



Newsletter of THE PALMERSTON NORTH MODEL ENGINEERING CLUB INC

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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 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.

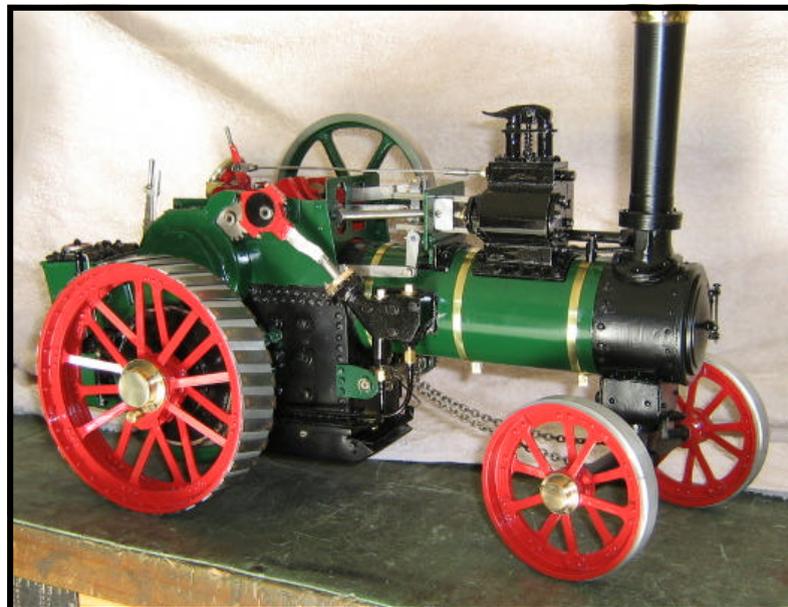
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This Months Featured Model



REPORT on the March Meeting.

Steve Denby gave us a most interesting talk on the year he spent down at the New Zealand Antarctica Base.

He told us that during the Summer there were a total of 145 scientists, staff, etc. This number reduced to 19 for the Winter.

Before leaving New Zealand the 'new' Winter staff were put through intensive fire training. One of the worst hazards on the 'ice' is fire. And once at the base there was further training in building ice caves and how to survive being caught out in a blizzard.

Steve explained that all fresh water is obtained from sea water and the waste water returned to the sea is of better quality than the sea water. Solid human waste is returned to New Zealand for disposal as every possible opportunity is taken to preserve the natural state of the Antarctic.

With the extremely cold temperatures problems arise with petrol and 1/2 a litre of alcohol has to be added to four litres of petrol to allow engines to run. The diesel used is of a special type developed to withstand the freezing temperatures.

Steve gave us all a great insight into the work required to maintain an operation like this all year round in a very harsh climate.

COMPTON SHIELD

At the AGM the 'Clubman of the Year' is presented with the Compton Shield. Members are requested to think about who they believe is the most deserving member and prepare to vote accordingly.

Previous holders have been.

1994 Clem Parker,	1995 Doug Chambers.
1996 Richard Lockett,	1997 Chris Morton,
1998 Murray Bold	1999 Bill Morris
2000 Cynthia Cooper	2001 Ron Walker

2002 Bruce Geange	2003 Ian McLellan
2004 Chris Rogers	2005 Jim Curtis
2006 Richard Lockett	2007 Doug Chambers

APRIL MEETING.

This will be held on the 24th April at 7.30pm in the Hearing Association Rooms, Church Street, Palmerston North.

This will be the ANNUAL GENERAL MEETING.

Cynthia has indicated that she wishes to stand down from being Vice President so if there are any members who would like to stand for positions on the Committee would that please make their wishes known.

COMING EVENTS

Mid Week Run at Marriner Reserve Railway

22 nd April	between 10.00 am and 2 pm
27 th May	between 10.00 am and 2 pm

Please contact Doug Chambers beforehand.

Track running at Marriner Reserve Railway

May 4 th	from 1pm to 3pm
May 18 th	from 1pm to 3pm

Open Weekends

Thames SGR 17th – 18th May 2008

FOR SALE

Myford ML7 3 jaw, two four jaw chucks, face plate, angle plate. Usual extras. \$1500 ono.

Heavy duty drill press 3/16" to 3/4" Jacobs Chuck, Power hacksaw. All home made.

Various drill vices, LPG torch and 9kg bottle (needs retesting).

Contact Clem Parker 06 376 8353.

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

FOR SALE

Brian Wiffin wishes to sell the patterns and plans for his gear hobbing machine. The plans and patterns may be seen at Bruce Geange's home. Please ring 06 357 0566 to arrange a time to see them. Price to be negotiated.

FOR SALE

26" Chesterman Vernier \$150 ,
Small Ryobi bandsaw \$50 ,
Small and old air compressor \$20 ,
Three sets of rollers for placing under locomotive driving wheels while setting valves or trial steaming , will suit all gauges \$50 ,
6" double ended bench grinder \$25 ,
7 1/4" gauge passenger trolley with coal bunker \$100 ,
Model submarine kit, untouched, all parts including RX servos \$500 ,
Kit for a high speed drilling machine \$50 ,
Three 3/4" x 3/4" hand pumps \$100 each ,
Two 5" gauge BR Mk1 carriages 80% complete.
They are Doug Hewson kits and include the parts to complete them \$250 each
Moore and Wright micrometers
0 to 1" \$30 ,
1" to 2" \$40 ,
3" to 4" \$50 ,
4" to 5" \$60 ,
5" to 6" \$70 .

To view Please Ring Chris Rogers 06 3561759

THIS MONTH'S FEATURED MODEL.

By Doug Chambers

Two months ago I was asked if I would complete a 'Minnie' traction engine. The owner had bought the model which had probably come from a deceased estate.

I made it clear to him that 'Minnie' in 1" to the foot scale was going to be incapable of doing any useful work such as towing a trailer carrying the driver.

He accepted that and explained that he would be content to have it sitting on a coffee table in his lounge, but that he wanted it completed to a standard that could see it safely steamed.

The boiler was hydraulic tested and after a few leaks were dealt with it passed OK. Then more serious problems arose. The radius machined into the base of the cylinder block did not match the

curve of the diameter of the boiler barrel. A more serious omission was the lack of an undercut machined in the outer diameter of the cylinder sleeve. This would have prevented steam from passing around the outside of the sleeve and entering the regulator box where the safety valves are fitted. With no way of steam being released from the safety valves there was a potential for a disaster.

The engine was test run on air and worked both forwards and backwards. The machining of the water pump wasn't too good and it took some time to correct the problems found there.

Although the gearing and major components were all present and correct, there were no wheels.

The new owner had contacted 'Reeves' in England and obtained spokes for the front and rear wheels, cast aluminium rims, strakes for the back wheels, and rear wheel hubs.

I have heard it said that if you can make the wheels for a traction engine, then you will be able to make the whole engine. I believe this to be true. It is essential to make a robust jig to assemble the wheels in or you will end up with wheels that are out of round both vertically and laterally.

One part that the original designer omitted was the gear cover. All traction engines had a gear cover enclosing the gear train down the right-hand side of the engine. I felt that the model would be greatly enhanced if it had a cover fitted and knowing that Bruce Geange had fitted a gear cover to his 'Minnie' I visited him to see how he had gone about fabricating the cover. Bruce was only too happy to assist and his 'Minnie' was quickly set up on the bench for me to see. I am not as skilled as Bruce in platework but the gear cover I made does improve the engine, making its appearance far more realistic.

When the time came for wire rope for the winch drum I was at a loss to know just what to use. Finally the 'penny dropped' and I went off to see Paul Delatour at Manawatu Motorcycles and asked to see his range of motorcycle throttle cable. I found exactly what I required and left Paul shaking his head and saying that he had never supplied throttle cable for that purpose before.!!!!

I can honestly say that I enjoyed completing this model, although I would have enjoyed it more had it been 2" to the foot scale and capable of towing me around the lawn.

LETTER FROM ENGLAND

By Stan Compton

Anne and I have just returned from a trip to New Zealand to visit our children in Auckland and Wellington. The weather was mostly hot, instant summer for us.

I always try to meet up again with old friends but it is not always possible, more so because it is difficult now at my age to hire a car. Even so we did well being driven to a number of interesting places. In Auckland we were able to ride on a two foot gauge railway, 5 ½ kilometres long through tunnels etc to a dam site in the hills. The line followed the 24" pipeline made of cast iron imported from the UK years ago. What was interesting was a section of pipeline that had burst due to a malfunction causing a water hammer that broke out an area about ten foot by two foot. The pipe was about ¾" thick and of good quality with no imperfections – such is the power of water. The carriages were cramped, built to clear the tunnels, but an interesting trip.

A meal in the rotating restaurant up in the Sky Tower was pleasant, once I got over the speed of the elevator which tended to leave my blood in my legs.

We could see the whole city spread out below us, there was the wharf where we arrived in 1962 on SS Himalaya bringing a car with us. I never did get it steam cleaned ! No problem getting a drivers' licence, just answer a few questions and present my current licence. On our way to the southbound motorway, we managed to find ourselves down in Queen Street !!!

This time we left on the 'Overlander', what a smart new station you now have in Auckland. This is the second time we have travelled on this train, what a good job you were able to keep the service. It may cost more than the bus but you can move around, get a nice meal and see the back country. A pity we were delayed a few times, a previous derailment near Huntly left shattered concrete sleepers at the trackside after repairs had been made. It just shows the power of modern diesel locomotives.

Now to meet Doug and Robyn Chambers, then Fin Mason brought Alex Dickson round to see us, how nice to meet up and talk over old times at Massey. Ken Neilsen lives nearby and it was a pleasure to look at Ken's latest project, a single cylinder O.H.V. petrol engine called 'Kiwi'. Such tidy work, but all Ken's work is. The steam car is a lovely job and so is the 7 ¼" gauge 'Lion'.

Our old friend Jim Mann took me out to the railway station to see the NZR Wab hauling Capital

Connection stock out through the gorge to Woodville. Jim then chased the train, first waiting by the line near Ashhurst where I could hear those clear, even exhaust beats as the locomotive went by, and then chasing it through the Manawatu Gorge. At one point there were a few kayaks waiting on the river and I aimed my camera to include them as the Wab entered a tunnel, a pity the smoke almost hid the engine. And then on into Woodville to the Station where we found the loco quietly simmering in the sun.

Back to Palmerston North and a ride on the Esplanade Railway, sitting behind the driver, an old friend of Jim's, he tooted the horn at every crossing. A full train and such a long drive through to the children's playground, I gather the city authorities want to go back to the old route. The road crossings did not seem to be a problem to the car drivers.

On the way to Havelock North to visit relatives we stopped at a garden centre just outside Dannevirke where I noticed a sign 'Kittens For Sale'. I did not expect to see about fifteen fluffy kittens, mostly ginger, scampering about the floor. It was early and we were the only customers. While Anne was looking for a suitable gift to stand on a patio, I noticed a pair of tabby kittens playing among the displayed plants. As the woman running the place picked up the pots, pushing the soil back into place, she told me that those two were a pair of rat-bags !!!

All the way down from Auckland we could see how dry the paddocks were, it was the same in Hawkes Bay, not good for the farmers.

The tracksite at Keirunga Park was the same. It was not a running day but all looked in good order. My memory went back to finding Bruce Fordyce at the far end of the tracksite digging with a spade and he had told me "If I start here we have got to complete it as planned." All credit to the team that worked hard to complete such a fine track.

Now on to Wellington where our son Chris took us to see the original gun emplacement at Wrights Hill, Karori. Being Waitangi Day the tunnels were open. The two 9.5" guns have been sold to Japan for scrap years ago, ironic isn't it, they were intended to defend Wellington Harbour from the very people who melted them down?

A pair of Ruston Hornsby 6 cylinder diesel generators are still down below ground awaiting restoration, a pity the con-rods have gone, they will not be easy to replace. Such massive engines to produce 185 horse-power. A small Dorman generator stood in the workshop area next to the big engines.

Next day we took the ferry to Somes Island that was once used as a quarantine station for imported stock,

also to hold internees during World War 1.

A German detainee had built a sextant from odd scraps of wood hoping to escape by sea but never did. Now a nature reserve, we were asked whether our bags contained any furry creatures such as rats or mice!!!! A short two foot gauge tramway with a hand winch was built in 1870 to bring supplies up from a cove to the lighthouse which is now automatic of course.

A visit to Peter Carr at Kelson. He had built the 'Vale of Rheidol' locomotive that I wrote about some time ago. Now he is building a 3" scale Burrell traction engine, cutting gears on a home built milling machine, full marks!!

At the Silverstream Railway we, our son and grandchildren, had a ride behind the NZR C class No 132, built in Scotland in 1875. It was burning some good Strongman Mine coal, plenty of smoke !!

The stationmaster at McKirdy Station told me that when they get over to the U.K. to visit his wife's relatives, he finds the driving on the motorways around London very hectic, but got out into the country to the same B&B accommodation. Then he claimed he had to go to three Museums and two Stately Homes to one Restored Railway.

PILBARA IRON ORE RAILWAY

By Doug Chambers

This operation is about 700kms north of Perth in West Australia. The iron ore mined at 9 separate mines is brought out to the port at Dampier on the coast. Seven of the mines are Hamersley's and two are operated by Robe. The Hamersley mines are Brockman, Nammuldi, Marandoo, Mt Tom Price, Yandicoogina, Paraburdoo, Channar and Eastern Range. Robe River operate the West Angelas and Pannawaonica Mines.

All the ore is shifted out to Dampier on Pilbara trains.

Pilbara Rail has 1200 kilometres of track. Each train is made up of 230 ore cars, each having a load capacity of 106 tonnes. A fully loaded train operated by a single driver, weighs about 29,500 tonnes and will be about 2.5 kms long. There are 26 complete train sets and 19 loaded trains arrive at Dampier each 24 hour period. All the trains are hauled by two locomotives except for the trains coming out of the West Angelas mine. Those have three locomotives as there is a small range to climb before the

downhill run to Dampier.

The locomotives are General Electric's with V 16 cylinder arrangement.

They are rated at 4,400 horsepower and weigh 200 tonnes. The are to be replaced soon

with a new generation General Electric. These will have a V 12 engine, still with 4,400 horsepower, but equipped with four turbo-chargers which give greater efficiency and lessen emissions.



Pilbara Rail is currently studying the feasibility of having unmanned trains. Later this year Rio Tinto will be carrying out trials with Komatsu Autonomous Driverless Haulage



system with a range of other advanced remote control technologies. Mining in such a remote area leads to labour difficulties and robotics may lead to solving some of the labour problem.

Information was supplied by Wal Robinson, an ex Trans Rail driver (and my previous next door neighbour) who is currently driving for Pilbara Rail. Wal says a lot of the employees are Kiwis and he is enjoying the lifestyle over there. Salary Package. About \$200,000 Aus. Before tax.

Easter at Havelock North Live Steamers

Richard Lockett

A small contingent from PNMEC enjoyed a relaxed Easter break at the Keirunga Railway.

Highlights of the weekend apart from the usual good weather, good company and good food were Chris Arts 7 1/4 " NZR Ka locomotive down from Auckland sounding absolutely superb whilst hauling four full carriages of people round the tight curves and tunnels of the Keirunga track.

Our roving photographer reports that the mild cloudy weather made for excellent photo opportunities; hopefully the reproductions for the Generator fully capture his enthusiasm. I gave the W 192 a run doing 32 Km's over two days and am pretty happy with its performance and am even more so now that

I've got the injector going sweet. Hopefully Chris has got a good picture of it for me as I need a new picture to go on the computer as I'm sick of looking at someone else's loco (its not one of ours).

Thanks must go to the crew at Keirunga for their hospitality over the weekend.

We were Chris and Paulette Morton, Chris Saunders and Richard Lockett.
Photos Chris Saunders



W192 - R Lockett



Ka 971 - C Arts



Aspen Southern RR 500 - L Dawe



760 - M Hartle

The Other Easter Meeting - Inglewood

Janice and I travelled to Ted Barnes home a short distance from



Chewing the fat



Waiting for the passengers

Inglewood. We arrived Saturday morning and proceeded to get Mr Sandman unloaded and into steam. Grant and Donna Alexander had arrived the day before. Grant already had No24 in steam so was testing the track. After lunch many invited guests arrived for rides . We stayed overnight and came home Sunday as Janice was due at work by 4:00pm.

Murray Bold



Ted and Florence



Eo - Electric Loco

The Generator