

# 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

Number 649

September  
2019

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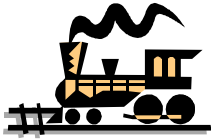
REGISTERED NEW ZEALAND PUBLICATION

## **Don't Worry**

It will stop raining soon. Spring is coming!

(Picture by the Editor)





# Train Roster

Date	Electric Driver	Electric Driver	Steam Driver	Train Controller	Station / Guard	Station / Guard
<b>1-Sep-19</b>	R Reichardt	M Moore	Voluntary	<b><u>P Dowdeswell</u></b>	<b>M Luxton*</b>	R Copeland
<b>8-Sep-19</b>	J Lankow	A Shirley	Voluntary	<b><u>T Lawrence</u></b>	<b>K Ryan*</b>	D Vaughan
<b>15-Sep-19</b>	P Woodford	I Ashley	Voluntary	<b><u>S Meikle</u></b>	<b>B Matchett*</b>	M Vickers
<b>22-Sep-19</b>	M Plant	A Bailey	Voluntary	<b><u>T Robinson</u></b>	<b>R Souter*</b>	D Beecher
<b>29-Sep-19</b>	G Beazley	M Granger	Voluntary	<b><u>G Anderson</u></b>	<b>A Stratton*</b>	R Stratton
<b>6-Oct-19</b>	M Hollis	D Housley	Voluntary	<b><u>D Russell</u></b>	<b>R Shearer*</b>	M Vickers
<b>13-Oct-19</b>	J Lankow	M Moore	Voluntary	<b><u>G Wills</u></b>	<b>P Tomkies*</b>	L Brown
<b>20-Oct-19</b>	R Reichardt	A Shirley	Voluntary	<b><u>B Aickin</u></b>	<b>R Crook*</b>	R Copeland
<b>27-Oct-19</b>	P Woodford	B Matchett	Voluntary	<b><u>P Dowdeswell</u></b>	<b>M Luxton*</b>	D Beecher

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

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

### **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.**

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.

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### **SEPTEMBER CALENDAR**

**Tuesday September 3rd, 7.30pm** - General Meeting, ASME clubrooms. A video on Colchester lathes will be screened.

**Tuesday September 10th, 7.30pm** - Workshop Night, ASME clubrooms

**Tuesday September 17th, 7.30pm** - Committee Meeting, ASME clubrooms

### **Coming Up**

- ASME 60th Anniversary Exhibition, 9th and 10th November, ASME clubrooms
- ASME's 60<sup>th</sup> Anniversary/Xmas meal, 16th November, Ryder's Cinema & Restaurant
- Hamilton Model Engineers Inc. **Steam N' Steel 2020 Convention**, Hamilton, January 9th-13th 2020. Visit [www.hme.co.nz/page/steam-and-steel-2020/](http://www.hme.co.nz/page/steam-and-steel-2020/) for registration and other information.

# Committee Comments

## Committee Comments – September 2019

We have already received some bookings with payment into the Club's bank account for attendance at Ryder's Cinema & Restaurant for the ASME 60<sup>th</sup> Anniversary/Xmas meal as advertised last month. Remember, if you want to reserve your place please make payment (\$15 per person) into the ASME bank account at BNZ Pakuranga Branch by internet banking – the account no is: 02-0223-0078104-000. Please put your first initial and surname in the Particulars box and Xmas Dinner in the Reference box, so we know who to book in for this event.

Another wee reminder that the Club needs your exhibit for the upcoming 60<sup>th</sup> Anniversary Exhibition to be held at the Club on 9<sup>th</sup> & 10<sup>th</sup> November – with all the rain around this month, it is a good time to be working on your entry to help ensure we have an interesting and varied array of models to display. Dave Housley will be back from overseas soon and will lead the detailed planning for the Exhibition – please be ready to give him assistance.

Recent work and indeed train running have been badly affected by poor weather during August. Very little Sunday running has been possible with the constant rain. Bruce Matchett has however continued with the gardening clean-up around the site at the weekly Saturday working bees; most recently he has been concentrating on the southern side of the long tunnel exit, clearing away all the overgrown grass and vegetation in preparation for some new, suitable plantings in the spring. Out of the weather, in the basement workshop (and at home), Greville & Grant have been concentrating on fitting up, assembling and painting the ten new bogies, with help from Timothy. Thanks go to Tony Lawrence & Mike Moore, for making the parts (axles & brake spreaders). Allan Bailey has been a regular attendee of late keeping the track clean and tidy, but is now away on holiday in UK. Greville (with help at times from others including Allan Stratton, Peter Tomkies and Allan Bailey) has now completed the standby job over the last few months of removing all the spacers and through bolts of the old 3.5 & 5" g trackage. This has eased collection of leaves and improved the appearance of the track immensely. Thanks guys for all your hard work.

It is concerning that we have gaps in our various magazine subscriptions which mean that we can't proceed with having the affected volumes bound up and available for members to use at the Library. So please do have a look at the list of missing magazines printed elsewhere in this issue and see if you may have a copy you could let the Club have, so we can maintain our range of bound mags available for members' perusal. Also we have the library copy of the 2012 AMBSC Copper Boiler Code missing – should you have it please drop it back to the Library asap.

The Committee is considering making another donation to a worthy charitable cause this Club year – should you have a suggestion, please let Greville Wills know so it can be researched and considered by the committee.

Time is ticking by and as it is only 3 months to the AGM in December **You** should be thinking about whether **You** could lead the Club into its next period of progress as our President, given that Timothy must retire under the Rules. Alternatively, who could **You** encourage to take on the role? It is important that the Club has a capable President, both for ASME's progress and for meeting its statutory requirements. If you are thinking about taking on the role, take some comfort that support for the new President in his role is readily available, if required. Members must not leave consideration and action on this important matter to the last moment (i.e. the AGM!)

## Missing Magazines

The ASME library is missing copies of the following magazines (they have not been received by ASME and their absence was not noticed until Mark took over as librarian). We would like to obtain copies of same to complete our collection: **Model Engineer: Vol 216 - Nos 4529 & 4530, and Vol 218 - No 4562.** Also **Model Engineers' Workshop: No 240, April 2016.**

In addition, we have found that it is no longer possible to get a copy of **Model Engineer Vol 222 - No 4609 March/April 2019.** A copy of a publication so recent would normally be available from the publisher, but we have had no success.

If you have any of these and are willing to part with them, please contact Grant or librarian Mark Luxton (or email me at [editor@asme.org.nz](mailto:editor@asme.org.nz)). ASME is prepared to pay for any of these publications received.

## August Photo Competition

Our August picture competition ended up with only one entry being received. Where were the rest of you? The winner was Dave Watt. The handsome guy in the photo is none other than Bob Aickin!

The full picture shows a corner of the WMR site as it was back in the early '70s when the tunnel was being dug. According to Bob, it was a rather "tuff" job!

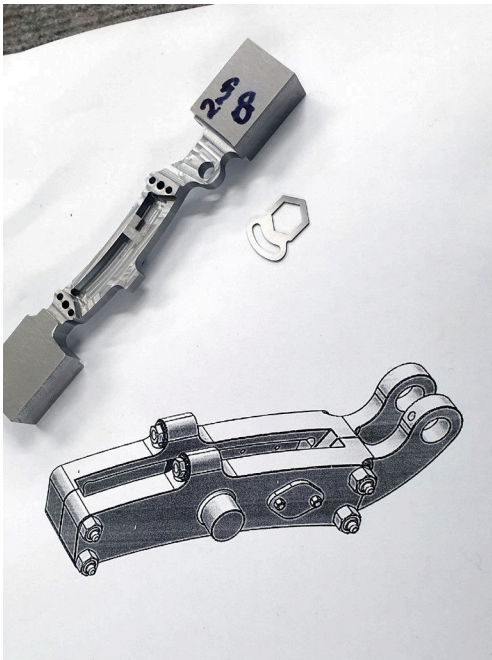
(Photo unearthed from ASME's archives by Grant Anderson (who also dreamed up the competition idea!))



## Bits and Pieces, August 6th 2019

Conducted by Greg Burrows. Report and pictures by Dave Russell

**Mike Banks** had acquired this collection of homemade Myford lathe attachments that included a filing guide and a sharpening guide and a couple of other unknown pieces. The lot came in a nice toolbox.

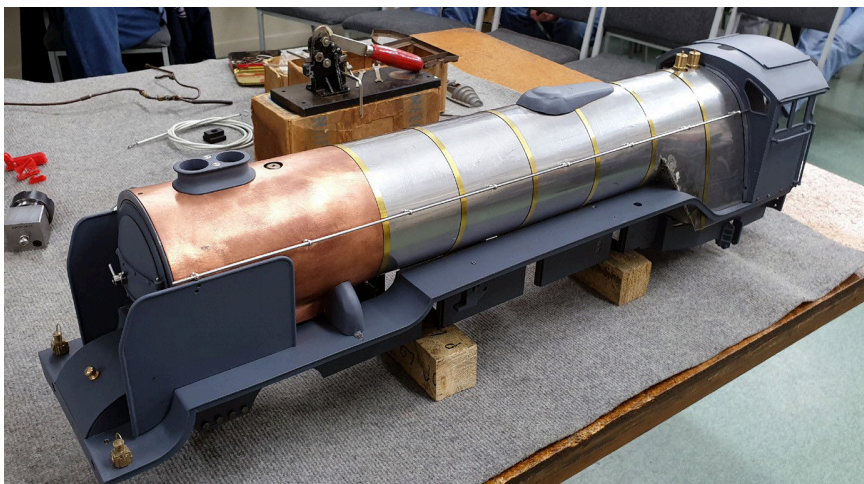


**Mike Jack** brought in a preliminary drawing of the boiler he is designing for his class 3 tank locomotive project. I did not get a photo of the drawing but some of Mike's other contributions to the night were part machined expansion links and radius rods for a 5" Duchess locomotive.



These nice brackets, also from Mike Jack's workshop, are cast in "White Bronze". Mike says it machines well and is more rigid than Silicon Bronze. Made from 55% Copper, 30% Tin and 15% Zinc.

This Donkey pump is being built by visitor Bill Parker, has run on air and the valve porting piece is drilled using CNC for accuracy.



**Bruce Cooper** is having all sorts of fun making the boiler cladding for his rebuild of the “Green Maggot”. Besides nothing being straight or square the stainless is quite hard resulting in broken drill bits. Looking good though.

A couple of months ago our secretary Mike Moore brought in a multipurpose tool that turned out to be from an old “Juneero” engineering hobby kit. **Murray Hollis** also had a bit of a collection of this product as seen in the photo. Juneero was like an early form of make it yourself Meccano.



This ER32 collet chuck on a block was one of **Peter Woodford's** items as bought from China. This one was fine and after the addition of an adjustable back stop to allow for depth control is quite useful in the 4-jaw chuck on the lathe. On the other hand, the ER16 on a shaft has a lump on the shaft making it virtually useless, (just the chance you take at the price).



**Greville Wills** has made these brake blocks for a ride trolley using discarded disc brake material cut and glued into the steel brake blocks.

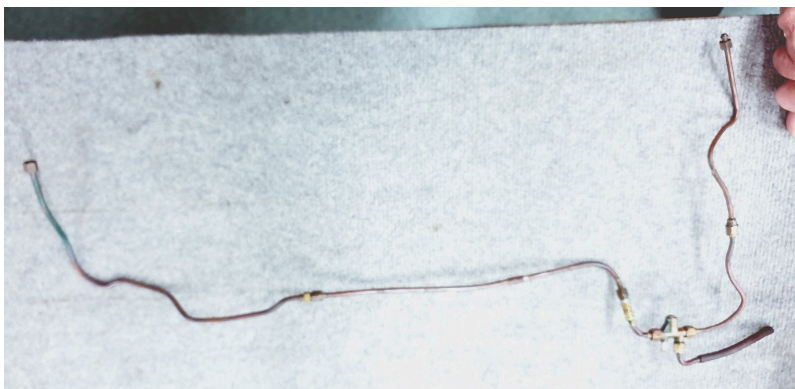
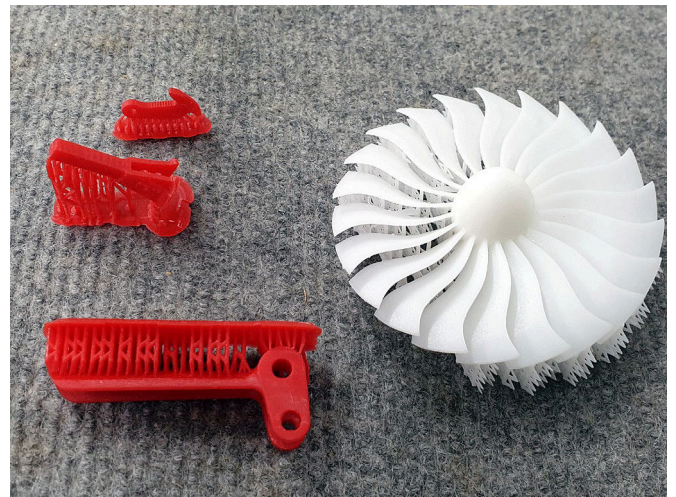
This 7-1/4" bogie is being assembled for use in adapting the old raised level 5" club passenger trollies to run on ground level. This will give us more suitable trollies for steam and visitor operations.



Sorry, but I failed to get the name of the contributor of this item, being a number plate for a King locomotive.

*(Greville Wills? - Ed)*

**Greg Burrows** has been busy trying out various materials and various different 3D printers to assess the results before he dives in and starts producing items that will end up being cast with the intention of being small parts for Greg's garden railway.



Lastly, we have been having some discussion at the club about injector problems, alot blamed on poor pipework and some blame on manufacture quality and much evidence that ball seating and lift in delivery clacks can contribute to poor performance. I thought I would bring in this bit of pipework as removed from the Maid of Kent under rebuild. This is the injector feed and delivery and despite all odds worked well for many years.



## Workshop Night , Tuesday 13th August 2019

This Tuesday night started off to a quick start with most of the people showing up by 7-35pm. We had just a couple of late comers bringing the total to around 14 for the night so we had another well attended ASME Workshop night to talk about the bits and pieces they had brought along. We started the meeting and at the same time we got straight into the tea pot and some nice biscuits to help the night roll along. The meeting was closed down at around 10-00pm.

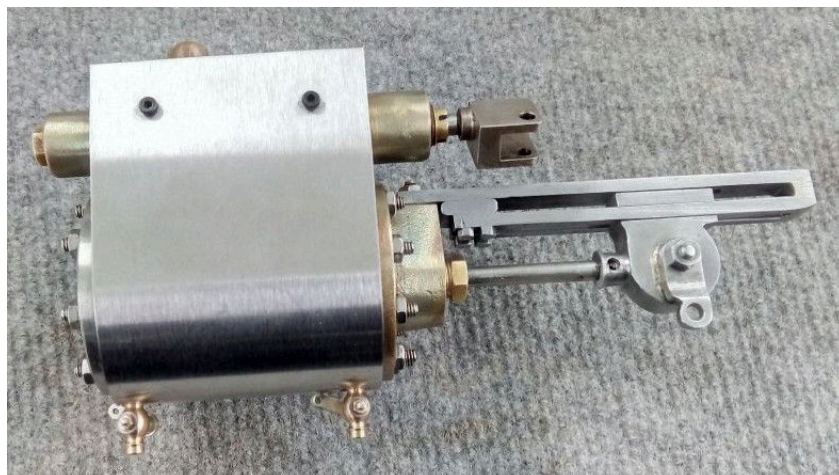


Visitor Justin Parker has been busy working on his 7-1/4" gauge 0-6-2 John Flower Sugar Cane Locomotive. The two parts in the photo are the handle for the hand brake and one of the spring hanger equalising beams that is use to link each spring together. The hand brake stand is around 40cm tall so this is going to be a big locomotive when finished.

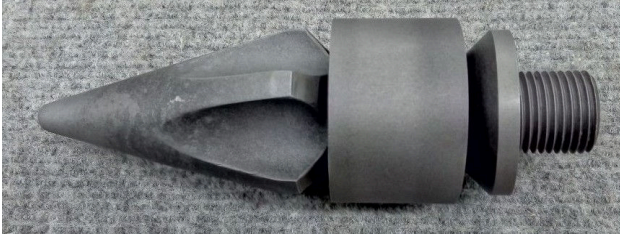


**Dave Russell's** partner arrived home one night and said to Dave the car had been making a funny noise but it has stopped now. But on returning to her work the next day there was this thing lying on the ground where she parks. The offending item was picked up and brought home to show Dave. Dave then had to try and work out where it came from: it didn't take too long after opening the bonnet to see that the air-conditioning had lost its driving pulley as the shaft that drives it had broken in half and let go. Hence the funny noise which later stopped! So Dave now has the job of locating a new part to fix the car.

**Bruce Cooper** is rebuilding the loco (nick -named) the Green Maggot and is 3-1/2" gauge. Bruce has really stripped her down and is now starting to slowly put it back together. Tonight he had one of the cylinders that has a nice new cylinder cover that he's made for them. He has also done a lot of work that can't be seen inside the cylinders and to the crossheads to get them nicely lined up and square with the other parts of the valve gear.

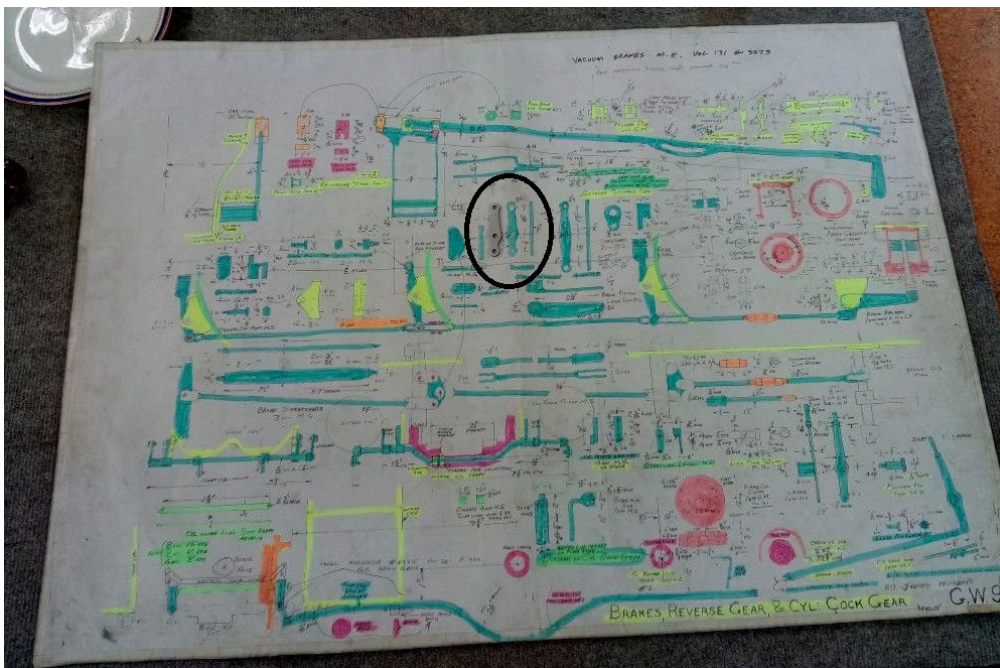
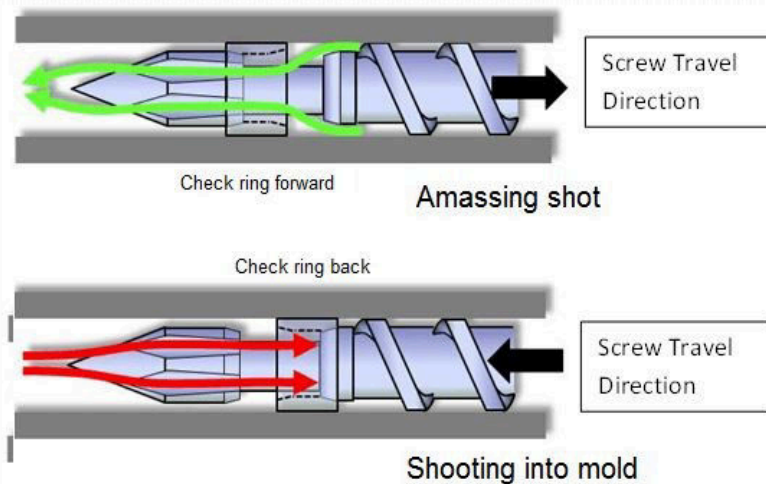






**Peter Woodford** tonight brought along this mediaeval looking device that looks like it could do you a lot of damage. It is actually out of the end of an injection moulding machine's feed screw, and is a non-return device that stops the back feeding of the molten plastic when this screw is moving forward to change the dies with their next shot. Then when the screw retracts back to load up the next shot this valve stops any molten plastic from leaking out the end of the hot nozzles while the dies separate to release the latest moulded part as in the diagram below.

As the barrel screw turns, the flutes of the screw shuttle molten plastic forward and the plastic pushes the check ring forward. The plastic can flow between the ring and the shaft through the channels of the screw tip into the open barrel at the end. When the "shot" occurs, the screw is pushed forward. The plastic pushes against the check ring and it slides back to seal the path and now acting like a plunger, the plastic is forced forward and into the mold. (See below)



**Mike Banks** has been busy working on the brakes for his King locomotive. He has coloured in the drawings to help him keep a track of all the parts he has to make. In the middle of the photo you can see one of the levers he has been working on. He also had some filing buttons he has been using to get a nice rod end to the levers without having to use a rotary table. As you can see this is going to keep him busy for some time.

**Michael Jack** has been busy making some more castings for the Class-3 Tank loco Kits. He has had some motion brackets cast in a material called White-Bronze that he has found to be very suitable for his castings. The material he was using was Silicon-Bronze that is very fluid and cast very nicely, but is not as strong as the newer material, so Michael is going to use this material when he can. Very nice work again Michael.



Michael has been working furiously working on loco parts getting them together for his class-3 Tank Loco kits. First up is another batch of castings of various parts in the cardboard box, also he has also been working on some expansion links and return cranks for an overseas customer.

Visitor Bill Parker has been doing some more work on his 4" scale Foster Traction Engine. This time he has been looking around to see if he could get the spud pan for the front axle of his engine metal spun here by one of the local companies. But wasn't having much luck! So off to the internet and see what was on offer there. After a while he found on one of the forums that there is a company in the UK that spins these up in steel for his Traction Engine and with the cost of delivery added to it ended up making it a very easy decision to buy one from them. He couldn't even get the locals to look at it for this price.

*(If, like me, you don't know what a spud pan is, Grant suggests you check out [www.steam-up.co.uk/useful\\_terms.htm](http://www.steam-up.co.uk/useful_terms.htm) - Ed)*



**Greg Burrows** brought along a jig that the late Guy Hocking has made up to assist in the manufacture of the firebox for his 5" gauge Britannia locomotive that he started many years ago and did not get around to finishing. The jig is very clever in the way it works and should make keeping all the plates and wrappers nice and square and in line with each other.

