October 2015
No 416

THE GENERATOR

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 4414**

PRESIDENT	SECRETARY	TREASURER	EDITOR
Robert Edwards	Fin Mason	John Tweedie	Doug Chambers
(06) 280-3057	(06) 356-7849	(06) 358-0150	(06) 354-9379
pnmec-president@trains.net.nz	pnmec-secretary@trains.net.nz	pnmec-treasurer@trains.net.nz	pnmec-editor@trains.net.nz

PNMEC Home Page www.pnmec.org.nz
Email:- pnmec@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 difficult. We may even offer you a cuppa.

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 4414

Place stamp here

This Months Featured Model

Report on the September Meeting.

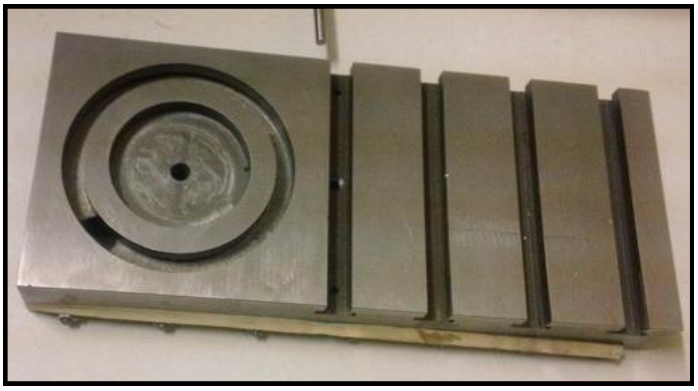
The President, **Robert Edwards** on behalf of the Committee, thanked all those who exhibited their work and those that helped over the weekend of our recent Model Engineering Exhibition. He noted that the event had been very successful and enjoyed by public and members alike.

Richard Lockett showed some photos taken by Albert Percy Godber who was a fitter-turner in the Petone Railway Workshops in the very late 1800s. He was evidently a keen amateur photographer and many of his subjects were the railway locomotives of that time.

Robert Edwards had a drawing and parts he has made for 'Jim Ewins' mechanical lubricators. He requires three, one each for the two NZR 'F' class locomotives that he and Terry Jowett are building and one for the NZR La that he has recently bought.

Graeme Hall is progressing with his 7 cylinder radial engine. This month he had the seven pistons, fourteen valve rockers (bushed and case hardened), fourteen valves and rocker pillars.

Philip Bealing showed us a hot air engine he has under construction. He also had with him a cross slide for his Chinese lathe. The original cross slide had no T slots and he wanted a cross slide with T slots and so he got to work and made one.



Merv George had a digital readout that he showed us and explained that he was going to fit it to the cross slide on his lathe.

Chris Morton needed something soft to fit on the jaws of his lathe to avoid marking the work. He opened up a drink carton and used the polyethylene from the inside of the carton. Others suggested he could have got a six pack and after consuming the contents cut the cans up, the aluminium making a good source of 'soft jaws'.

October Club Night

7:30pm, Thursday 22 October 2015
Hearing Association Rooms
Church Street, Palmerston North

The theme for the evening :-
You are invited to tell us about the coffee table magazines that you subscribe to, either past or present.
Also bring along your current project for '**Bits and Pieces**'.

COMING EVENTS

Track running at Marriner Reserve Railway

October 18th from 1pm to 4pm
November 1st from 1pm to 4pm
November 15th from 1pm to 4pm

Open Weekends

Havelock North
Labour Weekend 24th -26th October

New Plymouth
Labour Weekend 24th – 26th October

Feilding Steam Rail

are having an Open Weekend on the 14th-15th November. 10am - 4pm
PNMEC members will be operating the portable track. You are encouraged to come and take a look.
If you can, give us some help.

The closing date for the next issue of The Generator is Friday 13th November

WANTED

In the **'Engineering in Miniature'** magazines from July 1999 to July 2006 there is an article by Doug Hewson on the building of a 5" gauge British Rail 4MT tank engine. Eddie Bleackly would like to borrow the magazines to photocopy the articles or arrange at his expense to have them photocopied. Eddie can be contacted on 06-343-6571 evenings

Club End of Year Dinner

PN Cosmopolitan Club
22 Linton Street
Palmerston North

Thursday 26 November 2015

Drinks 6pm Dinner 7pm

The cost is $25 per person. (Pay as you arrive.) They also have a licensed bar for you to purchase innervating liquids.

Bring the family and join us for a relaxing lead into the summer.
We look forward to seeing you there.

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

Dave, 027-457-6175, newstead@clear.net.nz
Murray 326-9665, engineer@inspire.net.nz
Cynthia, 354-7100, cynthia@trains.net.nz

THIS MONTH'S FEATURED MODEL

THE SAGA OF TR 38 Part 1

By Neil Burn

Whilst growing up in Cobden, Greymouth, as a teenager, my friends and I would bike over to the railway roundhouse at Elmer Lane in Greymouth. There was a small diesel locomotive, which was used for shunting coal wagons to load the steam engines in the round house.
The engine drivers would give us the keys to this diesel loco and we would shunt wagons, change points and spend the afternoon playing trains.
As an adult with a family we shifted to Nelson and joined the Nelson Modellers Club, and I decided I would like to build a locomotive. What better choice than the loco I used to drive at Elmer Lane! I researched the loco's history and found out it was TR 38 and was built at Prices Foundry in Thames, North Island, NZ.
I sent a letter to Price's Manager regarding information on plans that may still be available for the loco, stating that I wished to build a model of it. He very kindly replied to my letter and sent me a large envelope, which included a set of plans for the loco which they still had on file.
The plans had been drawn at 5 inch, so it was an easy job to scale them up to 7¼ " gauge and then I commenced constructing the chassis, running gear, wheels and axles etc. I found an old steel window frame with sides the correct profile for the chassis side rails. I used thick walled hydraulic tube for the wheel rims and the spokes and counter weights were fabricated.
A jig was made to hold the wheel parts together while they were welded. The tyres were then turned to profile and the axles machined up.
The chassis was then assembled and the dummy sand–boxes were fitted.
Next step was to find a suitable internal combustion engine to suit the locomotive.

To be continued.

LETTER FROM ENGLAND

By Stan Compton

We had an Open Weekend at Hereford recently and one visitor from Wales brought a 5" gauge mainline electric locomotive with a rake of mixed goods wagons complete with a guards van.
It did look very effective; one flat truck had a model army tank chained down with the gun barrel pointing towards the front. I was told that it should have faced the rear to follow correct army practice. The stainless milk tank with perfect riveting looked really good and I was told that it only covered a section of plastic pipe!!! Such a pity that we had so few visitors to appreciate all the work that went into the set up.
The same applied to a man of eighty who brought a variety of wooden models. He had removed the stage coach body so we could examine the workmanship that had gone into making the chassis. His threshing drum brought back memories of my days in the hay and straw business loading wire tied bales onto my truck, having to carry them on my back, which now tells me all about it when I try to get moving first

thing in the morning. The man's wife helped look after the very extensive display which included a 'Shand Mason' fire engine. The man told me that he had no idea of the amount of model engineering this required until he examined the working drawings. A case of learning new skills, all credit to him as the results were first class.

The shop where I print my photographs has recently got a new machine that the customers can use themselves. I struggle to use this new device which does everything except make the tea!! The old machine had a button that I had to press really hard to make it print but this new one has a touch screen which will duplicate my order if I am not careful. Sometimes a notice appears on the screen telling me that "You have 72 photos, do you want them all printed at great cost"? Sometimes a customer, who is getting tired of waiting while this old man struggles, offers to help.

Last month I talked about superheaters in model locomotives. I have always built the 'radiant type' out of stainless steel and protruding out over the fire. The return block is TIG welded so is unlikely to burn out. The copper elements as described by our old mentor LBSC will burn out even though they are protected in the superheater flue. This happened to Fred's 'Hunslet' so I removed them. On a cold day there is a lot of wet exhaust steam but it still runs just the same. The second 'Quarry Hunslet' I built was built as a saturated engine and under test with just a driver it ascended the 1:60 grade up to the station with virtually no pressure on the gauge to the astonishment of the driver. Large piston bores and good sealing rings. I sent the locomotive to my son Chris in Wellington and it is kept in his office in Lower Hutt.
Stan saw this Hunslet at the 2015 Bristol Exhibition.

A newspaper item told of the death of a sixteen year old cat named 'Tama' who had been living on an unmanned railway station on the electrified 'Kishigawa Line' in Western Japan. Known to be a stray and I suspect being fed by the regular passengers, the Railway Company had been reputed to appoint her as stationmaster, well maybe. A photograph depicted a ginger cat with black patches and a white face lying down with a miniature stationmasters cap perched on its head. How many cats do you know of that would wear such a cap? An apprentice 'Nitaka' is to replace her.

About 1962 when we first came to New Zealand I was given some copies of 'English Mechanics' containing articles by LBSC, the pen name of Curly Lawrence, who also wrote for 'Model Engineer' later on. His early articles got me started building locomotives. By coincidence I have been given two copies recently of 'English Mechanics' that had the description of the construction of 'Caterpillar', a 4-12-2 locomotive designed by LBSC for 2 ½" gauge.
The issues I had were from 1930 to 1939 when publication ceased. In 1975 a man wrote to 'Model Engineer' asking for information about constructing 'Caterpillar'. I wrote to him offering to send photocopies of all the information I had. He wrote back saying that I was the only reply he had received and that he would be grateful for any help with the chassis that he had acquired. I sent copies as promised but I heard no more so I suspect that the project never got completed.

Fred took me to a Traction Engine Rally yesterday, hot and dry weather with a variety of engines in steam. No miniature railway these days as nobody wants to volunteer to run one. The model tent only had plastic models on show but there was a diesel engine for a 1940 T34 Russian tank that was interesting. It had a double overhead camshaft operating two pairs of valves. The engine is of a V12 layout and thousands of these very successful engines were built. The finish was not important but reliability was paramount.

Looking through a junk stall I spotted a number of tidy, useful-looking wooden boxes with the name of a fish merchant of an East Coast Port printed on them. Made to look old and collectable, too good to be true and then I recalled seeing some elsewhere and realised they came from the Far-East in a container. We get 'China made' copies of the genuine

article and only an expert can identify the fake!!

Recently a badger got into my garden and then into my neighbours garden as well. I had to find where they got in and block the hole under the fence. Badgers are a real problem here. They carry TB and infected dairy cattle have to be slaughtered. When the Government allows a cull of the badgers groups of 'do-gooders' go out and interfere with the marksmen so a lot of time is wasted. Badgers have no natural predator but they catch hedgehogs and eat them alive.

From The Editor.

I have to agree with the comments made by Stan about superheating. The short run followed by a period stopped while unloading and loading passengers does not give the superheating a chance to show its real advantage. While the locomotive is stationary the cylinders, pipe work carrying the steam to the valve chest and the superheater elements themselves all cool down and the engine has to travel some distance and be worked quite hard before temperatures increase to a level where there is an obvious advantage being gained.

However in about 1989 I was able to see for myself just how effective superheating can be. I had taken my 5" gauge 'Princess of Wales' 4-2-2 with an eight wheel bogie tender down to Maidstone where Bob Walters with his 'Torquay Manor' was running. Towards the end of the day Bob suggested that we try something different. The children that we had for passengers were advised to go to the toilets now as once the engines started we would not be stopping for at least twelve circuits of the track. Tenders were filled with water and coal and the fires attended to, Huntley coal as there was no Aussie 'char' in those days. Passengers on board and away we went. The first six laps went as expected, firing on the run and adding water with the axle pump as required. Coal usage was about three shovels per lap but after six laps the amount of coal needed fell to just one shovel per lap and the amount of time the pump was employed to top up the boiler got less and less. By the time we had covered ten laps Bob had started looking back at me with an inquiring look on his face. As the fourteenth lap passed by I could see him peering into the 'Torquay Manor's' tender tank and soon he was forced to stop to take on more water. After the fires had been dropped and the locomotives loaded for the trip home Bob and I paused to discuss the 'long' run. That the engines had used less water and coal the further we went was indisputable. The only reason for this was that the cylinders, inlet pipes, and superheater elements had heated up beyond what was possible with the normal one or two laps that our passengers usually get.

I have, on many occasions been able to drive Ian McLellan's 3½" gauge 'Maisie' and I have been amazed at the spirited performance from this engine. I think because of its small size it 'heats' up very quickly and I have covered 10 laps of the Marriner Reserve Railway without stopping. Once a few laps have been covered it settles down to being fired with two 'teaspoons' of 'Aussie char' per lap, or four teaspoons per kilometre.

Murray Bold took his saturated 'Phantom' up to the Marae at Taumaranui where he was delighted to see Ken McIntyre with his superheated 'Phantom'. The track at Manu Ariki has a long steep climb for approximately two kilometres and Murray noted that both engines had similar loads. Both engines handled the grade easily but Murray noted that there was a lot more water left in Ken's tender tank than in his own when they returned to the station. Murray knew that Ken had improved the

draughting in his 'Phantom' where Murray's 'Phantom' had an 'as designed' front end and the superior draughting in Ken's 'Phantom' may well have given an extra advantage again over the superheating.

Well there you are; there are savings in water and coal to be made with superheated engines but the engine has to be worked hard over a considerable distance before any savings can be made.
If the track is fairly level and the loads are light then there will be little difference between similar sized superheated and saturated engines.

In the Newsletters from other Clubs

Blastpipe Petone The 7 ¼" gauge Dc4450 built by Dave Brownlow, Alan Spinks and Peter Gibbes is all complete and is having some final test running before being delivered to the Cross Creek Railway in Featherstone. The ex Napier Harbour Board 0-4-0 Fowler No 5 has left Silverstream where it was restored and is now at Mainline Steam's depot at Plimmerton.

Maidstone The weather has continued unfavourable leading a wife of one of the members to suggest that umbrella type roofs for the passenger wagons might be a good idea. The Upper Hutt Tennis Club is relocating to Maidstone Park. With a new sub-division opening up nearby the club members are hopeful of increased patronage.

Manakau Live Steamers The body work of Chris Draper's Kiwi Rail DFT is out of the paint shop. An article on Volkswagen's recent problems along with Ford, General Motors, Toyota and Firestones disasters in the past. Volkswagen's problem doesn't really have the potential to kill people unlike the cars and tyres of the other manufacturers that were responsible for the deaths of many hundreds of drivers.

Hawkes Bay Model Engineers. A local building franchise have offered to build a 'ticket box' for them. Members are very enthusiastic especially those who brave the elements selling tickets. Several of their members building traction engines, one in 6" scale.

Thames Model Railway Signs depicting speed limits are being erected at various places around the track. With membership at an all time low, a membership drive is to get under way.

Marlborough Model Engineers Some of their members are busy extending the raised track and making artificial embankments out of old car tyres and earth fill.

Nelson Model Engineers Members had a recent visit to the rescue helicopter, which is a BK117. This is a twin engine 750HP x 2. Also some tips on steaming your locomotive.

When is the next train ??

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