

ANNUAL GENERAL MEETING

TO BE HELD AT THE CLUBROOMS ON

WEDNESDAY, MAY 20, 2015

AT 7 PM

Agenda: President's Report,
Treasurer's Report,
Election of Officers,
Appointment of an Honorary Auditor,
Setting of Annual Subscriptions,
Any Other Business to be Conducted at an AGM.

***BUT WAIT ... THERE'S MORE !!!
SEE PAGE THREE —*** 

CLUB NOTICES

3rd Sunday Running — May 17, 2015.

Mid-week Workdays — Mostly Every Wednesday.

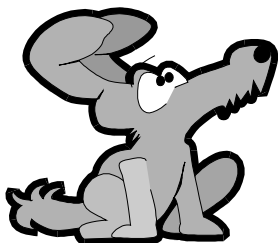
Extra Running Days This Month:

NONE ADVISED

THESE WORK IN WITH
MUSEUM "LIVE" DAYS AND
OTHER EVENTS

QUIZ — What is it?

For answer see Page 4.



WEDNESDAY WORKDAYS:

By The Editor



1/4/2015: Good attendance of workers. Brian gave the station veranda another coat of paint. It now looks very smart. Tony, Lloyd, John, Rankin and Rodney removed the point that led into the green carriage shed from the mountain inner track and replaced it with a piece of straight track thus alleviating a potential collision point. A stop block of some description will now be placed at the end of an extended spur line that this operation has created. Entry and exit to this area will now have to come from the other end of the yard. Tony has made some miniature handrails for the DC and will install them shortly. Ian has finished painting all the point levers and lineside fittings. The builders have just about finished the small shed at the northern end of the station.

8/4/2015: A reasonable sort of day although a little cool. Some of the hedges were trimmed as they were rather "hairy" looking. Being school holidays we ran one train (444) and that was fairly well patronised.

15/4/2015: Members were very scarce on the ground. They were mostly engaged elsewhere either on holiday or shifting house. As we are still in the school holiday period we ran one train (Santa Fe) and that didn't appear to carry that many patrons but the takings said otherwise. Tony was busy in the basement heating up something (?). Painting of the new BBQ shack was contemplated but flagged away because of the cold (it will keep).

22/4/2015: Yours truly has been given a 9ft length of 12 x 1 dressed pine that will be just "duddy" for a shelf in the new BBQ shack. Painting of the remainder of this building is under way. Still cold though!

29/4/2015: Quite cold and very windy and not a very good attendance. The heavy rain over the preceding two days deposited quite a large amount of dirt and other detritus in front of the door to the basement. Removal of this was undertaken and will be OK for a little while. I attempted to finish the outside of the BBQ shack but this was not to be.

Walking can add minutes to your life. This enables you at 87 years old, to spend an additional 5 months in a nursing home at \$4000 a month.

LIST OF CLUB OFFICERS

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Postal Address: Whangarei Model Engineering Club, P.O. Box 10233, Te Mai, Whangarei 0143.

Club Telephone: (09) 438 9520 (Available Work and Running Days Only).



“PEA, PIE & PUD NITE”

IN CONJUNCTION WITH THE
A.G.M.

TO BE HELD PRIOR TO THE
MEETING AT 5.50 pm



IF YOU INTEND COMING ALONG COULD YOU LET THE EDITOR
KNOW FOR CATERING PURPOSES —

TELEPHONE 434-3125 OR E-MAIL ME ON julianm@xtra.co.nz

QUANDARY:

A man returns home a day early from a business trip. It's after midnight. While en route home, he asks the cabby if he would be a witness as the man suspects his wife is having an affair, and he wants to catch her in the act. For \$200, the cabby agrees. Quietly arriving home, the husband and cabby tip toe into the bedroom. The husband switches on the lights, yanks the blanket back and there is his wife in bed with another man!
The husband puts a gun to the naked man's head. The wife shouts, Don't do it! I lied when I told you I inherited money.

HE paid for the Porsche I gave you.
HE paid for your season Patriots tickets.
HE paid for our house at the lake.
HE paid for your African tour and 4x4.
HE paid for our country club membership, and *HE* even pays the monthly dues!

Shaking his head, the husband lowers the gun. He looks at the cabby and says, 'What would you do?'
The cabby replies, 'I'd cover him with that blanket before he catches a cold.'

Other Club's Events:

Manukau Live Steamers: Open Weekend, Queen's Birthday Weekend, May 30-June 1.
Tauranga Model Engineers: National Convention, January 7-11th 2016.



ANSWER TO QUIZ ON PAGE 2:

The LMS turbine locomotive, No 6202, built in 1936.

This locomotive looks fairly conventional but was in fact driven by a steam turbine ahead of the coupled driving wheels. It was non-condensing, and had a reversing turbine, engaged for use with a dog-clutch.

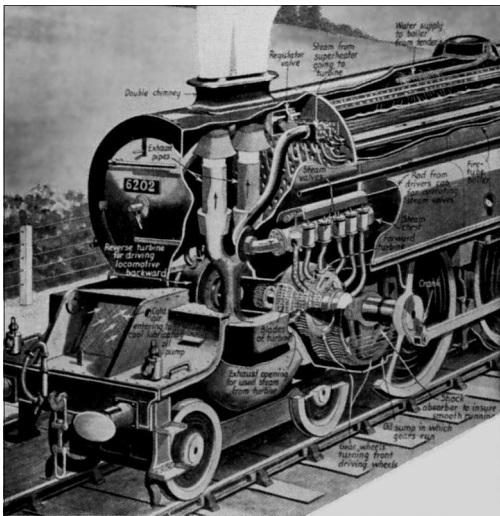
It was one of the few experimental turbines which really did beat conventional engines on thermal efficiency, despite having no condenser. This has to be called an engineering success; it covered over 300,000 miles between 1936 and 1945, and was finally taken out of turbine service in 1949. It was rebuilt as a conventional Pacific, and only a few months later was written off in the catastrophic 3-train accident at Harrow in 1952.



ABOVE: removing the turbine casing.



ABOVE: One end of the forward turbine. The curved pipes run from the six control valves down to the turbine nozzles.



LEFT: A very rare cutaway drawing of the business end of Turbomotive.

¶ Note the six valves controlling the forward turbine inlet nozzles.

A PSALM OF STEAM

The steam locomotive is my treasure; I shall not want diesels.

It maketh me to lie down in green pastures with my camera; it leadeth me beside the still water towers.

It restoreth my soul; it leadeth me along the dirt roads to scrap yards, wretched food and poverty for its preservation's sake.

Yea, though I walk through the terminal of the shadow of diesel, I will fear no secret police; for my photo permit is with me; thy side rods and thy stack-talk they comfort me.

Thou preparest a turntable before me in the presence of the diesel salesman; thou anointest my head with cinders; my tender runneth over.

Surely low, three-quarter sunlight and thick smoke will follow me all the days of my life; and I will dwell in the roundhouse of the LORD forever.

Anon

Newsletters Received . . .

Title	From	Dated
Blast Pipe	{ Hutt Valley Model Engineering Society (Inc) Maidstone Model Engineering Society (Inc)	April 2015 " "
Model Torque	Hawkes Bay Model Engineering Society (Inc)	April 2015
Piston 'n' Prop	Marlborough Associated Modellers Society (Inc)	April 2015
The Generator	Palmerston North Model Engineering Club (Inc)	April 2015
The Roundhouse	National Railway Museum of N.Z.	April 2015
Southern Rails 'n' Sails	Southland Society of Model Engineers (Inc)	April 2015

THESE MAGAZINES ARE AVAILABLE TO READ IN THE CLUBROOMS FOR APPROXIMATELY 1 MONTH



The story about the 20 wheels!

Early on in the construction of this 20-wheeler, I had made the frames and fitted the horns, with sliding axle boxes all set up to wobble from side to side. I had also made up all the brake hangers and leaf springs, etc.

The tender for this engine was a straight 8. That is, there were no bogies and the centre wheels were set up to take a minimum curve. These wheels were solid biscuits cut from a 200 diameter round stock by the local heavier engineering shop. These were all turned with correctly angled treads and set up with outside axle boxes, without any huge traumas. The whole tender base frame and platform have been hand pulled along the track at WMEC and appear to be OK. Not so sure of the tighter curves associated with the yard sidings.

The bogie wheel sets were acquired from a set of castings donated from an un-machined, "Black 5". The castings I used were for the tender of this 5" gauge English pattern with nine spokes. The Gresley should have 10.

These were machined and fitted into steel donut tires. Such donuts were cut, again by the heavier machine shop just around the corner, from a suitable sized pipe, machined and gentle push fitted with Loctite to the cast iron wheels. Final skimming of the tread and rims brought these to the NZ code requirements and the complete bogie has been hand pushed around the track.

A similar expectation was set out for the Cartezzi truck axle. When I tried to push the wheels into the prepared tires, I clearly got the OD and ID marginally wrong. My second mistake was to push harder on the press, loading on the boss. With hindsight the inevitable happened. A loud crack and every single spoke shattered! Now what do I do? I looked around the shed and delved into my "come in handy box" and halloo! there emerged a couple of biscuits almost the right size. Within a couple of days these had been machined for a force fit into the tires. I drilled a series of holes right through between the boss and the tread and then pressed the two steel parts together. One did not go in with my press, nor my next door neighbour's press. My son took the "half in" wheel assembly to work and it went in, no trouble at all — with 90 tonnes pressure! Taking the final cuts, this axle and the bearings and the tapered Cartezzi axle boxes have been run around the track and checked for code compliance.

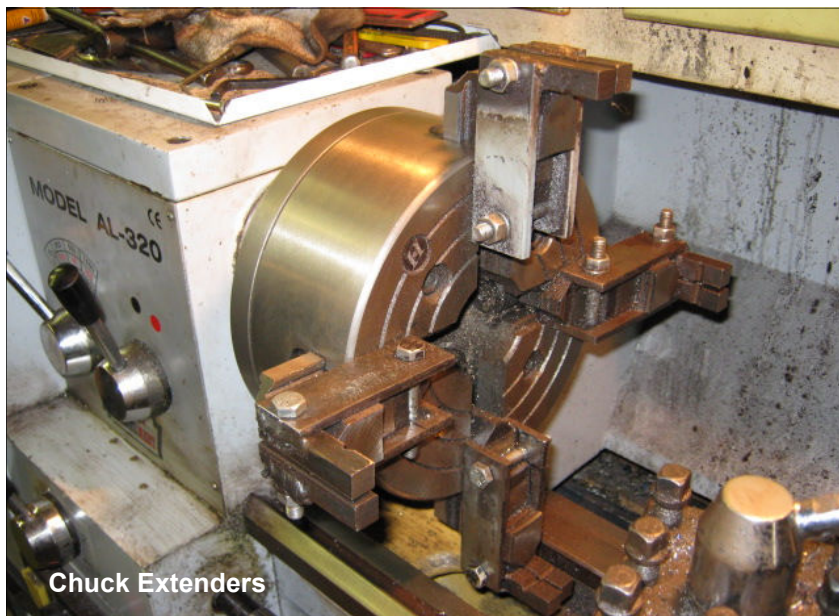
OK. This accounted for 14 of the 20 wheels, leaving the three main axles to sort out. Once again, I visited my mate around the corner and he cut me six donuts from a suitable sized pipe about 275mm. in diameter. These, I was just able to get in the four-jaw chuck with some extenders on the jaws and was able to do all the necessary machining. These all went into an oil bucket to await the actual wheel centres. Now this was a challenge!

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Tender base and wheels



Chuck Extenders

At the local wreckers, I came across some aluminium sheet, 5 and 6mm thick. There appears no real market for scrap aluminium and thus I became the owner of same! Some of this was distributed to other club members, Some I kept. In fact I kept it for some time while I thought how to make a pattern for the main wheels. I tried in plywood and the result went over my shoulder into the bin. Now, didn't I have some aluminium sheet? And could I make up a casting pattern from this material? One square bit about 450 x 450 was the starting base plate, although this had a few holes that would need filling. I used the hacksaw as a band saw and

CONTINUED NEXT PAGE

CONTINUED FROM PREVIOUS PAGE trimmed the necessary circles. Then I mounted these in the four-jaw and cut the inner disk out. Five of these were made and drilled and countersunk screwed together, as a pair and a threesome. These were then bored on the inside and outside to the recommended casting taper of 2 degrees. (I had talked to the local foundry before this!). The two hoops were then drilled together and then one set used to drill the base plate and the whole bolted together with countersunk Alan head screws, tapped into the back plate. Now I had a plate with a hoop on both sides, set up concentrically. The rear and outside boss pieces were hacked out of the cut off bits of aluminium plate and assembled, filed to shape and mounted in the middle of the hoops, one on each side. So far so good. Now for the spokes!

Another visit to the scrappy and a piece of 10mm thick aluminium materialised. This was cut into strips to form rectangular shapes about 13mm high and 10mm wide. These were milled rectangular and then hand filed to make twenty front spokes and 20 rear spokes. (These were all cut to length and drilled as matching pairs before hand filing). Again, using one set of pre-drilled half spokes to make the holes in the backing plate, these "spokes" were then screwed through into the tapped holes in the rear set. Thus I had a rather untidy aluminium casting plate. And there it sat for a year (or a bit more). Priorities changed to making the boiler.

However, things were to change again! A club member put me onto some steel impregnated high temperature two pot mix. ('JB Weld'). I invested in a couple of tubes of this and proceeded slowly to fill the various gaps on both sides of the casting plate. Waiting for the mix to go off and then filing and using the Dremel, to get closer to the shape I wanted, then refilling etc., seemed to take a good time, but eventually in around June 2014, I put a coat of paint over the pattern and took it to the foundry. Only to have it soundly rejected on five separate occasions and asked to tidy up the release angles and the nooks and crannies around the spokes as they joined the hubs. Eventually accepted! Then I had to wait while they waited for an order to make it worth their while to actually cast in iron. Around four months went by, with the sand casting done and sitting on a pallet. Then one day, just before Xmas 2014, I called in and there they were! 6 off castings!

I had long ago decided to only make one pattern for the six wheels and to set the counterweight for the driven centre wheels. The intention is to file and saw the other four wheels to shape and then fit appropriate steel counterweights, feathered in with lead or Araldite. ■

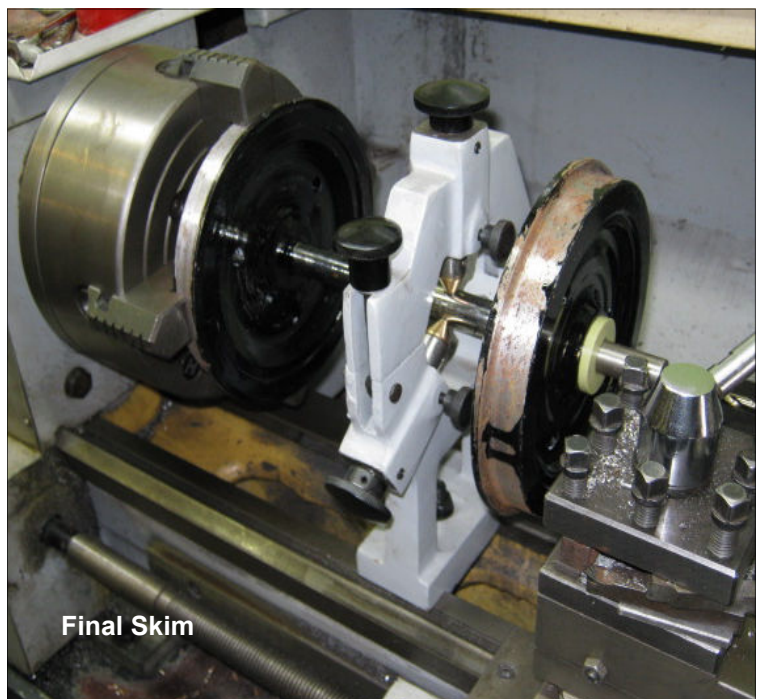


Tire in place ready for turning

TO BE CONTINUED IN NEXT ISSUE

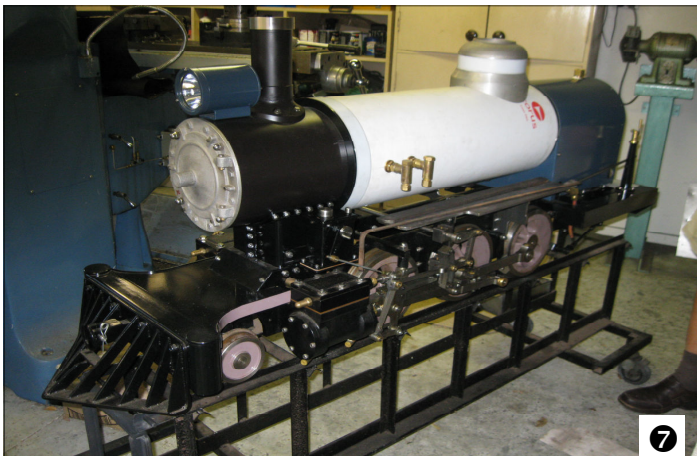


Trial heating of tyre



Final Skim

General Pics from Around About



PHOTOS ABOVE:

1. & 2. Progress on the construction of the BBQ shack.
3. A very welcome group of Dixieland musicians. Extremely pleasing to the ear.
4. A new use for an old glass washing board with up-to-the-minute amplification unit attached.
5. A picture from the "Aw! Ah! ... isn't he/she/it cute department."
6. Rankin has made a judicious use of an old hospital bed to keep his loco on. Has rise and fall installed.
7. Rankin's new Baldwin is progressing slowly.

IF UNDELIVERED PLEASE RETURN TO:—

Whangarei Model Engineering Club Inc,
P.O. Box 10233, Te Mai, Whangarei 0143.

