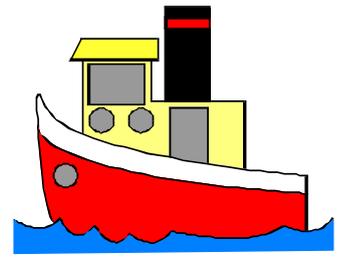


Wheels and Floats



Newsletter No. 339 Jan/Feb 2015

TAURANGA MODEL MARINE AND ENGINEERING CLUB

The Secretary
P.O. Box 15589,
Tauranga 3112
Palmerville Station Phone 07 578 7293

Rail Track Memorial Park
Open to Public weather permitting.
Sundays 10.00am to 4.00pm
Website: www.tmmec.org.nz

NOTICE OF MEETING

The next general meeting will be on
Tuesday 3rd Feb at 7pm
At Palmerville Station

Patron:	Noel Pope	
President:	Peter Jones	(07) 543 2528
Vice President:	Bruce Harvey	(07) 548 0804
Secretary:	Bruce Harvey	(07) 548 0804
Treasurer:	Clive Goodley	(07) 572 2959
Editor:	Clive Goodley	(07) 572 2959
	goodley@clear.net.nz	
Committee:	Warren Belk, Shane Marshall, John Stent, Bruce McKerras Peter Lindsay, John Nicol, Owen Bennett.	
Boiler Committee:	Peter Jones, Paul Newton, Bob Batchelor, Bruce McKerras	
Safety Committee	Warren Karlsson, Bruce Harvey J. Nicol, Malcolm George, P. Lindsay	

Conveners:	
Workshop:	Ron Salisbury, Bruce McKerras
Track:	Bruce Harvey
Marine:	Warren Belk, Ken Fox
Librarian:	John Nicol
Rolling Stock:	Clive Goodley
Small Metals Store:	Owen Bennett
Website by:	Murray De Lues
Driver Training	Clive Goodley
Operators Jan/Feb	
04-01-15	W. Karlsson
11-01-15	B. Kincaid
18-01-15	P.Lindsay
25-01-15	B. McKerras
01-02-15	N. Bush
08-02-15	R. Salisbury
15-02-15	O. Bennett
22-02-15	E. Evans
01-03-15	B. Fitzpatrick
08-03-15	C. Goodley

Next Committee Meeting Jan 29th at 7pm.

Presidents Points

Greetings members.

“Happy New Year “

Our club Christmas get together held at Bruce Harvey’s residence was well attended and a great day. It was wonderful to have Trevor Chapman come all the way from Greymouth to join us in the celebration of our clubs 35th Birthday. The birthday cake organized by Bruce Harvey: a model of our club #4 was outstanding, it even had a working headlight, seemed a pity to cut it up really but it did taste just as good as it looked.

As we move into 2015 plans for the convention is the focus, every member will be asked to help in some way, so please support Shane and his team and let’s make this an event to remember.

There has been some discussion with members of affiliated clubs regarding our stand on the “failsafe braking” of trains on our miniature railway, and I thought this will be an appropriate time to give some background and an explanation of what we understand as “failsafe” and how the braking system we have adopted, works.

When our club started operating a railway 30 years ago in Memorial Park, it was policy from the start that an efficient system of braking would be used on all ride cars. There were various systems being used throughout the world and after much discussion our club decided to adopt the Birmingham vacuum braking system. For our club the system evolved using what was available, basically the heart of the system was an old "Ajax" water cylinder valve that was modified with a rubber diaphragm, which had a sealed mechanical linkage attached to one side that was coupled through more linkage to brake blocks on each bogie wheel. There were vacuum hose connections on either side of the valve diaphragm, the mechanical linkage side hose was connected to an auxiliary vacuum tank (old spray can) the other side was connected to the vacuum train line through a non return charging valve. The vacuum was created by the club locomotive using a cam driven petrol pump with the vacuum side coupled to the ride car train pipe. The way the system worked was as follows. When the system was charged vacuum on either side of the diaphragm was equal and the diaphragm was positioned with the brakes released. The brakes were applied by destroying the train pipe vacuum; the auxiliary tank vacuum acting on the diaphragm applied the brakes. The system worked reasonably well, it was "fail to safe" which means that any loss in the train pipe vacuum would cause the brakes to apply. Its only down side was keeping linkages free and lubricated so that the diaphragm would be in the right position, and it relied on the capacity of the auxiliary reservoir to give the braking effort, which in turn relied on the correct brake adjustment at all times and a very "tight" system.

Those were the days when the population of Tauranga was about 30,000 and hauling 300 passengers was a good day. Now Tauranga has a population of about 118,000 and we are carrying on average 1200 passengers a day. Train weights have increased from 500kg operating on a flat track to 2000kg operating on grades of 1:50 and 1:60 in an open public park environment i.e. you have to be aware of the track hazards at all times and be prepared to stop in a hurry, the days of the old "boot brake" are well and truly over.

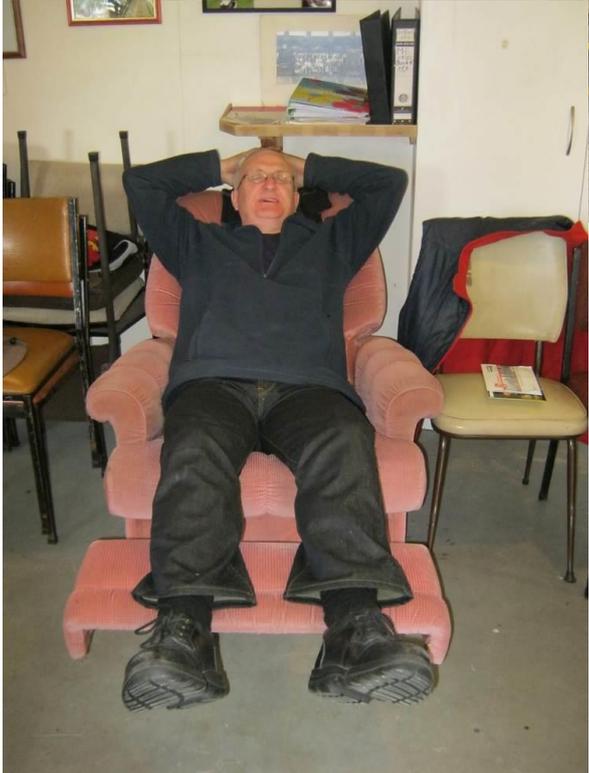
Our ride cars have been upgraded over the last few years, including the braking system but the "fail to Safe" principle is still in place. The diagram below shows just how simple the braking system is, loosely designed on the principle used for braking heavy motor vehicles which can use either positive pressure or a vacuum systems which in all cases bring the vehicle to a halt if there is a brake failure.

The auxiliary reservoir has been removed and the diaphragm now has vacuum to release the brake and a spring that applies the brake. When the brakes are released, the train pipe vacuum compresses the spring and the brakes are released, to apply the brake the train pipe vacuum is destroyed and the spring then applies the brakes. The advantage of this system is that the braking effect is constant provided brake adjustment is maintained, any loss of train pipe vacuum will cause the brakes to apply. This could be caused by the failure of the device that creates the vacuum, or a leak in the train pipe such as a disconnected hose. An added advantages are that there is no longer a requirement for the linkage attached to the diaphragm to be sealed, there is only vacuum on one side of the diaphragm, also when a ride car or group of ride cars is parked up the brakes are always applied; if movement is required there is a release mechanism that allows this. All TMMEC club locomotives are now fitted with electrically operated vacuum pumps, and members steam engines used to haul passenger trains are fitted with ejectors.

Our club is fortunate to have a very active safety committee who take an interest in miniature railway accidents and incidents throughout the world, some are quite horrific. We as a club do not want anything to happen that will close our \$1,000,000 railway, and destroy what has been built with blood sweat and tears over thirty years. We are a friendly club and welcome any other affiliated club member to run on our railway with their locomotive. All we ask is that they are financial members of their club, they have the required certification and couplings etc comply, as for the braking system there are ways of making any system compatible with our ride cars, and also out of courtesy, at any time please let us know you are coming and are prepared to haul passengers. We have regular training days and we welcome everyone to come and join us on those days, bring you loco's and ride cars and run on our new track.

Bruce Harvey and I will be happy to talk to any of our affiliated club members if there are any questions.

Happy modelling.
Peter Jones.



Top left, Eddie Evans looking for the key to wind up the elastic band.

Top, the pleasures of steam.

Bottom, myself and grand-daughter.

Left, Bruce McKerras finds the going tough.

Just before the funeral services, the undertaker came up to the very elderly widow and asked, 'How old was your husband?' '98,' she replied... 'Two years older than me' 'So you're 96,' the undertaker commented... She responded, 'Hardly worth going home, is it?'

Reporters interviewing a 104-year-old woman: 'And what do you think is the best thing about being 104?' the reporter asked... She simply replied, 'No peer pressure.'

Just prior to Christmas I became concerned that with the extra capacity required in order to keep ahead of the game, there may well be a shortage of drivers during January, with members being away on holiday or looking after visitors. With both Nigel and Pioneer now restricted to two ridecars each because of the new grade up to the viaduct. I decided to try running the two locos together, so that one driver could operate them and therefore haul four ridecars with one driver.

Nigel has only one control to operate in this situation, and that is the throttle, therefore it becomes the obvious candidate for leading loco. It has a centrifugal clutch, (and therefore no reverse) and a parking brake which would only come into operation should the coupling between locos fail.

As can be seen in the photos the throttle is operated remotely by a rod, and fortunately the throttle lever is forward for increased revs and back for idle. In the case of coupling failure, completely unlikely, the throttle will be pulled back to idle. The parking brake, which is a lever in a quadrant and is notched in the park position, will automatically be pulled into 'park' by a cord attached to Pioneer. The coupling had to be made up especially for this arrangement, as Pioneer is 5" gauge and Nigel is 7 1/4". Pioneer of course already has an offset coupling at the rear.

Pioneer has no vacuum connection at the front, but this is not required because the train brakes are operated from Pioneer.

As expected there was a little bit of adjustment required, but it all came together pretty much as anticipated and Russell Prout turned up just as the final touches were being made and we tried out the set up with four ridecars. A dozen adult passengers were recruited from the general public in the park; a couple of test runs were made and proved to be a success. The train has been run since on several Sundays and various drivers have found no trouble operating them as one unit.

Operating them as one unit is not really the right terminology, as the assisting loco is just that, and is only brought into use when assistance is required. At the end of the holiday period we will probably separate them and run them independently as in the past.

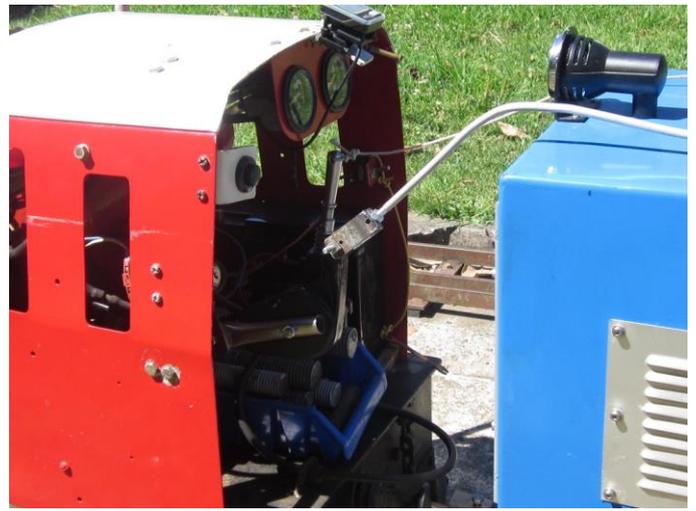
Further to our Presidents remarks about how busy we are on a Sunday; a couple off Sundays back, we had all fourteen ridecars in use at the same time for several hours. In my twelve years at the club, I have never seen that occur, even on Open Weekends. Luckily we do not have the shortage of club members on hand (as we had had in previous years) to do the various chores necessary to keep enough trains running to satisfy the demand.

We have discussed at committee previously about erecting some sort of shade for the public queueing up in the sun for a ride. Until now queueing time was too brief to be a problem, now however, the situation has changed, as queues are way longer than previously and in twenty seven degrees, as it was yesterday, the customers deserve some protection from the sun.

Brian goes to an outdoor show and wins an aluminium dinghy . He brought it home and his wife looks at him and says, "What you gonna do with that. There's no water deep enough to float a boat within 160 kms of here."

He says, "I won it and I'm gonna keep it." His brother came over to visit several days later. He sees the wife and asks where his brother is. She says, "He's out there in his tinnie" ,pointing to the paddock behind the house.

The brother heads out behind the house and sees his brother in the middle of a paddock sitting in the tinnie with a fishing rod in his hand . He yells out to him, "What are you doing?" His brother replies, "I'm fishing. What the hell does it look like I'm a doing?" His brother yells, "It's people like you that give people from Australia a bad name, making everybody think we're stupid. If I could swim, I'd come out there and kick your backside!"



Look carefully and see the cord from the park brake,



Thought from the Greatest Living Scottish Thinker--Billy Connolly.
"If women are so perfect at multitasking, How come they can't have a headache and sex at the same time?"

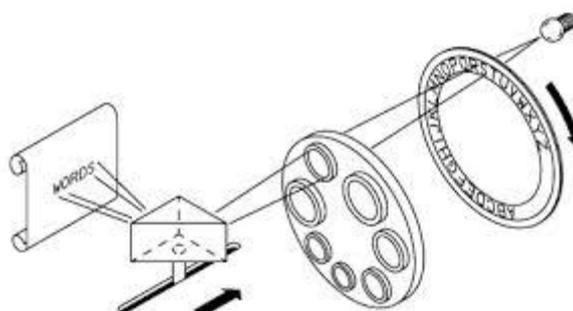
The sermon was very long on a sunny Sunday morning, and little Andy was getting very restless, and more so by the minute. Suddenly, in a whisper too loud for his mother's comfort, he blurted out, "if we give him the money now Mum, will he let us go out

Next page. Owen Bennett continues describing printing procedures, like most things in this world, there is more to it than outsiders realise.

Phototypesetting was a method of setting type, which used a photographic process to generate columns of type on a scroll of photographic paper. Typesetters used a machine called a phototypesetter, which would quickly project light through a film negative image of an individual character in a font, through a lens that would magnify or reduce the size of the character onto photographic paper, which would collect on a spool in a light-tight canister. The photographic paper or film would then be fed into a processor, a machine that would pull the paper or film strip through two or three baths of chemicals, where it would emerge ready for paste up or film make-up.

Phototypesetting machines projected characters onto film for offset printing. Mergenthaler produced the Linofilm using a different design and Monotype produced Monophoto.

The major advancement presented by the phototypesetting machines over the Linotype and Monotype "hot type" machines was the elimination of metal type, an intermediate step no longer required once offset printing became the norm. This "cold type" technology could also be used in office environments where "hot metal" machines, the Linotype and the Monotype, could not. The use of phototypesetting grew rapidly in the 1960s when software was developed to convert marked up copy, usually typed on paper tape, to the codes that controlled the phototypesetters.



Above was the Phototypesetter I introduced to Craig Printing in Invercargill, commercial printers and book publishers, in the early 1970s. Initially I was the operator of this system, later training others in this new medium of "cold typesetting", which eventually gave way to computer typesetting with desktop publishing software. A prerequisite to typing the text was "marking up", a process where all operator instructions were written on to the copy for changes of font, font size, bold or italic changes, spacing between lines and paragraphs, line lengths, etc. Type sizes on this machine could be set from 6-point to 72-point in 1-point increments, by lens power and focal length adjustment. All typesetting could be stored on a 5-inch floppy disc for later use and editing. The screen output was typewriter style, not WYSIWYG like the modern computer so markup was done blind, not able to be verified visually until the photo paper had been developed.

Compugraphic produced phototypesetting machines in the 1970s that made it economically feasible for small publications to set their own type with professional quality. One model, the Compugraphic Compuwriter, used a filmstrip wrapped around a drum that rotated at several hundred revolutions per minute. The filmstrip contained two fonts, a Roman and a bold or a Roman and an italic, in one point size. To get different sized fonts, the typesetter loaded a different font strip or used a 2x magnifying lens built into the machine, which doubled the size of font. The CompuWriter II automated the lens switch and let the operator use multiple settings.

Released in 1975, the Compuwriter IV held two filmstrips, each holding four fonts, usually a Roman, italic, bold, and bold italic font. It also had a lens turret which had eight lenses giving different point sizes from the font, generally 8 or 12 sizes, depending on the model. Low-end models offered sizes from 6 to 36 point, while the high-end models went to 72 point. The Compugraphic EditWriter series took the Compuwriter IV configuration and added floppy disk storage on an 8-inch, 320K disk. This allowed the typesetter to make changes and corrections without rekeying. A CRT screen let the user view typesetting codes and text.

Next issue: Computer typesetting and Desktop Publishing.

The barrier arms in operation, they are vertical when in the normal position. Bells and lights are yet to be installed. The third photo shows the barrier arms at the right side of the picture. Pete Lindsay driving.



Father Christmas came to the park and we played a part. He is shown throwing sweets to children.



Same Bruce, same day, different bed.



Boating News

One Metre Sailing. Shifty wind conditions have been the order of the day with high temperatures lately. Xmas has been and gone: members have enjoyed the break although sailing did still happen. Now we are back to our program for 2015 having a larger number sailing on the Wednesday. Next weekend I am the officer of the day and I intend to have handicap racing using two start lines. Wednesdays we have handicap racing as well using the timing count down system. These can be a lot of fun, getting the early starters off and the back markers itching to go and pass them. These are good ways to get members to get their starting sorted. Before xmas I purchased a new one metre yacht and at present am trying to come to terms with sailing it. Not good was the day I dropped it on the rough concrete path and marked the paint and the keel bulb. However I have repaired the boats paint work and am not using bad language any more. Cheers, Ken Fox

Children Are Quick

TEACHER: Why are you late? STUDENT: Class started before I got here.

TEACHER: John, why are you doing your math multiplication on the floor?

JOHN: You told me to do it without using tables.

TEACHER: Glenn, how do you spell 'crocodile?' GLENN: K-R-O-K-O-D-I-A-L' TEACHER: No, that's wrong

GLENN: Maybe it is wrong, but you asked me how I spell it.

TEACHER: Donald, what is the chemical formula for water? DONALD: H I J K L M N O.

TEACHER: What are you talking about? DONALD: Yesterday you said it's H to O.

TEACHER: Winnie, name one important thing we have today that we didn't have ten years ago. WINNIE: Me!

TEACHER: Glen, why do you always get so dirty? GLEN: Well, I'm a lot closer to the ground than you are.

TEACHER: Millie, give me a sentence starting with 'I.' MILLIE: I is . . .

TEACHER: No, Millie..... Always say, 'I am.' MILLIE: All right... 'I am the ninth letter of the alphabet.'

TEACHER: George Washington chopped down his father's cherry tree, and also admitted it. Now, Louie, do you know why his father didn't punish him? LOUIS: Because George still had the axe in his hand.....

TEACHER: Now, Simon, tell me frankly, do you say prayers before eating? SIMON: No sir, I don't have to, my Mom is a good cook.

TEACHER: Clyde, your composition on 'My Dog' is exactly the same as your brother's.. Did you copy his?

CLYDE : No, sir. It's the same dog.

TEACHER: Harold, what do you call a person who keeps on talking when people are no longer interested?

HAROLD: A teacher