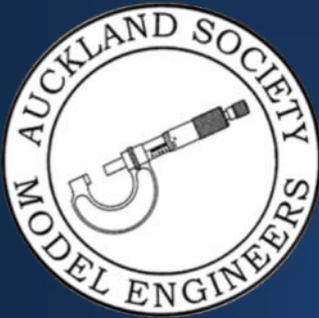


AUCKLAND SOCIETY OF MODEL ENGINEERS INCORPORATED

PETERSON RESERVE, PANMURE, AUCKLAND
PO BOX 14570, PANMURE, AUCKLAND 1741, NEW ZEALAND



Club House Telephone
(09) 570 5286

Club Web Site
www.asme.org.nz

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

Secretary
Position Vacant

Editor
Hayden Purdy
Email addresses
editor.asme@gmail.com
editor@asme.org.nz

MAY 2012
NUMBER 568

THE MICROMETER

REGISTERED NEW ZEALAND PUBLICATION

In This Issue:

- Page 2.....Train Roster
- Page 3.....Club Calendar
- Page 3-4.....President's Report
- Page 5-6.....Around The Clubs
- Page 7-8.....Country Member Workshop Visit
- Page 9-12.....Bits & Pieces
- Page 13-14.....Classifieds
- Page 15.....Notes From The Editor's Desk



Wa165 being run by the Gisborne City Vintage Railway across the Turanganui river from the wharves at Gisborne

Train Roster

Date	Electric	Electric	Steam	Station	Station	Station	Extra Guard
6 th May	B Cotton	P Eaton	<u>B Piggott</u>	G Murray	J Olsen*	W Parker	D Moffat
13 th May	M Granger	R Hannah	<u>D Russell</u>	G Quayle*	R Reichardt	M Richardson	
20 th May	P Haycock	M Hollis	<u>G Wills</u>	K Ryan*	A Shirley	R Stratton	P Dowdeswell
27 th May	D Housley	P Moy	<u>G Anderson</u>	R Street*	T Taylor	P Tomkies	R Smith
3 rd June	<u>T Robinson</u>	M Moore		S Weston	D Addis	P Boyes*	Bob Aicken
10 th June	M Plant	I Ashley	<u>G Bell</u>	R Brown	J Burnett*	R Crook	
17 th June	D Black	D Booth	<u>T Lawrence</u>	B Currie	G Dickey*	P Cunningham	J Cunningham
24 th June	B Cotton	P Woodford	<u>B Piggott</u>	A Foster	D Hamp*	G Healy	

Bold and Underlined name:

This 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 :

This 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:

On your rostered day you should arrive by **12.30 pm** to get prepared for the days running. If for some reason you are unable to fill your rostered date, you are respectfully reminded that it is your responsibility to find a replacement member to fill the gap - please don't let the rest of the team for the day be left "short-handed".

Please ensure you arrange the replacement member with one rostered to undertake the **same** role, to ensure we always have members with the appropriate training and experience on the day

Club Calendar

ASME Events	
1 st May	General Meeting - Speaker is Michael Cryns for the 2nd half of the talk on the restoration of the 1894 Auckland Library Clock - please note that this part will cover more of the technical aspects of the restoration.
8 th May	Committee Meeting
15 th May	Workshop Visit to Tony Lawrence's home
General Events	
12 th - 13 th May	Mana Ariki Open Weekend (7.25g only)
19 th - 20 th May	Thames Small Gauge Railway Open Weekend.
2 th -4 th June	Manukau Live Steamers Open Weekend (Queens Birthday Weekend)
6 th & 7 th October	HBMES 50th Anniversary Reunion

Presidents Report

May 2012

The Committee's immediate focus continues to be the outstanding issues arising from the MEANZ audit of our miniature railway in November. The latest matter to be dealt with is the introduction earlier this month of a "Daily Running Checklist" form to be completed progressively through each day that we undertake public running (i.e. each Sunday). The form is to be signed off by the train controller for the day and left (for the time being) with the Daily Running logbook in the Clubrooms – the Tuesday Club will be filing these in a separate folder in chronological order so we have a complete record. Work is in progress to deal with the other issues such that we expect to be "signed off" at the next MEANZ inspection.

A general working bee was held at the Club on April 14th – I am grateful to the four members (John Lankow, Trevor Taylor, Graeme Murray and Pete Woodford) who turned up to clean up the vegetation around the track with me. On the same date, another "cribwall" working bee was held at Tony Lawrence's yard in New Lynn attended by Clyde

Mitchell, Mark Luxton, Scott Meikle and Tony. You will note that many of these names keep on reappearing as it appears only a small number of Club members are coming along to working bees. I ask that more of you make the effort to attend the working bees which are vital if we are to keep the Club's assets in good working order. Our Tuesday Club's resources are severely challenged at present with several members suffering from operations and illnesses; as such more work must fall to be done by the general membership.

Members who have suffered some health issues of late include Mike Orange with a triple bypass, Hugh Martin with a hernia operation and Bob Fosberry undergoing some radiation treatment – we wish all of you a speedy recovery.

The review of the accounts for the year ended 30 September 2011 has been completed by the reviewer, Wayne Barnes. His report was tabled at the April committee meeting and confirmed he has no issues with the annual accounts as presented to the last AGM.

The next members "fun run" will be held on the afternoon of 16th June at the Club. By the time you read this, the run at the Manukau Live Steamers as part of their small gauge day on 25th April will have been and gone, so I will report on that next month.

The March workshop night was held at Greville Wills and attended by a small group – yes, it is quite a way to Waimauku but Greville travels it regularly to come to ASME! Anyway, the group enjoyed the tour and the related discussion, thanks Greville. May's workshop visit will be to Tony Lawrence's home shop in Titirangi – out west again, but not so far this time!

Ross Purdy has made good progress with developing and trialing of signals to protect our large tunnel – these have proved to be reliable after several versions. You may have seen them in use at the March fun run – now it is only a matter of working out the best way to make them vandal-proof!

After a suggestion received from our newsletter reviewer (Alan Emerson), the Committee decided to send the Hawkes Bay ME Society a donation to help with their financial recovery after an unfortunate loss of funds which became apparent late last year. This resulted in the postponement of their 50th year celebrations which are now to be held on the weekend of 6th & 7th October 2012 – please diary these dates as it would be good to have some of our members there to reciprocate the support their members gave ASME at our 50th Jubilee celebrations.

Hope you are getting more time in your workshop now daylight saving time has ended and the nights draw in much earlier.

Grant Anderson

(17th April 2012)

Around the Clubs

May 2012

Model Torque, Napier, February and March 2012

Successful Birthday parties held for Ross Bates [62] and for the Club [50]. Story on Harland and Wolff's shipyard with photo of a large turbine part for the Britannic. The story of the Russian B52 Super Fortress. A vintage tractor trip, a model loco and tender for sale and the forthcoming Art Deco event.

Slipstream Auckland Aero Club, March and April 2012

A lot of good reading and photos for aeroplane buffs. All sorts of models from rubber driven to 1/4 size with 2 engines, really great.

Whistle and Anchor SCMES, February 2012

Plenty of track running, a new turntable installed, articles on model and full size trains and on model and full size boats.

The Keirunga Park Platform, Havelock North, Autumn 2012 -

www.keirungaparkrailway.org.nz

Cover photo of the world's first mainline electric loco Plenty of photos of the Whangarei event. Good write up on the Baby Crocodile electric loco and on the 7 1/4" model of it.

Blast Pipe, Hutt Valley, April 2012

A good selection of coloured photos from various sites including Kapiti, Palmerston North and Mana Ariki. Also a lovely little Austin Seven and an article on harps

Wheels and Floats, Tauranga, March/April 2012

Please note the secretary's address is c/o 3 Waipuna Grove, Tauranga 3112. Some thoughts on advertising on the trollies. Photo of progress on the Cambridge and Rotorua track. Picture of the SA 19D loco for sale and some good funnies.

Engine Booster, Los Angeles, February 2012

Sad to note the loss of Gordon Sherwood. A founding member of LALS he passed away at the age of 100 years old. A real character. Also passed away, Jerry Brown at 82. Well known for his 2" scale steam shovel, a corn mill and other steam equipment. The ice cream making traction engine has a YouTube site Miniature Gaar-Scott steam engine making steam cream.

Expansion Link, Hamilton, March 2012

Visit to Manukau to support the Special Needs run. Vacuum brakes fitted to trucks a great success. Trip to Coromandel planned.

EBOP, Whakatane, March 2012 www.riveredgerailway.org.nz

A good web site well worth a look. Successful track running with a variety of locos. An article on the Aniwhenua power station overhaul by Club member Dave Fitton.

Blowdown, Kapiti, Autumn 2012

Article and photos of the Open Weekend, everyone looks happy. Write up on the Whangarei event. More on the restoration of the Dart.

The Generator, Palmerston North, January and February 2012 - www.pnmec.org.nz

Two more "Letters from England" covering a whole range of interesting subjects, well worth reading. Article on the TTT Co Mallet and an O gauge model of it. Photo and story of the Hutt Valley's new concrete track bed. Vintage signals used for training and pictures of vintage miniature trains in 600mm and 10 1/4" gauges. Photo of the compressed air engine that won the Les Moore Trophy and an article on the motor. Interesting story of the Tesla turbine with a line drawing.

Northern Views, Whangarei, March and April 2012 - wmec.org.nz

Interesting article on heat treating tram wheels. The story of lions versus train. Santa Fe to have a new Kohler engine. Thoughts on building a tunnel to join Alaska to Siberia. A lot of good photos from around the site.

Mailship, March 2012 www.marinemodellers.org.nz

Photos of the Grand Opening of the Model Boatyard in Neilson Street. The history of NZ lighthouses. Visit to Mark Belem's place. New model supply shop in Thames.

Country Member Workshop Visit

I had the pleasure of meeting one of ASME's furthest flung members in March, while on holiday in the Gisborne district. Joe Campbell has been a member of ASME since 1973 and is now retired from his years of electrical work for the local supply authority. I was visiting the Gisborne City Vintage Railway (GCVR) which operates steam-hauled excursions with restored ex NZR locomotive Wa 165 and knowing that Joe had an involvement with this Club, asked for him. He was not at the sheds that day, but the crew got him on the phone and Joe immediately invited me around for a visit to his home workshop.

Within a matter of minutes I was at Joe's home (Gisborne's not that big!) and was welcomed into his magnificent workshop. One is immediately impressed by the tidy and well organised state of this purpose-built shop; one we could all aspire to. The equipment is all nicely painted and everything well lit. He has a very nice Myford Super 7 Connoisseur lathe which he brought in from England, an Emco FB2 mill for vertical milling, another mill (brand name escapes me) for horizontal work and a large Colchester Bantam lathe, along with a variety of other minor machines (drill press, bandsaw, etc.) He is very pleased with the Newall brand of digital read out equipment and has this on several machines. Many books for trade reference and several desks for planning and drawing complete the set-up. I was impressed with how everything was organised and well set out so as to be readily at hand.



Joe has not been at all idle with all this machinery having built a number of models – he pulled out of its storage box his 3 and ½ track gauge LMS 2-6-4 “Jubilee” tank locomotive which has been finished but not yet run (there is no track in Gisborne) and a 1 and ½ scale Allchin traction engine which is complete, but currently stripped down for final painting. As with all workshop visits, one picks up good ideas – Joe had used some off cuts of

Brownbuilt commercial purlins to make a stack of horizontal shelves to store off-cuts. This fits in very neatly on the back wall of his shed and provides for a compact material store.

My visit was completed by an invitation to afternoon tea in the home, where I met his wife (Kay), daughter (Claire) and grandson (Zane) and enjoyed some freshly baked cake with my cuppa. Thanks Joe for a very enjoyable visit.



I should mention that Joe has been a “shaker and mover” in the GCVR (their website GCVR.org.nz is worth a visit). Much of the work which saw the Wa restored and also now 4 carriages rebuilt for use on excursions was due to Joe’s energy and leadership. Of course, this has been under threat of late with Kiwirail's possible mothballing of the Napier-Gisborne line, none more so than right now due to the landslip damage (understood to be partly due to failure to clear debris from culverts, etc.) earlier this month in the Whareratas – let’s hope the Government sees the light to ensure this rail link is maintained for the future.

Grant Anderson

Bits & Pieces

3rd April 2012

Hosted by John Olsen

Reported by Roger van Ryn

A rare prototype of a Portable Engine/Traction Engine built about 1890-1906 in the U.S. of A., is the inspiration for Peter Moy's engine. At first I thought it is a "Case" but Peter says about 150 of these engines were made by "Westinghouse". They have a water tube boiler. Peters making sense out of scant information, mostly a picture or two, to create this interesting 1/12th live steam model.



John Olsen spotted and explained Brian Cottons "whatsit?" as a Wheatstone Bridge, in prevalent use in the "early days" of electricrery. Used for a 100 years deducing the value of an unknown resistance, they were an essential tool for electrical people. The wheatstone principal is still used in some weigh bridges etc. where the other side of the bridge incorporates temperature compensation etc. Probably modelled in software nowadays.

Greg Burrows "had a go" at swaging(?) 1/4 steel rivets with a 7 ton hydraulic press, and found it works well, producing a nice finished head. (Having bashed steel rivets myself, and having not made a beautiful job, a more controlled method seems welcome.)

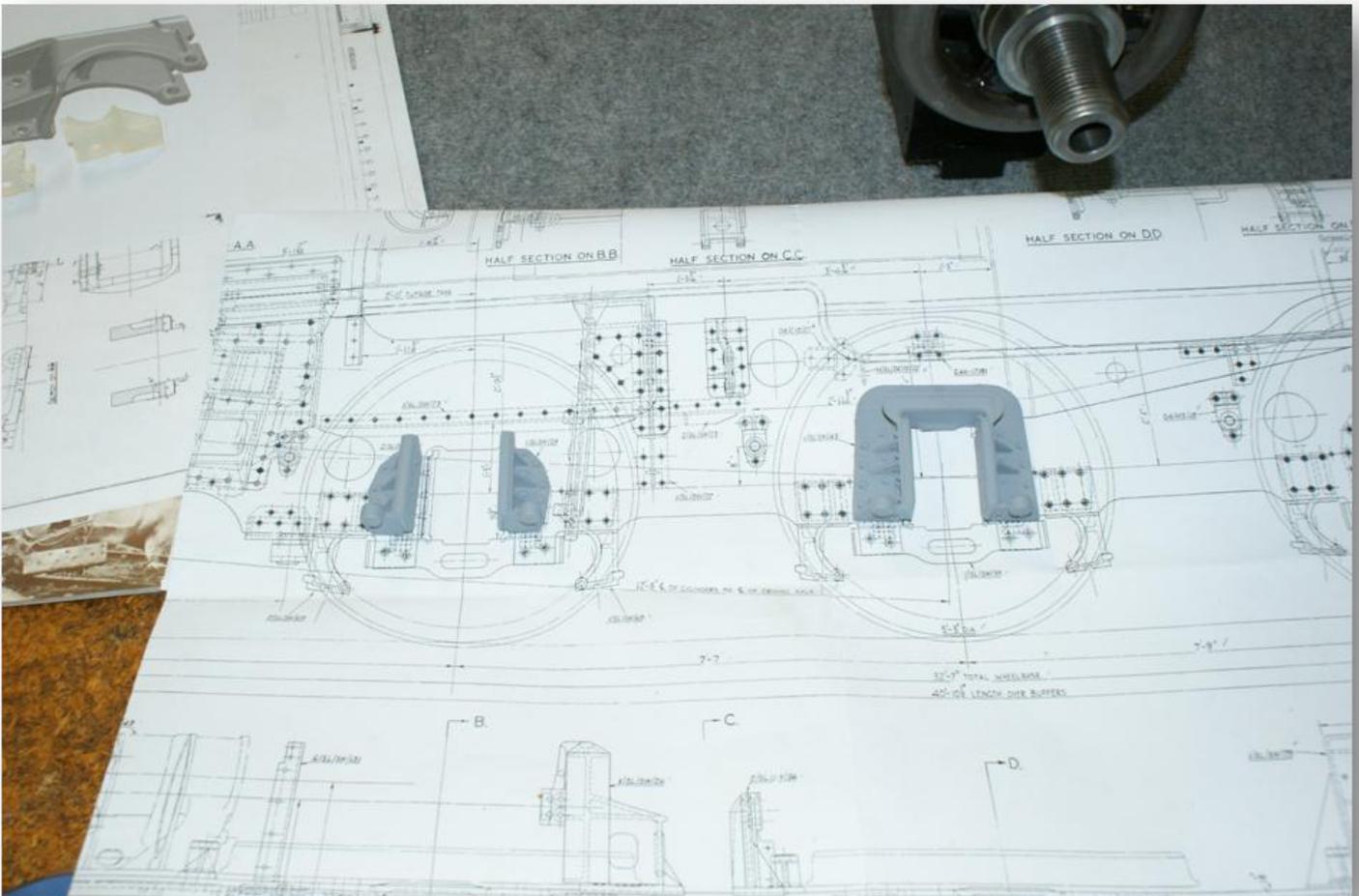


Some absolutely immaculate expansion links by Mike Jack for Martin Plants' Britannia, need to be seen to be appreciated! Whew!

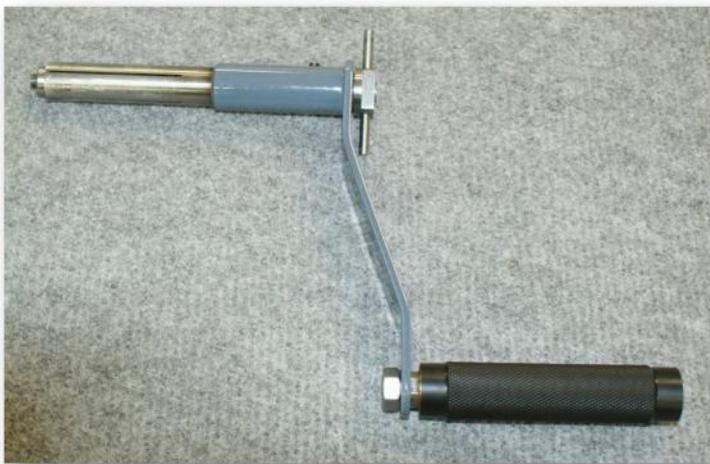
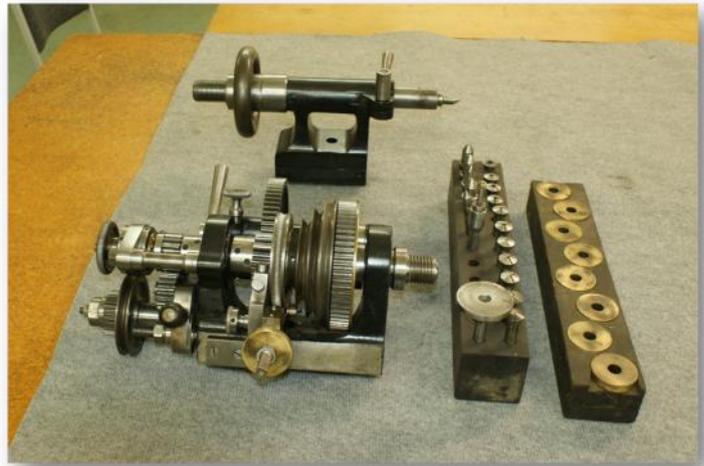
Tony Laurence also brought in some very fine interlocking concrete work made using polystyrene moulds. These were wire cut to shape and the concrete vibrated into the void. It sure sounds easy, but probably wasn't! All this hard work is to make more retaining wall for the high parts of the track,



Mike Jacks extensive presentation represents a huge amount of work done! Lots of hours drawing in 3-D CAD and having "rapid Prototypes" of parts made. A very useful service these days is the "houses" that make your prototype from a file that you send, and then courier them out to you anywhere in the world. Mike had some examples of spring hangers made in two different technologies, which then will be used to make wax patterns for "lost wax-casting" in brass. In order to end up with a part the right size, Mike has worked out an allowance of 3% for shrinkage through the whole process. Mikes using original "works" drawings of the full size prototype, to make working drawings. This is a B.R. Standard Class 3MT tank loco of which there are no surviving originals. Mike mentioned a trust who are involved with resurrecting this loco.



The headstock from the 1890 Henry Milnes Ornamental lathe which Murray Lane is refurbishing for MOTAT has a lot of interesting features which Murray explained to the meeting. Among these, the headstock has dividing mechanisms to allow rotating between stops and has tapered hardened-steel bearings. The tail stock is of the long-travel kind. Murray also has the rack of collets that go with this lathe.



Ross Purdy machined a tapping handle from a kit of miscellaneous stock. It fits into the arbor of the lathe to wind the chuck manually. This is usually used for manually tapping and threading parts in the lathe and reversing out easily.

Scott Mickle donated some surplus "closed cell wax" slabs to members, to keep those edges of cutters sharp once you have spent hours sharpening them! Heat gently and dip the end of the cutter to produce a non-permeable coating. (Interesting form of material, smells like the Excellite range of nut-drivers lots of electrical people use!?)

Graeme Murray also brought in some rapid prototype bits for instruments at work, which have a 0.2mm hole in them. Graeme mentioned one of these "rapid prototyping houses" has possibly the only machine capable of producing titanium parts in NZ. These have the appearance of being scintered.

To-nights speaker was Michael Cryns (as in "Hynds") with a jolly interesting talk illustrated by a media presentation. This included pictures and short movies on his work repairing/restoring the Auckland Art Gallery clock. Lots of hurdles on the way achieving this task, especially bureaucratic ones, unsafe building practices, and other safety issues that Michael had to sort out on the way. 2nd half of the story at the May meeting. Be there or be square!

Rog.

Classifieds

For Sale

Jim Yearn Estate

These items are in Papakura to view - contact Tim Robinson (Ph 09 296 2949)

Lantaine Lathe \$2570

5" centre height, 36' between centers mounted on a substantial steel frame bench with drip tray. 3 jaw and 4 jaw chucks, face plate, 4 way tool post, 1/2" Jacobs drill chuck, 13mm keyless drill chuck. 3 HSS tool holders, boring bar and holder, parting tool and holder. 2MT carbide centre, container of various HSS tool bits Container of 2MT drills

Tanner floor mounted vertical band saw. \$180

Quorn Cutter Grinder \$800

Brought by Jim unfinished which he completed. Spiral attachment, drill sharpening attachments, remote centre arm, 2nd size pulley for motor, box of various fittings, 6 job holding collets 3/16, 1/4, 5/16/ 3/8, 7/16, 1/2", 8 various shaped stones mounted on collets, 8 1/4' point stones.

Dore Westbury Milling Machine \$1355

Mounted on a steel stand with built in cupboard; 3 1/2 X 3 1/2' angle plate, 45mm dia boring head; Myford 2MT collet holder with 6 collets, 1/4, 3/8, 1/2", 6, 10, 12mm, 1/2" Clarkson auto-lock chuck with 1/2" collet, 1/2" ROHM drill chuck, Emco rotary table, 50 (2.4") high, 40 to 1 ratio, 15 degree direct indexing, 33 – 36 – 39 dividing plate, with home made angle tilting base, clamps, 3 slitting saw arbors, 50 end milling cutters 1/8 – 1/2", small tool makers vice.

12" X 8 "Cast Iron Surface Plate \$160

Overhead flexible drive For engraving polishing etc. \$45

3" record work shop vice \$50

Adjustable Starrett parallel set. \$85

0-1" micrometer Moore & Wright, and 0-25mm Mitutoyo \$20 each

0-25 +25-50mm micrometer Mitutoyo, very rare \$90

1 1/2" diameter Moore & Wright dial indicator .001" 0-.3" \$30

2" diameter Somet dial indicator .01mm 0-10mm \$50

New Mitutoyo vernier dial indicator 002mm 0-.8mm \$150

Verdict vernier dial indicator .0005" .04" \$50

Deckel 750mm (6") vernier height gauge \$80

2MT reamer \$80

Box of 5 slip stones, 2 Arkansas stones, 4 diamond hones. \$50

Tin of 6 taps 1/2" +, 3 machine reamers, 20 5 sided broaches. \$20

600 stainless ruler. \$18; 18" stainless ruler \$10. Carpenters square. \$15

Box of 28 MT drills ranging from around 5/16 to 7/8. \$125

Small set of drawers with around 100 dies and 200+ taps \$200

BA, BSW, BSB, ME, metric all used.

Set of 10 Bergeon screw drivers with spare blades. \$60

Set of 6 very small posidrive screw drivers. \$20

22 needle files mounted on wooden plinth. \$20

12 needle files in plastic case. \$18

Optivisor \$30 Optivisor \$20

Jim Jordan Estate

These items are in Howick- to view contact Murray Lane (Ph 534 8396)

Pictures of all these items can be supplied by email contact Murray at
lanemjk@slingshot.co.nz

Emco Super 11 metric lathe with milling head \$6000

Mounted on a stand as a complete unit, bought by Jim new in 1983 and has only been used for model engineering. Lathe: 140mm (5.5") CH, 650mm (26") BC, 4MT with 26mm (1") bore; all geared head with 8 spindle speeds via two speed motor 55 – 2200 rpm; 14 metric threads 25 – 2.5mm pitch and 9 imperial 12 – 96 tpi, set of change wheels for other threads; cross slide 135mm (5.3"); top slide 100mm (3.9"); tailstock 2MT, 60mm (3.1"). 250 (10") face plate, 140 (5.5") 3 jaw chuck, 150 (6") 4 jaw chuck; Set of change wheels, 2 2MT 1/2" drill chucks; centers, rotary center; MT sleeves; various HSS and carbide tipped tools, 2 tool holders, set of small fly cutters; dog drive; fixed and moving steadies never used. Milling head:- all geared head 6 speeds 120 – 2000 rpm; column 340 (13.4"); minimum throat 140 (5.5"); quill 40mm (1.6"); 2MT; 140 X 175 slotted Emco angle plate; Emco rotary table, 50 (2.4") high, 40 to 1 ratio, 15 degree direct indexing, 33 – 36 – 39 dividing plate; adapter plate to mount chuck to table; dog clamps; 110mm Emco machine vice, small angle plate; spanners and hex keys; manual and parts lists. This machine mechanically as new but has been sitting in a workshop for around ten years and there is some deterioration of the paintwork.

Heavy duty X – Y compound table \$130

Table 390 X 160, travel 330 X 130, height 115mm.

4" drill/milling vice \$20

Record 5" workshop vice \$70.

A model radio controlled 1-90 scale deep sea Dutch tug \$200

900mm long, made from a Billings kit. A small amount of work required to finish and requires a receiver and transmitter.

Notes From the Editor's Desk

Secretary Position Vacant

Our Secretary elected at the last AGM, Ross Smith, has had to stand down from the role for personal reasons. That means we have a vacancy to fill through to November. The Secretary's role is an important one and one we must fill to meet certain statutes and our own Rules. The job is mainly one of attending meetings and recording the Minutes, so that the Club has a good record of proceedings for future reference. The Club needs to have this role filled by the May General Meeting, so would you please ask yourself "Can I help the Club by filling this role for the next 6 months?" Please give Grant a call if you can. **Ph (09) 576 8330**

BOC URGENT RECALL

BOC's urgent recall (dated January 2012) of MAP PRO, Super Ego and Trade Flame Gas cylinders, manufactured by Worthington in the USA and sold by BOC (Part Nos 35663, WMC-US 211056, 211067 & 35490U) due to the gas cylinder not resealing properly once the torch has been detached. If you have any of these cylinders, it is suggested you contact BOC Customer Services for advice **(0800 111 333)**.

Train Drivers

A reminder that all drivers on the ASME track need to remain vigilant while driving on the track - remember, "SAFETY IS NO ACCIDENT"!

Be Identified with Club Apparel

ASME dress shirts available by order. Club embroidered 60mm dia. sew on badges. Ideal for your driving overalls at \$10.00
Contact Hugh Martin; **Phone (09) 536 4544**

Hayden Purdy