

The Generator

Issue 526
September 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 25th September

Club Night

Material Selection - Metals and their use within our hobby

Thursday 23rd October

Club Night

My recent hobby purchase

Marriner Reserve Railway

Sunday 5th October & Sunday 19th October

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

Club Night 25th September

Many years ago our then Dannevirke based club member Brian Wiffin you sadly passed away earlier this year made up a display case for a club exhibition which featured different metals and the surface finishes obtained from machining operations.

Lawrence Brooshooft will use the contents of Brian's display case as the starting point on a discussion on the selection of metals to be used in the construction of our model engineering projects i.e. which and why!

And as usual if you have something of interest that you wish to speak to bring it along!

Whanganui Model Railway Expo Saturday-Sunday 20th and 21st September

The Whanganui Model Railway and Engineering Society are holding a exhibition of their members railway layouts and engineering models on the 20th and 21st of September. PNMEC members will be displaying some of their models at this exhibition. If you get this notice in time its well worth a visit over to Whanganui sometime over the weekend!

Hartley Engines and Motorsport Visit

Saturday the 16th August saw club members gathered at Hartley Engines and Motorsport for what turned out to be a very enjoyable couple of hours with Nelson Hartley. Being shown around the engine shop and having an in depth discussion on all aspects of the business of supplying race engines to motorsport customers and the design and manufacture of bespoke high performance engines for very expensive limited edition road legal sports cars. Nelson and his father Brian have a long involvement in New Zealand motorsport having raced in all forms and doing their own engine tuning and development for their own cars and then for other competitors. Such is their knowledge base that the design and manufacture of their own engines is now undertaken. All traditional engine shop machine tools are present with the addition of a five axis CNC machining centre and a recently purchased twin spindle CNC lathe. Engine blocks and heads are cast in Australia, the moulds 3D printed in moulding sand, exhaust pipes 3D printed in China, Stainless Steel or Titanium all designed in Palmerston North. One thing that had us model engineers stumped was what would an



engine shop require 44 gallon drums of orange syrup concentrate for, this had us intrigued. Perhaps this was in leu of tea and coffee for smoko breaks! The question was asked. They were what the scrap metal man supplied to ship out the vast quantities of aluminium swarf that machining from solid produces. Two drums a day typically. Merv George subsequently supplied an address for a You Tube clip that features a sports car that will become available for purchase in 2027 for those amongst us with the necessary funds in which a Hartley V12 engine is housed. [Youtube.be/x6DelHell3c](https://www.youtube.com/watch?v=x6DelHell3c) Let us know when you take delivery as such a car could form the basis for another PNMEC shed visit!

Thanks go to Nelson and Brian Hartley hosting PNMEC for the morning.. Fantastic!

Nelson Hartley discussing the finer points of CNC programming with machined from solid inlet manifold in hand.
Photo Jon Mason

August Club Night Report

A very full table of projects to review with this month's club night in which we featured Marine Engineering. An invitation had been extended to a couple of our regions marine modelers to spearhead the evening by showcasing a couple of examples each of their marine projects. Richard Sheehan brought along a Tug Boat the "Turicata" which was commissioned by the Gisborne Harbour Board in 1977 and now operated by Thomson Towboats, Auckland. Richard started building "Turicata" from scratch in the late 1980's and it spent a lot of time parked up in the slipway while other projects took priority. Richard's interest in 3D printing was the spark that finally got "Turicata" completed with many components in the twin 360 degree rotatable screws 3D printed rather than machined in metal. The 1:20 scale Northern European crab fishing boat the "Bensersiel" was Richard's other offering, built from a commercial kitset all in wood with a planked hull and like the "Turihaua" radio controlled.



The drives to "Turihaua's" twin Azimuth Thrusters.

Crab Boat "Bensersiel".

Photo's Editor

Maurice Job brought along a vessel that he had recently modelled which had an interesting back story. Whilst on a trip around the lower South Island Maurice came across a two masted sailing boat moored at Queenstown on Lake Wakatipu and knew that it was a foreigner to the lake and New Zealand!

Maurice was able to track down the owner and found out the history of the vessel and run a tape measure over it on a subsequent visit and hence the model.

Built in Scotland in 1936, shipped to New Zealand in 1977 as deck cargo in a tank to keep the planking timbers wet to avoid shrinkage. Failure to keep the tank full of water during the voyage saw damage done which led to a gradual ongoing decline to the health of the vessel. A new owner and a major rebuild/restoration has seen it restored to its current condition as seen by Maurice on the lake.



Scratch building models involves a lot of research to be undertaken even before a lengthy construction period is commenced and a commercial kitset build saves a lot of one's energy's but you still need to have the passion to make that particular model to undertake the build process.

A recent build by Maurice was of a commercial kitset of a radio control Vosper Motor Torpedo Boat in 1/32 scale. Built by Vosper's in the UK. These 1960's boats were powered by 3 Bristol Proteus gas turbine units and exported to various friendly countries Navy's at that time. Missile technology launched from aircraft made this type of torpedo boat obsolete by the end of the decade.

Once again a nicely put together model marine project from our guest Modelers.

Photo's Editor

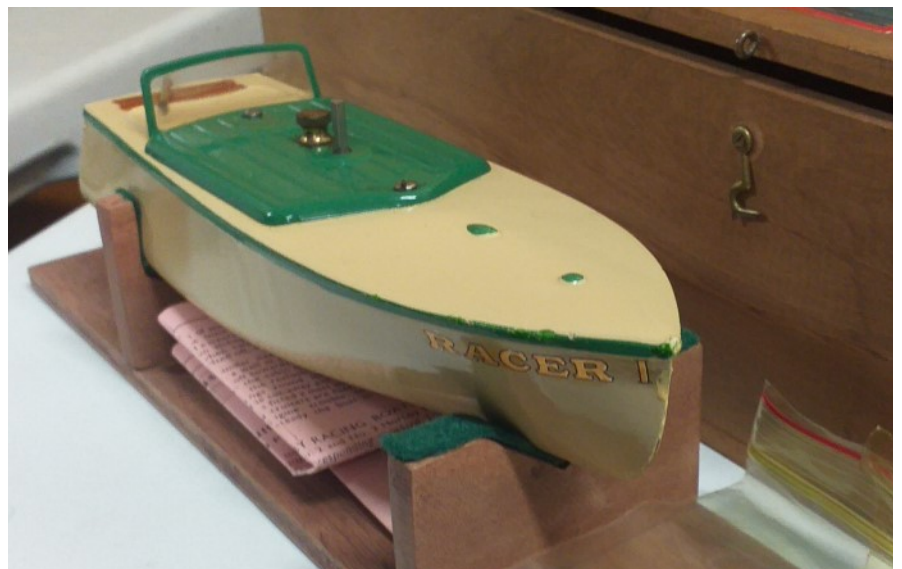


Merv George also brought along a military marine project that he is currently working on, in this case a Turkish Navy attack vessel. Also to be radio controlled and propelled by commercially made electric motor powered model jet units.



They say that you learn something everyday and on this club night the editor learnt that Hornby made a model speed boat. A quick internet search reveals that they made a whole range of clockwork and battery powered boats over the years! The editor although a keen Meccano modeller back in the day obviously not into boats!

This fine example from Bruce Geange being a clockwork racer 1 dating from 1932.

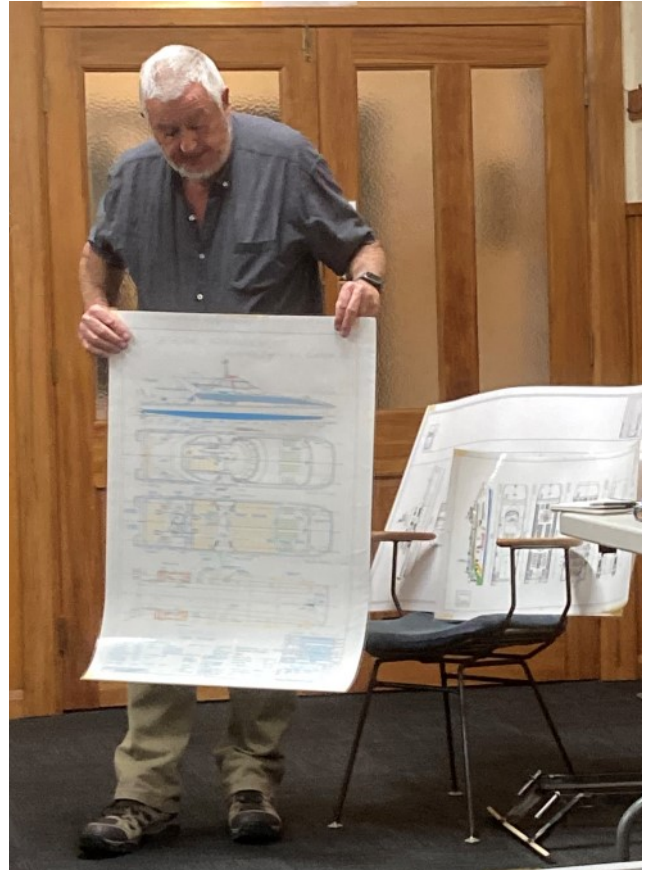


David Bell has spent the last 25 years of his engineering career working with mechanical services within the marine industry, military and civilian. Mechanical services is the name for all the other stuff that has to be fitted inside a vessel after all the other stuff has already been fitted and trying to make it all work! David gave an account of some interesting projects that he has been involved with over that time. Did you know that tropical fish get sea sick just like us if the tank that they are in is on a luxury yacht bobbing around on the ocean!

A few non marine projects were also on the table for discussion, Merv George with what appeared to be a giant motorised fishing reel which he was building to speed up the process of recovering the tow line used to launch model gliders off the airstrip. Merv also showed progress with a brake calliper casting that he was modifying so that an ABS sensor could be mounted into his bobber motorcycle project. This was done using Devcon plastic metal.

Bill Krippner's so keen to get his Burrell Traction Engine in steam but he needed a seat fitted onto the tender so that the driver could be fitted. A visit to the Mudgeway family farm where an old McCormick Deering tractor seat was found which would do the job nicely. This was mounted onto a frame which clipped onto the back of the engines tender.

Alex Mudgeway had spent some of his pocket money on a Chinese Lego copy in the form of a Union Pacific Railway Big Boy Locomotive kitset and pointed out that the instructions were a challenge to follow. Sound familiar!



David Bell with the GA plans to a luxury yacht.
Photo Jon Mason



Merv George is also a keen fisherman but this is not for surfcasting.
Photo Editor



Alex and his part built Big Boy Locomotive
Photo Jon Mason

“Good engineering is an art form”.
Nelson Hartley.
A little Hartley V8 engine.



Photo Merv George

Date and Time			Activity
Thursday 25th September	7.30pm		Club Night Material Selection The right metal for your project.
Thursday 2nd October	7.30pm		Committee Meeting
Sunday 5th October	1pm to 4pm		Marriner Reserve Railway
Sunday 19th October	1pm to 4pm		Marriner Reserve Railway
Thursday 23rd October	7.30pm		Club Night My Recent Hobby Purchase
Sunday 2nd November	1pm to 4pm		Marriner Reserve Railway
Thursday 6th November	7.30pm		Committee Meeting
Sunday 16th November	1pm to 4pm		Marriner Reserve Railway
Saturday 29th November	TBA		End of Year Gathering

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