



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.

November
2004
No 296

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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 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,

Place
stamp
here

Coming Events

Coming Events: November 25th This is to be the End of Year Dinner at the Cloverlea Tavern, 301 Tremaine Ave, Palmerston North. Start time is 6.30 pm.

Mid Week Run at Marriner Reserve Railway :

23 rd November	between 10.00 am and 2 pm
28 th December	between 10.00 am and 2 pm

Please contact Doug Chambers beforehand.

Track running at Marriner Reserve Railway:

5 th December	1 - 4 pm
19 th December	1 - 4 pm

OPEN WEEKENDS:

Whangarei Model Engineers	14 th - 17 th January 2005
Whakatane Open Weekend	29 th - 31 st January 2005
Auckland Open Weekend	26 th - 27 th February 2005
Palmerston North Model Engineers 'Locomotion 05'	5 th - 6 th March 2005

The closing date for the next issue of The Generator is Friday 14th January 2005

REPORT of the OCTOBER MEETING

The following items were displayed.

Ian McLellan had the jig for setting up the “Maisie’s” eccentric straps and links. Murray Bold showed us the small rollers he has made. Jim Curtis had a fuel tank gauge from a vintage or classic car. The owner requires a small bevel gear to allow repairs to be made. Doug Chambers had the nearly completed “Phantom” boiler. He was grateful to Phillip Wright who offered to carry it out to Doug’s car after the meeting.

Several members brought along their **‘Favourite Book’**.

Jim Curtis had one on the World’s Railways. Verdon Heath had a book on UFO’s seen around New Zealand. Cynthia Cooper had a Canadian Pacific Railways guide book which described the views across Canada via the CPR route. Written by a train steward. Fred Kent had a book on Engineering, cars, engines etc dated from 1919. And an interesting graph. Murray Bold had a software manual which he finds invaluable. Richard Lockett had a book on the Tararua’s. Extremely interesting for him as his other hobby is tramping. Chris Morton had a very old Technical book and a copy of a History of Meccano – Hornby. Jim Spall had a book on Meyer – Kitson. Bruce Geange had a book on Meccano. Both Brian Leslie and John Garner had Sparey’s ‘Amateurs Lathe.’ Doug Chambers had a copy of Deep Sea diving which had enabled his father to regain contact with a relation in England who had been a diver in the Royal Navy.

NOVEMBER MEETING.

Cloverlea Tavern,
301 Tremaine Ave,
Palmerston North.

6:30 pm Arrive and mingle.
7:15 pm Sit-down for evening meal

FOR SALE

Hunslet NZR Dsa 71/4” gauge. 4hp Briggs and Stratton engine driving an Eaton Hydrastatic Transmission. Complete package includes ‘Dsa’ locomotive. “La” riding trolley, @ 12 volt battery. A sturdy workshop stand on castors. The locomotive is modelled on the NZR Dsa Hunslet in service at Invercargill during the mid 1950s. The Makers no 4700, being one of fourteen imported at that time, from Hunslet in England. Price POA from Jim Curtis, phone (06) 374 7151 See photo in last months Generator

“King George V” a 5” gauge Great Western Railway 4 –6 –0. 4 cylinders. Gas fired but it would be a simple conversion to coal firing if required. Engine and tender are over six feet long. Completed in 2002 and has had little running. \$13,000 ono. Chris Rogers (06) 356 1759

Y4 shunting engine 0 –4 –0 in 5” gauge. Gas fired but could be easily converted to coal firing. Completed in 2003 and finished in Satin Black. \$3,800 ono. Chris Rogers (06) 356 1759

Two Stuart Turner D10 twin cylinder steam engines, both with reversing gear. Suitable for large radio controlled launch. \$1,000 and \$900 Chris Rogers (06) 356 1759

Several Stuart Turner stationary engines, singles and twins \$ POA Chris Rogers (06) 356 1759

North British 0 –4 –0 Diesel shunter in 5” gauge. Battery driven and radio controlled. Spare battery and charger. \$650 ono Chris Rogers (06) 356 1759

British Naval Dockyard Tug. “Hercules” Steam powered by a Stuart Turner D 10. I metre long. And radio controlled. Available with or without transmitter, would sell without engine
Total package \$2,500 Chris Rogers (06) 356 1759

A Trip to See Old and New Mates in Nelson

23-25 October 2004

Cynthia, Richard, Simon and “Robyn” set out at 11:00 pm on Friday 22 October. Eleven in the evening you say? No, that must be a mistake, no one of sound mind sets out on a journey at that time. But, I say to you that adventures can start at any time.

So, there we were exploring the Arahura as she pulled away from the Wellington dock at a quarter to two in the morning! She has been beautifully refurbished with uncomfortable seating and is now unsuitable for anyone who wants to catch a couple of hours sleep. Never the less two of us managed to curl up on a couple of small benches, leaving our youngest member to unsuccessfully try and get comfortable on the floor.

The crossing was smooth and the drive to Nelson uneventful. After a short stop for a typical Kiwi breakfast (a meat pie), we arrived at the Nelson Model Engineers track at 8:00 am. Richard and Simon were welcomed with polite smiles and handshakes. Cynthia was welcomed with big hugs and kisses. This was followed by a cup of tea, which in our sleep deprived state was greatly appreciated.

The new 7¼” ground level track is extremely smooth. It is just over 500m long and runs around the outside of both the original raised track and the two acre model boat pond. The new track was officially opened on Saturday afternoon by local MP Nick Smith, who gave a very good speech - it praised all the right people and was short.



“Some people missed the speeches”

As well as passenger trains running on both the new ground level and the old raised track, the small side paddle boat also took passengers on the modeller’s pond. In the clubroom there was an HO layout running trains around four different circuits, plus an N gauge mountain loop. Also running was a separate OO 3-rail layout with hand made track. The shelves and floor held a variety of models – a traction engine, boats, stationary engines, locomotives and aeroplanes. There were numerous photographs on the walls and yours truly was in three of them!

Several months of the Generator were proudly hanging on a purpose built notice board along side newsletters from other clubs.

The weather was a little damp, never the less a respectable number of people enjoyed rides, and the evening BBQ’s were a pleasant end to each day. Visitors from other clubs came from Palmerston North, Blenheim, Christchurch Live Steamers and Canterbury Model Engineers.

There was much talk about seeing each other again in Christchurch at the International Convention CANMOD, 5-9 January 2006.

Cynthia Cooper

There's more than one live steam railway in Havelock North

Over Labour weekend John Dunn of Havelock North hosted a 16 mm scale "O" gauge railway meeting. There were 4 or 5 "O" and "1" gauge live steamers and a couple of electric locomotives. John has two parts to his railway the indoor and outdoor sections with a bridge and tunnel to connect the two sections. The following photos show some of what it was all about.



"Sunnyfield" A live steam 0-6-0 loco



Crossing the viaduct



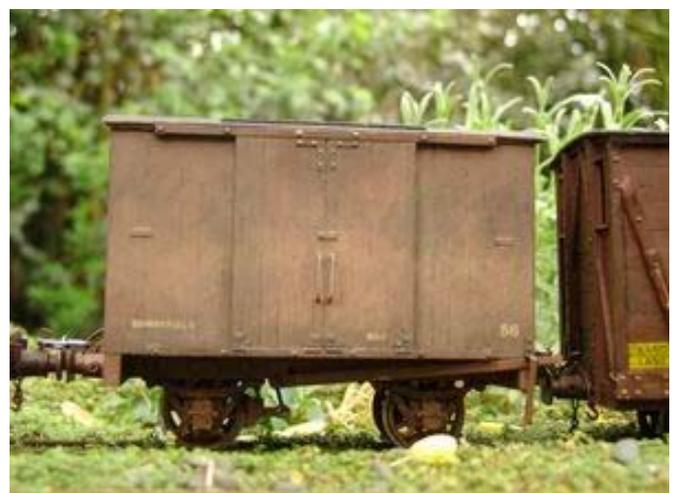
Two locos pass on the garden section



A Scene of the inside railway



A Real Garden Railway



Great detail on all the scratch built rolling stock

Photos and Text :- *Murray Bold*

LETTER FROM ENGLAND

By Stan Compton

A few years ago the Hereford Society had a guest speaker talking about his business that started off restoring narrow gauge locomotives, these including the petrol engined "Simplex" tractors used behind the lines in France during World War 1. Many of these engines are still in use in all parts of the world besides the restored railways in the United Kingdom.

Our speaker also told us about a system of elevated track he hired out to contractors who wished to remove earth etc from the rear of a property with limited access. Basically a simple version of the "Lartigue" principle as used in Ireland at Ballyburn years ago with the odd looking steam locomotives that straddled a monorail. A small petrol engined locomotive was used to haul a train of small trucks built pannier style. I am not clear whether the driver sat on the top or if he walked alongside, but it was a practical method that left no damage to a roadway not intended to carry heavy tractors.

So when I saw an Open Day advertised at the works of Alan Keef Ltd, we made a point of visiting the site. What I found was a small but very tidy undertaking capable of doing complete overhauls of narrow gauge steam locomotives, besides the "Simplex" tractors. One of the latter had been completely rebuilt and was on display on a test track in the yard alongside a new two foot gauge "Coffee Pot" type locomotive of the traditional 0-4-0 layout.

In steam, hauling a substantial passenger carrying wagon, loaded with adults who wanted a ride, was "Pixie" the Kerr Stuart 0-4-0 previously owned by the late Rev Teddy Boston who had built a two foot gauge track around his parsonage.

Possibly the locomotive had been in the works for overhaul judging by the sound of its exhaust climbing the steep grade up to the front of the yard on the short test track provided. A young lady was driving but the grade proved a challenge until her instructor made her open the throttle wide before hitting the climb that looked about 1 : 20 !!!!!!!

Inside the works were a number of three foot gauge locomotives under overhaul and you can imagine the amount of work required on engines that have had a long, hard life.

Modern heavy machinery provided proved their worth, judging by the finish achieved. Carbide tooling helps here, something unavailable when some of these engines were built.

There was a two foot gauge Baldwin 2-6-2, one of several hundred built for service in France during WW1. When the Americans really get going they can produce the goods. These engines were never intended to last and all the wear on this one's bar frames had to be built up with electric welding prior to re-machining back to size. This is where the big planing machine would prove its worth.

Looking at those bar frames took my memories back fifty years to when I worked at the Canadian Locomotive Company on a contract for 90 4-6-2 tender engines for India. One of my jobs was to lap the cylinder covers to the cylinders with grinding paste. Then clean it off, fit the studs, with white lead and then bolt down the covers. A hydraulic test of 350 psi proved the work. I recall those cylinders and saddle castings weighed 3 ½ tons. The work was completely new to me but as a recent immigrant to the country, one had to take any work available.

I digress ; back to Alan Keef works. I met a very interesting young engineer who had a boiler design and inspection service (graham@morrisengineering.fsnet.co.uk). He had just completed the design for a replica "Puffing Billy" c. 1813 for the Beamish Museum in the North of England.

"The original boiler was of the return flue type ie. The chimney and firebox door were at the same end connected by one large tube or flue. These types of boilers had a low amount of heating surface area and were consequently slow to make steam. The Beamish Museum required that the locomotive can work daily without constant attention and the boiler has been redesigned to incorporate two sets of tubes, forward and back from a hidden tubeplate at the far end. Its original construction from lots of small pieces of wrought iron plate (large pieces could not be made at that time) and this has been changed to steel and simplified where not visible but externally it will look exactly as the original".

This description is by Graham Morris and the work has been contracted out to a specialist boilermaker as does Alan Keef Ltd.

It was interesting to see how work was produced in those early days but I was shown a new forging for the project made at the only firm left in the country. All similar work in future will be obtained from India where good service and quality are available.

It looked as if Alan Keef Ltd were responsible for construction of this replica because the new boiler was mounted on two massive oak beams.

In the paint shop was a rebuilt narrow gauge wagon looking very smart with new tanalised timber sides and decking. It was a very interesting visit to a small works on the edge of the village of Lea on the A40 not far from Ross-on-Wye, and I look forward to returning next year to park in the same field of wheat stubble. Incidentally, I saw no sign of the elevated monorail system, so maybe other work has taken over.

I have just completed a new boiler for a Hunslet 5" gauge small quarry engine. Why I am starting another locomotive at my age I don't know. At least I know what I am doing unlike the little fire engine that has been put to one side but not forgotten. I have had the Hunslet cylinders for some years so at last they will be machined and put to use. One of our Hereford members is building a Hunslet, not a simple engine, as a first attempt only he is contracting out most of the work.

An American visitor was shown the London Eye, the large Ferris Wheel, "Say that is really something." "Yes but wait till you see the Guinea pigs that use it !!!!"

HOT AIR ENGINES

By Doug Chambers

For most of the model engineering fraternity hot air engines draw our thoughts to small, hand held devices that require careful machining and close tolerances if they are to work. The largest I had seen was a commercially made type that weighed about 500 lbs (227 kilos). It was in Australia and it drove a small water pump lifting water up into a holding tank on a farmhouse. No pressure was involved and the diameter of the hot air engines piston was about six inches. I did not believe that hot air engines were made any larger than this until I read about a ship called the 'Ericsson'.

The ship's motive power was a hot air engine, designed by a man called Ericsson. The vessel was built in 1852 at a cost of \$500,000. The length was 260 feet, breadth 40 feet, draught 17 feet and had a tonnage of 2,200. It was propelled by 32 foot diameter paddlewheels and these wheels were powered by the four working cylinders each 168 inches diameter and having a 72 inch stroke.

The four air compressing cylinders were each of 137 inch diameter with a 72 inch stroke.

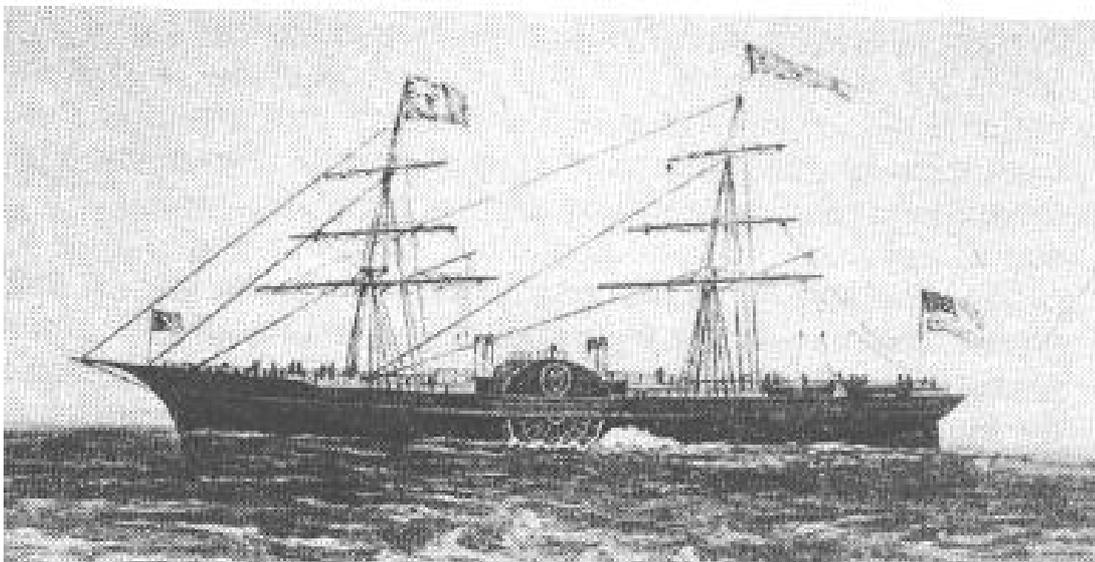
During trials the 'Ericsson' achieved speeds of 7 knots. Similar size vessels of the Collins Line, the 'Baltic' and the 'Pacific' were able to reach 14 knots but burned 58 tons of coal every 24 hours to achieve that speed. The 'Ericsson' used 6 tons of coal in a 24 hour period.

During a final trial in March 1854, the 'Ericsson' achieved a top speed of 10 knots before being overwhelmed by small tornado which lay the vessel over until the open starboard ports were under water.

So much water came on board that the ship could not recover, especially as the crew panicked and ran up to the deck without attempting to close the ports.

Eventually the 'Ericsson' was refloated but converted to conventional steam power and used as a Government transport during the American Civil war. Later she was converted to a sailing ship and employed by the British Government to carry coal to the Pacific Station.

Problems found with the hot - air engine were due to failure of lubrication due to dry heat, joints loosening and oxidation of parts.



The Generator