

April 2017 No 432

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G E N E R A T

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

Managers of the "MARRINER RESERVE RAILWAY"

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### **PNMEC Home Page** www.pnmec.org.nz **Email:-** pnmec@trains.net.nz

#### 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 March Meeting.

There was a brief report on Locomotion 2017 which had gone off very well. Then it was on to the projects on the table.

#### **Phillip Bealing**

showed us a device he had made for balancing flywheels for hot air engines. Hot air engines do not develop a lot of power so a well balanced flywheel may be of help.



Graeme Hall showed us the progress he has



made with
the Anzani
aero engine,
a three
cylinder
radial engine
very similar
to the one
that Bleriot
had in the
aircraft in
which he
made the

first crossing of the English Channel. Graeme has fitted cast iron liners to the aluminum cylinders, a push rod drives the exhaust valve via a rocker, the inlet valve works by suction. The valve seats are of bronze, threaded into the aluminum alloy cylinder head.

**Doug Chambers** had the frames for the 3½" gauge 'Schools' locomotive that he is building. The engine is a 4-4-0 with a six wheel tender. It has three cylinders and three sets of valve gear and in that gauge will be a bit like watch making.

**Richard Lockett** about a year ago was a bicycle mechanic for a Women's Adventure Racing

Team. He realized that finding the various 'check points' would be easier to find if a decent map was attached to a board mounted on the handlebars. After a bit of trial and error he came up with a suitable design that allows the map to be read without vibration distorting the directions. He is now making a pannier bag to mount out of the way on his own mountain bike.

Fin Mason brought along the cylinder heads and rocker boxes for the Rolls Royce Merlin V12 aircraft engine he is making. Line boring the camshaft mountings has caused him some headaches and the first set of mountings had to be discarded. The second set, machined in a different way have proved successful. What a challenge to take on a project like that!!!

#### **April AGM Club Night**

7:30pm, Thursday 27 April 2017 Hearing Association Rooms Church Street, Palmerston North

Please attend and if you feel that you would like to offer yourself for a position on the Committee, then let a member of the executive know.

#### **COMING EVENTS**

#### Track running at Marriner Reserve Railway

May 7<sup>th</sup> 1pm-3pm May 21<sup>st</sup> 1pm-3pm

PNMEC AGM 27 April - 7.30pm

#### From the Editor

After 21 years as editor I feel it is time for a change so this is my last 'Generator'. I would like to thank Murray Bold for his work in formatting the rough copy he gets from me and also Cynthia Cooper for her efforts proof reading and finding the deliberate mistakes Murray and I have left for her to find. Thanks too, to the members who have contributed articles over the years.

The closing date for the next issue of The Generator is Friday12th May

#### From the Chief Boiler Inspector

After 32 years as a boiler inspector for the PNME Club I have decided to hand on the responsibility of being the Chief Boiler Inspector. It has been an interesting time and I have enjoyed working with members of the fraternity as well as with people within and also outside the hobby.



## Building a Stuart Turner 10H Steam Engine

A number of years ago now, a lady came to the house with a box under her arm and presented me with it and said that it belonged to her father. Later the box was opened and found to have Stuart castings in it. When sorted there was a complete 10V engine and a near complete 10H engine. The 10V went to our club to be sold with funds going to the club. The 10H sat not touched for a number of years before being tipped out onto the bench one day with the base and trunk guide machined and bolted together. Crankshaft bearings came next followed by a fabricated crankshaft as the original was missing and then the flywheel. The cylinder and valve block were next along with the covers and glands. The crosshead.

connecting rod and big end were machined with the crosshead being lapped into the trunk guide. The piston and connecting rod followed with a groove in the piston for packing. The value eccentric was machined from material in stock and remaining parts from the castings. Drain cocks were fitted to the cylinder.

When assembled the engine had a test run on air and found to operate satisfactory with a minor tight spot. Now time to dismantle the engine, clean and paint. After a time the engine was assembled and lubricated. The cylinder lagging came from a piece of brass sheet held on with 10 BA screws. The lady who gave me the castings and other people who came with her has seen the engine finished and running.

At the 2017 Annual General Meeting of the Palmerston North Model Engineering Club (Inc) the following changes to the Club Constitution will be proposed:

In Section 7 of the constitution the word "AUDITOR" in the section heading be replaced by the words "FINANCIAL REVIEWER"

In subsections a. through d. of section 7 the word "auditor" be replaced by the word "reviewer".

#### 7. AUDITOR

- a. At least once in every year the book, accounts and vouchers of the Society shall be examined by a person suitably qualified to act as Auditor appointed for that purpose at the Annual General Meeting.
- b. The Auditor shall be required to certify the correctness of the Statement of the Income and the Expenditure, or of receipts and payments and the Balance Sheet, or if he unable so to do, to report to the meeting accordingly
- c. The Auditor shall at all times have access to all the books, accounts and records of the Society and he may examine any officer of the Society with

reference thereto.

d. The Auditor may be paid such
Honorarium as the Society in General
Meeting may from time to time decide.

## A message from the Treasurer regarding subscriptions to PNMEC for discussion and possible action at the 2017 Club AGM.

For the past several years the annual subscription has been \$30.00 for Full and Family membership and \$15.00 for Junior and Country membership.

In addition there has been a requirement that country members who require the club to carry out boiler inspections and issue boiler certificates should pay full membership (\$30.00). I understand that this was a committee decision and, as far as I can ascertain, the only reference on the club web site to this requirement is on the online form for new club membership.

It has come to the notice of the Treasurer that the distinction between Full and Country members has become quite blurred over time and the application of the requirement of full membership for country members requiring boiler tests has not been applied universally.

Because of these anomalies I will recommend to the Annual General Meeting on April 27th that, in future, there be a single class of ordinary membership and that the Annual Subscription or the 2017/18 financial year be set at \$30.00.

This subscription would cover all members of a family residing at the same address.

#### Letter from England

By Stan Compton

The late Fred Dibnah used to tell a story about the time he undertook the repair of the top of a factory chimney. It was a cold and frosty morning when Fred with his helper of many years gathered up the steelwork to be fitted on top and around the rim and placed it on a ventilator outlet to warm up. Next it was hoisted by hand to the top, one hundred and fifty feet up. Fred had noticed a ginger cat watching the activity but he ignored it until he realized that the cat had started to climb the

ladder. Once at the top the cat had evaded Fred's attempts to catch hold of him and the cat made use of the two inch wide rim around the chimney to walk on. Fred and his mate left the cat alone and continued with the work until lunchtime. Fred went home for a hot meal and on the way back to the job Fred could see someone up the chimney and it turned out to be a seventeen year old boy who had climbed up to rescue the cat but was petrified about the climb down the ladder. The RSPCA had been called and the officer gave Fred a cat box to put the cat in, a sack would have been better!! Carrying the cat box, while helping the boy to get down was not easy, especially as the chimney was still in use. As soon as Fred got down all attention was for the cat, not for Fred who was really the hero of the day. Nobody claimed ownership of the cat so he was taken to be neutered to stop him wandering in the future.

I am reading a book about 'London Dockland' by Fiona Rule (Ian Allen paperback).

About 1550 a group of river pilots operated on the River Thames from a property called 'Trinity House'. It has grown to take responsibility for all the lighthouses around Britain. In the early days the fee for pilotage was one penny for a vessel with one mast, two pennies for a vessel with two masts and three pence for three masts. I remember that in 1935 I had one penny for my pocket money and nowadays a child will receive five pounds and that is the way of inflation.

We sometimes watch a program on TV called 'Salvage Hunters'. The crew follow Drew Pritchard as he travels the country looking for antiques or salvage that his team of tradesmen can restore for sale. He visits 'Stately Homes' and sometimes the owners can learn so much about their family heirlooms from Drew who is very knowledgeable through years of experience. It must be very frustrating for him when he goes out searching in the old stables and finds a saleable item and then is told "Oh I had forgotten all about that table"

disregarding the leg rotten with woodworm that needs replacing, "That was Grandmas, I couldn't sell that". One day Drew was at an old railway station due for restoration and he found a number of old railway signs from Victorian Days eg 'Ladies Waiting Room' or even 'Gentlemen'. The quality of the signs and original paint makes them a saleable item and the volunteer supervising the sale was surprised when he was offered good prices, far more than he expected. One day Drew was in an old dock warehouse where he found a pair of 'bale hooks' and he explained that these were used by the 'dockers' to handle bales of wool and he paid fifty pounds for them. I was interested in the way they were made in the shape of a letter S with a point at one end and a wooden handle across the other. It was a clever design because by pressing down on the handle the hook would release guickly. Years ago I bought a business carting hay and straw. The bale hooks I had were of a poor design and were the cause of me falling from a loaded truck and breaking my right ankle. In those days I was young and fit but one day I could not get the truck close to the wire tying baler so I made a walkway of straw bales and then carried the bales on my back dumping each bale on the truck deck. I then jumped up on the truck to stack the bale and then returned to the baler to be ready for the next bale. After a while the load on the truck deck grew higher and I now had to climb a ladder that was carried on the truck's chassis cross members, with the bale on my back. I now had to run to get back for the next bale. Now the 'penny dropped' as I realized that the baler crew were having fun feeding the baler as hard as possible to beat the 'townie' but I won, handling that four ton load on my own. Many years later I made a three inch scale model of that baler and drove it with my four inch scale Allchin that had taken me 2500 to build.

During my wartime service in the Royal Navy on a base on the River Hamble near Southhampton, I was ordered to locate a problem concerning the mis-firing with the Kelvin engines installed on two 36 foot harbor launches that were being run by a Wren crew who daily carried servicemen out to their landing craft anchored up the river. Both boats had the same problem with the four cylinder petrol-paraffin engines; they appeared to only run on two cylinders. They had been like this for some time

and I blamed the magnetos having had problems before and since with Lucas products in damp conditions. Many years later I met a Lucas mechanic and I explained the problem. He knew what was causing it, it was voltage leaking through the high tension leads to the steel tubes the leads were carried in, long before the arrival of plastics.

For well over forty years I have enjoyed 'scratch-building' live steam locomotives. My first attempt was tackling a 71/4" gauge LNWR 'George the Fifth' and by chance I had been able to purchase a set of castings, forgings for the crankshaft, coupling rods etc and a steel boiler which had been supplied to someone in Auckland, possibly before World War 2 by Bassett Lowke Ltd. It was a pity some of Henry Greenly's drawings were missing, but many years later all the stocks of drawings were found in a locked cupboard when the firm was being sold up. I was quite new to the hobby then and I was dismayed to read a statement by our old friend LBSC that he considered the design to be a load of old rubbish. Once the engine was completed I was disappointed with its performance but after modifying the exhaust to 'Sam Ell's' draughting it took a new lease of life so my eighteen months of work was not wasted. When I returned to the UK to live after retiring the 'George the Fifth' was sold to a man in Whangarei and later it was passed on to a museum on the North Shore. From there it was sold to a man in Germany and now it is in London. It was the first of many locomotives that I have built, all now disposed of to my regret.

#### The Saga of TR38

By Neil Burn

The test runs were very successful, the controls set up made it easy to drive and easy for new chums to get the hang of. One problem was its tendency to slip on the uphill grade due in part to its small size and light weight. I was advised that it is essential to have an equal axle loading on both axles so I added some lead to the chassis and that made a tremendous difference. A usual load is the driver and two adult passengers. All in all I am very happy with thewhole exercise and I am looking forward to many years of successful running. I would like to say 'Thanks' to the members of the Palmerston North Model Engineers and

other clubs who have freely offered help and



advice during the project.

EDITOR"S NOTE. The little TR38 has astonished a lot of people with its ability to haul passengers and one occasion I heard two men saying that they believed that the driving trolley was the powered unit and the engine was being pushed along. I said to them that it was the engine doing the work and if they asked the owner I was sure that he would lift the seat to show them that the driving truck only contained the batteries and some electronics.

They did as I suggested and they came back and told me that it was hard to believe that such a small engine could run all day without having to recharge the batteries.



#### **Steampunk**

A couple of our members are lending models to this event which is shaping up to be a lot of fun. Come along and see what this interesting group gets up to.

Saturday-Sunday, 13-14 May, 10am-4pm. Palmerston North City Library, Ground Floor, enter on George Street.

#### **FOR SALE**

71/4" gauge 0-6-0 petrol-hydraulic shunter. The engine is a 5.5 hp Honda driving an Eaton hydraulic pump-motor. This shunter is No 4 from Rex Toms workshop. Asking Price \$5000 Phone Dick Griffiths (06) 368 -1814



#### I am a Seenager. (Senior teenager)

I have everything that I wanted as a teenager, only 60 years later.
I don't have to go to school or work.

I get an allowance every month.

I have my own pad.

I don't have a curfew.

I have a driver's license and my own car.
The people I hang around with are not scared of getting pregnant and they do not use drugs.

And I don't have acne.

Life is great.

Something for the oldies.

Opps we are all old

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