

November

2009

No 351

R

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.**

PRESIDENT

Richard Lockett (06) 323-0948 pnmec president@trains.net.nz SECRETARY Stuart Anderson (06) 357-7794 pnmec_secretary@trains.net.nz TREASURER Murray Bold (06) 355-7000 pnmec_treasurer@trains.net.nz EDITOR Doug Chambers (06) 354-9379 pnmec_editor@trains.net.nz

Place

stamp

here

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 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 22b Haydon St, Palmerston North

This Months Featured Model



REPORT on the October Meeting.

Yet another cold and very wet night, but another good turn out of members to hear Richard Lockett speak on the reasons for boiler testing and the application of the Australian Model Boiler Safety Codes.

Doug Chambers then spoke on the PNME club's previous boiler inspectors, working forward to present day. He noted that well over 100 boilers had been presented to the boiler committees for inspection.

Doug then told of some of the ups and downs of boiler inspections. He said that for him one of the hardest jobs he had was to condemn the efforts of a member to build a boiler to a design that would not comply with the Australian Code. The boiler had been started many years ago and fortunately had not progressed too far, only the outer shell and firebox had been completed. Doug redesigned the boiler to comply with the Australian Code and then gave assistance to the member to build a much sounder boiler.

He noted that there is no truth in the rumour that the boiler committee can be favourably influenced by serving them 'rich cream cake' with their afternoon tea. But it certainly would not do the boiler builders case any harm. Unfortunately two of the boiler committee now have to be very circumspect about their diet and dry biscuits are all they are supposed to have.

Doug assured the members that the boiler committee are not just a regulatory body and they are only too happy to help the 'new chum' with advice and physical assistance being only too happy to pass on the skills that they have had to learn 'the hard way'.

Terry Jowett and **Robert Edwards** had one of their two 7¹/₄" gauge N.Z.R. 'F' class locomotives on the table for us to see progress on. Robert says that he cannot believe the number of nuts and bolts required to get the frames and cylinders to this stage.

Ian Stephens had the horizontally opposed twin cylinder stationary steam engine on display. Now painted and with the brass work nicely polished. The cylinders were from the last project that Clem Parker was making before he had to give up the hobby as advancing years caught up. Clem is well into his nineties.

Ian McLellan showed us the superheaters and gauge glass mountings he is making for a 'Tich' that he is completing.

Bruce Geange had a lovely little N.Z.R. 'Dubs' A class loco. Electric powered to run on three rail track. A little beauty built to the very high standards that we have come to expect from Bruce.

We have all read in the Newspapers and seen on TV where High Schools are getting students interested in engineering again through getting them to build mini motorcycles. **Richard Stevens** told me that his grandson had placed third overall in the competition races at the Manfield Circuit. I think grandfather may have had some input into the bike and his pleasure at the lad's success was quite evident.

November Meeting Club Annual Dinner

26th November 2009, 7:00 (for 7:30) pm, PN RSA Broadway Ave Palm Nth

January Meeting Presidents BBQ

This event is to be held on the 28th January, at 6.30pm, at Cynthia Cooper's home. 119 Ruapeahu Drive Palmerston North.

COMING EVENTS

Mid Week Run at Marriner Reserve Railway

24th November between 10.00 am and 2 pm 22nd December between 10.00 am and 2 pm Please contact Doug Chambers beforehand.

Track running at

Marriner Reserve Railway

 $\begin{array}{ll} \text{December} & 6^{\text{th}} \\ \text{December} & 20^{\text{th}} \\ \text{January} & 3^{\text{rd}} \\ \text{January} & 20^{\text{th}} \end{array}$

from 1pm to 4pm from 1pm to 4pm from 1pm to 4pm from 1pm to 4pm

Open Weekends

Rotorua MEC 12th – 13th December CANCELLED

The closing date for the next issue of The Generator is Friday 15th January 2010

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 1/4", width 6 1/2". 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

A Morgan Mill Drill Apply to Bernie Coyne Phone 06 753 4528 WANTED

A vertical milling machine of the type designed to fit on the bed of a Myford ML 7 lathe. If you have one would you contact Doug Chambers, phone 06 354 9379.

THIS MONTH'S FEATURED MODEL.

The photo is of a 'Maid of Kent' but it is not one built by a Palmerston North Club member. The photo was sent to me by Stan Compton and it shows the locomotive built by one of his friends, Brian Collis. Stan and Brian are both members of the Hereford Model Engineers in the UK. Brian is a retired builder (over seventy years old) and the 'Maid of Kent' is his first attempt in the model engineering field. It took him five years to complete and he built the boiler himself. Stan is the boiler inspector for the Hereford Model Engineers and he guided Brian through the stages of boiler construction. Stan's offer of physical help was politely declined as Brian was determined to do all the work himself.

The locomotive is obviously very well finished and Brian must be well pleased with his efforts. Stan was so impressed that he persuaded Brian to let him exhibit the 'Maid', on his behalf, in the 'Midlands Exhibition' this year.

LETTER FROM ENGLAND

by Stan Compton

On the last running day in July a rare situation developed on the elevated track at Broomy Hill. The weather forecast was for substantial rain and consequently it was decided not to steam the heavy locomotives on the ground level track, but to rely on the two petrol driven locomotives built by Wally Sykes, i.e. the Santa Fe and the GWR parcels rail-car. These were considered to be all the power necessary for operation of the ground level track. This proved to be a wise decision, giving the usual

steam locomotives a break on what turned out to be a heavily overcast day with minimal rain until 3.00pm when the rain really began in earnest. Quite a steady flow of visitors early on from about mid-day meant that the two petrol locomotives coped well.

Meanwhile the three steam locomotives that arrived to run on the elevated track, namely 'Polly' being run by Paul Collis, LNER K1 driven by Nigel Linwood and a 'Maid of Kent' owned by Terry Jackson were all steamed up and put into operation. As it was such a cool, damp day, clouds of steam from these locomotives made it obvious to our visitors that rides behind a steam engine were available and soon I, as Station Master, found we were very busy for a change.

Polly coped very well with the loads and so did 'Maid of Kent' and the K1 but after a while the 'gremlins' began to get busy. First Polly began to run 'out of beat'. Something was wrong with the valve gear so we got it back into the steaming bay. Next the K1 feed water supply ceased to function properly, so out of service it came. Then the 'Maid of Kent' split the hose to the by-pass. No feed water for the boiler so it too had to be retired. All three locomotives had failed.

One irate woman passenger wanted a ride behind a steam locomotive. She had purchased a ticket with that intention and had already had a ride on the ground level track and why was it that all our engines had failed when normally the big 7 $\frac{1}{4}$ " gauge engines were available?

She had no idea, of course, that two grub screws had come loose on Polly's weigh-shaft. that a drive key for the water pump on the K1 had slipped out of mesh and what appeared to be a split water hose on 'Maid of Kent' turned out to be that the hose had simply slipped off under pressure.

I deserve credit for trying to placate the woman when I wanted to tell her to "Go to H !" Actually in the rain towards the end of the afternoon many young passengers arrived to ride on the ground level track from the direction of the waterworks Museum. It appeared that a party had been arranged over there and a ride on our track was an extra.

The highlight for these children, all aged about 6 years, was the derailment of their train at the turnout near the willow tree. They jumped off quickly when Wally driving the Santa Fe asked them to, then they began to sing because they were enjoying themselves so much!!!

My wife and I were able to visit a flower show in Worcester recently on advice from the chairman of the Worcester M.E. Society, I spent the time talking to the members who had put on a display which created a lot of interest with the public. It was interesting to examine models that were under construction, a $1\frac{1}{2}$ " scale Showmans Engine by Murray Lane that was almost complete after fifteen years of work, and showed a lot of detail work, even the generator and exciter in place, both belt driven, but all will be covered up when the canopy is fitted. But what a challenge for a first attempt, it will make a fine display model when completed.

By coincidence Charles Jones had his completed 2" scale Showmans Road locomotive on display on a trailer. The canopy was in place, such a lot of work and all fabricated, full marks.

I was shown the lights all round the canopy which are LED's, all controlled with electronics. If the engine is put into reverse the lights go out but diodes sorted this out. Charles had acquired an old engraving machine and with the smokebox door mounted on his rotary table he was able to cut the name of the original builders, that's ingenuity. What a pity his family are not interested to inherit it when that time comes. I hear of this problem a lot.

There was a very nice 'Britannia' that I was told is now a regular performer on track days, injector feed can be a problem, a lot to be said for a mechanical pump in the hurly-burly of track-running on busy days.

It was nice to see Larry Osman's 'Gordon', the 5" gauge 2-10-0 nicely repainted on display. I recall seeing Larry flying down the back straight at Bristol one open weekend.

A 'Speedy' being completed by Dave Barrett will be a very useful engine; they all take time to complete. Incidentally there is a very interesting article about 'Speedy's' valve gear by that expert Don Ashton in the January issue of 'Engineering in Miniature'. I regret my memory now fails me about the rest of the display but my wife assures me that the flower show was a real village affair, so nice to see in modern times, the city gardeners had got all their flower-beds in fine order for the occasion.

Paul Collis took me out for the day to see Brunel's ship "S.S. Great Britain" now rebuilt in Bristol docks. We travelled by rail and I was impressed by the quality of the ride on modern track. What did not impress me was the lack of good manners of some of the British Public who occupy the seat next to them with their belongings, disregarding passengers who are standing. They will make room if they are asked but not otherwise, an attitude unknown in my youth!! The ship was easy to reach from 'Templemeads' station. The original Brunel train-shed now covers the car park alongside the station. Just a few minutes walk to the ferries, one of which took us to the 'S.S. Great Britain' giving us a fine view of the variety of vessels tied up there from canal barges to coasters. We spent about five hours on board Brunel's ship, all very interesting, but the mock up of the main engines, with sound effects as they rotated, was most effective. Construction of the engines was of timber but realistically painted to resemble iron and steel. The size of the bunks, even in the small first class cabins, was so small but even then longer than those for the officers on the 'Cutty Sark' that was burnt out in London Docks some time ago.

The ship's galley must have been awful to work in with so little light from a lantern, we know the meals were basic, but life was tough in those days. Due to the age of the vessel corrosion still takes place, so the lower part of the ship has been sealed off with glass at the water line and de-humidifiers have been installed to keep the hull at a minimum humidity. I hate to think what it all cost but it was the only solution we were told.

Someone had the bright idea of installing a cow-shed on the upper deck, complete with a dummy cow with its head sticking out, calling as cow's do. This would have been the only way to get fresh milk for first class passengers on long voyages.

On the way back by rail we met one of our Hereford M.E.S. junior members waiting to return home after a day working for a firm, without pay, who are developing an old principle of utilising the energy, built up in a heavy flywheel to assist the driving of a small rail-car called a 'Parry People Mover'. I have read about this project for some time and knew that a prototype, driven by a gas-powered Ford car engine, was in use on a minor railway line. This is the best thing a young man could do to gain experience. He told me his hands ached handling steel, but he said he was grateful for the time I had spent giving him instruction on the Club 'Myford' lathe. It was interesting to learn that the firm was also developing a method of making cheap building blocks suitable for the African market, using a poly-styrene mix, the insulating properties of which would be of great advantage in a hot climate. This reminds me of a project funded by a Scandinavian Brewer who felt that all the bottles exported could form the basis of an inexpensive home. He commissioned a well known architect to design a suitable range of buildings. The project was a failure; the members of the intended market wanted the type of home depicted on U.S. television.

BOOKS DONATED to the LIBRARY

Dick Griffiths has recently donated a small suitcase full of books for the PNME club library. All are to do with railways both here and overseas. As club librarian I felt that I should have a quiet read through first and then I would be well placed to write a few notes on each so that you can select what may be of interest to you.

'Great Western Railway' by Peter Semmens. A series of three books covering the years, 1923-29, 1930-39 and 1939-48. Covers the management, building, operation and locomotives of the Great Western Railway.

'Preserved Steam Trains of Britain' by Dr. W.A. Sharman. Colour photos of preserved railways in Britain.

'The Foxton and Wanganui Railway' by K.R. Cassells A very interesting read of the linking of Foxton and Wanganui via Palmerston North.

Club Dinner: 26th November 2009, PN RSA

Those of you who were at the last dinner at the RSA (2007) – it won't be like that ! The RSA catering is under new management. Three of us (Cynthia, Bruce & David) have been to a similar gathering there since the change and found it very good. So we have chosen the same menu (at the same price) as on that occasion (i.e. buffet, good conventional food, tested and proven). We have a corner (the dance-floor) to ourselves.

Palmerston North RSA, Broadway, (dancefloor area, beyond the bar), from 7:00 pm for dinner at 7:30.

Price \$25.50 per person (pay on the night), drinks from the bar (extra),

We need to let them know actual numbers, so please let's know if you're coming as soon as you can. e-mail: <u>Newstead@clear.net.nz</u>,

phone David at 027 457 6175 or Murray at 355 -7000.

David Newstead

Tauranga Model Engineers 30th Birthday Weekend 7-8th November

I haven't been up to run a locomotive at the Tauranga track for a few years now, so I planned to travel up this year with the W. The club putting on an exhibition and a dinner was a bonus. As we generally see the railway stuff during track running, it's always interesting to see what non railway modelling work is coming out of other clubs.

A couple of their members are building traction engines, Lloyd Breckon a 2" scale Durham and





North Yorkshire and Shane Marshall a 1.5" Allchin. Shane has on occasions rung me asking for advice on its construction so I was keen to view progress. What a stunning piece of work! Not painted but polished all over. At the dinner in the exhibition hall on the Saturday night it took the prize for the best model produced this year.

Shane has also purchased a 3" Burrell traction engine which he was running for the first time. The other model in contention was a 4hp Root and Vandervoort gas engine, also built to a very high standard.

Also on display in the hall were Military Models, an extensive NZR electric railway layout, model boats and aircraft and a collection of gauge 0, 1 and G loco's and rolling stock from the



Tauranga M E's members involved in the smaller gauge. A couple of NZR locos caught my eye, an F and a Wa, a K or J, I can't remember which, they looked good anyway. I also spotted a NG Garrett being built by Geoff Hallam also caught one's eye.



To the outside stuff and two days of excellent weather and a relaxing environment in which to operate the W were just what I needed to lift my spirits a tad, good fun.

A couple of old guys, public not M.E. people were able to identify W192 and its significance to NZ railway history and also my Q class coal wagon which most think is a Yc ballast wagon; it all made for an interesting day.

Back to the exhibition hall and on display a 5" NZR F class loco chassis being rebuilt ex Owen Handley from Kapiti. I thought there's a challenge for a keen man, one Steve James is having a go. Those of you who have been around long enough to know of Owen and his F class loco will know what I'm talking about. Anyway a big thanks to Peter Jones and his crew at Tauranga for an enjoyable weekend.

Robyn's Rebuild Part Three Richard Lockett

Work has progressed on the reassembly of the valve gear which is to the Hackworth design, a simple design having few parts. The split

bearing on the eccentric rod had a lot of wear. 0.4 mm oval on the 11mm dia hole. Which is an indication of the loading on this bearing, as the rod is pushing the die through the die block with each revolution. The mating faces of the split bearing were faced to allow the bearing to be bored out in the mill to be a good clearance fit on the shaft. A new ash pan has been fabricated in stainless steel. I have changed the design slightly. It is now held in place by a pin







located through the frame plates, allowing the ash pan to be dropped quickly should the need arise. With the manufacture of the new pop safety valves. I visited the safety valve orifice diagram in the AMBSC Boiler Code in order to work out the orifice dia 8 mm which came out slightly smaller than the original design. The boiler has had a hydrostatic test to working pressure x1.25. No problems here and has now been positioned back into the frames.

For Sale Supplement

Lathe, as new,12 months old. All extras, stand and some spare parts. Price \$2,500.00 Lathe is in Matamata but I could deliver to Palmerston North, if required, to genuine purchaser. Brian Wiffin, Phone 07 8888 493

LATHE

WM280V WITH STAND

Swing Over Bed: 280mm Swing Over XSlide: 170mm Distance Btw Centres: 700mm Bed Width: 180mm Spindle Speeds: Variable Speed Range: 150-2000rpm Spindle Bore: 26mm Spindle Taper: MT4 Threading Metric: 0.4-3.5mm Threading Imperial: 8-56tpi Tailstock Taper: MT2 Motor: 750w Single phase Weight Nett/Gross:190.00/210.00 Volume: 0.6100 ACCESSORIES:



3 & 4 jaw chucks, Face plate, Steady & follow rest, Splash guard, Stand. FEATURES:

 \ast This compact WM280 European design lathe comes with the latest variable speed controller which is made in the USA

- * Headstock is gear driven in oil bath
- * Bed is hardened and ground to ensure long term accuracy
- * Power longitudinal feed for thread cutting
- * Oil bath gearbox for quick and easy gear selection
- * Slideways have adjustable gibs
- * Tailstock can be offset for turning tapers
- * Reverse switch for added versatility
- * Come with stand and splash guard

Where this one is blue, mine is off white and tray is charcoal grey.

More For Sale



Metal Bender, Hossfelt Universal #No 1.

Can bend radii and angles on a wide variety of shapes ranging from small rod through to pipe and tubing to flat stock and angle iron.

Comes with all parts shown in adjoining picture.

Asking price - highest offer proceeds to PNMEC.

Any questions ph Bruce on (06) 357 0566 or to view, Merv on (06) 323 6146