

Number 619

December
2016

The MICROMETER

AUCKLAND SOCIETY OF MODEL ENGINEERS INCORPORATED

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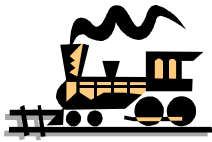
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REGISTERED NEW ZEALAND PUBLICATION

Waipuna Junction

This issue is all about history and developments around our little corner of the world. Enjoy.





Train Roster

	Electric	Electric	Steam	Train	Station /	Station /	Station /	
Date	Driver	Driver	Driver	Controller	Guard	Guard	Guard	
4-Dec-16	D Housley	J Lankow	Voluntary	<u>G Anderson</u>	K Ryan*	A Shirley	Voluntary	
11-Dec-16	D Moffat	M Moore	Voluntary	<u>D Russell</u>	R Stratton	P Tomkies*	Voluntary	
18-Dec-16	P Moy	R Reichardt	Voluntary	<u>G Wills</u>	R Copeland	R Crook*	Voluntary	
25-Dec-16	----- Xmas / New Year Break - No Roster in Operation - Voluntary if you wish -----							
1-Jan-17	----- Xmas / New Year Break - No Roster in Operation - Voluntary if you wish -----							
8-Jan-17	P Woodford	B Aickin	Voluntary	<u>T Lawrence</u>	P Jones	M Luxton*	Voluntary	
15-Jan-17	I Ashley	A Bailey	Voluntary	<u>S Meikle</u>	B Matchett*	G Murray	Voluntary	
22-Jan-17	G Beazley	P Dowdeswell	Voluntary	<u>G Wills</u>	M Richardson	J Service*	Voluntary	
29-Jan-17	M Granger	M Hollis	Voluntary	<u>G Anderson</u>	K Ryan*	A Shirley	Voluntary	
5-Feb-17	D Housley	J Lankow	Voluntary	<u>D Russell</u>	R Stratton	P Tomkies*	Voluntary	
12-Feb-17	D Moffat	M Plant	Voluntary	<u>T Robinson</u>	R Copeland	R Crook*	Voluntary	
19-Feb-17	M Moore	P Moy	Voluntary	<u>T Lawrence</u>	P Jones	M Luxton*	Voluntary	
26-Feb-17	R Reichardt	P Woodford	Voluntary	<u>S Meikle</u>	B Matchett*	G Murray	Voluntary	

Bold and Underlined Name:

This is the designated **Train Controller**, i.e. the person in overall control of all operations for the day

Bold with Asterisked* Name:

This is the designated Stationmaster, i.e. the person responsible for activities in the station area.
The Stationmaster is also responsible to account for the day's takings.

Drivers: Please keep your eyes open for unusual or suspicious behaviour around the track which may affect the safety and/or smooth operation of our trains. Report such activity to the Train Controller.

Please Note:

If for some reason you are unable to attend on 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.

Also, please ensure the member you arrange a swap with is one who is rostered to undertake the same role to ensure we always have members with the appropriate training and experience on the day.

DECEMBER CALENDAR

Friday December 2nd, 7pm - Annual Christmas Dinner at the Remuera Club, Ohinerau St, Remuera. Mix and mingle in the Lounge Bar from 6pm.

Tuesday December 6th, 7.30pm - Annual General Meeting , ASME clubrooms.

Tuesday December 20th, 7.30pm - Committee Meeting.

Coming up: Sunday March 19th - Panmure Basin Day. It's several weeks away, but there will likely be a double roster and extra hands will be needed at the station. The Council and Mt Wellington Foundation are putting a lot of effort and money into this so please keep this day free if you can.

President's Report

As the end of 2016 approaches so I come to the end of my term as President of the Auckland Society of Model Engineers. As I look back, over the years, indeed the decades, I have served as a committee member, secretary, librarian, Vice President and finally President for the last two years. Now I look forward to more time in the workshop and running on the track. It has been a privilege to serve in these roles in a Society which I have admired since my early years.

From an operating perspective, the performance of the Society has been more than satisfactory during the last year. The club continues to hold substantial financial reserves with the track and trolley project nearing completion and a substantial inventory of new and refurbished assets. The track continues to be extremely popular with the public on our Sunday running days, sometimes limited only by our capacity. Our club maintains excellent relationships with our regulator (Worksafe) and our landlords, Transpower and the Auckland Council. The General Manager will provide more details in his annual report at the annual general meeting in December.

The ASME Christmas dinner to be held for the first time at the Remuera club has had excellent support and we look forward to this important occasion. Remember that this year, to accommodate availability at the venue, the dinner is on a Friday night, i.e. Friday, 2 December.

Four days later we have the Annual General Meeting at the clubrooms. This is an important AGM worthy of a full attendance as there are some substantial issues to discuss. The committee, in response to directions from the last AGM have put in place an accurate system for monitoring members' attendance on rostered days in anticipation of providing some recompense to those who actively participate in the track running activity which provides the bulk of funding for the society. The system will be effectively "triggered" when the membership fees are set by the AGM after hearing the recommendations of the General Manager. The scheme has not been without controversy and has occupied a lot of time and effort. What I can say is that the meeting need not worry about the mechanism as that has been thoroughly and in my opinion competently thrashed out. The question for the meeting to consider is that, now that the scheme is a workable option, whether the wider membership remains of the same mind to carry on with the instructions of last year's meeting and for that matter those indicated by ongoing informal consultation at general meetings during the year.

Membership numbers are continuing to fall a bit, with those on the list now more closely following those who are active on the track. Attendance at general meetings while still reasonable is down on previous years with an average of around 25 compared with past numbers in the 30s. This is not an issue for ASME alone; people, particularly younger people, in central Auckland are finding more demands on their disposable and recreation time. Model engineering is a demanding hobby requiring both space in the home and regular time both of which are under pressure. Paradoxically, in the past a more significant barrier was the availability of equipment and its cost; from this perspective, there has never been a better time for our hobby with ready access to inexpensive new equipment of adequate quality and the commensurate ready availability of second-hand gear. There has been some interest in the club about holding workshop nights and this may well be tried again in the future. The uppermost question must be whether sufficient members would be able to come out twice during the month and the effect this might have on attendance at the general meetings.

Health and safety has been in the news this year with the passing of the new Health and Safety at Work Act (HSW). The regulatory environment for MEANZ affiliated organisations such as ASME remains the Amusement Devices Regulations (ADR) which are now managed by WorkSafe New Zealand and have been moved from the old Machinery Act to the new HSW. Many members are having experience in their day jobs

with the substantial upgrading and increased compliance requirement, particularly with regards to documentation, required of employers under the HSW regime. The question has been asked as to whether these changes add to the obligations of ASME, which is already covered by rules approved by MEANZ and subject to regular audits in which our society has performed very well. The key question here comes down to whether our society is seen by WorkSafe as a “person conducting a business or undertaking” - a PCBU in the parlance of the HSW. This question has been put to WorkSafe and an answer received as follows

“As long as your organisation does not employ any staff and therefore uses entirely volunteer labour, then the organisation is considered to be a Volunteer Association and not considered to be a PCBU. However there will still be obligations on your Volunteer Association for your casual volunteers, and they will also have duties surrounding the safety of members of the public.”

In my opinion those obligations mentioned in the advice are well and truly covered by our existing safety regime. We are fully compliant, up-to-date with audits and registration with WorkSafe and Auckland City and so it is business as usual for ASME and we can look forward to performing well again in our next MEANZ audit.

I look forward to seeing everybody at the dinner and the AGM; please do consider contributing to the running of the society by standing for the committee.

With many thanks for all of your kind and generous support,

David Black

President

Boat Pond Redecking

One of the jobs outstanding over the past 18 months has been the replacement of about 45 sq metres of unsound decking on the south/east side of the boat pond which ASME hires out to Scale Marine Modellers (SMM). Under our arrangements, major maintenance is the responsibility of ASME. Having received quotes from two builders to undertake replacement of the worst 30 metres of this decking but with neither showing up for work, meant other measures were needed to get the job done. A meeting was held with the hierarchy of SMM in September to ensure that they were fully committed to this asset and to solicit help from their members if we could get authority from the committee to do the job ourselves. Yes, they were keen and very committed to the model boat hobby and saw their club doing much the same in 5 years time at ASME's boat pond. So with that confidence, materials were spec'd, quotes obtained for the timber and the ASME committee approached, who authorised up to \$4k to cover the costs of timber, transport, nails, etc.

SMM did us proud with a working bee on 1st October and ripped off all the old decking, cutting it up into manageable lengths to cart away for disposal on a trailer at a later date. They also helped with digging out soil which was found to have leached from under the retaining wall to bury the bottom of the deck bearer timbers, thus creating a risk of accelerated deterioration. Notwithstanding this, most of the framing timbers were found to be in surprisingly good order, with just a few joists requiring replacement or doubling up to ensure a strong, long-lasting base for the new decking.

With some difficulty, on 15th October the Fox Transport truck reversed down the drive to alongside the public toilets and with its magnificent long-reach crane, effortlessly picked up the two packets of wet timber (weighing an estimated 3 tonne) and swung them over to the relatively flat area between the pond and top curve of our railway track.



Long- reach truck swings the timber packs close to the job while Greville, Tony (obscured) and Timothy prepare packers for it to rest on.

(Note: All pictures used in this article were supplied by SMM Secretary, Ian Donald.)

However before the new decking timber could be laid, the 3 “musketeers” from the T & T Project sub-committee having diverted from track work & other maintenance jobs around ASME and led by our professional contractor/member Tony Lawrence, cut up planks to fill the area below the retaining wall to help avoid any further soil build-up under the framing timbers. This extra work took several Saturdays to complete but should extend the life of the structure considerably. Then the decking work, that the builders had quoted to do, was started.

The ASME team, consistently helped by SMM Secretary Ian Donald and on a few occasions by several other SMM members, got to work to put down the new decking, all 95 x 45mm H4 SG8 first grade material. With the use of Greville’s drop saw and Tony’s nail gun, progress was very good and at the time of writing, only the infill decking between the retaining wall piles has to be completed to finish the job. Thanks to our few helpers, a large sum has been saved from the ASME “coffers” for other important projects, the boat pond’s life has been extended and another job can be ticked off the “to do” list!

Grant Anderson – 22 November 2016

SMM team having stripped off the old decking are assisting dig out the bearers





Corner showing bearers cleared of soil & retainer planks ready to be fitted - some joists were replaced in this area.

SMM members enjoying a sail day last Sunday with a clean pool & the new decking.



Track & Trolley Project Update

As there hasn't been a report for some time, this will help bring members who haven't been along to a working bee this year, up to date.

The focus since autumn has been the delivery track from the car park to the engine sheds. Having previously lowered the section of unloading track at the car park end to enable 7.25g locos to get onto the railway via the swivel device, the goal was to rebuild the old, steeply graded, raised delivery track leading up to the engine sheds. The idea was to make the path a wee bit wider and lower thus making matters safer by giving better headroom under the main pedestrian bridge and providing a firm, flat walking surface as rolling stock is pushed up towards the engine sheds.

Firstly, the old raised track was removed and the foundations demolished; then at a working bee in April attended by 9 members, a hired digger, operated by our suitably licensed contractor member Tony Lawrence, was used to excavate the base for the concrete path with the spoil moved up to the dump in the glade. The track subway abutments were removed and dug wider & deeper by hand – quite a job as it was “tuff” lower down. The following weeks saw base course spread and compacted, the excavations boxed, reinforcing steel formed and laid, with the new path poured in early June. Tony, Timothy & Greville (with some helpers from time to time) then set to work to box up a low retaining wall along the clubhouse side of the lower part of this path, provision being made for a set of steps to improve access when walking back from the car park. As well, the abutments for the subway under the inner main line were repositioned with greater width to allow trolleys to be moved via this access way. The boxing was a laborious and complicated job, requiring both internal and external walls to provide a smooth, finished surface – shutters were altered from those made

available by Tony from his work, painted with a “home-brewed” release agent and fitted.

Before the outside shutters could be bolted and braced in place, an elaborate latticework of reinforcing steel was fashioned into place and tied to the starters left upstanding when the path was poured. With this major job completed, the concrete was pumped and vibrated into the cavities to ensure a complete fill on 4th October – due entirely to Tony’s expertise, the weight of concrete was adequately contained by the braced formwork. The boxing was removed the following weekend by a small team including the originators helped by Mike Banks, Bruce Matchett and Mike Moore, to reveal a nice, flatly surfaced wall. Backfilling done and grass seed spread, it now only requires the steps to be completed and we can then get onto fitting the new altered track configuration (mostly made up at a mid-week evening working bee) which will allow rolling stock to be pushed up to and loaded onto the traverser in its fully down position, for movement onto the track or steaming bays as the case may require. All this work has been done without any disruption to regular Sunday running.

During the Saturdays when inclement weather affected the above work, some progress was made on the points. A jig was made up on a purpose built table in the basement with angle fitments, made by Graeme Murray at home, added after the jig base was drilled and tapped for 6mm bolts. There is however still a long way to go to get the first set of the multi-gauge points completed for trial.

Many thanks to our workers who have made this progress possible.

Grant Anderson - 22 November 2016



Top left: Little Helper - Cade Anderson keeps new concrete path wet

Above: Well Braced - All ready for the weight of wet concrete

Left: The Boss - Tony caught mid-flight during the boxing phase while Timothy waits ready to assist



Another view of the boxing - Mike B on the job.



View of finished wall - but for stairs



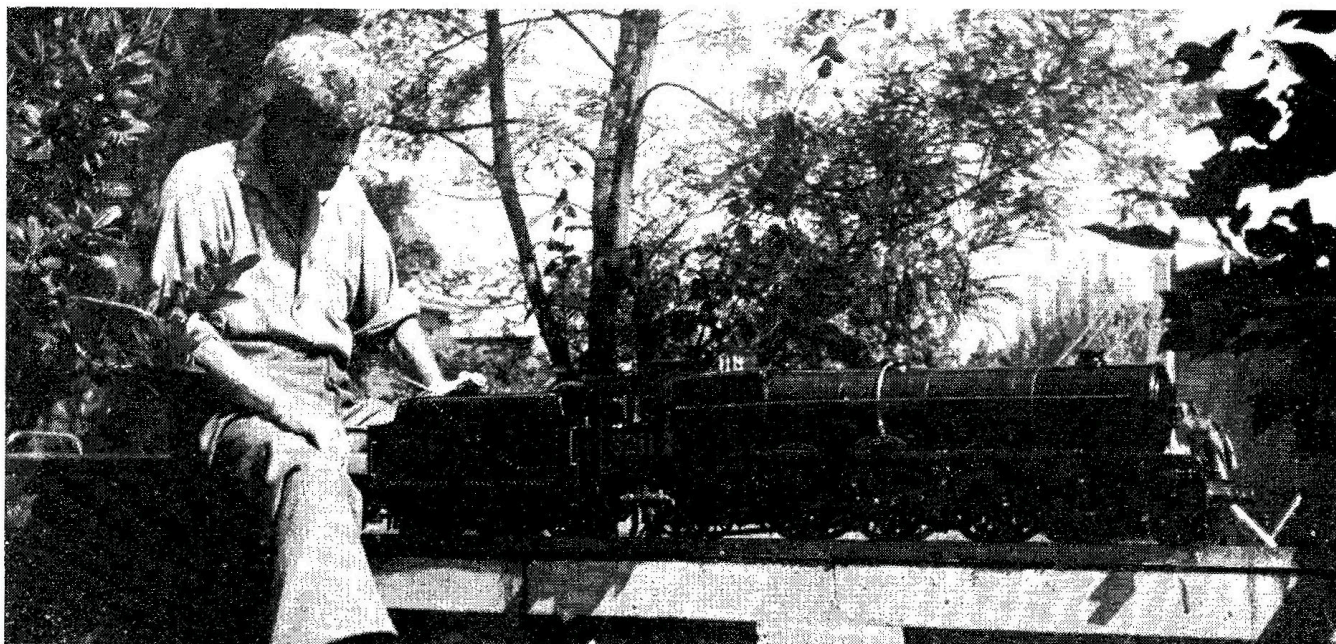
Test train driven by John L, with Graeme M checking from behind, crosses over the rebuilt subway.



While we are bringing you up to date with goings-on both at the track and the boat pond, there could not be a better occasion to also have a look at the history of both.

The article on the next two pages is taken from an old library book, entitled "MT. WELLINGTON 100 PROGRESSIVE YEARS", which was published in 1963, and was reproduced in the October 2016 edition of SMM's "Mailship" newsletter. It was also forwarded to ASME for our amusement (?) by SMM member Garry Hamlin.

There seems to have been a few changes in direction over the years, but the original idea was good!



A typical model engineer pursuing his hobby. Mr W. Enstone driving his model "Pacific" steam loco "Queen Maud". This photograph was taken at Mr Enstone's own track in Otahuhu.

THE AUCKLAND SOCIETY OF MODEL AND EXPERIMENTAL ENGINEERS

The Auckland Society of Model and Experimental Engineers consists of a growing band of enthusiasts whose aims can be roughly categorised as:—

1. The fostering of all kinds of model making, both working and scenic.
2. The encouragement of arts, skills and handicrafts which are being largely superseded by modern methods of production in industry.
3. The acquisition and maintenance of a centre of model engineering.
4. The aiding of youths to acquire knowledge and skill in mechanical and technical pursuits.

The present Society was founded four years ago, with an initial membership of only twenty. For a

long time they met in one of the member's workshop in Onehunga. The membership has now grown to over 100 and the Society is about to realise its first ambition, a home of its own.

The interests of members are varied and wide and cover every imaginable kind of model-making. The predominant interest, however, is centred around working model steam engines.

Each year the Society has exhibited at the Easter Show and has won much acclaim for its display.

The future of the Society is governed by its being able to find a suitable site which can be developed into a model engineering and hobby centre. Consequently the members are delighted at the co-operation they have received from the present Council and Council staff in developing an area adjacent to the Panmure Basin.

Many residents will have noticed the oval concrete structure adjacent to the skating rink off Lagoon

Drive. By now most people realise that this is going to be a model railway track. This track is the first project of the Society and will be followed soon by a small clubroom adjacent to the track. These developments are of a temporary nature only and will be used whilst a larger and more ambitious project gets under way in the South-west corner of the Basin.

The future hobby centre that will eventually be built has been approved in principle by the present Council. There are, however, many legal points to be settled before the green light shines, but in the meantime the Society is intent on consolidating its position and making itself an integral part of the Mount Wellington District.

The future plans for the development of the south-west corner of the Basin consist of building a stone retaining wall across the tidal mudflats to enclose about 2½ acres in area. This work will be carried out by the Society on a voluntary basis. Behind this retain-

(continued on page 104)

MODEL ENGINEERING (cont.) ing wall will be built two boating pools, the larger one of about three-quarters of an acre will be used for sailing model yachts and larger power boats, and for holding model boat regattas. The second and smaller pool will be only about 12 inches deep and will be for use by kiddies as a paddling pool and a place where young boys and girls can sail their toy boats. It is rather unusual that in a port the size of Auckland with all the interest there is in maritime subjects, that there should be no place in the whole of the city where children can paddle and play with small toy boats and yachts, etc.

In conjunction with the Auckland Model Marine Club, who are affiliating with the Society, a steam-driven model of a Mississippi Stern Wheeler will be built about 12ft long in which the public will be given rides around the boating pool.

The remaining area will be reclaimed with assistance from the Council and a number of ambitious projects undertaken. A longer model railway track of about 1000ft in length will be built for the larger passenger-hauling locomotives. A smaller track for the little fellows will also be part of the layout. The Society is hoping to introduce outdoor model slot car racing, build an "0" gauge outdoor scenic railway layout and erect a large clubhouse, containing a workshop, where facilities will be available for responsible young men to carry out operations on machine tools that they cannot afford to buy for themselves.

The future of the Society is very bright. It is envisaged that eventually the area to be developed will grow into a hobby centre where all clubs with similar interests to the Society's will be able to find a home and be given assistance to establish their own particular re-

quirements. All of these facilities will be open to the public and will make a lovely picnic area where all the family will find something to interest them.

As the development of the Basin grows the Society will grow with it. In time a hobby centre will grow which will be quite unique, not only in New Zealand but throughout the world.

The Auckland Society of Model Engineers would like to take this opportunity to thank all those persons who have assisted them in many ways. In particular our thanks go to the Mayor, the Chairman and members of the Parks Committee and also members of the Wardens' Committee.

President: G. A. Pealing, 11 Arron Street, Ellerslie.

Secretary: J. C. James, 40 Plunket Avenue, Papatoetoe.

Treasurer: P. M. Isaac, 42 Ladies' Mile, Remuera.



A view of ASME's track as it appears today.

Bits and Pieces November 2016

Conducted by Gary Farquhar, Report and Photos by Dave Russell



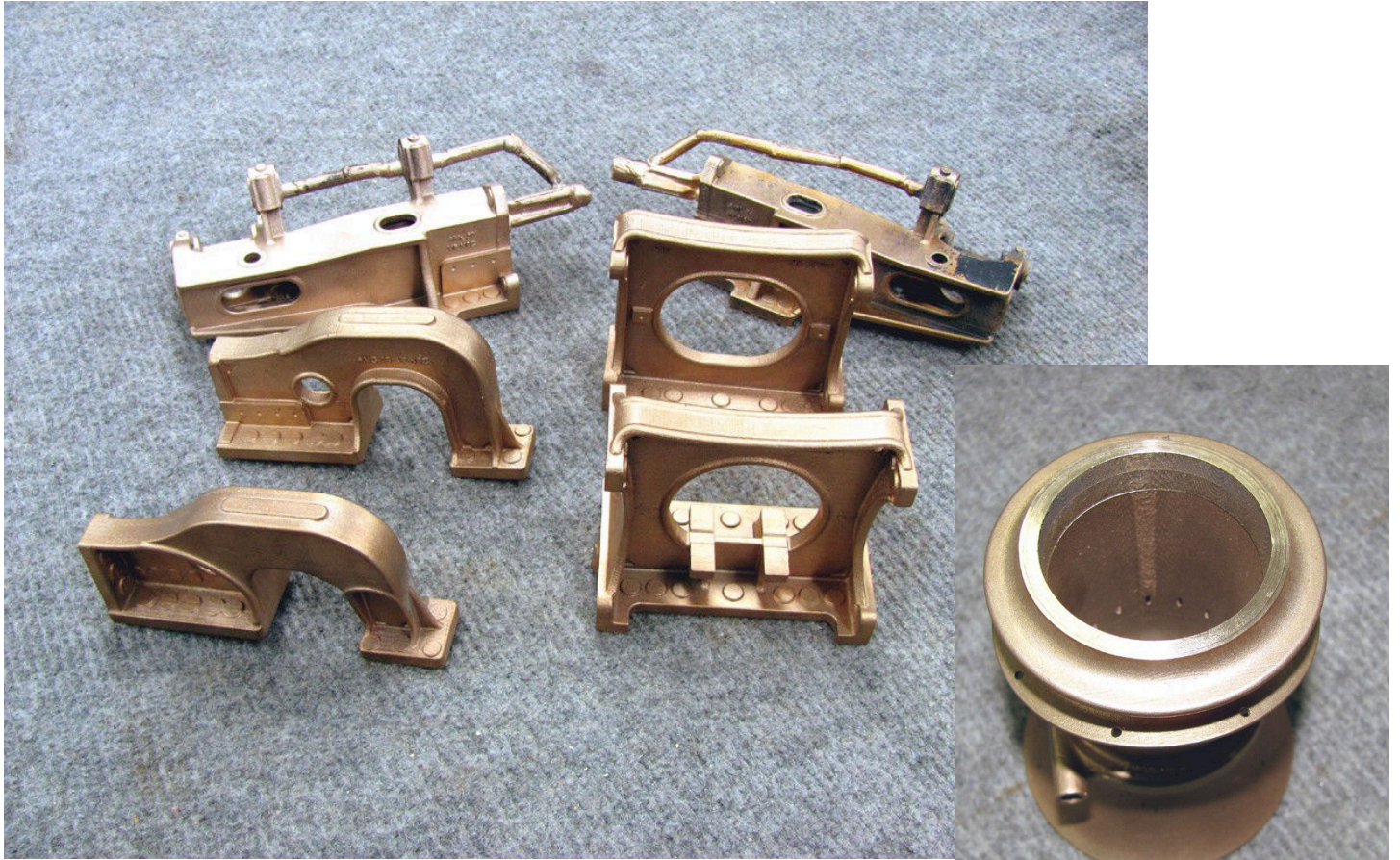
Greville Wills has been making some new parts for the steam feed to the cylinders on one of his locos. Greville has learned not to use cheap Chinese dies especially coarse thread ones as they just strip the end right off the piece trying to be threaded. So the second attempt worked OK with using a much finer brass thread.



Murray Hollis has a ride on lawn mower that often needs some bearings replaced, these are hard to remove without damaging the associated parts. Murray's solution was to make an expanding press tool and cleverly used the threaded tapered part of a large "Dyna-Bolt" for the centre of the tool.



It is great to see one of our newer members bringing in items for the Bits & Pieces. Graham Ockleston had some attachments he acquired with and presumably for his Hercus lathe. Graham was asking if anyone knew exactly what the items were for and the best offering was some sort of tool post grinding attachment and also an indexing attachment, If you can help please email the club. As a footnote it was mentioned that a lot of lathes like the Hercus are fashioned after the American Southbend lathe.



It's hard to describe how impressive some of the castings are that Mike Jack is producing for customers all over the world. This month Mike brought in a series of frame stretchers and motion and slide bar brackets for an Australian, Victorian Railways locomotive and a chimney / petticoat pipe for a 5" gauge Britannia with the blower jets actually cast into the inner circumference.



I have been busy on the restoration of the Maid of Kent and have started doing some of the re-painting. I have never used a proper spray gun before and after trying it out and seeing the results I don't know why I have waited so long. The spray gun I am using is described as an automotive "detailing gun" it has a small gravity fed bottle of about 150ml size and runs a pressure of about 25psi. I have also been busy cleaning the old paint off the boiler at the same time, ready for a re-paint.



For Tender Partly built Simplex 0-6-0 Loco

This Steve Berkley partly-built 5" gauge model is now available for tender – It may be inspected at the clubrooms in the basement. (Pictures below)

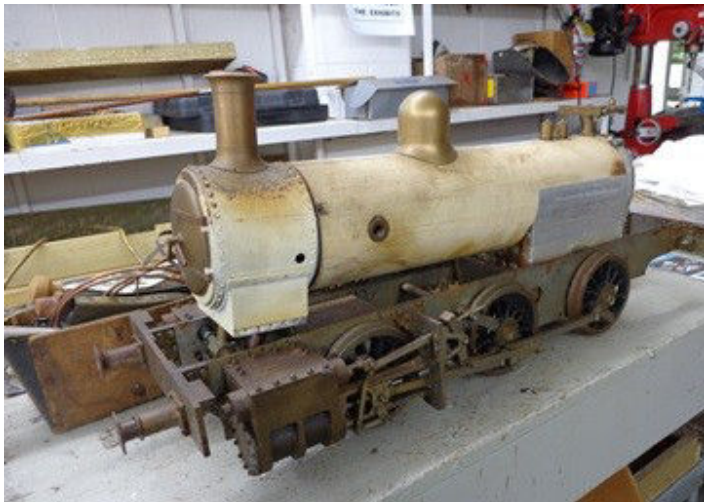
There are no actual or implied warranties from ASME and the loco is being sold in an "as is where is" condition, on behalf of Steve's family. Tenders from Members who intend to complete the loco to running condition (which is the wish of the family) without undue delay will be considered - please indicate on your Tender document your best guess as to how long it might take you to do the job.

ASME boiler records do have an entry for the model: this includes construction check sheet and a record of an hydraulic test.

Tenders must be in writing and delivered to the Secretary or myself by the 13th January 2017.

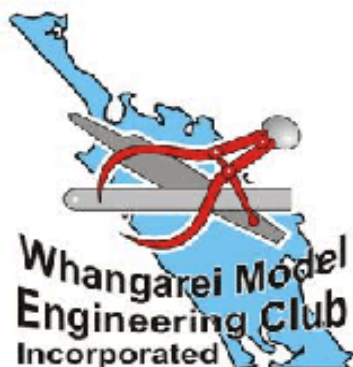
It is expected that a decision will be able to be made as soon as possible after the closing of Tenders.

Greville Wills – Vice President



BOILER INSPECTION PROGRESS SHEET			
Type: "Simplex"		Designer: MARTIN CLIVE MANNING STEVEN BERKLEY	
Locomotive No. 1000		Using the plans, drawings, etc. of: STEVEN BERKLEY	
General Details:			
Overall length of boiler	18 inches		
Boiler	Material: Copper, dia. 3 1/2", length 18", gauge 16		
Inner flanges	Copper, dia. 3 1/2", g. 16		
Outer flanges	Copper, dia. 3 1/2", g. 16		
Fire tubes	Copper, no. 12, dia. 3/8", g. 16		
Fire stays	Copper, no. 12, dia. 3/8", g. 16		
Long stays	Copper, no. 12, dia. 3/8", g. 16		
Cross stays	Copper, no. 12, dia. 3/8", g. 16		
Pressure ring	Copper, dia. 3 1/2", g. 16		
Welding or riveting	Alloy 414 Silver Solder		
Date of Inspection	State of Construction	Boiler & Attachments Carried out	Signature(s)
12-12-16	Full construction complete		
1-1-17	Boiler & Attachments complete		
5-5-17	Boiler & Attachments complete		
Hydraulic test date: 12-12-16		Pressure: 700 p.s.i.	
Sign (1)		Sign (2)	





ANNIVERSARY WEEKEND OPEN DAY EVENT

YOU ARE CORDIALLY INVITED TO ATTEND OUR

ANNIVERSARY WEEKEND EVENT

SATURDAY, JANUARY 28th, 2017
and SUNDAY, JANUARY 29th, 2017

THE FORMAT IS SLIGHTLY DIFFERENT THIS YEAR IN THAT THE
WEEKEND CO-INCIDES WITH OTHER MUSEUM EVENTS

THEY ARE:

(On the Sunday): MEDIEVAL MADNESS

(On the Monday): A VISIT BY VINTAGE CARS
RE-ENACTING THE 1916 PARLIAMENTARY
VISIT TO NORTHLAND.

***THE SUNDAY RUNNING WILL BE A CHARITY
EVENT IN THAT NETT PROCEEDS OF THE DAY
WILL BE DONATED TO THE WHANGAREI
BRANCH OF***

"RIDING FOR THE DISABLED"

**WE HAVE A 1.1km DUAL GAUGE,
(5" & 7¼") GROUND-LEVEL TRACK**

ALL USUAL AMENITIES AVAILABLE

- GOOD TANK WATER
- CHAR & COAL SUPPLIED
- RETICULATED 12v POWER
SUPPLY NOW AVAILABLE
AT STEAM-UP BAY
- REFRESHMENTS, Etc

**AS TIME IS OF THE ESSENCE PLEASE REPLY A.S.A.P. WITH NUMBERS ATTENDING TO
PRESIDENT, Brian Mould <thewrinkles@clear.net.nz> OR SECRETARY, Bruno
Petersen <brunopetersen@xtra.co.nz>**