THE AUCKLAND SOCIETY OF MODEL ENGINEERS INCORPORATED

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REGISTERED NEW ZEALAND PUBLIICATION

ASME INC.

The MICROMETER

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Northwestern Steel and Wire locomotive number 80, July 1964

July 2010 | Number 548

Train Roster

Date	Electric	Electric	Steam	Steam	Station	Station	Station	Extra Guard #
4-Jul-10	M Granger	J Harrison	**A Gasteen**	Voluntary	D Addis	**I Ashley***	G Briggs	
11-Jul-10	M Hollis	D Housley	**M Jack**		P Boyes	R Brown	**J Burnett***	
18-Jul-10	T Lawrence	J McManus	**B Piggott**		R Copeland	**R Crook***	P Cunningham	J Cunningham
25-Jul-10	P Moy	T Robinson	**M Orange**		B Currie	**G Dickey***	G Farquhar	
1-Aug-10	A Murley	J W-Buys	**A Pritchard**		A Foster	**D Hamp***	R Hannah	
8-Aug-10	M Plant	P Woodford	**D Russel**		G Healy	**P Jones***	G Kemp	
15-Aug-10	J Yearn	D Black	**G Wills**		J Lankow	M Luxton	**I Lyons***	P Dowdeswell
22-Aug-10	D Booth	T Boyd	**G Anderson**		H Martin	**S Meikle***	G Murray	
29-Aug-10	B Cotton	R Craig	**G Bell**		E North	**J Olsen***	B Parker	

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

Club Calendar

July 6th	General Meeting, John Olsen will show a video on the French Locomotive Works.
July 10th	Working Bee at the clubrooms to break up some concrete 9.00am, bring sledge hammers etc.
July 13th	Committee Meeting.
July 20th	Workshop Night for July is at the clubrooms.
July 24th	Club mid winter luncheon dinner at clubrooms 12.00noon for meal at 1.00pm subsidised @ $15 per person, please pay at club meeting 6th July or by cut off 10th July
September 25th & 26th	ASME Annual Exhibition at clubrooms, judging of displayed items.
October 16th	Club Spring Saturday running day with loco competitions, 10.00am - 3.00pm
December 11th	ASME Christmas Dinner and Annual Exhibition Awards presentation.

Presidents Report July 2010

Last month's speaker was the second talk by a member this calendar year and Trevor Taylor gave an interesting account of his experiences as an apprentice on the Western Australian Railways. We have several other similar talks by members lined up for later in the year and I thank all members who have volunteered to give a talk – we now have enough to take us clear into next year!

The social luncheon for 24th July is all organised and you will see details elsewhere in this newsletter. This is a new initiative to have a day time occasion mid winter where we can all get together to socialise, with our wifes/partners as applicable. Please support this initiative by booking and prepaying so that we can give accurate numbers to the caterer. We are limited to about 50 persons for a sit down meal, so note that the bookings are on a "first in, first served" basis!

Further to recent updates regarding our new licenses (read as leases) with ACC, I am advised that Transpower has agreed with ACC to extend the early termination clause provision in the new license arrangement out to 12 months, but there are still several other clauses which ACC attempting to renegotiate. When the ACC is satisfied with the form of the arrangements, ASME will be supplied with a sublicense for review, so it would appear that finalisation of this important matter to our Club is still some time off.

Last night another workshop night was held with a visit to a members home and a look at his projects and set-up. These are always very useful and educational for most. I heard several people make a comment along the lines of "that's a good idea; I've learnt something I can use on my project". If you would be happy to host such a visit to your workshop, please let me or someone on the committee know and we will programme it for a suitable time. Thanks to Mike Jack, John Olsen and Alan Gasteen who have hosted visited so far this calendar year

Since my last report, I've had the opportunity to run at the Thames and Manukau open weekends. Both events were somewhat affected by heavy rain at some stage, but a good turnout of engines from other Clubs were noted and the usually camaraderie of people with like interest was enjoyed. Thames had a "night" run through to about 7.30pm on the Saturday night and it was interesting running for a few hours in the dark – thank goodness for the battery light on Hotpot! Manukau had bumper days on the Saturday and Monday but, like ASME, were rained out on the Sunday. Several of our members attended at some stage over the weekend at Manukau, including a very enjoyable dinner on Saturday night.

We have had two bad weather Sundays in a row now with little or no running; obviously these do little to help ASME's finances and are to be expected in winter, but it is important that our rostered teams do turn up to check how things are at the Club at 1pm rather than just assuming running will be cancelled. As we know, Auckland's weather is remarkably fickle and can both differ across the city as well as change rapidly. The Sunday two weeks ago that I was most booked on, most arrived and we had a good social chat and a cuppa in the clubhouse before calling off any hope of running. The other rostered (country) members also called in to check before travelling long distances and were on standby in case we were able to run.

This issue of the Micrometer is the first where our interim arrangements of production by Hayden Purdy as sub-Editor have commenced. Hayden will be arranging the draft for Editor Dave's review prior to printing. It is expected that over time, Dave's input may be reduced so that Hayden may in effect step up to the Editors position. Hayden has some great ideas for reformatting the newsletter in the future, but for now the plan is "steady as we go" while he gets some experience with the normal content and all important timetable! My thanks to Hayden for offering his help in response to the several requests which were made to help alleviate Dave's two onerous duties (Secretary and Editor) for the Club.

The Works Department have a working bee timetabled for Saturday 10th July when some preparatory work for concreting by the basement is planned, but there is also a fair bit of cleanup work around the track that is required. So please do diary this date and come along by 9am for a few hours to help out.

Well that's all for now, keep the workshop warm on these colder winter days so you can make the most of your model engineering hobby .

16th June 2010

Grant Anderson

Bits & Pieces, General Meeting 1st June 2010

Hosted by Murray Lane, reported by Roger van Ryn

Apologies to Graham Bell for not correctly acknowledging his Hosting previously, and acknowledging Murray instead.

Graeme Murray brought in his "aspirator float tester" as it was being "rationalised" at work, saving it from dismemberment. I can remember when Graeme brought it in, in its development phase, 15 years ago. We were as amazed then at its intricacy as we are now! The patient relies on the floats functioning reliably as they keep the air moist, while the patient is under anesthetic. Photo A

Lots of lovely small lost-wax brass boiler fittings being fitted out by Alan Gasteen for his "rebuilt Scott" boiler, look very scale. Photo B

Murray Lane brought in a few "Turns" which jewelers use(d?) for turning small diameter parts for watches etc. They are operated by use of a bow, and one cuts on the return stroke only. Amazing. Photo C

Murray also brought in the petite "Lady Stephanie" again for anyone who may have not seen it, the write-up is in a previous newsletter.

Graeme Quayle has had to acquiesce family demand and produce a "Quayle Horizontal" for each of his grandsons, hence mass-production style line-up of "Horizontals". Photo D

John Olsen is Beefing-up his Myford ML 7 with "multi-V" pulleys. The long turned and threaded shaft belonged to him as well and was a stay for his boat boiler. He has made a "Norton" gearbox for this Myford, which he showed us on a previous occasion as well. Photo E

Dave Housleys 7 ¼ "Lima" cylinders are a little lighter than last time, as he has bored the ports and galleries! Photo F

The people at MOTAT wanted an air-drill and asked Murray Lane to adapt some odd pieces and make one. With a few special bits made by Murray it does the job well. Photo G

Peter Woodford brought in an elegantly simple "whatsit". Its a series of radiating raised "V"s on a plate which work as an automatic TPI gauge. You just roll the bolt along until it drops in, and read off the TPI. It works with different thread profiles as well. Photo H

Hugh Martin's made a fine centre finder for his lathe from a car engine valve, which probably was an A10 that may have belonged to a member? Photo I

Graeme Healy donated a collectable Engineers book to the Club Library. If you want to order a 70 foot-long lathe, you will find one in there..... might be out of stock, makes wonderful reading though.

Grant Anderson has torn himself away from Presidential duties and is fixing up the leaf springing on a "K" that he is working on. Grant made a punch to make the holes and even though its not hardened it cuts fine, with an occasional touch-up. Grant was advised by various members to bake the stainless spring material for ½ an hour at 250C. Photo J

Graeme Murray had a lucky find getting a Starrett DTI stand from Trade Tools for a third off. Photo K

Alan Pritchard brought in some "taper Gauges" which one pokes in a hole and it will tell you the diameter within 4-thou, which is close enough to identify which drill you used to make it! Photo L

Graeme Healy brought in some special "whatsits" which proved to be special drills that can get through glass, hardened steel and even broken taps stuck in a hole.

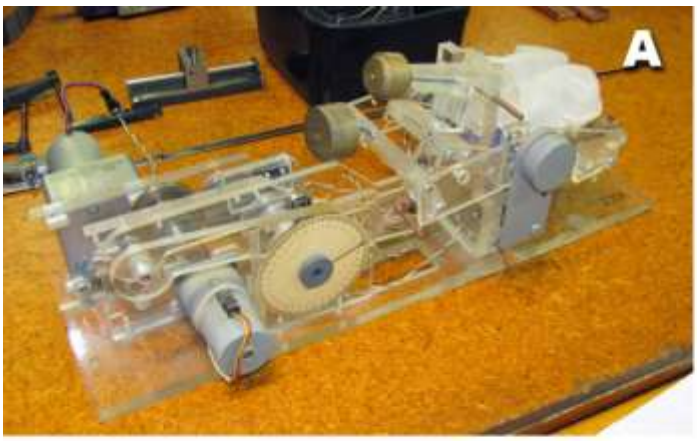
Mike Jacks immaculate CNC workmanship was in evidence on a pair of A4 cross-heads, which he has made to replace the "bit rough" ones from a kit some one has. Photo M

Mike also brought in some nice "V" blocks he has made, complete with embossed "MJ" lettering. Photo N

Lastly Dave Russell had brought in some boiler crown stays for his Beejax, it is possible that this type of girder stay may now no longer be acceptable to the boiler rules. Check it out with the Boiler Committee. Photo O

Thanks to all who brought in something.

Roger van Ryn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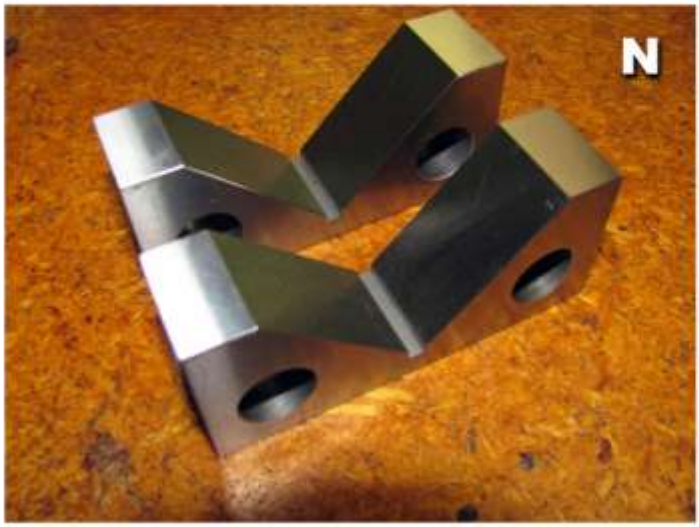

N


O

The Latest in Engineering

Something different this time: This article appeared in the May 1963 issue of "Guns and Ammo" magazine from the US. It was based on a Canadian newspaper article about this individual. It just goes to show that you don't need to be in possession of a big workshop, or even an indoor space, (or even your full mental faculties), to turn out functional engineering items. I have the original magazine if anyone would like to borrow it.

Sam Miskinis – **The "Mad" Gunsmith**

Sam Miskinis escaped from the Ponoka Mental Hospital in the Province of Alberta, Canada, in March of 1954. He apparently came to Canada from somewhere in Europe many years before and had been trained as a machinist. He had been in the mental hospital for several years and had made two prior escapes, but was recaptured almost immediately and returned to the hospital.

Very shortly after the 1954 escape, the body of a man was found in a burned hay-stack near the town of Westaskiwin which is immediately south of Edmonton. It was assumed that this body was that of Miskinis who had burned to death in an attempt to keep warm. The matter was then closed until August of 1955, 18 months later, when a family out picking berries in the Glen Park area near Calmar found evidences of human activity in a wild and heavily-wooded spot. They reported this to the Royal Canadian Mounted police and the next day two R.C.M.P. officers undertook a search of the area. They found well-travelled paths leading in all directions and, as they were investigating further, a man suddenly appeared from what looked like a brush pile and made off at a run. The officers gave chase and at first were under the impression that they were pursuing a wild creature. His hair fell well below his shoulders and was tied in a "bun" on top of his head to keep it from covering his face. The "wild man" tripped after running a short distance, allowing one of the officers to come up on him as he recovered. The pursued man then swung around and pointed what appeared to be a revolver at the officer. The R.C.M.P. man, who was right on top of him by this time, struck the revolver from his hands, knocked him down, and the chase was over.

It soon became apparent that the wild man was none other than Sam Miskinis who had maintained himself in the open for a period of eighteen months which included all of one, and part of another, Alberta winter. Even more remarkable was the pistol which Miskinis had pointed at the R.C.M.P officer. It weighed five pounds, was more than a foot long, and was altogether remarkable as can be seen from the accompanying photograph. It was chambered for, and loaded with, three .30-.30 and three .303 British cartridges. According to the Royal Canadian Mounted Police it was completely functional. Miskinis had constructed this pistol entirely by hand from scrap metal. The source of the cartridges was never determined although they could have been found at an abandoned farm near the hide-out.

A further search of the area disclosed that Miskinis, during his stay of approximately eighteen months there, had constructed a grain grinding mill, a hand-powered turning lathe (or perhaps more correctly, a horizontal boring mill), the pistol and a partially completed rifle. The rifle is seen in the second photograph. It turned out that Miskinis had constructed all of this with a hack-saw blade fastened in a frame made from a set of bicycle handle-bars (see photograph of rifle), a few files, a rasp, a hammer and some small punches and drills he had constructed himself. His main source of raw material was a tractor on an abandoned farm near the hide-out. The lathe was made from two trees growing about three feet apart. These were cut off about three feet above the ground and the head-stock was driven by a chain of gears from a hand crank and the effectiveness of the whole outfit cannot be doubted in view of what it accomplished in building the pistol and the rifle.

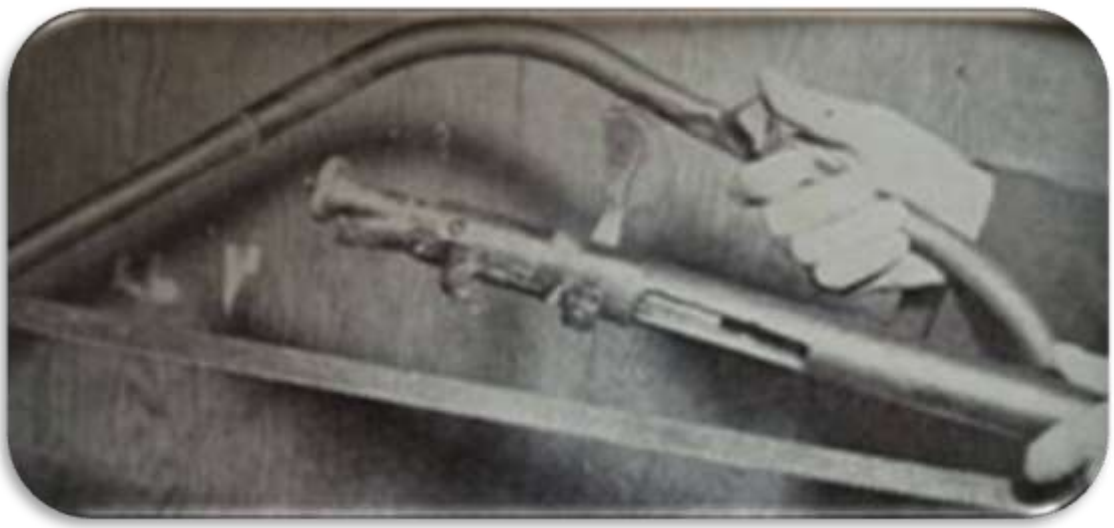
The barrel of the pistol was formed by drilling a hole eight inches long through a piece of solid steel (it was apparently a smooth bore). The cylinder was made from a piece of steel nearly three inches in diameter which was cut from a large shaft. It was chambered for two different sizes of rifle cartridge (three of each) and the gunsmith apparently did quite a good job fitting the chambers to the cartridges. The main portion of the frame was fabricated from sheet steel.

The rifle barrel was eighteen inches long and had been formed by drilling a hole of this depth through the middle of a round shaft. The barrel had been fitted to a bolt action with trigger assembly. The action worked smoothly and, from the photograph, it would appear that Miskinis had intended to fit it with a magazine. The rifle was inspected by a local gunsmith who was impressed by the expertness of construction. Miskinis stated that he made the fire-arms because a bear had prowled around his camp and he was afraid of being attacked. He had subsisted for the full time of his occupancy of the camp-site on ground wheat and berries stored over the winter.

The winter temperature in that part of Alberta regularly falls to 40 degrees below zero and stays there for days on end. The storage of sufficient food and fuel during the summer to last over the winter would strike most people as a job that would tax the full mental and physical capacity of a normal man. Yet Miskinis not only accomplished this but also made the necessary tools and completed the construction of the revolver even though he was considered insane…

Brian Cotton

"Functioning revolver shown here was chambered for two different .30 Cal loads"



"Saw frame of bicycle handle bars was one of the crude tools used to build the rifle"

Around the Clubs: Reviewed by Alan Emerson

Swarf, New Plymouth , April 2010

Good article on bellows to fit between trolleys. These are available through www.bellows.co.nz they look great. All about WD 40 and some funnies.

Conrod, Otago , May 2010
Visit to Mana Ariki with photos. A portable HO/OO railway layout for sale. Visit by some of the Engineering group to the Ord railway and some photos of the boat group in action

The Workbench , Durban , June 2010
Interesting write up on the South African Railways. Though the country standard is 3'6 gauge track the new Gautrain will run on 4'81/2". Some thoughts as to whether the Club should add a 71/4" track. Another thought was to develop gauge 1 and 0 tracks to attract more members

Southern Rails and Sails , Southland , June/July 2010
News and photos from all the sections. Plenty of useful info for Model train and boat fans. Looking for a way to keep the ducks out of the boat pond though.

Northern Views , Whangarei , June 2010
Demonstration and a chance to try out some new plasma and TIG welding equipment. Article on the "Navvy" and the building of the railways in England. The Wednesday Workers busy with track refurbishment. Report on an accident on the Rovos Railway where a set of carriages ran away while the engine was being changed. Article on Dave Giles Rail experience to run between Mamaku and Ngongotaha.

Alan Emerson

NB: If you are interested in reading any of the full articles, they can be found filed in binders ate the clubrooms, just below the notice board.

Fireless Locomotives

A fireless locomotive is a type of locomotive designed for use under conditions restricted by either the presence of flammable material (such as in mines) or the need for cleanliness (such as at a food factory). Thus a traditional steam locomotive is ruled out because of its open fire and the possibility of hot embers ejected from its chimney.

There are two types of fireless locomotive – fireless steam locomotives and compressed air locomotives.

A fireless steam locomotive is similar to a conventional steam locomotive, but has a reservoir, known as a steam accumulator, instead of a boiler. This reservoir is partly filled with water and charged with steam from a stationary boiler. The locomotive can then work on the stored steam until the pressure has dropped to a minimum level, after which it must be recharged.

European fireless steam locomotives usually have the cylinders at the back, while American ones often have the cylinders at the front, as in a conventional locomotive. Major builders of fireless steam locomotives in the UK included Andrew Barclay and W.G. Bagnall.

Compressed air locomotives are used mainly in mines, but have also been used on tramways.

Several hybrid locomotives have been built that have either used a fire for part of the time, e.g, Fowler's Ghost of the Metropolitan Railway, or have used a fire to superheat stored steam, such as the Receiver Locomotives built by Sentinel Waggon Works. None has been a success.

Most fireless locomotives have been of 0-4-0 or 0-6-0 wheel arrangement but there have been some 0-8-0 and even a few0-10-0. Some 600 mm (1 ft $11\frac{5}{8}$ in) gauge 0-10-0 fireless locomotives from the German company Henschel were used in the construction of the Baghdad Railway, probably to avoid the risk of carbon monoxide poisoning during the boring of tunnels.

Another German company, Hohenzollern, built some articulated fireless steam locomotives with a cab at each end. Only one of the bogies was powered, making the wheel arrangement B-2.

Numerous examples have been preserved across the world. One notable example is "Lord Ashfield" (Andrew Barclay works no. 1989 of 1930) at the Museum of Science and Industry in Manchester. It ran in limited service in the 1990s sharing a steam supply with the stationary exhibits.

The Ayrshire Railway Preservation Group is currently in the process of rebuilding its Andrew Barclay 0-4-0 fireless locomotive (Works Number 1952 of 1928) and intends to operate it as part of a demonstration freight train during Summer 2009.

The North Carolina Transportation Museum in Spencer has a fireless steam locomotive, the North Carolina Power and Light #3 0-4-0.

Pennsylvania Power and Light "D", a fireless steam locomotive

Preserved Porter Locomotive Company No. 3290 of 1923

Preserved Andrew Barclay 0-6-0 fireless steam locomotive, South of Scotland Electricity Board, No. 1

Classifieds

For Sale

Vintage Wireless Sets (free)
Brian Cotton's father Richard is downsizing his shed and needs to find new homes for his large collection of vintage radios. These vary from fully restored to requiring restoration.
Many different makes and models.
If you are interested in acquiring a new (old) radio, please contact Richard Cotton direct on (09) 521 5515 (evenings), or (021) 759 309 or email electron43@xtra.co.nz
Please note the following two provisos: These radios will be given away to like-minded people who can be trusted not to regard them as something to be sold as quickly as possible to make money; and they won't be given to anyone who is affiliated with the NZ Vintage Radio Society.

Tanner Bowl Woodturning Lathe Headstock
This particular item that was donated to the club will be listed on Trade Me the week starting 5th July:
3 speed Wood Turning Lathe Headstock with single phase motor
Quality NZ made by Tanner.
Tanecraft 500, adapted for bowl turning
Does not have chisel rest or chuck.
Bidding start price $150

Club mid winter luncheon dinner at clubrooms 12.00noon for meal at 1.00pm subsidised @ $15 per person, please pay at club meeting 6th July or by cut off 10th July, Limit 50 persons, tickets on a first in first served basis.
I have attached a picture of the front of the 50th anniversary book to use with the add if you like, your call, it might fill up some space.

50th Anniversary Book

Club Members who have never received a copy of the 50th anniversary book and would like one please contact Gary Farquhar. (09) 576 7025