

Number 596

November
2014

The MICROMETER

AUCKLAND SOCIETY OF MODEL ENGINEERS INCORPORATED

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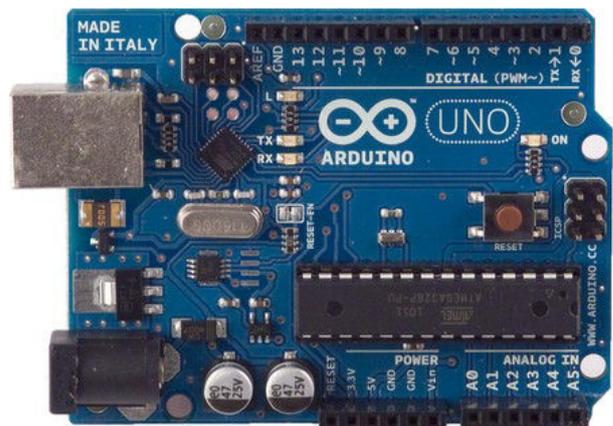
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REGISTERED NEW ZEALAND PUBLICATION

Arduino

A small computer for doing all sorts of clever things with. See note at the end of Bits and Pieces.





Train Roster

Date	Electric Driver	Electric Driver	Steam Driver	Train Controller	Station / Guard	Station / Guard	Station / Guard
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
7-Dec-14	D Moffat	M Moore	Voluntary	<u>D Russell</u>	A Pritchard	M Richardson	R Stratton*
14-Dec-14	P Moy	R Reichardt	Voluntary	<u>G Wills</u>	K Ryan	A Shirley	R Street*
21-Dec-14	P Woodford	B Aickin	Voluntary	<u>T Lawrence</u>	P Tomkies*	D Addis	J Burnett
28-Dec-14	----- Xmas / New Year Break - No Roster in Operation - Voluntary if you wish -----						
4-Jan-15	----- Xmas / New Year Break - No Roster in Operation - Voluntary if you wish -----						

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 Asterisked* 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.

President's Report

Work on Track & Trolley is progressing with the long tunnel concreted on a working bee on 18th October.

The workshop night at Graeme Murray's had a good turnout.

Please note the news letter contains the notice of the ASME Annual General Meeting. The committee is in need of some more / new committee members. If you can help please let me or the secretary know.

Timothy Robinson
President
 26 October

Notice of Annual General Meeting

of

Auckland Society of Model Engineers Incorporated

The Committee gives notice that the next Annual General Meeting will be held at the ASME Clubrooms, Peterson Reserve, Panmure on Tuesday 2nd December 2014 commencing at 7.35pm.

The Agenda items will be the relevant items as set out in Rule 16.

The other business to be attended to (per Clause 16.8) will be as follows:

1. Change to the Rules:

Notice of Motion to amend Rule 16.6 has been received from Grant Anderson & Greville Wills.

The current rule regarding audit of accounts reads:

Clause 16.6 The meeting shall appoint an Auditor if a suitable qualified person has accepted the appointment.

Notice of the Motion to be included as an agenda item is:

"I move that Rule 16.6 be amended to:

Clause 16.6 The Annual Accounts are not required to be audited unless the membership, by a two thirds majority, at an Annual or Special General Meeting, requires this action to be taken. The Auditor shall be an accountant properly qualified and authorised to undertake audit work.

(Note: The meeting would also need to authorise the payment for the cost, from \$3,000 to \$5,000 or more.)"

Background to this change:

There is no legal requirement for the accounts of an organisation of ASME's type and size to have its accounts audited. This is true under the Incorporated Societies Act or the Charities Act. Other stakeholders, e.g. Auckland Council, Charities Commission and funding agencies such as the Mt Wellington Foundation Ltd only require audited accounts to be filed if the organisation's rules require accounts to be audited – otherwise they are happy to accept unaudited accounts.

There is really no half-way house today, i.e. in the past accounts were often "audited" by an unqualified but capable administrator or bookkeeper as honorary auditor. Today, because of liability concerns, if an audit is to be done it must be done by a suitably qualified and authorised accounting firm or qualified person. While an audit done by such qualified firms or persons sometimes turn up irregularities, that is not the prime purpose of an audit. Rather it is to check the system of internal control to ensure that the accounts can be relied upon to show a "true and fair" view of the organisation's financial results and position. Today, auditors will always require a letter of presentation signed by the organisation's officers/committee which puts the responsibility and liability for maintenance of such systems, and accuracy of the information supplied, back on the organisation.

In the circumstances, one has to ponder the true value of an audit or review especially in a club such as ASME where, amongst other things, the rules require all withdrawals from a bank account to require two authorised signatories.

Moved: Grant Anderson, Seconded: Greville Wills

2. That a nomination for a new Life member has been received by the Secretary and will be put to a secret ballot at the meeting (as per Rule 6.5).

(The required notice has been met and twelve members have signed the nomination.)

ASME – Christmas Function

Date: Saturday 6th December 2014
Time: 11:30am till 4:00pm
Where: JC Ryder Cinema
177 Riversdale Rd
Avondale

The lunch will be served soon after midday.

We have to vacate by 4:00pm as another group are in for dinner.

Cost:\$20 per head (includes short film)

Minimum Number is 30 people attending.

We need confirmation of numbers, so payment is necessary in advance to the treasurer with your booking.

The club will subsidise the event with extras for the Xmas spirit,-
Xmas mince pies and wine & beer Xmas Crackers etc.

Club Calendar

Tuesday November 4	General Meeting (7.30 p.m.)
Saturday November 8	Regular monthly Working Bee (9 a.m.)
Tuesday November 11	Committee Meeting (7.30 p.m.)
Tuesday December 2	Annual General Meeting (7.35 p.m.)
Saturday December 6	ASME Christmas Function (11.30 a.m.)

Track and Trolley Project

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

A special working bee was held on Saturday October 11 and several members turned up to assist Tony and crew to lay the concrete in the long tunnel. Rain was forecast for the morning, but fortunately there was very little precipitation while the job was in progress.

For the most part there was not a lot to do while the concrete was being laid — there is only so much room in the tunnel so once things were set up it was a case of letting Tony and his assistant get on with the job while the rest of us waited outside to help the concrete-pump operator manipulate the heavy hose when required.

Similarly, it was just about impossible to take photos of the action — it tends to be very dark inside a curved tunnel — so there is not much in the way of action shots!



The concrete pump — remotely controlled as I found out later. How handy!

This must be the tube station!



So this is where the concrete goes!





Snake in the grass near the 3-way bridge. No cause for alarm, though.

Concrete practitioners ready for action. Tony and friend at the boat-pond end checking out the boxing for the transition pad.



Concrete was pumped in through the pipe which had been fed in from the other end of the tunnel so that pouring could start at this end. Smoothing out the surface came later.



The special tool that Tony created on his milling machine for placing the concrete between the rails at the required level. There can't be many multi-gauge concrete screeds around!

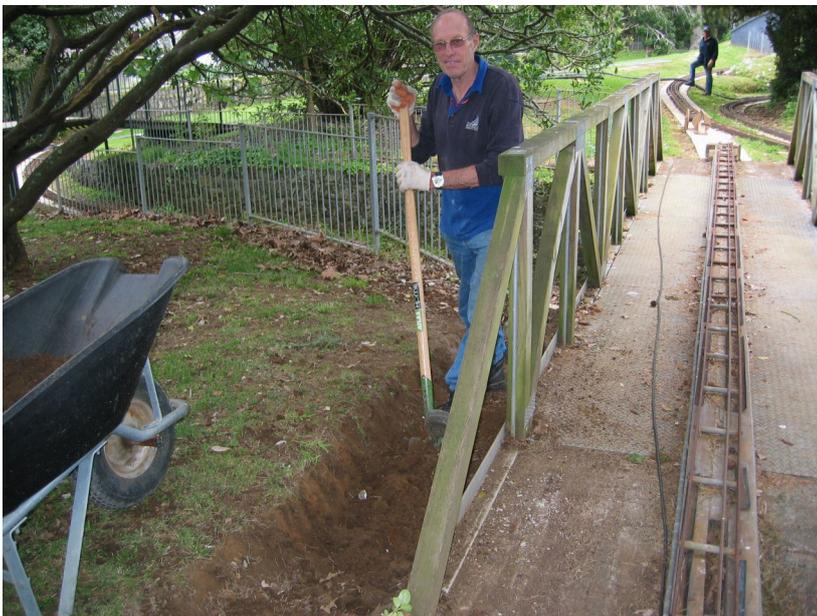
As mentioned earlier, the possibility of taking pictures of the work in progress inside the tunnel was non-existent! So some time had elapsed before the opportunity arose to take this photo of the last couple of metres being poured at the girder bridge end of the tunnel.



And this is where the surplus length of pipe went as the work inside the tunnel proceeded. Every few minutes a request would come from inside the tunnel to pull the hose back a bit further, and it took several hands to lift and move the heavy pipe without creating any sharp bends.



One of the few action shots from inside the tunnel. Take a work trolley, a man with a headlight and a couple of trowels, and smoothing of the surface is under way. Needless to say no trains were running! In fact, Sunday running the following day was cancelled as, although the long tunnel is currently not in regular use, the loco and trolleys have to pass through on the way to and from the temporary station at the start and end of running and it was decided not to risk having the weight of the loco crack the new concrete on its way through.



And while all this was going on, not too far away, Mike Banks was beavering away preparing for some major work on the girder bridge to be performed at the next working bee. It was a “tuff”* job, but Mike handled it ok!

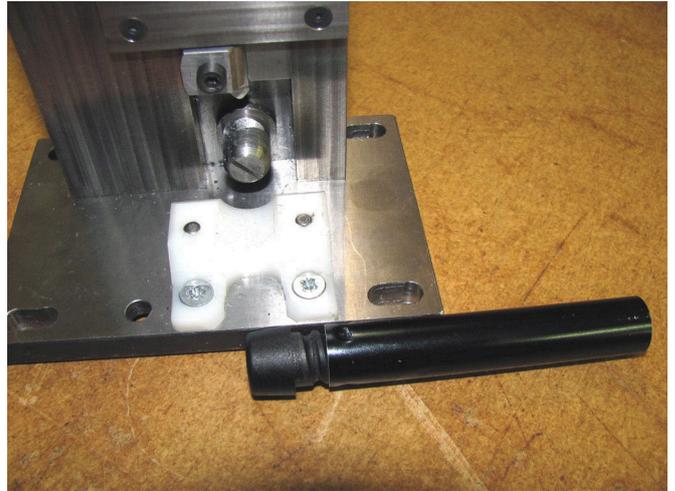
*Tuff: solidified wet volcanic ash from the Panmure Basin eruption many hundreds of years ago. Like trying to dig lumps of concrete!

Bits and Pieces October 7 2014

Conducted by Greville Wills, photos and report by Dave Russell

As you may know our resident inventor Graeme Murray has had quite a bit to do with the development of the “Blunt Umbrella”, he has shown us various bits that he has made in the past.

This time he has made a small press tool that pushes a little rectangle dimple (on an angle) into a piece of alloy tube. This is to engage with a threaded plastic piece that is screwed into the end of the umbrella tube. The tool is quite heavy for the job that it is designed to do; the rationale behind this is that the tool is to be sent to China to be used in a factory environment.



Yet another part for the 5” King has taken shape, Mike Banks brought along his cab reversing gear for the locomotive. The thread is a L/H thread, two start, Acme, 8 TPI of about 5/16” diameter. Mike explained that he turned the screw from the same material that would become the tap. Also he turned the piece long enough that both were formed at the same time with the same tool and at the same setting. The finished “threaded rod” was then cut to the lengths required to make the screw and the tap. The tap portion had some flutes cut into it and then it was hardened. The bush cut with the tap is a very neat fit on the screw.

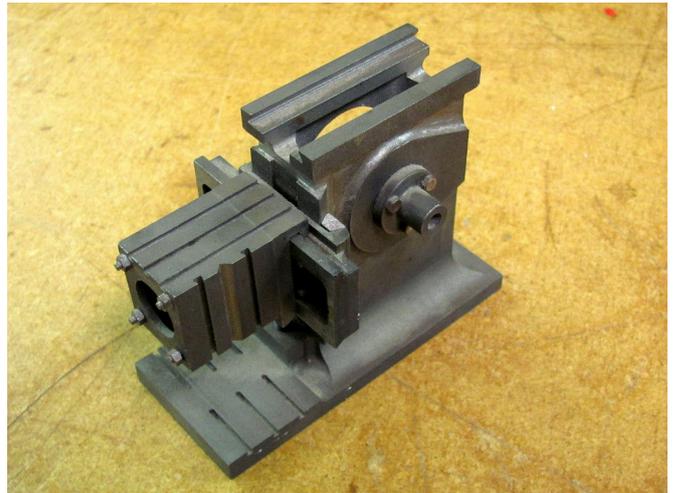
From one of the “CNC Wizards”, Greg Burrows, we had a fine scale shovel for his 7-1/4 gauge locomotive. The item is a 1/3 scale replica of an NZR fireman’s shovel and has been carved from a solid piece of plate approx 1/2” thick. When Greg was asked why he didn’t just make some pressing tools he replied “I didn’t have enough material to make the two halves”. The finished piece is about 1.5mm thick and only took 2 days non stop to make on the CNC mill!





Greg also brought in a couple of Vacuum Gauges for the same locomotive mounted on a piece of Rimu that came from an NZR Railway workshop cabinet.

John Olsen has a collection of 1/12 scale workshop machine tools that he has been working on for some time, and has in the past brought in the little lathe made with Stuart Turner castings, but this time he had a shaper to the same scale to show us. It is carved from the solid and even has very tiny T slots on the bed. John quite proudly informed us that this is the 5th shaper he has in his collection, albeit the smallest.



Last but not least Greville showed us a simple drilling jig made from a piece of aluminium angle that he has used recently to drill into the end grain of MDF board before assembly with screws, this was to avoid the board splitting as it is prone to do.

Editor's Note: Dave tells us that he and another member have been discussing a low-cost gadget called an "Arduino", which, in layman's terms, is a tiny computer that you can program to process inputs and outputs between the device and external components you connect to it. The Arduino is what is known as a physical or embedded computing platform.

He suggests that anyone who has played with these things will know what he is talking about, and wants to invite anyone who has one to bring it along with their inventions or creations and show it to the club during Bits & Pieces at the November meeting.

He will bring along a laptop that can be used to upload different programs (sketches) to the Arduino's as long as the participants bring their hardware in and "sketches" on a USB drive.

Classified ad:

Tauranga Model Marine and Engineering Club Inc

Open Weekend 8th and 9th November 2014

Join us to celebrate the official opening of our clubs No3 track extension at Memorial Park Tauranga on Saturday the 8th of November.

Program

Saturday the 8th November

9.00am Gathering at Palmerville Station for official Welcome by Tauranga City Mayor Stuart Crosby.

9.30am Track is officially opened by Bill Holland Chairman of Tauranga Electrical Consumer Trust

10.00am Official Train Departs.

10.30am Track opens for the days running until 4.00pm.

5.30pm BBQ and Norm Decke Memorial Trophy presentation all welcome.

7.00pm evening run.

Sunday the 9th November

Track operates from 10.00am until 4.00pm.

Morning Tea, lunch, afternoon tea, and Saturday BBQ provided by our club during the weekend.

Don't forget to bring your current boiler certificate and drivers certificate if you intend to run your locomotive during the weekend.

RSVP to Bruce Harvey at b_harvey@xtra.co.nz or Peter Jones at jones.kaimai@xtra.co.nz , and you will be sent additional information and the weekend train advice.

Look forward to seeing you.

TMMEC.