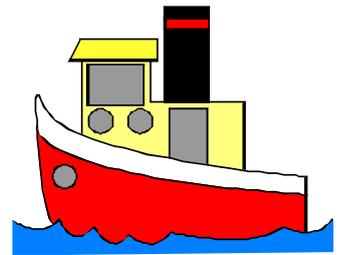




# Wheels and Floats



News letter No. 322 October / November 2012

## TAURANGA MODEL MARINE AND ENGINEERING CLUB

The Secretary  
c/o 3 Waipuna Grove,  
Tauranga 3112  
Palmerville Station Phone 07 578 7293

Rail Track Memorial Park  
Open to Public weather permitting.  
Sundays 10.00am to 4.00pm  
Website.

### NOTICE OF MEETING

The next general meeting will be on  
Tuesday 6<sup>th</sup> Nov. at 7pm,  
At Palmerville Station

Patron:	Noel Pope	
President:	Peter Jones	(07) 543 2528
Vice President:	Ron Salisbury	(07) 577 9403
Secretary:	Owen Bennett	(07) 544 9807
Treasurer:	Clive Goodley	(07) 5722959
Editor:	Clive Goodley	(07) 5722959
	goodley@clear.net.nz	

Committee:	Warren Belk, Bruce Harvey, Bob Stacey, John Stent, Bruce Mckerras Peter Lindsay.
Boiler Committee:	Peter Jones, Paul Newton, Bob Batchelor.
Safety Committee	Warren Karlsson, Bruce Harvey Lloyd Breckon. Pete Lindsay

Next Committee Meeting. Thurs 25<sup>th</sup> Oct

### Conveners:

Workshop:	Ron Salisbury, Bruce McKerras
Track:	Bruce Harvey
Marine:	Warren Belk, Ken Fox
Librarian:	John Nicol
Rolling Stock:	Clive Goodley
Supply Officer:	Bob Stacey
Website by:	

### Operators Oct / Nov 2012

07-10-12	C. Goodley
14-10-12	B. Harvey
21-10-12	P. Jones
28-10-12	W.Karlsson
04-11-12	P. Lindsay
10-11-12	B. McKerras
11-11-12	R.Salisbury
18-11-12	O. Bennett
25-11-12	N. Bush
02-12-12	E. Evans

### Presidents Points

Greeting members.

Firstly our best wishes to Sheila Goodley who is recovering from a recent operation, speedy recovery Sheila.

After weeks of rain we seem to be moving into finer weather at last. Off the top of my head we have had 9 Sundays this year that we have not been able to run, which has impacted on our finances. It was decided at the last committee meeting that the track will operate two additional days during each week of the school holidays to try and compensate, these beings Tuesday and Thursdays. Thank you to those who have made themselves available for the extra days.

Work is progressing on our track extension with the concrete foundation laid by 'Kerb and Concrete', from the existing bridge to the North end of the large bridge. Work is now focused on the low level bridge. Tauranga City Council are assisting with ground retention and landscaping around this area and have built a new foot path between the adventure playground and the main play area. The whole area is going to look first class when the

work is completed. Our concrete foundation is proving a real attraction to young scooter riders, not sure how they are going to handle it once the sleepers go down.

There are a few dates to mark on your calendar:

27th October is the next playday.

3rd November is the next working B, tidy up before the open weekend.

10th and 11th November annual open weekend.

7th December is our Christmas get together at Oak Tree Restaurant (RSA) meeting 6.0pm. dining at 6.30pm

Please advise me by the 30th November if you are coming so that I can verify numbers.

Our open weekend will be the usual format, Start 9.00am track closes at 4.00pm for the public. Saturday, judging for Norm Decke Memorial Trophy Saturday afternoon and presentation of the trophy prior to the BBQ on Saturday evening at 6.00pm. Visitors and members welcome to run Saturday evening.

Sunday is 9.00am until 4.00pm as usual, steam locomotive drivers please make sure you have current certification and everyone make our visitors welcome.

Bob Stacey has secured the lobby of QE2 for a display so please contact Bob 07 542 3444 if you can help with setting up the display or providing something to display, visitors also, we welcome your display.

Bev has asked me to remind our ladies that if you are able to assist in the kitchen over these two days please give her a call, 07 543 2528 and advises that all requests made for additional equipment for the kitchen last year have been fulfilled.

Best Wishes and happy modelling.

Peter Jones.

John Nicols has requested that you advise members in the next newsletter that an index for 'Model Engineer' magazines is available on the internet, anyone who does not have access to a computer can call John with a reference of subject or author and he is quite happy to help them look it up.

For those members who like to read newsletters from other clubs, take note of the following;

Attached is a link to download your monthly 'Micrometer', for October 2012:

<http://www.asme.org.nz/newsletters/2012-573-October.pdf>

A list of past/current newsletters can be found on the following page of the website:

<http://www.asme.org.nz/newsletter.aspx>

If the link does not seem to work, paste it into the top of your browser.

If you have any issues, or wish to unsubscribe from these emails, please contact me at [editor.asme@gmail.com](mailto:editor.asme@gmail.com)

Yours Faithfully;

*Hayden Purdy*

*ASME Editor*

Owen Bennett tells me he now has **Phosphor Bronze rod** in stock at  $\frac{3}{4}$ ", 1", and 1  $\frac{1}{4}$ ".

## **Dates to Remember**

**Tauranga Club Playday Sat 27<sup>th</sup> Octber**

**Working B 3<sup>rd</sup> November**

**The club Christmas Dinner will be at the RSA rooms on Friday Dec . 7th**

**New Plymouth Model Engineers 60th Birthday Bash 20<sup>th</sup> 21<sup>st</sup> 22<sup>nd</sup> Oct.**

**Havelock North Live Steamers Open Weekend 19<sup>th</sup> 20<sup>th</sup> 21<sup>st</sup> 22<sup>nd</sup> Oct**

**Cambridge Rotorua Steamers Grand Opening 1<sup>st</sup> & 2<sup>nd</sup> Dec**

**River Edge Park Miniature Railway 10<sup>th</sup> Anniversary Run 15<sup>th</sup> 16<sup>th</sup> Dec**

# TO SUPER HEAT OR NOT????

At some point in time the topic of super heating crops up at most open weekends and generates many questions regarding the use in model steam locomotives.

In my early days of model engineering I met up with a fellow by the name of Les Fitt who retired from Auckland and set up home in Rotorua to get away from model engineering only to get heavily involved in the formation of the Rotorua Society of Model Engineers in 1976. Les was my mentor towards building engines and would pounce on me for not conforming to model engineering methods and practices he had learnt from his younger days. However over time I was able to cope with building steam engines, being trained as an Electrician does not help either!! Les was always for fitting super heaters but I never really understood why, I just did it as the norm on my first locomotive, a Simplex.

However on a trip to the US some two years back I was given the opportunity to drive numerous locomotives only to have the problem of getting my glasses fogged up to the extent that I became a lethal blind driver without my specs on! Most American model engineers tend to rely on 125 lbs pressure with no super heating to run engines. However when you analyse the facts, very few clubs in the States pull passengers, its mainly light fine scale freight wagons so power and efficiency does not necessarily come into the equation.

Most clubs here in New Zealand tend to pull passenger ride cars so power and efficiency come into play, more so on very heavy engines that can cater for large loads. This is where super heating comes into play and it works well if installed to receive the heat that is needed to produce more steam from the water droplets within the normal production of steam from the boiler.

The normal expansion of steam produced from a boiler is about 10 times, where as its about 7.5 times for superheated steam. With this in mind why would any one want to fit super heaters? The problem with saturated steam is that the water content cannot be used to generate power onto the pistons, thus the usable quantity of steam is reduced. So if we can increase the steam temperature produced directly from the boiler the water content can be reduced by quite a large amount, depending on the design and placement of the super heaters within the boiler tubes.

On full sized engines the complexity of super heaters is large, especially on engines used for fast running and the same design features on a model would be difficult to achieve, although I have seen some good attempts. On full sized engines the extra heat can be obtained within the flue tubes so the super heater elements do not need to extend into the fire box, which could lead to failure due to high fire temperatures. For model purposes it can be the opposite arrangement where the tubes can be extended to within 4mm of the back fire wall, so allowing far more heat into super heat tubes. All the 9 engines that I have built have been fitted with 'over the fire' super heaters made of 316 stainless and tig welded ends. I have not heard of a failure yet, except on a weld I did instead of using a professional welder.

There are two main ways of building super heaters, one using separate 316 tubes, or copper, with a spade end attached in the fire box end and the coaxial type with one small tube set into a larger outer tube. The outer tube having steam fed into it at the smoke box end, the inner tube being used to feed the superheated steam to the cylinders before or after the regulator. Bare in mind that if the super heaters come before the regulator they become part of the boiler for inspection purposes. The inner tube should extend into the outer tube to within 5mm of the end.

The end result is like driving a car on 98 octane petrol instead of 91!! There is more usable energy being produced and this also allows the engine with heavy loads on to run on very short cut off's. Both my 'B' class, Tagus and Tamar engines can run easily, from a start on 30% cut off with a 4 or 5 carriage load on a level track. Again I empathise the fact that the real benefit is on larger engines with good tractive effort, although on the smaller types one will see gains in steam and fuel efficiency.

Food for thought!!! John Heald



SUPER HEATER LAY OUT ON THE 'B'



'B' CLASS COAXIAL TWIN SUPER HEATERS



TAMAR SUPER HEATER SET UP

A doctor was addressing a large audience in Sydney. Red meat is full of steroids and dye. Soft drinks corrode your stomach lining. Chinese food is loaded with MSG. High transfat diets can be disastrous and none of us realizes the long-term harm caused by the germs in our drinking water. However, there is one thing that is the most dangerous of all and most of us have, or will eat it. Can anyone here tell me what food it is that causes the most grief and suffering for years after eating it?" After several seconds of quiet, a 70-year-old man in the front row raised his hand, and softly said, " Your own Wedding Cake."

From the Committee meeting,

The guttering on the front of the building needs replacing, it has more holes than gutter.

An evening workshop to be arranged for the assembly of more ridecar bogies.

The club purchase a bigger and better grinder. (Done)

Planning for the electric control of points for the new track to be developed, probably similar to Whakatane.

Metal casting to be reintroduced to the club. Graeme Lambert and others are interested.

Plastic conduit to be laid in conjunction with the earthworks for the new points.

Three ridecar bodies are at the powder coaters for treatment.



It was April and the Aboriginals in a remote part of Northern Australia asked their new elder if the coming winter was going to be cold or mild. Since he was an elder in a modern community he had never been taught the old secrets. When he looked at the sky he couldn't tell what the winter was going to be like. Nevertheless, to be on the safe side, he told his tribe that the winter was indeed going to be cold and that the members of the tribe should collect firewood to be prepared.

But being a practical leader, after several days he had an idea.

He walked out to the telephone booth on the highway, called the Bureau of Meteorology and asked, 'Is the coming winter in this area going to be cold?'

The meteorologist responded, 'It looks like this winter is going to be quite cold.'

So the elder went back to his people and told them to collect even more wood in order to be prepared.

A week later he called the Bureau of Meteorology again. 'Does it still look like it is going to be a very cold winter?'

The meteorologist again replied, 'Yes, it's going to be a very cold winter.'

The elder again went back to his community and ordered them to collect every scrap of firewood they could find.

Two weeks later the elder called the Bureau again. 'Are you absolutely sure that the winter is going to be very cold?' he asked.

'Absolutely,' the man replied. 'It's looking more and more like it is going to be one of the coldest winters ever.'

'How can you be so sure?' the elder asked.

The weatherman replied, 'Our satellites have reported that the Aboriginals in the north are collecting firewood like crazy, and that's always a sure sign.'

## The Beer Run

**In the lighter moments of WWII, the Spitfire was used in an unorthodox role: bringing beer kegs to the men in Normandy**

During the war, the Heneger and Constable brewery donated free beer to the troops. After D-Day, supplying the invasion troops in Normandy with vital supplies was already a challenge. Obviously, there was no room in the logistics chain for such luxuries as beer or other types of refreshments. Some men, often called sourcers, were able to get wine or other niceties from the land or rather from the locals. RAF Spitfire pilots came up with an even better idea. The Spitfire Mk IX was an evolved version of the Spitfire, with pylons under the wings for bombs or tanks. It was discovered that the bomb pylons could also be modified to carry beer kegs. According to pictures that can be found, various sizes of kegs were used. Whether the kegs could be jettisoned in case of emergency is unknown. If the Spitfire flew high enough, the cold air at altitude would even refresh the beer, making it ready for consumption upon arrival.

A variation was a long range fuel tank modified to carry beer instead of fuel. The modification even received the official designation Mod. XXX. Propaganda services were quick to pick up on this, which probably explains the official designation.



Kegs and converted fuel tanks were used

As a result, Spitfires equipped with Mod XXX or keg-carrying pylons were often sent back to Great Britain for maintenance or liaison duties. They would then return to Normandy with full beer kegs fitted under the wings.

*The Spitfire had very little ground clearance with the larger beer kegs.*

Typically, the British Revenue of Ministry and Excise stepped in, notifying the brewery that they were in violation of the law by exporting beer without paying the relevant taxes. It seems that Mod. XXX was terminated then, but various squadrons found different ways to refurbish their stocks, most often done with the unofficial approval of higher echelons.

In his book *Dancing in the Skies*, Tony Jonsson, the only Icelancer pilot in the RAF, recalled beer runs while he was flying with 65 Squadron. Every week a pilot was sent back to the UK to fill some cleaned-up drop tanks with beer and return to the squadron. Jonsson hated the beer runs as every man on the squadron would be watching you upon arrival. Anyone who made a rough landing and dropped the tanks would be the most hated man on the squadron for an entire week.

### ***A staged shot of the Mod. XXX tank being filled.***

Understanding Engineers:        Understanding Engineers 1:

Two engineering students were walking across a university campus when one said, "Where did you get such a great bike?" The second engineer replied, "Well, I was walking along yesterday, minding my own business, when a beautiful woman rode up on this bike, threw it to the ground, took off all her clothes and said, "Take what you want."

The first engineer nodded approvingly and said, "Good choice; the clothes probably wouldn't have fitted you anyway."

Understanding Engineers 2:

To the optimist, the glass is half-full.

To the pessimist, the glass is half-empty.

To the engineer, the glass is twice as big as it needs to be.

Understanding Engineers 3:

A priest, a doctor, and an engineer were waiting one morning for a particularly slow group of golfers. The engineer fumed, "What's with those guys? We must have been waiting for fifteen minutes!"

The doctor chimed in, "I don't know, but I've never seen such inept golf!"

The priest said, "Here comes the green-keeper. Let's have a word with him."

He said, "Hello George, what's wrong with that group ahead of us? They're rather slow, aren't they?"

The green-keeper replied, "Oh, yes. That's a group of blind firemen. They lost their sight saving our clubhouse from a fire last year, so we always let them play for free anytime."

The group fell silent for a moment.

The priest said, "That's so sad. I think I will say a special prayer for them tonight."

The doctor said, "Good idea. I'm going to contact my ophthalmologist colleague and see if there's anything he can do for them.."

The engineer said, "Why can't they play at night?"

Understanding Engineers 4:

What is the difference between mechanical engineers and civil engineers?

Mechanical engineers build weapons. Civil engineers build targets.

Understanding Engineers 5:

The graduate with a science degree asks, "Why does it work?"

The graduate with an engineering degree asks, "How does it work?"

The graduate with an accounting degree asks, "How much will it cost?"

The graduate with an arts degree asks, "Do you want fries with that?"

Understanding Engineers 6:



Three engineering students were gathered together discussing who must have designed the human body.

One said, "It was a mechanical engineer. Just look at all the joints." Another said, "No, it was an electrical engineer.. The nervous system has many thousands of electrical connections."

The last one said, "No, actually it had to have been a civil engineer. Who else would run a toxic waste pipeline through a recreational area?"

## Boating News

### One Metre Racing

The 15th/16th September was our Bay of Plenty champs. Invites went out and we had 30 sailors from Gulf Harbour, North Shore, Wellington, Waihi and our own Tauranga club. The weather forecast was for a rain bomb but Saturday started with no wind at 10.30am when I gave members the briefing, but at 10.45 am when the first fleet hit the water using their A rigs the wind arrived. Chaos for the first race but sailors changed to b rigs and as the breeze stayed in sailing returned to normal. With 3 fleets we had a 6 up 6 down system and so sailors were kept on their toes, as we had the racing going all day. An evening meal at the R S A had sailors and helpers enjoying an evening together. Sunday, we woke to wind and rain, but had racing underway by 10 am. It blew, it rained and by 11.30am. every one was wet, we called it a day and had our prize giving, with Rob Nelson from Auckland the overall winner. Our non racing club members pitched in and the days ran smoothly, a great team effort. Our Wednesday and Saturday racing has good fleets attending and competitive racing, with new members improving each week. Cheers, Ken Fox

### Return Address

TMMEC  
3 Waipuna Grove  
Tauranga 3112

TO

