The Generator

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

The Palmerston North Model Engineering Club

Upcoming Club Nights

26 September 2019

One of our members will give a talk about the stuff he works on each day to earn a living. You will be enlightened and informed of the manufacture, testing, uses and dangers of his chosen field.

24 October 2019

We will be visiting the new
Palmerston North City Library Blueprint - Makerspace.
They have all kinds fun and interesting machines for making things.

November Meeting

The committee has 2 possible locations for this event.
We are undecided at present and will ask the membership at the September club night for their input.

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 027-220-9030 or (06) 353-6189**

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

Track running at Marriner Reserve Railway

Oct	6th	1pm - 4pm
Oct	20th	1pm - 4pm
Nov	3rd	1pm - 4pm
Nov	17th	1pm - 4pm

Club night 22 August 2019

Robert and Richard opened the meeting with some details about the organisation of the upcoming Model Mee (I Built This) event in the PN City Library on Saturday and Sunday (24/25 August). Three new members were also welcomed to the Club.

The main theme of the meeting was a pictorial history of the club from its beginning. Several members had brought along either slides or photographs from their own collections. Together these formed a very interesting view of the club from its early beginnings. Of particular interest was the 25 year historical booklet that was produced for the occasion of the club hosting the MEANZ biannual convention some years ago.

Many of the photographs shown were of the original level track which was laid down by the founding members. The formation of the present track on the earth embankments was also well portrayed. The fill for these embankments came from the excavation of the site for the NZ Post sorting building adjacent to the railway station off Tremaine Avenue. Apparently a keen-eyed member of the club spotted the trucks carrying the spoil to the then active Palmerston City Council dump at the end of Maxwell's line and suggested to the contractor that they might like to place the material at Marriner Reserve instead. They were only too glad to oblige as this would make a saving of approximately 8 km per round trip.

Of interest to the longer standing members of the club were photographs of many of the original members, many of whom are no longer with us. Some interesting locomotives as well.

The early Model Mee exhibitions were also covered, going back to when these started in the Rangitane Pavilion on the ground floor of the part of the City Council building that is inside the Square. I believe that the Pavilion was located

approximately where the Arranged Marriage Indian Restaurant is now located.

This evening appeared to be of great interest to the members present and it crossed my mind that we should digitise these images as they will eventually be lost as the members who took them move away or pass on.

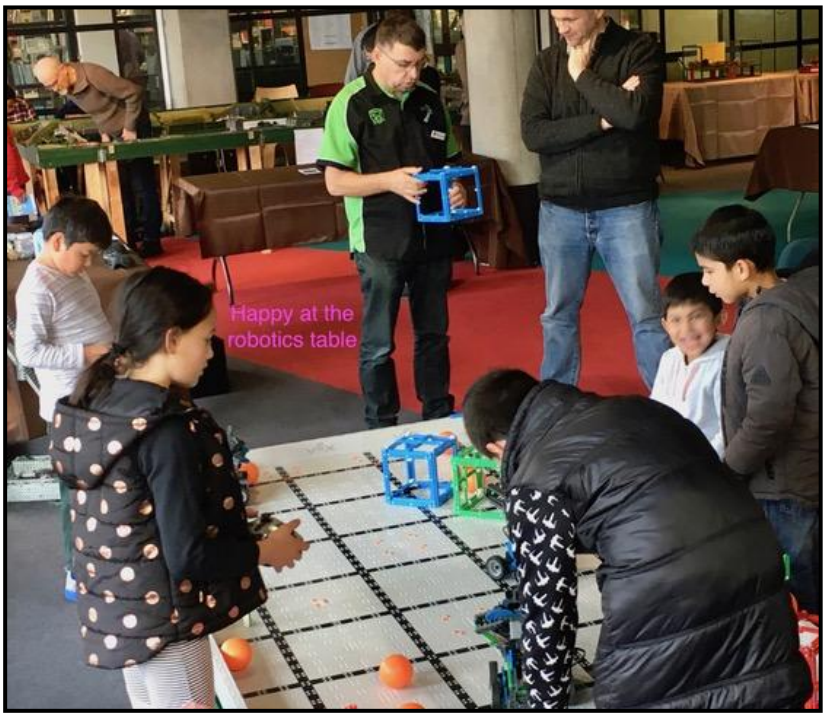
John Tweedie

Model Mee (I Built This)

Palmerston North Library 24 –25 August

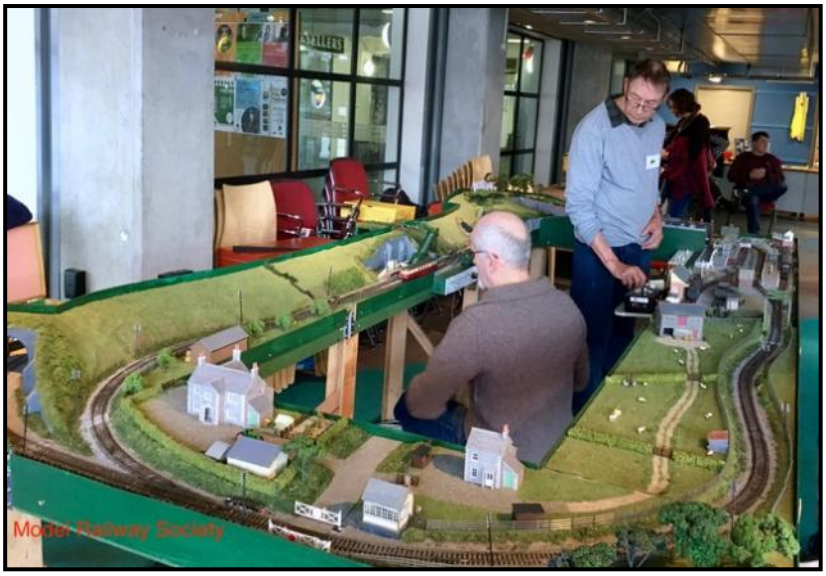
We tried a slightly different format for Model Mee this year. We joined with the Manawatu Model Railway Club and the VEX Robotics groups from PN Girls High School and St Peters College that meet after school at St Peters College.

The diversity of activities seemed to be appreciated by the patrons and I think all groups were gratified by the interest in their displays. The ground floor space at the library is a good venue and we seem to attract quite a bit of attention from the foot traffic in George Street.

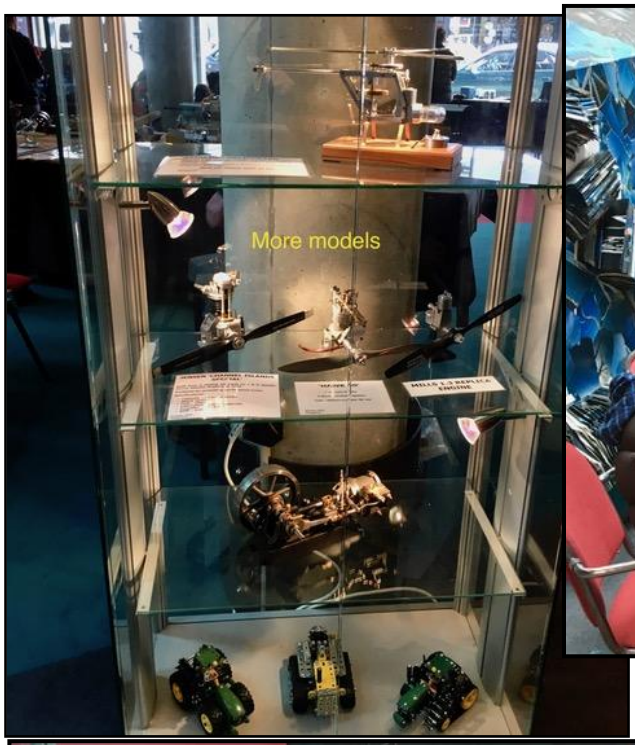


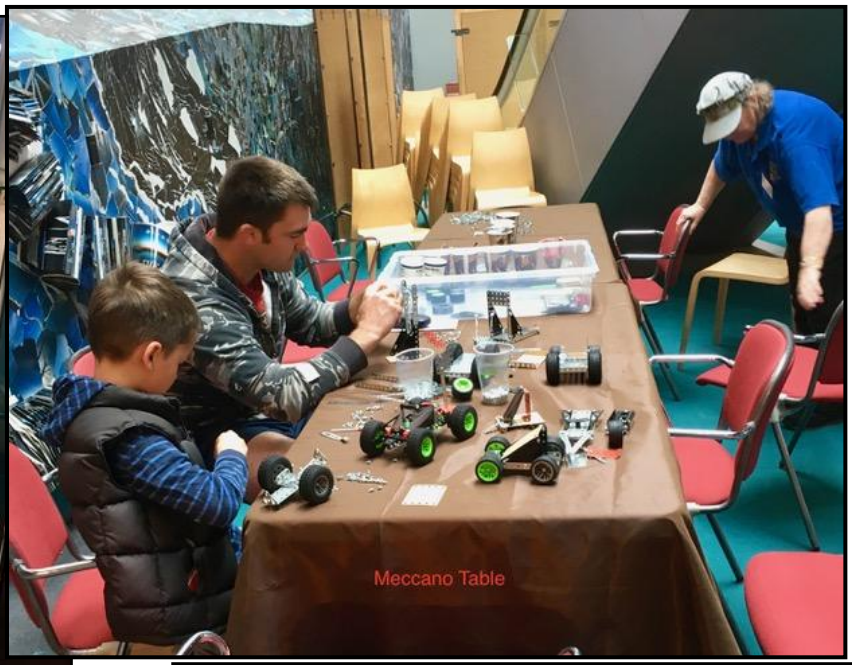
The VEX Robotics group were kept busy with mainly children who wanted to try out the robots but I observed many adults also giving it a go. Another thing that struck me was the preponderance of young ladies who participated in this group. The enthusiasm and expertise of the teachers involved was also evident and I am sure this has contributed to the success of the group.

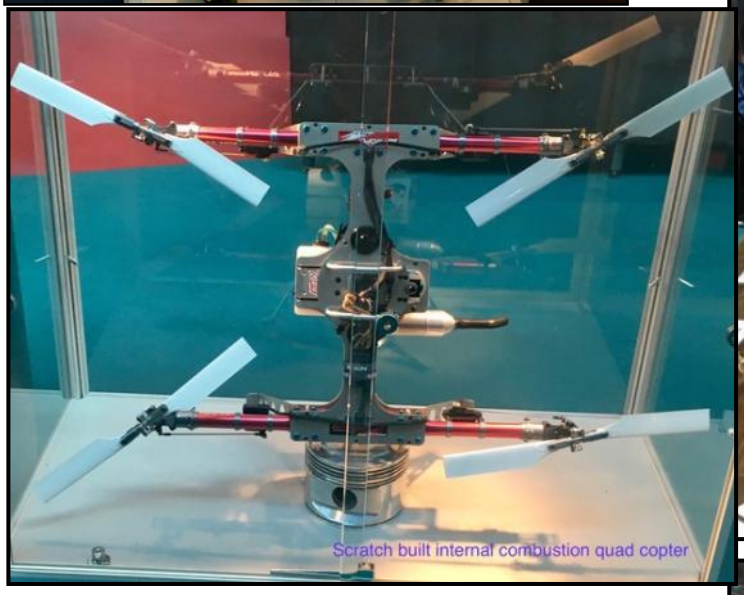
The Manawatu Model Railway Club had one of their layouts on show, together with a display of rolling stock and this was much appreciated by the younger children but I also observed many of the adults showing an interest.

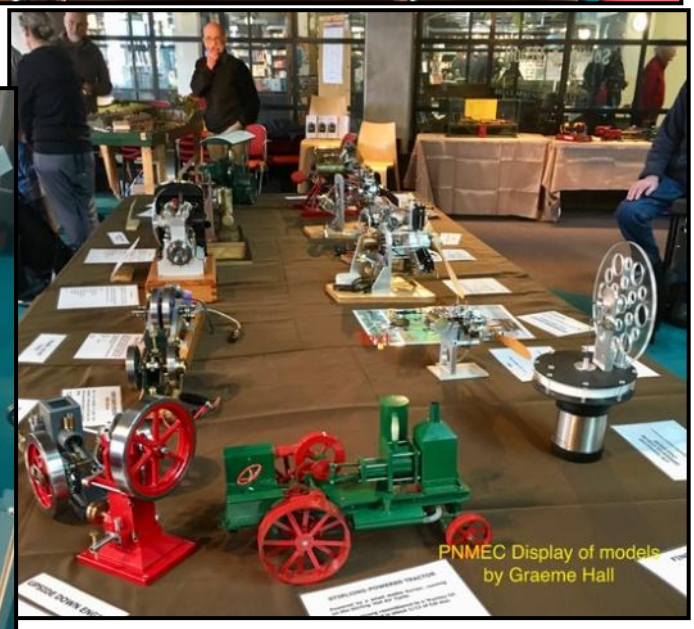


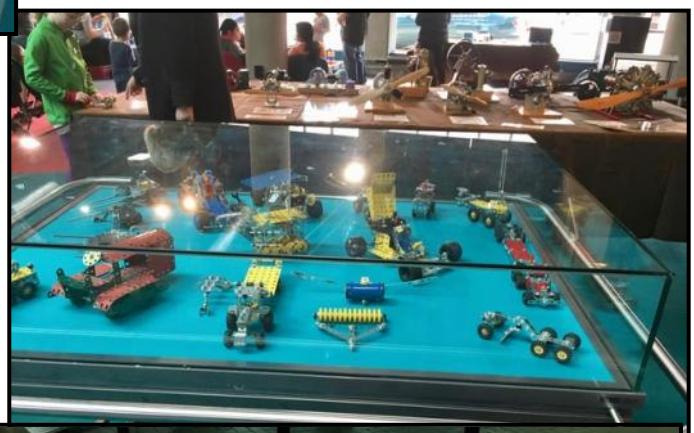
The Model Engineers display had a good variety of completed models together with a range of models under construction.
As usual the Libraries' collection of Meccano was well patronised by attendees of all ages.

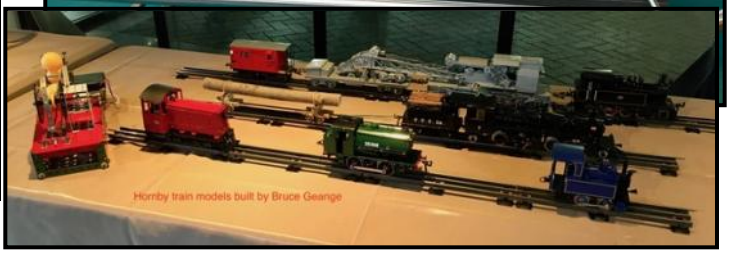












The scope of the event is probably best obtained from the accompanying photographs.

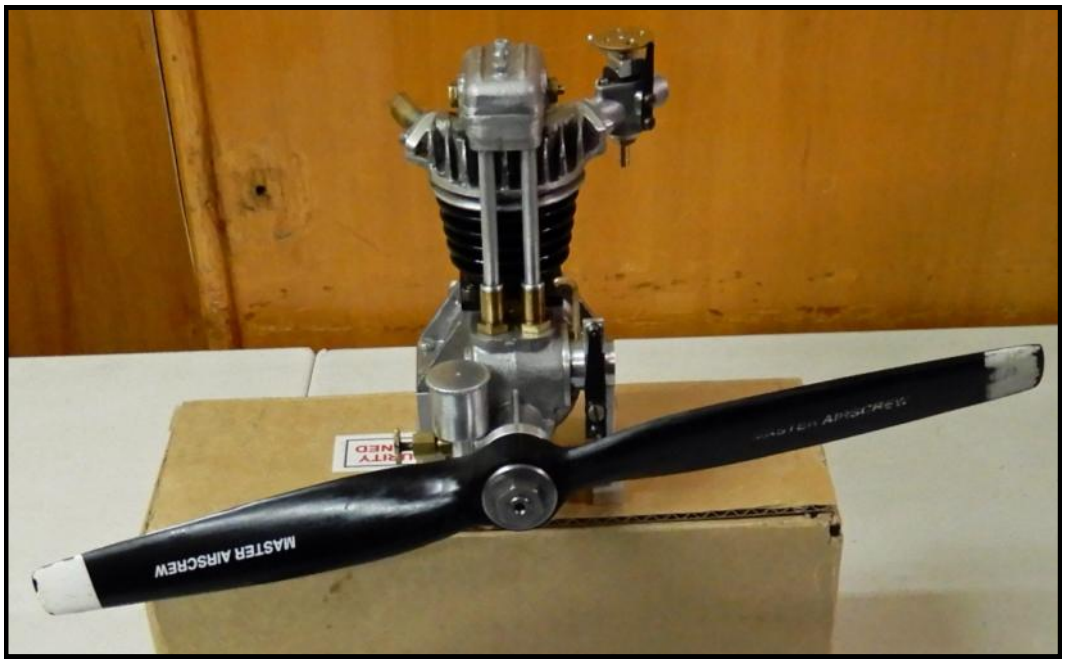
The weekend was a success for all three clubs.

John Tweedie

Saved from the 'Scrap Heap' – by Graeme Hall

In late 2018 I obtained, from a collection of an old friend, a dusty, rusty box of parts, including a faded set of original plan drawings. These drawings were enhanced and copied by a local printing firm.

The engine, the Jensen Channel Islands Special, designed by E T Westbury, was made by J & G Jensen of La Pouqeulaye Works, St Helier, Jersey C.I.



Produced and sold in a casting and material kit from 1949 to 1951 – designed mainly for tethered model speed boat racing.

An attempt at construction had been made years ago by an unknown enthusiast who lacked the ability or the equipment to complete the project.

All parts were cleaned and on inspection revealed good quality die castings and most materials, including BA screws and nuts. Crankcase casting and cylinder head needed machining to correct dimensions – requiring a number of jigs and fixtures to be made.

The connecting rod casting required bushes to be fitted and bored to correct a mis-alignment. The cylinder barrel made from a bar of cast iron had been bored out of parallel and also required honing and new piston and rings made.

All this required about two and a half months of work.

Then followed all the smaller parts, including valves, rockers, lubrication system and carburettor. Next the camshaft which has cross helical gears (supplied in kit) required some fitting work to get correct engagement.

The cams, keyed to the drive gear proved to be the most difficult part of the project to machine. The cams have to have the correct profile, left and timing valve operation.

The ignition contact breaker was made then the engine mounting brackets. The crankshaft was modified to fit a propeller to help with cooling.

Next – assembly, with careful fitting and adjustments!

A temporary fuel tank and ignition system enabled a start to be attempted. After several 'back fires', requiring a modification to the ignition timer – it ran.

After short runs and adjustments, and about one hour of running time, I have a model with reliable starting.

Specifications:

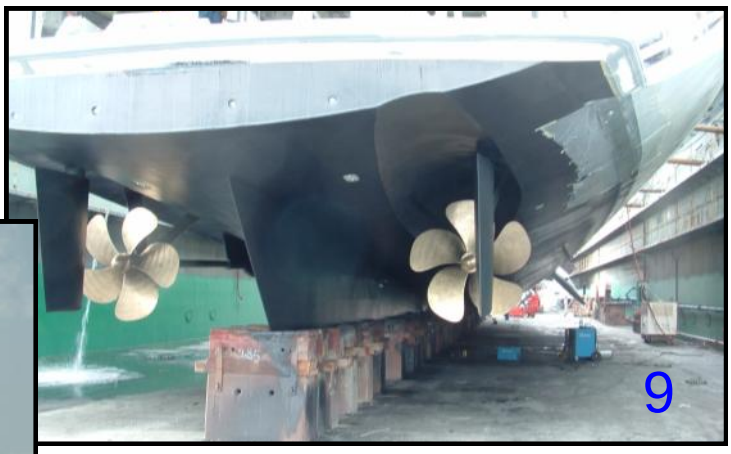
Engine	10 cc
Bore	15/16” – 24mm
Stroke	7/8” – 22mm
Spark Ignition	
Fuel	Petrol
Lubrication	Oil reservoir on crankcase
Speed	5000 RPM
Propeller	12x6

Ship Inspections continued

Another popular methodology for lifting a ship is the use of a “Floating Dock”. The following series of photos show a small cruise ship being manoeuvred into such a dock at the French Naval Base in Papeete Tahiti. This ship owner operated two identical ships and because of the size of the dock we were able to get both ships into the same dock at once. Firstly the dock is submerged until the deck of the dock is lower than the keel of the ship. Photo 06 shows such a dock in its fully submerged state. Photo 07 shows the view from the ships bridge as the vessel is carefully lined up ready to sail into the dock. Photo 08 shows the ship making its way along the dock and being positioned over the row of wooden blocks that will support the keel. When the ship is in position the dock is de ballasted and floats higher and eventually lifts the whole ship clear of the water. Photo 09 shows the underside of the ship clear of the water sitting on the row of wooden blocks under its keel.

On a larger scale Photo 10 shows the front end of the floating dock at the Mayport Naval Air Base on the St Johns River, Florida. This dock is so long it is difficult to photograph (even if I could get a camera anywhere near it). There are actually two destroyers in this dock (one behind the other) and combined they took only a fraction of the space available.

This is an older dock and was capable of lifting the smaller air craft carriers that were used by the US Navy up till the 1960's.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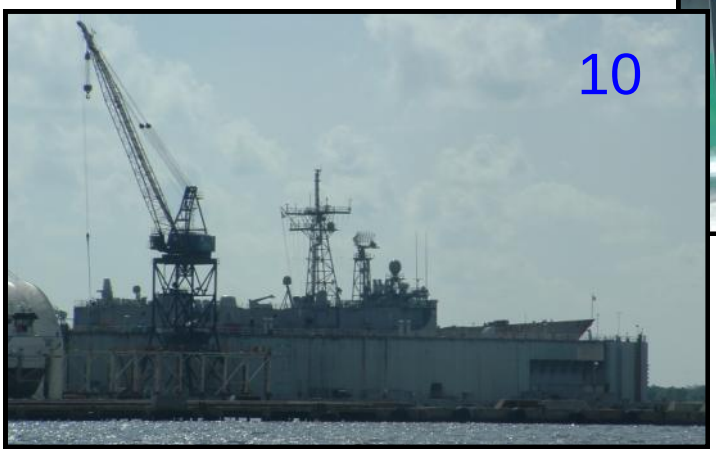
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David Bell
To be continued.

Letter from England

By Stan Compton

We had a visit at Hereford by a group of model engineers who were members of a group interested in historical locomotives. All had built a 5" gauge model of "Lion". The original is on display in the Liverpool Transport Museum, located on the waterfront near the Birkenhead Ferry Terminal. All the models were fitted with the Gab valve gear, not an easy one to scale down and get to function well but all of the group had succeeded.

There is a story about the original locomotive built in 1837 by Todd, Kitson & Laird for the Liverpool and Manchester Railway as an 0-4-2 tender engine. In 1859 it was sold to the Mersey Docks and Harbour Board for four hundred pounds, spending many years as a shunting engine, ending up as a stationary pumping engine servicing the docks. This was discovered by an enthusiast who wrote to the Harbour Board asking for permission to photograph this ancient engine. The authorities were rather embarrassed to realise such an old engine was still in use.

Once on holiday visiting relatives in the UK we took over running a sheltered accommodation, elderly people having free board while the Warden was on holiday. When some residents discovered I had a mechanical background they asked if I could look at their Bingo machine. It was a simple device with a fan driven by a quarter horse motor, making the plastic numbered balls float around dropping into the base giving the winner. It was only a slack drive-belt, once adjusted the word was passed around. "**Bingo at 2:30pm!"**

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