / Burma railway using slave labour . The railway did not actually cross the Menan Khwai Noi river but ran parallel to it for over 150 km through rugged country requiring the construction of many cuttings and embankments as well as wooden bridges over many tributaries . Approx 30,000 prisoners of war and over 80,000 civilians perished at the japanese hands on this construction under far worse conditions than in the film . The most significant bridge actually built was a wooden structure over the Mae Klong which was quickly blown up a couple of times by Allied planes before being replaced by a concrete and steel structure . (Australia in the War of 1939—1943 the japenses thrust Wigmore. Australian war Memorial Canberra) . This bridge has become synominous with the Burma Railway so a short section of this river has been renamed the Kwai so as to not disappoint tourists. Further complicating the facts is the 2 bridges for the movie were set up in what is now Siri Lanka That said the book and film about this railway bridge received world acclaim and have been widely recognized for its crucial part in highlighting the pain and sacrifice that so many people made so that we can enjoy the wonderful life we have today .



Pile driving on one of the real bridges of the Burma Thailand railway . Reproduction of a sketch by Maj. L. F. Robertson

Stony Creek Bridge at Nowa Nowa mentioned last issue as the biggest in Australia and thanks to Clive Windley we now have a couple of much better snaps Clive writes ….. A week back I was in Nicholson, near Lakes Entrance and out from there is the Nowa Nowa bridge. You may be interested in it. Here are some pics .

This perspective lets us better appreciate the size while

I can understand now why you are not allowed to walk on it

Eltham Rail Bridge It is of timber-pier and timber-beam construction, while utilizing a few longer steel joists on timber piers over the main channel of the stream . This substantial bridge has almost two hundred metre of timber deck. In accordance with standard practice all timbers have their date chiselled in . 19 41 are the oldest apparent with many more from the 1970's indicating a couple of refurbishments . It is the only railway bridge of predominantly timber construction still in regular use as an integral part of Melbourne's metropolitan electric railway network and one of extremely few timber rail bridges in the State that still carry trains. The Eltham bridge is consider to be a valuable historic relic of an earlier steam locomotive transport era in the Diamond Creek Valley and long formed an important part

of a magnificent Eltham Park landscape fitting in well with the trees and creek while the open trestle construction avoids back up of water in times of heavy rain . For a while it looked to be under threat with the duplication of the line to allow trains to run more often to cope with increase in passengers from the addition of a couple of new stations . Fortunately being heritage listed a solution was found that allowed retaining a single track for a short distance on that section of the line that included the bridge while still allowing the extra trains . Thanks to Ewan McDonald for the tip off

Koo Wee Rup Swamp Outrage has resulted from Vic Track's intention to demolish 6 short low wooden rail bridges on the disused Great Southern Railway put through the swamp in the 1880's . National trust and Cardinia Shire Council are hoping something can be worked out.

One of the Koo Wee bridges under threat . Info from Peter Jackman

STOP PRESS with the ban on logging of Australian hardwood suddenly brought forward to the start of this year I wonder how all these hardwood bridges can be repaired in the coming years or are they now doomed !

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Brian's Solar dishes on display in shed 6

Donation of Solar Powered Steam Engine

We were contacted by Kate who was looking for a good home for the experimental model Solar powered steam engines her late father Brian Howard had made about 10 years ago . All a bit intriguing as it was something that we had not come across but being models and steam it was up our alley. Anyway she was quite insistent that they go to a good home so Warwick made a trip to Benalla in his light tray in the hope they would fit in and stay dry on the way back Brian was a Marine Engineer and had been a lifetime steam enthusiast and model Engineer with a well equipped home workshop and library.

It turned out he had been a contemporary of Ted Pritchard of steam car fame and had shares in his venture . Ted was so convinced of the potential of steam he even went so far as to install an engine he had invented in a Ford Falcon and took it to Detroit to try to sell it to the Big Three . Kate still remembers, with a thrill, having a ride in Ted's car when she was a little girl.

On arrival I was confronted by 2 quite large parabolic reflectors on stands arranged to focused the heat from the sun to boil water which was then piped down to miniature steam engines behind the dishes .

The smaller one is 1. 2 m dia and has a long length of small copper tube in a spiral at the focal point of the reflector creating in effect a steam generator. The resultant steam is supplied to small oscillating cylinder engine that drives a very small short stroke feed pump that returns the water to the generator .

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The larger dish (opening photograph) is 1. 8 m dia and slightly different technology in that it has a pot boiler containing 300 ml of water . This is positioned at the focul point so recieves the heat of the sun on all external surfaces. In this case the engine is a minature steam turbine rigged up to drive a bicyle generator and small globe. A truly ingeanious way to harness the energy of the sun .

We have been waiting with great patience to try them out but unfortunately since getting them , nearly a month ago , we have not had a bright day . Fortunately the big one with the turbine can be seen in action on YouTube @BHsteam. https://www.youtube.com/channel/UCvlzAEHklOR0ZUDHHnjarTw/channels?app=desktop&view=49&shelf_id=2

We were also kindly given about 50 technical books for our library including his one on the wcrds and music on making minature steam turbines. If anyone wants to have a go talk to Rohan to see the books.

Steam Shovel Update

The first thing on the critical path is freeing up the tracks as nothing can go together till these are done .

With the containers out of the way Peter Morris has moved them onto the arena and attacked them with his powerful compressed air jack hammer and blasted away with Rod Jones's industrial pressure washer .

Things are looking encouraging with most showing various signs of movement , after that it is just a matter of time.

Hayden and John Meade have taken on the slewing steam engine and can be seen in the process of assessing its condition and cleaning it up . It looks pretty good inside .

Warwick attacking the machinery deck with the pressure washer . It is cleaning up well and proving to be in amazingly good condition so far with no excessive wear on any of the bearings and pivots.

It would be good to have a few more hands to help with things like wire brushing and painting , conserving the boiler and procuring material for coal bunker and cabin rebuild.

Also important before too long is sorting out the parts in the green container and determining how much of the cabin we have so we can establish the size of the reconstruction job.

Railway Storage by Rob Worland

Today was a big day at the railway yard. Santa delivered an excellent Christmas gift.

The purpose of this new facility is to house several locomotives. Lots of short tracks are needed in the shed. A locomotive should not be stabled behind anything else.

Aaron and Peter Morris spent six hours, without a break, installing the two 20-foot shipping containers facing the turntable.

As required for safety around the cranes etc. we stayed well away, occasionally watching from a safe distance.

Our containers moved from the arena over to the railway yard to provide secure undercover accomodation for our trains . Tracks will connect to the turntable

Aaron and Peter took on the challenge in a professional and impressive manner with Peter driving his 20 tonne Coles Mobile Creane and Aaron using his Mecalac excavator to prepare the site

The required location was set by:

1. The only possible layout of the radiating turntable tracks. Starting at the turntable pit access steps, the stub rails are squeezed together to fit them in. This resulted in a layout that cannot be changed.
2. Moving the containers further from the turntable would bring them too close to the train shed.
3. The proposed gable roof spanning both containers requires a precisely aligned rectangular layout.

The containers must be level and at the same height.

5. The floors of the containers need to be at least 15mm below the head of rail at the turntable. This is to avoid having vehicles roll into the turntable pit.

The existing ground needed to be lowered. On the west side the ground was found to be soft, requiring additional base material.
The base layer supporting the containers was formed using crushed bitumen brought down from the stockpile in the back paddock.
The containers were brought to the area using the large yard crane. They were then moved into position with the big mobile crane.
Much care was taken getting the containers precisely into position. This is very difficult while they hang from the crane. Even with a slight breeze the containers tend to move. While one corner is aligned the other corners don't stay put. Aaron and Peter were very patient and careful in achieving close compliance with the required layout.

Today, everything came together to get the containers installed. As mentioned in the annual report Peter did much of the work of work emptying out the containers. I think Aaron was involved with manufacturing the frames for storing the removed fencing material.

Many thanks Aaron and Peter from the railway team and the broader club.
Rob Worland.

Meanwhile the railway gang has been busy making a set of points and laying a third track in the train shed so locos can be readily taken in and out of service without having to shuffle them around often by hand .

John Pattison watching Tony Zaia driving our Diesel hydraulic loco REG , the fist loco to use the new third road in the shed

When you stop and think our little railway has really had a terrific year with bumper takings , 3 extra locos and a set of carriages, track upgrades and now extra train storage thanks to the containers and turn table . A great achievement for the many members who have volunteered their time and expertise in this direction Thank you all

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To Restore or Not to Restore that is the Question

A picture of a Little Grey Fergy found on a museum web site . Obviously "restored " to please little children .
A fashionable thing to do at one time but now the tide has turned with the thought being if it has more than about 70 % original paint left it should be conserved as it is because it tells a story about how it was made and what it was used for. Making like or better than new also destroys part of it's history so is also going out of favour with some.
Of course if you own it you are free to do what you like with it