

Number 677

April 2022

The MICROMETER

AUCKLAND SOCIETY OF MODEL ENGINEERS INCORPORATED

PO Box 14570, Panmure, Auckland 1072, NEW ZEALAND

Club House: Peterson Reserve, off Peterson Road, Mt Wellington, Auckland 1060

Telephone: 09 570 5286 Club Web Site: www.asme.org.nz

President	Mike Moore	09 443 6050
	e-mail address	president@asme.org.nz
Secretary	Dave Housley	09 576 3923
	e-mail address	info@asme.org.nz
Editor	David Black	09 235 2372
	e-mail address	editor@asme.org.nz



Work completed to provide barriers to meet COVID-19 requirements for when ASME are able to resume public running (on current rule versions, when we return to TLS Orange). They provide for separated entry & exit points and will assist fully vaccinated people only to be managed within the barrier area. They were set up for a trial at the working bee on 12/03/2022 - signage still to be added. Full instructions will be given to station staff before running resumes. (P.S. the area had been specially manicured for the photo shoot!)

Photo credit: Timothy Robinson

President's Report April 2022

Welcome to another month of uncertainty, and I hope you are all keeping well, although I am aware of several members who have been unwell recently, including with Covid. The imminent easing of restrictions means, in theory, that we could restart Sunday Running soon, as many of us want to, however this will depend on the rate of infection in the community, which will determine the risk to our members. At this stage we intend to start in April, with the date to be set according to the risk factors, and those who are rostered on in April need to be prepared to turn out as scheduled.

Scale Marine Modellers have now moved out of the clubrooms completely, and a new rent for the Boat Pond has been agreed. This means the work on the new workshop can begin, with much to be done including removal of the unwanted shelving, stripping the coating on the ceiling, electrical work, and repainting. This will involve more working bees, so please help out if you can. The recent working bee on March 26 saw a good turnout, and the important jobs of filling the blockwork of the new wall of the Engine Shed and removing the mass of leaves on and near the track were carried out, so thanks to all those volunteers, and especially to Grant who organised it all.

We have had a request from the family of the late Norm Ingram, a former member and VP of the club, who built a red loco called Little Gem, and they wish to locate this model and possibly purchase it. If anyone has any knowledge of this please get in touch with me.

The workshop nights are still operating, but with Peter Woodford and Greg Burrows both unable to attend the numbers appear unfortunately to be dwindling. With a couple of new members joining recently this should be becoming more popular, so please get along and pass on your experience.

With Daylight Saving finishing next weekend it will be getting dark earlier but I hope you will still come along to the General Meetings and bring along any items of interest you may be working on or have come across.

Looking forward to seeing you there.

Cheers, Mike Moore

ASME is an active member of MEANZ, members should keep a lookout on the website too <http://www.pnmecc.org.nz/meanz.php>, a good place to find other clubs when you are travelling. Just like us, our friends nationwide always welcome visitors.

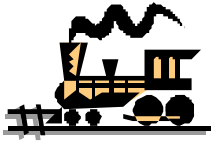
APRIL CALENDAR **(Subject to COVID Settings)**

Tuesday April 5th, 7.30 pm

Tuesday April 12th, 7.30 pm

Tuesday April 19th, 7.30 pm

- General Meeting (Clubhouse)
- Workshop Night, (Clubhouse)
- Committee Meeting, (Clubhouse)



Train Roster

ASME

DUTY ROSTER

Date	Electric Driver	Electric Driver	Steam Driver	Train Controller	Station / Guard	Station / Guard
3-Apr-22	M Hollis	D Housley	Voluntary	<u>P Dowdeswell</u>	D Beecher*	J Anderson
10-Apr-22	J Lankow	M Moore	Voluntary	<u>T Lawrence</u>	R Crook*	B Matchett
17-Apr-22	R Reichardt	I Ashley	Voluntary	<u>S Meikle</u>	M Luxton*	R Shearer
24-Apr-22	A Bailey	G Beazley	Voluntary	<u>T Robinson</u>	M Vickers*	A Van Zon
1-May-22	M Hollis	D Housley	Voluntary	<u>D Russell</u>	D Beecher*	C Witiskie
8-May-22	J Lankow	M Moore	Voluntary	<u>G Wills</u>	D Wilson*	H Danbo
15-May-22	M Plant	R Reichardt	Voluntary	<u>B Aickin</u>	R Crook*	R Shearer
22-May-22	I Ashley	B Matchett	Voluntary	<u>D Black</u>	M Luxton*	A Van Zon
29-May-22	A Bailey	K Ryan	Voluntary	<u>P Dowdeswell</u>	M Vickers*	B Matchett

Bold and Underlined Name = **Train Controller**, i.e. the person in overall control of all operations for the day

Bold with Asterisk* Name = **Stationmaster**, i.e. the person responsible for activities in the station area and for the day's takings.

At the date of publishing New Zealand is at COVID Red Traffic Light

All Public running is cancelled until further notice

Please Note:

If for some reason you are unable to attend on your rostered date, you are respectfully reminded that it is **your** responsibility to find a replacement member to fill the gap – please don't let the rest of the team for the day be left short-handed. **Note: the Train Controllers for both affected days must be informed of the swap in advance. It is the responsibility of the person who initiated the swap to do this.** Also advise Bob Aickin who is keeping track of the number of duties each of us perform during the year.

The details of the swap should be noted in the Run Book.

Also, please ensure the member you arrange a swap with is one who is rostered to undertake the same role to ensure we always have members with the appropriate training and experience on the day.

Club Notices

Help Wanted

Greville has been busy converting A&G Price 5" gauge trolleys to run on our 7-1/4" gauge track and has now finished the second one. But there are still 2 more to do, and he would like some assistance with these.

The work is quite involved, but Greville has produced all the parts required in the form of a kit, along with a comprehensive set of instructions, to make the job as easy as possible. If any member can help with this work, please contact Greville.

From Greville

The first of two A&G Price bogies being converted to 7 & 1/4 inch bogies. Note the old braking mech in 5" lying in the 7 & 1/4 inch track.



Workshop Nights with Dave

In the light of Pete Woodford now retiring to Thames, the committee is supportive of keeping the workshop night going. Tim will still be attending and also will I and hopefully Mike Jack

The **second Tuesday of the month will still be workshop night** I also would like to extend thanks to both Greg and Pete for their contributions. We will obviously have to abide by the controls regarding Covid. With the smaller figures attending the gathering we are well in for abiding to the with vaccination passes and whether people feel comfy wearing masks

Regards Dave Housley

The story of BELLE (so far)

or Bob's Electric Little Locomotive Experiment

From Bob

Reference to the publication "The Heisler Locomotive 1891 – 1942" has been used/made.

Over 600 Heisler loco's were built (steam v2 engine), 30+ fireless loco's and 1 diesel electric version ?, but just suppose a battery electric version was to be modelled.

This model, as the name implies, is an experiment, and is still under-going development and changes.

Shown in the photo's are a temporary base/deck of 20mm shelving to be replaced with 12mm plywood.

There are 2 versions of side frame. Mark 1 is too thin, hence the heavier mark 2 version is to be used.

Currently a rubber pad (not visible) is used at the mounting of the side frames to a beam that the whole bogie swivels on, and may be replaced with a beam that will more closely resemble the original swivel beam.

The universal joints are based on a Taplin coupling that is used in model boats for propeller shafts.

Bicycle sprockets and chain has been used for the primary drive from motor to Central shaft, and axle to axle within the bogies. The proposed gearing should give a top speed of 8 kph on 12 volts.

Modified right angle drive gears, ex a Cortina differential, have been pressed into service.

The motor runs on 12v supplied from a model train set transformer, but with only 1amp available, only just runs the set up under a no load condition. A test on a car battery gives a much more impressive performance.

The first 3 photos are of an upside down assembly.

Need to now work on an improved power supply.

The side frames have been made from thicker material to increase the bearing area for the axle boxes, also provides extra weight for tractive effort.

Axle boxes have been made as split, to facilitate removal for any future maintenance that may be required.

Side frames have been mounted on to swivel beams with a rubber pad between, to provide a degree of flexibility. The full-size models are renown for flexibility on the temporary, very uneven and undulating lines used in strip mining operations. I am hoping that swivel beams closer to original may not be needed.

The support for the right-angle drives input shafts, is located as close as possible to the bogie pivot point, this will hopefully eliminate any excessive side-ways movement of the couplings on the central shaft. It should be possible for this model to negotiate a 1.5 to 2 metre radius.

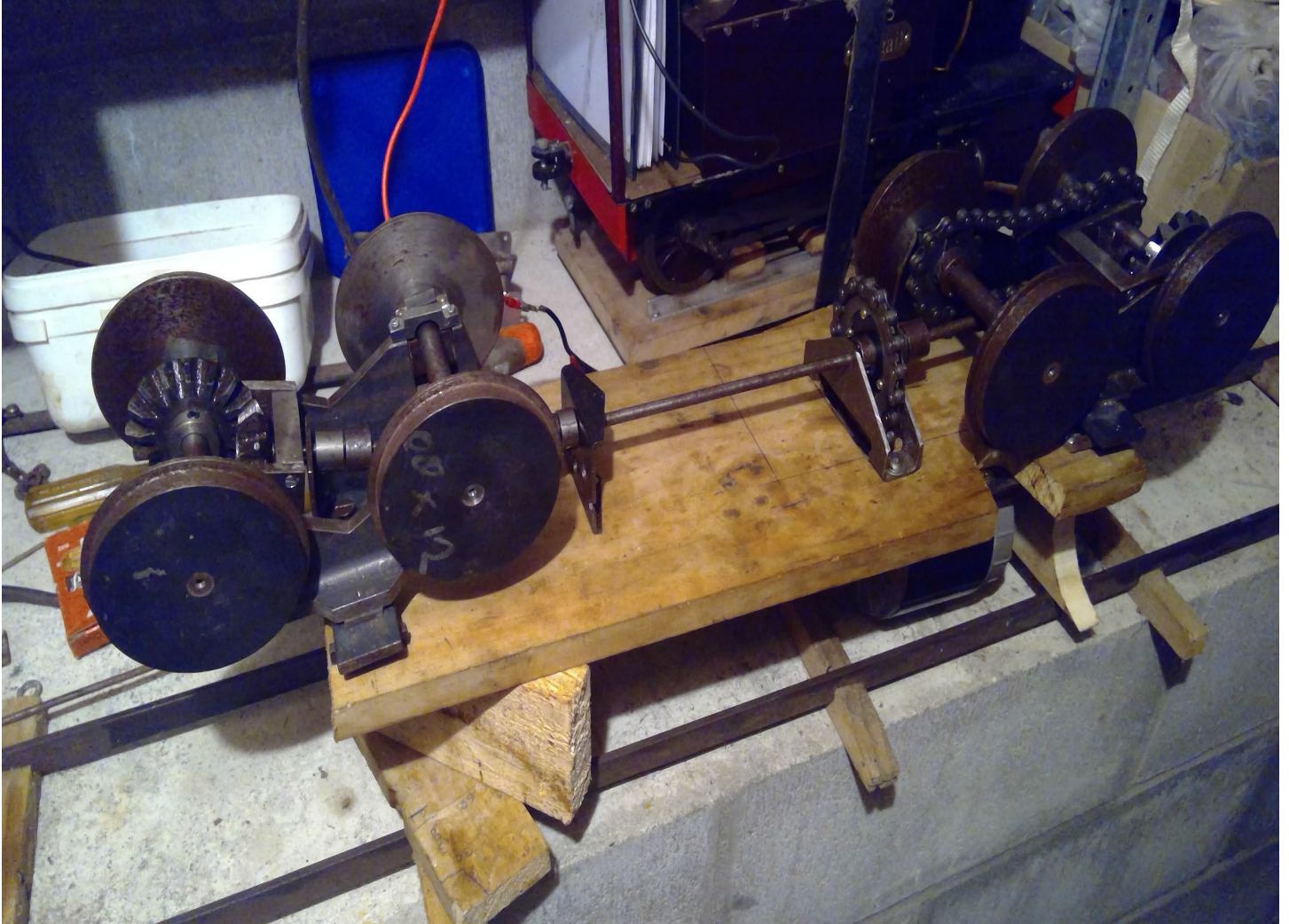
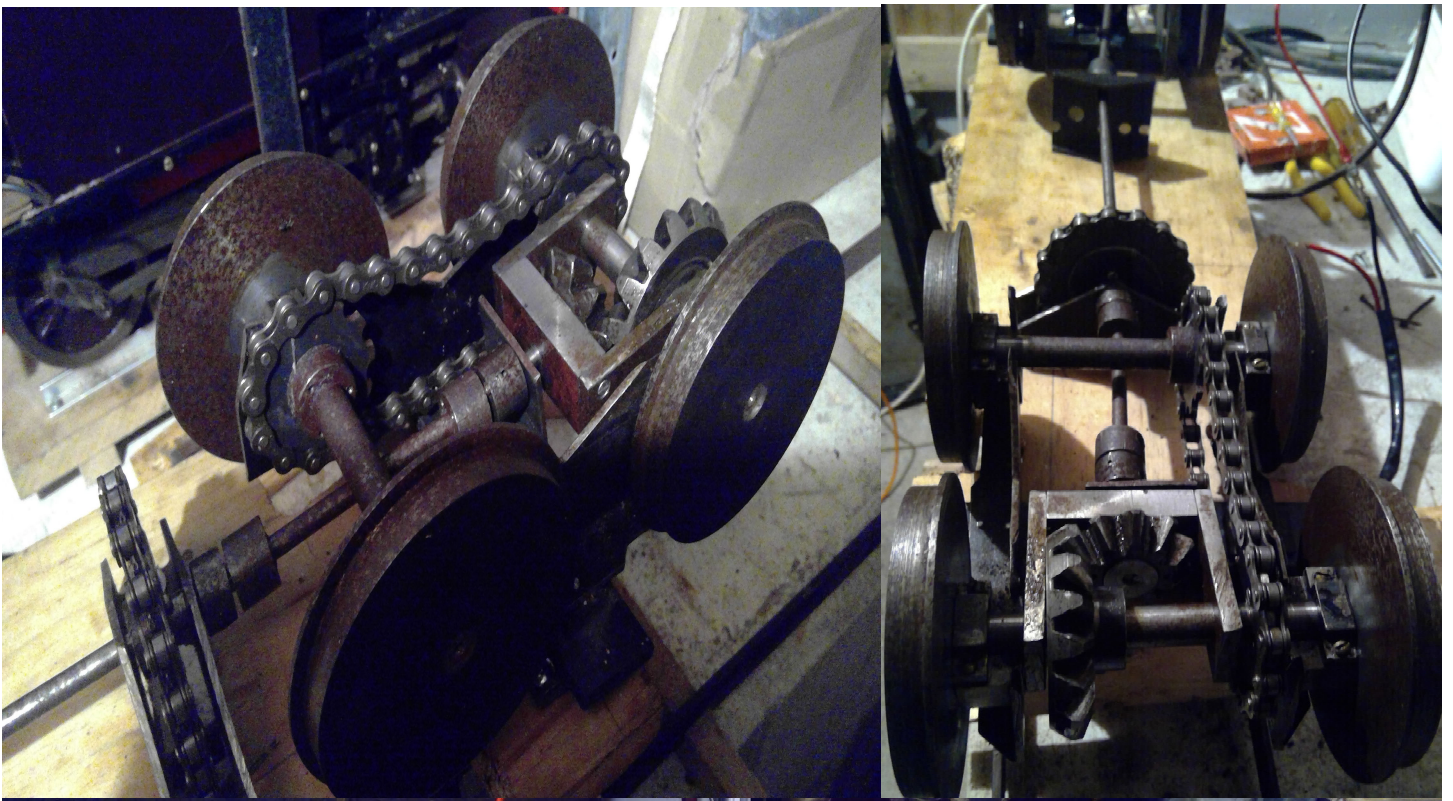
Right angle drive frame is a mark 1 version at present. It does not allow for detachment from the axle. What is needed has been sorted, just need time to produce.

The sprocket that was installed on the motor when purchased is for ¼" chain links. This chain is now proving difficult to obtain. I have been able to attach a home-made ½" sprocket as used on bicycles, to this motor sprocket, and am using this size sprocket and chain for the primary drive to the Central shaft, and for the connection of the bogie shafts on each bogie. The primary drive secondary sprocket has an outer ring of commercially made teeth that I have mounted onto a home-made hub. The axle sprockets are entirely my handiwork.

My thoughts on using chain drive between axles, is that if technology has made a battery powered loco possible, then perhaps chain drives would not be out of place. I feel that side rods would be outside of my ability when contemplating quartering of wheel sets is needed.

The motor that I will be trying to use, is a 24 volt one that would peak rev at 2750 rpm. I have been informed that 12 volts will give half speed. The gearing used should have a max speed of 8.3 kph.

Just need to tidy up and complete some aspects of the project as at this time, and contemplate the next phase.



Bob's "Belle"

ASME General Meeting – 1 March 2022

Only 12 members plus 2 visitors tonight – numbers down, probably due to Covid effect (20k new cases today)! Most in attendance wore a mask to help protect themselves and others present. It was great to have David Watt (our long-term member from Rotorua) in attendance. Only two items for Bits & Pieces tonight – these were:

Greville Wills brought in the trolley he has been converting for use on the leaf sucker train; it will be used to carry the leaf bag rather than (at present) using one of the “new” standard sized 7.25g passenger trolleys. Greville explained how he has altered a set of 5”g bogies off an old A&G Price trolley to 7.25g by spreading the axles and making new bolster bars which are fitted to one of the old 5”g chassis frames donated by Guy Hocking’s family back when the track was being reconfigured to ground level - these had been invaluable for moving materials and equipment around during the major works of the Track & Trolley project. This chassis frame fitted with the altered 7.25g bogies will carry the base for the framework which supports the canvas bag used for the collected & shredded leaves, blown in by the leaf sucker unit. The whole unit had been given a full coat of black paint and should fulfill it’s new task well.



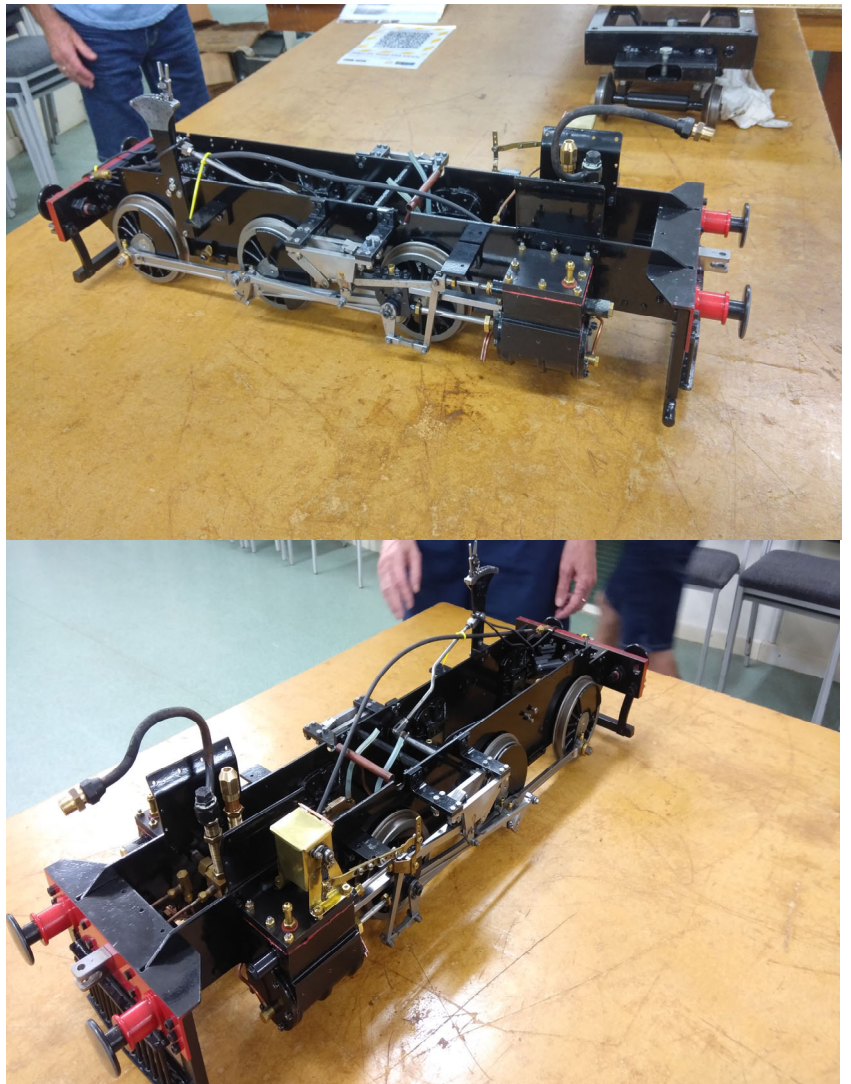


Grant Anderson sends a photo from a working bee prior to Xmas when Greville & Allan Bailey were preparing the footings for the additional access to the engine shed for the leaf sucker train. This work has progressed lately—more next month!

Grant also provides a couple of photos of the late Jim Yearn's loco which has just been retrieved in a sorry state from a supplier of acrylic covers who lost contact details with Jim's widow from a decade ago. Fortunately it came up not too badly after some TLC at a recent working bee.



Grant Anderson had his Beejax chassis (sans the pilot truck) set up for viewing and running on air. He described the background to the Beejax loco and the variations which the designer, past member Geth Creagh had made available from the late 1970s. Grant's unit is the Kuaka 2-6-0 version and was built and completed by past member Alan Emerson in 1998 (who named it HOTPOT) and Grant acquired it 2 years later. Since then he has run the loco almost 1900kms at ASME and 10 other NI and 2 SI tracks; as a result it needed some maintenance to bring it back to good condition. With the lockdown in the latter part of last year, Grant decided to strip it down to a bare chassis and repaint and replace various worn parts. All pins in the valve gear and axle pumps drive, valve rods with guide/gland nuts, one return crank, and the rear rod hinge bushes were replaced. Also the expansion links were re profiled and new die nuts made & fitted. A wider derail bar has been made & fitted to augment the original cowcatcher and hopefully avoid damage to the springing as occurred when the loco derailed at the Hamilton track during the 2016 Convention. A lot of time was spent to make the rotary drain cocks leakproof; also to free up the reverser which has always been very tight. Cylinders were checked and found to be serviceable with rings all free (on two previous checks one or more had been gummed up) – the cylinders & valve chest will require some work soon but were thought OK for now. Rod bearings were all in good order, but the small ends required new pins & bushes. Grant ran the loco on air at various speeds including almost 10kph (which was the basement compressor's limit of supply) – and it ticked over happily, albeit it slowly, at 5psi. Now all Grant has to complete is the repaint of the boiler, tanks & cab and reassemble for a steam test; the hydraulic test having been passed by Mike Banks on 05/02/2022.



The photos by Timothy Robinson on the cover and below depicts work completed by Timothy to provide barriers to meet Covid 19 requirements when ASME are able to resume public running (on current rule versions, when we return to TLS Orange). They provide for separated entry & exit points and would have assisted fully vaccinated people only to be managed within the barrier area. They were set up for a trial at the working bee on 12/03/2022 - signage still to be added. Full instructions will be given to station staff before running resumes. (P.S. the area had been specially manicured for the photo shoot!) Photo credit:

