



Newsletter of **THE PALMERSTON NORTH MODEL ENGINEERING CLUB INC**

Managers of the "MARRINER RESERVE RAILWAY"

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T H E G E N E R A T O R

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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

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

Place
stamp
here

This Months Featured Model



Report on the September Meeting.

The guest speaker was Brian Wiffin who told us about making the Lyre Skeleton Clock. Brian and Margaret lived in Dannevirke where Brian had a tool room in a large shed behind the house. However years catch up with all of us and they sold up and moved to a Lifestyle villa in Matamata. Brian couldn't be parted from engineering completely and he bought a small lathe and mill and set up a small workshop. He had thought of building a model steam locomotive but realised that the distance from tracks and the need of a trailer to transport it on meant that the locomotive was not going to be a very practical idea. Brian then decided to make a clock, after all once finished it could be a show-piece in the lounge. Bob Owen loaned Brian a book by W.R. Smith on the construction of a Lyre Skeleton Clock. Why that particular clock? Well, it doesn't have a case enclosing the 'works' and Brian felt that the 'works' should be able to be seen. Brian found that understanding how and why a clock works was not as easy as might be expected and the precise engineering of parts to very fine tolerances that he had been used to was not desirable in clock-making where components have to run freely with no friction at all. Brian says that the clock will stop at odd times but he has located the wheel causing the problem and the clock is to be dismantled again to allow for fine adjustment. He has no idea of the time it has taken to complete. A 'labour of love' although it frequently caused the blood pressure to rise, it was done when the weather was too wet to play golf and between other chores.

Then of course there are the jigs and clock spring winding tools that have to be made but at least they can be used on future clocks. Yes, there are two more clocks under construction and I hope Brian will bring them down to show us when they are finished.

As usual there were a few items brought in by members and displayed.

Fred Kent had the little 'Flying Scotsman' now very close to finished. He is at present having some difficulty fitting the little air compressor inside the boiler. He has altered the cylinders to allow them to run on air so that the wheels and motion can be seen moving.

Merv George has made a device for applying a 'dot' punch to the right place. Especially useful to those of us whose eyesight is not as good as it was some forty years ago.

Graeme Hall brought along a hot air engine drawn up by a Mr. Rizzo of Malta that was featured in 'Australian Model Engineering' not very long ago. Later in the evening, with the aid of a small propane burner Graeme set the engine running to the delight of all.

Ian Stephens brought along his nearly completed two-cylinder 'inverted' steam engine, built largely to his own design. Some of the members had seen photos of Ian and his models in some of the local papers and he was asked to explain himself. Ian said that he had been asked by the Marton Craft Society to display his models at their craft show in Marton last week. He had a great time and was delighted in the interest shown by people of all ages.

COMING EVENTS

Track running at Marriner Reserve Railway

November	4 th	from 1pm to 4pm
November	17 th	from 1pm to 4pm
December	3 rd	from 1pm to 4pm
December	20 th	from 1pm to 4pm

Open Weekends

Pureoro Timber Trail. Mountain Biking, November 16-17-18. Bike and Rider fitness essential. Talk to Richard Lockett for details.

E.B.o.P. MEs River Edge Park Railway
10th Anniversary Run 15th -16th December.

Cambridge-Rotorua Live Steamers
Grand Opening 1st -2nd December

Tauranga Model Marine & Engineering Club
10th -11th November

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

October Club Night

7:30pm, Thursday 25 October 2012
Hearing Association Rooms
Church Street, Palmerston North

The theme for the evening will be 'Bits and Pieces' so dust off your current project and bring it along.

Wanted

If anyone has a surplus refrigerator in working order, would they please contact Richard Lockett or any Committee Member.

Club End of Year Dinner

Tasty Restaurant

700 Main Street
Palmerston North
(corner of Main and Albert Streets)

Thursday 22 November 2012

Drinks 6pm
Dinner 7pm

The cost is \$24 per person. (Pay as you arrive.) They also have a licensed bar for you to purchase innervating liquids.

Our End of Year Dinner is traditionally an upbeat but at the same time relaxing lead into the summer. In other words, it's a lot of fun. 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
Cynthia, 354-7100, Cynthia@trains.net.nz
Murray 326-9665, engineer@inspire.net.nz

THIS MONTH'S FEATURED MODEL

by Graeme Hall

After building various types of 'Hot Air' engines, I decided to build one that would do some work or move along under its own power. This model is based on a construction article serialised in 'HomeShop Machinist' in 1996. Some changes

were made due to available materials and those on hand. Alterations were made to the front axle and steering on advice from Bruce Geange who built one of these models some years ago and his was featured in 'The Generator' in April 2005.

All parts were fabricated, mostly from scrap metal. The rear wheel rims were made from an aluminium fire extinguisher cylinder and the drive gears were cut from brass. The displacer tube was made from stainless steel tube and the power piston from carbon which needs no lubrication. A methylated spirit burner provides heat to the end of the displacer cylinder and the cold end is cooled by a water tank. After some minor problems with the methylated spirit burner and the displacer cylinder sealing, the tractor now starts and runs well – much to the enjoyment of our grandchildren and visitors.

LETTER FROM ENGLAND

By Stan Compton

Many of you will have never heard of Gordon Atkinson who died recently. He lived in Feilding, a self taught model engineer who built a magnificent steam tug, radio controlled, that he used to steam on the lagoon. He built boats, hydroplanes and a submarine, but it was the two steam cars, one with a Bugatti outline, that were of his own design and driven by his grandsons. They were a credit to someone who worked in a small shed and who had a determination to succeed.

Recently I was taken to the 50th Anniversary of the Kniver M.E.S., a very active group located north of Birmingham. Pete Waterman, the man who now owns one of the old British Rail Works and is fully occupied with the restoration of steam locomotives. So some good has been achieved by his early ventures in the 'Pop' music world. Just by a bit of bad luck when it was time for Pete to drive a 5" gauge 'Pansy' around the half-mile raised track, the water feed hose split, so there was a delay while this was repaired. After completing the run at good speed Pete gave us a talk on the public address system complementing the Society on its progress. Then he told us about his efforts to get Industry to set up more apprenticeship schemes which is what Germany does successfully producing quality products. I heard later that 28 visiting locomotives were on display, plus other models and trade stands

in the nearby school hall. Outside was a restored 'Burrell' Showman's Engine in steam and idling quietly, also there was a full-size replica of the engine known as 'Catch Me Who Can'.

It weighed over four tons and was jacked up on a heavy trailer so we could watch the action of the piston rod tripping the valve gear.

The original was built to run on a circular track for paying passengers in a London Park in the early 1800s. I gather that the weight of the engine broke the rails of the track.

There was an interesting collection of vintage cars, a 1930 Bentley Tourer took my eye; years ago one of these left me far behind on a steep hill in Devon.

I was riding a 500cc Matchless at the time. Among the vintage motorcycles on display was the only example of a pre 1914 steam powered 'Haleson' motorcycle resplendent in all the copper pipework.

It was nice to see a 3½" gauge 'Lion' locomotive steaming effortlessly out among all the big engines on the excellent track. Full marks to all the members who had brought the track up to its first class condition. The atmosphere created was just like years ago, all concerned enjoying themselves.

One locomotive on display near the steaming bays caught our eyes, a 5" gauge G.W.R. 'Court Class' because it looked like a working engine. The builder had correctly joined the boiler cladding and the bands on top of the boiler shell, something we rarely see.

The Hereford club locomotive is a 5" gauge 'Sweet Pea' built by a group of members many years ago for use on a portable track to raise funds. It has had a hard life but now a couple of members use it passenger hauling and recently took it to a rally at Oxford. Now this engine usually obtains the injector feedwater from a tank on a stand; at the rally I gather a short length of plastic hose with a funnel was used to top up the boiler, most un-railway like!!

Incidentally the hand-pump had seized up previously due to the application of oil to the pump-ram, the O-ring bought as a 'Viton' was found to be a rubber one which had swollen.

On a recent trip to the South coast we boarded a boat ready to go on a cruise around the Poole Harbour, when a three-masted sailing ship the 'Lord Nelson' a sail training ship for handicapped people, was turned around with a powerful rubber craft with an outboard engine, and

moored alongside us. Quite a sight, then the crew went aloft to correctly furl the mainsails while standing on the foot-ropes, just imagine doing the same job off Cape Horn!!!

Another day we visited the National Motor Museum (www.beaulieu.co.uk). An extra was to visit the home of the owner, Palace House on the same property. He had many small moulded models of vintage cars, even a 'Rolls Royce Silver Ghost' made of icing sugar. You all know about the sculpture of the lady on the radiator cap on 'Rolls Royce' cars. There is also another one called 'The Whisper', the model is doing just that to indicate the silence of the car. So much to see and well worth a visit.

Do any of you remember a small car made by the Standard motor Company called the 'Mayflower'.

It looked like a small 'Rolls Royce' and was intended for the second car market in the U.S.A. There is one on display at Kniver reminding me of one I bought cheap when we lived in Vancouver. We used to take our children up into the hills so that they could play in the snow. That car always boiled the radiator on the climb!! Like many English cars the water passages to the cylinder head were too small. Sometimes as I drove into the city a young man with a real 'Hot-rod' would pull alongside and call out, "I'll drag you for a beer"!!!!!!



The picture above was taken at the National Motor Museum, shows 'Golden Arrow' a car driven by Henry Segrave to a World Land Speed record at Daytona Beach, Florida on 11. 3. 1929. Designed by J.S. Irving and powered by a Napier Lion W 12 cylinder aero engine.

Track-Bed Upgrade

On the 20th September the Thursday gang lifted the rails and then the crib wall sections from between the concrete blocks on a sixteen metre section just before Manuka Curve. After some digging, the section was fitted up with boxing to the appropriate grade and super-elevation.



The following Thursday the rails were bolted down and "Taffy" was used to adjust the track alignment.

The rails were scrubbed with a rotary wire brush and then painted with 'cold galvanising' paint.

Friday morning saw a Higgins concrete delivery truck arrive with a metre of concrete which was quickly barrowed and levelled off. Then a couple of members stayed on to 'guard' the concrete until it has dried off enough that undesirable attention from local children could be prevented.



The following Thursday the boxing was removed and dirt was reinstated next to the concrete. The club's ride on mower was used to compact the dirt. The painting of the rails was completed and new holes in the sleepers were drilled ready for the 'Dyna-Bolts' which hold the rail down to the concrete. Off site strips of conveyor belting were cut ready to glue on to the sleepers before the rail is re-laid.

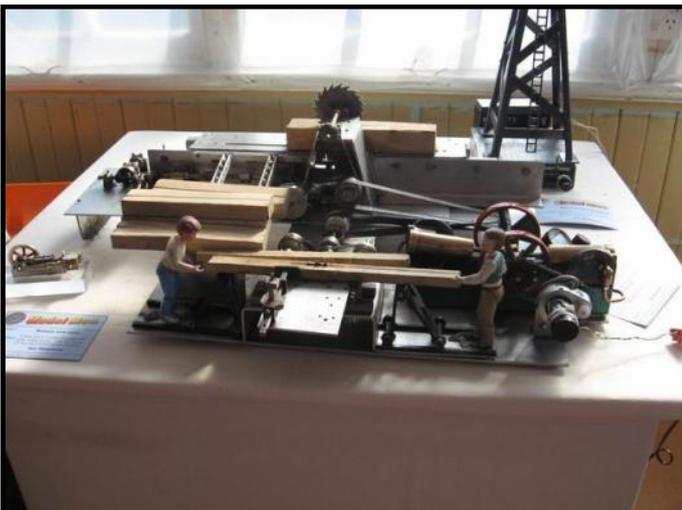


The job was proved and tested by Robert Edwards Heisler and David Sullivan's Bavarian Tank.

Marton Craft Society Display

This display took place in Marton from the 19th - 23rd September. Ian Stephens, one of our members who lives in Marton was asked to display his models and he agreed. For those of you who don't know Ian, here is a little background. Ian didn't start model engineering until he was 75 and during the next eight years he has become a prolific builder of stationary steam engines, vehicles (steam powered), miniature sawmills and the machinery used in sawmilling. Ian's standard of workmanship continues to improve with each model completed. Ian told me that he attended the display each day and that he was peppered with questions about his models. He found people astonished that he had made them himself and in the time taken to produce the completed item. Ian passed out our PNME club 'Flyers' to those who were interested.

He found himself speaking to people who had come from as far south as Foxton and as far north as Taihape. Below are photos of Ian's display taken by Richard Stevens.



bombers. Because the Mosquito used wood for its construction it was passed by the Air Ministry to be built for evaluation. The rest is history, the Mosquito turned out to be one of the most successful aircraft of the Second World War. It was capable of carrying a two ton bomb load to Berlin and relying on its high speed to evade fighters. The bomber version was unarmed. Different models were developed for day fighters, fighter-bombers, night fighters, photo reconnaissance and path-finders (target marking).

The last Mosquito flying in the United Kingdom crashed killing the crew some years ago.

Progress on the Mosquito being built by Glyn Powell was slow. However Jerry Yagen, an American aviation enthusiast who owns a large collection of aircraft, bought the first Mosquito taken from the moulds and arranged for AVSpecs Restorations Ltd. to completely fit out the aircraft.

Engine runs were undertaken during the last two weeks and then on Thursday 27th of September 2012 the New Zealand built Mosquito became the only flying example in the world.

Laurie and Joan Gudsell travelled to Auckland to see the Mosquito in the air for the first time and took the following photos.



Mosquito First Flight.

By Doug Chambers

Twenty years ago at Ardmore, in Auckland, Glyn Powell started making the moulds necessary to produce the fuselage and wings for a Mosquito aircraft. Most of you will know that the Mosquito was largely built of wood. In fact it was due to De Havilland's design being made of wood that the aircraft was built in the first place. In 1940 aluminium was in great demand for other fighters and