

The Generator

Issue 523
June 2025



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

Managers of the Marriner Reserve Railway - Marriner Street - Palmerston North
C/- 119 Ruapehu Drive - Palmerston North 4410

The Palmerston North Model Engineering Club **Upcoming Club Events**

Club Nights typically start at 7.30pm and are usually held at the
The Hall, 435 Church Street, Palmerston North.

Thursday 26th June

Club Night
Project Progress

Thursday 24th July

Club Night
Special General Meeting plus M E Quiz

Marriner Reserve Railway

Sunday 6th July & Sunday 20th July

Railway operations at the Marriner Reserve
Trains in operation from 1pm to 3pm
Weather permitting (Richard Lockett 06 323 0948)

Thursdays

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

Club Notices

June Club Night

The theme for this months club night is Project Progress. So bring along your current project or part of it and tell us about it or even about what you were going to do but never quite got round to getting it done! Or as is the case on any club night bring along something that would be of interest to your fellow club members.

Special General Meeting

This is formal notice that a Special General Meeting will be held on the 24th of July at 7.30pm in the Hall 435 Church Street, Palmerston North.

Agenda.

1. The vote to adopt the proposed new Club Constitution.
2. The vote to formally submit the new Club Constitution for acceptance by the registrar of Incorporated Societies

New Club Constitution

A thanks from the club committee to those of you who have taken the time to read through the draft club constitution and make comment on said constitution. Your input has been appreciated and some changes to wording has been made. The new constitution is now being proof read to identify errors of spelling and grammar before final sign-off by your committee and release back to our membership prior to a vote of acceptance at the Special General Meeting.

Subscriptions are now due.

Membership subscriptions of \$40.00 as set at the Annual General Meeting are now due.

Please pay Club Treasurer Lawrence Brooshooft at a club night or preferable pay direct into the clubs bank account via internet banking. **Account number 06-0996-0831663-00 bank account name is Palmerston North Model Engineering Club Inc.**

Please remember to use your name as the reference

August Shed Visit

Keep your Saturdays in August free if you can as a visit is being arranged to have a tour of a Palmerston North automotive engineering company. We are aiming for Saturday the 16th at this stage but this date may change. This company specialises in the manufacture and tuning of high performance race car engines across most disciplines of motorsport. Notice of this visit will be via email so keep a lookout in early August for this in your inbox!

Okay so what is the engine in the photo? Its very famous!

Photo web



The Generator

May Club³Night Report

Themed as Boilers and Safety Valves Richard Lockett began by reminding those club members present that two aspects of our hobby are subject to NZ Government regulation namely the manufacture and operation of pressure vessels (Pressure Equipment, Cranes and Passenger Ropeways), (PECPR) and our miniature railway operations (Amusement Device Regulations), (ADR). Richard explained that currently the Model Engineering Association (MEANZ) are developing a NZ Model Boiler Code to replace the Australian Model Boiler Codes (AMBSC Code 1 Copper and Code 2 Steel) which the hobby has been using for a number of years. Our government regulators (WorkSafe) have expressed an unease with our use of these codes as they do not reference back to anything covered under the (PECPR) regulations and to maintain the integrity of our management of the manufacture, testing and ongoing inspection of our boilers MEANZ has agreed to undertake the development of our own boiler code. It is not envisioned at this stage that there will be any difference in the actual design and construction detail between the NZ and Australian codes. There will be some changes to what hazard level a club boiler inspector can verify a boiler design before having to defer to a MEANZ boiler design verifier for signing off and also the development of a national database for the storage of our boiler records possibly cloud based.

As part of the 3 yearly steam test of our boilers is the testing of the operation of the safety valves namely that they release at the max operating pressure of the boiler and that they don't accumulate more than 10% pressure when released. The safety valves are generally removed whilst the boilers hydraulic test is performed and is a good time to dismantle the valve to check on the condition of the ball and spring. If the spring and ball have not been made of stainless steel they will corrode over time and the valve will not perform as desired. Design requirements of safety valves are specified within our boiler codes and if building a boiler to a published design reference should always be made back to these codes for compliance. Reference tables for spring specifications for different ball sizes are also in these codes and should also be referenced when building safety valves. These springs can be purchased through some Australian based model engineering supply businesses and this should be your first port of call when sourcing safety valve springs. When purchasing stainless steel balls test them by storing in a glass of water overnight to prove that they are stainless steel and not something close to that will rust after contact with water and steam, yep it happens!

The Mudgeway family Locomotive "Tasha" has returned to the rails at the Marriner Reserve after nearly a year having had a new copper boiler made and fitted to replace the steel Briggs style boiler which didn't like making steam in sufficient quantities to make for an enjoyable afternoons track run. Allied to the new boiler were modifications to the smokebox drafting and a new ashpan.

Reports from the footplate crew of Alex and Kyle are that there would seem to be a definite improvement in the locomotives performance.

Kyle Mudgeway test running locomotive "Tasha"

Photo Jonathon Mason



Ww644

Matariki weekend has seen a fair amount of full size live steam activity in the Manawatu with the hosting of the FRONZ 50 event taking place. One of the main attractions of this event is the return to main line running of NZR tank locomotive Ww 644 which for nearly 55 years has been confined to its home railway at Glenbrook south of Auckland. Last in use by the New Zealand Government Railways in 1969 hauling coal trains in and around Greymouth before being sold to the Glenbrook Vintage Railway and steamed to Auckland in 1970 and put into storage awaiting restoration which began in 2002 with a new boiler built in Dannivirke. Your editor had a quick look over Ww 644 whilst it was being steamed up in the depot of Feilding Steam Rail after its journey down the trunk line from Glenbrook earlier in the week. Said by many enthusiasts to be the most attractive of the NZR tank locomotive fleet Ww644 is one of fifty built new at Dunedin's Hillside workshops commencing in 1913.



Ww 644 awaiting a weekend of work in the Manawatu during the FRONZ 50 event.

Photo Editor



Hidden in Plain Sight

These photo's were meant to be included in last months Generator but on transfer across to the editors computer got lost and could not be found when needed for inclusion. Upon looking in the folder to which they were supposed to have been placed there they were. They were there all the time unseen right in front of my eyes hidden in plain sight. This can also be of a nuisance in one's workshop particularly when it comes to the placement of 300mm rulers which if not put back into their correct resting place if they have one can be very difficult to locate, they seem to be very good at hiding in plain sight.

April's AGM and with the meeting venue having plenty of tables to hand allows us to bring some table top models which some of our members have a passion for. Photo Editor



Date and Time			Activity
Thursday 26th June	7.30pm		Club Night Project Progress
Thursday 3rd July	7.30pm		Committee Meeting
Sunday 6th July	1pm to 3pm		Marriner Reserve Railway
Sunday 20th July	1pm to 3pm		Marriner Reserve Railway
Thursday 24th July	7.30pm		Club Night Special General Meeting Re new Club Constitution. Plus a Quiz
Sunday 3rd August	1pm to 3pm		Marriner Reserve Railway
Thursday 7th August	7.30pm		Committee Meeting
Sunday 17th August	1pm to 3pm		Marriner Reserve Railway
Thursday 28th August	7.30 pm		Club Night Marine Engineering

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.