



## Newsletter of THE PALMERSTON NORTH MODEL ENGINEERING CLUB INC

Managers of the "MARRINER RESERVE RAILWAY"

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September  
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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 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 August Meeting.

**Richard Lockett** showed us pictures of the 'Trench Locomotives' used during WW1 to bring supplies up to the front lines. The 600mm rails were made up in short sections to enable track repairs to be carried out quickly. The nature of the ground the track was laid on was not really suitable for track-laying as having been heavily shelled and thus covered with water filled craters; the track was anything but stable. Several of the photos that Richard had found were of the narrow gauge locomotives lying on their sides in the mud, not derailed by enemy shelling but by track subsidence. As it is 100 years since the 'trench locomotives' were brought into use it was felt that a feature of their work could be made at our Model Mee Exhibition using Barry Parker's 'Mountaineer' as the centre piece.

**Robert Edwards** showed us pictures of the 'Island Princess', the cruise ship he and Margaret travelled around the Mediterranean on. It is a fairly large ship with 2000 passengers and a crew of 980. Interestingly it is powered by two big diesel engines and one gas turbine that can power the ship along at 24 knots. Robert said the ship was very smooth, no vibration from the engines and little indication of movement at sea.

## 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

## September Club Night

7:30pm, Thursday 24 September 2015  
Hearing Association Rooms  
Church Street, Palmerston North

The evening will be a 'Bits and Pieces' night so bring along your current project and be prepared to tell us all about it.

## COMING EVENTS

### Track running at Marriner Reserve Railway

September 20 <sup>th</sup>	from 1pm to 3pm
October 4 <sup>th</sup>	from 1pm to 4pm
October 18 <sup>th</sup>	from 1pm to 4pm

### Open Weekends

**Havelock North**

Labour Weekend 24-26 October

## 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

The closing date for the next issue of The Generator is Friday 9th October

## **THIS MONTH'S FEATURED MODEL**

by Murray Bold

### **3D Printing - Additive machining.**

In October 2013, Janice and I were off on a South Sea Island cruise. At the airport, before we left, I bought a "Shed" magazine, and on the front cover was a 3D printer kit made by 2 guys in Auckland. When the cruise finished I called the makers and purchased a kit. It took about 3 days to assemble and another day to set up and configure the open source (free from the internet) software on my laptop. After many calls to Auckland the machine was able to print plastic.

A month later, a friend, also in Ashhurst, bought a printer as well. Between us we got them both going to our satisfaction. It was still a mission to get it all sorted out and to produce reliable and repeatable prints.

From the internal stats the machine has done about 552 hours printing to date.

The machine cost \$1500.

Filament is \$55 a 125m roll.

I have bought at least 5 rolls.

The maximum job size is 220mm wide, 250mm deep and 180mm high.

The printer is not used every day but has a day printing at least once a week.

Lately I have learnt to use "OpenScad", a 3D drawing package, to create the prints that I need.

If you were at "Model Mee" you would have seen it doing its thing.

### **Letter From England**

By Stan Compton

Have you ever noticed that TV cameramen show no interest in anything mechanical? At the start of the Antiques Roadshow we see a British motor cycle with a German 'Stieb' sidecar approach and leave, it could be a 'Triumph Tiger 100' but we never see a side view. There is a program called 'Posh Pawn' where customers bring in expensive items to sell. A woman aged about thirty had a very special motorcycle powered 'trike', one of three built like a Formula 1 car with one wheel at the rear. In road trim it could

do 120mph and we saw it demonstrated on a track but unfortunately the cameraman never gave us a close up shot. The lady wanted ten thousand pounds for it but accepted half that as it was in a very limited market. It had a cockpit and spoilers, beautifully built, real professional work but we never got a look at its power unit.

I have got a very interesting striking clock to restore for a local 'Op Shop'. It was made in Germany pre WW1 by the Hamburg American Clock Co. The number typed on the makers label is not a high number so it must be an early example because the firm produced thousands, the same as the American firms did in those days employing skilled immigrants. As received, the case needed stripping of old varnish and repolishing. The motion had rust on the steel parts and the brass gears were oily, but the pawls (called clicks in the trade) on the spring drums were dry and seized up. The pawls were not worn and neither were the arbours (spindles to you and I) so I left it alone and now it is running well and keeping good time. To strip it right down is a lot of work and I am told that gears that have run together for years are best left alone. The clock now running and looking like it did when new has given me a lot of satisfaction and it should fetch a good price.

My great niece from New Zealand saw me in my workshop wearing a pair of dark rimmed glasses. "Cool" she said unaware that I had used them for forty years. My local optician told me that they were very well made and that they had been made in Australia. Unlike the fancy ones my wife wears, with no frames. The bridge has two one millimetre studs fitted into holes in the lenses and one of them broke while we were away on a holiday and we had no access to an optician. I was able to patch them up with a bit of wire and sticking plaster!! My wife says she will take a spare pair with her next time.

Fred, who owns a 'Quarry Hunslet' took me to Statfold Farm Railways recently where there were fifteen narrow gauge locomotives in steam. This railway is a private one that

has excellent facilities to restore engines to a very high standard. Last year we saw a 'Davenport' 0-4-0 tender engine that was made in the USA and recovered from India still with a section of tree trunk that had grown up through the valve gear. You can visualise the state of the engine.

It looked as if it were only fit for scrap. Now fully restored and in steam, it looked like it was brand new and it is now known as 'The tree trunk engine'. The 'Davenport' engines are very rare over here.

One of our members told us an interesting tale about his time in the transport trade. One day he was sent to a well known chemical firm to collect drums of spent radio-active material. After loading up he drove across country to an Atomic Power station where he was directed to park in an inspection area where his load and trailer was found to be radio-active!! He was immediately taken to a decontamination site where he had to strip off his clothes and stand under a powerful hot shower. His watch, ring and clothes were treated elsewhere and returned to him. Meanwhile a huge hole had been dug and the articulated trailer still with its load on board was dumped in it and covered over. The driver now had to tell his firm that he would be late returning driving the tractor unit, but minus the trailer!!!!

There is one subject often talked about among model engineers who have built and run their locomotives, is whether to superheat or not. Theoretically the dry steam produced in a model locomotive should result in a livelier engine but in fact the difference is not noticeable, just clouds of steam on a cold morning. I have tried both and this is so but it is a thing of scale. A full-size mainline locomotive working hard does benefit with a saving in coal consumption. Narrow gauge locomotives are seldom superheated, speeds are slow and coal consumption is unimportant. My first locomotive built in 1968 was a 'LNWR George the Fifth' in 7¼" gauge which had been designed by Henry Greenly in 1927. It didn't have superheaters and on one

occasion that proved a blessing. I was running the engine on a temporary track at West End school in Palmerston North which had about 700 pupils and all wanted a ride. During the afternoon the lubricator failed and I had to rely on the wet steam to lubricate the cylinders. There was just a small squeak as I started off but nothing else. Next day the pistons were withdrawn and there was no sign of any damage. Pistons and cylinder bores looked like black marble due to the old type steam cylinder oil I was using.

### **In the Newsletters from other Clubs**

#### **Blastpipe Petone**

Claude Poulsen has had the club's 'Speedy' out and steaming well.

#### **Maidstone**

Members still finding the weather conditions rather cool and wet.

#### **Manakau Live Steamers**

An article on Kiwi Rail's ferry 'Arahura' trialing a new blend of fuel in one of its engines.

#### **Hawkes Bay Model Engineers.**

An article on boiler de-scaling.

#### **Havelock North Live Steamers**

A history of EB1809, later to become TR1003 operated in Napier till 1998. Restored in a paddock near the Maraenui Golf Course and now operated at the Silverstream Workshops.

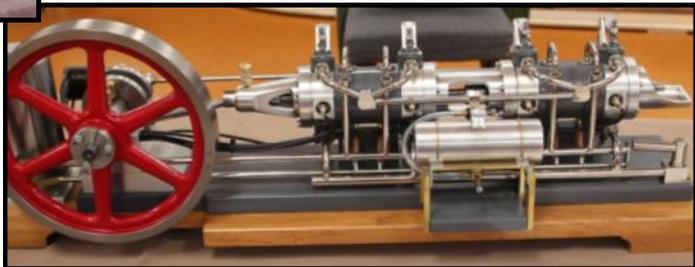
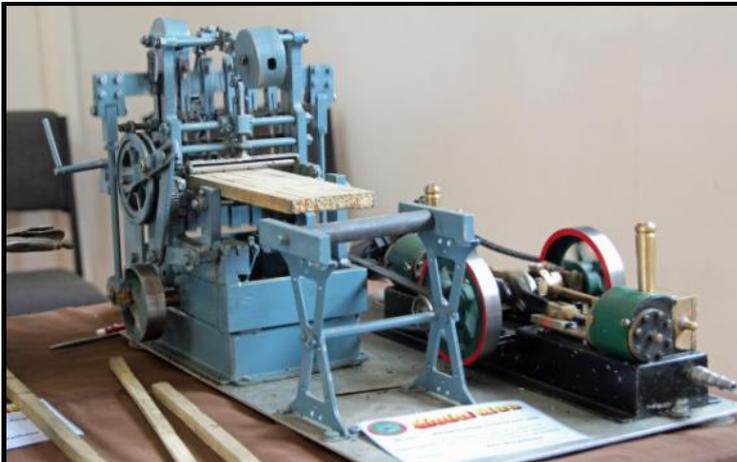
#### **Marlborough Model Engineers**

At a recent meeting Ken McIntyre displayed a check valve that was off his 26 year old, 3½" gauge 'Miss 10 to 8'. The valve had broken and the brass showed signs that the zinc content had eroded away.

#### **Nelson Model Engineers**

Palmerston North member Eddie Bleakley visited the Nelson track recently and was immediately pressed into service driving the shunter named 'Jumbo'. The Nelson City Council have agreed to put money forward to line the pond with concrete so registering the boat 'The Navy Lark' is to go ahead.

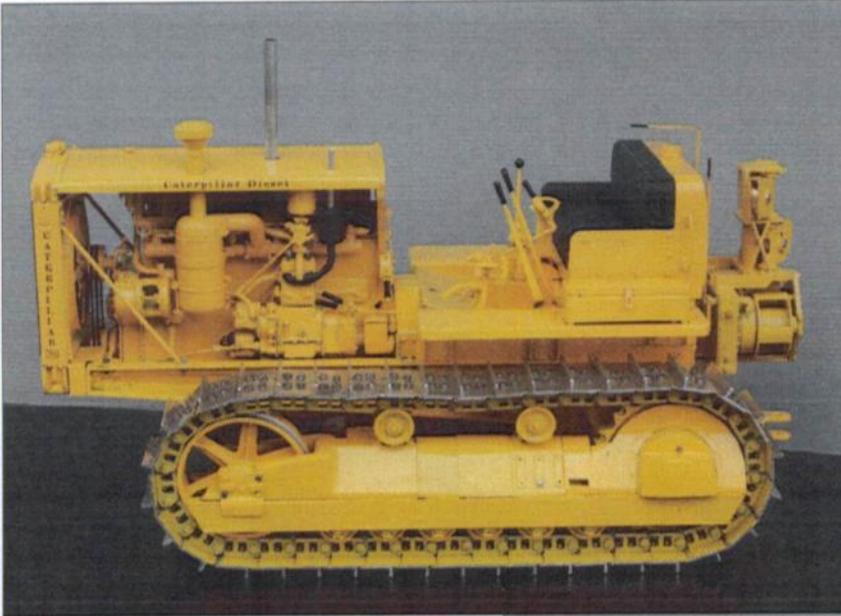
# Some of the models at Model Mee 2015



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The Painted Tractor

The Final Pictures  
Thank you Bruce



The build hours is approx. 900 hours  
and the Winch another 100 hours. All  
functions are controlled from the  
drivers seat.

The Generator