

The Generator

Issue 501
June 2023



Palmerston Model Engineering Club
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Managers of the Marriner Reserve Railway - Marriner Street - Palmerston North
C/- 119 Ruapehu Drive - Palmerston North 4410

The Palmerston North Model Engineering Club

Upcoming Club Events

Club Nights typically start at 7.30pm and are usually held at the
Hearing Association Hall, 435 Church Street, Palmerston North.

Thursday 22 June

Club Night
Project Progress

Thursday 27 July

Club Night
Painting your Project for best Results

Marriner Reserve Railway

Sunday 2 July & Sunday 16 July

Railway operations at the Marriner Reserve
Trains in operation from 1pm to 3pm
Weather permitting (Richard Lockett 06 323 0948)

Thursdays

Railway operations for club members
Subject to ongoing track maintenance and weather
Contact track manager (Richard Lockett 06 323 0948)

Club Notices

Club Night 22nd June

It's been a while since we've had an in depth look at the projects that you all have under way. So please bring along the components of said projects of which you are currently working on and give a brief overview of their creation!

Subscriptions are now due

Membership subscriptions of \$40.00 as set at the Annual General Meeting are now due. Please pay Club Treasurer Lawrence Brooshooft at a club night or preferable pay direct into the clubs bank account via internet banking. **Account number 06-0996-0831663-00**
Please remember to use your name as the reference.

Metal Casting Weekend

There is only 1 month to go before this event kicks off! TechniCast Foundry in Whanganui will host an annual event where one can take your patterns along and view the process of the casting

This will take place on **Matariki** weekend commencing on Friday **14th July**.

Last year the cost was \$9.00 per Kg of **Cast Iron**. Hopefully those of you who wish to have castings done will be well on the way to having your patterns made by now, if not best you pull finger out and get on with it! If you would like to take the opportunity just to view the foundry in operation on Friday the 14th and not be involved in getting a casting done, give **Jonathan Mason** a call on **353 0368** so that any car pooling options can be explored.

TechniCast, 463 Heads Road, Castlecliff, Whanganui.



September Club Night

Just a heads up, it is proposed to hold a bring to sell, buy or exchange event for our September club night. So when you are out in your workshops and trip over some item lying about the floor think as to whether you need it or could it be sold on to someone else to trip over! If so put a bundle together for our September club night! Think tools, materials, unfinished projects, books, plans etc.

The Generator

Prior to writing up this edition of the Generator, (Number 501) I thought that a more in depth look back at some early editions might be in order to help with the milestone of reaching 500 editions. The Palmerston North Model Engineering Club was formed in 1977 with the aim of building a miniature railway track for members who had live steam locomotives or who wished to build these locomotives and operate them. With a view to seeing what the Generators editors had to say while the building of the railway was being undertaken. Luckily Chris Morton has kept all of his Generators since issue number 1 with only a few missing in action over the 47 years of publication, an achievement in itself thanks Chris and so with ten years worth of issues 1980 to 1989 I started to read them to see if there was a story to be told! I was a wee bit disappointed with the lack of detail around key events, dates, who etc but over this period the Generator had 4 editors between February 1980 and April 1981 and hence an explanation perhaps as to why the actual completion of the railway and who/what was the first engine to do a lap was not mentioned at all.

Issue number 28 of February 1980 saw a track plan published with the green light to proceed not yet given by council. It is noticed by the current editor that the track plan shown is not what was actually built, he thinks that the digger operator took a short cut! Issue 29 of March 1980 reports a working bee to mark out the track ready for excavation. Issue 31 of May 1980 reports on an Easter working bee where the track base was dug out and boxing and the first concrete pour was undertaken. Issue 32 of June 1980 reports the completion of the concrete track bed, 491 feet long completed in 1 month and 2 days!

The railway track was not mentioned again until issue 36 October 1980 the lack of progress re the fabrication of the steel rail sections was voiced during a club night meeting.

We jump a few months to issue 38 of March 1982 where there is mention of the track being operational, so progress was made somewhere but with the sudden resignation of the then editor in late 1980 and no January or February editions of the Generator it is understandable that the completion and first use of the railway track was not recorded.

Only a couple of issues later to number 40 of May 1981 and the comment that the railway track is not being used by members, all that work for nothing! Looking back with hindsight having an "operational track" with no means of unloading a locomotive from a vehicle, water for the boiler, power for steam raising blowers, a way of getting a locomotive onto the tracks apart from physically lifting it on and off does not make an operational railway track. All these extra's were installed over the next 2 years with the first official track run taking place on the 5th of June 1983 still with no power or water at the steaming bays. No mention of this track run in the next edition number 63 of July 1983. To get the facilities that we now have at the Marriner Reserve took another twenty years. The current editor of the Generator has it easy on reflection, if he see's something interesting he just gets his phone out, takes a couple of photo's, downloads them into his computer and drops one into publisher software on said computer, writes a few lines of script, save it to a file all in full colour. Easy as compared to punching keys on a typewriter and getting a bromide done if you wish to reproduce a photo!

Doug Chambers behind the footplate of his Simplex Locomotive with Bruce Geange providing the load making steam, safeties blowing. Late 1983. Storage shed not yet completely finished.

Photo D Chambers



So Who was the First

Our club published a booklet in 2002 to record and celebrate the 25th anniversary of forming the society and it states that the first locomotives to run on the newly completed railway track were Chris Compton's Railmotor, Rex Toms Y class NZR (Simplex) and the Club's EB28 battery electric locomotive. Sadly the editor has been unable to locate any photo's of this milestone event in the history of the Marriner Reserve Railway. If anyone reading this knows of any photo's that date from 1981 of activity at our track please contact the editor.

What the editor does have is a photo of the next milestone event in the history of the Marriner Reserve Railway the completion of the track extension in November 1990. The photographer only just managed to capture Barry Percival with his 0-4-0 Juliet climbing the grade on the first lap by a locomotive on the freshly laid rails (welds still hot). Also Peter Hatton with his A3 Flying Scotsman out of shot in hot pursuit.



For Sale

Part built 3.5 inch gauge 4-4-0 Early American Tender Locomotive Virginia
Boiler number ZPN 119
Part built by P N model engineer Ian McLellan to the design of LBSC.
Complete pressure tested copper boiler. This project is well on the way to completion.
\$ 1000.00 ono.

Enquiries to Richard Lockett 06 3230948 or rockett@inspire.net.nz



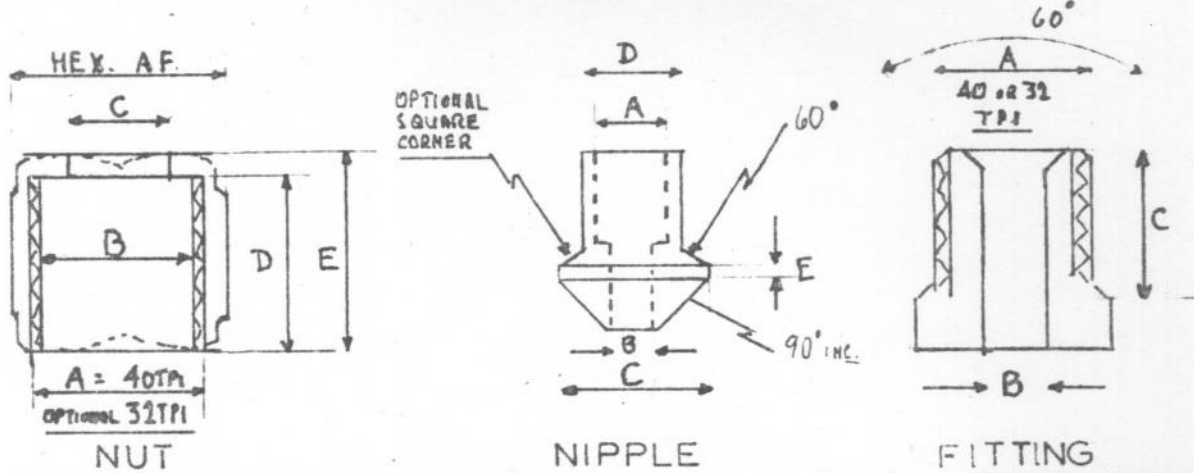
The Generator

Tech Tip

I came across this chart for machining pipe fittings in an old Generator and thought that I needed a copy for the workshop. Unfortunately they are dimensioned in some ancient measuring system (Imperial) which will need converting into something that you will understand. Multiply the decimal dimension by 25.4 to give the dimension in millimetres.

MACHINING PIPE FITTINGS

REF
R.R. TURPIN 16-1-64



NUT

NIPPLE

FITTING

PIPE SIZE	A	B	C	D	E	HEX
1/8	7/32	.191 No. 11	.156 5/32	.200	.230	1/4
5/32	1/4	7/32 No. 11	.191	.250	.300	5/16
3/16	5/16	9/32	.234 9/32	.250	.300	3/8
1/4	3/8	11/32	.303 7.7mm	.250	.300	7/16

A	B	C	D	E
1/8	.101 No. 38	.187	.450	.060
5/32	.136 No. 29	.218	.485	.060
3/16	.156 5/32	.275	.225	.070
1/4	.330 21/64	.330	.295	.070

A	B	C
7/32 .219	1/8	.200
1/4 .250	9/64	.250
7/16 .312	11/64	.250
3/8 .375	13/64	.250

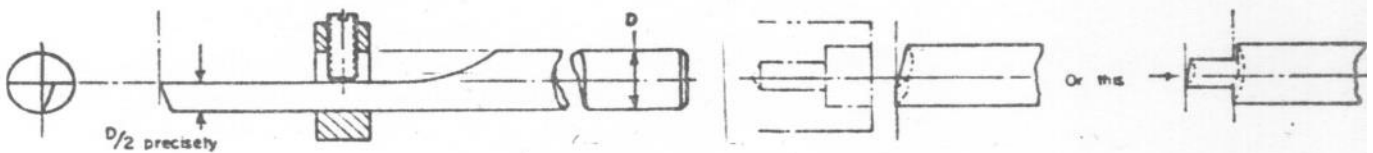


Fig. 1b: D-bits

The lathe tool is a 60 deg. point which serves both for chamfering and for parting-off. All you change in the making of nuts are the drill, the D-bit and the tap in the tailstock. After the parting-off, all nuts have to be screwed on to a spigot in the three-jaw and faced to length.

You will see that the nipples are made from bronze rod. This is because the tubular walls are necessarily thin and would melt in the course of the silver soldering if they were made from brass.

Externally the turning is very simple. A pointed tool is used throughout. The outer side is chamfered 45 degrees and the inner side 60, and the turning, chamfering, parting-off are done without a change. The cone angle of the nipple is 90 deg. and the angle on the fitting 60 degrees.

This, of course, gives a line contact at the joint. Under pressure by the nut, the joint is absolutely steam-tight. (If the angles were equal the turning methods used by amateurs would, in any event, create a line contact.)

Tech Tip

Stud manufacture: Easy enough to put the first thread on a stud but how to hold it for the second thread. Tap a thread into a small piece of steel. Hacksaw through the thread and 80% through the steel as per picture. Clean up the thread. Screw the 1/2 threaded stud into the steel block and clamp it in the vice. This will hold the stud securely and stop it turning while you thread the second end.



The threaded clamp and half completed stud.



The clamp in use holding stud ready for threading.

Tech Tip and photo's Merv George

Date and Time			Activity
Thursday	22nd June	7.30pm	Club Night Project Progress
Sunday	2nd July	1pm to 3pm	Marriner Reserve Railway
Thursday	6th July	7.30 pm	Committee Meeting
Friday	14th-16th July	All Weekend	Casting Weekend
Sunday	16th July	1pm to 3pm	Marriner Reserve Railway
Thursday	27th July	7.30pm	Club Night Paint your Model
Thursday	3rd August	7.30pm	Committee Meeting
Sunday	6th August	1pm to 3pm	Marriner Reserve Railway
Sunday	20th August	1pm to 3 pm	Marriner Reserve Railway
Thursday	24th August	7.30 pm	Club Night Antarctica By Boat

If you would like to be notified when this newsletter is published, send us an email with your **Name, Club** and **Email** address to pnmec@trains.net.nz with "**Generator Please**" in the subject line.