

The Generator

Issue 479
June 2021



Palmerston Model Engineering Club
www.pnmec.org.nz - pnmec@trains.net.nz

Managers of the Marriner Reserve Railway - Marriner Street - Palmerston North
PO Box 4132 - Manawatu Mail Centre - Palmerston North 4442

The Palmerston North Model Engineering Club

Upcoming Club Events

Club Nights held at the Hearing Association Hall 435 Church Street,
Palmerston North 7.30 pm

Thursday 24 June

Richards Tour Aotearoa 2020 South Island

A look at the places visited of interest to club members, gold mining,
ghost railways etc

Saturday 17 July

Visit to the Tokomaru Steam Engine Museum.

Saturday 24 July

Visit to Fieldair Engineering Ltd

Marriner Reserve Railway

4 July & 18 July

Railway operations at the Mariner Reserve
Trains in operation from 1pm to 3pm
Weather permitting (Kerry Puklowski 06 353 6189)

Thursdays

Railway operations for club members
Subject to ongoing track maintenance and weather
Contact track manager (Richard Lockett 06 323 0948)

May Club Night Report

With the planned club night activities being disrupted due to technical difficulties some quick thinking was needed to provide some entertainment for the evening. Bruce Geange showed off one of the wooden trucks that he is currently building, while thanks to Bill Krippner and Robert Edwards a video of the recent NZR miniature locomotive weekend held at the Maidstone Model Engineers Maidstone park Railway was plucked from the ether and installed onto Robert's laptop computer. A general discussion developed around the various locomotives from 2.5" gauge up 7.25" gauge as regards to who owned them now and who built them. Looked to be a successful weekend and I should have been there with the NZR W192, but I had a prior engagement in Taranaki that weekend.

Flash New Bicycle Under Construction

I got a whisper that something special was happening in the workshop of club member Robin (Flash) Wallace. It was known that Robin was working on a steam powered bicycle and one has visions of a steam engine stuck into an existing bike frame, but no that is definitely not what this project is about! It is a bicycle with cranks and pedals and not a motor bike which would have to be registered for road use etc. As you can see in the photo is has that look, certain to get the steam punk people quivering! Editor



The Generator

Club Notices

Due to Richards's memory stick not being allowed to connect to Roberts laptop for the purpose of a presentation of his bike packing trip through the South Island this did not happen and has been carried over to this month 24th June.

It would appear that I had not gone through the correct procedure when removing my memory stick from my computer after having saved the presentation onto it.

This was news to me as I had just done as I have always done and which has not been a problem before and so to try to avoid this issue cropping up again here's the guts of it. I am running a windows system like most of you I think and on the Task bar which runs along the bottom of your screen, right hand corner not far from the time and date there is a little vertical pointing arrow which is **Hidden Icons**. Click on this which will reveal other icons one of which will be **Safely Remove Hardware** but only if you have a memory stick or similar inserted will this be there! Click on this which will bring up **Eject Mass Storage**. Click on this which in doing so should inform that it is safe to remove your stick memory that is.

The July Club night has been changed to the morning of Saturday 24 July to take advantage of the offer of a visit to Field Air Engineering Ltd. Located at the Milson Airport, the club committee thought would be of great interest to club members. As numbers are limited for this visit **please do not invite** extra persons along thanks! Full details in next months newsletter. Please advise Richard Lockett if you are able to join us on this visit.

The Hutt Valley Model Engineers are to visit the Tokomaru Steam Engine Museum on Saturday July 17th and it would be ideal if the Palmerston North Model Engineers joined them as the museum has not been open in any form for some time now, just bear in mind that there will be no steam on to power any of the engines.

There will be an \$10 pp entrance fee. Meet at the museum at 11 am.

Rail Ex 2021

To be held on 17th and 18th of July. The PNMEC will not have a presence at this event on this occasion due to there being no spare space inside the hall for us as priority is given to model railway layouts and with the addition of having to produce a risk assessment and hazard management plan for the Arena Manawatu Management to cover our normal outside live steam locomotive demonstration. This would have to include things like traffic and fire management. It was decided to completely remove any risk to our members from getting cold (high risk) and of getting a wet arse (moderate to high risk depending on the weather on the day) by not being there.

Rail Ex. 10am to 2pm Barber Hall, Waldergrave Street, P North.

Te Manawa Club Day. 10am-2pm Saturday August 7th, Te Manawa Museum 326 Main Street P North. PNMEC will have a stand at this promotional event.

[Stony Batter Fortress](#)

During a visit to Waiheke Island prior to the Queens Birthday weekend I took in a tour of the stony batter fortress which formed part of New Zealand's planned coastal defences envisioned during the 1930's.

Located on the eastern tip of Waiheke Island the inclusion of Japan into the war in 1941 and the threat that this imposed to New Zealand saw coastal defence projects raised in priority and construction commenced in 1942. The fortress was to house three 9.2 inch mark 1X naval guns with all their supporting infrastructure, such as observation posts, magazines, plotting rooms, barracks, power generation etc. Over 1 km of tunnels were hand dug into the hillside at Stony Batter so named by the large boulders littering the eastern tip of Waiheke deposited by one of Auckland's volcanic eruptions thousands of years ago. These large guns had a range of over 30 kms and movement was achieved by hydraulics via electric motors and pumps located deep under ground. Electric power was supplied by two large Ruston Hornsby diesel engines with a smaller engine to drive an air compressor to supply air for starting the Ruston engines also located deep underground in a separate chamber well away from other infrastructure. The first gun was installed in 1944, the second in 1948 and the third never was as the threat was over and large fixed naval type guns probably become an obsolete concept. The guns were scraped in 1961 and the Ruston engines removed to be used as power generators in suburban power stations much like Palmerston North's Keith Street power station. What astonished me was that the local historical society who had the concession from the Dept of Conservation to look after the fortress had sourced two replacement Ruston engines from Britain to fit back into the underground chamber. The average person visiting the fortress on a tour would have been content with a detailed wooden mock up of the engines and you would not have been able to fire up the engines with people inside of the tunnels for the noise alone so I was somewhat mystified as to the thinking behind this ambitious plan! But here they were two Ruston diesel engines disassembled in their underground chambers waiting for some keen person to reassemble them deep underground and a long way from a suitable warm workshop where you may get someone keen to take them on. Editor



Ruston Hornsby crankcase lying beside its cylinder block deep underground at Stony Batter.



Waiting for a good keen man. One of two Ruston engines lying in wait for something to happen!

The gun pit for the Mark 1X naval gun being examined by visitors to Stony Batter Waiheke Island



The Generator

Moving the Blades

Those of you who come and go to Palmerston North via Rangitikei Line may have noticed the large stack of wind turbine blades on the vacant land at the Tremaine Avenue end. These blades having arrived at the port of Taranaki and trucked down to Palmerston North during 2020 have been stored until site works up on the Tararua Ranges south of the Pahiatua Track were completed and wind turbine assembly could commence.

With the blades being 55metres in length, getting up the Pahiatua Track was always going to be a problem particularly the tight hairpin halfway up which was to be straightened out involving the removal of a rather large amount of the hillside. As excavation commenced it was discovered that the more they dug the more that the hillside slipped down to fill the void, or so the story goes which required a rethink as to how to transport the blades up the hill! An innovative solution was arrived at where a special trailer was designed that allowed the blade to be pivoted up to lessen the turning radius significantly also allowing the blades to clear obstacles whilst being moved around the city streets, traffic lights etc. Chris Saunders was tasked with capturing the trailer in operation with his camera. Editor

Trailer with blade mounted waiting to leave the Rangitikei Street storage site, blade raised to clear traffic lights at Tremaine Avenue



Negotiating the Main and Ruahine Street intersection. Blade raised to clear obstacles

If you would like to be notified when this newsletter is published, send us an email with your **Name, Club** and **Email** address to pnmec@trains.net.nz with "**Generator Please**" in the subject line.