The Generator

Issue 447
August 2018

Palmerston Model Engineering Club

www.pnmec.org.nz - pnmec@trains.net.nz

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

"60+ Club Day at the Library."

Our representatives
John
Dave
Cynthia and
Bruce.

What's happening this month and in the future, Check out the PNMEC Club Calendar

Track running at Marriner Reserve Railway

September 2nd	1pm - 3pm
September 16th	1pm - 3pm
October 7th	1pm - 4pm
October 21st	1pm - 4pm

The Palmerston North Model Engineering Club
Upcoming Club Nights

23 August 2018
The Alexander Turnball Library holds an amazing variety of historic documents. A club member will give a presentation based around their photos with an engineering theme.

27 September 2018
A club member will demonstrate 3D Printing and Laser Engraving.

25 October 2018
Bring along the project that you have been working on this year. We would also like to see your Bits and Pieces.

These meetings are all to be held at 7.30pm in the
Hearing Association Hall, 435 Church Street, Palmerston North

There are quite a number who haven't paid their annual sub. This is **$30** for Members and Family's. Please send your cheque to The Treasurer at the address below, deliver on club night, or by using Internet Banking.

The Treasurer
PN Model Engineering Club
PO Box 4132
Manawatu Mail Centre
Palmerston North 4442

For Internet banking
The club Bank account number is
06-0996-0831663-00
Make sure your name is on the transfer so we know who to credit.

Inclement Weather on Run Days

If the weather looks a bit rough, squally, wet, wild or just iffy on the morning of a regular Sunday Run Day and you are wondering if trains will be running; then phone **Kerry Puklowski** and he will let you know if running is going ahead or has been cancelled. **Kerry 027-445-5487 or (06) 353-6189**

Two New Members of PNMEC

Welcome to

Narayanan Padmanabhan from Palmerston North

and **Ewan Pound** from Wanganui.

We look forward to seeing you at our meetings .

Report on July Club Meeting

The meeting had quite a small attendance (12 members). Following the opening of the meeting **Cynthia Cooper** reported on the club presence at the recent "60+ Clubs Day" at the Palmerston North City Library. A large crowd turned up at this event and our stand, manned by **Cynthia, David Bell and John Tweedie**, attracted considerable attention.

The main part of the meeting involved members giving a short talk about a document, book, photography, or another printed item they found particularly Interesting to them.

Fin Mason described how the large amount of specifications from the NZ Ministry of Works had impacted on his job as an engineer with various public bodies, including the Palmerston North City Council.

David Bell talked about specifications from the NZ boiler code (1980) and its aspects of his job as an engineer. The NZ specifications in many cases were more stringent than those generally applied throughout the rest of the world. This often resulted in considerably more work when designing equipment and buildings in this country.

Graeme Hall showed a book by Edgar Westbury on internal combustion engines that has led to his interest in the construction of many of these engines.

Dave Edmond showed several early photos of Massey College as the local University was known then. His parents had been students there. He also had a photo album of early tractors and traction engines.

Merv George talked about a book that he had checked out from the Feilding Library on a rotary valve 4-stroke engine that had sparked his interest.

John Tweedie talked about a 1964 book on the early origins of molecular biology and how it changed his ideas about biochemistry and his approach to science.

Chris Morton brought along a plan of the original track layout at Marriner Reserve before the placement of the embankment and track extension. Chris also had a copy of Fin Mason's drawings for the track extensions and embankments.
Chris also showed us a large scale drawing of a Triumph Herald 1147cc motor.

Murray Bold talked about the assembly manual for his latest 3D printer.
Without it, it would have been a nightmare to assemble setup and calibrate.

Cynthia Cooper presented a collection of items that the committee produces such as our club pamphlet, flyers, posters, running day email, etc. These are printed as needed to promote and support the club.

Letter from England

By Stan Compton

Have you ever wondered why steam ships used to have such tall funnels? The ones on the Titanic were 19' x 24" oval and 70' long to obtain a good draught on the boilers. Modern vessels, if steam powered, use forced-draught but the late Dom Young always stated that the old way was better and he was a draftsman at a shipyard on the Isle of Wight.

Someone has loaned me a copy of R.M.S. Titanic Owners Workshop Manual by Haynes containing many facts, figures and photographs of its construction. An example are the working conditions in the stoke holds, for the twenty four double ended boilers that required 48 stokers and 20 trimmers for each four hour shift firing best Welsh steam coal about the size of a melon. Just imagine firing that coal at chest height a long way into the furnace. Each side in turn one side would have the clinker dowsed with water to help break it up with an iron pricker that weighed forty pounds. Firing had to be done at the sound of a gong from the Kelroy firing regulator, from every nine minutes to every half hour depending on the steaming rate. This gave a regular rate but was known to drive the stokers to commit suicide.

The Titanic would consume 750 ton of coal daily creating 100 ton of ash and clinker. How would this be got rid of? An ash ejector was fed by a trimmer from his wheel-barrow. Imagine a heavy-duty flush toilet with a clamped down lid working at 150psi discharging overboard above the water line.

The Trimmer also moved the coal from the bunkers to the foot-plate by the firing door. It was common with fresh coal for combustion to take place in the bunkers. This occurred on Titanic due to obtaining a mixture of coal from other sister ships because of a coal shortage. When she was due to sail a fire was discovered while docked in Southampton. Rather than delay the sailing it was decided to deal with the fire at sea. Trimmers were paid extra to move the burning coal to the boilers. This could have been the reason Titanic was at full speed in an ice field. It could also mean to reach New York with no delay to obtain help to extinguish the bunker fire. We shall never know.

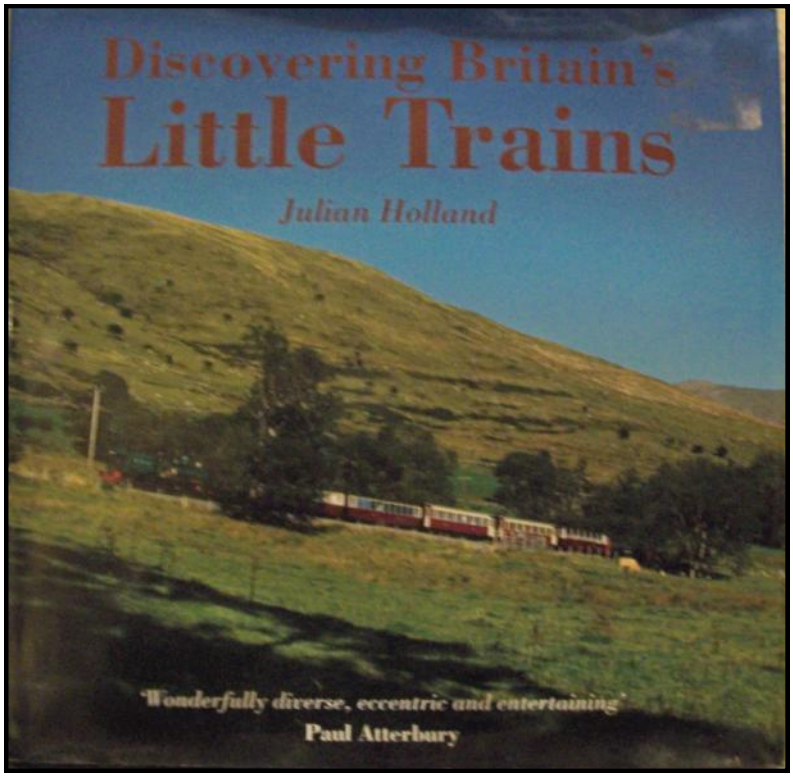
In my position as Crossing Keeper to the elevated track at Broomy Hill I meet all sorts of visitors. One day I had an ex B.R Driver in his nineties. He had no idea we build passenger hauling locomotives based on B.R. prototypes. His grand-daughter had brought him to our track site. It was such a pity Doug was not running his B1 known as "Springbok" because the old man used to drive the full size locomotive.

Another regular visitor brings parts of a 5" GWR "Dukedog". This design leads to complications to cope with. The builder is determined to be authentic and even obtained a section of a GWR slide-bar to machine his from. I always use gauge-plate. This is ground to size. Even bright mild steel is suitable with my limited workshop compared to his commercial machines. I once had a GWR 1366 to restore. The boiler that had been over-pressured due to someone leaving the blower turned on with a bright fire. The safety valve could not cope and the backhead bulged out, shearing the copper round the firehole ring. Foolishly he tried to patch it up with soft-solder. Now NEVER try to silver solder on top of soft-solder. The lead will melt into the copper ruining it.

I affected a repair by pressing the firehole ring back into place. Then I drilled and tapped 5BA overlapping holes all round the ring, fitting copper studs as I went round. The overlaps gave the strength. Castings used to be repaired this way. I now completed the job with soft-solder as caulking and it was tested to 200 pounds pressure with no leaks.

We find often that our young passengers are intrigued by the clickety-click of four-rail-joints as the wheels pass over - of course many youngsters have never travelled on a mainline train, but if they do it could be on modern track with quarter-mile rail joints

Discovering Britain's Little Trains



Discovering Britain's Little Trains takes the reader on a trip down memory lane to the eccentric world of Britain's narrow gauge railways. Many such as the Ashover Light Railway in Derbyshire and the Welsh Highland Railway were short lived and never lived up to the over -optimistic expectations of their promoters. Most of them had closed and had long disappeared into the undergrowth well before the onset of World War II.
While several preserved narrow gauge lines in Britain, such as the Ffestiniog Railway and Talyllyn Railway; are well known to the public the author has chosen ten of the more idiosyneratic and less well-known lines to delight the reader. Armed with his trusty camera and with the resourcefulness of a "Railway Detective" Julian Holland has unearthed some real gems that have lain hidden away - some for over 70 years - in Britain's countryside.
However, due to the dedicated efforts of preservationists, some are now in the process of being reopened. Julian Hollands fascinating text is accompanied by nostalgic photographs and ephemera of both closed and reopened lines in their heyday, along with specially commissioned colour photographs of what can be seen today.

July Club Night

The July Club Night was on a cold day and the attendance was low, which was a pity as those of us that were there had a very entertaining evening. Members had been asked to bring along and talk about some kind of printed item that they find particularly interesting.

A fascinating and diverse mix of materials were on the table and members talked for varying lengths of time. Everyone was very relaxed as we listened to a range of assorted, entertaining and noteworthy stories. If you weren't there you missed a delightful evening.

Cynthia Cooper

60+ Club Day

On the afternoon of Thursday 26 July the Palmerston North City Library held a gathering for clubs that include older members amongst its ranks. The Model Engineers were invited to have a spot where we could meet the public and show off the different types of modeling that we do. Three members represented the club - Cynthia Cooper, David Bell and John Tweedie. We had various items on our table to demonstrate the diversity of our hobby.

John Tweedie had his small Stirling Cycle Hot Air Engine. It runs for over an hour on just one mug of boiling water. The movement drew the public's attention which was an advantage to us over other club displays. We had Murray Bold's Roundhouse Lady Anne - Live Steam - G Scale garden locomotive.
David brought along his Meccano Robot and some Baldwin Locomotive Component Drawings dated from the late 1890's. We also had the steam crane that was built for the modelers challenge some years ago. These demonstrated a nice cross section of the variety of modeling our members undertake.

We spent over two hours interacting with a cross section of society of all ages having some fascinating conversations. People were generally interested in what we had to say. We were able to enlighten them on the location of our track and we hope that this will lead to having more customers at our Sunday running. More importantly, we talked to people who like to build things. Their backgrounds were many and varied and we hope that these will lead to some new members.

A surprise was the number of people that came back multiple times to look at what we were offering. Another surprise was how many people took contact information to hand on to others. These people recognised what we were about and knew of somebody who may be interested. They obviously thought us worthwhile.

Most surprising of all was the time people spent looking at our work. Many looked in detail at the three old Baldwin Locomotive Component Drawings we had on the table. At least five old men jokingly said they could still smell the ammonia on them (referring to the way blueprints used to be produced), they all asked for a club brochure, and they all came back for a second look.

We all felt that our time was well spent and that the day was worth doing. However, next time we should include work that ranges from quite simple to very complex. Some people were put off by their perceived expectations that "you have to be skilled to produce work like that". We need to let people know that we cater for a wide range of skills.

Cynthia Cooper and David Bell

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send us an email with your **Name, Club** and **Email** address to
pnmec@trains.org.nz with **"Generator Please"** in the subject line.