

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 648

August
2019

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

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REGISTERED NEW ZEALAND PUBLICATION

No Play Today

Wet and miserable view from Waipuna Junction. 1.30pm, Sunday 14th July 2019. (It's a bit hard to see, but a small lake has formed on the inside of the curve in the distance!)

(Picture by the Editor/rostered driver)





Train Roster

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

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.

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.

AUGUST CALENDAR

Tuesday August 6th, 7.30pm - General Meeting, ASME clubrooms. Kevin Ryan will give a talk on underwater acoustics. (Sounds like a good idea!)

Tuesday August 13th, 7.30pm - Workshop Night, ASME clubrooms

Tuesday August 20th, 7.30pm - Committee Meeting, ASME clubrooms

Coming Up

- ASME 60th Anniversary Exhibition, 9th and 10th November, ASME clubrooms
- ASME's 60th Anniversary/Xmas meal, 16th November, Ryder's Cinema & Restaurant
- Hamilton Model Engineers Inc. **Steam N' Steel 2020 Convention**, Hamilton, January 9th-13th 2020. See Pages 9-12 or visit www.hme.co.nz/page/steam-and-steel-2020/ for registration and other information.

Apology: There is no Workshop Night report this month, as Greg Burrows was unable to attend due to illness.

Committee Comments

Committee Comments – August 2019

Ryder's Cinema & Restaurant is booked with the deposit paid for ASME's 60th Anniversary/Xmas meal (followed by a film – yet to be selected) on 16th November from 11.30am to approx 3.30pm. The committee has set the fee at \$15.00 each for members and partners, the balance to be subsidised by the Club. If you want to reserve your place, please make payment 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.

Friends of the Waipuna Miniature Railway are welcome to attend.

Below is an excerpt from information provided by Ryder's regarding their menu etc:

Your Roast Lunch/Dinner includes:
Your choice of two meats from the following,
Beef, Lamb, Chicken or Pork. (Note: ASME will be choosing two meats in advance so only these two meats will be available)
Our meats are slow cooked the old fashioned way in our coal range. The result is an incredibly tender and flavoursome meat.
Served with

- Our *Famous* Crispy Roast Potatoes
- Roast Kumara
- Roast Pumpkin
- Mixed Vegetables and gluten free gravy.

Vegetarian? Not a problem. Let us know in advance with your booking and we can arrange a salad option.
Optional Extras available:

- Tea/Coffee
- complimentary with day bookings
- Deluxe Wrapped Ice Cream \$3 each (ASME will pay for these)

BYO beverages with no surcharge

Another reminder that we need your exhibit for the upcoming 60th Anniversary Exhibition to be held at the Club on 9th & 10th November – it may be a little cooler in your workshop now we are in the depths of winter but we hope you are working on (or at least planning) your entry to help ensure we have an interesting and varied array of models to display. **If you have an ASME trophy in your possession, please return ASAP.**

The new monthly rental rate for SMM has been agreed and is effective from 1 July 2019. The committee at its last meeting, decided to pursue renewal of the license (lease) for the ASME site at Peterson Reserve. As such, a letter has been sent to Auckland Council requesting that the third term of 5 years be granted with effect from 1st November 2019. Ultimately, if granted by Council, it will require an affirmative resolution from members at a Special or Annual General Meeting to enable it to proceed.

A new gate key for the entry to the carpark has been arranged and is on a hook on the inside left of the cupboard behind the whiteboard in the upstairs clubhouse. This is an emergency key (with appropriate marked

tag) for use should you get locked in by the council's security staff, as happened to one of the tenants recently. If used, please ensure it is returned immediately afterwards.

Time is ticking by and it is only about 4 months to the AGM. This year club members will need to elect a new President, as Timothy Robinson will have completed three consecutive years in the role and under the Rules another member will need to be elected to the position. So please starting thinking about whether you could lead the Club into its next period of progress; if not, think who could you encourage to take on the role? Timothy will have served as President for 5 of the last 7 years and deserves our thanks for his long term effort in seeing the job through.

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.** If you have any of these and are willing to part with them, please contact Grant or librarian Mark Luxton. ASME is prepared to pay.

And now a comment from Grant about the Union Pacific "Big Boy" 4-8-8-4 loco that was recently restored. After completing a successful trip from Cheyenne west to Ogden in May for the 150th anniversary of the completion of transcontinental railroad , it is now on another trip this time to the mid west including Chicago, St Paul & Duluth. There are plenty of videos and photos on YouTube and the Official Union Pacific Steam Club Facebook site for anyone interested. While some of it leaves a bit to be desired (including lots of whistling!) it is worth a look if only to be in awe of this huge piece of machinery, now restored back to life. It has certainly been a huge attraction to people living anywhere near the route being travelled, resulting in heavy traffic and lots of line-side watchers. A photo is attached to whet the appetite.



© Andrew M Wirth 2019



Competition

Who is this handsome bloke? Clue 1 - See the caption at the top of the picture. Clue 2 - He is a current member of ASME. The first member to correctly identify this intrepid digger may well win a chocolate fish!! Email your answer to the editor@asme.org.nz.

Committee members (and the guy in the photo!) are not eligible to enter. Answer next month.

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



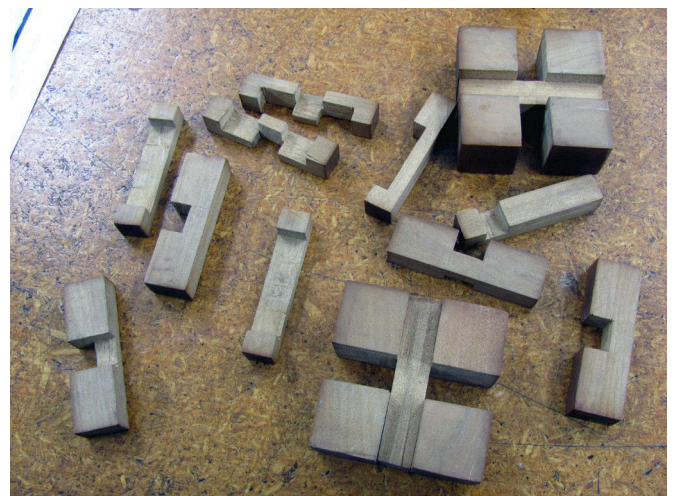
Bits and Pieces, July 2nd 2019

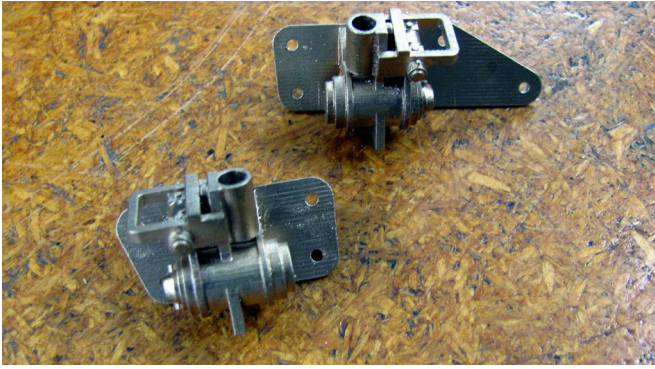
Conducted by Mike Jack. Report and pictures by Dave Russell and Mike Jack

As part of a safety talk, **Grant Anderson** had brought in several items related to steam loco coal and ash sparks blown from the chimney when running. Grant has employed a number of different strategies to minimise sparks including different fire grates and deflection arch in the firebox, various gauze shields in the smokebox and chimney and different types of external deflectors and catch containers to catch sparks. In the photo of the fire grates a large pile of clinker can be seen, this is the result of a day's running with the available coal we are having to use.



Bob Aickin had again brought in one of his puzzling puzzles: this one was in the form of a cube that when a key part was removed the whole thing came apart. Solving this one was quite tricky

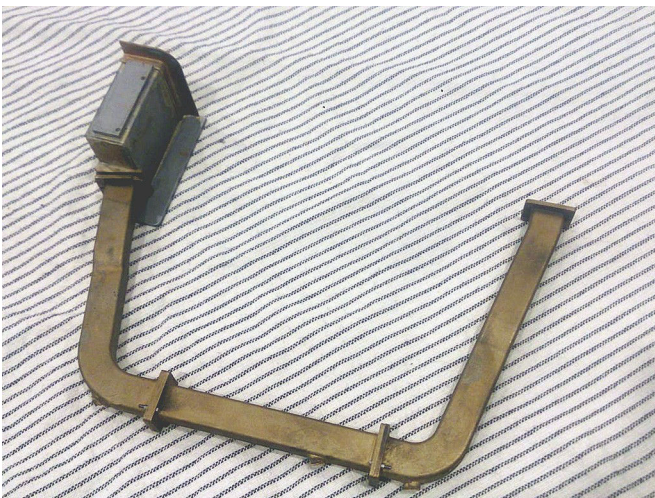




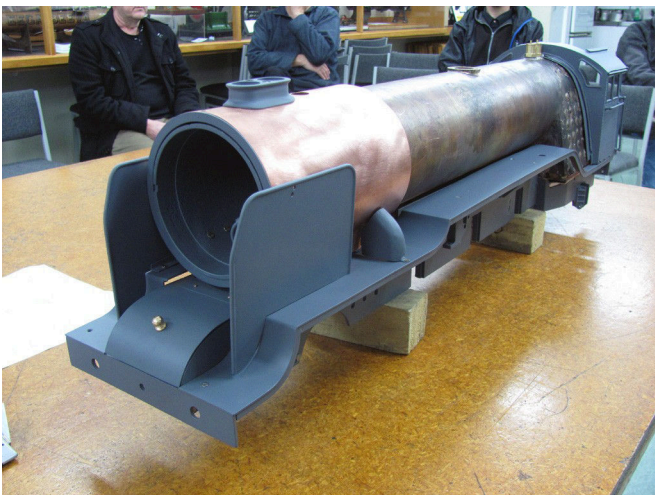
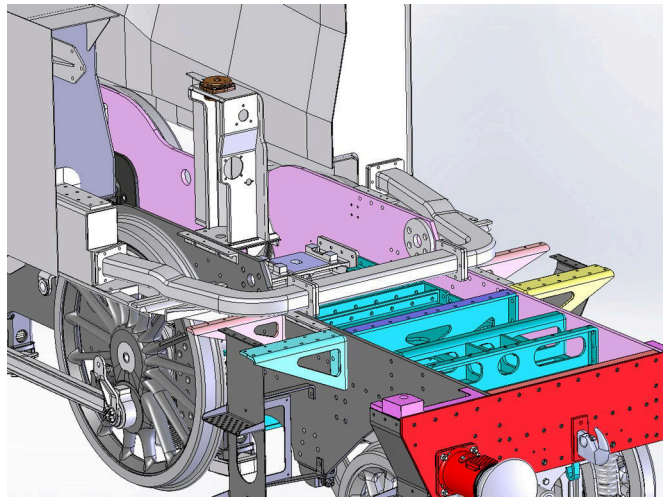
These little bronze castings were made by **Mike Jack** for a client, they are dummy rocking grate mechanisms for a 9F Britannia in 5" gauge.



Mike has also put together from laser cut parts these rear side tank frames for his 5" gauge 3MT locomotive project. The next picture shows the mounting box for the cab reverser gear, and Mike has made a bronze tubular casting that is easy-flowed into it so that the side tank water balance pipe (the U shaped hollow bronze castings) can attach to the box and allow water to flow through without causing any corrosion. Once again all very professional work turned out by Mike.



Below, Mike has provided a screenshot from his CAD drawing of the engine to show how the assembly is situated when assembled running under the cab floor.



Bruce Cooper is progressing well with his restoration of the Hielan Lassie 3-1/2" gauge locomotive modelled closely on the Flying Scotsman. Further research has confirmed that his engine is the one built by Peter Baker with help from Les Fitt and named the "Green Maggot" - not very complimentary but I am sure it will look and run well when Bruce has finished giving it the once over.



For Sale



4" scale Clayton & Shuttleworth Traction Engine For Sale

Prototype is C&S general purpose engine no 32900 "The Old Clayton" of 1899 which is preserved in UK.
First steamed 2013.

Weight 526kg (10.3cwt)

Wheels 24"rear, 16"front, flywheel 18"

120psi boiler, NZ built under survey, current certificate. Water treatment used. Full build and steaming documentation.

Spark arrestor, fits in firebox.

Cylinder bore 2 $\frac{7}{8}$ " x 4" stroke. Piston and working rods stainless steel, bronze piston rings, fine grain cast iron cylinder liner.

Crankshaft surface hardened steel, bronze bearings.

Two speed gearing with all steel geartrain and differential drive.

Mechanical boiler water feed pump plus injector.

Comfortable driving position and seat.

Good engine to drive, powerful, steams well. Very stable on hills.

Road registered.

Low loader style goods / passenger wagon with hitch to tow second trailer in parades.

Equipment box with necessary gear.

Road trailer with electric winch. Takes engine & wagon, easy to tow.

Price \$44,000

For more information or pictures contact Alan Smail email ajsmail@orcon.net.nz

094781500 or 02102875822.



Steam N' Steel 2020 International Convention Registration Form

Hamilton Model Engineers Inc.
 P.O Box 5090, Frankton, Hamilton, 3242
 E: 2020@hme.co.nz
 W: www.hme.co.nz

Thursday 9th – Monday 13th January 2020
 Convenor: Dave Simpson
 Secretary: Bianca Betts
 022 470 7264

** Please email completed Registration Form with copies of all device paperwork and direct credit all money owing OR post with cheque by 20th October 2019. Any registrations received after this date, we cannot guarantee you will receive a uniform (if ordered) **

Principal Attendee Details:

First Name: _____	Surname: _____	Accompanying Family Members:
		First Name: _____
		Surname: (if different) _____
Address: _____		_____
_____		_____
_____		_____
Email: _____		Contact Phone: _____
Club: _____		Car Pass Required: Yes / No (Please Circle)

On-Site Camping: Would you be interested in bringing a fully self-contained caravan/campervan? **Yes / No**
ONSITE CAMPING WILL BE EXTREMELY LIMITED, FIRST IN FIRST SERVED BASIS, MUST BE FULLY-SELF CONTAINED, NO POWER OR WATER AVAILABLE, DUMPING STATION AVAILABLE. Confirmation emails will be sent following registration.

Registration Fees:	Total No.	\$ Total
Principal Attendee @ \$80	1	80.00
Additional Family Members @ \$15 each		
Total A		

Traction Engines, Locomotives & Passenger Wagons:

Please let us know what devices you are travelling with.

(To speed up the inspection process at the Convention, please post or email copies of all current Warrant of Fitness' and Boiler Certificates, along with a copy of your current Club Licence with your Registration – thanks. If any expire between you registering and the Convention you will need to post or email these to 2020@hme.co.nz)

Other Boilers: Any boilers that are built using a material not recognised by the model codes (Duplex), or those that operate above 100 PSI or over 50 litres in capacity, **will** be permitted to run at the 2020 Steam N' Steel convention. All steam equipment in this category **must** also send any necessary certification paperwork alongside current boiler ticket information, as well as having these to present on the day.

Device I.D.	Type	WoF Expiry	Boiler Cert. Expiry	Gauge

Driver's Licences

A valid driver's licence **must** be held and presented (at registration) by all attendees who wish to drive any equipment requiring a licence, throughout the convention. The Hamilton Model Engineers licensing system is shown. Supervision must be carried out by a 'Class 3' licence holder, at the respective level (Electric, Combustion, Steam). Please indicate below what you are licenced the drive, and if anyone is under the age of 16.

(Please send a copy of your current Club Drivers licence along with your registration details, to speed up the inspection process)

Name	Under 16? (Y/N)	Internal Combust	Electric	Steam Engine	Traction Engine			
						Class 1	Class 2	Class 3
						No Passengers Super	Yes	Yes
						Non-Fare Paying Passengers Super	Yes	Yes
						Fare-Paying Passengers No	Super	Yes

Yes = Permitted
 Super = Supervision by a Class 3 licence holder
 No = Not Permitted

Uniforms

Select size/s in table below – <i>please refer to attached sheet for information</i>	Total No.	\$ Total
Visitors Polo Shirts (Any Size) - \$45 each		
Caps (One Size Fits All) - \$20 each		
Total B		\$

Note: Sizes below are 1/2 chest/bust measurements

Mens (Enter Quantity Below)

S	M	L	XL	2XL	3XL	5XL
52c	55c	58c	62c	65c	71c	79c
m	m	m	m	m	m	m

Womens (Enter Quantity Below)

8	10	12	14	16	18	20	22	24
46.5c	49c	51.5c	54c	56.5cm	59cm	62cm	65c	68c
m	m	m	m				m	m

Dinners

Dinners will be available for attendees on all nights. The main convention dinner with awards and guest speakers will take place on Saturday the 4th of January. All other dinners pricing will be confirmed at a later date depending on the number of attendees interested. Please reserve a spot at the official convention dinner below and include it in your final cost, and/or please register interest in the other dinners listed below. Contact will be made with those interested at a later date to confirm pricing.

Convention Dinner: Adult	Tot No.	\$ Total	Convention Dinner: Child (12yrs+)	Tot No.	\$ Total
Saturday 11th Jan - \$40 each			Saturday 11th Jan - \$20 each		
Total C					

Alternative Dinners (Registration of Interest)

Evening Meals: Adult	Interested (Total Num)	Evening Meals: Child (up to 12yrs)	Interested (Total Num)
Thursday 9th Jan		Thursday 9th Jan	
Friday 10th Jan		Friday 10th Jan	
Sunday 12th Jan		Sunday 12th Jan	
Monday 13th Jan		Monday 13th Jan	

Please advise below any dietary requirements e.g. gluten free/allergies etc & for what attendees:

Steam N' Steel 2020 – Les Moore Challenge

Full details of the 2020 Les Moore Challenge are attached on a separate form below. Please register your interest. By registering your interest and participating, you hereby agree to all rules and guidelines of this challenge.

I intend to participate in the 2020 Les Moore Challenge (Circle One): Y / N

Please list any additional registered family members who will be participating, along with their age:

Other Information

Convention DVD: Would you be interested in buying a copy of the official Convention DVD after the convention? Y / N

Note: All DVD's are being produced privately, details on availability and pricing will come during or after the convention.

Static Display: Do you have a static display you would like to bring? (Please attach dimensions and other details). Y / N

Best First Effort Award: Do you have a model you are bringing (if applicable) that would qualify for this award? Y / N

Total Payment Summary

Payment is possible via Internet Banking or Cheque (please tick one):

Internet Banking:

Steam N' Steel Account Number: 03-1555-0063923-02 (S&S 2020)

→ Please ensure you put your surname and initials as a reference, so your payment can be easily tracked.

Cheque:

→ Please make payable and post to:

Steam N Steel 2020, P O Box 5090, Frankton, Hamilton 3242

Attention: Bianca Betts

Total A	\$	
Total B	\$	
Total C	\$	
Grand Total	\$	

Signature: _____ Date: _____

Uniform Options for Steam N' Steel 2020

Steam N' Steel 2020 has one option of Polo Shirt available for visitors, ranging in sizes from Small to 5XL for Men, and 8-24 for Women. The colour scheme of these shirts is Black and Red, with white lines, to match our logo. The shirts are 50% cotton inner, and 50% polyester outer, and will have our 2020 convention logo on the front. **ALL UNIFORMS MUST BE ORDERED BY OCTOBER 20th, 2019.**



Front



Back



Steam N' Steel 2020 Les Moore Challenge

Rules & Guidelines

The challenge set is to assemble and complete a steam turbine driven (open vein style) rail vehicle of sorts to self-propel around the track with challenges set to be accomplished. This challenge is to also encourage the junior members to partake, be involved with design concepts, assembly and running on the day of the challenge.

To encourage junior members, entries should include photos of their participation kept as a **Journal of the assembly process.**

Design Criteria:

- Rail vehicle to be and run on the 3 ½" Gauge track
- Boiler is to be made from and utilise a 220gram tin such as a that of a coco powder tin with a removable lid
- Open vein style turbine (no size restriction)
- Boiler to be powered by "Tealight Candles"
- It must comprise of both belt and gears to drive the cart, plastic or metal as you choose fit
- Must have a safety valve of sorts to prevent the lid from popping off
- The amount of water within the boiler is up to yourselves to decide to use but a maximum of 120ml will be provided on the day

NO COMMERCIAL STEAM FITTINGS ARE ALLOWED TO BE UTILISED

Rules:

- No push starting, your design must be self-starting
- If the boiler tin lid pops off, your entry will be disqualified
- No commercially made fittings can be used upon entry

Prizes:

- Quickest steam raised and movement greater than 5m
- Greatest distance travelled around the track on your chosen boiler level
- Fastest rail cart speed achieved
- Most creative design
- Best Photo Journal of the Assembly

Have fun, be creative and create some form of whimsical Rail Cart machine!

