



## Newsletter of THE PALMERSTON NORTH MODEL ENGINEERING CLUB INC

Managers of the "MARRINER RESERVE RAILWAY"

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### TRACK RUNNING

This is held on the FIRST and THIRD Sunday of each month, from 1 pm to 4 pm Summer and 1 pm to 3 pm during the Winter. All club members are welcome to attend and help out with loco coaling, watering and passenger marshalling - none of the tasks being at all difficult. We may even offer you a cuppa.

Visiting club members are always welcome at the track, at the monthly meeting, or if just visiting and wishing to make contact with members, please phone one of the above office bearers.

Sender:- PNMEC  
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stamp  
here

**This Months Featured Model**



## Report on the April AGM and Meeting.

There was a very good turn out of members for the AGM. Always a heartening sight. And now another AGM is behind us and we are off into another financial year. The minutes of the 2013 AGM were read and confirmed and the various reports were read and accepted. The following officers were elected to lead us through the next twelve months.

<b>President</b>	<b>Robert Edwards</b>
<b>Vice-President</b>	<b>Murray Bold</b>
<b>Secretary</b>	<b>Fin Mason</b>
<b>Treasurer</b>	<b>John Tweedie</b>
<b>Committee</b>	<b>Stuart Anderson, Cynthia Cooper, Richard Lockett, Stewart Neal, Dave Newstead</b>
<b>Editor</b>	<b>Doug Chambers</b>
<b>Track Convenor</b>	<b>Richard Lockett</b>
<b>Librarian</b>	<b>Doug Chambers</b>

The boiler committee are appointed (not elected) and the three current members are happy to continue for another year. They are Doug Chambers, Richard Lockett and Ken Neilsen.

With the AGM declared over voting took place for the Clubman of the Year trophy and this was awarded to Graeme Hall, a very fitting recipient in view of his high standard of workmanship seen in his i.c. models, and his readiness to display them at Locomotion and Model Mee events.

Attention was then drawn to items on the table.

**Graeme Hall** showed us the progress he has made with the 'Snow' engine, explaining that to get the single piston rod to move freely through the tandem cylinders took considerable patience.

**John Tweedie** had the misfortune to drop and break a handle off his mill. Making a new handle called for a ball turning attachment and he has made a very tidy unit which produced the required balls. The original handle was made of poor quality material, the replacement is of steel. The evening ended with tea and biscuits and a very nice cake brought by Janice Hall.

## May Club Night

This will be held on the 22<sup>nd</sup> of May at 7.30pm in the Hearing Association Rooms Church Street, Palmerston North.

Murray Bold will demonstrate his 3D printer.

There will be two short videos and the usual bits and pieces on the table.

Club members desiring a club name badge can order one from the committee.

## Subscriptions

Subscriptions are now due and remain at the previous years amounts.

Full Membership	\$30
Country Membership	\$15
Junior Member	\$15

There is a joining fee of \$10 for new members.

The treasurer noted at the AGM that although costs were rising, power, insurance etc by careful management subs would be able to be kept at the same level for at least this year.

## COMING EVENTS

### Track running at Marriner Reserve Railway

June 1 <sup>st</sup>	from 1pm to 3pm
June 15 <sup>th</sup>	from 1pm to 3pm

During the afternoon of the 1<sup>st</sup> members of the Hornby Railway Collectors will visit the Marriner Reserve Railway

### AGM Cake - Supplied by Janice Hall



The closing date for the next issue of The Generator is Friday 13th June

## THIS MONTH'S FEATURED MODEL

By Gordon Trow

A Wellington-Manawatu Railway carriage. Why did I decide to build it? Quite a few years ago I built a 5" gauge Wellington-Manawatu Railway Ud class locomotive and I got to thinking that it would be nice to have a carriage to go with it. The original carriage body was of wood construction and fortunately I had some totara window sashes. The project started with ripping the timber down to make the framework for the sides and ends. The model was to have vertically sliding windows within the frames so the frames were doweled together and the ends doweled on as well. This allowed the carriage to be fitted together temporarily until the roof was worked out and fitted.

Before starting on the roof, I went onto the Internet to download progress that the 'Silverstream' railway group was making with their full-size restoration. The carriage when built had a central toilet and short and long compartments each side.

The chassis has the correct bogies with swing links and leaf and coil springing.

The Westinghouse brake gear is fitted and is fully operational. The hand brake works as the original would.

I was unable to find a toilet and hand-basin of the right size in the toy shops where components for dolls' houses were sold. While contemplating the lemon tree, I came up with an idea. A lemon of the right size and shape was selected and cut until I had the right shape. I greased it so I could make a plaster cast for the toilet bowl, which was sanded and painted white. A hinged seat was made for the toilet. A different shaped lemon provided the shape for the wash-basin which was made and painted in the same way.

The windows and the glass were fitted in the roof and doors fitted.

Progress was held up for a while after I had some minor heart trouble. Once given a clearance to be allowed back in my workshop I found that I had to call on Joy, my wife, to do the painting and lining out of the interior seats. These seats had taken a bit of working out as they can be tipped over to face the front or the rear as desired.

The timber for lining the interior had to be cut to make the scale size boards which were then glued onto the frame and varnished.

Wellington-Manawatu Railway carriages had electric lighting unlike the New Zealand Railways carriages that had gas lighting. I used LEDs in a brass fitting and they are run off a 12v battery. Once the seats were fitted, all the doors were then fitted, hung from hinges 20mm long. The last jobs were to fit the roof and complete the external painting.



## LETTER from ENGLAND

By Stan Compton

We have a TV programme where items bought at a 'flea market' are put up for auction where sometimes the items make money and sometimes not. One item put up for sale was a restored ladies bicycle of about 1912 vintage. It was in very good order and I noticed that the spokes were shiny indicating that the wheels had been re-spoked. A traditional 'sit up and beg' that were popular with female students a few years ago and quite expensive to buy. The one on sale only made twenty pounds (\$40), such is fashion, that bike had no gearing, thus the chain would not be prone to falling off and it would still give years of service. I went to 'view' at a local sale recently and spotted two Railway Clocks hung high up on the wall; hence no close examination was possible. One had LNWR on the dial and the other had Taff Vale Railway initials on it. Both Railways disappeared in the 1923 amalgamations so I 'smelt a rat'. These rare clocks in a country sale room seemed unlikely so I visited my mentor and he told me that a genuine clock would fetch 600 pounds (\$1200) and that these had probably been made in China. I have been told that Railway Lamps with the initials GWR stamped on them are often found to have been made in India!!!!

I understand that the Unimat 3 and the Unimat 5 lathes, originally from Germany are now made in China and not identical to the originals, lack of demand is the reason. I can believe this judging by the trend these days to buy an engine, rather than make one with the satisfaction that one gets from that achievement. We have a new club member at Hereford of the right age and ability to set up a workshop. He is a natural and can keep steam up on the club's 'Sweet Pea'. Instead he bought a one-fifth share in a 7¼" tank locomotive. With the money he spent he could have set up a workshop with good second hand machinery. I can foresee the demise of our hobby. Already there is a shortage of volunteers to restore vintage steam locomotives but money can be found to build new ones.

And now I have heard about the two Railway Clocks that were put up for sale and we believed that they probably were not genuine. We were wrong and when I visited my mentor both clocks had been brought to him for overhaul. Both were of good quality with a Fusee Movement,

probably over 100 years old and both needing re-bushing. This is only to be expected after many years of minimal lubrication; both had the traditional twelve inch dial and mounted in a mahogany case. The Taff Vale Railway clock had small hinges for an inspection flap replaced at some time with new ones marked GWR, who of course took over in 1923.

The other clock has LNWR on the dial, this company was absorbed into the LMS. The auctioneer had described the clocks as being in working order which they were not. Each clock fetched 500 pounds (\$1000) but the purchaser was not liable for the cost of repairs.

Recently we have had a great-niece of mine from New Zealand staying with us for a week or so before starting work in a London shop. What a change of lifestyle from plenty of sun to cold dark mornings, but she has coped and is now flattening with young Aussies and Kiwis in the big city.

In 1952 my wife and I landed in Canada. I only had the address of an engineering firm, no job but the address was noted down by customs and immigration and we were given the advice, "Take any job you can find, and then look for work in your own field". We had to prove we had funds to last us a month or two and we were lucky after choosing Kingston, Ontario that I was able to find work as a vehicle inspector at an Army camp, and then later as a fitter in a locomotive works. My wife found work in a supermarket, some unheard of in the UK. In those days in the UK we were still experiencing food rationing and now in Canada we were in the land of plenty. After two years we had saved enough to buy a small house but a few years later the railway contract was completed and I was unemployed! After a few difficult years we made a new start in Vancouver, BC when unemployment was at 9%. I paid the fees to train as a welder of pressure vessels adding to my experience gained earlier. Now I was lucky to find employment with a small firm that repaired ships damaged during loading. On one occasion I recall being sent out on my own with the pick-up truck one night after the usual days work in the workshop, with a portable petrol driven DC welder on a trailer. I found the ship loaded and ready to sail on the next tide but the mast head navigation light was broken off and needed to be welded back on to effect a quick repair. Now although I had served in the Royal Navy during WW2 I had never climbed

up a ships mast being in the engine room branch. But the job had to be done, I should have had a second man for help, but I carried on alone. The earth lead was clamped onto the ships hull and with the positive lead over my shoulder and dragging the heavy cable up with me as well as the helmet and tools ascended the mast. By now it was dark and raining, and once up on the platform I found I had to lay down flat to affect a repair made difficult by the rust and paint. Job completed, a ships engineer re-wired the light and they were able to sail. While I repacked the welding cables etc, there were three blasts from the ships siren, "I am going astern from the dock" and away it went into the night. Next time I will tell you about the 'sugar boats'

Our next move was to New Zealand. I decided to take a car with us and found a late model 'Hansa', a small German car made by Borgward Company. It was easy to convert to right-hand drive by moving the short steering column over and mounting chain sprockets to take a heavy duty roller chain which was much heavier than needed. It worked very well, moving the foot pedals was not difficult and when driving the conversion I soon forgot the roller chain. The car was front wheel drive and had a flat four engine, it was a small station wagon, very smart and worth the effort. We were travelling by sea on the SS Himalaya and I actually made the frame used to lift the car onto the ship as part of my daily work months before. Having a car to land with in a new country was worth while and the sale of it provided funds to help us buy a house.

Anne and I were in a Garden Centre looking for a certain type of cactus when I spotted a sign for sale. It was a 'take-off' from one of Confucius's sayings. It read "Give a man a fish and he will feed his family for a day. But teach him how to fish and he will disappear for the weekend, leaving you in peace!"

### **In the Newsletters from other Clubs**

**Blastpipe, Petone** Petone has had a very interesting guest speaker, Len Chisholm of the NZ Railway and Locomotive Society who had a very interesting trip through Europe. The trip went from Kiev and went down into Romania, Germany, Austria and the Ukraine. Steam still in evidence on narrow gauge and branch lines.  
**Maidstone** Their 7 ¼" gauge track now has a

loop at the station. The Mayor has been down for a visit and a drive of Tr 107. Weather has interfered with their track running.

**EBoP Model Engineers** The second hand shade sails have proved their worth during the long hot summer. John Heald is advertising his NZR type powered jigger For Sale.

**Whangarei Model Engineers** Running Days have been affected by poor weather.

A Wednesday team have been water blasting and repainting a picket fence. The workers comments about the person who dreamed up picket fences are such that the designer should have to sit on one.

**Christchurch Model Engineers.** Members requested to make sure the buildings are locked and the alarm set before leaving. Wet weather interfering with track running. Two members of the boating part of the club visited a local school and operated their boats in the swimming pool.

**Hawkes Bay Model Engineers.** Ross Bates has built a model of an oil rig for the boating pond. Four members in their gumboots waded out into the pond and anchored the rig in place. Their return to dry land was watched with interest as there seemed to be a possibility of one or more slipping on the mud bottom. One of their members has a part built NZR DG locomotive for sale.

The wet weather over in the Hawkes Bay has seen their trackside shrubbery grow to an extent that a pruning gang had to trim it back.

**Hamilton Model Engineers** Weather affected their Open Weekend. Council raises their rent.

## **The 'Turbinia'.**

By Doug Chambers

In 1884 Charles Algernon Parsons invented a steam turbine suitable for marine purposes. In 1893 he and five associates formed Parsons Marine Steam Turbine Company. An experimental vessel called the 'Turbinia' was built in a light steel design by Brown and Hood who were based at Wallsend on the Tyne. Initial trials proved disappointing. The single propeller suffered severely from cavitation. Parsons then had three turbines fitted and each one powered a shaft. Each shaft was fitted with three propellers and in the next series of trials a top speed of 34 knots (63kph) was achieved. But Parsons had trouble getting the 'Lords of the Admiralty' interested and so the 'Turbinia' turned up unannounced at the Royal Navy Review for Queen Victoria's diamond Jubilee at Spithead



on 26<sup>th</sup> June 1897. In front of the Prince of Wales, Lords of the Admiralty' and foreign dignitaries the 'Turbinia' raced between the two lines of battleships. A Navy picket boat sent to intercept the civilian interloper was nearly swamped in the 'Turbinia's wake. Other Navy vessels directed to chase off the 'Turbinia' failed to get anywhere near the faster impertinent intruder.

It is said that the 'Lords of the Admiralty' were heard to demand that the owner of the 'Turbinia' be 'keel-hauled' or suffer a 'flogging around the Fleet' once he was apprehended. The Prince of Wales suggested that the Admiralty would be better employed seeing if Parsons design could be applied to the Royal Navy ships!!!! It rather forced the Navy's hand when cross-channel ferries were fitted with Parsons turbines; the first was the Clyde steamer 'King Edward' in 1901 and in 1905 the Admiralty confirmed that future Navy vessels would be powered with turbines, the first being the revolutionary HMS Dreadnought.

## Whangamomona to Taumarunui by Rail

By Bruce Geange

The line was built from the Stratford end running through to Taumarunui and includes 24 tunnels and 91 bridges. It was opened to through traffic in 1933 having taken 30 years to build. It was closed in November 2009 after a partial derailment that damaged 6 kilometres of track. It was mothballed in June 2010. In 2012 Forgotten World Adventures obtained a 30 year lease on the line. We travelled on modified golf carts that were purchased second hand from America.

A satellite phone is carried by our tour guide in case of an emergency.

Our daughter Susan and I travelled to Taumarunui on the day before the trip, staying in a motel that night. Leaving Taumarunui at 7.45am we travelled by bus through hilly country shrouded by fog. We arrived at Whangamomona about ten o'clock. We were given a cup of tea at the hotel and then walked to the rail siding to start the journey back to Taumarunui with the Golf Carts, a distance of about 82 kms.



We were each given tickets and these were clipped at all our main stops. You had the choice of 2 or 4 seat models all with a top speed of about 20 kph. There were nine carts on our trip with another group in front of us. After safety and driving instructions, we were on our way travelling through open and bush country stopping at Tangarakau for a morning tea break with muffins. We had stops along the way where we were given history lessons of the area and told a few stories.

One story was about the restaurant on the hill above the first tunnel. It was said that they bored a hole for a long drop and came through into the roof of the tunnel and to watch out when we drove through. Everything looked good when we went through.

From here we travelled through seven tunnels with more bush and grassed areas with stops along the way and arriving at Tokirima for a lunch break. We all

made our own sandwiches from the ingredients on the tables including wholemeal bread. There were two old Bedford truck bodies and the remains of a Land Rover at the loading platform with a non running Ferguson tractor nearby. Power for the hot drinks came from a portable generator.



Leaving Tokirima we travelled through open and rolling country with more Tunnels. We stopped at Ohura to take a short walk to view the old State Prison, that is now an accommodation and



eating house. From here we went to Toi Toi where afternoon tea was served with cold drinks. The day was very warm and with the windscreens folded down, the bees and wasps seemed to hone in on us. Bee hives were seen while travelling through the bush areas for the collection of Manuka honey. Travelling

closer to Taumarunui through open country heading towards more hills we passed Matiere, a small town with a few people living there. Next was our first brick tunnel, one of two (No. 20) completed in 1917 followed by tunnel 21 completed in 1921.



The last tunnel No 24 was built in 1920 and is 1.5 kms long. Before entering this tunnel we were told that we would stop in the middle. The motors and lights were turned off so we could experience being in complete darkness, not even being able to see the tunnel ends. Our journey ended at Okahukura where a waiting bus took us back to Taumarunui arriving at about 5pm. This was an enjoyable day and the seats in the golf cart we had were comfortable.



## 400 'Generators'

By the Editor

This is the 400<sup>th</sup> issue of the 'Generator' and looking back I find that I have produced over 200 of them. I am not quite sure of when it was I started as editor but it must have been about 1996. It is a challenge trying to find features that will interest such a diverse number of model engineers that we have in the PNMEC. My own following is the steam locomotive and it is easier for me to write about them. However clocks, i.c. engines, hot air engines, stationary steam engine and traction engines are not so easy for me to write articles about knowing little about them.

It may be a good time to thank the members who have contributed articles and those who have their arms twisted till they agree to write something to go with their 'This Months Featured Model' photo. Also Murray Bold who takes my very rough work and formats it into the rather professional looking final form.

Cynthia Cooper is our proof reader and she is very good at finding the 'deliberate' mistakes that Murray and I leave in for her.

Another who has been a tremendous help in sending a 'Letter from England' is Stan Compton. His letters tell of the changes in Model Engineering in the UK and changes to the way of life there as well.

I have at times been asked to put in the Generator articles on how to machine cast iron wheels and other work. I am a self taught machinist and some of the methods I use would be frowned on by a trained fitter and turner. There are plenty of publications in our club library that describe the best practices or ask Richard Lockett, Graeme Hall or Ken Neilsen.

It was in 1979 I started building my first locomotive 'Simplex'. Bruce Geange was responsible for encouraging me to 'have a go'.

I wasn't in the PNMEC and was happy enough working alone. However Roy Hood lived a bit further down the road and he heard of my interest. That resulted in a visit by Roy to my workshop and a return visit by me to his workshop. Next came a phone call from Stan Compton and a visit from him and in 1980, I joined the PNMEC. I was only 34 and like today the majority of the members were over 65. This meant that many of the members who assisted me with advice and at times practical help are no longer with us. I guess that is the way of life but

it didn't help when Barry Parker pointed out a year or two ago, that he regarded me as being one of the older statesmen of the PNMEC!!!!

Sixteen years later, with four locomotives completed I suffered a severe problem in my lower back. Confined to the floor for four months, I gradually recovered to a stage where I could manage three hours a day on my feet in the workshop. It was at this time that Fin Mason encouraged me to have a go at being editor of the Generator. It took me quite a while to write it up on an old typewriter as I was only a one finger typist (still am), but I never dreamed that 18 years later I would be still doing the job!!!

A passion for reading has helped me find articles which I hope are of interest to the members (must have as I still have the editor's job).

I apologise for the amount of "I" in the above. Just the Editor abusing his position!!!!!!

### Generator No 300

Printed in April 2005. This month's featured model was Bruce Geange's Stirling tractor. There was a photo of Verdon Heath taking part in a motorcycle trial, a report on the 49<sup>th</sup> AALS Convention held at Warner, Brisbane, Queensland, which was attended by several of our members. Also a very good article written by Jim Curtis about his motorcycling years. And very sadly the editor wrote of Jim's passing on the 27<sup>th</sup> March, 2005.

### Generator No 200

Printed in June 1996 on one sheet of paper and rather small print. Complaints from older members led to the present format being adopted. Richard Lockett and Verdon Heath had been tramping in the Ranges at the end of Gladstone Road near Levin looking for remains of an old sawmilling tramway. A 'Letter from England' and the editor had been corresponding with Bob Kimber of Maryborough, Queensland. Both had built Martin Evans' 'Princess of Wales' and were very pleased with the boilers ability to produce steam. Bob had built 16 locomotives at that time. It was noted that the Maryborough Club had recently visited the Baracaldine Club. Nothing unusual in that except it involved a 2200km round trip!!!

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