

The Generator

Issue 517
November 2024



Palmerston Model Engineering Club
www.pnmecc.net.nz - pnmecc@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.

Sunday 24 November

End of Year Gathering
Pahiatua Railcar Society Visit
Page 2 for details

Sunday 9 February

Presidents Barbeque
Plus Mamod Steam Up

Marriner Reserve Railway

Sunday 19 January

Railway operations at the Marriner Reserve
Trains in operation from 1pm to 4pm
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

End of year Gathering Sunday 24th November

Join fellow club members, partners and extended family for a visit to the Pahiatua Railcar Society with a start time of **10.30 am**. Please note that there is a \$10.00 entry fee into the Societies workshops.

If you would like to car pool or need a ride please contact the club secretary Fin Mason 06 3567849 or 027 6422264 to arrange.

Following the tour of the Societies workshops a BYO lunch will be taken in conjunction with a Thermette challenge. A judge will be appointed on the day and the task will be to use your Thermette to make a cup of tea to the judges requirements. First person to produce a cupper to the satisfaction of the judge will receive applause and adulation from the rest of the PNMEC members present!

For those of you who don't know where the Pahiatua Railcar Society is located please refer to the map below and head over the Pahiatua Track and follow the signs to Pahiatua and proceed to a railway crossing after descending a hill (the circle on the map). The society is on the left directly after the railway crossing. See you there!



Presidents Barbeque

Invitation is extended to all PNMEC club members, partners and family to our club president Jonathon Masons property to celebrate the start of the new year with a late afternoon BBQ on the 9th of February. Gathering at 2pm to wander through Jon's sheds and workshop which are full of items of interest and the homesteads gardens. You are also invited to bring along your methylated spirit fired steam engine, locomotive or traction engine (Mamod or equivalent) and to give it a run under the cover of one of Jon's sheds.

Date Sunday the 9th of February.

Time 2pm onwards.

Place Jonathon and Donna Mason's, 150 James Line, Palmerston North.

Bring Your own fuel and water (BYO).

As per usual an email will be sent out beforehand with any specific details or change of program etc.

Club Library News

Club librarian Merv George has received some additions to our plans library.

The club library now has plans for

- ◆ "The Trojan". A double acting slide valve reversing steam engine for marine and general use.
- ◆ "Topsy"; a 0.375 cc compression-ignition "diesel" designed for construction on a centre lathe.

These join many other plans in the library. A selection of these are

- Austin 744cc Racing car
- The BRM, Britain's 1 ½ litre Formula One racing car
- REA "E" Type
- 1927 1 ½ litre grand prix Delage
- Back parting tool holder
- Garrett Steam Waggon, 7mm scale
- 1952 Ferrari Formula 2 race car
- High efficiency magneto
- Stutz Bearcat
- ◆ Blanking out press (Punch machine)
- ◆ Crusader speed boat

For more details or if you wish to study the selection phone Merv on 021 081 69930.

Regards

Merv George

163 Mount Taylor Drive

RD 5

Feilding 4775

Ph 021 081 69930

October Club Night Report

The evening kicked off with some project items from Graeme Hall, Chris Morton, David Edmond and John Neal. John having recently moved back to the Manawatu from Marlborough and into a retirement village and is having to make some tough decisions around what projects can be undertaken with the space that he now has available for his hobby activities. One of these projects was a 3.5 inch gauge 2-6-2 Mountaineer narrow gauge locomotive and John brought along the plasma cut frames and a set of patterns for the casting required for this loco which he did not wish to take back home with him. So if there is anyone out there who has ambitions to build this locomotive please contact the editor! They are free to a good home! I'll even throw in a couple of those files.



Frames and patterns for the Mountaineer in 3.5 inch gauge

Photo Editor

Graeme and Janice Hall made the trip over from Whanganui and it was great to see them. As always Graeme had been busy in his workshop and had brought along his latest project to which Graeme explained was chosen to utilise the available materials remaining in his workshop. A horizontally opposed twin cylinder I.C. engine named the Upshur Twin which was air cooled with a wet sump and overhead valves, 19mm bore, 18.28mm stroke. Designed to be made with just a lathe and a drill press.



The Upshur Twin.

Photo Editor

David Edmond had been doing up an older style drill press which had a smashed or missing fine down feed handwheel. Using the sprue from cast iron castings produced at the recent Technicast casting weekend he had machined up a replacement hand wheel which restored the drill press back to a usable condition.

Chris Morton had made this device for testing the windings on electric motor armature's which he called a growler



The Growler

Photo Editor



The first step in any machining operation, getting material of the right size! Photo Editor

The main topic for the evening was Kyle Mudgeway's recent trip to California as part of his schools entry into the world finals of the H2 Grand Prix which is run using hydrogen fuel cell powered electric radio controlled model cars. The team from Freyberg High School had gained a wildcard entry straight into the world finals as an effort to introduce this educational race series into New Zealand schools. As an extra out of school hours activity, sponsorship from local businesses was sourced to buy a starter kit in from the USA and was built up and tested in conjunction with our local RC car club. The RC club whisperer or guru advised the school that the kit car should be upgraded to make it more suitable for serious competition use i.e. reliability and robustness. Over the two month leading up to the world finals the cars chassis was progressively upgraded along with more powerful and energy efficient electric motor was sourced which was not fitted or tested before departing for California. Modern RC systems allow for the transfer of data from the car to a laptop computer in real time i.e. as the car is being raced, measuring energy use etc.

Come race day the team started off slowly, carefully analysing the data of its energy usage as the race was of endurance over many hours and energy was capped in the form of hydrogen sticks 22 and batteries 4. As the data was analysed speed was increased crash damage was avoided, pits stops for hydrogen stick replacement were undertaken and the team progress up the leader board to place third at the race end completing 1096 laps to the winners 1200. An effort to be proud of!

The race was live streamed so Kyle's parents and brother were able to watch as the race action unfolded in real time!



Kyle and the H2GP race car "Kia Kaha" Freyberg High Schools entry in the world finals. Photo Jon Mason



Kia Kaha's body work sign written with sponsorship from local Palmerston North businesses.
Photo Editor

| Date and Time | | | Activity |
|------------------------|-------------|--|---|
| Sunday 24th November | 10.30am | | End of year gathering Pahiatua Railcar Society |
| Sunday 1st December | 1pm to 4pm | | Marriner Reserve Railway |
| Thursday 5th December | 7.30pm | | Committee Meeting |
| Sunday 15th December | 1pm to 4pm | | Marriner Reserve Railway |
| Sunday 19th January | 1pm to 4pm | | Marriner Reserve Railway |
| Sunday 2nd February | 1pm to 4pm | | Marriner Reserve Railway |
| Wednesday 5th February | 7.30pm | | Committee Meeting |
| Sunday 9th February | 2pm onwards | | Presidents BBQ |
| Sunday 16th February | 1pm to 4 pm | | Marriner Reserve Railway |

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.