AUCKLAND SOCIETY OF MODEL ENGINEERS INCORPORATED

Peterson Reserve, Panmure, Auckland

PO Box 14570, Panmure, Auckland 1741, NEW ZEALAND

September 2010
Number 550

Club House Telephone
(09) 570 5286

Club Web Site
www.asme.org.nz

President
Grant Anderson (09) 576 8330
E-mail address president@asme.org.nz

Secretary
David Russell 446 0957
E-mail address info@asme.org.nz

Editor
Hayden Purdy 022 0677 892
Email address editor.asme@gmail.com

REGISTERED NEW ZEALAND PUBLICATION

ASME INC.

The MICROMETER

In This Issue:

Page 1.....Train Roster and Club Calendar
Page 2-3..... President's Report August 2010
Page 4-8..... Bits and Pieces, General Meeting August 3rd
Page 8-9..... The Latest in Engineering
Page 9.....Working Bee
Page 10.-11.....Around the Clubs
Page 12.....Classifieds
Page 12.....More Working Bee Photos

A late version of a Watt double-acting steam engine, in the lobby of the Superior Technical School of Industrial Engineers of the UPM (Madrid).

Train Roster

Date	Electric	Electric	Steam	Steam	Station	Station	Station	Extra Guard #
5-Sep-10	T Crake	P Eaton	**S Day**		**G Quayle***	T Taylor	M Richardson	J Reavley
12-Sep-10	M Granger	J Harrison	**L Farquhar**		**K Ryan***	B Sanford	R Reichardt	
19-Sep-10	M Hollis	D Housley	**A Gasteen**		R Stratton	**R Street***	A Shirley	
26-Sep-10	J McManus	P Moy	**M Jack**		S Weston	D Addis	**I Ashley***	P Tomkies
3-Oct-10	A Murley	T Robinson	**M Orange**		P Boyes	G Briggs	**R Brown***	
10-Oct-10	J W-Buys	P Woodford	**B Piggott**		**J Burnett***	R Copeland	R Crook	
17-Oct-10	J Yearn	D Black	**A Pritchard**		P Cunningham	B Currie	**G Dickey***	J Cunningham
24-Oct-10	D Booth	T Boyd	**D Russel**		G Farquhar	**A Foster***	D Hamp	
31-Oct-10	B Cotton	R Craig	**G Wills**		**R Hannah***	G Healy	P Dowdeswell	P Haycock

Bold and Underlined name – is the designated **Train Controller**, i.e. the person in overall control of all operations for the day. If you are the **Train Controller** you should phone around the others rostered for that day to make sure they remember to turn up.

Bold with Asterisked* name – is the designated **Stationmaster**, i.e. the person responsible for activities in the station area for the day. The Stationmaster is also responsible to account for the day's takings. **Please Note**, there is no expiry period or date on train ride tickets previously sold.

Please Note, You will notice from the above roster that new members to the club have been rostered on as the Extra Guard. The committee has decided to do this so that the new member has a chance to learn the ropes at the station without being under undue pressure. Please note on your rostered day you should arrive by 12.45pm to get prepared for the days running.

Club Calendar

7th September	General Meeting, Michael Cryns will give a talk on his visit to Europe featuring clocks and with a slide show.
14th September	Committee Meeting.
18th September	Onehunga Heritage Festival, we will have an exhibit there.
21st September	Workshop Night this month at the clubrooms.
25th & 26th Sep-	ASME Annual Exhibition & open weekend at clubrooms, judging of displayed items.
5th October	General Meeting - Club Auction
16th October	Club Spring Saturday running day with loco competitions 10.00am – 3.00pm
16th November	Workshop Night, "Milling 101", Peter Woodford will give a basic demonstration of
11th December	ASME Christmas Dinner and Annual Exhibition Awards presentation

Presidents Report September 2010

The Club's Annual Exhibition will be only weeks away by the time you receive this Report. The good news on this front is that Mark Richardson and Graeme Healy have kindly agreed to act as conveners and you may have heard from them looking for the display items that you can make available for the show. This will be held in our Clubrooms over the weekend 25th & 26th September and includes the annual judging for Club awards. There will be a list of duties to be done at the weekend, so if you can help in any way, please let Mark or Graeme (or a committee member) know.

I'm hoping that the working bee for general members held Saturday 14th August was well attended and we should have some photos elsewhere in this issue of the last couple of similar events to show the teams at work! Hopefully also the contractor will complete in August the right hand section of the concrete slab and we will have a smooth pavement area free from trip points and eventually some easily graded ramps to assist equipment and wheelchair access.

Nothing much to report on the new leases (licenses) front with ACC; I'm informed that the drafting is still with ACC Legal (along with a multitude of similar documents) and will be sent out only when they are fully completed. So it's a matter of continuing the wait……!

Hugh Martin gave an interesting report to the last general meeting on MEANZ progress with government parties re the Amusement Devices Regulations which control our miniature railway operations. This report was based on a recent written update from MEANZ. It appears that at last some worthwhile progress is being made, but we will have to wait and see. In the meantime, the important thing is to keep ASME operations trouble free from a safety point of view and ensure we continue to comply with our Operating Code.

On that front, the importance of having adequate staff to run our operations each running day can't be underestimated. While we are clearly all volunteers and your valuable time spent on Sunday operations is much appreciated, it is important that we all turn up on our rostered day or alternatively find another person to fill in. If someone doesn't show up, then the remaining members rostered on, are forced to work shorthanded which can make life very tough for them. So please act responsibly; look at the roster in the Micrometer as soon as you receive it and mark your rostered day in your diary. If you have something else on, then ring around those booked on a week (or so) ahead, and in good time so as to arrange a replacement using the membership listing that was included with the March 2010 issue of the Micrometer. In the event of some last minute emergency which makes your attendance impossible, and as a last resort only, please make sure you contact the others rostered on to let them know of your inability to attend – please just don't be a no-show! Currently the requirements of the roster are about 4 times a year for station staff and once every 9 to 12 weeks for train running staff; I would respectfully suggest that's not unduly onerous!

Hugh is also investigating some smart new-style club shirts with ASME logos for members use. Subject to satisfactory styles and pricing, these should be available for firm purchase orders only, later in the year.

The Onehunga Heritage Festival will be held on 18 September to coincide with the re-opening of the Onehunga (railway) Branch Line and new stations. Alan Emerson and Roger van Ryn are going to man a

small model display for the Club, which should help give us some more local profile – and importantly an opportunity to advertise the ASME exhibition a week later. Thanks Alan and Roger for your efforts.

Bad weather Sundays continue to affect our operations – while we had some good Sundays in early July after a very poor June, the latter part of the July month was extremely poor – with one washed out day and another with low takings due to rain. Fortunately, spring is not far away……!

The mid-year luncheon seemed to be much enjoyed by those 46 members and partners who attended in July. The caterer who came recommended by Manukau Live Steamers did a superb job of feeding us all and even did the dishes! So with that performance, ASME has booked the same caterers for the Christmas Dinner on Saturday 11th December to avoid any disappointment at that busy time of the year.

I'm currently off-shore and Vice President Greville will be in the chair for the September meetings, so please give him your full support. I hope you are allocating enough time to enjoy your model engineering activities.

11th August 2010

Grant Anderson

Bits & Pieces, General Meeting 3rd August 2010

Presented by Mike Jack, Reported by Roger van Ryn

Photo of Murray Lane's Stewart 10H described in last month's bits and pieces, **Photo A**

Brian Cotton brought in some examples of a friend of his dads work. Bob Sutherland sure was a meticulous modeler as the workmanship on the Stewart D10 with reversing gear shows. The well made knurling tool with complementary stand also shows what care was put into his work. **Photos B and C**

Bill Parker hefted a rear wheel for his 4inch Foster onto the table, showing spokes made with a bit of help from a friend (Greg) and the built up double "T" wheel rim. Bill is researching the rubberising story but may resort to Gorilla Glue and some conveyor belting?

Graeme Quayle's mass production of family heirlooms is coming along nicely with 4 off "16/16 Horizontals" taking shape for his grandchildren. **Photo D**

David Russell came to invent a neat gadget to hold the DTI at a setting when working in the lathe. Seems other inventors had made this gadget too, as attested by a few members.... (don't you hate that!?) ...great minds eh? **Photo E**

Murray Lane brought in a few tool holders, 2-Large and 2-Small for his Dekel Mill. He managed to source a shorter one (at a good price!) which gives one more useful working height when one has a vice on the table. **Photo F**

A very swish rear tool-post for parting off in the lathe, (I loved the cartoons in the last Micrometer!) was brought in by Dave Russell. Very well made, with a spherical knob handle from Enco. It sure is a boon when parting off in the Myford, and Daves is quick-release to get it out the way when turning. **Photo G, R/H**

Murray Lanes rear tool post also has some neat features, including a quick indexing set-up to put that bevel on those sharp edges when you need to. Murray had some observations about getting things blued, which isn't always so easy. **Photo G, L/H**

The crank and another part for Murray's Dual Row Monosaupe was on display with an unfortunate “ding” in the wrong place! This happens to all of us at some time, just a bit frustrating when a lot of work has already gone into a part. A few choice Anglo-Saxon expletives always helps, and back to make another () &**%^&#! one. **Photo H**

Who brought in the Reamer with a small hole all the way down? Seems the holes probably for bringing coolant to the cutting edge. **Photo F, extreme R/H**

John Olsen has been having some change of scenery (from boat-building), cleaning up the ali casting for his aero engine. **Photo I**

Mike Jacks lovely connecting rods for his customers 7 1/4 A4 have oil holes led through to the cast iron pins which run in Nitrided bushes on the linkages shown. Seems the English customer is (justifiably) well pleased. **Photo J**

Derek Toms brought in some more antique books with “words and music” on running a railway and make interesting reading.

Photo K

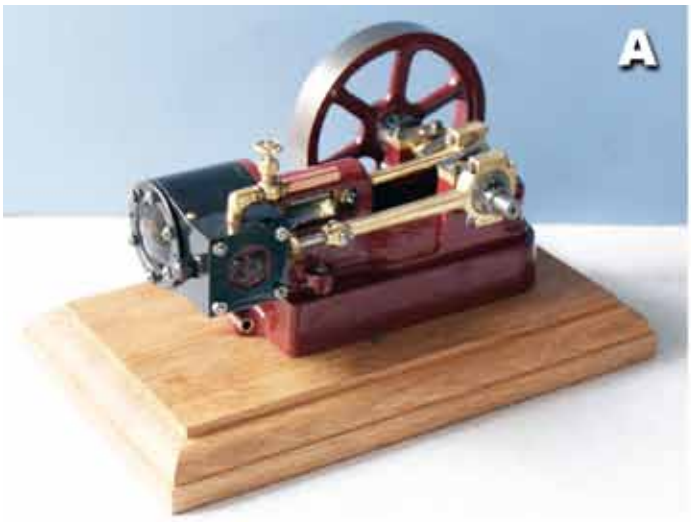
Martin Plants “Britannia” bronze spring hangers came from Britain, cast to his patterns? **Photo L**

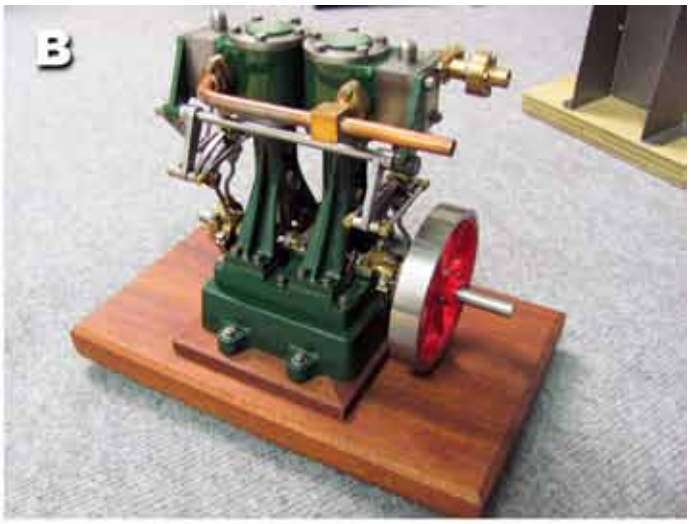
Remember the plastic strain test pieces brought in by Peter Woodford? I have been using a few for applying glue (how inventive!?) but Graham Bell made a finger saving finger board for his circular saw. It stops the saw sending the piece you want shooting backwards through the plaster board wall while one hangs on to the waste piece. Nicely made! **Photo M**

A petrol tank stand and fancy lever by Alan Foster, was made to test Alan's injectors for his Commer TS3 Engine. A fair bit of pressure is needed. Did I hear someone say 15 to 20 Bar!?

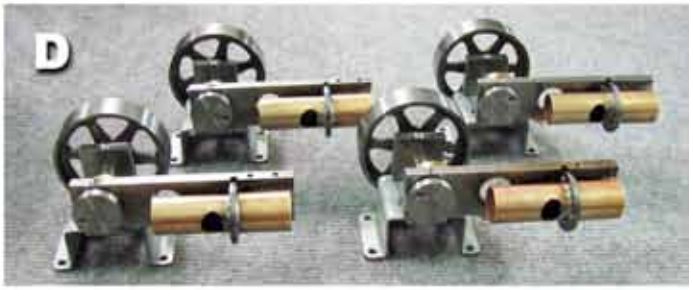
Photo N

Alan also brought in a jig for machining the helix on the Commer engine fuel pump. He used a set up in the vertical slide on the lathe and a dental burr in a Dremel Tool. Tricky!


A


B


C


D


E

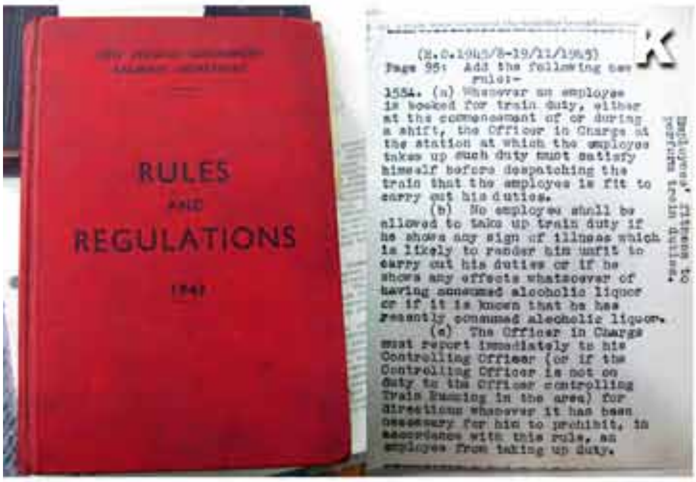

F

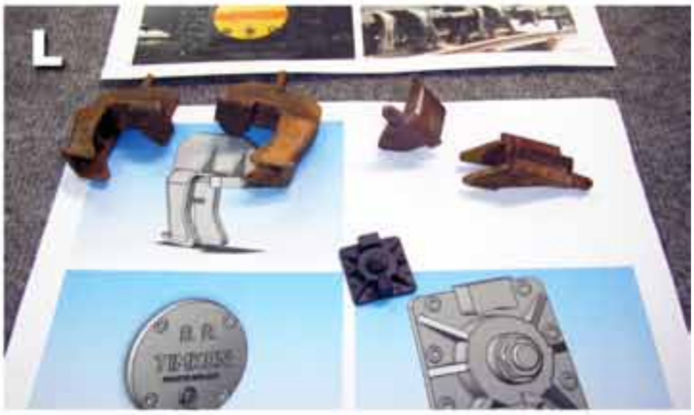

G

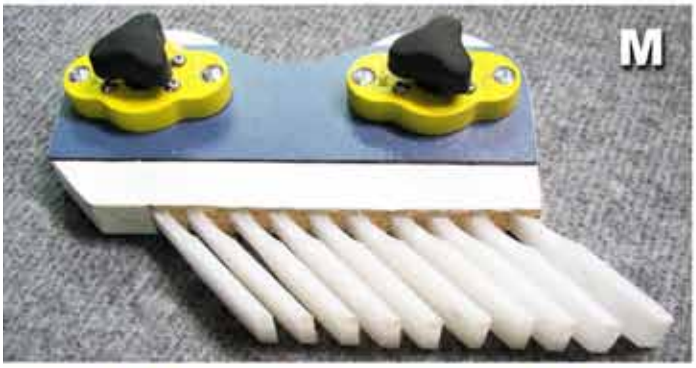

H


I


J


K
RULES
AND
REGULATIONS
1941
(M.O.1945/8-19/11/1945)
Page 95: Add the following new rule:-
1554. (a) Whenever an employee is booked for train duty, either at the commencement of or during a shift, the Officer in Charge at the station at which the employee takes up such duty must satisfy himself before despatching the train that the employee is fit to carry out his duties.
(b) No employee shall be allowed to take up train duty if he shows any sign of illness which is likely to render him unfit to carry out his duties or if he shows any effects whatsoever of having consumed alcoholic liquor or if it is known that he has recently consumed alcoholic liquor.
(c) The Officer in Charge must report immediately to his Controlling Officer (or if the Controlling Officer is not on duty to the Officer controlling Train Running in the area) for directions whenever it has been necessary for him to prohibit, in accordance with this rule, an employee from taking up duty.
Employees' fitness to perform train duties.


L
B.R.
TIMKEN


M


N


O
NRM
English Electric


P


Q


R

Mike Jack brought in a collectors model (HO gauge?) Deltic Loco as illustrated for tonight's talk. Mike got it while in England from the National Railways Museum. **Photo O**

A large Wagon by Graham Bell for his roller (or will it be in Tractor guise?) when out on large jobs. It will be great to see a train of wagons including water bowser (and chuck wagon?) trailing behind!

Graham used "Ti Tree" for the boards and the leaf springs where sourced from CMI Springs. **Photo P**

A large steel ring turned out to be a sample of the size of the mud drums on John Olsen's multi-tube (Yarrow-type?) boiler for his canal boat. John illustrated how he had to re-size the roller type tube expanders to get them through the mud-ring along with a chain drive and up into the end of the tubes. A few turns with the "ol" battery drill and a good seal is obtained. By working with an able assistant (Diana) from each end of the mud drums, all the tubes can be reached. Sods' law says the tubes supplied wall thickness is two different sizes! "These things are sent to try us". (Why?) **Photo Q**

Graeme Murray brought in 3 natty inventions, 1. a spring loaded scriber to mark out a piece of metal in his CNC machine, 2. a rotary folder to put a lip onto a round lid, and 3. a punch for making holes in spring steel. Graeme pointed out how useful those large hack saw blades are, as being tapered, an old one will make nice parting tools having the relief already made. **Photo R**

Thanks to Mike Jack and all the members who brought in exhibits. There are a lot of busy people out there! Bring in something, and you go in to the running for an award at the end of the year.

The evening ended with a very interesting talk by Alan Gasteen on the Deltic engines, along with anecdotes from his personal experience on the manufacture of these engines during his time with the company in Liverpool. Hearing these engines run on the test bench was an ear splitting experience!

Roger van Ryn

The Latest in Engineering

Extracts from *The Model Engineer and Electrician* of September 1, 1910

White Star Liners "Olympic" and "Titanic"

The work on the *Olympic*, says *The Engineer*, is now so well advanced that it is possible to appreciate the graceful lines of the hull. All the hydraulic riveting is now completed, and various portions of the superstructure are in evidence. While the steel workers have yet much to do, they have made such progress that the woodworkers and others are able to get ahead with their work in every direction.

The work on the *Titanic* is also proceeding very rapidly. A vessel with a rudder weighing 100 tons, beams 92 ft. long, and steel plates 36 ft. long, may be naturally expected to afford some interesting details with regard to the machinery. Each engine crankshaft weighs 118 tons, bedplate 195 tons, each column 21 tons, and the heaviest cylinder with liner 50 tons. The castings for the turbine cylinder weighed 163 tons, and for the propeller, which is of solid bronze, 22 tons.

Motor Cycle Notes

By "Phoenix"

Which is the Best Method of Driving a Motor Cycle?

The driving of a motor cycle requires but very little more than ordinary skill and manipulation, but the question arises, which is the best of the usual methods employed for the purpose.

The engine can be controlled either by means of the throttle or of the spark lever or of the exhaust valve lifter. Then, also, in certain circumstances the speed can be adjusted to the required level for temporary purposes by manipulation of the air lever and again by the use of a switch for cutting out the ignition.

In the modern machines fitted with handle-bar controlled carburettors, it is usual to arrange the gas and air levers together near the rider's hand, but on at least one well-known by means of the throttle or of the spark lever or of the exhaust valve lifter.
Then, also, in certain circumstances the speed can be adjusted to the required level for temporary purposes by manipulation of the air lever and again by the use of a switch for cutting out the ignition. In the modern machines fitted with handle-bar controlled carburettors, it is usual to arrange the gas and air levers together near the rider's hand, but on at least one well-known model, it is the spark lever and the throttle levers that are grouped together, while the extra air lever to the carburettor is manipulated by bending down and moving a short arm attached to a slide on the carburettor itself; this indicating, I suppose, that the makers intended the control to be largely effected by varying the position of the spark lever.
In my own personal opinion, the regular control of the engine should depend upon the movement of the throttle lever, and, in a slightly less degree, to the air lever, both of these being mounted together where they may be moved, either independently or in unison, with one thumb or finger, as may be the more convenient. The spark lever, being the one which should be the least required, may very well be located alongside the tank, or, for the matter of that, it could be set upon either the same or the opposite side of the handle-bar. Lifting the exhaust valve is all very well, but to set the throttle, as some do, to give a high speed, and then control the movements of the machine by frequent manipulation of the lifter is the very worst kind of driving. It is hard on the valves and very uneconomical, and results in sending the rider along the road in fits and starts instead of in a regular manner, with even firing all the time.
The best way is to advance the spark either to its full extent or nearly so, open the throttle get the desired speed and adjust extra air lever to suit, so that even firing goes on all the time; then, when are encountered, additional power is obtained by further opening the throttle and on down grades it can be closed as far as possible. There is nothing like a well-advanced spark and as weak a mixture as possible for cool and economical running.

Brian Cotton

Working Bee

Thanks to all the members (pictured) who turned up to help at the working bee on the 10th July (And also on the 14th of August)

They prepared stage 2 of the basement concrete job.

A special thanks goes out to Virginia Reichardt for the morning tea cake!

Around the Clubs

Model Torque. Journal of the Hawkes Bay Model Eng Soc.

May 2010 No5

Thames open weekend. Down at the Track. Last Months Meeting. Wanted. Of this and that. Fault Sheet on diagnosing Injector Problems

Model Torque. Journal of the Hawkes Bay Model Eng Soc.

June 2010 No6

Down at the Track. Last Months Meeting. Wanted. Of this and that. When Sail beats Steam. Sailing boat circumnavigates world in 48 days at average speed of 19 knots.

The Narrow Gauge. The Official Newsletter of the Adelaide Miniature Steam

Railway Soc. (Inc) No. 133 For July, August and November 2010 Editorial. Secretaries Corner. May 2010 Show of work: Lots of B+W photos and lovely projects. Article on Ome Railway Park and E10 2

MELSA Model Engineers and Live Steamers Association Maryborough Inc.

Queensland.

Newsletter No 66 June 2010

Editorial. Presidents Puff. News From Secretary Pictures of a members Stanley Steamers. Pictures of AALS Convention 2010. News from Sub Branches. Article on Doug Kuskie and Bede Taylor. Article on Brazing Copper.

The Generator. Newsletter of the Palmerston North Model Engineering Club Inc.

May 2010 No 356

Article: Trolley Skirts. Article: Featured Model: Half Beam Engine. Thank you from England Stan Compton. Lathe For Sale.

The Generator. Newsletter of the Palmerston North Model Engineering Club Inc.

May 2010 No 357

Articles: Featured model of steam driven gang saw. TTAFFY (Trevors Track Aligning Fault Finding Yard-stick)

Mailship. Newsletter of the Scale Marine Modellers Auckland.

Issue 333 Date: June 2010

Picture and Article: Revolutionary ship Designs: Service Ship and “littoral combat ship”. Does 43 knots at half power and makes no bow wave. Can turn at high speed.

Engine Booster. New of Los Angeles Live Steamers Railroad Museum.

June 2010.

Lots of colour pictures of HUGE locos.

The Keirunga Park Platform. The Journal of the Havelock North Live Steamers & Assosciates inc. Proprietors of the Keirunga Park Railway.

Issue No. 71 Winter 2010

Articles: Easter 2010 at the KPR. Art DECO 2010 with Ja 1271. Wedding reception on a steamer at the club. China's High-speed rail plan. Beijing National Railway Museum. Trip over the Raurimu Spiral. Mana Ariki.

Nothern Views Whangerei Model Engineering Club Inc.

Issue No 229 July 2010

Articles: Chinas High speed train service. Railways on the Isle of Majorca. Bendigo Tramways, $30 annual fee for adult.

Big Wheel News. The Steam Locomotive Society of Victoria Inc.

News and pictures of club running.

Wheels and Floats. Tauranga Model Marine and Engineering Club.

No 298 July 2010

Articles: Rolls Royce Engines Cont'd. 25cc high speed radio control boats.

Conrod. Otago Model Engineering Society.

Vol 21 Issue 6 June 2010

Articles: Locomotive Piston lands in wall of bedroom. For Sale ho track. Pictures of Anzac Day running.

Conrod. Otago Model Engineering Society.

Vol 21 Issue 7 July 2010

Articles: NZ120 gauge model railways history. Trip to the Central Fire Station. Boat Group. Scale Rail Group. Engineering group. Pictures.

Steamers and Dreamers. Newsletter of the Manukau Live Steamers Inc.

May 2010

Articles: Work done. Newmarket Viaduct Update. Boilers

Blast Pipe. Hutt Valley Model Engineering Society Inc.

July 2010

Articles: Pictures of Bits on the table. Fiftieth Annual Report 2009-2010 10 ¼ inch Gauge Nigel Bruce Ka942.

Roger van Ryn

Classifieds

For Sale

Lathe Tida TD 5AA

Belt Drive.
130 Centre height (5”).
800 centers (Approx).
Power feed longitudinal /crosswise.
Dual Metric/Imperial dials.
3 & 4 jaw chucks.
Faceplate.
Fix Steady.
Bore 25-30 mm (approx).
Various tooling.
$1800.00 o.n.o.

Mill Drill Exel RF 20 Type

Machine vice.
Small angle Plate.
Drill chuck.
Clarkson Imperial Milling collet set.
Some milling cutters & Drills
$1200.00 o.n.o

6” Rotary Table

$200.00 o.n.o.

For all the above contact Jan Scofield (09)2676970

Copper Boiler

Copper boiler new 5" gauge "springbok" B1 Martin Evans design.

Hydraulic tested.

Ph 09-2352018, Bill Parker.

More Working Bee Photos