

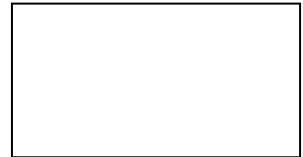
The MICROMETER

THE AUCKLAND SOCIETY OF MODEL ENGINEERS INCORPORATED
Peterson Rd Reserve, Panmure, Auckland
PO Box 14570, Panmure, Auckland 1741, NEW ZEALAND
Club House Telephone (9) 570 5286
Club Web Site www.asme.org.nz

Number 543
February 2010

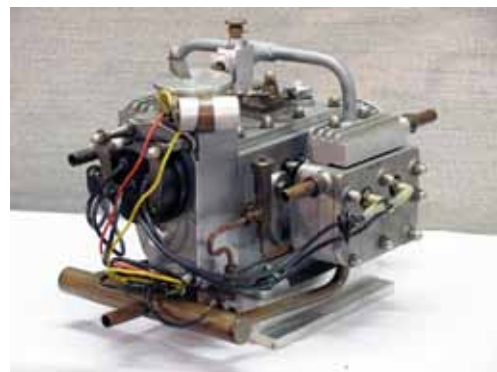
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REGISTERED NEW ZEALAND PUBLICATION

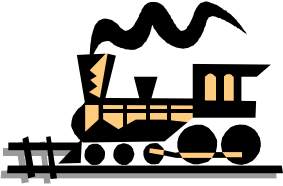


Happy New Year to all.

**Congratulations to Brian & Ainsley
Cotton on the arrival of Sarah.**



**A fine 4 cylinder horizontally opposed engine
seen at the recent ASME 50th Jubilee Exhibition**



Train Roster

| | Date | Electric | Electric | Steam | Steam | Station | Station | Station | Extra Guard |
|----|-----------|------------|------------|---------------------------|-------|--------------------|------------------|----------------|--------------|
| | 7-Feb-10 | M Plant | T Robinson | <u>G Bell</u> | | P Jones | G Kemp | J Lankow | |
| | 14-Feb-10 | J W-Buys | P Woodford | <u>L Farquhar</u> | | T Lawrence | D Leybourne | W Lord* | |
| am | 21-Feb-10 | J Yearn | D Black | <u>A Gasteen</u> | | I Lyons | H Martin* | S Meikle | |
| pm | 21-Feb-10 | D Booth | A Cotton | <u>M Jack</u> | | A Murley | G Murray* | E North | |
| | 28-Feb-10 | R Craig | T Crake | <u>B Piggott</u> | | J Olsen* | W Parker | G Quayle | |
| | 7-Mar-10 | P Eaton | M Granger | <u>A Pritchard</u> | | G Farquhar* | R Reichardt | M Richardson | |
| | 14-Mar-10 | J Harrison | D Housley | <u>D Russell</u> | | K Ryan* | B Sandford | A Shirley | |
| | 21-Mar-10 | T Lawrence | J McManus | <u>G Wills</u> | | R Stratton | R Street* | P Tomkies | P Dowdeswell |
| | 28-Mar-10 | M Plant | T Robinson | <u>G Anderson</u> | | T Taylor* | S Weston | D Addis | A Whillans |

PLEASE NOTE: The Panmure Basin Festival Day is on the 21st February, so an extra roster (the first row) has been added for 10am through 1pm.

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.

Club Calendar February 2010

| | |
|-------------------------------|---|
| February 2 nd | General Meeting, Peter Woodford will be giving a talk on the Bullied Pacific's. Peter's father from the UK will be here also and he fired these engines and will be able to answer any questions. |
| February 9 th | Committee Meeting |
| February 16 th | Workshop Night for February will be held at the clubrooms, bring along anything you are currently working on. |
| March 13 th 3.00pm | Club BBQ and family get together, bring you loco and run on the track just for ourselves. Dinner will be at 6.00pm, all members and families welcome. |

Presidents Report January 2010

Happy New year to all members and their families. I trust you had a good break and are refreshed for an interesting year ahead with your model engineering.

On the Committee front, we have a volunteer for the Librarian role which became vacant late November but are still looking for someone to relieve Dave Russell from having to do the two principal jobs (Secretary and Editor). I would still very much like to hear from anyone who would take over one of those roles - please give me a call.

The latest status of the lease with Auckland City Council is that just two days before Christmas we received draft copies of the sublease and license. Previously I have referred to the latter as the "lease" but it's the same thing, i.e. covers all ASME land either side of the Transpower transmission corridor. The transmission corridor land is covered by the sublease. With the approval of the members given at the December Special General Meeting, we are now proceeding to vet and negotiate changes where possible to these drafts in the hope they can be finalised without undue delay.

Thanks to those members who responded to the call to provide the entertainment slot at future monthly Club meetings. We have been able to map out the programme till April and still have some other offers to take up. However many of these are for DVDs, so it would good to have a few more speakers - if you can help out give me a call.

On a similar vein, we are looking for some volunteers to host the Workshop Nights, held on the third Tuesday of the month. Most recently these have been held at Mike Jack or Graeme Murray's workshops

and it would be great to view other workshops. The idea is to share ideas and see what works best for each in his own patch. Give me or a committee member a call if you can help with this in the year ahead. The ASME Bereavement Scheme was formally adopted at the December general meeting. It would be great to identify several members who could fill the role of Club representatives ahead of the need for same – give me a call if you would like to assist in this role.

We will be looking to advise of the award of the Frank Roberts Cup at the February meeting. This has been based on the Committees assessment of the quality of bits and pieces brought along to Club meetings over the year to October 2009. I record a vote of thanks to Murray Lane for doing the leg work in preparing a basis for assessing this which helped the Committee to a very large extent.

Our hearty congratulations to members Brian and Ainsley Cotton on the safe addition to their family – a daughter Sarah who arrived just before Christmas. Glad to hear that all are safe and well.

We had a small incident at the track in December when the locomotive transfer loading rail was being used during Sunday public running time. The stop sign was placed in the middle of the track just around the curve but an approaching train had insufficient time to stop before hitting the stop sign, resulting in the derailment of the locomotive. Until the Safety Committee come up with a more permanent fix, would anyone who is using this loading rail please make sure that the stop sign is placed at the end of the straight section of track directly down from the station, so that it is in full view of the station crew and of train drivers preparing to leave the station. In addition, please let the stationmaster know before placing the stop sign. Only then proceed to block the track with the loading rail. This should hopefully avoid a reoccurrence.

By the time you receive this, the 2010 Model Engineering Convention at Nelson will be over. It would be great if we could have a report from any member who attended to publish in a future issue of the Micrometer.

Welcome to new members Peter Tomkies and Desi Addis. Additionally Michael Cryns was welcomed at the December meeting. I trust you will all enjoy your time at ASME. The resignation of Kent Toyoda was also communicated to the December meeting.

I'm looking forward to the family afternoon on 13th March. To assist with planning for the BBQ, please would you let Greville or Dave R know if you are coming and how many should be catered for.

Well that's all for now, happy model engineering.....

Grant Anderson

Bits & Pieces, General meeting 1st December 2009

Reviewed on the night by Murray Lane

John Ohlsen after reading Bob Fosberry's article on overhead belt drives brought one in for us all to see, the item included fast & loose pulleys, although old it had seen little use. John is going to rig it up one day to drive his large 50 year old but almost new shaper. Murray told how at MOTAT they have a whole workshop of equipment (8 machines) running from an overhead layshaft.

Murray Lane had a number of items this month from his home workshop. Firstly was the burnt out motor off his recently purchased 2nd hand linisher, also the table and angle slide bar for the same machine. Murray has modified the table using epoxy to smooth out and level the surface. **Photos A & B**

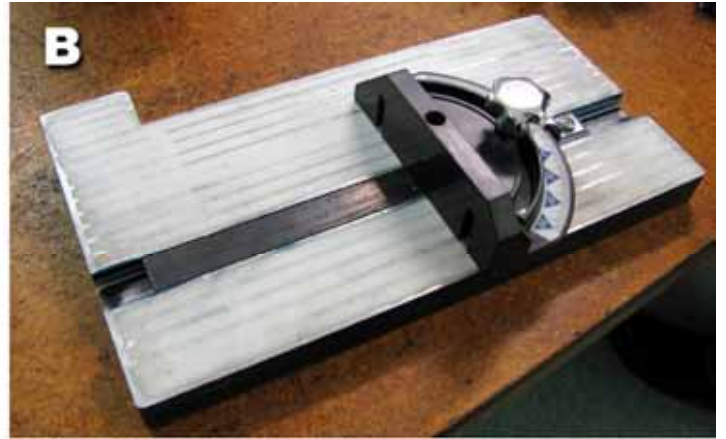
Secondly Murray had brought in an Armstrong Milling Collet holder that had proved to be unreliable so he has modified it to accept collets from a Vertex R8 Collet set. The problem he now has is that he has to purchase collets in 0.5 mm sizes to cover the range needed. **Photos C & D**

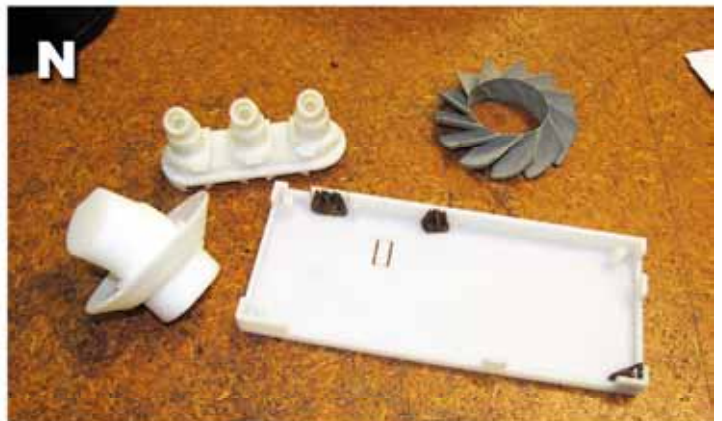
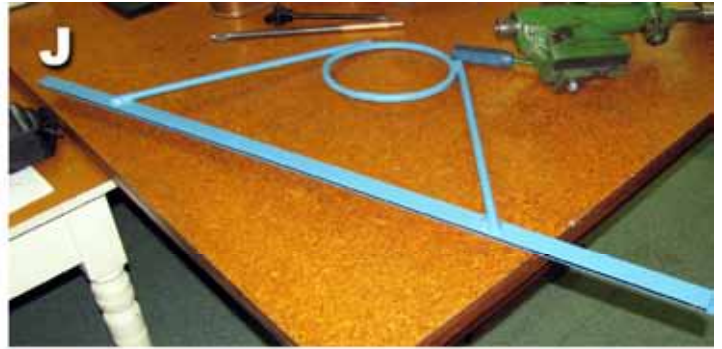
More on collets this time for the Unimat, Murray explained how the collets get so tight that they break on removal when hit off centre by the striking bar. Murray has fixed this problem by making an accurate striking bar.

Next was a damaged and replacement fibre gear off his Myford lathe, the replacement gear was made by Ross Reichardt. **Photo E**

Murray Lane revolving tool holder stand from his Myford **Photo F**

The last item from Murray this month was a modified tailstock for a Myford lathe. This one was made by Warren Green and Murray is going to re-design and make a similar item with some more modifications to make it more useful and user friendly. **Photo G**





The next item was brought in by Bill Parker, it was a tool box from a Bamford Horse drawn agricultural machine, Bill is going to install this on a full size traction engine. **Photo H**

Greville Wills had a problem with some crox fittings bought from the flea market, they where so thin gutted that they just broke through the bottom of the thread when trying to tighten. Greville has also had to modify some lamp fittings to replace some that are clearly not up to standard. A large steel hop arrangement is for guiding rope back on to a recoiling drum. Lastly he has had to modify the door seal for a Fisher & Paykel to make it stay in place. **Photos I & J**

A what is it from Gary Farquhar was the next item on the table, it consisted of a small brass tubular contained with a small steel spoon shaped piece attached to the lid. The item was identified as a container for oil with the steel piece being used as a dipper to transfer some of the oil where needed. **Photo K**

Graham Bell has made a spud pan for his traction engine, Graham is converting his roller to a tractor, this involves a new smoke box, front axle and wheels also the rear wheels are a different diameter so all in all its quite a big job making the bits. When finished Graham reckons he will be able to change from a tractor to a roller in about one hour. **Photo L**

Peter Woodford described his item as the gyroscope from the Navel College that had just been repaired after being dropped. Peter also had a few items made on a 3D rapid profiling machine, these machines work a bit like an inkjet printer except instead of ink they lay down plastic in layers to build up items in 3 dimensions, a file is sent directly from a CAD program to the machine. The machine cost about \$150,000 when new but the price of them has now dropped to about \$80,000. Peter gave a fairly detailed description of how the machine worked. **Photo M & N**

You will remember the Commer TS3 engine that Allan Foster is modelling, this month Allan brought one of the working (he hopes) injectors for us to have a look at, I can't wait to see this engine running. **Photo O**

Richard Street produced a Stanley Archer tapping head, It was described as having a planetary gear set inside it.

From the inventors workshop this month Graeme Murray brought in a jig that has a heating head to facilitate attaching a membrane on to the end of a tube. Graeme also had a small computer mouse that he had modified by adding a small button click switch to the side. **Photo P**

My offering this month was a chopped up pair of digital vernier being modified as a digital readout for the quill depth of a mill drill. The steel that the vernier was made from was extremely hard so it was cut with a Dermal cut off wheel as pictured. **Photo Q**

Dave Russell

The Latest in Engineering

Extracts from *The Model Engineer and Electrician* of a hundred years ago.

From the *Editor's Page* of the "*M. E. & E*" for January 20, 1910

"Will you please send me a sketch of the head of a torpedo showing striking apparatus in detail, and say how it is worked when it leaves the ship?" Such is an inquiry we recently received. It is typical of a large number of similar ones which have come to hand in the course of the year. Unfortunately, there are limits to the resources of even our Query Department, and we must say that requests of the nature of the one just instanced almost reach those limits. The details of the striking apparatus of a torpedo are, be it known, confidential. We say so on the best authority, for we recently attempted to abstract the desired information from such a source for the benefit of our correspondent, and failed ignominiously. We therefore trust that the numerous inquirers, both past and prospective, to whom these remarks are addressed will accept this explanation and act accordingly. In this particular case it has been suggested that the striking apparatus of this model be represented by a diminutive screw fan, two-bladed, in the nose of the torpedo. The motion of the torpedo in the water revolves this fan, and after a certain distance sets free the striker, so that the torpedo becomes "dangerous."

From the "*M.E. & E*" of February 3, 1910

An International Exhibition of Aeronautics is to be held in Rome in March this year. Arrangements are being made for the inclusion of many interesting features, notably, the Competition Section, which will be wide in its scope. Model aeroplanes, kites, and dirigibles are to be well to the fore. Everything connected

with aeronautics as an industry and a pastime, from the raw materials to the highly finished man-carrying flyer, will be there to be seen. The Exhibition will be open for one month. Further particulars may be had from Mr. Oswaldo Boeri, Urbino, Italy.

From the "M.E. & E" of August 26, 1909

A Remarkable Lens.

A new and clever invention has recently aroused much interest in the photographic world. It is a periscopic lens, which, to put it briefly, enables a person to see all around him. An illustrated article on the subject appeared in the Amateur Photographer and Photographic News of August 10th last, which is, indeed, well worth perusal by everyone interested. Messrs. Aldis Bros., the well-known opticians of Old Grange Road, Sparkhill, Birmingham, are the investors, who, with a newly-formed company known as "The Improved Periscope, Ltd.," are manufacturing it at their Sparkhill works. The enormous assistance that this lens will be to the look-out man in a submarine is obvious, as the optical conditions of the periscope before the invention of this lens rendered only part of the horizon visible at one time. The uses to which it can be put are almost infinite, and we are pleased to note that the invention and manufacture are entirely British.

Brian Cotton

Around the Clubs, reviewed by Alan Emerson

Mailship, Scale Model Marine, Oct and Nov 09

Good Club news with photos from the 50th, Waihi and Hawera events. Write up on warships.

Northern Views, Whangarei, Nov and Dec 09

Good Club news and an article on the weird and wonderful Boynton Unicycle Railroad. Also an article on the Eritrean Railway being rebuilt after some very turbulent times. Another idea that probably seemed a good idea at the time was to build a mobile fort on railway lines, not sure whether it was ever used.

Series of pictures of the working bee involved in some serious track laying

Blast Pipe, Hutt Valley and Maidstone, Dec 09

A whole lot of interesting Club news and pictures. Coloured photo on the cover shows Basil Wilson on his Ab with Peter Baker as Santa behind him, taken in the 1970`s.

Leading Points, Thames, Spring 09.

Cover picture of Thames in the old days and of the refurbished trolleys. An article on the Cable Car in Wellington and a trip on the Overlander.

The Generator, Palmerston North Nov 09

Another very good Letter from England from Stan Compton, always a good read. Article on the visit to Tauranga with photos and progress on rebuilding a loco with Hackworth valve gear. A poster with details of their Locomotion 2010 Event to be held on the 6th and 7th of March is displayed in our Clubroom. Also a lathe and a metal bender for sale.

Workbench, Durban Society of Model Engineers, Dec 09

Good article on Charles Babbage also, apparently known as the father of the computer. Amongst other things he is credited with the cowcatcher the standard rail gauge, lights for lighthouses and the Greenwich time signal. His website is <http://ei.cs.vt.edu/~history/Babbage.html> An interesting article on the Gautrain. A people mover to take people from towns to the airports with connecting bus services. Hopefully to be finished in time for the Soccer World Cup.

Con Rod, Otago, Nov 09

All the groups seem to be doing well with some interesting outings. One on the Taieri Gorge Railway behind a steam loco. Another was a visit by a member to the Maritime Museum in Fremantle to look over the submarine Ovens. Some really historic photos too. A box Brownie camera belonging to a sailor was found recently and the film developed. The photos show the bombing of the American fleet at Pearl Harbour while it was all happening.

Blowdown, Kapiti, Summer 09

A lot of good photos of locos taken at Havelock North at Labour Weekend. A trainset in a briefcase for the real enthusiast. Progress on the Seaview Extension, despite the high cost of the paperwork, and progress on the Meanz requirements.

Wheels and Floats, Tauranga, Nov and Dec 09

More on the total number of steam locos built, photos of models on the table and on the track. Some good funnies and steam bits for sale. Interesting picture of a section of Brunel's vacuum railway.

Expansion Link, Hamilton, Nov 09

The night run proved to be a great success, as did several Birthday parties. Thoughts about the need for first aid training.

Canterbury Tales, Christchurch, Nov 09

Proposal to carry fire extinguishers on IC locos after a petrol leak was discovered on one. Bad attack of vandalism on the container and engine shed, not helped by the failure of the security system and the insurance company wanting to impose a very large excess. Photos of models taken on Awards Night.

Wanganui Mixed Traffic and Railscene, Nov 09 -Jan 10

Reports on a number of successful events and outings. Write up on member's visit to Hawke's Bay and an interesting letter from a member now living in Australia. Visit to the Masterton Model Railway Show which included a visit to the Pahiatua Railcar Society and to the Middleton Model Railway and Cheese shop

Model Torque, Hawke's Bay, Nov 09

Plenty of good Club news covering the comings and goings of members and successful track running. The demolition of the old stables in front of the Clubhouse seems to have created a rat problem in the tunnel. The hot weather last year and the resulting fire bans mean some changes to Open Days could be necessary. The HB Vintage Machinery Society event held at Hastings very successful and well patronised.

Southern Rails and Sails, Invercargill Dec 09/Jan 10

Great photos and articles on all the various sections, a good read.

Engine Booster, Los Angeles, Nov 09

The Halloween show must have been really something. From running through a full size western town, presumably through the smoke, to black light displays where ghosts flew through the air on bicycles, to the Witches Rest Home and on to all sorts of ghost train type attractions. An enormous amount of work and planning must have gone into this event. People waiting in the queue were entertained with animatronic displays and other ideas and a baby exchange helped people with little ones too small to ride. All sounds brilliant.

Alan E

Other Important Items

Copy of a letter received from Manukau Live Steamers

Dear Sir

On behalf of the committee and members of the Manukau live Steamers we would like to congratulate you on a very successful 50th Jubilee model exhibition.

The organisation and display of models was absolutely superb. It was also great to have the opportunity to view once again the many models from past members no longer with us.

The writer spoke to many members of the visiting public at the exhibition and without exception the feedback was "this is fabulous".

As fellow modellers we can really appreciate the amount of teamwork required to present such a wonderful display.

Our members are unanimous in voting this the best we have seen.

Yours Sincerely

Mike Orange

Secretary, Manukau Live Steamers.

Otago Model Engineering Society Inc – Annual Display Invite

Saturday 30th January – Sunday 7th February 2010, See the flyer on the notice board at the clubrooms.

Entertainment for Upcoming Meetings.

Thanks to all who have offered to help with items of interest to entertain us at future General Meetings.

February meeting: Peter Woodford on the Life and Major Locos of Oliver Bullied probably assisted by his father who will be visiting from England, Peters father fired some of these Locos in his younger days.

March, A 15 Minute DVD on building a Boeing 747 from Lex Farquhar and also another of the "Workshop Series" DVD's as shown by Peter Woodford in the past.

Club BBQ, LPG bottle

Recently we loaned our BBQ to another club using the track area, we were embarrassed to be told that the LPG bottle was missing, could the person who borrowed it please return it to the club.