



Newsletter of **THE PALMERSTON NORTH MODEL ENGINEERING CLUB INC**

Managers of the "MARRINER RESERVE RAILWAY"

Please address all correspondence to :- 22b Haydon St, Palmerston North.

PRESIDENT

Robert Edwards
(06) 355-1489
pnmec_president@trains.net.nz

SECRETARY

Stuart Anderson
(06) 357-7794
pnmec_secretary@trains.net.nz

TREASURER

John Tweedie
(06) 358-0150
pnmec_treasurer@trains.net.nz

EDITOR

Doug Chambers
(06) 354-9379
pnmec_editor@trains.net.nz

**July 2012
No 380**

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PNMEC Home Page www.pnmeec.org.nz
Email:- pnmeec@trains.net.nz

TRACK RUNNING

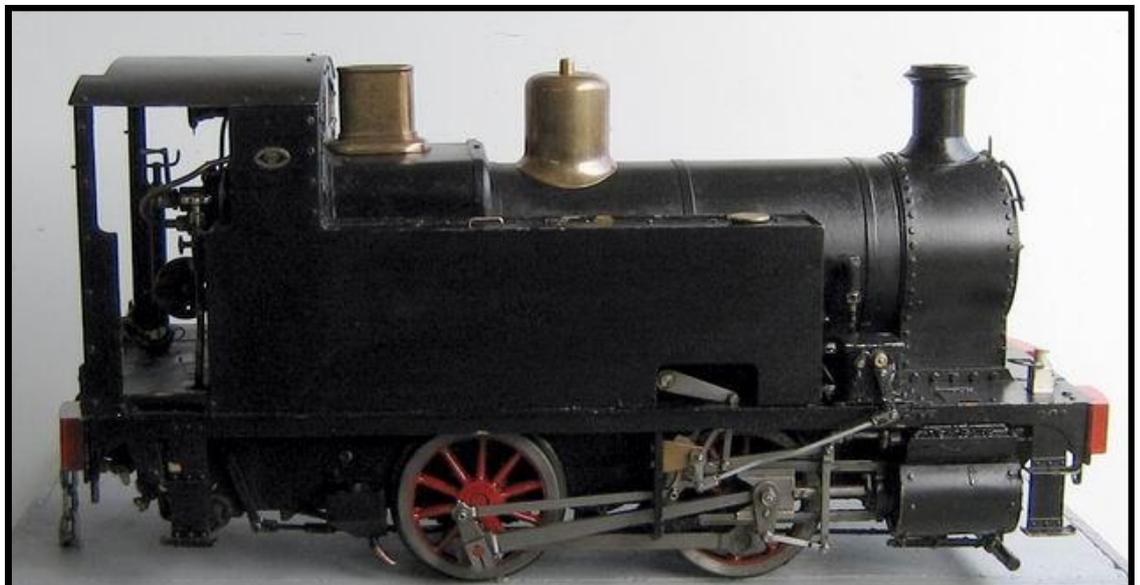
This is held on the **FIRST** and **THIRD** Sunday of each month, from 1 pm to 4 pm Summer and 1 pm to 3 pm during the Winter. All club members are welcome to attend and help out with loco coaling, watering and passenger marshalling - none of the tasks being at all

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
22b Haydon St,
Palmerston North

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This Months Featured Model



Report on the June Meeting.

The theme for the evening was bridges, and the appeal of certain bridges to certain members. Evidently quite a few of our members are fascinated by bridges as many came along prepared to speak about various bridges that they have seen or heard of.

Dave Newstead told of the original Tay Bridge (the one that collapsed during a storm and a train fell into the river) and the Forth Bridge.

John Garner too spoke of the original Tay Bridge. He added some more information telling that building began in 1871 and it was completed in 1878. It collapsed in 1879.

John Tweedie said that when he lived in the United Kingdom he had gone to see the Telford Chain Bridge over the River Conway in Wales and Brunel's Saltash Bridge over the Tamar River.

Richard Lockett told us about the 18 month old bridge on the walkway-cycle track along the foreshore at New Plymouth. He also told of the many new suspension bridges crossing the Yangtze River that he saw during a recent trip to China.

Murray Bold brought in to the meeting two bridges that are used on his Gauge 1 railway. One is a truss bridge used on the line and the other goes from the track to his car shed allowing locomotives and rolling stock to be returned to display track in the shed after use outside. The second bridge is quickly detachable and is kept in the shed when not in use. Murray made both bridges.

Fred Kent told us of a bridge his father made to give access to the back of their farm near Puketoi. Just a footbridge but extremely useful and a delight for a young Fred to cross as it swayed.

Les Fordyce recalled the old Bulls Bridge over the Rangitikei River, (not the one that collapsed). It was a one way bridge and Les recalled being a passenger in his father's 1925 Humber car when a Model 'T' Ford truck loaded with firewood met them halfway across. Neither driver would back up and with great care they passed on the bridge.

Robert Edwards showed us pictures of the first and second Panmure Bridges. The first bridge had a pivoting section on a turntable near one end to allow small ships to pass. He also had a very good picture of the original Balance Bridge at the Woodville end of the Manawatu Gorge.

Laurie Gudsell recalled that the man who tendered for the job of demolishing the old Balance Bridge intended to drop it using explosives. To aid in its demise he set about gas cutting partially through the steel but apparently he cut too much steel away and the bridge collapsed into river with him still attached. Fortunately he was not injured.

Jonathon Mason explained that in his younger days he was employed surveying routes for power lines from power stations to sub stations. Much of this surveying was between Stratford, Taumaranui and Raetihi.

He came across the 'Bridge to Nowhere' near Raetihi and the 'Bridge to Somewhere' which is inland from Douglas. He also crossed the Tangarakau Bridge which was built for the workers building the Railway Line from Stratford to Okura. He also had some old photos of the curved trestle bridge on Ellis and Burnand's logging tramway just north and east of Taumaranui. The trestle bridge had been washed away in a flood long before Jonathon was in the area but he had photos of the remains of the abutments.

Bruce Geange also spoke of the 'Bridge to somewhere' and then showed a series of photos of the building of the Makatoke Viaduct. He also showed us pictures of the large model of the Makatoke viaduct that he built for the Centennial Celebrations of the opening of the Main Trunk Railway. The model was displayed at the Ohakune Railway station for the 'Parliamentary Special' and is now at the Waimarino museum in Raetihi.

Chis Morton spoke on the problems associated with getting a bridge across the St. Lawrence Seaway at Quebec. Building started in 1899 but in 1907 before completion it collapsed; the centre section fell into the Seaway. During the second attempt to cross the Seaway in 1917, the centre section again fell into the water. However it was a case of third time lucky and in December 1917 the first train crossed safely.

The closing date for the next issue of The Generator is Friday 10th August

Cynthia Cooper spoke of the Floating Bridges near Seattle. She said that from time to time some of the pontoons are swept away but are quickly towed back and refitted into place.

Doug Chambers had a series of photos showing a Caterpillar D4 that had crashed through a bridge on a farm near Bunnythorpe; being righted with a winch rope on a International TD40 crawler tractor. This happened in 1937 and the D4 driver was lucky to escape uninjured.

July Club Night

7:30pm, Thursday 26 July 2012
Hearing Association Rooms
Church Street, Palmerston North

This is going to be a 'Bits and Pieces' evening so bring along your current project, not necessarily completed and tell us all about it.

Always interesting to see what other model engineers are doing.

COMING EVENTS

Track running at Marriner Reserve Railway

August 5th from 1pm to 3pm

August 19th from 1pm to 3pm

Open Weekends

Hawkes Bay Model Engineers

50th Reunion 6th – 7th October.

New Plymouth Model Engineers

60th Birthday Bash 20th-21st 22nd of October.

Havelock North Live Steamers Weekend

19th, 20th, 21st, 22nd. October.

EBoP MEs River Edge Railway

10th Anniversary Run 15th -16th December.

Hawkes Bay and New Plymouth events will require registration.

THIS MONTH'S FEATURED MODEL

By Ian McLellan

This model is based on a Great Eastern Railway Y4 shunting locomotive designed to work on the sharp curves of the East London Docks and at the same time be small enough to work in and out of the warehouses and goods depots with limited headroom. Five were constructed between 1913 and 1931 and it is said that these engines were the largest 0-4-0 tank engines to be used by any English Railway Company.

The model was constructed by Chris Rogers and purchased by me at the beginning of 2005. My reasons for purchasing this particular locomotive were that it would be able to negotiate the curves of my home (5" and 3 ½" gauge) railway (its wheelbase is shorter than my 0-6-0 'Juliet'), it would have a greater hauling capacity than my other locomotives and be small enough to transport in my car.

Over the last seven years I have made a number of modifications to it. When purchased the boiler was gas-fired and I converted it to coal-firing. Some cosmetic plate work was added to the side tanks, trimming to the cab front plus (at a later date) windows and frames as well as an altered roof. The blast nozzle was increased from 5/32" to 1/4". The reversing lever was altered from a spring-loaded plunger to a conventional trigger type which is easier to operate.

The firehole isn't very large; it is the same size as the firehole on my large boilered 'Tich'. As a result the coal has to be crushed quite small otherwise it is a case of "four on the floor and one in the door" when firing on the run. It also means the coal burns quicker and this tended to aid the build up of clinker. However this has been largely eliminated by increasing the air space between the firebars from 1/8" to 3/16". Leakage occurred past the bronze piston rings, so I replaced these with cast iron piston rings. Originally there was one lubricator feeding both cylinders through a 'Tee' pipe but one cylinder, despite checking the pipes for blockage, was starved of oil and it seized a couple of times. Fortunately the cylinder bore was not scored, and to overcome this problem separate lubricators for each cylinder were fitted. A commercial hand-pump was fitted in one of the side tanks but it lacked the capacity for the size of boiler and eventually it 'died'.

It was replaced by a considerably larger hand-pump. As well, an injector has been fitted. The axle pump is one without a gland. It eventually leaked badly but a replacement Oring fitted in a correctly sized groove cured that problem.

My thanks to those Club Members who provided technical advice and components (hand pump, injector and two lubricators). The locomotive steams very well but being such a short wheelbased 0-4-0 she has a bit of a 'dance' on the track.

LETTER FROM ENGLAND

By Stan Compton

The first public run of this year was the most hectic I have ever known. We suspect that this could be due to the high price of petrol.

At almost \$3.00 a litre this means looking for places to visit that are local. Even so, when we heard about a possible strike by tanker drivers many people panicked and filled their petrol tanks and cans causing a shortage of supply. You won't believe this but one woman decided to transfer petrol from one container to another **in her kitchen where her gas stove was lit cooking food.** You can guess that she got badly burnt in the fire that started; it just proves how many people are unaware how volatile a fuel petrol is.

So our Easter Sunday was so busy and even our shorter elevated track was carrying full loads for over four hours. We had three locomotives running, Peter had his new 'Metropolitan battery electric' out for the first time and it ran faultlessly hauling heavy loads on our 1 : 60 grades. With a motor on every axle it never slipped at all and we were all impressed. This was the first time Peter had hauled passengers and despite sitting on an uncomfortable seat, he kept going all afternoon. He entered the 'Easter Bonnet' competition with a magnificent hat made by his wife, and was an easy winner.

John ran the club's 'Sweet Pea', although new to driving a steam locomotive he kept going even with blocked fire tubes. The 'brick arch' had burnt away causing the flues to become blocked.

John Martin brought his version of 'Sweet Pea'. It has no cab, a larger firebox and modified valve gear. It is a reliable engine that also did not fail. Paul worked hard loading passengers with hardly a break; as usual we could do with more

volunteer helpers

Brian, Paul's father had an unusual problem. When he got his 'Maid of Kent' loco out for a run he found that the axle pump had failed due to the fact that ice had previously formed on the suction side of the ram and this had caused the brass fitting to split!!!!

Brian told me he had recently been watching a clip on TV showing one of the few remaining Hawker Hurricane WW2 fighters being flown. An ex WW2 pilot who happened to be watching could not believe his eyes. He had flown that very 'Hurricane during the war. The 'Hurricane' was not as fast as the 'Spitfire' but was manoeuvrable and liked by the pilots. It had fabric covering to wings and fuselage etc. and repairs could be made quickly and the plane got back into action.

After the hectic weekend Peter decided to alter his driving truck, adding arm and back rests. On taking the work to be upholstered he mentioned that he repaired clocks. "Oh, that is a coincidence; I had customer here who was an expert on clocks and watches. He had restored a super-charged Bentley and he had brought it in to have a tonneau cover made for it, but I forget his name." Peter told him that the man's name was George Daniels and he had died some years ago. George Daniels was the only man to take on Swiss watch manufacturers and prove that his movement design was an improvement on theirs.

I read a book on his life recently and I can only admire such talent.

There has been some correspondence in a National Newspaper about the fouling of city streets by dogs. Some owners are very responsible and one woman was observed to be ready with a plastic bag when her greyhound got ready to perform. She caught it before it reached the tar seal; it was all so neat that the observer wanted to applaud her actions.

Years ago I recall hearing about a dog being taken to the dosing strip to check for hydatids (I wonder if that still applies). The animal was dosed but would not perform. Eventually the dog was taken back home in the car and as soon as the car door was opened it shot out to perform on its own special place in the back section. Now that is good training. A pity all dog owners are not so responsible. I was caught out once at a motor-way service area while out travelling in a new motor coach. I trod in some dog waste and

walked back on board the coach with much of it adhering to my shoe. Our driver was so good about cleaning up the mess but you can guess my feelings about this incident. So watch out if you are ever travelling in the UK or Europe. But the thief who snatched an old ladies handbag was in for a surprise. She used it to carry her dog's waste away for disposal!!!

Full Marks to Stan Corlett on his Ford quadricycle featured on the March issue of the Generator. I imagine that with a project like that it would be difficult to collect the information to build such an unusual replica.

HORNSBY OIL TRACTOR

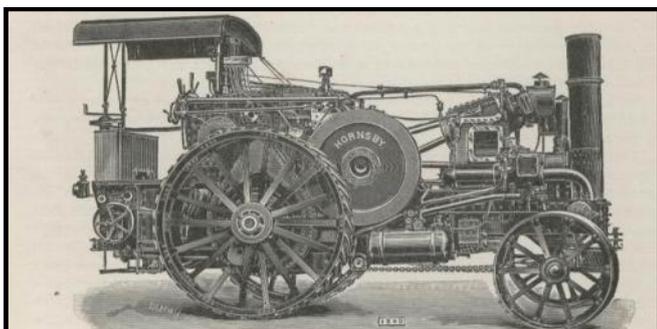
By Doug Chambers

In the early 1900s the English firm of Hornsby Ltd were building the Oil Tractor pictured below. The wheels and steering are the same as those on a steam traction engine. The Oil Tractor has a two cylinder engine, a four stroke V twin, one cylinder inclined over the other. Maximum RPM is 350.

Three oil tanks are provided with a total capacity of 100 gallons. The oil used is refined Russian oil but after some adjustments are made the engine will run on refined American, Scotch Shale, Crude Russian, Astaki, Texas, Liquid Fuel or Burmah oils. The ability to run on so many different oils made the Hornsby – Ackroyd engine unique for its time.

The cylinders are water cooled with a pump circulating the water to a cooler under the footplate. Air is drawn past the tubes by a fan. There is a silencer in front of the engine and the chimney acts as a second silencer as well as directing the exhaust upwards into the atmosphere. The Tractor has four forward speeds, 1.5mph, 3.5mph, 5mph and 8mph and there is of course a reverse gear.

Each moving part and bearing has its own lubricator which is supplied by copper tube from a central reservoir and the supply of oil is under the control of the driver from the operating position on the footplate.



The Generator

END of a GREAT AFTERNOON



Four steamers on the steaming bays after a busy afternoon. It had been fine and sunny and there were a large number of passengers requesting rides. Three of the engines had had their fires dropped, boilers 'blown down' and were ready to be loaded into cars or vans. The nearest has still has wisps of steam drifting about and is soon to have its fire dropped and boiler blown down.

Nearest the camera is Doug Chambers' 'Hunslet', Richard Lockett's NZR W, John Tweedie's simple articulated Mallett and Robert Edwards 'Heisler'.

Richard Lockett commented that if you paint a steam locomotive black, you can't go very far wrong.

RAIL-X 2012

Over the weekend of 14-15 July the PNMEC we in attendance at Rail-X 2012. On the Saturday the portable track



was in use with the Mason's Wren as the prime mover and one gondola ride car. We had a successful day but Sunday was too wet to run. We spent both days manning our stand inside the venue.

Mid Winter Steam Up - Squirrel Valley



Four live steamers were displayed.
 Richard's 7.25" NZR "W" - Coal
 Murray's 5.00" NZR "F" - Coal
 Barry's 3.50" NZR "K" - Coal
 Murray's 1.75" 0-6-0 Tank - LPG

We also made 26 new email contacts to add to our database.

Thanks to Jonathan and Daniel Mason for running the Wren on Saturday.

FOR SALE

A set of sensitive drilling machine castings. Price negotiable
 Contact Jonathan Mason 06 353 0368



Just a small selection of the eleven "G" gauge live steamers running at Grant and Donna's Squirrel Valley Railway in Cambridge.



Important Notice to Clubs

From September the PNMEC will no longer be sending "**The Generator**" out to all the NZ Model Engineering Clubs.

You may get your colour copy by downloading it from our website.

<http://pnmec.org.nz/newsletters.php>

All the electronic copies of "**The Generator**" back to October 2002, are available for download from our website.

Please email us at pnmec@trains.net.nz with your "**Club Name**", "**Club Email Address**" and "**Club Generator Request**" in the subject line so that we can advise you when "**The Generator**" is published, this is normally the 3rd Thursday of the month.

If any of your members would like a personal email, then please email pnmec@trains.net.nz with your "**First name**", "**Surname**", "**Email Address**" and "**Personal Generator Request**" in the subject line.