

# TMMEC NEWSLETTER

## JULY/ AUGUST 2021



**Located at the Memorial Park, Tauranga**

Open to the public Sundays 10:00 to 15:00  
(weather permitting)

### CONTACT:

The Secretary, PO Box 15589., Tauranga, 3112

**Palmerville Station:** Phone: 07 578 7293

**WEBSITE:** [www.tmmec.org.nz](http://www.tmmec.org.nz)

### FACEBOOK:

<https://www.facebook.com/memorialparkrailway/>

### COMMITTEE:

**President:** Jason Flannery 07 572 1165

**Vice:** Bruce McKerras 07 577 0134

**Secretary:** Warren Belk

**Treasurer:** Joanne Knights

**Club Captain:** Max Donnelly 07 571 6778

**Committee:** Ash Thomas Warren Karlsson  
Russell Prout Regan Olivecrona  
Bruce Harvey

**Boiler Committee:** Peter Jones

Bruce McKerras

**Safety Committee:** Warren Karlsson

Peter Jones Jason Flannery

**Editor:** Chris Pattison 021 231 6612

[Ytrose2@gmail.com](mailto:Ytrose2@gmail.com)

### CONVENORS:

**Workshop:** John Nicol Brian Marriner

**Track:** Bruce Harvey John Stent

Russell Prout

**Librarian:** Chris Pattison

**Rolling Stock:** Bruce Harvey

**Website:** Max Donnelly Murray de Lues

**MEANZ Rep.:** Peter Jones

## President's Report - July

Hi TMMEC

Firstly well done to Chris Pattison for getting the role of Editor underway. He has been working on his layout and has requested that you please give him your feedback.

We have several items being built in members sheds so even a few photos with captions will help Chris in keeping the magazine informative so please send them to him.

We welcome two new members!

The first being our junior member Trent whom most probably already know by now. Trent and his parents Tracey and Stuart have already contributed massively in helping out on Sundays and playdates. Trent is now old enough for his own membership and I look forward to seeing what this enthusiastic youngster builds in the up and coming years.

Secondly we have Ross from Matamata who is building a 3" Burrell traction engine. Ross has spent many years working for Fonterra running full size boilers and working with engineering machinery, I expect we may see a superbly finished model when this is done.

Welcome on behalf of the TMMEC members.

The night run was a great success! Well done to everybody involved. Chris Pattison pretty much covered this in the last mag with the timing, but I would also like to thank all of those members involved. Thanks to Roy and Barb for feeding the troops, as usual we are always well looked after! Also thanks to all the other partners of members who came along and helped out in the station and kitchen over the Saturday and Sunday.

The last minute curve ball of the power going out, how's that for timing? Russell Prout and Warren Karlsson did a fantastic job of making a plan, generators, extension leads and we were away again.

As we say in South Africa "n boer maak 'n plan", this really directly translates to the saying of kiwi "No 8" mentality, same thing, different language, so well done to the TMMEC team for improvising and adapting and making it happen.

The last committee meeting the committee was presented with some feedback from one of the club members who attended the Saturday playdate and night run. The feedback was how they enjoyed the

day and evening so much, the morale, the banter, the people. Well, the credit for this is to you the club members, because the members are the club, well done to you all because only we can make this a great club for all involved to enjoy.

Ashley Grant's first artwork is on the container and it looks superb, the print has come out fantastic! Saturday was a washout so Ashley and a team of club members came down on the Sunday and had a go. The forecast was not flash for the day, a 5 minute rain shower around 11 am and that was it for the day. This gave the team most of the day to get the panels levelled and set in place. Well done to all those who helped and Russell Prout who spent the rest of the day getting all the final tek screws in.

Kiwirail is back on the track after a major rebuild. This locomotive has now been fitted with 4 x 1000w motors which is hoped will extend the motors life span, reducing down time. The motors also now have their own gearbox and are chain drive to the axles, so a far simpler design. The bogies also now don't need to be stripped down to get the motor out when electrical maintenance or removal is required, they can just be removed from the top.

There were several involved in this, so thanks to Warren Karlsson for rewiring the locomotive, Ash Thomas for all the keyway and sprocket machining and of course Peter Davies for measuring up the existing bogies so we could have some drawings to work from. Once we are confident with the conversion, we may consider doing the same to Silver Fern.

There has been progress on putting a "role list" together. This is a list of who is doing what, or may be the best person to speak to if you have a question. This list does not mean these jobs are taken for life, or that that person does not want assistance. If you would like to be involved in one or more of the tasks then please say so.

Please note your subs are due and Joanne is no longer doing invoices as it is not necessary.

There was an email from Joanne that subs are due, we have had a delay in getting the new newsletter up and running which mentioned this so if you have not paid them then please do so.

Thanks, and happy modelling.

Jason

## President's Report - August

Hi TMMEC

Yes you are right there is no July newsletter for the TMMEC and a bit of a double whammy for the August one.

It took Chris Pattison a bit of time getting his templates ready so together we agreed to let the newsletter process catch up, otherwise he would always be chasing his tail.

Finally the container is complete on both sides, well done to Ashley Grant and his team. It has really come up well and the response from the public has been fantastic, they are really loving the idea and the look of the artwork.

Thanks to Ash Thomas the last trolley is done, this one being the guard / disabled one. A coat of paint and it should be on the rails soon. Ash has spent many hours doing the tweaks and tunes we requested to get them running smoothly. I'd also like to say thanks to RFT Engineering for sorting out the blasting and painting of these four trolleys.

Also a thanks to Warren Karlsson for sorting out all the rewiring of Kiwi Rail. Warren made some changes to suit four motors, extra isolation etc, which is covered in a separate article for the mag.

Lets hope that's it for a while on the electrics and Warren can get back to working on his Phantom.

For the four-motor conversion there was a bit of trial and error getting the final set up sorted with the motor positions, chains tensioned, one or two bits and pieces that needed tweaking but we got there in the end! I'll just leave it at that.

The new level crossing is almost complete, we had a good turn out of members on the Saturday morning and they made good progress on getting things moving. Another Saturday working bee and the crossing itself should be done. Then just the bridge on the raised track to measure up and fabricate, the raised track should be operational again pretty soon. So thanks and well done to everybody who has helped out on this to date.

There have been numerous conversations about a project for junior members, a NZR Ln wagon in 5" is somewhere in the system at this point in time. Watch this space as they say.

Regan has asked if the TV in the clubrooms can be looked at in terms of playing from USB sticks or the PC so videos of other activities can be shown and talked about. We did have a bit if this at one stage but

it has gone quiet. We will make sure it's all operational, still so if you have any ideas, or have seen anything you think the club members would be interested in, then please bring them down.

Playdate coming up soon on the 4<sup>th</sup> of September so please come on down. I am not sure if the plan is to have the Tamar running but I would assume so, I'll see if we can get this confirmed on an email closer to the time. For those of you who are interested in having a go please speak to Warren Belk or Joanne Knights about an opportunity.

Remember to please keep your articles coming for Chris, this is your club mag.

Thanks, Jason

## Editorial

Dear Ferroequinologists

My apologies for the hiccup with the timing of the magazine. As the July edition was going to be late due to my getting up and running, it was agreed to combine the July & August editions in order to get back in synch. Enjoy this bumper edition.

Well, the weather is on the cold side, chasing us indoors, so now is the ideal time to do work on our current projects. (Lockdown helps too, as going to circulation)

Myself, I have been creating swarf at an amazing rate. Currently, after having turned up my diff spider and fitted it to its various mating components, I am working on the rear axle.

This started off as 60mm dia. billet half a metre long and is being chewed down to a chunk 35mm dia. in the centre, with flanges near to each end with 19mm shafts each end. My Myford is working hard, and as I am taking 4 thou. cuts at each pass, it is a long process. The swarf bucket has already been emptied twice and soon will be the third time.



Thankfully, our bin will be emptied on Tuesday. I wonder what the garbo's will think of my bin contents.

---oooOOOooo---

A person has quite a bit of time to think about things whilst watching swarf curling off the lathe tool. Whilst avoiding the smoking chips and making sure that the job goes smoothly, it occurred to me that our hobby has been going on for a very long time.

On checking in our library (we are fortunate in having ME magazines going back to year dot), I see that the first issue of Model Engineer magazine was way back in 1898. So, our hobby has survived for over a century and two world wars. It is strange that despite these world-wide conflicts, it has taken a pandemic to interrupt the publication of our favourite magazine.

Whilst on the subject, it is worth noting that Model Engineers during WW2 were doing their bit to support the war effort. Apparently, many Sten gun parts were farmed out to be made in home workshops. Now, what can we do about Covid?

There have been various magazines that have climbed on the band wagon to provide interesting projects and articles. Magazines such as Engineering in Miniature and Australian Model Engineer. They have all been good publications, but sadly only ME Magazine has managed to stand the test of time.

Editor (Cotter Pin)

## **CLUB MEMBER PROJECTS**

In this section, I would invite a listing of club members who are busy with specific projects.

I would also invite those club members with projects on the go, to give us all a run down on where they are in their projects, and tell us about the small successes that they have had with their projects. Share with us so that we all get encouragement with what we are individually doing.

At the same time, if you have come across a problem, if you share it, possibly someone else

may have a solution for you. This could be a subject raised at our monthly meeting for a round table discussion.

## **FAVOURED SUPPLIERS & RECOMMENDATIONS**

As I mentioned in the last edition, if we publicise those companies who give us exceptional service, it will only benefit our members who might be looking to get a job done, as well as the supplier who deserves our support.

My recommendation this week is Bayform in Judea. Initially they bent up and supplied to me the channels I needed to build my chassis. That was some time ago.

Just recently, they cut some 3mm copper sheeting for Marty and I. Then they very competently rolled a piece of this copper into the outer shell for my boiler. The ends mated perfectly, it was not twisted and there was only a very small flat at each end which one normally gets when rolling flat metal.

Any recommendations from you?

## **BOILER ANALYSIS:**

I have been reading with interest a current article in the Model Engineer dealing with finite element analysis of model boilers under pressure.

For those not familiar with the process, the finite element analysis process breaks a body up into small discrete components, each of which is then analysed for stress and strain when subjected to external loads. This is a process that can be done easily by a computer. Manually, it would take ages.

The Boiler Committee should definitely find it interesting.

-----oooOOOooo-----

And whilst on the subject of Model Engineer Magazine, you may wish to note that there is a series starting on the use of 3D printing in the foundry side of things.

I must admit to having a fascination for 3D printing and what can be done with it, over and above toys and trinkets that are so often demonstrated. I will be following this series with interest.

Maybe we could get one of the club members who owns one to give us a talk on a Tuesday club meeting, tell us what he has used it for and show us the results?

## LIBRARY CORNER

For my sins, I also run the library. Every now and then, I find some old books lying around in the club. Just recently, I found half a dozen. Please be advised that I can only assume that these are being donated to the club by somebody unknown. I have these with me and if nobody puts up their hand soon, I will be putting them into the club collection.

On the other hand, I am still on the lookout for missing issues of Model Engineer. If you have ME magazines lying around gathering dust, please feel free to donate them to our library. My aim is to eventually have a full set of ME for reference by our members.

Any magazines surplus to library needs I will boldly write on its cover "SPARE" and these will be free for the taking by club members. Maybe they could be given out to aspirant engineers on a Sunday? This might bring some fresh blood to our club?

## SMALLS – FOR SALE/ WANTED:

Whilst some club members bring tools along to our Tuesday night gatherings, some stuff might be too big, or club members living further afield may not be able to attend the meetings.

For this reason, I would like to run a smalls section in the newsletter for members wanting to sell, or purchase workshop items.

Here is the shelf that I have free to a good home.



Contact the Editor.

## SUGGESTIONS AND IDEAS:

I like to think that we Model Engineers tend to be an innovative lot. Given a problem, we tend to think ourselves out of it, and if we cannot find a solution, we discuss it with others of the same ilk, and someone else is bound to come up with a solution.

Just to kick the ball off, I have a few to pass on to readers:

Sandpaper "Files":

Here is one of my "sandpaper" files that I mentioned in the June edition.. The other I have is narrower.



On my side, I recently used superglue to make some thick washers that were too thin to grip in the chuck. Basically, from a bar of stock, I machined these to OD, drilled the ID and parted/ sawed off the washer. After dressing the steel chunk left, I glued the good side of the (degreased) washer to it, held in place by the tailstock. Once set, I was then able to face the washer to thickness using thin cuts and after,



using a heat gun heated to destroy the superglue. Success! Apologies to anybody who knows this trick already.

### **CLUB NEWS:**

You will note that we now have a nice decoration on the side of our container. Definitely the biggest blueprint that I have seen, ever. In fact, I reckon that a lot of people may have heard the term “blueprint”, but had no idea what it meant.



### **ODD ITEMS OF INTEREST:**

Coming from South Africa, Cape Town to be precise, I am afraid that my stories and information for you will tend to have an appropriate slant.

Here, I will tell you about a unique animal in the South African Railway history.



James “Jumper” Wide worked for the Port Elizabeth – Cape Town railway service.

Wide earned the nickname “Jumper” due to his habit of jumping from one railway car to another and sometimes swinging from railcar to railcar. One afternoon in 1877, near Kleinpoort in the Eastern Cape, he attempted to leap to another car

and fell underneath the moving train. The massive wheels of the train severed both his legs. Jumper was devastated. Not only had he lost his legs, but he would be of no use to the railroad.

He took a post as signalman at Uitenhage station (near PE), where he made himself two pegged legs he carved from a piece of wood, and built himself a small trolley he used to get around. Still, he was limited on how well he could perform his job.

One afternoon he was visiting the marketplace in Uitenhage where he saw a baboon leading an ox wagon. He spoke to the owner who demonstrated how smart the primate was. Jumper was convinced the baboon could serve him well. He pleaded with the owner to let him have the baboon. The owner didn’t really want to give up his favourite pet, but he felt sorry for the crippled man.

He gave the baboon to Jumper which began the most unusual friendship in the railroad’s history. The two lived in a cottage a half mile from the railroad depot. Each morning Jack would push Jumper to work on the trolley. He would push the trolley up a hill and once on top of the hill, Jack would jump on the trolley for a fun ride as it rolled quickly down the other side of the hill.

At work, Jack operated the signals that instructed train engineers which tracks they would take.

Wide kept an important key in his signal box. It unlocked the points that enabled locomotive drivers to reach the coal-sheds. Whenever a driver wanted it, he gave four blasts on his whistle and Wide would trotter out on his crutches and hold up the key. Jack watched this performance for a few days, then raced out with the key as soon as he heard the four blasts. It then became one of his duties.

Finally, the time came when Wide entrusted the signal levers to the baboon. Wide would hold up one or two fingers and Jack would then pull the correct lever. He always looked at his master for confirmation. In the end, the baboon needed no instructions from his master. Jack got to know which lever to operate for each approaching train, and caught the various offerings thrown to him by passengers.



There was an official investigation when a member of public reported the baboon changing signals at Uitenhage. Officials were initially sceptical, but investigation revealed that Jack was doing the job competently.

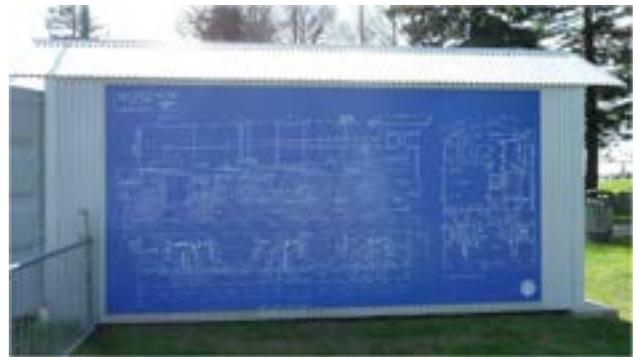
Jack was then paid 20c per day and half a bottle of beer a week. In the 9 years Jack worked for the railroad and his legless master, he never made one mistake that resulted in an accident.

Around Jumper's cottage Jack learned to perform other tasks such as removing rubbish and sweeping the kitchen floor. He also turned out to be a very good watchman. Intruders were greeted by a fierce guard who gnashed his teeth and snarled ferociously to frighten away unwelcome visitors. And if you have ever been up close to a baboon, you will see their teeth are worse than a dog's.

Jack worked for nine years, and died of tuberculosis in 1890.



### Pretty Container



Congratulations to Ashley and his helpers in organising the decoration of our new container. Hopefully, we will no longer have the local graffiti "artists" scribbling on our container.

## Electric Locomotive upgrade.

The club owns what were two identical 48vdc Locomotives, and these being our primary locos for the last 5- 6 years.

The original traction bogies were designed by the late Steve James, a prolific and well known builder of steam and electric locomotives. He sadly passed away after completing traction bogies and frames for two Locomotives, being passed onto the club.

The electrics and the bodywork were completed by Peter Wisely, ending up with two very smart engines – “Kiwi Rail” and “Silver Fern”.

Both ran well for some years, but the centrally located motor and open gearbox started giving maintenance problems, together with failed bearings on the main axle and gearbox. Both locomotives started spending longer and longer time in the workshop.

The gearbox /motor needed a good 6 hours to access, remove and strip down. The 2 x 1kW ( 2 x 1.34HP ) traction motors were also regularly running fully loaded especially when ascending the incline. Without the driver monitoring the current, these easily went into overload.

Just after completing a major overhaul on “Silver Fern”, “Kiwi Rail” went u/s. It had always been my intention to double up and fit two traction motors on each bogie giving a total of 4kW ( 5.36HP ) connected power, so halving each motor’s load. The original 2kW was just adequate, with little leeway. The high demand on the brush gear also resulted in some interesting “failures”.

I took the opportunity to rearrange the wiring, so providing better circuit protection to the various systems on board, but without altering the main Power Controller, this being well within its running parameters.

Similar motors were available fitted with integral gearboxes. And with the CAD design work provided by Peter Davies, it was possible to ensure a good fit and sufficient internal space to negotiate our tightest radii. The final design gives us a direct chain drive to each axle, so solving the problematic open gearbox, and motor access. We are now able to get to the new setup and change the motors out, in the field if needed, within 10 minutes. We can also disconnect one motor, leaving the remaining three to complete a run, still with adequate power.

The new motor support plates were outsourced and Jason took the lead on all the mechanicals, modifying the bogies and all the numerous small jobs such as,

drilling, tapping, machining, milling, painting, and final assembly.

There were some inevitable minor “engineering” problems that required adjustments, dealt with by Jason. We have now ended up with an improved, capable locomotive, with simplified drive system. This is noticeably quieter, with less demand on each motor, giving greater reliability and longevity. We should now see a greater interval between major overhauls. This locomotive will be our mainstay when running on public days.

It will be interesting to compare how the two electrics match up over a full year. Enjoy the changes!

Warren Karlsson

## **Tuesday Evening Meeting (6<sup>th</sup>)**

Our Tuesday meeting was once again interesting.

Ken brought a “Master Clock” to show us. These were used in large institutions such as hospitals to ensure that everyone in a large institution were working to the same time setting.



It is not well known that the advent of railways resulted in standardised time systems.

Previously, all towns a cities’ had a central clock which everybody in that town used to refer to. The trouble was, because the time was set by dawn, or midday, the time shown in each town’s clocktower varied, sometimes considerably.

Of course, with railways, all the stations had to run on the same time, resulting in the advent of centralised control of time and clocks, first in the country and later world-wide, resulting again in GMT.



John Bremner's firebox and inspection plate for his Traction Engine.



Bruce's motorcycle spindle, nicely made with a fine thread.



## OPERATORS ROSTER 2021

15/08/2021 22/08/2021 29/08/2021  
M. de LUES B.FITZPATRICK  
J.FLANNERY

05/09/2021 12/09/2021  
B.HARVEY P.JONES

19/09/2021 26/09/2021  
W.KARLSSON B.McKERRAS

03/10/2021 10/10/2021  
R.PROUT M. de LUES

17/10/2021 24/10/2021 31/10/2021  
B.FITZPATRICK J.FLANNERY B.HARVEY

07/11/2021 13/11/2021  
P.JONES W.KARLSSON

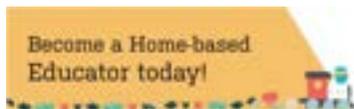
14/11/2021 21/11/2021 28/11/2021  
B. MCKERRAS R.PROUT M. de LUES

05/12/2021 12/12/2021  
B.FITZPATRICK J.FLANNERY

19/12/2021 26/12/2021  
B.HARVEY Boxing day

### **SPONSORS:**

Our thanks to those companies who sponsor us –



## **LINKS TO OTHER CLUBS:**

**Auckland Society of Model Engineers** -  
[www.asme.org.nz](http://www.asme.org.nz)  
**Cambridge Model Engineering Society Inc.**  
[www.cmes.org.nz/](http://www.cmes.org.nz/)  
**Christchurch Live Steamers** -  
[www.clstrains.co.nz](http://www.clstrains.co.nz)  
**Canterbury Society of Model Engineers** -  
[www.csme.org.nz](http://www.csme.org.nz)  
**Hamilton Model Engineers**  
- [www.hme.co.nz](http://www.hme.co.nz)  
**Hutt Valley Model Engineering Society** -  
[www.hvmes.com](http://www.hvmes.com)  
**Kapiti Miniature Railway Association** -  
[www.kapitirail.org](http://www.kapitirail.org)  
**Havelock North Live Steamers** -  
[www.keirungaparkrailway.org.nz](http://www.keirungaparkrailway.org.nz)  
**Manakau Live Steamers** -  
[www.manakaulivesteamers.co.nz](http://www.manakaulivesteamers.co.nz)  
**Marlborough Associated Modellers Society** -  
[www.mams.org.nz](http://www.mams.org.nz)  
**Nelson Modellers** - [www.nelsonmodellers.org.nz](http://www.nelsonmodellers.org.nz)  
**Otago Miniature Road and Rail Society** -  
[www.omrr.org.nz](http://www.omrr.org.nz)  
**Otago Model Engineers Society** -  
[www.omes.org.nz](http://www.omes.org.nz)  
**Palmerston North Model Engineering Club** -  
[www.pnmec.org.nz](http://www.pnmec.org.nz)  
**EBOP Society of Model Engineers, Whakatane**  
- [www.riveredgerailway.org.nz](http://www.riveredgerailway.org.nz)  
**South Canterbury Model Engineers Society** -  
[www.south-canterbury-model-engineers.org](http://www.south-canterbury-model-engineers.org)  
**Whangarei Model Engineering Club** -  
[www.wmec.org.nz](http://www.wmec.org.nz)  
**MEANZ:** - [www.meanz.org/](http://www.meanz.org/) [meanz.org/](http://meanz.org/)

If I have missed any out, kindly advise me of whom and their details.

## MEMORIAL PARK CHANGES - PROPOSAL



What we see here is the proposed changes to be made by TCC at Memorial Park. You will note that the present car park will be entirely used up, as well as the present clubhouse. A new clubhouse is proposed to be built within our present track. But this poses problems of access, especially for the disabled.

The club invites members to offer their ideas regarding this development, and some alternative ideas regarding the new position of the clubhouse. What is not shown here is the full extent of our track system, and maybe there is a better compromise/ layout that will benefit both us and the TCC?

*[As an aside, since this proposal was presented, there has been a new announcement by Bluehaven that a pool complex, including a 50m pool, is going to be built in the new Papamoa township. This may alter the plans for Memorial Park. Time will tell. – Ed.]*

**Tauranga Model Marine & Engineering Club List - All Responsibilities 2021-2022 – Keep for Reference**

**Committee Members**

President: Jason Flannery  
Vice President: Bruce McKerras  
Treasurer: Joanne Knights  
Club Captain: Max Donnelly  
Secretary: Warren Belk  
Bruce Harvey  
Warren Karlsson  
Regan Olivecrona  
Russell Prout  
Ash Thomas

**Accountants - reviews**

Grace Team

**Bookkeeper**

Raewyn Tanner

**ADR**

Warren Karlsson – paperwork and audit  
Every two years, Expiry: 22 Sep 2022.  
Audit date 14/21 June 2022

**Advertising**

Peter Davies  
Jason Flannery  
Joanne Knights

**Boiler Inspectors**

Peter Jones  
Bruce McKerras

**Club Calendar**

Max Donnelly

**Driver License Database**

Warren Karlsson

**Driver License issuing**

Jason Flannery Exp 31/8/21

**Duty Operators**

Peter Jones

**Front door entry codes**

Warren Karlsson

**Incorporated Societies**

Jason Flannery - cut off date 30/6/21

**Insurance provider**

Crombie Lockwood renewal 28/6/22

**Librarian**

Chris Pattison

**Locomotive WOF register – club locos**

Bruce Harvey

**Locomotive WOF – members locomotives**

Bruce Harvey  
WOF require two members to sign off, Bruce Harvey to arrange for an extra person when required.

**MEANZ Rep**

Peter Jones

**Member Register**

Jason Flannery

**Newsletter Editor**

Chris Pattison Subs notice May edition

**PO Box**

Jason Flannery

**Ride car WOF register – club and members**

Bruce Harvey

**Safety Committee**- first aid and fire extinguishers

Jason Flannery  
Peter Jones  
Warren Karlsson  
Ext test dates

**Tamar Boiler Certificate - yearly** Expiry 31/9/2021

Bruce Harvey – controller  
Warren Belk – operator  
Joanne Knights - operator

**Tauranga City Council - Park Managers**

Megan Cleverly  
Phill Everett 027 836 2707

- **Lease Manager**  
Conor McEvoy

**Test gauges – yearly** –\_Expiry: 31/07/2021

Peter Jones

**Track Managers**

Bruce Harvey  
John Stent  
Russell Prout  
Max Donnelly – Raised

**Ticket seller roster**

Jason Flannery

**Website Provider**

Openhost

**Website Editor**

Max Donnelly

**Workshop**

John Nicol  
Brian Marriner



# TMMEC 2021 CALENDAR

	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T													
JAN					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
FEB					1	2	3	4	5	6	7	8	9	10	11	12	CHR	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28				
MAR					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
APR					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
MAY					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
JUNE					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
JULY					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
AUG					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
SEP					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
OCT					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
NOV					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
DEC					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

- SUNDAY RUNNING DAY – 10am to 3pm
  - OFFICIAL CLUB PLAYDAY
  - COMMITTEE MEETING – 7pm START
  - GENERAL MEETING – 7pm START
  - ENGINEERING TUESDAY – 7:30pm START
  - OPEN WEEKEND
  - CANCELLED
  - AGM
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- CHR CHRISTMAS PARTY - 13 FEB
  - 20-21 MARCH HAMILTON OPEN WEEKEND
  - 29-30-31 MAY MAIURAU OPEN WEEKEND
  - 17-18 JULY ERGOP OPEN WEEKEND
  - 30 OCT HALLOWEEN NIGHT RUN
  - 11th APRIL KATIKATI VINTAGE MACHINERY CLUB SHOW
  - 3rd JULY NIGHT RUN