

Number 595

October
2014

The MICROMETER

AUCKLAND SOCIETY OF MODEL ENGINEERS INCORPORATED

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REGISTERED NEW ZEALAND PUBLICATION

Track modifications proceeding well

Life Member Alan Pritchard observes the modifications at the entry portal of the long tunnel. See Track and Tunnel report inside.





Train Roster

Date	Electric Driver	Electric Driver	Steam Driver	Train Controller	Station / Guard	Station / Guard	Station / Guard
5-Oct-14	S Meikle	D Moffat	Voluntary	<u>T Lawrence</u>	C Mitchell	G Murray	J Olsen*
12-Oct-14	M Moore	P Moy	Voluntary	<u>G Wills</u>	M Richardson	K Ryan*	A Shirley
19-Oct-14	R Reichardt	P Woodford	Voluntary	<u>D Russell</u>	A Pritchard		R Stratton*
26-Oct-14	B Aickin	I Ashley	Voluntary	<u>T Lawrence</u>	R Street	P Tomkies*	D Addis
2-Nov-14	A Bailey	G Beazley	Voluntary	<u>G Wills</u>	J Burnett*	J Clarke	R Copeland
9-Nov-14	D Booth	B Cotton	Voluntary	<u>T Lawrence</u>	R Crook*	J Davies	G Dickey
16-Nov-14	P Dowdeswell	M Granger	Voluntary	<u>T Robinson</u>	A Foster*	G Healy	P Jones
23-Nov-14	M Hollis	D Housley	Voluntary	<u>D Black</u>	D Leybourne	M Luxton*	H Martin
30-Nov-14	J Lankow	T Leys	Voluntary	<u>G Anderson</u>	C Mitchell	G Murray*	J Olsen

Bold and Underlined Name:

This is the designated **Train Controller**, i.e. the person in overall control of all operations for the day

Bold with Asterisk* Name:

This is the designated Stationmaster, i.e. the person responsible for activities in the station area. The Stationmaster is also responsible to account for the day's takings.

TRAIN DRIVERS PLEASE NOTE: New trolleys - please make sure when you put the trainset away after Sunday running that you **leave the brake switch** (on the front of the first trolley) **in the middle** (Brakes On) **position. This will help stop the vacuum pump battery from going flat**, a situation which prevents the following week's crew from using the train!!

President's Report

October 2014

Work on the Track & Trolley project is progressing with track in long tunnel prepped and nearly ready for concreting in October. The storage racking in the engine shed has been modified and the traverser is being modified to fit the new riding trolleys.

At the annual club Auction on 7th October please put your name on the items you are selling even if it is a donation to the club.

Timothy Robinson

President

26 September 2014

Club Calendar

Tuesday October 7	General Meeting and Club Auction. We have had a number of auctions this year, but this one is different - this one is for selling all the stuff that you have decided you didn't want after all! Clean out your workshop and bring along anything that you think might be useful to someone else! (Bring your cheque book, too. There might be something that takes your fancy...) (7.30 p.m.)
Saturday October 11	Regular monthly Working Bee (9 a.m.)
Tuesday October 14	Committee Meeting (7.30 p.m.)
Tuesday October 21	Workshop night at Graeme Murray's place. For those members who have not seen Graeme's workshop, it is well worth making the effort to come along!

Track and Trolley Project

Update on the Track & Trolley Project 2013 (Stage 1).

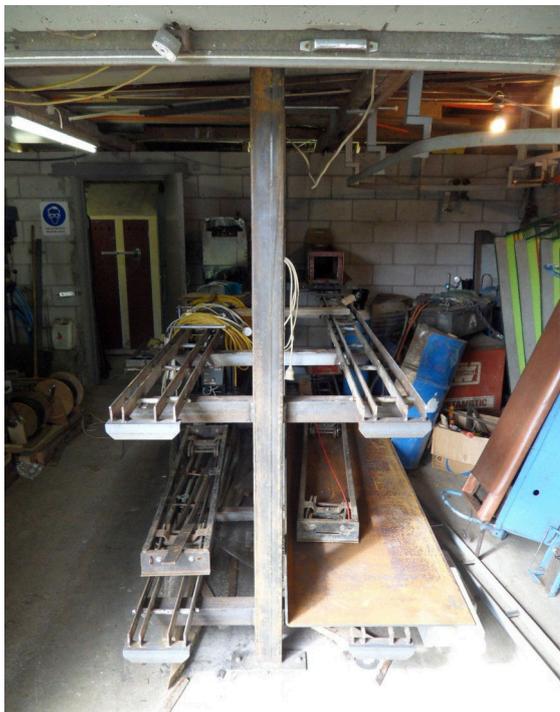
We have been undertaking Sunday running for the public on the "upper loop" since late May; i.e. the track of the 1987 extension converted to ground level operations with the new 7¼ g trolleys. The temporary station has worked out reasonably well, helped by the lower numbers of the public riding through the winter months, enabling ASME to continue to provide a safe and pleasant train ride. We have even seen a steamer running on several Sundays hauling passengers, in addition to the club trainset!

Recent work has focussed on the long tunnel, the storage rack in the engine shed and a new pad by the traverser— it is fortuitous that the areas for all these jobs have provided an undercover work area given some of the unpleasant winter weather that has been encountered on recent working bees. Following on from clearing the tunnel spoil, the pipes were water-blasted to get years of dirt & grime from the walls. The track was then graded properly by means of 22 pieces of threaded rod chemset into the base of the pipes and secured by nuts above and below the sleepers. Then starters were chemset into the pipes at each end of 22 adjacent sleepers, the camber set to a modest amount and welded to hold the track in position. The track has been fully welded and the old crosstubes removed — the result is a very stable track on which the trainset can be run over temporarily without any other support. A small section of pipe has been cut out at the entry end to provide additional space for safe operations as the portal and pipes are offset.



Track set up in the tunnel, ready for concreting.

Footings have been dug at the entry and exit portals – when the concrete is placed in the tunnel at the October working bee, this will enable it to be linked up to the new track base. When completed, this work will provide a much improved flat evacuation path for passengers and crew to walk on, should a train have a derailment or other emergency in the tunnel.



Modified storage rack for rolling stock. Note new plate for traverser on bottom r.h. rack.



Preparations for concrete at the exit portal - still to be boxed!

The other main job over the winter months has been modifying the storage rack in the engine shed. The rack was moved across to a more central position in the doorway, the rack lengthened to enable two new trolleys to fit on each track if required and 7¼ g added. An additional post was provided to improve stability. The lengthening has had the added benefit of shortening up the bridge piece that is needed to meet the traverser.

We have had a good turnout during September to the working bees – thanks to Tony Lawrence, John Lankow, Pete Tomkies, Scott Meikle, Mike Banks, Reg Reichardt, Allan Bailey, Graham Beazley, Greville Wills, Timothy Robinson and Grant Anderson.

Upcoming work includes modification to the traverser – the base plate is being replaced with a wider thicker plate with lateral support. This will enable the new trolleys to roll onto the traverser for movement to the storage rack; all without the need to lift anything manually. Some photos in the last Micrometer covered the work involved building the new concrete pad by the traverser.

During October, besides concreting the long tunnel we hope to get back onto converting the remaining old track to include 7¼ g and to make a start changing the steel girder bridge for ground level running.

Any assistance from members will be much appreciated – note, this doesn't require welding experience, just the interest to be part of the team for concreting, setting up rail gauges and a host of related jobs prior to and after the track welding, including gluing the rubber insulators onto the sleepers and bolting the track down onto the concrete base. So come along and help get this Club project completed soon. There is a working bee most Saturdays from 9am, so come and join in – any queries as to what is involved, or to confirm days for working bees, can be directed to any of the sub-committee members below.

Grant Anderson – 25 September 2014.

Project Sub-Committee Members:

Timothy Robinson Ph 296 2949, 0274 736 846

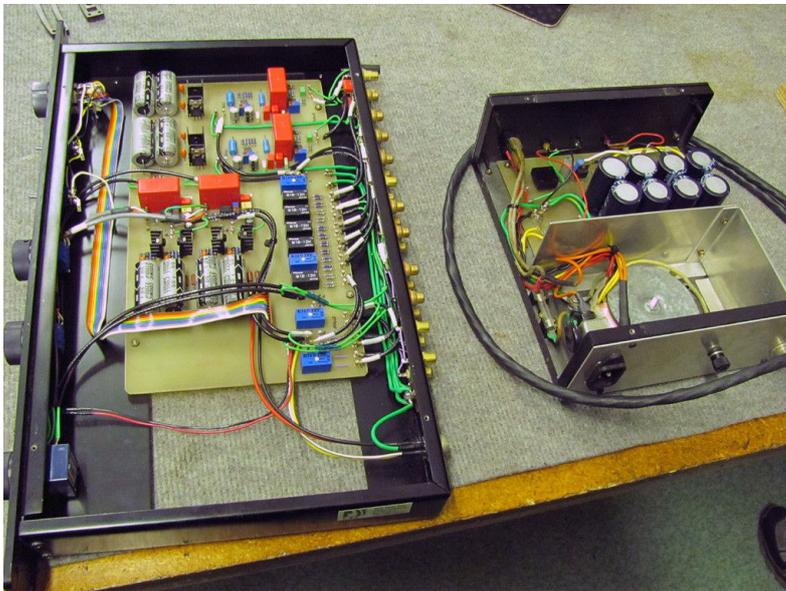
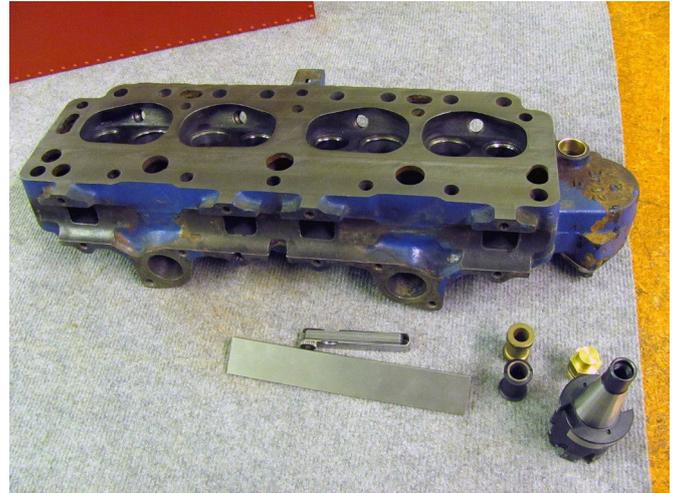
Greville Wills Ph 411 5092, 0274 982 713

Grant Anderson Ph 576 8330, 0274 810 185

Bits and Pieces September 2 2014

Conducted by John Olsen, photos and report by Dave Russell

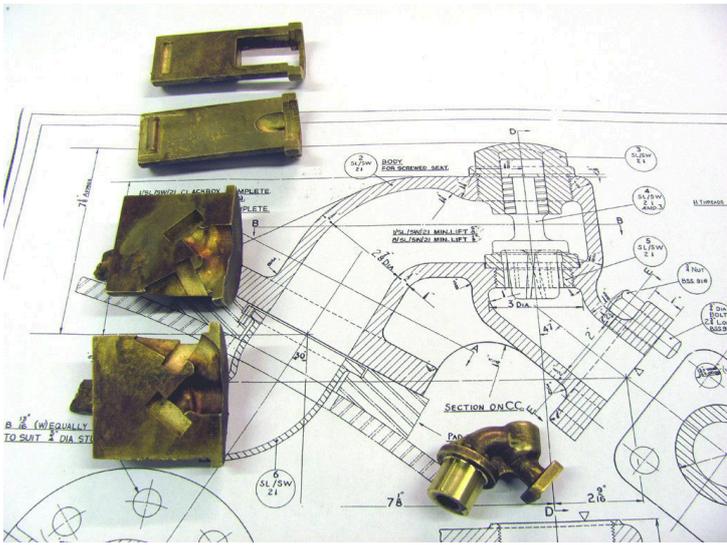
Grant Anderson, our resident Consul & Zephyr collector, decided he would surface a 4 cyl Consul cylinder head himself using his milling machine. The result is deemed to be quite satisfactory. While the head was set up on the mill Grant also bored out the hole where the bypass tube fits in under the thermostat as it was corroded and did not seal nicely against the rubber of the tube. Grant made and used Loctite to hold in a brass sleeve to bring the hole back to correct size, a replacement tube made from brass and with two O rings is to be used when the head is fitted to the vehicle.



Graham Beazley, before he got deeply into his telescopes, used to manufacture and sell high end audio equipment under the brand name of "GJB" (his initials), these were all analogue pieces as this was before the digital revolution. Shown is an amplifier and power supply, Graham built 91 of these amplifiers in total.

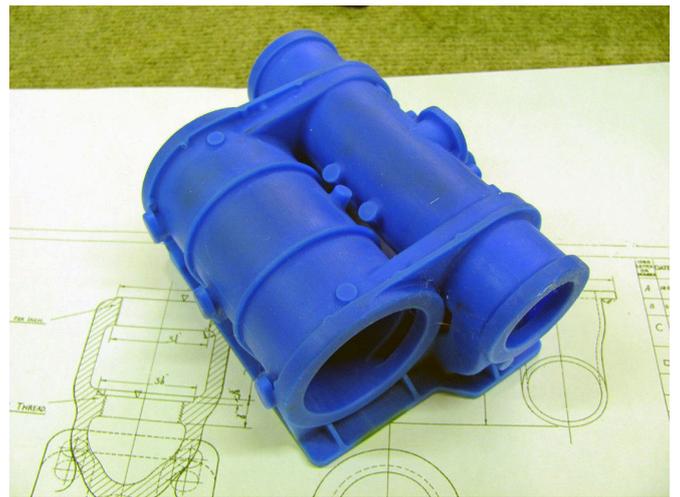
The fine bronze locomotive chimney is for a 3-1/2" gauge model "William" locomotive being built by John Lankow. The original gunmetal casting was deemed to be too short, so John cut it in half and put a brass insert in the middle with a petticoat piece on the bottom made from a brass offcut bought at a club auction. The locomotive will be finished to an NZR style.





Mike Jack has been very busy as usual, currently working with bronze lost wax castings for his commercial project locomotive. The photo shows a British Rail standard class boiler feed clack and drawing, the hole through the fitting has been cast in, this is possible thanks to using 3D printed waxes as the source pattern for the mould.

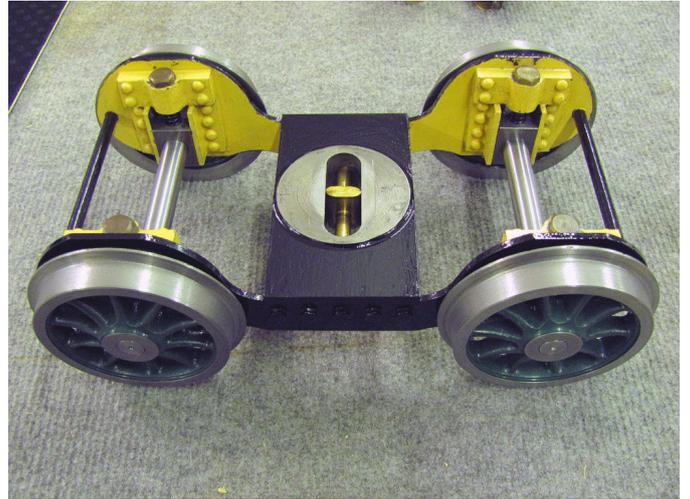
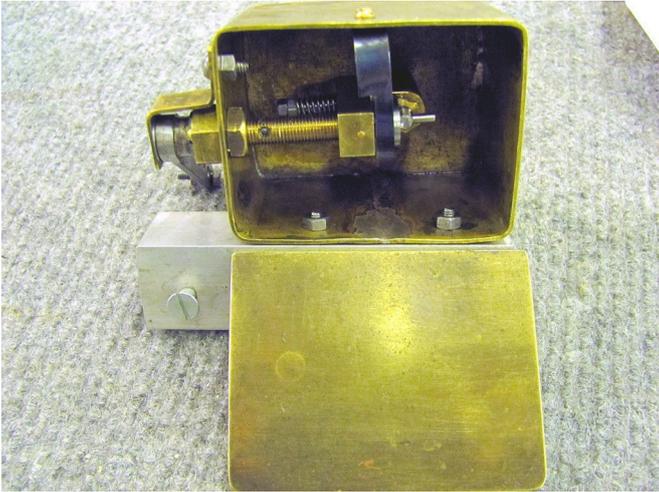
Mike's second piece this month was a rather expensive wax pattern for a cylinder casting, this had been printed in the UK and sent over to Mike. Mike has just purchased a 3D printer so he will be capable of producing these wax patterns himself.



Also from the M Jack workshop were a couple of A4 Mallard expansion links, Mike had to make a second pair for the owner of the locomotive as the original were broken when the loco was assembled and something else fouled the links.

Mike's last piece was a lead screw and nut for one of Mike's little machine vices. The screw was produced on the CNC lathe and is made from "4140". The nut is made from Aluminium Bronze.





I am in the process of doing a quick restoration and tidy up of the "Maid Of Kent" locomotive built by the late Peter Swager and currently in my ownership. After about 30 years of very regular track running there are a number of things that need attention. The photos show firstly the steam oil lubricator that had started working intermittently. This was due to the little one way clutch being gunked up with old oil etc. Secondly is the front bogey that had one wheel that fell off and the other that was loose, all the wheels also had flat spots and have been re-machined, a coat of paint finished the job. Lastly is the drain cock lever, it has had a new handle top made for it as the old one had broken off and dropped out on the track somewhere.

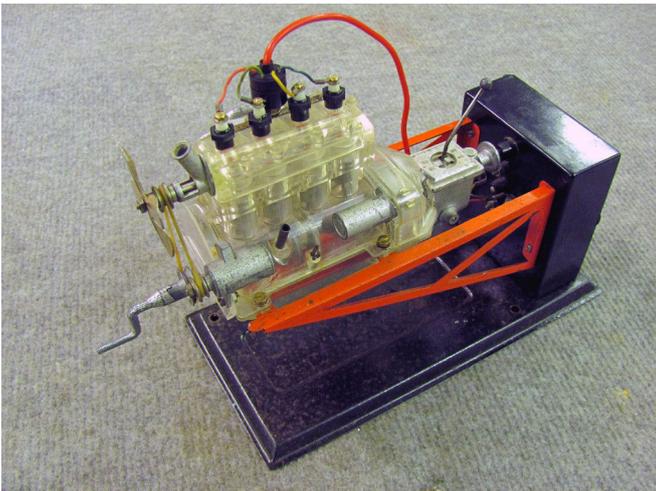


This nice-looking feed pump is by Mike Orange, Mike says it works fine on compressed air and almost works on steam, a few more adjustments should see it working as it should.



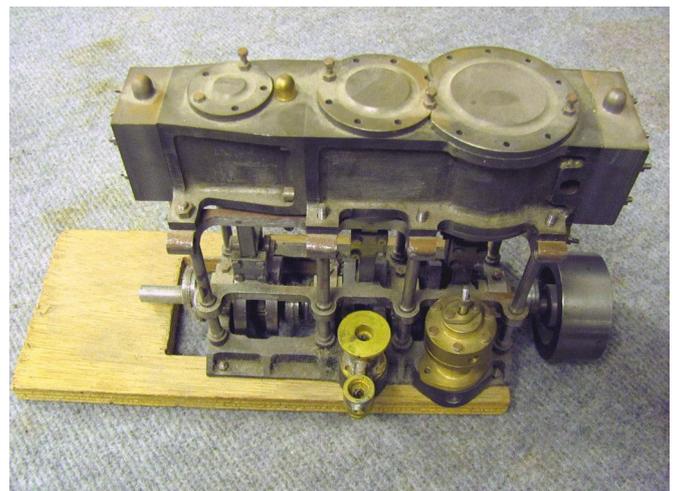
These very fine pieces of gear are parts of a hydrometer / humidifier made by Graeme Murray for test equipment made for his employer in the health research field.

Do you recognise this person? Yes, it is Greg Burrows shrunk to fit inside the cab of his 7-1/4" gauge locomotive under construction. Thanks to the wonders of modern technology and the good people at "3D Hobbies" in Parnell Greg had his top half scanned and made into a cad file that was then printed out on a 3D printer in plastic and stands about 8" high, Greg is doing the painting himself, very creative.



This little see thru model of a 4 cylinder Opel engine and gearbox has been restored by Ron Copeland who purchased it at a club auction. Ron had to make a new sump and one of the plugs was missing. The item can be operated by battery or by the crank handle, dates from the 1930's and very collectable.

John Olsen left his own item till last, this being a fine Stuart Triple Expansion engine. Most of the parts have been carved from the solid and John has made some modifications to the pillars to make assembly and maintenance of the reversing gear easier. This is a project that John has been working on for some time. I am sure we are all looking forward to seeing this engine running one day.



Also on the Bits and Pieces table were:

Some old photos of Meccano locomotives built by Rob Campbell who was the Editor of the NZ Hot Rod magazine for a long time. These photos were brought in by Peter Tomkies.

A couple of angle pieces made by Greville Wills to extend the club traverser track as part of the ongoing track and trolley project.

Classified Ads

For Sale—7¼” Gauge Loco and Trolleys



Union Pacific RS1 212 Loco & 2 Trolleys complete

Asking price \$15,000.

Extremely reliable and comfortable runner. Very simple to drive.

Time to build new loco & need funds to start the project.

24v Battery Electric, 4QD Pro150 Controller with regen braking and electric park brake.

Dual 24v battery packs (2x12v 80AH Deep Cycle Batteries in loco, replaced 2014 & 2x12v 80AH Deep cycle batteries in 1st trolley)

Phoenix sound system for exact replica sounds with 2nd speaker and amplifier in rear 1st trolley.

Independent air brakes on 2nd trolley

Foot boards remove both trolleys & 2nd trolley body is "flat pack" design for easy transport

Complete with 24v Smart Charger & spare drive motor / gearbox.

Enquiries contact Chris Drowley, cdrowley@xtra.co.nz or 0274 496907.