

The Generator

Issue 456
June 2019



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 Nights**

27 June 2019

Richard will talk about some more photos he found when searching the
National Library Archives.

25 July 2019

Bring along your current project and explain to the members how the construction/building/creation is coming along. What is going well and easily and what is proving to be more difficult.

“Show and Tell”

22 August 2019

Many of you have old photos covering significant times in the history of the club. Bring these along and entertain and regale the members with your memories as portrayed in the pictures.

“Photos of the Club History”

Please note Subs are now due.

You should have received an invoice for these by email or in your posted newsletter. Please pay the Treasurer.

Thanks.

What's on this month and in the future PNMEC Club Calendar

Track running at Marriner Reserve Railway

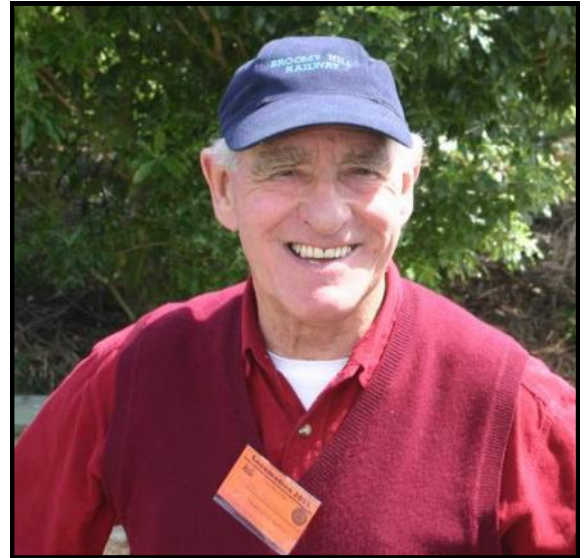
July	7 th	1pm - 3pm
July	21 st	1pm - 3pm
August	4 th	1pm - 3pm
August	18 th	1pm - 3pm

Vale to Stan Compton

My memories of Stan - we would have first met in February 1977 I think at the club meeting which may have been in the Hard of Hearing hall - a long time ago. There are so many things that Stan did for the club, both to raise funds to pay the bills, and to make the club known to the wider community.

He had a 7¼" 4-4-0 steam locomotive called "George the Fifth", and so a portable track to suit was made, probably with the aid of the late Jim Garden amongst others. Two trollies also constructed for the passengers to ride on and so away we went to school galas, etc on the basis of generating income for the school and the club.

Steam-raising was done with a hand-cranked blower, and Stan was always able to get children to crank the handle for the ten minutes or so until the engine blower could take over. It was quite a lot of work to do, transporting all the gear, finding a safe level site, lay the track out with packing for the low spots, playgrounds were always a bit rumpty, then at the end of the day the loco needed internally and externally cleaning before loading to go home. I was a bit shocked when Stan said that sometimes he would rather just take some cash out of his own wallet to give to the club instead of going to a gala, however after quite a few galas I fully understood his point of view!!



Speaking of "George the Fifth" Stan put many a novice driver on the seat, and I can remember one person leaving the water pump bypass valve closed for far too long, the boiler well overfilled and Stan most unhappy. I did not know a great deal then, but when Stan stopped for a moment I asked "Can we just open the blow-down valve to lower the water level?" He looked at me for a few seconds, and then said "Yes, we can, and I should have thought of that." So the situation was defused and running resumed.

Stan also built a 1/4 size traction engine, and to go with it a 1/3 size stationary hay baler which I spent many hours on many occasions forking the straw into the press - we sold the bales for more funds - a messy task as straw went everywhere it was not wanted. The baler still exists, but as to the engine and the locomotive I know not where they are now - I think the loco went out of New Zealand.



Much, if not all, of the construction of the original track at Marriner Reserve Railway was led by Stan, and he would have done the majority of the welding at ground level, not good for the knees he said. There were and are so many things that Stan did for the club that I can not list them all, even if I could recall them all!!

Stan - you have truly earned your rest.

Chris Morton.

Work Methods / Comments (An ongoing series of articles.)

This month: Painting Small Equipment

I paint items requiring a reasonable level of quality but not as high as you would find on models. Many years ago, my Father had a TK Bedford truck and being in contact with fertiliser it needed a good thick layer of paint on it. No problem, he had all the gear . . . if only he used it. You can imagine the result when no masking was done. I have always appreciated contrasting colours and these look great with a well defined 'edge' between them. (OK, a blended edge can look awesome too, unless it goes all over glass and rubber parts.)

The pictures show a gearbox we painted. Areas around the shaft seals can be difficult. The round cardboard discs were marked out with a compass and cut out with scissors and curved tin snips. They are held in place with 3 small blobs of Blue Tack. The fit is close enough for this job. Note that there is a diagonal cut across the masking. On this face there was a large washer and the masking had to go under it. The cut allowed the masking to be splayed out, fed around and under the washer, the ends pulled together and then the masking was pushed down fastening it in place against the blue tack. The diagonal cut can be covered with tape or grease or more blue tack if required.

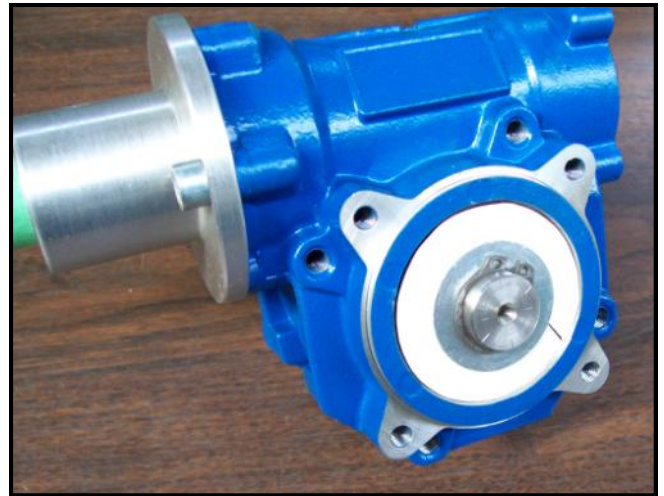
Other masking around the label and black cover was done with masking tape and carefully cutting around the edges with a sharp modellers knife.

If an item to be painted has sharpish edges the trusted old method of using a ball-peen hammer used to gently "cut" cardboard or another masking material, gives very good results. The secret is securing the cardboard so it doesn't move during the hammering. If a bolt hole or spigot is in the item, this can be "cut out" first and a bolt inserted to locate the cardboard. This process is the same as making gaskets except you may wish to mask over the holes later to stop paint entering. Masking can make a paint job look classy! I don't like paint all over things like grease nipples. Apart from fitting the nipples later, the solution is to use a small length of plastic tubing pushed over the nipple to mask it. The open end can be plugged with a bit of sealant or similar.

Masking can take a lot longer than the actual painting but it is worth the effort!

I use quick dry enamel paints when painting on all faces of an item, as you can never be quite sure if the paint has dried enough to take the weight of the item. If the painted face of the gearbox was placed on cardboard or even timber the paint could adhere to the surface defacing the paint job.

Placing the painted item on a plastic bag or sheet minimises this problem. Holding the gearbox in a fixture or even a vice may seem ideal but this gearbox has many hidden corners and it would be easy to miss painting parts of the casing.



Others may like to add their own comments each month.

Merv George

The previous article is the first in what we hope will become an ongoing series of articles. If you have come up with a method of accomplishing a small task please write a short article about your methods and send it to pnmec@trains.net.nz or deliver to a committee member.

Doug Chambers Latest Locomotive

The latest locomotive in a long line of production from the workshop of Doug Chambers is a 3.5 inch gauge Southern Railway class "V" or more commonly known as a Schools class locomotive.

Doug has held ambitions to build schools for many years, often regaling the MRR loco crew with tales of their performance over a cup of tea down at the track, although the performance of this model is yet to be fully accessed.

Originally designed by Richard Maunsell for express passenger train hauling on the British Southern Railway on routes with restrictive tunnels and short turntables. They proved to be good steamers liked by their operating crews. Featuring a 4-4-0 wheel arrangement,



three cylinders with piston valves, with Walschaerts valve gear. These locomotives were in service from 1930 until 1961 when the Southern Railway began its electrification program.

Each loco was named after a Public School and Doug has chosen "Repton" as the name for this model.

MRR Round Up

Those of you that have a green nose will have noted that the PNMEC have a lot of mass planting of Rengarenga, New Zealand Rock Lily (*Arthropodium Cirratum*) at the Marriner Reserve. There are now even more Rengarenga's planted up around the reserve. The PNMEC are unique as regards to being a Model Engineering Club in having the responsibility for the development and maintenance of the plantings within the Marriner Reserve which we lease from the Palmerston North City Council.

This has been a work in progress ever since the club extended the original railway track back in the late 1980's. Rengarenga are attractive ground cover under the canopy of trees and large shrubs and require no ongoing attention, not even the removal of dead heads after flowering.

An offer of more Rengarenga Lily's at no cost was accepted, we just had to remove them from their home along a driveway in Whanganui and relocate them to Palmy. Well the healthiest Rengarenga Lily's I've ever seen, big succulent clumps and thinking this may be hard work but two or three swift



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strikes with my heavy grubber had them released from the sandy Whanganui soils. With the help of Graham and Janice Hall who were friends of the property owners we had sufficient lilies to fill up two ute trays.

The following Thursday saw Janice and Graham, along with Chris Morton and myself start to split and plant out the Renga's around the Reserve. With some recent rainfall they are looking good, despite the trauma they have endured. May 2019 Richard Lockett

For many years Stan Compton had been sending us his thoughts and musings about life. Stan was an early member of the club and after his move back to the UK continued his support. We have a number of his letters which have not yet been printed. Stan's family have giving us permission and encouraged us to continue publishing the outstanding material

Stan Compton's Letter from England

When I first took charge of the faculty workshop at Massey I was intrigued by the heavy duty Plaurt lathe of German make that had been bought on the dockside at Wellington. The ship was loaded with used machinery from Germany at the end of WWII, called war reparations. How stupid to take their machinery away with no thought of getting back into production again. That Plaurt lathe was excellent. Built pre-war, it had an Imperial lead screw I assume to cut pipe threads. It had a high speed reverse to cut metric threads with the half-nuts closed. Being in charge of the new workshop I was able to order a new Colchester lathe for smaller jobs designed to cut metric threads. Later I found it was limited to EU standards. One day I had to cut an odd metric thread for a camera lens and had to resort to the old 9" dia swing Hercus, a copy of the American South Bend supplied with a 127 change wheel to do the job.

One of our member's, Terry Jackson, was able to acquire an American Handinge lathe. Old, but in good order. Built in 1927 but had little use. He turned a test bar mounted in the three-jaw chuck, one inch diameter, eight inch long and brought it to me to measure with a micrometre. I could not believe my eyes when I found it only had a half thou taper. He asked is that good? It was excellent.

That heavy Plaurt lathe had been fitted with a twelve inch 4 jaw chuck as it had no face plate. I would have made a wooden pattern and got one cast, that big chuck only just cleared the lathe bed. One day I had a pump casting mounted off-set to bring the bore in line. With a face-plate counter-weights could have been added to balance the job. Speeding up the lathe to machine a small bore the casting came loose, struck the lathe-bed sheering the 12 inch chuck off and it disappeared onto the floor. Even a skilled worker can get it wrong sometimes. I had to set-to and repair the damage.

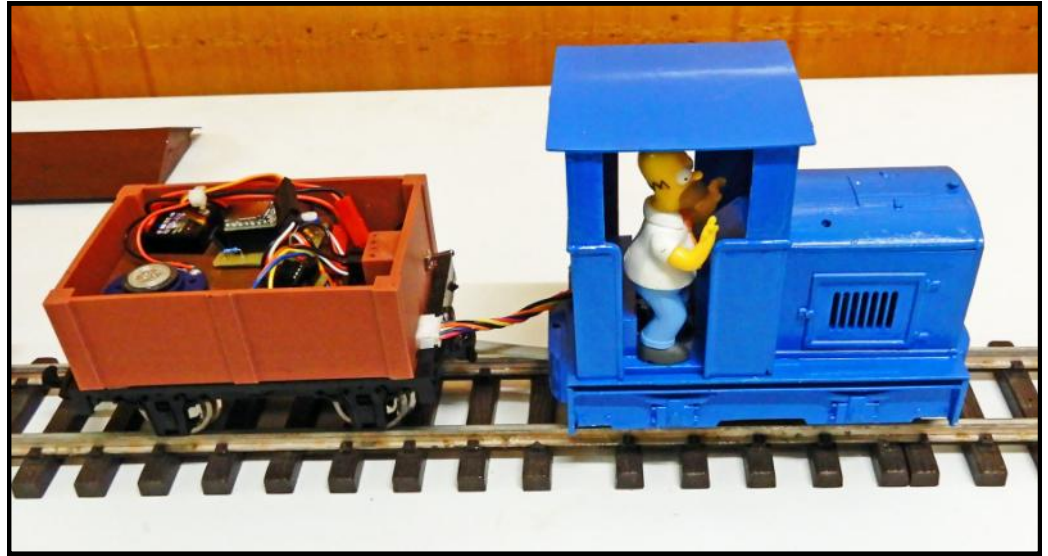
One sunny day in town I came across a man of retired age sitting in his new Morgan three wheeled car. The American built two litre V-twin engine mounted out front with overhead valves, intended to fit into a Harley-Davidson motor cycle. A sign on the engine read "Do not touch, it is hot!" Just like many retired men who could now afford to indulge forgetting there is no substitute for youth. The car has no doors one climbed up and slid down to sit. Easy when you are young but add forty-odd years this act gets difficult admitted the driver who was happy to chat about his car. I told him I had bought a super shorts Morgan in 1949 for fifty pounds I had no idea it was the same age as me, 1924! A crude vehicle it did not have the usual water-cooled JAP engine but a Blackburn summit v-twin mounted out front. Two speeds obtained by using two final-drive chains selected by a dog-clutch and no reverse. To start the engine one inserted the crank handle into the side of the vehicle just behind the driver's seat. I did not keep it long and sold it to a collector and got my fifty pounds back. My pay was four pounds a week less tax. Oh yes, even as an apprentice age we paid tax.

Last Month's Club Night

Electronics and how it fits into Model Engineering

The evening started with Bruce Geange explaining Switches, Motors and Batteries.

Next up was Murray Bold with a G gauge, 3D printed Loco and Tender that carried the batteries, R/C receiver, Speed controller, Directional Lighting Controller and Sound Generator. When the sound files are loaded to a Micro SD card, there will be a Horn and various Diesel noises.



Robert Edwards spoke about and showed the members the \$5 "Arduino" micro controller. He demonstrated programming and uploading a "sketch" to the controller to make a LED flash.

After that he demonstrated the "Drill Sharpener" he had purchased.



Bruce Geange also had a partly built 'O' gauge NZR Generator Set Shunting Engine that is powered from the track.

There were only five of these built and they started life as battery only engines.

When the batteries failed these were removed and generator sets fitted. The model is based on EB25.

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.org.nz with "**Generator Please**" in the subject line.



I BUILT THIS



MODEL MEE

Sat-Sun 24 - 25 August 2019

PALMERSTON NORTH LIBRARY

Free entry 10am to 4pm

Come and see how you can join in and take part at whatever level and complexity appeals to you.



Hosted by: The Palmerston North Model Engineering Club, Inc.

Manawatu Model Railway Club, Inc.
VEX Robotics, St Peters High School
Palmerston North Girls High School

<http://www.pnmec.org.nz>