

The Generator

Issue 441
February 2018



Palmerston Model Engineering Club
www.pnmecc.org.nz - pnmecc@trains.net.nz

Managers of the Marriner Reserve Railway - Marriner Street - Palmerston North
PO Box 4132 - Manawatu Mail Centre - Palmerston North 4442

January Meeting Report **“President’s Barbecue”**

As usual the January Club Meeting was the President’s Barbecue, held at Robert and Margaret’s residence at Te Arakura. Robert, Dave Spark and Neil Burn all ran their locos on Robert’s multi gauge ground-level track. Graeme Hall brought along his recently completed Barn Engine which ran very smoothly. Well up to Graeme’s immaculate workmanship standard. Later in the evening Murray Bold and Bruce Geange ran their putt-putt boats in Margaret and Robert’s large swimming pool. Murray’s boat was the one he built as an entry in the challenge at the recent National Convention in Nelson. Murray’s boat did not win in Nelson but it did not sink as many of the entries did and it apparently ran as long as the winning entry. Bruce’s boat was a really swept up job (painted and all) but was not part of the competition in Nelson. Both boats performed well at the barbecue.

About 25 club members attended and there was a lot of mixing and discussion. The marquee provided welcome shade on a sweltering day and there was also a nice gentle breeze. Robert and Janice Hall did a sterling job on the barbecue and there was a good selection of salads and desserts provided by the members. All in all a very nice way to start off our club nights for 2018.

A happy group watching the putt-putts perform



What's on this month and in the future PNMEC Club Calendar

**Track running at
Marriner Reserve Railway**

February 4th 1pm - 4pm
February 18th 1pm - 4pm
March 18th 1pm - 4pm

Locomotion 2018

March 3rd & 4th 10am - 4pm

The Palmerston North Model Engineering Club Annual General Meeting is to be held on 26 April 2018.

February 22 Club Night

We Cut Shapes

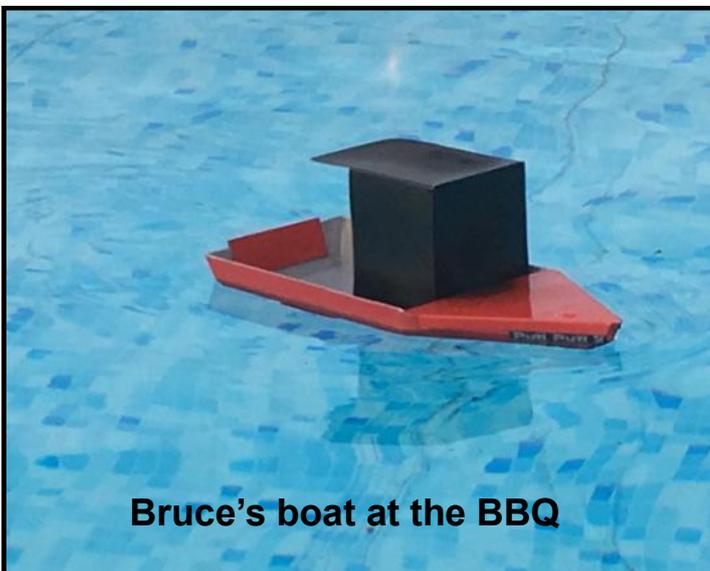
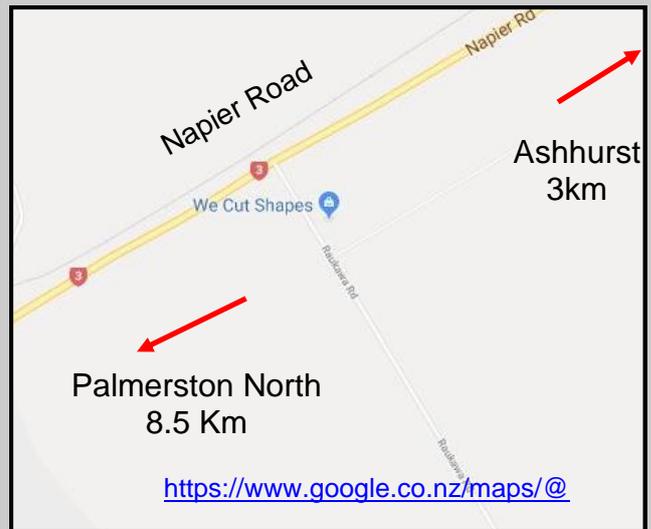
This is a small home based business that makes CNC cut Routed Trophies in Acrylic and also Laser cut timber etc

We will meet at 21 Raukawa Road at 7.00pm for a look around the workshop.

Travel 8.5km from PN cemetery toward Ashhurst on Napier Road to Raukawa Rd. Turn Right. WCS is 100 meters on the left.

See WCS website for examples of what they can make. www.wecutshapes.co.nz

It will be a most interesting evening.



Bruce's boat at the BBQ



Murray's boat at the BBQ

Farm or Barn Engine – 1900–1930 era

Built in the thousands to power farm equipment – water pumps, wood saws, corn mills, and generating electricity for household lighting.

The main advantages of this form of power plant lay in its portability (if required) and economy of running.

The majority of successful engines were simple in design and offered fool proof operation so that maintenance was within the scope of the farm worker or local blacksmith.

The Project

Featured in a series in the 'Model Engine Builder' online mag, a small single cylinder $\frac{7}{8}$ " bore and $1\frac{1}{8}$ " stroke was fabricated with no castings. This appealed to me as I had nearly all the materials on hand.

The engine is water-cooled with a water hopper built up from sections of $\frac{1}{8}$ " steel plate, brazed together around a steel cylinder with a cast iron liner pressed in.

The crank case frame started out as a solid block of aluminium 1.5 x 3 x 3.5 and after a large pile of metal chips a housing was formed with cylinder and crankshaft bearing mountings, a fuel tank in base cavity and bearing caps made and bored to size.

Crankshaft cut and machined from $\frac{1}{2}$ " steel plate, con-rod and piston from aluminium bar stock with 2 piston rings fitted.

Then the serial plans ran out – no more issues to date!! With a bit of research – more parts were made.

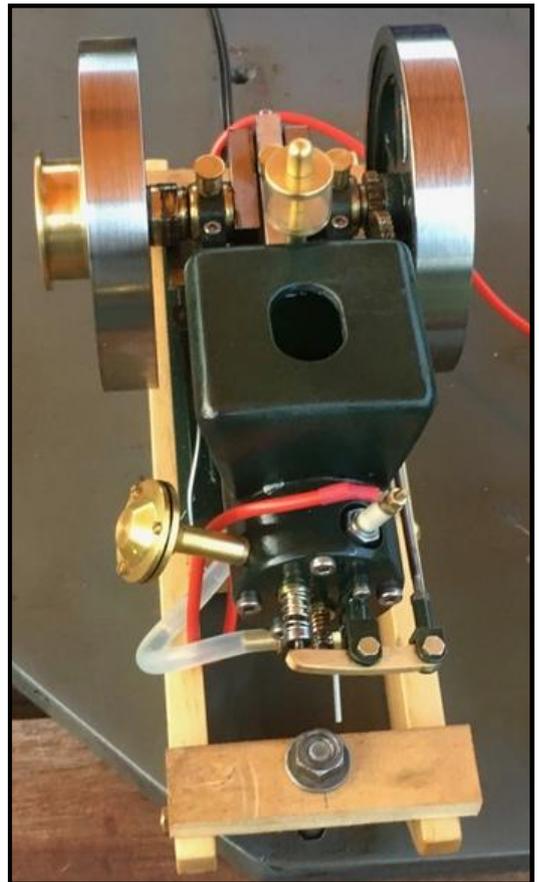
Two slices of 4" steel bar obtained formed fly wheels, cylinder head, valves and timing gears made up to fit. A simple carburettor with throttle control, as this engine has no governor.

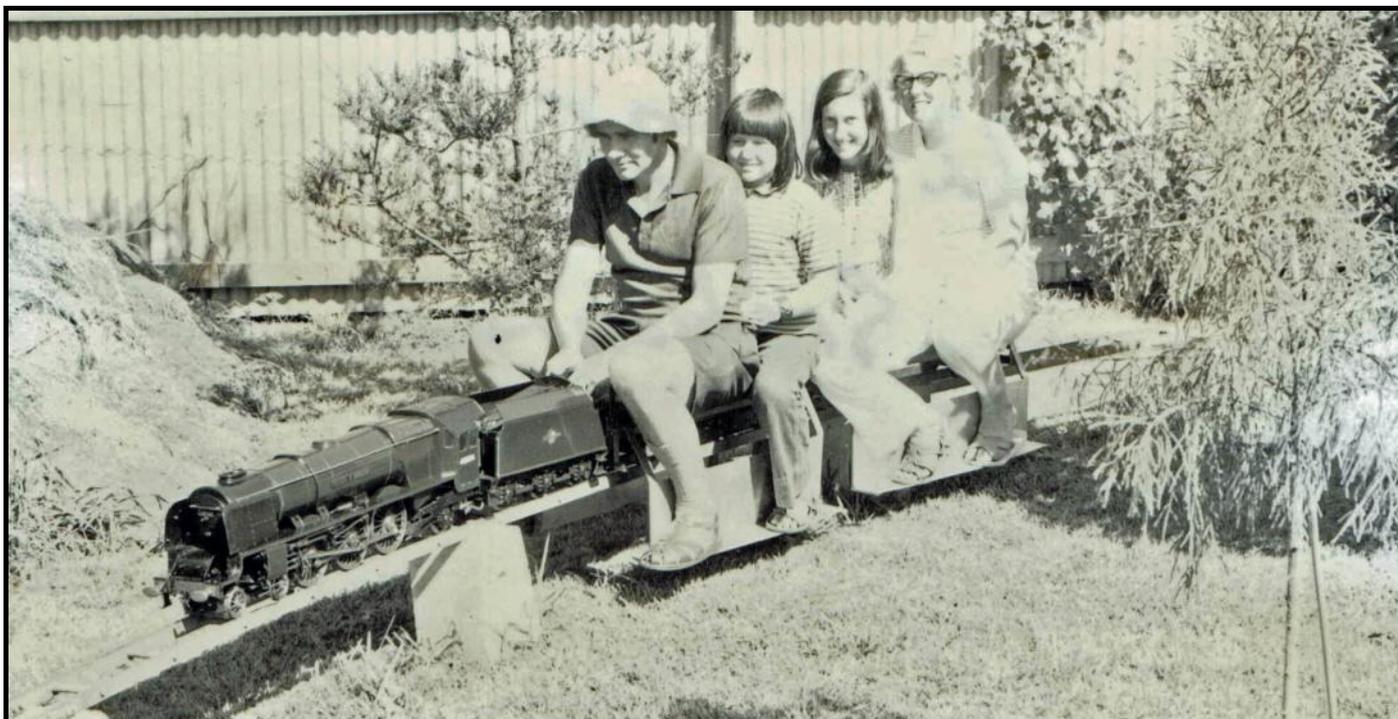
The ignition breaker - after a few modifications sparks obtained.

A clean-up, a base plate and painting next. As most of these engines were made to be portable on a sledge base or trolley – a sledge base selected.

Test runs, timing adjustments and I have another running engine!!

Graeme Hall - Wanganui





**Where and When was this photo taken. Who are the Passengers.
Answer elsewhere in this newsletter**

Lots of Fun at the Nelson Convention

Cynthia Cooper

I love the biennial model engineering conventions. Once every two years is just enough time for them not to become too onerous and to build up anticipation for the next one. This year's convention was particularly well run. The Nelson club did an exemplary job, with the Gibbs family in particular being here, there and everywhere. There is a huge amount of work and commitment for the host club and I really appreciate it when one comes off as well as this one. They quietly and efficiently handled every kind of situation that arose.

The Palmerston North club was well represented. Murray and Janice Bold had their camper van which was parked on site. They set up next to the track. This gave us a place to hang out when we were feeling the need to relax from all the activity. We could eat our lunch or have a quiet drink and watch the trains go by.

I particularly enjoyed the Les Moore Challenge this year. Participants had less than two days to build a Putt-Putt boat out of tin cans. There were a dozen entries of all shapes and sizes. Most people cut up the cans and hammered them into an outline resembling a boat. The ideas and designs were diverse with many and varied shapes. One of my favorites was left in its round form with "coracle" written on the side.

Murray Bold's entry arguably went the furthest distance as it travelled around the edge of the pond and just kept going and going for over half an hour. Unfortunately there was something a bit off about the rudder which kept turning it in towards the shore. Consequently he had to keep pushing it back out, thus disqualify him.

I believe that, back in the mists of time, the Nelson club started these conventions. They certainly uphold a very high standard. Exceptionally well done Nelson!

How Do I Do That

We are planning a section for members to ask the Question "How do I do that." The committee will find some one to answer it and publish your question and the answer from a knowledgeable person. Send your question to pmnec@trains.net.nz

Locomotion 2018

3rd & 4th March 2018

The Palmerston North Model Engineering Club Inc



Invite you to attend their Annual **LOCOMOTION** Weekend at the Marriner Reserve Railway, Marriner St, Palmerston North.

Ground level 500 meter
7.25", 5" & 3.5" track

Lunches, Morning and
Afternoon Teas are
provided

Saturday Evening
Night Running and BBQ



For more Information Contact:-

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Murray Bold - 1502 Napier Road - Ashhurst - (06) 326-9665

Email - pnmec@trains.net.nz

Web Site - www.pnmec.org.nz

Nelson Convention January 2018.... Tony Brown

I have been conned into writing a small report about the event so here we go.

Thursday 4th ... Arrived at the Nelson track mid afternoon... weather was very hot. Offloaded locos, hooked up, and checked the track out with a Nelson committee member. There were not too many passengers, but dozens of locos (and people) I had never seen before. We settled into the Motel, shared with Cynthia and Richard, and very handy at 5 minutes walking distance. Also caught up with Murray and Janice who campervanned on site.

Friday 5th ... After a night of very heavy rain, the locos were covered like this:  But the day came fine and had a busy day with passengers. The tide was extremely high and lapped the bottom of a truss bridge at the end of the lake.



Saturday 6th ... This was similar to Friday, very hot, plenty of passengers. But no night run as planned as the rain came back; some hardy drivers ran, but not too many customers. The MEANZ meeting was held and was over in an hour.

Sunday 7th ... Very busy day with passengers; so many locos that they were banked up 100 meters from the station at one stage. The night event/awards was held in the marquee and very well attended.



Monday 8th ... Loaded up locos and headed for home. Excellent event and credit to the Organizers, the Gibbs family.



Above was the smallest loco there It did many trips on a couple of small alarm batteries!

Also another loco was interesting as the running gear was built out of a step through motorbike... including muffler and fuel tank! 



The Generator

Profile - Richard Lockett

So how did I end up in this position? While having a spell living in England early in the 1980's I used to visit the Model Engineering Exhibition at Wembley Stadium each year. I've liked to build things from an early age. Junior Engineer plastic construction sets, then moving up to Meccano and doing metal work through high school, then on to an engineering apprenticeship as a teenager. So, before I returned to New Zealand I purchased castings for a 1.5 inch Allchin Traction Engine.

On joining the Palmerston North Model Engineering Club I found out that there is a process to follow to constructing and certifying model boilers. This eventually led to me ending up on the clubs boiler team. I joined the clubs committee, then took on the position of treasurer, followed by a spell as club president. I am currently the manager of club railway operations at the Marriner Reserve Railway.

When I joined the club in the late 1980's they were extending the ground level railway track and I became involved in this side of the hobby - shifting dirt, pouring concrete, fabricating steel bridges, planting trees, building track. I'm still doing it!

I did finish building the traction engine and some of you may have seen it running. I then purchased from Doug Chambers the 7¼" gauge Kerr Stuart Wren class railway loco known as "Robyn". I operated this for some years while I was building my 7¼" gauge W192 NZR Tank Locomotive. I am currently building U193 a 7¼" gauge NZR locomotive. Both of these are products of the Addington Railway Workshops.

Progress on the "U" is slow at present as other activities are taking precedence, namely tramping and mountain biking. I started biking to maintain a high level of fitness for tramping. I now spend more time biking as I started racing mountain bikes at a club level, which I really enjoy, so it has become a priority activity.



The answer to the Photo question on page 4 :-

The photo was taken **January 1975** at **Ron Walker's home** in **Gisborne**.
The passengers Bruce, Susan, Judith & Alison Geange.

If you would like to be notified when this newsletter is published, send us an email with your **Name, Club** and **Email** address to pnmec@trains.org.nz with "**Generator Please**" in the subject line.