

# The Generator

Issue 450  
November 2018



**Palmerston Model Engineering Club**  
[www.pnmec.org.nz](http://www.pnmec.org.nz) - [pnmec@trains.net.nz](mailto:pnmec@trains.net.nz)

Managers of the Marriner Reserve Railway - Marriner Street - Palmerston North  
PO Box 4132 - Manawatu Mail Centre - Palmerston North 4442

## Saturday 24 November 2018



### **A Visit and Lunch in Wanganui**

The first stop will be in Fordell at Bruce Ardell's Vintage Museum at 10am, and then on to Wanganui.

See the maps on page 4

You will need to leave Palmerston North by 9.00am.

If you want a ride - **Call Fin**

If you have a spare seat - **Call Fin**

If you want to come - **Call Fin**

If you **DON'T Call Fin** - You aren't coming.

**Fin Mason (06 356 7849)**

We need the **Numbers For Lunch**  
by **Monday 19 November**

The afternoon visit has been arranged at the local Railway Society. The sheds will be open so we can spend the afternoon there.

## What's happening this month and in the future, Check out the PNMEC Club [Calendar](#)

### Track running at Marriner Reserve Railway

|                           |                   |            |
|---------------------------|-------------------|------------|
|                           | <b>2018</b>       |            |
| December 2 <sup>nd</sup>  |                   | 1pm - 4pm  |
| December 16 <sup>th</sup> |                   | 1pm - 4pm  |
|                           | <b>2019</b>       |            |
| January 6 <sup>th</sup>   |                   | 1pm - 4pm  |
| January 20 <sup>h</sup>   |                   | 1pm - 4pm  |
|                           | <b>LOCOMOTION</b> |            |
| January 26 <sup>th</sup>  |                   | 10am - 4pm |

## The Palmerston North Model Engineering Club Upcoming Club Nights

22 November 2018

### NO MEETING

There will **NOT** be a meeting at the **Hearing Association Hall** this month as we will be going to Wanganui on **Saturday 24 November 2018** for lunch and visiting a few workshops while there.

There is **NO** meeting or **Generator** in **December.**

We have a month off to enjoy the silly season

24 January 2019

This is the Presidents BBQ held at Robert and Margaret's home.

More information next in the January Generator.

It will be the same place as last time.

**Thursday 24 January 2019**

26 January 2019

This is the New Date for our **LOCOMOTION**

It will only be on the Saturday

**Saturday 26 January 2019**

## **Inclement Weather on Run Days**

If the weather looks a bit rough, squally, wet, wild or just iffy on the morning of a regular Sunday Run Day and you are wondering if trains will be running; then phone **Kerry Puklowski** and he will let you know if running is going ahead or has been cancelled. **Kerry 027-445-5487 or (06) 353-6189**

# Last Month's Club Night

John Tweedie

The October meeting started with a few words from Robert (President).

Some announcements were made regarding our November meeting which will be a departure from our usual format. It will be held on Saturday 24 November and involve a visit to Wanganui. Details are provided elsewhere in this newsletter. Members were also reminded of the president's BBQ at Robert and Margaret's residence at Te Arakura Road.

The remainder of the meeting was a "Bits and Pieces" session.

**Dave Bell** described his restoration of a "Viceroy" shaper. This involved a strip down and clean up and also scraping of the table and ram ways. He also described his problems in keeping the machine from moving around the workshop while operating.

**Bruce Geange** showed a very nice Stuart Turner beam engine he was restoring. He also showed a small backhoe digger that he had modified from one made by Murray Bold on his 3D printer. The scale of the digger was about 1/79 and Bruce has customised the basic machine to produce a very nice model. Bruce has also produced a book of about 80 pages showing and describing the Meccano models he has made over the years.

**Graeme Hall** is building quite a large Stirling cycle engine. This has a cast iron piston which must be a very close fit in the power cylinder. A further complication is that the displacer and power cylinders are in line and the shaft for the displacer passes through the power piston and has also to be completely airtight. I am sure that Graeme will cope with these difficulties with his usual level of craftsmanship.

**Ian McLellan** brought along the boiler he has made for the 3½ inch gauge "Virginia" he is building. He also showed a copper chimney he has built and also a choke he is making for the blast pipe in the smoke-box. Ian also discussed the ash pan and grate he is planning to build. This needs to cope with the Welsh steam coal we are now using. Ian has found that this fuel needs a good air supply to maintain the fire and is designing his ash pan and grate with this in mind.

**Richard Lockett** brought along three grates that have been used in his 7.25 inch F class loco. One was the original grate that lasted about 6 years while the loco ran on the aussie char fuel which is no longer available. This grate showed some erosion of the fire bars but looked to me to be still serviceable. The other two had been used with various fuels since our supply of char ran out. One had lasted a reasonable period of time before burning through. The third one, which has been used exclusively with the Welsh coal has burned through after only about 6 months and the number of firings is probably less than 10.

**Murray Bold** brought along some of the items made with his new 3D printer. These included some printed 3D cube puzzles which proved quite difficult to solve. He also showed some containers for laptop batteries, a capacity tester he had made for checking batteries and a microcontroller unit for his solar power system and storage batteries for night use at his home.

# Saturday 24 November 2018

## A Visit and Lunch in Wanganui

First Stop - Bruce Ardell's Museum (06) 343 1879



At the top of the Whangaehu Hill, turn right into Warrengate Road. Proceed to Fordell and turn right again, continue to Harrison Road. You are there.



### Next Stop Graeme & Janice Hall (06) 344 2495

Enter Wanganui from SH3. At the Putiki roundabout, take the 2nd exit. Cross the river and take the 1st exit at the roundabout. Continue on Heads Road, past the Hospital on your right, to Kings Ave, 3rd Right, turn right. Proceed to No 59 Kings Ave. You are there.

Park on the street and join us at Graeme's Workshop before lunch.

**Lunch will cost \$15 - \$20** Leave there for the Rail society's location after lunch.

**If you are coming let Fin Mason know by**

**Monday 19 November (06 356 7849)**



A Big Thanks to Dick Griffiths for the donation of NZR books to the members.



# Letter From England

Stan Compton

I recall a prolific builder of locomotives from Worcester and District Model Engineers. He told me about meeting up with young district officers sent by the British government out to Africa as young men with a good education to take charge of a district to look after local tribes. It was a lonely life for a young single man, so they would be glad of the company of young servicemen who could visit bringing a few bottles of beer during their off duty time in the district.

This reminds me of a book I once read about two young society women living in London during our last conflict with Germany. They found that these young district officers were given leave and instructed to return with a wife, due to concern that young men could be tempted to take up with a native girl! Now with such short notice how can a man follow his instruction without help? These two young women were asked if they could find a suitable partner to be prepared to live in Africa with no white company except a new husband. This was the start of a business putting young people, and others, together. No computers then just notes on a card.

I have told you before about a TV program in the U.K. where someone has a permit to wait at the top to recover any item that may be useful. Yesterday I watched a multi-use saw bench and drill complete with a double ended motor with all the castings. I recall seeing these advertised years ago. We heard that the unit had not been used since Dad died. It was all loaded up. Only needing reassembly it would have been quite saleable, but I was horrified to watch as the good quality third-horsepower motor was stripped down to remove the windings. The armature was replaced with the pulleys on each end and mounted onto a short length of scaffold plank. Beneath it the MEM switch was mounted with a cheap pull switch inside it to control a 40 watt Pearl Bayonet lamp over which was mounted a metal shade painted black to illuminate the wall it was mounted on. After the motor shell was cleaned and waxed all admired the workmanship and it was sold later for less than the original was worth! I should add the lamp holder was mounted on the top-end of the vertical armature.

Two young boys walked into a pharmacy one day, picked out a box of tampons and proceeded to the checkout counter. The pharmacist asked the older boy "Son how old are you?" Eight the boy replied. "Do you know what these are used for?" "Not exactly" the boy replied. "They are for my brother he's four". "Oh really" the pharmacist replied. "Yes" said the boy "We saw on TV that if you use these you can swim, play tennis and ride a bike. Right now he can't do none of that."

I had an uncle who had been in the motor trade most of his life starting in the R.A.S.C. during WWI. He was brought up on a farm near Birmingham and used to take me out into the country side looking for bird nests as a boy. He had four daughters so I was like a son to him. When I got called up into the Royal Navy in 1943 I would bring him cigarette tobacco when I came home on leave, not realising it could kill him, which it did. He loved to hear about my stories of life in the services telling me some of his behind the lines in France.

His old Royal Enfield motorcycle had acetylene lights. One night out in the country he came across someone who was out in the dark with a motorcycle whose lights had gone out. On asking what was the problem a voice said "I've got no water for my lights." His reply was "Well pee in it." Referring to the container on an acetylene lamp. A girl's voice replied "Can't do that." So he did!

That old Royal Enfield 350 ended up in my hands when I was sixteen. I learnt how to set the ignition point on the magneto correctly. Also to set the values to operate the timing. There used to be a motorcycle shop owned by Vale Onslow who lived to a hundred and still riding his SOS motorcycle. There is one in the National Motorcycle Museum near the Birmingham airport.

## Alaska Adventures

Attached are some photographs of interest taken by David & Jean Bell during their recent journey through Alaska. Alaska is a sparsely populated state of the USA that is literally thousands of square miles of nothing but tree's, rocks, and water. With signs of civilisation few and far between, lets just say the population has their own way of doing things.

### Telecommunication Service Truck

Took this photo in a telecommunications contractors yard close to the Arctic Circle. This is a two wheel drive light truck converted to a half track for use in the winter snow. Spiked snow tracks taking the place of the rear wheels and skies fitted to the front wheel hubs for steering. And yes it is still used (imagine getting a WOF for this at a testing station). Picture shows it laid up for the summer but when it snows, up to six feet in a single dump, this is how the contractor covers the long distances required to get to line outages.



### Phone Up Tree

Just outside Dawson City (aptly named the “Wildest Little Town on the Klondike”) I found this little gem. In 1955 the US Army Corp pushed through the road between White Horse and Dawson City. On the way they laid out the telephone system that is still used today. At a place called Moose Creek they installed an army phone as a public telephone on a tree in a weather enclosure. Well in the ensuing 60 years the tree has grown a bit. With the nearest telecom engineer a least two days away by road, the Alaskan solution “Just build a longer ladder”. At least that way the phone is kept out of the snow.

### Immigration Control Dawson City Airport

This is immigration and baggage control at Dawson International Airport. Yes a table complete with table cloth on the tarmac beside the aircraft. On a wet day I am told they do bring out a tent to go over the table. You get off the tour bus two at a time and they check your baggage, stamp your passport and you are out of Canada and clear to fly further north and into the USA. There is no terminal building. Now this airfield is built on permafrost and because the ground moves so much the runway does not have a solid



surface. This is a 737 fitted out so it can take off from a gravel runway. Now immediately some of you will realise that jet engines and loose stones on the runway are not a good combination, yet here they handle two take-offs and landings a day. How they do this is another story.



### Trans Alaska Pipe Line

This is a photo of one of the pipe supports on the Trans Alaska Pipe Line. For scale this is my loving wife standing beside it. Much of the steel work is not painted and never has been. Although



under snow for most of the year the climate is extremely dry and as a consequence corrosion inhibiting steel corrodes very slowly. This part of the line was installed over 40 years ago. The same steel exposed to the NZ environment will show

signs of pitting and scaling in less than 5 years. The refrigerant heat pipes protruding from the top of the support legs that form part of the system to keep the ground frozen. This is not solid earth. It is actually swamp that is permanently frozen solid (permafrost). Melt the ice and everything sinks. This heat transfer system ensures that very little heat is transferred from the pipe line and its supports to the ground.

The pipe line is 48 inches in diameter and in this location had a wall 5/8 inch thick. This cut away exhibit shows a cleaning pig that is pushed through the line by the hydraulic



pressure of the fluid behind to scrape away any sludge and solid build up from the walls of the pipe.

David & Jean Bell  
**To be Continued**

## **Dog Spike Dogma**

In the last two editions of the Generator, sections of the Marriner Reserve Railways Operation and Safety Manual were added for you to read and become familiar with the

processes and the operation of the infrastructure used when the Railway is in operation. This has come about as a result of the recent Safety Audit carried out by a Model Engineering Association of New Zealand (MEANZ) Safety Auditor. One of the items covered by the safety audit is evidence of ongoing safety training and we as a club on this occasion could furnish no evidence of having done any! So it was agreed with the safety auditor that we would have a regular railway safety topic in the clubs newsletter, "The Generator".

So here we are, ongoing safety training.

Because our Marriner Reserve Railway carries members of the general public (for reward or hire) we have to comply with the Amusement Device Regulations 1978 and for us as a "Hobby Club Miniature Railway" we have to apply to register with Worksafe NZ every two years which involves a "competent person inspection" carried out by the MEANZ safety auditor using a MEANZ audit check list to determine whether our club is still competent to carry members of the public on our railway!

On passing a safety audit and having applied for registration with Worksafe NZ the club will receive a Certificate of Registration which contains the conditions of operation and an equipment addendum (loco's and ride cars). This is kept in our operations shed. PNMEC being a member of MEANZ also have to operate the MRR under the provisions of the MEANZ Manual of Operating Procedures for Miniature Railways which contains the detail on best practice for the safe operation of our miniature railway.

So with the Conditions of Operation as laid out in the Certificate of Registration, the Manual of Operating Procedures for Miniature Railways, we the club have then to develop our own manual specific to our railway operation to cover the complexity or not of our operation and the specific environmental factors which may have a bearing on safe operation, hence we have the Marriner Reserve Railway Operation and Safety Manual.



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](mailto:pnmec@trains.org.nz) with "**Generator Please**" in the subject line.