



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 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
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This Months Featured Model



Report on the January Presidents BBQ

The evening was pleasantly cooler as members settled down at the tables arrayed on Robert and Margaret's lawn. Craig Moore had his 'Sweet Pea' in steam so there was a pleasant smell of coal smoke and hot cylinder oil wafting in the breeze. On display was the fire engine, winner of the challenge at the Tauranga Convention, and which was awarded the Les Moore trophy. Also the Canterbury Trophy awarded to Bruce Geange for his magnificent Caterpillar D8, the result of years of dedication.

Graeme Hall had brought with him the recently completed 7 cylinder radial aircraft engine which after considerable 'flicking' of the propeller, burst into life and ran very sweetly. Graeme explained that he has yet to find the correct position for the throttle for starting and the amount of choking the engine requires before it will start readily. He pointed out that too much choking would lead to a hydraulic of the lower cylinders resulting in engine damage.

The BBQ was just fine and all the members attending enjoyed a rather pleasant evening catching up and hearing about what others had done over the holiday period.

The amount of work Margaret and Robert have done in the gardens during the last twelve months was evident and once again the members thank their hosts for their hospitality.



February Club Night

The February Meeting will be held in the Hearing Association Rooms, Church Street, Palmerston North at 7.30pm on the 25th February.

There will be the usual briefing on the Locomotion event and members are invited to talk about the tasks undertaken in their workshops during the holidays.

Locomotion 2016

5 + 6 March 9am - 5pm

The committee requests members for the following duties over the weekend.

Help with general setting up.

Station helpers and

Ticket sellers.

Help out as hospitality Kitchen staff.

Steaming Bay and Parking

Attendants.

The public will arrive from 10am so we need to have most things set up by then. Members are requested to bring a plate for morning or afternoon tea. There will be a BBQ Saturday night for members and guests.

COMING EVENTS

Track running at Marriner Reserve Railway

March 20th from 1pm to 4pm

Open Weekends

Locomotion 5+ 6 March 2016

10am to 4pm each day

Havelock North Easter Open Weekend

25th - 28th March

Hawkes Bay Open Weekend

23rd - 25th April

Model of the Flying Scotsman

Some years ago there were a series of magazines published that had parts included in each issue that enabled you to build a small model of the Flying Scotsman. Bob Owen has the complete set of magazines and all the components for the model. Some assembly has been done but Bob has decided to stick with clock repairs and so the 'Flying Scotsman' is offered for sale at a very realistic price. Phone Bob on 06 377 7031 evenings only

The closing date for the next issue of The Generator is Friday 11th March

For Sale

Myford ML7 bare lathe, 3 jaw chuck, no gears for power feed, \$500
Phone Bruce Manning 027 230 1388

THIS MONTH'S FEATURED MODEL Building a Steam Fire Engine

by Bruce Geange

Having been given a set of drawings and rules for the fire engine and studying them at various times I thought yes, I can build one of those. While looking through an old magazine there was an article about a 1939 Leyland Fire Engine with a separate ladder. I thought that these improvements would be good detail on the engine. The chassis rails were cut from aluminium bar and were 12mm longer than the drawings. Cross members were brass. I made springs with shackles and the steering having a simple steering box. The rear axle runs in bushes fitted to the springs and held in place with collars.

The drive to this axle is with modified Meccano gears. The wheels are Buz, early NZ Meccano equivalent with tyres from Argentina. There are dual wheels on the rear plus a spare.

The radiator was fabricated from brass sheet and easy flowed together with a stainless plate at the rear. The bulkhead is also made from brass. The boiler was made as a separate unit with the centre rod at the front fitting through a hole in the stainless plate on the radiator and fixes to the bulkhead with one nut and holes for the bushes to fit through. The methylated spirit burner is of the gauze type with the filler cap under the floor boards. Stainless steel folds up under the burner and partly up the sides of the boiler. Another piece of stainless fits on top of the boiler. The engine, pump and air chamber were built as per the drawing. The hose inlet and the two outlets are on the sides of the engine.

The panel work is mostly from aluminium sheet and riveted together. One nut holds the rear cover in place. The bonnet was constructed from panel steel with brass louvers riveted on.

The mudguards are mostly from tinplate and the running boards from aluminium with storage compartments in them.

The triple extension ladder is mainly pine, brass and tinplate. The wheel centres are aluminium with two rows of holes around and the rim is from custom wood with one row of holes. Kebab sticks form the spokes with a strip of tinplate

around the outside for the tyre. The axle and frame are brass and tinplate with wood where required. The side rails for the ladders were cut from pine and these were jig drilled and kebab sticks were cut to the required length and pressed into the side rails making up three ladders. Metal brackets were fitted to hold each section in place. Small pulleys were machined and fitted along with a winch and brake that operates the ladder.

After steaming the engine many times the pump was found to be the biggest problem. All the ports were bored out and the piston finished size was 9/32" with the hose nozzle being 1/16" allowing the pump to operate well at low revs. The engine was dismantled for painting and re-assembled and sign written.

An interesting project.

LETTER FROM ENGLAND

By Stan Compton

While watching the crossing over our ground level track on running days at Hereford, I get to meet a variety of interesting visitors to our track-site. One day I met an ex British Rail driver who had no idea that people built passenger-hauling models. He had been driving 'B1' locomotives and I told him that one of our members had a 'Springbok' but it was not at the site that day which was a pity. Last Sunday I met a retired man, a new member of a Welsh model engineering club who had just started on building his first locomotive and he had a lot to learn. With a engineering background and a suitable 'Harrison' lathe he is now well on the way. He had arrived at the site on a BSA Star twin which put us on common ground. I tried to stress the advantage of taking on a simple project to start with.

One day a smart looking van arrived outside my neighbour's property, the signage on the van said "Do you want your oven to glisten?" The van driver soon brought out all the removable parts of the oven and immersed them in a large vat that he produced out of the van. Soon the racks etc, were being swilled off leaving the chrome like new and did they glisten!! My wife was watching with envy and so was I, who buys a solution to use to clean our oven and have to use steel wool to achieve the same finish he had obtained!!!

Have you ever heard of 'Denim Mining'? In the

late 1800s in the silver mining areas of the USA, old miners used to cut up old 'Levis jeans' to use as lagging. Many years later there is a demand for this material, it may have lain in a spoil heap but it does not rot and is saleable. An old pair of 'Levis Jeans' recently sold for \$10,000, made in 1876 and still sound. This brings out the enthusiasts to search old spoil heaps in the hope of finding the 'big one' just like their forefathers of years ago.

I was examining a steel boiler rebuilt for a 7¼" gauge locomotive at the Midlands Exhibition held recently; the builder stated that he had fitted a 'Rose-bed' grate made of solid steel with many small holes tapered from underneath giving the rising air velocity and lifting the fire off the bed, in effect creating a fluidised-bed as used on large commercial steam raising plants. The 'Rosebud grate' was invented at a mine of that name in the USA. Dial up 'Rosebud' on Google for more information. Incidentally the boiler displayed was far too long for the firetubes to perform efficiently. This is why combustion chambers are fitted to large locomotives. Anyone who drives one of Don Young's 'Rail Motors' with its short chubby boiler will confirm its steam raising ability. My youngest son Chris built one when at High School. We took it to Rotorua for their Open Weekend and he had a ball. While Chris was waiting to follow other drivers out on to the excellent track an older driver complained "I don't want that boy to hold me up". "Don't worry, you will not be able to catch him up" he was told and that was proved correct.

At the Midlands Exhibition someone had put on a display of the life's work of Len Crane who was chairman of Kinver MES for many years. Most of you will recall seeing his Fowler Road Locomotive with a crane jib mounted on the front. I had the good fortune to hear this engine climb up the hill out of Ross-on-Wye in 1996 I think it was. The display told how Len had trained as a silver-smith in Birmingham but he changed to general engineering later on. He led a team restoring a large stationary steam engine in his later years. In his middle age he enjoyed racing a side-car outfit on a scramble circuit and there were very good photos showing him. We never met but he certainly put every effort into his life's work. His like are disappearing fast.

I met some members of the Worcester MES at

the Midland Exhibition, nice to hear that they get good support at their running days with four locomotives in steam. A local group of ladies under-take to supply cups of tea to everyone and I assume a small charge is made. New rolling stock has been purchased, now it only needs a new ground level track to replace the original 440 yards that utilised angle iron for the rails which due to the weight of passengers hauled over many years has become very worn. The elevated track was replaced over twenty years ago by Larry, Gavin and a chap who is no longer alive. The support columns were made adjustable for height to allow for the unstable ground. I was able to help in those days, prior to activity at Hereford. My 'Midland outline' 4-4-0 did a grand job running through the station with the whistle blowing. On stopping to unload someone was always there to supervise, then move forward to load passengers, build up the fire, take on water and off we go! All so well organised, full marks.

When running the Midland 4-4-0 on the elevated track at the Hereford track a lady visitor from the "Welshpool and Llanfair Railway" where she was a volunteer fireperson, came to visit Hereford. When she told me about being a fireperson I told her she could drive my locomotive. She protested that she had never driven a small locomotive but I told her "Don't worry, you will be all right". Sure enough out on the track on her own she showed that she was a natural driver with a good sense of balance and she really enjoyed the experience. She would not realise at first that the engine had good clear valve beats and being 1/12 of the size of a mainline engine was a steady runner unlike the 'Princess' or 'Earl' that she was used to on the narrow gauge track. When she left I was offered a footplate ride on her home track.

From the Editor

Don Dudley. I am sorry to have to tell you that Don passed away about a month ago. Don was already a member when I joined the club in 1979. He was a very clever man and his specialty was making tooling for his lathe and milling machine. He made indexing heads, rotary tables, ball turning attachments and gear cutting machines. He built a 'Railmotor' 0-4-0 tank locomotive, a 2" scale 'Minnie' traction engine and a 'Sweet Pea' tank locomotive. Don had also built 'P' class yachts and built and

flew radio controlled model aircraft. For the last six years Don has suffered severe pain in his back and legs and as he was unable to stand at the lathe or his bench, he sold off most of his equipment. His last few years must have been very frustrating for him.

Richard and Allison Smith (Daughter & Son in Law)

Don was always interested in any aspect of engineering, but in the early days lacked the finances to develop his hobby. Newly married and with their first child Don and Jan moved to Levin, and purchased their first home. Don soon realised that without a garage the roof space of the house would have to become the "workshop". You got it - onto a chair, remove the manhole and up into the roof. Thankfully it was a tile roof, as this gave a steep pitch so there was standing room and, during summer air conditioning arrived with the removal of a tile



or three !!
Needing a proper "workshop" Jan was encouraged into work in the local strawberry industry to pay for a garage. Soon after this was built the new workshop appeared and

Jan became another model engineer widow. I'm not sure when Don joined PNMEC but his name appears twice in "The First Twenty Five Years". The first was 1984 when a Zip water heater he donated was finally connected when electricity made it's way to the storage shed (Editors note: it is still in constant use today) and secondly in 1989 when Don and George Dowd built and installed the Levin bridge. Don became ill and stopped model engineering some years ago. His health slowly declined and he died on the 26th January 2016. Don's three children have each inherited a steam engine that Don built (two x steam locomotives and a traction engine) which they highly value. Don asked that the family donate his collection of 22 bound volumes of Model Engineering magazines, which he began collecting in 1959, be donated to PNMEC.

In the Newsletters from other Clubs

Marlborough Model Engineers Entries and results of their Model of the Year, Mark Taylor is building a 'Speedy' and Ron Perkinson is starting a 'Springbok'.

Blastpipe Petone A very good report on the Tauranga Convention. John Antcliffe took his 'Phantom' named 'John Henry' up to Manu Ariki. Had a good run. Peter Targett called upon the expertise of Bruce Piggot of the MLS to sort out his injectors for the 'Dart'. The commercially made injectors he had wouldn't work, but after Bruce made new cones they work perfectly. The 'Dart' now has a boiler ticket and the final detailing is in hand. Some years ago I completed a 'Phantom' for the late Ted Barnes. Recently I heard that the 'Phantom' now is in Khandallah and in Ted's son Pauls hands. Late in January the 'Phantom' was presented for boiler testing and now has a ticket again. I am sure Paul will get a lot of enjoyment steaming the engine.

Convention 2016 Tauranga

By Robert Edwards

After a little drive, we got to Tauranga and then met up with the others Cynthia, Murray & Janice, Chris & Paulette M, Richard, Chris S, Craig & Rochelle

The weather was on our side for most of the time. I got out on the track most days for an hour or so with my Heisler. I tried using Welsh steam coal and it seemed to work very well for me. Richard also gave the Welsh coal a try and found that it was very good. So maybe positive for when the Aussie Char runs out.

There were some upset people concerning the rules for this convention e.g. fail safe braking. I would like to say that a host club has every right to make rules for the safe running of their track and grounds and these were their rules. The Convention Model Exhibition this was not a bad show and I found some interesting things for example a bogie that used a scissor action for braking. And of course on display were the Caterpillar D8 and the Fire engine, both built by Bruce Geange. PNMEC members have seen them on club nights and they are very good models to my eyes. The detail was just perfect. No wonder Bruce has won the golden spanner for some of his other work. When the fire engine was put thought its paces it did extremely well. At the convention dinner Bruce was awarded the prize for the Les Moore Challenge, and he also won the Canterbury Award for the D8. Very well

done Bruce!!!!

I had a very good time talking/breathing rail and steam for a few days. I met up with lots of people who are involved in our hobby. I also meet John Stent who worked at Meremere Power Station so many years ago and we remembered lots of the guys from that time. I hope that more people make it their holiday next time at Nelson in 2018.



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