



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
Bruce Geange
(06) 357-0566

SECRETARY
Murray Bold
(06) 355-7000

TRACK CONVENOR
Richard Lockett
(06) 323-0948

EDITOR
Doug Chambers
(06) 354-9379

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PNMEC Home Page www.pnmeec.org.nz
Email:- pnmeec@clear.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 onerous.

Visiting club members too, 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 of the JANUARY MEETING

Murray Bold spoke of the Canterbury Convention and members interested in attending can get the details from him.

Richard Lockett spoke on the operation of the Portable Track at the Settlers Day celebrations in Feilding.

There was a wide range of models exhibited on the table. Members had been busy over the holiday break.

Stuart Anderson had a photo of his NZR Dh under trial hauling three loaded wagons.

Jim Curtis had the front of his F7 complete with the necessary compound curves all made from panel steel. He admitted that he received expert help from Roger Corlett and noted that with the bodywork well on the way the project is drawing to an end.

Ian McLellan had the chassis of his "Maisie" now with most of the valve gear in place.

Bruce Geange had the fairleads and gearchange for his 3" Burrell. Bruce was grateful to Chris Rogers for bronze welding some of the components.

Brian Wiffin had made a jig for grinding a radius on a grinding wheel. It has a fine adjustment for the diamond tool.

Richard Lockett had two injectors, built to Ken Neilson's specs. Also the firehole door and the NZR (Taj Mahal) type lubricator all for his NZR W.

Fred Kent was given a wooden kitset of a Dutch windmill. He has assembled the kit and is deciding on the colour scheme. Fred also had some of the components for a small wind turbine he is making.

Barry Parker has inherited a 5" "Britannia" from a friend no longer well enough to finish it. He showed us the completed tender. The chassis is almost ready to run on air but a boiler is yet to be built.

Murray Bold showed us the Gauge 1 wagon bodies he made. Two are of the open La type and the third is a stock wagon. Very nicely made and a very good paint job. Murray is also building a track sweeper. A powered rotating brush (made up from two toilet brushes) fitted up to a suitable wagon. This to clear the track of rubbish thrown up by the birds when the trains are not operating.

John Garner is making the 'Hot Air' tractor that Bruce Geange made a couple of years ago. John displayed the components completed to date, chassis and displacer cylinder.

Also on display was the steam tug 'Hercules' built by Chris Rogers from the Caldercraft kit of the tug

FEBRUARY MEETING.

Will be held on the 24th February 2005 at 7.30pm SHARP, in the Hearing Association Rooms, Church Street, Palmerston North.

The theme for the evening is '**Bits and Pieces**' and perhaps another of Richard Lockett's talks on Workshop Practice.

COMING EVENTS

Mid-Week Run at Marriner Reserve Railway

Tuesday 22 February 10 - 2 pm

Tuesday 22 March 10 - 2 pm

Please contact Doug Chambers beforehand.

Track running at Marriner Reserve Railway:

Saturday & Sunday 5 & 6 March 9 - 4 pm

Sunday 27 March 1 - 4 pm

OPEN WEEKENDS

Auckland Open Weekend

26 - 27 February 2005

Palmerston North Model Engineers '**Locomotion**'

5 - 6 March 2005

Hamilton Open Weekend

19 - 20 March 2005



Doug telling us about the Tug Hercules

There is to be a fourteen episode program on TV1 Sunday nights around 7:30pm about Railways, both large and small, in New Zealand. It should be interesting.

The closing date for the next issue of The Generator is Friday 11 March

LETTER FROM ENGLAND

By Stan Compton

Going back to those 7 ¼” bogies I told you about last time, another problem has come to light. The axleboxes had been bottoming against the frames due to inadequate springing; coil springs had been purchased from the model trade and assumed to be suitable by trying to compress them by hand.

My own very basic method of testing springs is to use an old bathroom scale mounted on the drill press table with a heavy slab across to eliminate any flexibility.

I was able to demonstrate clearly that the springing was inadequate for the varying loads we are obliged to carry. I expect that you have the same problem carrying a couple of slim women with children on one trip, the next one can be four very heavy grandfathers with a couple of two year olds whose weight is negligible.

The best answer is progressive springing with very heavy springs taking over the load at the limit of travel.

The axlebox travel was also inadequate at 10mm. The cast iron axleboxes were modified and the travel was increased to 18mm.

Drilling and tapping the axleboxes for a grub screw means the axles can no longer rotate. Such a lack surprises me as the workmanship shows high quality machining, probably on a modern programmable lathe. A pity closer tolerances were not adhered to because I found some of the ball races badly worn. This was due to too great a pre-load on both the inner and outer bearings.

With modern bearings only a slight interference fit is required or just use ‘Loctite’. There was no provision for removing worn bearings.

I gather a contract had been let to a firm in Europe to manufacture a large number of bogies, we got some cheap because of problems due to the poor design.

The original braking system was with 50mm diaphragms operated with compressed air at 60 psi. This was topped up every time the train was reloaded in the station. Conversion to vacuum braking has been achieved with commercial units that work very well.

One of our members is a retired engineer and his interests are in old woodworking tools. T always

amazes me to examine the quality of such items from years ago and he is a source of much knowledge on the subject. Recently he answered a query in an American tools publication on the use of a number of cast brass rings found in a tool chest. On measuring the bore and calculating the weight of a cast iron ball he came to realise that the rings were for sizing ramrods. He explained that a carpenter on a warship would need to replace many ramrods because it was common to lose one overboard and ramming a fresh charge into a muzzle of a cannon in which the remnants of the last charge were still burning. One wonders what happened to the poor chap operating the ramrod when the charge exploded ? Surely a bucket of water should be used here but where from ?

Editors Note ; After the cannon was fired it was hauled inboard with blocks and tackle, the barrel was then swabbed out with a pole with cloth soaked in water to quench any remaining sparks. The fresh charge was then rammed into the barrel followed by a wad and a cannon ball and another wad. The cannon was then hauled outboard again ready for firing. In a prolonged action the gunners deafened by the noise and injured by the gun rolling over their bare feet, sometimes got the order of things wrong resulting in a premature explosion.

Recently we had a visit of our son with his family from Wellington, this is the first time he has visited the U.K. and he could not believe how narrow some of our main roads are. By giving him a list of road numbers to follow and he found his way to many places with little trouble. Even our motorways were no problem but it is important to be sure of the route, it is so easy to get on the wrong one.

He wanted to go to the Severn Valley Railway, who only run at weekends in the winter. I checked up and found 3 tender engines and a newly restored 2 –6 –2 tank were running. I told Chris “Get on the station platform at Arley and you will get a good shot of the train approaching from Bewdley framed by the bridge.” Unfortunately the engine arrived tender first, I had forgotten that this is the direction the trains have to run due to there being no turntable. It was a long train so the locomotive is at the far end of the platform before it stops. He was disap-

pointed, but his highlight was to see snow falling on our birthday in November !!!!!
 No doubt you will have heard by now that the world of vintage engineering has lost it's main supporter, the late Fred Dibnah. We used to meet up with him at Eastnor Castle near here, and he loved to have us listen to his experiences, one of which was concerning a medical examination of a very personal kind.

"Now Mr Dibnah we shall be using some compressed air to help us." This is where Fred's eyebrows shot up in surprise, his idea of compressed air has a jack hammer on the end of the hose !!!
 That was about two years ago so he was aware of his problem which he tried to live with.

His neighbours must have hated living next door to what they considered a load of junk, even a 30 foot mineshaft had been sunk. What does one do with such a place ? Maybe his team of helpers will organise something.

No doubt he was hard to live with, but he always wanted to let people know that we have lost so much of our Industrial Heritage. One item in his younger days springs to mind when he was married to his first wife, the attractive red-head. She wanted a holiday at a beach resort, they had little money and he wanted a new smokebox tube plate for his steam roller. Fred located a firm in the beach area who would make him a tube plate and in return Fred would repair their works chimney. Fred's young wife thought she was going to lie in the sun on the sandy beach but instead was pressed into helping him mount the ladders up the chimney so he could repair it. Unfortunately it was a wet day and the poor girl was soaked !!!!

We have seen a program on TV dedicated to Fred's life, strangely they did not mention his second wife who gave him two sons and made him give up smoking. We also saw him organising his last chimney demolition, number 80.

By the way, I did enjoy the tongue in cheek article by Peter King of Christchurch in the December issue of Model Engineer.

FOR SALE

Complete set of drawing for a Queensland Railway A 10. This is a 0-4-2 tender engine. It has inside Stephenson valve gear

driving through rocking levers to the valves, which are above the outside cylinders.
 The drawings are for a 5" gauge loco and bearing in mind Queensland Railways are 3' 6" the model will be a little larger than the 'Simplex' or 'Ajax' models.

Contact Doug Chambers 06 354 9379
 Price POA.

**NEW LOCOMOTIVE visits
 Marriner Reserve.**

On the third Sunday of January Bernie Coyne joined in with the track running at Marriner Reserve.

His newly completed 5" gauge NZR Wab tank engine made light work of the grade on the PNME track.

It was a very hot day and the black painted loco required little coal to maintain steam. Just as well as Bernie was feeling the heat. Bernie is a country member of PNME and lives in New Plymouth where he is a member of the New Plymouth model engineers.

He found it different running the Wab on a longer track than the New Plymouth one.
 On the previous day Bernie had visited the Feilding Steam Rail group where he was able to closely examine Wab 794. This particular locomotive had featured in Bernie's schooldays, as it was usually the engine hauling the train that brought him home from school. Of course members of the Feilding Steam Rail group were very interested in the 5" gauge model on the trailer behind Bernie's car.



Bernie and family behind Wab 794

THE STEAM TUG 'IMARA'.

By Doug Chambers

The tug 'Imara' was built in 1930 by Fleming and Ferguson Ltd., at their Phoenix Works in Paisley. The order came via a Crown Colonies Contract on behalf of the Tanganyika Railway Company.

The price was 29,400 pounds and included delivery to the tug's homeport of Dar - es - Salam. The 'Imara' was 109 feet long and 28' 6" wide. She was powered with two triple expansion steam engines each of 500 indicated horsepower. She was expected to be able to move a 12,000 ton vessel in calm water.

The log of her delivery voyage makes interesting reading. 'Imara' covered 4,589 miles at an average speed of 7.4 knots, using just one of her two boilers at a reduced boiler pressure of 170psi. The voyage was completed in 26 days and 1 hour, the weather conditions being mostly fine.

The tug was equipped with eight steam engines. The two triple expansion engines for propulsion, a steam engine driving the forced draught fan, a steam engine driving a generator for inboard lighting, another engine for powering the fire and salvage pump, the anchor windlass, the steam powered capstan and boiler feed pumps. The bunkers were capable of holding 60 tons of coal.

'Imara' had a crew of eighteen. Six Europeans, master, mate, chief engineer and three junior officers. There were six Lasker deckhands and six Lasker firemen.

The Tanganyika Railway Company only employed 'Imara' for a year before the Royal Navy purchased her. Renamed 'Perseverance' she was considerably altered. The open bridge was replaced with a fully enclosed type and various stovepipe chimneys were added no doubt to help provide warmth in the colder climes the tug now worked in.

The steel lifeboats were replaced with clinker built ones and two carley floats were stacked one above the other. The funnel was given a 'mushroom' cap so that a cover could be lashed over the funnel when the fires were out to prevent rainwater from turning the ash to acid. In 1983 Caldercraft set out to produce the most

accurate and detailed tug kit produced. The prototype was built over a period of time and experimentation, sailing at various stages of its construction and after having travelled many hundreds of miles, it was entered in the 1986 Model Engineer Exhibition in London.

The 'Imara' was awarded a silver medal.

The scale chosen by Caldercraft was 1/32 nd and the model is about 1.100mm long. Caldercraft produce two hulls, one for twin screws if electric powered another for single screw if the tug is to be steam powered. In 1993 the kit was advertised for sale at 345 pounds, and bearing in mind that the propulsion units, either electric or steam, and the radio control equipment are all extra, this is not a cheap venture.

There is over 1,800 parts to the kit, some parts are in fibreglass, wood, three ply, and small fittings in die-cast. This is **NOT** a kit for an amateur, nor is it a kit that can be built up in a few nights !! But it is a model that will prove a delight for any person who has an interest in Maritime matters.

Chris Rogers built the kit, (but renamed the tug 'Hercules') some nine years ago and recently asked me to do the fine detailing work required to complete the model. I had never undertaken any serious ship modelling and found the task a real challenge. I shall be sorry when it is completed and it leaves our dining room table. I, and others who have seen the completed tug feel that is of such a standard as it could be a Museum exhibit.

But perhaps my long-suffering wife will be glad to get the use of the table again. !!!!!



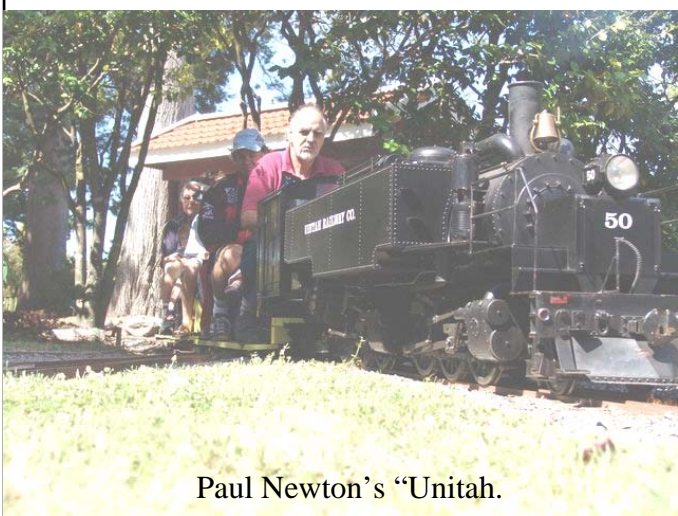
Close-up of the bridge and deck.

A weekend at Rotorua

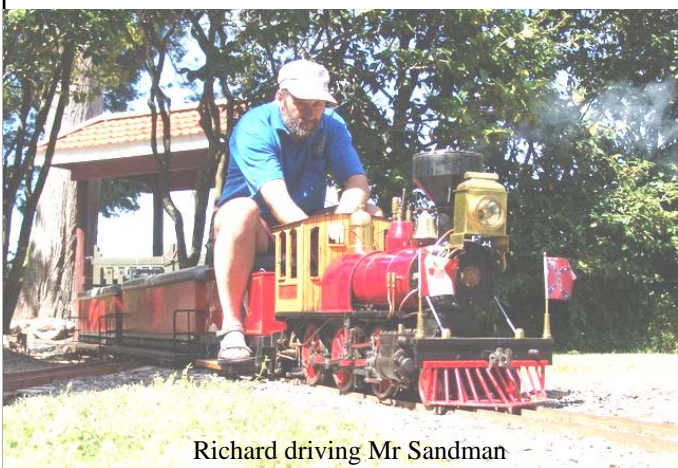
Janice, Murray ,Cynthia and Mr Sandman travelled up to Rotorua over the weekend of 28 - 29 January. We stayed at Holden’s Bay holiday park, 200 meters from the Te Amorangi Museum where the Rotorua Club Track is. We were joined by Richard on Sunday.



The Wab down from Auckland



Paul Newton’s “Unitah.



Richard driving Mr Sandman

Thanks to all those at Rotorua.

An enjoyable time was had by us from Palmerston North Model Engineers

My Visit to the KAPITI COAST

On Sunday I went down to Kapiti Miniature Railway and Associates Open weekend leaving Palmerston North at 8am in the morning.

There was a good turn out of Havelock North members with Keirunga Express, Irish Bus, Ec, Jan Rordon’s 5 inch loco & John Romanes new loco a 0-4-0.

It was a good day to play trains. There was a good turn out of passengers.

The Kapiti clubs new clubhouse is slowly moving forward with the basement up and useable but the top section hasn’t been started as yet.

With one mishap being the Keirunga Express derailing, other than that nothing really to report, but a very enjoyable day.

I arrived back in Palmerston North at 7.30pm.

STUART ANDERSON