



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

TRACK RUNNING

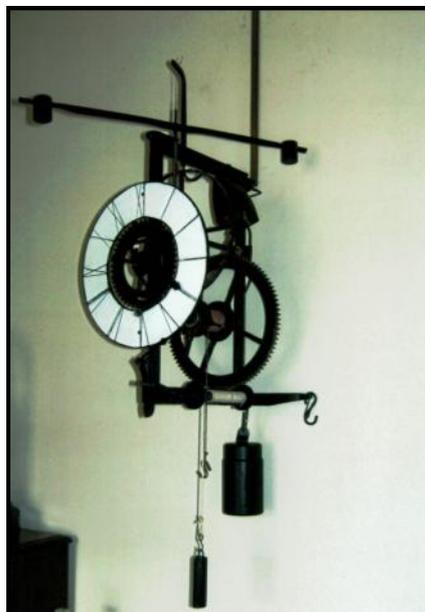
This is held on the FIRST and THIRD Sunday of each month, from 1 pm to 4 pm Summer and 1 pm to 3 pm during the Winter. All club members are welcome to attend and help out with loco coaling, watering and passenger marshalling - none of the tasks being at all difficult. We may even offer you a cuppa.

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 4414

Place
stamp
here

This Months Featured Model



Report on the September Meeting.

A visit to the Palmerston North Mail sorting and distribution complex in Malden street was arranged for the members and friends to attend. There were 17 of us that attended. We were split into 4 groups and shown around the arrival, initial, electronic and manual sorting and their training facility. We were to have a cuppa in their cafe but it was double booked for a staff leaving function so we all went home about 8.45pm

The Palmerston North model engineers have been bequeathed a collection of 'Model Engineer' Magazines. Your Librarian has used some to fill in some gaps in our collection which now goes from 1922 to 1997 with each year being complete. The Librarian now wishes to dispose of the following years which are nearly all complete.

1962, 1963, 1964, 1965, 1966, 1967, 1968, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1992, 1993, 1994, 1995, 1996.

These may be purchased for a small donation.

Contact Doug Chambers 06 354 9379 or email dougjohnchambers@gmail.com

We have been advised by Marie Palmer that her father, long time PNME member Harry Palmer has passed away.

The Treasurer noted that subs are coming in slowly and that if you haven't paid up by the end of the month you will have to rejoin the club. This is \$10 + Outstanding fees

October Club Night

The meeting will be held in the Hearing Association Rooms, Church Street, Palmerston North at 7.30pm, 27th October 2016.

Chris Saunders will give a talk on his recent visit to the London Museum of Water and Steam, previously known as the Kew Bridge Steam Museum.

COMING EVENTS

Track running at Marriner Reserve Railway

Feilding Steam Rail 5 & 6 Nov
November 20th from 1pm to 4pm
December 4th from 1pm to 4pm
December 18th from 1pm to 4pm

Open Weekends

Havelock North Live Steamers

21, 22, 23, 24, October

New Plymouth Model Engineers

22, 23, 24, October

Robert Edwards reminded members that the next event the PNME club is involved in is the Feilding Steam Rail's Open Weekend Sat-Sun 5th & 6th November. The portable track will be in action. Any and all help members are able to give would be great.

Robert Edwards reminded members that they can get their PNMEC name badges through him. Just contact him and he will arrange manufacture.

The closing date for the next issue of The Generator is Friday 11th November

Club End of Year Dinner

PN Cosmopolitan Club

22 Linton Street
Palmerston North

Thursday 24 November 2016

Drinks 6pm Dinner 7pm

The cost is \$25 per person. (Pay as you arrive.)
They also have a licensed bar for you to purchase innervating liquids.

Bring the family and join us for a relaxing lead into the summer.

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.

Murray 326-9665, engineer@inspire.net.nz
Cynthia, 354-7100, cynthia@trains.net.nz

LETTER FROM ENGLAND

By Stan Compton

My daughter is touring in France and she visited the Normandy Beaches, something I always wanted to do because as a young naval serviceman I had been engaged in preparing the landing craft for the invasion in 1944 that succeeded despite the summer gales. In 1943 I found myself working as a mechanic on 32 foot landing craft known as LCAs (Landing Craft Assault).

They were based on the River Hamble near Southampton where a local boatyard had been commandeered and improved with the addition of new workshops etc. One item that needed replacement was the crude slip for getting craft out of the river to affect repairs to damage sustained with training exercises. Although I was new to the marine world and only 18 years old, I could see that what had sufficed for yacht repairs was inadequate for our needs. By the time I was thirty I could have designed and built a cradle using the skilled labour we had in our group. Old railway track of light gauge from a quarry could have been mounted on the existing timber slideway and a heavy tractor could have been hired to lift or lower our craft out of the water instead of the regular struggle to drag that ancient cradle with loads of grease applied to help the old bull-nose Morris engine powering the old winch. The Morris's radiator would be boiling merrily during the operations. The winch was so crude we had to change the rusty, spiky wire ropes for each operation taking hours to perform; gloves were unheard of in those days!! I came from an engineering background and the marine world was completely new to me but I could see that the LCAs were built like a yacht with mahogany carvel planking i.e. two layers fitted diagonally with copper rivets and roves (dished washers) obviously built by traditional shipwrights. These craft weighed eight tons and were fitted with two Ford V8 petrol engines which I suspect were made in the USA. Even at my young age I could see that these craft had been designed by someone with a 'Big-Ship' background.

THIS MONTH'S FEATURED MODEL

By Stan Compton

The clock pictured on the front page is a scale model of the famous Warzburg Clock of 1350. The original was mounted in the Cathedral.

The model of the clock was built by Stan from drawings by 'Torus' in 'Engineering in Miniature'. 'Torus' (now deceased) learnt German so he could correspond with the Museum at Warzburg to obtain details of the original clock.

The hour hand is pointing to four and the shape close to the six is the hour gear meshed with the hour wheel. This can be reset to any hour to trip the alarm weight. Time keeping is about twenty minutes of error in a day which is quite normal with such a clock.

"Note the shape of the cow bell, that swings close to the top bar when tripped."

The original had an iron sphere made in two halves with a pebble inside!! All the teeth were hand filed on the original clock!!! When the large weight is placed on the spare hook the 'folio' (arm with weights) starts to oscillate – weird!!!

The coxswain steered the vessel from an armoured cabin with no roof next to the ramp door on the starboard side.

He had two slots to peer through, a beautiful mahogany spoked ships wheel and two brass telegraphs, miniatures of the ones used on the bridge of a steam ship of that era. Down in the engine room aft the 'stoker' sat between his engines with two clutch levers and two throttles facing the repeater dials mounted on the bulkhead. This was how he got his orders from the 'bridge' e.g. Starboard slow ahead, Port slow astern. It works if the 'stoker' is still at his controls but what happens if those Bowden cables got cut through enemy action? Similarly, the chains that controlled the rudders, years later I heard of a man who won an award by steering one of these craft by sitting on the stern of the vessel with his legs in the water gripping one of the rudders which was still attached to the other one and was thus able to steer the vessel!!!

I watched a documentary on TV about a boat designer in Florida who visualised in 1938 that a war was about to start and that there would be a need for landing craft in a modern conflict. He designed what he thought would be required, a steel vessel with a ramp door of welded construction about 34 feet long and I believe it had a V bottom at the bow changing to a flat bottom towards the stern designed to assist steering. A GM diesel was fitted and the helmsman stood in a small steel shelter above the engine room; the steering wheel was of steel and horizontally mounted on a vertical shaft with a roller chain drive to the rudder, the clutch and throttle levers were also under his control. He offered the design to the Navy but was told they saw no need for them but it was a different story when 'The Sleeping Giant Woke' and a few thousand were ordered. An improved version with two GM diesels was able to carry a three ton truck as well as troops were called LCMs. I was trained to service those GM diesels and after the landings in Normandy they were used to ferry stores ashore. Those that got damaged were brought back to our

base on the River Hamble, full of water and beached on a high tide. I had two 'stokers' (a term to describe a low rating) with buckets on ropes to empty the craft for us so the engines could be replaced. Buoyancy tanks each side of the cargo hold kept the vessel afloat. We didn't have a powered pump and I wanted to drill a hole through each side to drain the water out and cap off the holes later thus saving three days work.

My suggestion was refused by my engineer officer who had not long left University. When the time came for our LCAs to be loaded onto cargo ships to be ferried across the English Channel it was found that each craft lacked the four shackles needed to hoist them aboard. None were available so our blacksmith was called on to make them. This took three days working almost around the clock for a small team to produce what was wanted. Why it was nobody noticed these lacking from the inventory?

Our blacksmith was the same age as many of us, about eighteen, but fortunately he had a good background in his trade before being called up for service.

Prior to the Invasion of France in 1944 we, on our base had no idea when it was to take place. Just by chance I had to visit a local hospital for a check up and on the way through the country lanes we found Army vehicles, guns, tanks etc all waiting parked on the grass verges; a day later they were gone.



A Hunslet at Statfold Barn Railway in the UK as observed by Stan at a private track <http://www.statfoldbarnrailway.co.uk/>

Catalina Yarns

By Doug Chambers

In August members of the Palmerston North Model Engineering Club were invited to Ohakea Air Force Base to see over the Catalina amphibian. My two major interests have always been aviation, in particular aircraft of the WW2 period and from 35 years ago model engineering took a major place in my spare time. I never had enough money to learn to fly but I have managed to get rides in a wide variety of aircraft and I was able to help Laurie Gudsell get his Allison V12 aircraft engine running by assisting with valve and ignition timing. Of the Catalina I remember reading about one American crew who were operating in the Pacific near the Equator. On this occasion the mission was to patrol and search for Japanese ships. Now the range of a Catalina was just over 2500 miles at an economical cruising speed of 117mph so if you do the maths you can see that the duration in the air was over twenty hours. Fully laden with bombs and fuel the Catalina was reluctant to take off from the water but eventually a convenient wave assisted and they were away. The patrol went ahead with no problems and no sightings of ships either enemy or friendly until they were at the farthest point of their patrol when a loud bang was heard and one engine ceased to run. The pilots immediately tried to 'feather' the propeller on the engine but to their dismay it refused to 'feather' and the resulting drag saw the Catalina gradually descend towards the sea. The crew were ordered to throw everything not essential over the side and the bombs were jettisoned as well as the machine guns and ammunition but still the Catalina continued to descend towards the water. There were no islands near them and in the rough seas the Catalina could not be expected to remain intact for very long. Only a couple of hundred feet above the water the propeller blades 'feathered' and at last height could be maintained. As the hours passed and more fuel was burnt the Catalina was able to climb a little eventually attaining about one thousand feet. Towards the end of the flight

the power could be reduced a little on the still running engine and finally the Catalina landed on the water at their home base. Some of the crew clambered up onto the wing to inspect the failed engine.

There was a hole through the cowling where the cylinder head, barrel and piston had departed after the connecting rod had broken. Still it was a credit to Pratt and Whitney that the other engine had operated at full power for nearly ten hours to get them home safely.

The second story took place earlier in the Second World War before America had joined in. The RAF Coastal Command had bought Catalinas to patrol far out into the Atlantic to protect convoys from German U boats. Initially the Coastal Command pilots had trouble getting the range out of the 'Cats' that the Americans claimed they could do. Several were lost when they ran out of fuel and the Americans sent over some of their pilots who would fly with the RAF pilots on actual missions and see what was wrong. It turned out that the RAF pilots were not using enough supercharge pressure and they also tended to run the engines on the rich side. After the German battleship 'Bismarck' had sunk the HMS Hood she was able to head off into the Atlantic where the shadowing British cruisers lost radar contact. Everything possible was done to find the 'Bismarck' again and it was a Coastal Command Catalina that finally found her through a hole in the cloud. The Catalina dropped through the cloud to confirm the identity of the 'Bismarck' and was quickly repulsed by the 'Bismarck's' anti aircraft guns. On the Catalina was one of these American pilots who said "For Heaven's sake, don't get shot down because if the Germans get hold of me it will cause an International Incident". The RAF pilot patted his pistol and told the American "Don't worry they won't get you alive"!! The American was not sure whether the Coastal Command pilot was serious or joking and the expression on the British pilot's face gave nothing away so it was with relief for the American when they turned away to return to their base.

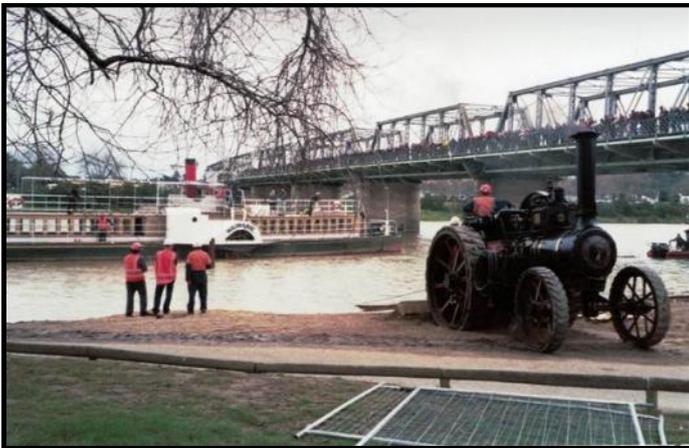
'Waimarie out of the water and up in the Slip.

By Doug Chambers and Mike Barnes
 On Saturday 17th September I picked up Mike from his home in Feilding and we headed up to Wanganui. We had been forewarned that the P.S. 'Waimarie' was to be hauled out of the river and up onto a slipway just below the Dublin Street Bridge. The hull of the 'Waimarie' was due for an inspection and of interest to us was the method of hauling the 'Waimarie' up the slipway. This was really very simple. A cradle was made for the hull to sit on and two sets of railway lines went at a fairly steep angle down the bank and under the water where they sat on a prepared base and timber sleepers. The cradle sat on wheels that rolled on the rails, but to get the 'Waimarie' and the cradle up the steep incline of the rails powerful winches would be required. This was when the Steam Traction Society stepped up with two traction engines, one from Feilding and one from

4nhp No 18641 there as well but it wouldn't have been able to offer much in the way of assistance. There was a little manoeuvring getting the 'Waimarie' into the right place on the cradle and tied up to the two stanchions that were attached to the cradle but stood clear of the water.

Finally the skipper indicated that the traction engines could start winching. Five minutes later the 'Waimarie' was up out of the water and the cradle was at the end of the slipway and work was under way to anchor the cradle to prevent it rolling back into the water.

We were able to listen to the comments of the public who were watching and most were astonished with the ease that the traction engines made of winching the P.S. 'Waimarie' out of the river.



Hawera. Steven McLune's Burrell 7nhp DCC No 2924 and Fowler 10 nhp DCC No 10320 provided the hauling power on their winches but Johnny McLune had his little Fowler



For Sale

TMU3 universal D bit grinder \$800.00.
 10" Elliot shaper with swivel vice \$750.
 Contact Philip at 027 478 9004

For Sale

A four axis CNC System.
 Complete from mouse to software, 'Mach 3',
 'Desk Engrave', and 'Cam Bah'.
 Price \$750 ONO.
 Contact 06 343 6512

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