

# The Generator

Issue 451  
January 2019



**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

The Committee hope you had a great  
Christmas and New Year break.

The next event for the members is  
The President's BBQ  
on the **24 January 2019**  
3.00pm onwards.

There is a 5" and 7.25" track  
to run your Steam or Electric Models.

On **26 January 2019** is  
**Locomotion 2019.**

Please note the change of date.

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

**Track running at  
Marriner Reserve Railway**

January	20 <sup>th</sup>	1pm - 4pm
February	3 <sup>rd</sup>	1pm - 4pm
February	17 <sup>th</sup>	1pm - 4pm

**Locomotion 2019**

January	26 <sup>th</sup>	10am - 4pm
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## The Palmerston North Model Engineering Club Upcoming Club Nights

### 24 January 2019

This is the Presidents BBQ held at Robert and Margaret's home.  
It will be the same place as last time.  
See page 7 for directions.

**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**

### 28 February 2019

This is our first meeting back at the Hearing association Hall

**Thursday 28 February 2019**

The subject will be "What I did over the Holidays."

## Report on November Club Meeting

The November meeting took a very different format than our usual meetings. We had a club outing where about 24 members car pooled to Wanganui. Our first stop was in Fordell to visit Bruce Ardell's vintage and classic car parts warehouse. Bruce has parts for pretty much any car all carefully stored and labelled. Impressively Bruce maintains this business without any assistance from a computer. Keeps things carefully labelled and the rest is in his head. If you need a head gasket for any model prior to 1990 Bruce is your man.



There is a good article in the 18 Jan 2014 Wanganui Chronicle that is available online at [https://www.nzherald.co.nz/wanganui-chronicle/news/article.cfm?c\\_id=1503426&objectid=11188557](https://www.nzherald.co.nz/wanganui-chronicle/news/article.cfm?c_id=1503426&objectid=11188557)

We did not get to see Bruce's classic car collection. Perhaps for another trip.

Our next stop was at Graeme and Janice Hall's residence in Wanganui where we were provided with an extensive and very nicely presented lunch catered by Janice and her granddaughter and one of Janice's friends. This was greatly appreciated and thanks again to Janice and her helpers for their superb effort. I particularly enjoyed seeing the glass display cabinet which contains many of Graeme's models. I had seen most of them at one time or another but most impressive seeing

them all together. The simplicity and tidiness of his workshop was a bit of an eye-opener for someone who is naturally quite disorganised!



*ED. Graeme ran his hot air helicopter for us over lunch.*

*It was great to see the Compton Shield displayed on the wall of Graeme's immaculate workshop.*



Before moving on to our next stop several of us enjoyed a stroll through the extensive and well maintained grounds of Janice and Graeme's home.

Our last visit was to SteamRail Wanganui's depot next to the Whanganui River on the Castlecliff branch line. Several of their members turned out to show us around their site and facilities. Their workshop has an impressive number of small loco's and rolling stock in the process of restoration and they also have a very nice collection of restored jiggers. There is

also a railways steam crane in restoration which is certainly an impressive project. They also restored and maintain the turntable at this location which was saved in the nick of time as the scrap merchants had already begun demolition before the group stepped in. This facility is still in use by NZ Rail to turn locos and also by visiting vintage locomotives.

This outing was somewhat of a new venture for the club but all who participated were enthusiastic about the format.

John Tweedie



**The Generator**



## Alaska Continued Gold Dredge 8

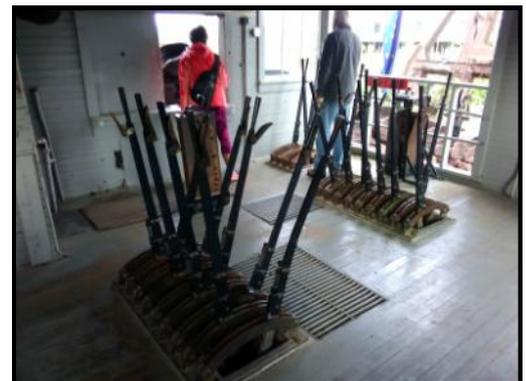
This is a photo of Gold Dredge 8 on the gold fields outside Fairbanks. This dredge was all electric and when operating was powered from a dedicated power station specifically built 30 miles away in Fairbanks.



The No 8 on the gold dredge is a statement of its size – 8 cubic feet of gravel per bucket load. This is photo of the gear train driving the bucket elevator of the dredge.

The dredge floated in its own lake and was moved and

controlled by winches, with ropes fixed to anchors dug into solid land. This photo shows the winch controls located on the bridge.



Photos of the battery of winches located on one corner of the dredge. 12 winches in total were used to control the movement and operation of the dredge.



Some of the machinery drives are shown.



The flat belts are 15 and 18 inches wide. Here is a close up of one of the drive belts.



This photo is of a raw hide pulley installed on one of the electric motors.

This pulley is fabricated from layers of leather sheets riveted between two iron side plates. The whole assembly is turned round before



use and provides a compact pulley that can transmit more power than a traditional metal pulley of similar proportions.

## [Gold Mining School](#)

No trip to a gold field would be complete without the mandatory attendance of a gold panning school. This photo shows a couple of older folk (don't know who they are) having a blast playing with dirt, gold, and freezing cold water. And yes it was worth it.

[Foot Note:](#) Gold dredging stopped in the Fairbanks area not because the gold dredges ran out of gold to mine, but because the gold dredging companies ran out of profit. For reasons of political expediency the US government fixed the purchase price for gold at a price that was less than the dredges recovery cost. There is still a lot of gold in this area and this is currently being mined by many small operations, but efficient mining on the scale offered by the dredges will never return. The environment protection laws have seen to that.

Dave & Jean Bell

## [Locomotion 2019](#)

This year Locomotion will be on Saturday 26 January. Many things in our local area have changed over the last few years and the club committee deemed it necessary to make some adjustments to Locomotion. The new date brings it back into the school holidays so that it no longer classes with other events. We are also trialling holding it on just one day.

A lot of thought went into these changes and we need your help moving forward to next year. After Locomotion we are keen to hear from club members and also from those who visited, as well as those who were unable to attend. Please let us have your thoughts on the new date and format. Let us know if you liked these or not. Do you like just a one day event, or would you prefer two days. Any and all feedback will be considered in our planning for 2020. Please send your comments to: [pnmec@trains.net.nz](mailto:pnmec@trains.net.nz)



## Letter from England

We used to watch the Tiger Moths, used for pilot training during WWII. I met a model engineer years ago who was learning to fly there and tried to land his plane on a hanger roof. His instructor took over! That was the end of his experience of flying in the Fleet Air Arm to his relief. It was a short life flying “swordfish”!

As a boy I used to buy a small tin of calcium carbide from the bike shop and make a bomb by finding an empty cocoa tin, put some carbide in it, add water and put the lid on. Wait for a few minutes and “bang” would go the cocoa tin as the lid blew off. Great fun!

It has been noticed at the Hereford track site that we are victims of our own success. During fine weather we are overloaded with passengers. The members with locomotives are getting older and find the work tiring. Similarly ground maintenance is demanding.

Doing my duty supervising the crossing I observe new members driving in full gear all the time especially when hauling a heavy load. The station staff are often unaware when they load a small steam loco with heavy passengers needing full gear which causes sparks to fly.

On our elevated track we have a sieve made of a saucepan with 12 mill holes drilled in it. A few shakes gets rid of small coal, we used to call it slack in the Midlands. Mainline drivers in the days of steam used it to get rid of boys who would drop stones onto them as their loco passed under a bridge. A shovel full of slack would be thrown onto the fire next time these boys were up to old antics. Problem solved.

I have been reading a paperback book called “Juggernaut: Trucking to Saudi-Arabia” by Robert Hutchinson, 1987. He is a professional writer who became a passenger on a 10,000 mile trip through fourteen counties in a Scania-3, sampling the life of the long haul trucker. Through cold-war Europe to Turkey and Iran during the Iran-Iraq conflict. Coping with twenty mile border queues with a cargo of machinery and ovens to make plastic pipes. Robert describes the history of the routes they cover beside the danger of travel in those regions. All the truckers get to know each other and difficulties they get involved in. One driver ran off the road while driving a Mack Truck into a new steel water pipeline which ended up alongside him in the cab. The driver telephoned his boss in Sheffield explaining he had a pipe stuck in his radiator. “Well, pull it out and chuck it away.” He was told. “I can’t do that it is seven miles long, I am lucky I still have my legs being a left-hand drive.”!

Stan Compton

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.

The January Club night will be the  
**Presidents BBQ Thursday 24 January 2019**

It is the same location as last year.

All members, partners and kids are welcome from 3.00pm

See the following map for directions.



Robert and Margaret's Home is at the junction of Hansens Line and Te Arakura Road. This is off the end of Milson line.



The Driveway to the BBQ.  
Please park on the road if  
able bodied.

There is plenty of room.

The committee is currently looking for an editor to gather the articles for  
"The Generator". This is probably the easy part.  
Murray is still happy to put it all together and publish it to the internet.

# Marriner Reserve Railway Operation and Safety Manual

## Part-3

### Palmerston North Model Engineering Club, Marriner Reserve Railway Operation and Safety Manual.

#### 2 FIRST AID

A first aid box is kept in the Operations Shed. **Please use it** if you have any sort of accident that requires any first aid. It contains **useful sterile** products for dealing with cuts and abrasions etc. Far better than an oily rag. Clean, low pressure water is also available for **cleaning wounds** or **cooling burns** from the Steaming Bays or Station Water Tank or from taps located in the Operations Shed. **Please notify** the Operator of the day or the Track Manager of any accident requiring First Aid. Please refer to section 3.6F. If you deem the accident as serious please get someone to **dial 111** on their phone.

#### 3 INFRASTRUCTURE

##### Operation and Potential Hazards when in use

##### 3.1 Steaming Bay Area - Traverser

The Traverser is used to unload your locomotive from your vehicle and to move locomotives between the Steaming bays, Hoist and the Operations Shed. It has two sets of track, the top deck for 3.5in, 5in and 7.25in gauges, use this deck for movement operations. A lower deck with 5in and 7.25in gauges are used to access the carriage storage bunker for locomotive storage, there being no 3.5in gauge in the bunker. For unloading locomotives from your vehicle a link is used with are kept in the storage bunker. With the traverse positioned behind your vehicle and the link span attached to it with someone holding up the other end reverse your vehicle until the link span can rest on your locomotives rail or other suitable area.

**Handbrake on - Potential hazards when in use.** Please push the traverse towards the direction of travel. So that you can see any obstructions and that you don't **run yourself over**. To prevent derailments be sure that the rails are aligned correctly before locomotives or carriages are moved on or off the traverse. Please ensure all other persons are clear of the traverse before you move it as there are possible **pinch hazards** with the wheels and with the steaming bays and hoist. Please **push** the traverse from its **centre** to prevent jamming.

##### 3.2 Hoist

The Hoist is used to transport locomotives and rolling stock from the Traverser to ground level and as a turntable and to unload from low trailers. The Hoist is Hydraulic with an electric pump and oil reservoir located in the operations shed. To operate Hoist. Switch on mains power, located on wall above pump. Hoist control pendant is located inside trapdoor of shed, open for access. The pendant consists of two buttons **Valve and Pump**. To Lift Hoist press valve button (approx 1 second) and then press pump button until desired height is achieved. To lower hoist press valve button (approx 1 second). Hoist should descend. **Potential Hazards when in use.** Please keep hoist area clear so that operator can see. When hoist is lowered down into its recess there is a possible **Pinch Hazard**; Operator is to supervise until hoist is in recess.

##### 3.3 Raised Steaming Bays

Seven raised sets of rails are provided for the purpose of servicing and steaming up of locomotives. Please select a bay to suit your locomotive re gauge and ash pan removal. Provided at each raised bay are: 12 volt DC power supply- a wire runs down each side of rail. Low pressure water - located under rail at walled end, which consists of a standard garden hose **STOP** fitting recessed into pipe. Stop valve located in Operations Shed next to sink. Ash pan for placing under locomotives when removing fires - kept in Operations Shed. **Potential Hazards when in use.** Hot coals, please use ashpan when dropping fires. Hot water/steam/oil from drain cocks, blow downs etc. Unintentional movements. Apply hand brakes or chock wheels. Use only kerosene or diesel soaked wood for locomotive light up. No petrol to be stored or locomotives refuelled within the steaming bay area.