October 2010
No 361

THE GENERATOR

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

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

Place stamp here

This Months Featured Model

REPORT on the September Meeting.

Several members brought along some of their digitally stored photos. There was a wide variety of pictures ranging from Narrow boats on canals throughout England, Gauge 1 railways in New Zealand, model traction engines and an early Caterpillar '60', and even pictures of our treasurer achieving an indoor 'rock climb'.

Brian Leslie had a picture of a NZR 'Q' class at Kingston with the 'Earnslaw' in the back-ground.

Once again there were quite a few examples of members work on 'The Table'.
Robert Edwards had a set of coupling rods and a connecting rod for his 7¼" gauge NZR 'F'.

Graeme Hall had the crankshaft, master rod and connecting rods, cylinders and drawings for the three-cylinder aircraft engine he is building.

Ian McLellan had the chassis and bogies for a new driving truck he is making.

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

FOR SALE

Eccentrics, straps and links for a Stuart Turner No 4 steam engine.
A small horizontal boiler 50mm diameter by 150mm long. Meths fired, Smithies type.
No boiler certificate.
Graeme Hall 06 3442495

October Club Night

7:30pm, Thursday 28 October 2010
Hearing Association Rooms
Church Street, Palmerston North

Members are invited to bring along their current project. With the long period of wet weather members should have been spending long hours working in their sheds and making good progress so bring it along and let us all see what you have been up to.

COMING EVENTS

Mid Week Run at Marriner Reserve Railway

26th October between 10.00 am and 2 pm
23rd November between 10.00 am and 2 pm
Please contact Doug Chambers beforehand.

Track running at Marriner Reserve Railway

November 7th from 1pm to 4pm
November 21st from 1pm to 4pm

Open Weekends

Tauranga November 13 -14

The closing date for the next issue of The Generator is Friday 12th November

Club End of Year Dinner

RSA

200 Broadway Avenue

Palmerston North

Thursday 25 November 2010

Drinks 6pm
Dinner 7pm

The cost is $25.50 per person for a full carvery meal including desert. Pay on the night as you arrive. We have a designated section set aside for us which will be clearly marked.

We need to give the restaurant an idea of numbers. Please let us know if you plan to attend and how many will be in your party.

Dave, 027-457-6175, Newstead@clear.net.nz
Cynthia, 354-7100, Cynthia@trains.net.nz

THIS MONTH'S FEATURED MODEL.

By Ian Stephens

A 1" by 2" Inverted Engine.
This inverted engine is a very simple engine and a smooth runner.
However the building of it gave me one or two moments of concern as I will mention.
First of all, the flywheel, which was turned from a piece of mild steel plate 9" by 1" thick.
This was too big for my lathe and I had to call on Richard Stevens to turn it for me on his big lathe and finish off the job on his big mill.
So all compliments of the flywheel's appearance should be directed to Richard.
The main shaft is straight with a crank on one end, not a crankshaft as such on normal engines.
The crosshead was made from a piece of 1" square steel which took a bit of making.
Turning and milling took quite a while as the material was very hard.
Now comes the hard part, the piston ring. I had never made one and never thought that I would. My way out of this problem was to ring Doug Chambers for information which he was only to pleased to divulge. Thank you Doug.
Carrying out his instructions, the job went well.
Finding a piece of cast iron was the first job.
I settled for a window weight.
When I mentioned this I got a few frowns.
I cut several pieces off until I got a perfect piece of nice clean cast iron. The ring was then machined to the specs Doug had supplied.
The nerves were on edge while the final cuts were made. I then made the cone to expand and anneal the ring over. Once the ring had cooled, it was put on the piston which was then fitted to the cylinder bore. A perfect fit. Whew!!!
When the engine was completed it was found to run very well on just 10 psi.
Thanks to those who gave advice and assistance during the building.

LETTER from ENGLAND

By Stan Compton.

Recently I was taken to the Heritage Motor Centre, Banbury Road, Gaydon, M40, Junction 12. Brian was my driver, such a great day out with so much to see, from a 1912 'Albion' car, with French 'Marchal' headlights. At first I thought it was a Rolls Royce 'Silver Ghost'. There was even the six wheeled car built for the 'Thunderbirds' film series.
Did you know that the little Austin '7' was built under licence in Germany in the thirties and called the 'Dixi'? They had the well-known blue and white badge of the BMW firm on the radiator.
I happens that I learnt to drive in a 1930 Austin Seven and later bought a 1938 version in 1955 from a District nurse who had bought it new. As time went on that little car got harder to start and was a constant worry because when a telephone call came that she was needed to deliver a baby, the car was vital transport.
I fitted a new carburettor and the hard starting problem was solved.
I remember men speaking to me after seeing the licence plate, saying how they would stand in the road waiting for the nurse to arrive!!
Any mechanic going through the Museum would recall problems he had to repair, often caused by poor design. The famous 'Mini' was such a case, customers simply accepted the problems that should have been sorted out early on. There was a notice board with postcards pinned up by visitors, invited to put in their comments. One read " I bought a new 'Mini Clubman' for 375 pounds in 1963, also

married my first wife and went on holiday. The gearbox failed costing me 68 pounds to repair, I am now onto my second wife and I wish I still had that 'Mini Clubman'!"
We stayed for six hours and still more to see, a cooked meal was available at a reasonable cost. We could hear comments from visitors looking at a pre-war car, " I had one of those, great car" , but they forgot the poor brakes, engines that boiled in the summer climbing a grade, but even so cars had a character years ago.
When I think of Len Southward's Car Museum, all built with his own efforts, such a credit to his drive with no backing from the car industry as was the case with the Heritage Motor Centre.

You may recall that I told you sometime ago about the cross-head seizing up to the slide bars on the new 7¼" gauge loco bought by a group of our members? Well I had assumed that the engine was lubricated with car engine oil, which is not ideal but better than the 'Three in One Oil' someone who usually runs Gauge 1 engines was using. No wonder it seized up!!!!
We have a member who is building a 7¼" GWR locomotive; it is taking him a lot longer than he thought it would. His machine work is good but being a first attempt he has a lot to learn. He was asking someone how to use the smokebox vacuum to operate the brakes!!! Didn't GWR have a vacuum pump on the crossheads of some of their locomotives? But usually an ejector is quite suitable on larger models.
Another member acquired a 5" gauge 'Jubilee' class locomotive. On his first steaming something went wrong with the throttle restricting the flow of steam. Later it was found that the new throttle slide made of Nylon not Teflon had been fitted. The Nylon had melted blocking the steam passage; it took two of us two hours to drill out the Nylon while I held the Vacuum cleaner nozzle to suck out the bits in case they got into the superheater circuit. So be warned, Nylon looks like Teflon but has a different feel. Carbon impregnated Teflon is grey in colour and more stable than the plain white. I have just replaced a pair of stainless steel piston valves on a 'Speedy'. They had started to 'blow-by' and the new ones are made from carbon impregnated Teflon which should last.

We have just returned from a holiday in the Lake District, travelling with a coach hire firm who took us to Lake Windermere with a trip across the lake to connect with the 'Lakeside and Haverthwait Railway'. The train was full of families on holiday and the 'Barclay Tank' was painted in Caledonian Blue. The original station at the end of the line is an elaborate stone building, railways were meant to last when it was built.!!
A trip on the 'Mountain Goat', mini coaches suitable for the very narrow roads and steep grades in that area was a full day ending up on the 'Ratty' as the Ravenglass and Eskdale Railway is known. Built to fifteen inch gauge our train engine 'Hercules' soon got his train moving at a good clip, the hardy passengers out in the open carriages. One of our group was left on the train because our guard sat or stood in the middle of the train and the platform was not long enough.
We also called at Muncaster Castle nearby and witnessed a flying display of various birds of prey, all done by rewarding the birds with food.!! I knew owls hunted with their hearing in the dark but I was unaware that they could hear the heartbeat of a mouse a metre away.!!

CLEARING THE SLIP

By Doug Chambers

No doubt you all saw the slip in the Manawatu Gorge that derailed the locomotive of a milk train, either on TV or in the papers. But when the machinery arrived to clear the slip material away it was obvious that there was going to be a different method used this time.

The first picture shows the way it used to be done. An excavator has been unloaded and the work train consisting of one wagon and a diesel locomotive is positioned to allow the excavator to load the wagon. When loaded the wagon will be towed away to where it can be unloaded, before being returned for the excavator to load again.

Meanwhile the excavator stands idle, not a very efficient way of shifting the slip material but until now all that could be managed.
When some slips were being cleared it would often be well over an hour before an empty wagon was returned for the excavator to load.

The second picture shows a row of new wagons lined up, but how is the excavator going to load them all?

The third picture shows the details of the wagons. Each wagon has a sloped elevator in the floor and material can be moved along onto the next elevator which transfers the material onto the next wagon and so on until all the wagons are filled although the excavator has only been loading the wagon nearest the slip. Each wagon has an operator and a diesel engine powering a hydraulic pump which supplies oil to the oil motors that move the conveyors and the elevators.

The fourth picture shows a wagon transferring material via the elevator to the next wagon.

The fifth picture shows the wagons unloading. The elevator can be turned up to 90 degrees to the wagon and then simply empties itself. Fortunately there was a bench quite close to the slip where the wagons could be unloaded without any danger of the slip material falling in to the Manawatu River and upsetting the fish.!! Although there is still only one excavator loading the wagons, two others can be seen bringing material closer to it and the large crane (with lattice type jib) is still there after having lifted the locomotive back onto the rails. Using these wagons for clearing the slip material will have sped the job up quite a lot. The Manawatu Gorge is a cold windy place even on a fine day and the men would have been pleased to get out of there once the track was reopened.
The wagons were designed by Plasser and built under licence in Australia. However they were not designed for this particular work, but to be used with the Ballast Cleaning Machine. As the Ballast Cleaning Machine moves along the waste material is transferred into a hopper wagon from an elevator. When the wagon was filled it had to be taken away and emptied and the Ballast Cleaning Machine had to stand idle until it was returned. Now with the six wagons fitted with elevators the Ballast Cleaner can be kept working for longer periods with less down time waiting for the return of an emptied wagon.

I would like to thank Terry Jowett, Chris Saunders, and Laurie Gudsell who all sent me the pictures that made the article possible.

Spring is Here

The first run day in October.
Doug, Richard, Ken and Ian enjoy the sun.

Are you getting your monthly Email advising you that **The Generator** has been published.

"A Message from the Database Administrator"

A number of members have not been getting these Emails. I have checked the server logs and they are being sent. If you are not getting them please check your **JUNK MAIL** or **SPAM** folders. You may have to add the address to the safe senders list, or alter your spam settings at your Service Provider.
The PNMEC Committee sends your subs invoices and other notices by this method.