



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

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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 onerous.

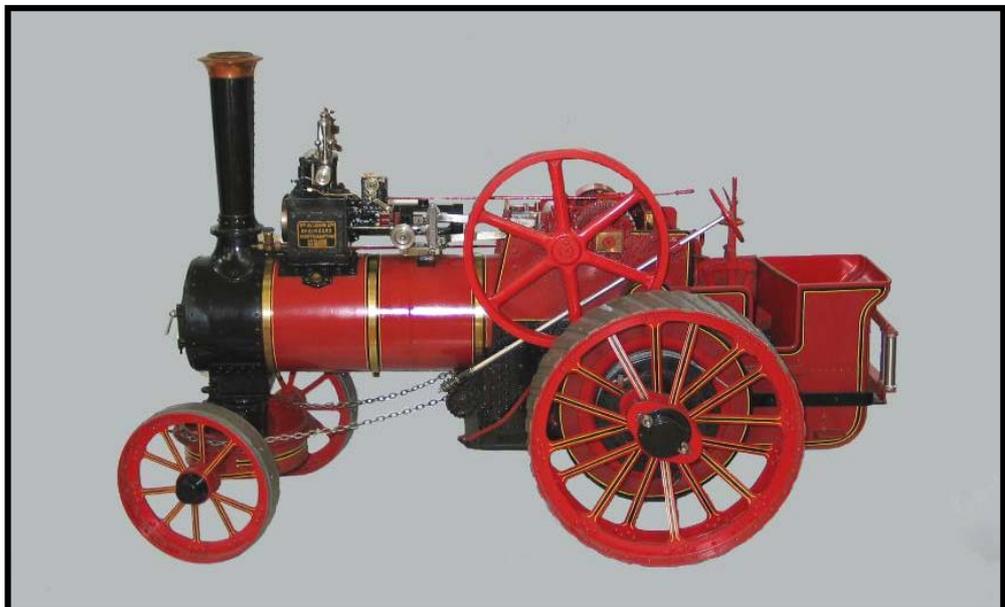
Visiting club members too, are always welcome at the track, at the monthly meeting, or if just visiting and wishing to make contact with members, please phone one of the above office bearers.

Sender:- PNMEC
22b Haydon St,
Palmerston North

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Note NO Meeting this month
Details inside

This Months Featured Model



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FEBRUARY MEETING.

Not so many 'Bits and Pieces' on the table this month, but there sure was a variety.

Stuart Anderson had one of the bogies from his Dh diesel locomotive. The right angle drive required to transmit power to the axle was achieved by using the right angle drive from a Bosch angle grinder. Stuart is busy making up the brake blocks and braking linkage so that he can stop as well as start.

Bruce Geange had a balance plough made from Meccano. He has nearly completed the two ploughing engines complete with electric powered winches so perhaps in the future he may be able to demonstrate the operation of a balance plough.

Richard Lockett had the nozzle for a small rocket. One of his friends builds rockets for a hobby. The aluminium nozzles originally used proved to be only suitable for 'one shot'. Richard was given the task of making a nozzle out of stainless steel, which hopefully will prove to be reusable. Part of the job involved tapping twelve 'blind holes', for the screws that will hold the nozzle to the rocket body. Unfortunately a tap broke, not uncommon when working with stainless steel, and Richard now has to remove the remains.

Murray Bold explained that he has a problem with his Gauge 1 garden railway. Birds scratching around for insects cover the rails with bark. Murray has made a powered track sweeper out of two toilet brushes, motors out of an ATM and printers. The unit was displayed in motion, the brush rotating as the powered wheels propelled it along. Trials have proved the machines ability to clear the rails of bark and stones. One thing that has to be watched is that long pieces of grass will wrap around the brush axle and then jams the bearings, (just like flax leaves on a rotary mower).

Chris Morton showed us a die-cast model of a flying boat (probably a Sunderland) that he had been given. He wanted to know if anyone could tell of the models origins. There were a lot of model aircraft cast in either zinc die cast, brass, and aluminium at metalwork classes in High Schools in the period 1950 -60 and I believe that this one came from that source. Over the years I have seen examples of Kittyhawks, Mustangs, Oxfords, Ansons, B17 Flying Fortress, Liberator, Spitfire, Hudson, but this was the first time I had seen the Sunderland.

Fred Kent had been having trouble with his van jumping out of second gear. He found that the selector fork was no longer moving the syncho unit sufficiently to allow the gear to be engaged. He was able to fit a couple of grub screws and overcome the trouble although he found there was not much room to work in. Obviously Fred couldn't display the van and gearbox 'on the table'.

Richard Lockett gave a brief talk on centre drills, and different types of countersinking tools and their uses.

Chris Rogers had some surplus workshop equipment that he wished to sell and was relieved that he didn't have to take any of it back home.

COMING EVENTS

THERE WILL NOT BE A MEETING THIS MONTH. A LARGE NUMBER OF OUR MEMBERS WILL BE AWAY OVER EASTER ATTENDING OTHER EVENTS.

Palmerston North Model Engineers

Annual General Meeting.
7:30 pm April 28 2005.

Mid Week Run at Marriner Reserve Railway:

Tuesday 22 March 10 - 2 pm
Tuesday 26 April 10 - 2 pm

Please contact Doug Chambers beforehand.

Track running at Marriner Reserve Railway:

Sunday 3 April 1 - 4 pm
Sunday 17 April 1 - 4 pm

OPEN WEEKENDS

Havelock North at Easter
March 25 26 27 28

Rotorua
April 23 24 25

Thames Small Gauge Railway
May 21 - 22

Manakau Live Steamers
June 4 5 6

The closing date for the next issue of The Generator is Friday 15 April

LETTER FROM ~~ENGLAND~~ Auckland

By Stan Compton

This edition was written in Auckland while staying with our daughter and her husband. Every time we take a trip to New Zealand we always notice how bright everything is, the blue agapanthas are everywhere, you probably don't notice them. The trucks seem to get longer and the number of four-wheel drive cars has increased three fold. The economy seems to be booming judging by the increased traffic, so different to when we first arrived in Auckland by sea forty years ago. By good fortune I shall be in Palmerston North at the Marriner Reserve track site on Saturday the 6th of March after completing our three week tour of the South Island.

I told you last time about the overhaul of the Hereford passenger rolling stock. Well one of our very willing volunteers, John Martin, has undertaken to overhaul the Club's 'Sweet Pea' named 'King Offa', who was an early King of West Mercia which is located on the border of Wales. 'Offa's Dyke' an ancient earthwork marks the border, now a marked path for trampers to follow. Not the hard going our daughter and her husband experienced doing Arthur's Pass where their boots did not dry out for a week !!!

Poor old 'Sweet Pea', it gets a hard life doing public running at schools, birthday parties etc, constantly up and down the short straight portable track earning lots of money for club funds.

I overhauled it some years ago. I found two piston rings in a wide groove, both wide ring gaps lined up together so you can guess why it would not pull. The valve faces required re-machining and fifty thou had to come off to clean them up. I had no material for new pistons so I machined extra grooves for piston rings I had in stock. The wide groove I packed with braided PTFE packing which should have helped.

The valve slide grooves needed re-machining and new slides were made to fit. The saddle

tank leaked, the cab was loose and the safety valves were seized because there was no drain hole in the extension tubes for the condensate. The axle springs were too soft and that little loco would bob along the track, heavier springs and a heavy piece of steel one inch thick, (my bench plate) was bolted on the front buffer beam. The old dodge of a piece of angle steel to form a knife -edge under the frames mid-way between the axles proved I was on the right track. However John felt that it looked ugly so replaced it with lead between the frames in front of the smokebox. Ingeniously he made a wooden former to the correct internal shape and poured the melted lead into it. He said it did not smoke much and that it was easy to knock up out of particleboard. Neat buffing blocks of Tufnol complete the modified front end, but his valve gear modification deserved to be published. John has his own 'Sweet Pea' and a couple of years ago he rebuilt the valve gear to eliminate the slides, normal on a Hackworth valve gear. His engine now runs very well of a system of levers and cranks. I regret I did not have time to run a rule over it but will aim to let you know. One day the little loco was put on the elevated track for one of our newer members to get some practice at driving. The pity of it was that he did not know the 'Golden Rule' that before taking over an engine, to check that the coupling between the engine and truck are secure. The drawbar had been simply hooked over the cranked draw-pin, he started off, went around a few times and then the draw-bar slipped off the draw-pin, (note no safety chains used over here), and now with no load the loco took off with a wide open throttle, (the only way it will pull at all), and on the first bend it nose-dived off the rail onto the ground. Only the smokebox and cab were damaged, all needless work for John to contend with. The runaway had really upset our new member and I hope it does not put him off driving as I really need his help on the raised track on Running Days.

I had previously overhauled both water pumps and this time they only needed new O rings, cup washers would be better, I recall Paykel Bros used to stock a synthetic version, much better than leather. Are Paykel's still in business? Yes they are.

You will probably read in 'Model Engineer' later about the successful hosting of the 7¼" gauge Society AGM with over sixty members being present to use our track. All sorts of engines from a box on wheels (battery powered) to complex steam locomotives. People ran all day, everyday, usually unloaded and never got bored. Most 7¼" gauge members seem to buy their engines which is common nowadays. I think a kitset 'Britannia' is close on 20,000 pounds (\$60,000 NZ). With a skilled person building the kit they can be successful but the unskilled can get into trouble. I know someone who assembled a five inch gauge kit and ended up sending it away to get it to run, he is still waiting to get it back !!!

To finish I like the story on an old theme I saw in a daily paper, The usual one about the man who found an old lamp, he gave it a rub and a Genie appeared offering three wishes.

The man asked for lots of money, to be admitted to royalty and to be married to a beautiful woman.

"No problem" said the genie.

The man found himself in four-poster bed with a beautiful woman at his side.

She said "Time to get up Ferdinand, we are due at Sarajevo in an hour".

For those of you not so well up in your history, it was the assassination of Prince Ferdinand in Sarajevo that set off World War 1.

THE 1 ½" ALLCHIN.

by Richard Lockett

From a very early age I had a desire to build a small scale live steam traction engine. During my O.E. in England in the early 1980's we used to go each year to the model engineering exhibition in the Wembley Arena. I picked up a

Reeves catalogue there and I still have it to this day.

There on page 32 is a photo of the 1 ½" scale Allchin, a beautifully proportioned traction engine. I sent away for the drawings and after they arrived I determined what castings I needed. I then drove up to Birmingham and purchased the castings which were shipped back to New Zealand.

Later I returned to Feilding and purchased an Emco Super 11 lathe with a milling head. Construction then started beginning with the wheels and then the boiler, hornplates, smokebox, tender and so on.

It is very quick when you say it, but it took 5 ½ years of work to see the Allchin painted and in steam, but very well worth the effort.

ALLCHIN 3251

By Doug Chambers

It would be quite fair to say that the Allchin No3251 'Royal Chester' is better known among the model engineering fraternity than the traction engine enthusiast. This is due totally to the superb drawings produced by W.J. Hughes leading to a large number of 1 ½" scale Allchins being built.

William Allchin formed the company in 1847 in Northampton. And the company traded through until 1930, closing down during the depression along with many others.

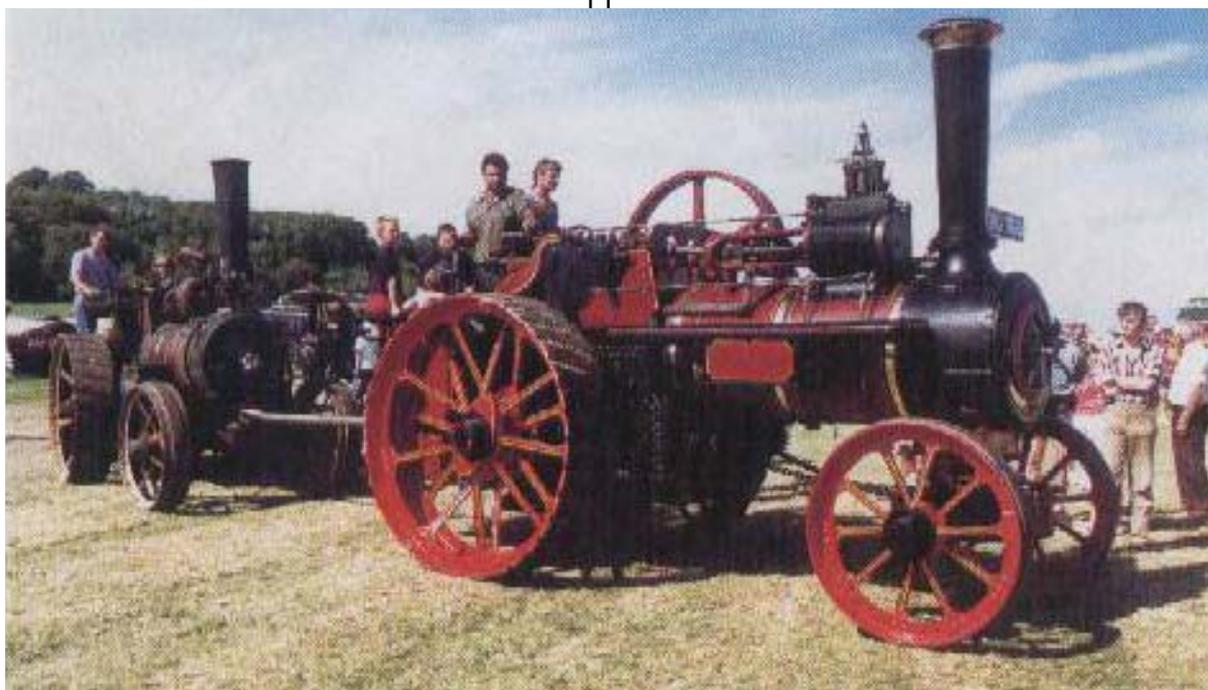
Allchins never produced anywhere near the volume of traction engines, as did their competitors, Burrells, Fowlers, Marshalls and Aveling and Porter. They did enjoy a reputation for good design and sound workmanship. Allchins had started producing steam wagons as early as 1904 which put them ahead of many of their competitors in that field.

Allchin No 3215 was completed in 1925 and as the firm intended to send the traction engine to the Royal Show in Chester, she was briefly named 'Royal Chester'. However a steam wagon was sent to the Royal Show in 3215" place and the traction engine never carried any nameplates. W.J. Hughes chose to name the Allchin 'Royal Chester' as he said

“I prefer to remember the engine by the name rather than the cold serial number!”

Allchin No 3215 is a single cylinder, two speed engine rated at 7 nominal horsepower, capable of 32 bhp at the flywheel. The unladen weight of the engine is 9 ½ tons and in low gear was capable of pulling 38 tons. Her colours ex works were a deep crimson, (known as purple – brown) and was lined out in black, yellow and vermilion. There was a central black spoke on each spoke with a thin yellow line either side.

and B. Earnshaw who worked the engine until 1949. At this stage she was for sale for 25 pounds and W.J. Hughes sadly admits that he had neither the 25 pounds, nor the storage and was therefore unable to purchase the engine for himself. One of the pioneers of the steam preservation movement, Chris Lambert bought the engine and such was its condition that it was able to be steamed to the railway station and loaded onto a wagon. Later the Allchin was bought by Malcom Rostron who aquired the engine after Mr.



The Allchin was a four-shaft engine, crankshaft, second, third and axle and was sprung on both axles.

Many features on the Allchin are common to those of a Burrell and this is not surprising as the Allchin was designed by an ex Burrell man.

The crankshaft was bent up from a solid 4” steel bar turned to 3 ¼” on the journals. A unique feature of this engine was the height above the road of the ashpan. W.J. Hughes had a newspaper cutting showing her negotiating flooded roads near Sheffield. Although the water was high enough to put out the fire in many traction engines, the Allchin was able to continue through, her fire above water level.

Allchin 3251 was purchased in 1925 by J.G.

Lambert’s death. Malcom Rostron was an ex Pathfinder pilot and he completely restored the Allchin. Sadly he died not long after the restoration was completed, in a flying accident.

FOR SALE

Complete set of drawings for a Queensland Railway A 10. This is a 0 –4 –2 tender engine. It has inside Stephenson valve gear driving through rocking levers to the valves, which are above the outside cylinders.

The drawings are for a 5” gauge loco and bearing in mind Queensland Railways are 3’ 6” the model will be a little larger than the ‘Simplex’ or ‘Ajax’ models.

Contact Doug Chambers 06 354 9379
Price POA.

LOCOMOTION 2005

Fine weather, plenty of visiting engines, some new and some old friends. A highlight was Stan Compton's visit on the Saturday. He was delighted to see the Hunslet 'Maid Marion' that he had built many years ago, now owned by Clive Walton running and going just as well as it did when he first built it.

A special vote of thanks to all those who gave up time to organise the tea, coffee, salad rolls, man the station, and help out in all the jobs that an event like this creates.



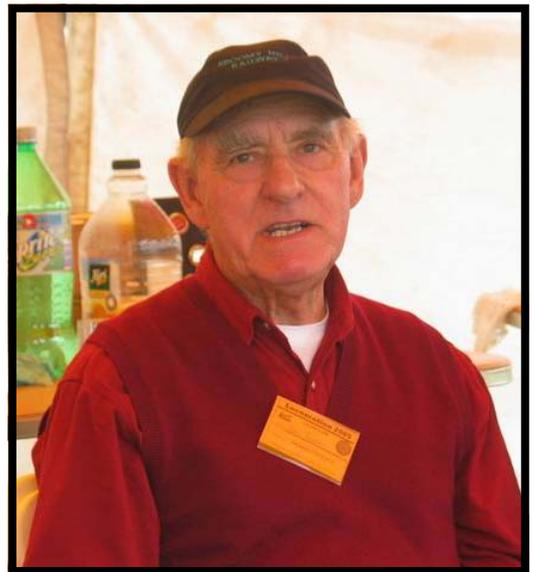
Front page of The Guardian - Thursday 3



Laurie Bason's Rail Bus parked up.



Laurie Perkins paused for a Photo Shoot



Stan Compton - The Roving Reporter



Grant Alexander and Nutkin leaving the Station



Brian Clark firing No7 prior to moving out.