



Newsletter of THE PALMERSTON NORTH MODEL ENGINEERING CLUB INC

Managers of the "MARRINER RESERVE RAILWAY"

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No 355

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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 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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Palmerston North

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This Months Featured Model



Report on the MARCH Meeting.

In March the club visited Triple "R" Engineering in Kauwhata on Rangitikei Line just outside Palmerston North. The name stands for "Repair, Rework, Rebuild". A couple of dozen members attended this most interesting tour which had been arranged by Chris Morton.

The company has been located in this old dairy factory building for approximately 30 years and employs around 18 staff.

As the name implies the main focus is on reconditioning machinery and parts. Although they will consider all kinds of requests and have undertaken some quite unusual jobs. They also do quite a bit of Research and Development.

The factory is full of lots and lots of old, mostly large, machine tools. Each one has its own unique characteristic and use. Many have been put together from parts from different equipment in order to have a machine that will do a specific job.

The company does a lot of work for the pulp and paper industry. Some of the other current jobs include refurbishing parts for the Wab steam locomotive in Feilding and repairing the Ashhurst Flood Gates.

At the end of the tour we were given a demonstration of a high temperature, high velocity, metal spray unit controlled by a six axis robot. The robot is programmed from a hand held controller. A great demonstration.

All in all it was a very informative evening which was topped off with some hot food nibbles from Chris Morton to go with our tea.
Cynthia Cooper

FOR SALE

A Lux drill mill.
It has eight speeds, and a three morse taper. It comes with a stand, 13mm chuck. The table length is 20 ¼", width 6 ½".
Sideways travel 13" and fore and aft travel 6".
It has a 1hp motor, colour is light green.
Asking price \$1,100 ono.
David Neilsen 06 3551520

Its that time again Annual General Meeting

The April Meeting

This will be the AGM, and it will be held on the 22nd April at 7.30pm, in the Hearing Association Rooms, Church Street, Palmerston North.

Members should be giving some thought as to who they wish to have as the Officers and Committee for the coming year, and also who should be Clubman of The Year and be prepared to vote accordingly.

After the meeting a short talk on the highs and lows of the Nelson Convention with Supper to follow.

COMING EVENTS

Mid Week Run at Marriner Reserve Railway

25th May between 10.00 am and 2 pm
Please contact Doug Chambers beforehand.

Track running at Marriner Reserve Railway

May 2nd from 1pm to 3pm
May 16th from 1pm to 3pm

Note:- We will need helpers this weekend as many of our members will be at the Thames Open Weekend

Open Weekends

Thames Small Gauge Railway 15 -16 May
Manakau Live Steamers 5-6-7 June

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

THIS MONTH'S FEATURED MODEL

Many years ago, not long after Stan Compton had finished his 5" gauge 'Hunslet', named 'Maid Marion' he offered me a drive. Ever since then I have had a yearning to build a 'Hunslet' of my own. I was impressed with the ability of the boiler to produce steam and the power of the 1 3/4" bore cylinders.

The years passed and there never seemed time to build a 'Hunslet'. I knew Don Dudley had started building one and when I found that he had returned to his previous hobby flying radio-controlled aircraft I asked him if he would consider selling the 'Hunslet' project to me.

Don agreed to sell as pain in his back does not let him stand at the workbench for very long, and a price was settled. A few months later I was building a couple of boilers so I made the 'Hunslet' boiler at the same time.

Then a couple of years passed during which I was too busy with work for other people to look at the 'Hunslet' which appeared to have become firmly settled under the bench.

In August last year there was finally time to make a start. The chassis was not ready to run on air so work began at that point. The first job was to fit medium tensile steel tyres to the cast wheels. The engine weighs in at over 200 lbs so derailments at points would have seen sections of the cast iron flange broken at that weight. Apart from minor changes I followed Don Young's drawings.

I decided to fit an injector with the water supply drawn from the saddle tank. This can be a source of trouble as the water in the tank gets quite warm being heated by the hot boiler barrel underneath and also if a check valve leaks a bit (they often do) then sometimes the injector will refuse to work due to the water being too hot. I fitted a large diameter drain plug in the underside of the tank so that the water can be quickly drained from the tank and then the tank can be refilled with cold water and once the injector has cooled down it will start working again.

After about 350 hours work the 'Hunslet' was complete. As the other two Hunslets in New Zealand are painted red and have cabs and another being built by Laurie Perkins is also to be painted red and have a cab, I decided that mine would be glossy black and not have a cab.

On the April 1st, I took the 'Hunslet' down to the track at Marriner Reserve the trial run.

The engine was a bit tight as is usual but began to free up with each successive lap.

I am very pleased with the locomotive. I have got a name in mind for it, and the name and the reason why that particular name was chosen will be the subject of an article in a future Generator.

Doug Chambers

LETTER FROM ENGLAND (Wellington NZ)

by Stan Compton

I am writing this in New Zealand as we are visiting our family here. I was able to visit Peter Carr and watch their video of the Nelson Convention. What a lot of work has been done there since my last visit, such a variety of locomotives, about seventy I believe, so many larger ones these days. Our Hereford member Richard Donovan, was running a Gauge 1 engine. Richard has been visiting New Zealand and Australia for many years, first of all when he and Elizabeth his wife, first qualified as Doctors and were employed by Shaw Saville Shipping Company as the ship's doctors. It is believed that she took on the burly First Mate when she put a seaman with an injured hand on light duties. This did not suit the mate at all.

I read about Mike Coglan in the 'Blast Pipe', this took me back nearly forty years when I was building my first locomotive 'George the Fifth' and needed some advice so I visited Mike in Wanganui. He produced a 'Juliet', I think, and it was examined on the kitchen table. I was most impressed and I had a lot to learn in those days, still have !!!! 'George the Fifth' is now in Twickenham near London, but probably needs a new boiler.

We got to Kapiti on a running day, they have a nice track in the park by the sea, very busy giving rides. I timed them at six minutes each lap, at one dollar a ride is good value, at Hereford we charge one pound –fifty pence (approximately three dollars!) for a twelve minute ride. There was just one steam loco a 7 1/4" gauge 'Mountaineer' making light work of the single trolley load, The 'ICE Train', just loco and stock trolleys, the 'Intercity' ran well, all full loads. A 'Crocodile' was set up with dummy workers on a platform in between the pantographs, supposedly checking the

overhead wires. This looked very effective and worth the effort. I hope I have used the correct name for the locomotive. Another electric locomotive painted red, was it an Ec? The bogies looked shorter than the one I made. A very simple tram took my eye, about 1.4 metres long and .7 metres high, hauling a four wheel trolley. This carried the driver and one adult. The driver had a warning bell to strike that had a pleasant tone. All the drivers were busy so I kept clear.

Almost all the 7¼" gauge locomotives had been at Nelson for the Convention which I gather was well organised and successful. Reminded me of the time that I took my 'Enterprise' locomotive named 'Edward' to an earlier Convention. Barry Percival drove for the whole time dressed in NZR black shirt and white tie in the 27 degree temperature at Blenheim. That locomotive is now in St. Albans, United Kingdom. It was sold from New Zealand via the Internet to the UK. It was run at Reading for two years by Mike Palmer of www.stationroadsteam.com

From Kapiti we moved north to Otaki where there is a garden railway gauge 1 called 'Loco' open to the public, for information phone 06 364 6506 or info@loco.co.nz A 17 year project to build scale sized models of a mine, timber mill, wild west town complete with 'Honkey Tonk' music.

A lot of American locos and rolling stock, all electric, the ten wheeler appealed to me with its slow speed and very effective simulated exhaust beats. We had our picnic lunch in the grounds, it was all worth the admission fee. Someone had put a lot of work into the site to build all those model early American towns. Very extensive track lay-out through flower beds with small pine trees that are growing fast.

I gather that Peter George from New Plymouth has acquired my 3" scale Ransomes hay-baler that I built from drawings supplied by Reading University, actually an annex devoted to saving prints of English Machinery, or was it perhaps the Museum of English Rural Life? Nice to know that the baler is being put into use again. I found that the soft wire used by florists was ideal to tie the bales with. How the children loved to acquire a bale to take home with them, New Zealand children all know what a bale of hay is.

In all the years we lived in New Zealand the Johnsonville Line was considered impractical, but we stayed for a week in Khandallah and I could see that common sense has prevailed and

it with the Hutt Valley are getting a new lease of life. New extended platforms to accommodate the new units being built in Korea, the old stock has been in use for fifty years, longer than its intended life I imagine.

I have been reading about the D Day invasion of France, my bit of the war only I was left back at the landing craft base near Southampton. On the day a 'Horsa' glider was under tow to drop troops behind the beach-heads in Normandy. As they approached their landing zone the tow line was slipped and by a bit of bad luck both the pilot and co-pilot were killed. One of the troops, a cook pushed the dead man out of his seat and grabbed the control column. He had never flown anything before but with luck and common sense he managed to land the glider without smashing it up, saving the lives of all on board. His Commanding Officer put him up for a D.F.C. but it was turned down!!!

BUILDING MODEL LOCOMOTIVES

By Doug Chambers

I have been asked several times why I haven't written any articles on how to machine many of the various awkward parts required to complete a model locomotive.

There are two very good reasons why I haven't produced anything in that line. The first is that I am a motor mechanic by trade and during my apprenticeship we were shown a lathe, told this is the headstock and this is the tailstock; forget it as it has no application to the motor trade!!

The second reason is that I have always felt it better to sit in the corner and be thought a fool, than to open your mouth and prove it.

Therefore if you are having trouble machining or trying to work out how to machine something, then you are better to ask Richard Lockett (a fitter and turner by trade) Ken Neilsen, Chris Rogers or Graeme Hall whose work we have all seen and admired.

However during the past ten years much of my work has been the completion of, or overhaul of model locomotives. These engines were being built or had been completed by men of varying skills, from the amateur having a first attempt to the very skilled. I was somewhat surprised then to find the same two faults showing up in many of these engines. The faults were in the quartering of the driving wheels and the lift of the stainless steel ball valves in the axle driven and

hand pumps. Often the lift of the balls in the check valves was too great as well. The lift of the balls for an axle driven or hand pump should be no more than one fifth the diameter of the ball. And the same for the check valve the pump is supplying feed water to the boiler through.

Just watch a 5" gauge loco with small driving wheels scooting around the track. Remember each time the wheel rotates the piston of the pump has cycled in and out and the ball valves have each opened and closed.

I have often heard a driver complain that his axle pump only works when the engine is driven very slowly, this indicates that the balls have too much lift and when the engine is being run at speed the balls are not returning to their seats until the stroke is nearly over.

Quartering wheel sets: There are many different ways of doing this. Many involve V blocks, and all sorts of measurements, shims etc, and the more complex a method is, the more likely an error will creep in.

My own method was described in Model Engineer many years ago. I press one wheel onto the axle, slide on the axle boxes and mount the axle between centres in the lathe. The crankpin of the wheel near the chuck is lined up to be as near vertical as can be managed. The chuck is rotated until the crankpin leans against a chuck jaw. Put the lathe in back-gear and ensure that there is no backlash resulting in movement of the chuck. I usually put the chuck key in to the chuck and with a piece of welding wire tied to the chuck key and to another fixture and then the chuck will be immovable.

A piece of steel is then fixed in the tool holder set at a height of half the diameter of the crankpin below the centre height.

The second wheel is then fitted on to the axle and twisted around the axle until one crankpin is firmly against the chuck jaw and the other crankpin is resting on the steel fixed in the tool holder.

When the 'Loctite is dry the wheel set can be removed and the next set assembled.

My own preference is to fit a 'Scotch Pin' to each wheel and axle just to make sure the wheel cannot shift on the axle.

It will be seen that this method cannot guarantee that the wheel sets will be at exactly 90 degrees, but each wheel set will be exactly

the same as the others which is absolutely vital if the coupling rods are to be free from binding.

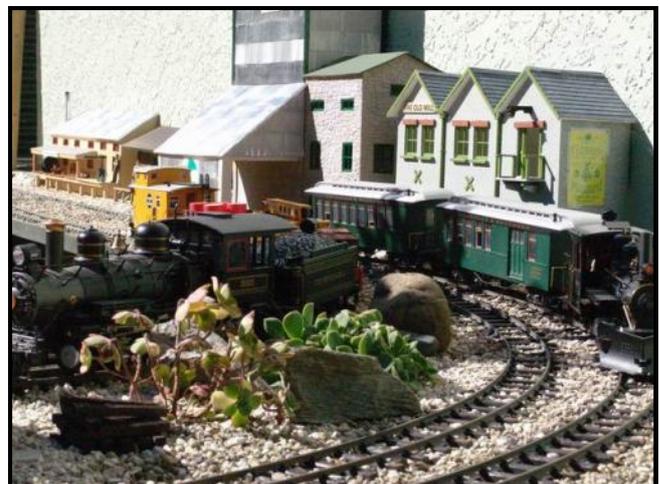
I hope this will help someone get the wheels turning with plenty of feed water available for the boiler!!!!

A Day in the Garden

Sunday 11th April saw Chris and Pam Rogers open their garden railway to the members of the Wellington Garden Railway Group. There were 11 members in attendance, on a brilliantly fine and warm Sunday afternoon.



The branch line to the Mill



A passenger and freight pass the industries.



It was so hot some of the guests had a beer.

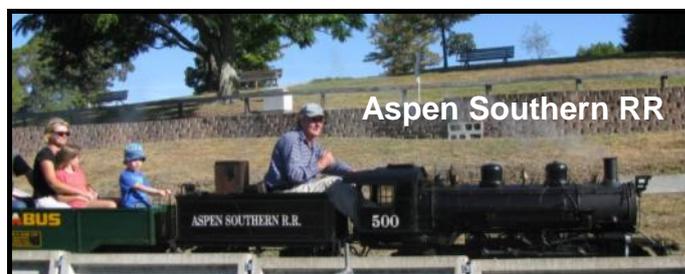
Easter 2010 at Keirunga Park Railway

On Friday 2 April we headed off to Havelock North for what was our first out of town with "Robyn". I have been under some pressure to attend this event as we have visited many times before but of course never had the opportunity to drive on the track. Richard was there when we arrived so was able to induct us a little to the track and show us the signalling protocols etc. Barry turned up later so there were three club members in attendance. Daniel soon had "Robyn" fired up

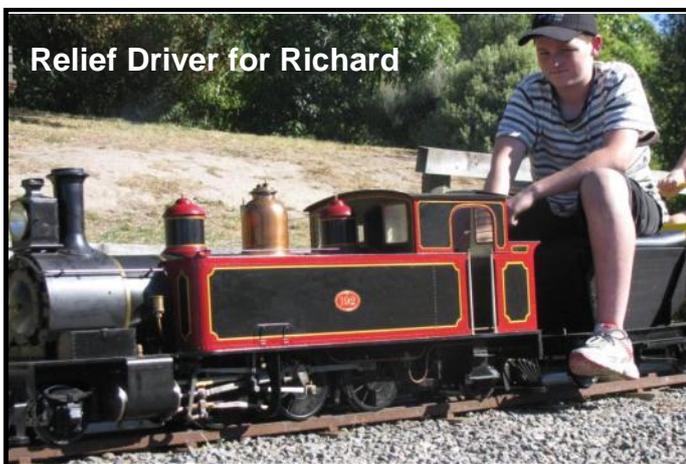
Most days saw 6 to 7 engines steamed up, with assistance from several "diesels", most impressive was Ka 971 which of course powered up the grades and made a very realistic engine note.



and was keen to put his newly acquired licence to use. Friday afternoon was relatively quiet so all the lads got a little more driving practice and Richard had a few relief drivers for the W as well.



On Sunday we reluctantly headed home, "Robyn" has clocked up over 50kms and we had done a fair share of hauling passengers. With the great weather, nice surroundings combined with one of the more interesting tracks around, we had a great time.



I must add the hospitality of the KPR club stood out most, with a core group in the kitchen producing 3 great meals each day and all the track staff keeping up with steady flow of passengers and the odd wayward driver.



So a big thanks and look forward to seeing you again next year.

Jon Mason