

The Generator

Issue 514
August 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.

Thursday 22 August

Surveying by LIDAR

Jon Mason will give a presentation
on the use of LIDAR in the survey of power transmission lines.

Thursday 26 September

Quiz Night

Plus some Health and Safety - Electrical

Marriner Reserve Railway

Sunday 1 September & Sunday 15 September

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

August Club night.

Jon Mason has spent most of his working life in the power transmission industry, starting out surveying pylon lines through rough backcountry throughout New Zealand. The surveying techniques have changed over the course of his working life. Most of you will know of compass and chain, Jon will describe LIDAR and its use.



Photo Web

Subscriptions are now due.

If you haven't yet pay your subscription you may have already have had contact from the treasurer, but here it is again!

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**

Please remember to use your name as the reference.

Sunday the 4th of August was a stunner of a day weather wise which always makes for an enjoyable track run at the Marriner Reserve. Visiting 3.5 inch gauge Britannia loco with its owner Slade Welch being prepped for an afternoons run on the steaming bay.



Photo Owen Mudgway

July Mid Winter Shed Meet

A gathering of PNMEC club members assembled at the premises of Complete Custom Engineering Ltd along with the president Bernard Watson of the Palmerston North Esplanade Scenic Railway to view progress with the construction of a new locomotive for their railway located in the Victoria Esplanade, Palmerston North.

This locomotive is modelled on the English Electric DG class which entered service with the NZR in 1955 and will be the fourth loco of their fleet of NZR diesel locomotives. Being of 12 inch gauge this makes for an impressively large model locomotive 1/3 full size!

Bernard along with Warrick George the proprietor of Complete Custom Engineering gave a run down on the technical features of the locomotive and the overall concept of the build. Being their fourth loco, things had been learnt over the years re the ease of service and maintenance with learnings being put into practice with this build!

Built as a diesel hydraulic and powered by a small 3 cylinder Kubota engine as used in small excavators to run the oil pump which supplies pressurised oil to the motors, one in each bogie with chain drive to each wheel set. PNMEC members were very impressed with the build quality of this project particularly with the Warrick's workmanship re the cab and bodywork in general as the photo's will show! Thanks go to Bernard and Warrick for giving their afternoon to show off the DG.

Bernard Watson giving the run down to PNMEC members on the controls of the DG



Photo Chris Saunders



All present and correct, club members pose beside the DG along with Warrick George and Bernard Watson.

Photo Chris Saunders

July Club Night Report

Themed as Mosquito's and Merlin's the July club night centred around the 1/9 scale model Mosquito fighter bomber from the mid 1940's along with the Merlin engine which powered the Mosquito. Local modeller Richard Sheehan had kindly offered to show his De Havilland Mosquito to the PNMEC but had to cancel the talk on two previous occasions so it was a case of third time lucky! This model is Richard's first aircraft build and is capable of being flown under RC control but was not intended to be flown.

The full size aircraft chosen by Richard to be modelled has had an interesting history, being built by the Standard Motor Company in October 1945, serial number TE910. After a brief period of service with the RAF, TE910 was sold to the RNZAF in April 1947 along with 3 others and based at Ohakea and then on to Wigram before being put into storage with only 66.3 hours of flying time while in service with the RNZAF. Sold off as surplus in the mid 1950's and purchased by a young farmer John Smith who stored it under cover on his property in Mapua until he died in 2019. Now owned by the Omaka Aviation Heritage Museum in Blenheim. Functional but not to be flown due to a bit of cut and splice to allow for transportation to Mapua back in the day!

Back to the model, Richard has had to learn CAD so as to 3D print many components used in the build such as undercarriage, guns, bomb racks and the radio set which sits up behind the pilots in the cockpit.. Truly a nice piece of work! Thank you Richard.



De Havilland Mosquito TE910

Photo Bruce Geange

The Merlin component of the evening was provided by Fin Mason giving an up date on his Rolls Royce Merlin project which is always of interest to us and we could spend many hours talking about. Fin explained that the only design difference between the model and the full size engine was the drive to the cam shafts and that ignition via a magneto would not be possible to be scaled down and still work! As it happened John Neal had brought along a full size Merlin magneto which he had purchased many years ago from an acquaintance who had purchased it from Govt surplus even more years ago!

To cap off a rather good evening David Edmonds produced an array of cast iron castings which he and some friends had cast at the Technicast Weekend. A nice cast component from an artillery gun in which a 3D printed pattern and core box was used form the inner and outside surfaces of said casting was show along with some components for early Cadillac Engines.



Fin Mason's Merlin V12 engine along with the full size Magneto

Photo Bruce Geange



Cast Iron components for early Cadillac engines and the artillery piece part along with the 3D pattern and core box used in the casting process.

Photo Bruce Geange

Marriner Reserve Railway

Another locomotive is about to join the operational fleet at the Mariner Reserve Railway. A 5 inch gauge NZR "F" class 0-6-0 saddle tank locomotive one of two built by Alan Sadler and Dave Giles in Huntly in the early 1970's. Dave was the metalwork teacher at the local college and Alan was the maths teacher who made his own telescopes. The college workshop also trained the local apprentices in the evenings which must have kept Dave very busy.

Now owned by the Drummond family and under the care of Steven Drummond a model railway enthusiast who has been drawn by the lure of steam to join the PNMEC.

As with any locomotive that has been laid up for a few years a bit of work is required to be done to make them operational again and thanks to Doug Chambers the "F" has had its water pumps, axle and hand, safety valves reconditioned and other minor work done and now has a boiler ticket.

Thanks Doug. Stephen has had his first run with the "F" on one of our regular Thursday maintenance days and enjoyed the experience but admitted that he has a bit to learn!



NZR "F" class simmering away on a cold Thursday morning.

Date and Time			Activity
Thursday 22nd August	7.30pm		Club Night Surveying using LIDAR
Sunday 1st September	1pm to 3pm		Marriner Reserve Railway
Thursday 5th September	7.30pm		Committee Meeting
Sunday 15th September	1pm to 3pm		Marriner Reserve Railway
Thursday 26th September	7.30pm		Club Night Quiz Plus Health and Safety
Thursday 3rd October	7.30pm		Committee Meeting
Sunday 6th October	1pm to 4pm		Marriner Reserve Railway
Sunday 20th October	1pm to 4pm		Marriner Reserve Railway
Thursday 24th October	7.30 pm		Club Night TBA

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.