



June 2004
No 291

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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 onerous.

Visiting club members too, 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,

Place
stamp
here

Coming Events

Coming Events; June Monthly Meeting. This will be held at the Hearing Association Rooms, Church Street, Palmerston North on the 24th June at 7.30 pm. **SHARP.**
See further details on page 2.

Mid Week Run at Marriner Reserve Railway : 22 nd June , between 10.00 am and 2 pm.
27 th . July , between 10.00 am and 2 pm

Please contact Doug Chambers beforehand.

Track running at Marriner Reserve Railway: 6th June 1 – 3 pm
20th June 1 – 3 pm

OPEN WEEKENDS

Hawkes Bay Model Engineers	10 th - 11 th July
South Canterbury Model Engineers	18 th - 19 th September 70 th Anniversary
Havelock Live Steamers	23 rd - 25 th October
New Plymouth Model Engineers	23 rd - 25 th October
Tauranga Model Engineers	12 th - 14 th November 25 th Anniversary

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

REPORT of the MAY MEETING

On the table for us to see were the following projects.

Peter Vincent had a fixed steady he had made for his lathe. Very neatly finished and painted in ‘hammer-glaze’ it looked like a bought item.

Murray Bold demonstrated the bogie power unit for his Gauge 1 NZR ‘Standard’ Railcar. All set up for automatic stopping and starting, carriage lighting, and headlights at both ends. A minor problem being that the electric motor is too slow, but Murray assured us that a different type of motor will do the trick.

Murray also displayed his now nearly completed Gauge 1 gas-fired steam loco. It is just awaiting a pressure gauge.

Doug Chambers had the boiler he is making for a 3 ½ ”gauge “Evening Star”. The outer shell being complete and the firebox, combustion chamber, fire tubes and flues nearly ready to fit up inside.

Jim Curtis told of progress with his F 7 Santa Fe ‘Warbonnet’. At the front is a headlight and below it is a “mars” light. Jim had been a bit at a loss until he saw a flashing white light on a bicycle. He tracked the device down and purchased one and now has one less problem to solve.

The ‘Favourite Picture’ drew out some interesting stories from the following members.

Bruce Geange had an old photo of the Milson Deviation.

Jim Spall had a picture of the Steamer “Waikare” which sank on the 4th January 1910 after striking an unchartered rock in the entrance to Dusky Sound. The “Waikare” was taking passengers from Dunedin on cruises through the Sounds and Jim’s mother had been a passenger on the previous cruise.

Fred Kent had pictures of an electric powered garden tractor that he had made some fifteen years ago.

Richard Lockett drew a picture of an iceberg. He related how some years ago he attended a course and the thing that had remained in his memory was that when quoting for jobs one should remember that although you can see part of the iceberg above the water, there is much more below it. It is the part below it that will come back to haunt you if you don’t consider all the probabilities.

Cynthia Cooper displayed the front page for the “Generator” and all the ticketing that was done for the 2002 Convention in Palmerston North. Cynthia also noted that our ‘Web-site’ has a good selection of pictures.

Chris Morton showed us ‘the plans’ for the new Morton residence.

Jim Curtis showed us a photo that he took of his steam loco “Malibu”, a ‘Kuaka’ 2 – 6 –0 tank. He hadn’t realized how badly he had posed the loco. A fence detracted from the loco and spoilt the original picture. Jim patiently cut out the loco and then grafted it over another picture, which gave a much better background.

Doug Chambers showed the framed photo of his Ducati motorcycle taken in the lounge at 22 B. The photo presented to his wife for her birthday, to commemorate an event that she had said would never happen. !! Laurie Gudsell had the ‘picture of the evening’. A large print of a Spitfire MK 9. It had been taken some years ago when Laurie and Joan were holidaying in the U.K. Laurie had dug deep into his pocket and arranged a flight in the Spitfire owned by Caroline Grace and that had been restored by the late Nick Grace. The Spitfire had been the regular mount of New Zealander Johnnie Houlton and after the War it was converted to a two-seat trainer for the Irish Air Force. Laurie gave a vivid description of his flight in OU-V on a cloudy day. More than enough to make any aviation enthusiast envious!!!

JUNE MEETING.

This will be a “Buy, Sell, Exchange or Swap” evening. So hunt out your surplus stock, all the bits and pieces that you never managed to find a use for, bring them along and be prepared to acquire someone else’s bits that just might assist your project.

ALISTAIR JUPP has resigned his membership. He has recently retired and has moved to Raumati. I am sure that all the members wish him well in his retirement.

LETTER FROM ENGLAND

By Stan Compton

About twenty years ago one of the Hereford Club members bought a kit-set locomotive called "Pearl". A 7 1/4" gauge 0-4-2 based on the Kerr Stuart 'Wren'. He was a man with an electrical background and no experience with steam.

Following instructions provided, he assembled the engine but when steam was raised and the engine was tested on the short straight portable track, it did not perform very well. Even so he loaned the engine to the Club who used it to raise funds in those early days, even though it needed a "blow up" at every change of passengers. In those days there were very few people with steam experience to locate this poor steaming problem. Meanwhile the Club decided to build their own Club engine and a group was formed to build a "Sweet Pea".

Poor old "Pearl" lay unused for years, the owners son inherited the engine and asked me to overhaul it for him.

So recently I got the engine home and stripped it right down, to discover that it really is quite a sound design and very well made. Just poor attention to proper assembly methods. The driving axles run on 'plummer blocks' supported on a flat bar, seemingly quite crude but to build a kitset engine for a reasonable price the designer had eliminated all the work involved slotting the frames, fitting horns and axleboxes etc. Four small coil springs carry the load and I have fitted heavier springs to the rear axle to stabilise the Hackworth valve gear.

The round top un-superheated boiler is well made with robust fittings, a simple screw-down throttle supplies steam to the cylinders via a long external copper pipe. This pipe needs lagging to avoid heat loss. The bronze cylinders are in very good order and valve ports and valves look pristine.

The slides for the Hackworth gear need attention due, I suspect, to a lack of oil when in use. Aluminium castings are used for items like stretchers, buffer beams, saddle tank and bunkers. A substantial hand-pump backs-up the crosshead pump, there is no injector which is understandable.

So we have a basic engine that looks correct to outline. Now to sort out the problems.

1. The smokebox door is an aluminium casting, a push fit into the smokebox, which is an extension of the boiler shell and retained by two screws into the edge. This formed a leak point so the door was modified to have a proper dart and beam to allow the door to be clamped shut.
2. The blower was a length of 5/32" copper tube external from the backhead, through a 3/16" hole in the smokebox to point up the centre-line of the chimney. So easy to get knocked out of line. I brazed up a proper blower jet onto the blast nozzle and made an angle fitting for the smokebox. With no seal for the blower pipe through the smokebox no wonder it would not make steam, so many people fail to realise it only needs a pinhole to break a vacuum!!!
3. The ashpan was a shocker, so impractical. I have made a new one with a sloping bottom to self empty. The grate is attached to the ashpan which is hinged to the front of the foundation ring.
4. All the check valves have been reset to the correct lift of 1/6th the ball diameter. If for an injector this would be 1/3rd the ball diameter.
5. The crossheads are only 1/16th thick and I had to tack weld the pin to remove the retaining nut, not good. So I reamed the small-end bush, ditto the cross-head to accept a stepped sleeve retained by a 1/4" countersunk Allen screw with a nut. Success !!!!
6. I fitted lubrication cups to the crossheads.
7. The pistons had a 1/4" x 1/16" strip of PTFE with soft graphited packing to fill the groove. New PTFE rings were turned dead to size of bore and cut with a knife. Silicon tube underneath the rings now acts as a cushion to force the piston rings against the bronze cylinder bore. Previously a 1 mm gap would allow steam to leak past the piston.
- Incidentally I removed the solid PTFE piston rings from the cast iron cylinders on my "Bridget" and replaced them with homemade cast iron rings, scoring was a problem after a winter break.
8. I fitted heavier springs to the pony-truck.
9. The Hackworth valve gear slides were refitted and links rebushed and I fitted a deflector inside the firebox door flap.

After this work it will be interesting to try the engine in steam again.

We had a very good running day at the Hereford Track recently, with clear skies and 20 degrees so early in the year. The new brochures advertising our activities have really paid off. I seem to be the only member prepared to run on the raised track with my LMS 4 – 4 – 0 . Our secretary has acquired two engines, a “Molly” a 3 ½” 0 – 6 – 0 tank and a “Highland Lassie” 3 ½” 4 – 6 – 2 tender engine both designed by LBSC. Both could be a help and the public like to see mainline engines, but now the owner has got to learn to keep steam up.

My little “Merryweather” fire engine has had to take a back seat lately, the boiler is now lagged and complete with ashpan. I am designing the steam pump with information from another builder of fire engines. Visitors to a Safari Park near us were shocked when a Rhinocerous attempted to mount their Renault ‘Laguna’ car. A spokeswoman for the Park described him as “A bit of a lad.” !!!!!

TRACK RECONSTRUCTION AT MARRINER RESERVE

Over the last couple of years we have noticed a problem on the uphill grade through the Manuka Curve. Part of the track has settled somewhat and then to compensate a three metre section increased it's grade from 1 : 70 to 1 : 30. Several drivers and their engines had been ‘caught out’ by the sharp increase in grade and had either stalled or slipped to a halt.

A more serious aspect was that the stalled train was at the end of a curve through a grove of Manuka trees and a following train, storming up the bank, the driver trying to ensure that he was able to get past the 1 : 30 grade was likely to run into the rear passenger car of the stalled train.

The Track Convenor and the Editor using a borrowed ‘Dumpy’ level surveyed the problem area and it was decided to uplift the rails for thirty-two metres and relay the concrete track bed at a constant grade.

On the 20th May the rails were uplifted and the original concrete trackbed removed.

On the 21st May the boxing was prepared and on the 22nd 3 cubic metres of concrete were barrowed into place. Several members carried on with other tasks for the rest of the day, keeping an eye on local children who were eagerly awaiting the chance to ride their bikes over the soft concrete.

May 27th saw some of the team busy again, removing the boxing and reinstating the soil. New holes were drilled in the steel sleepers ready for the ‘Dyna’ bolts.

A two hour ‘working bee’ on the 29th May saw the track relaid and bolted down and apart from the need for some more topsoil the job is complete.

One or two members have been heard to comment that they were sorry to see the steep pinch removed as they had found it a real challenge to overcome each lap!!!!!!!



The Generator

N.Z.R. 'K' 915 RETURNS TO STEAM

The 3 ½" gauge 'K' that was built by the late Ron Walker is being returned to steam. Graeme Harris bought the 'K' after Ron's death, but sadly his health has prevented him from getting the locomotive back into steam. After our recent Exhibition the 'K' did not return to Upper Hutt, but instead took up residence in Barry Parker's workshop. The 'K' had a hydraulic test just after Graeme took the engine over but as the engine had never been steamed since then, there had been no opportunity to carry out a steam test.

As far as Ken Neilson and I could remember the 'K' had last been steamed by Ron about 5 ½ years ago.

It was only steamed once after Ron completed his NZR Wab. in 1997.

Barry and I spent some time checking out pumps (axle and hand). A new piston was made by Barry for the hand pump and then a coal shovel and rake.

On Sunday the 6th June the 'K' returned to Marriner Reserve and a steam test was carried out. Unfortunately we had a few minor problems, The safety valves have no method of locking them after the adjustment so they will have to be altered and then retested.

The check valve for the hand pump leaked badly and needs dismantling. The flexible pipe between the tender and engine for the hand pump will have to be replaced with a pipe more suited to the task.

The ratchet and pawls on the lubricator didn't, so they too will be attended to.

Although the engine didn't return in triumph to the track we lifted the locomotive clear of the steaming bay rails and set her 'ticking over.' This at least gave Barry and I a little time to become familiar with the operation of the engine.

The fire was dropped and the boiler blown down. Then the 'K' returned to the workshop for servicing and repairs.

In a week or two we will try again and I am sure that this time the 'K' will return to the rails in triumph. !!!



CHALLENGE CRANE PRIZE

By Richard Lockett

As you know, our crane won the heavy lift part of the Challenge at the Hamilton (Steam and Steel) Convention. The prize was a \$50 book voucher and we have purchased two books to add to the Club's library.

The first is "[The Desert Railway](#)" by Brendan Judd. The previously untold story of the hundreds of New Zealand Railway men who volunteered to construct and operate a railway network in the Western Desert during the Second World War. Your fellow member Bren Campbell is mentioned and features on the cover.

The second book is titled "[The Last Journey of William Huskisson](#)" and was written by Simon Garfield.

On the 15th September 1830, the Liverpool and Manchester Railway was officially opened and the locomotive "Rocket" and William Huskisson came together for the first and sadly last time. The book is the story of the events that brought them together.

I found that once I had started these histories, I found them very hard to put down. I read them both in the space of a week so members should not have to wait too long before the librarian makes them available for members to borrow. See Doug to secure a place on the waiting list for these excellent reads.

A weekend at Thames

We left Palmerston North on Friday morning heading for Thames open weekend. There was a group of us there for the weekend namely myself, Murray & Janice, Richard, Cynthia, Stuart, and Chris and Paulette.

Once we found the track we ran into Tui Frew who made us welcome and we asked her to join us for tea at the Golden Dragon where we meet up with Richard & Cynthia. After the meal we went back to Tui's place for a cuppa and then home to the motel for bed.

Saturday was fine and sunny. We got to the track to find Richard unloading the "Simplex" so I got busy getting steam up before the big boy's arrived.

I ran the "Simplex" every morning during the weekend. When I offered Murray & Richard a drive, they turned the offer down FLAT.(DIDN'T WON'T TO EMBARRASS THEMSELVES!!!)

We were very well looked after the whole weekend with plenty of food and drink. They had a lot of visitors and loco's from other clubs. We left Thames at 2 pm and headed south stopping for tea at the Gumboot Cafe, Taihape.

I thoroughly enjoyed the weekend, the company was great, the running days were good, the hospitality was excellent and it certainly is a weekend I would recommend attending again.

Barry Parker



The Manawatu Mob from Left :- Barry, Cynthia, Chris, Paulette, Janice, Murray and Richard.
Mr Sandman and Simplex in the foreground.

FOR SALE

Myford lathe for sale. This is Jim Curtis's old lathe. At least the one that he replaced when he bought a new Emco some years ago. Jim sold the Myford and now the present owner wishes to sell it.

Asking Price. \$1,000 Apply to Jim Curtis Phone 06 374 7151.