

Number 545 April 2010

The MICROMETER

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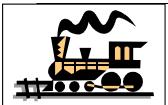
REGISTERED NEW ZEALAND PUBLICATION

Overdue Club Subscriptions

We still have a small number of members who have not paid their Subs. Please note any that remain unpaid will not receive a newsletter after this Issue.



An unusual angle view of the Laxey Wheel Isle of Man. Built 1854



Train Roster

Date	<u>Electric</u>	<u>Electric</u>	<u>Steam</u>	<u>Steam</u>	Station	<u>Station</u>	<u>Station</u>	Extra Guard
4-Apr-10	J W-Buys	P Woodford	G Bell		I Ashley*	P Boyes	R Brown	
11-Apr-10	J Yearn	D Black	L Farquhar		J Burnett*	R Copeland	R Crook	
18-Apr-10	D Booth	A Cotton	A Gasteen		B Currie	G Dickey*	P Cunningham	J Cunningham
25-Apr-10	R Craig	T Crake	B Piggott	(Changed)	G Briggs	G Farquhar	A Foster*	
	5.5 /				5.11			
2-May-10	P Eaton	M Granger	A Pritchard		D Hamp	R Hannah*	G Healy	l Hansen
9-May-10	J Harrison	D Housley	D Russell		M Hollis*	P Jones	G Kemp	
16-May-10	M Lane	T Lawrence	M Jack		J Lankow	D Leybourne	W Lord*	
23-May-10	J McManus	T Robinson	G Wills		I Lyons	H Martin*	S Meikle	P Dowdeswell
30-May-10	J W-Buys	P Woodford	M Orange		A Murley	G Murray*	E North	

<u>Bold and Underlined</u> name – is the designated <u>**Train Controller**</u>, i.e. the person in overall control of all operations for the day. If you are the <u>**Train Controller**</u> 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.

A special thanks to all who show up and perform their rostered duties at the regular Sunday running. We have had some outstanding days over summer including the Panmure Basin Festival day. Hugh Martin noted that the finely honed skills of the station crew where able to safely load and dispatch a full train behind the club electric locos in about 47 seconds.

Club Calendar April 2010 ->

April 6 th	General Meeting, Peter Woodford has another DVD in his Workshop Practice series, "Forging" approx 20 minutes.
April 13 th	Committee Meeting.
April 20 th	Workshop Night for March will be held at John Olsen's place, 4 Hillary Heights Avenue, Sunnyvale, Waitakere.
April 24 th (Sat)	Open invitation to ASME to run 3.5" & 5" Gauge Locomotives at Manukau Live Steamers track at Centre Park, Robertson Road, Mangere. 10.00am – 3.00pm.
May 4 th	General Meeting, Ian Langley from Seco Tools will give a talk on "Carbide Tips - higher performance" will also include a 12 minute video.
May 4 th - 6 th	EMEX, ASB Showgrounds, Greenlane. Members manning ASME display stand.
May 22 nd To be Confirmed	Open day for like minded groups at Glenbrook Vintage Railway, entry by donation. Including track extensions now completed to Waiuku.
July 24 th	ASME Mid Year Social Event, exact details to be finalised.
Sep 25 th & 26 th	ASME Annual Exhibition at clubrooms, judging of displayed items.
Dec 11 th	ASME Christmas Dinner and Annual Exhibition Awards presentation.

Presidents Report March 2010

The Family Day was very enjoyable with more steamers on hand at one time than we have seen for many years. Eight members lit-up but only six got on the track after an injector fault on one and a blown sight gauge on another. Then two of those who got on the track only managed one circuit, one having an axle pump fault and another running short of steam! Nevertheless, the remaining steamers were more than enough to give multiple rides to the members and friends in attendance. Greville had identified various contests for the drivers; however the day didn't allow time to complete more than the "timed circuit" challenge which was won by Dave Russell with a run "to the nominated second"! We will have to set up another challenge day later in the year. It was pleasing to see David Black and Peter Tomkies along with their steamers – hopefully a couple more for the Sunday steam roster soon! Also good to see some wives

and grandchildren along – all enjoying ASME's facilities. Greville sourced the supplies and cooked the meal which was enjoyed by all on our new BBQ – many thanks Greville. Thanks also to the ladies who helped in the kitchen.

The update on the new property arrangements with Auckland City Council is that the redrafting of the sub-licence is still with Transpower lawyers. I expect that in the very near future we will receive from Council the new licence and a sub-licence for execution.

On the membership front, we welcome new member John Reavley, and record the resignation of Bill Rubie who is now residing at a rest home.

Many thanks to those members who showed up for the working bee on 6 March. The back steps were painted and the concrete cut for a new drain near the basement door.

For the past year or more, the committee has been wrestling with the issue of our ride trolleys. Most have given good service but are now starting to show signs of wear & tear due to regular use. They are frequently challenged by some very heavy passengers; probably heavier than were ever contemplated! We have also had a few derailments from time to time – fortunately with little consequence. The committee has decided that a sample replacement trolley should be built and tested with the expectation that if the tests are successful, then new trolleys can be constructed as necessary to this new pattern. It is hoped that the sample trolley will be ready for tests by approximately mid-year and Timothy Robinson and Mike Jack have volunteered as the leaders for this project. In time they will be calling for assistance in the manufacture of parts, etc – the help of members to this end would be much appreciated.

The Clubhouse is starting to show real signs of deterioration of the paintwork, especially on window frames, fascia boards and the like. We are therefore seeking prices from painting contractors to undertake this work, as such work is deemed too risky for our members to undertake.

The Bereavement Assistance Scheme adopted by the Club last December requires the Club to form a panel to undertake any work which may be required under the scheme. The committee has appointed Hugh Martin, Richard Street and Gary Farquhar as the inaugural panel and thanks them for making themselves available. Included with this issue of the Micrometer is a copy of the Scheme (as adopted) which can be used by members to obtain advice and/or complete and return to the Club if they wish to avail their executors /trustees (in time) of this service. Additional copies are available on request.

The Committee has identified dates for various Club functions and events for the balance of this calendar year and these are set out elsewhere in this issue. Please mark the dates in your diary now so you can be sure to take part.

A new promotional brochure for the Club is being designed at present with the intent of having this printed and available for EMEX in early May. Thanks to Hugh Martin and Murray Lane for offering to pick this project up.

Manukau Live Steamers have very kindly invited our Club members along for a runday at their track at Centre Park in Mangere on Saturday 24 April. Members are welcome to bring their engines along (please bring your boiler certificate) and run on both tracks; or just come along as spectators and riders. MLS have offered to provide lunch (a small donation on the day will be appreciated). The plan is to open for steam- up from 10am onwards with running through to 3pm. The track will be exclusively reserved for 3.5 & 5 inch models, so you won't have to worry about the big boys (7.25) getting in the way! MLS members will also be running their smaller locos. Come along and join in the fun of running on a different track and meeting people with similar interests at another Club.

Well that's all for now, keep making the most of your model engineering interest......

Grant Anderson

Club Running and Family day 13th March

The rain threatened, but never eventuated. A good number of members (approx 45) arrived with 8 loco's in total. Some ran only once round the track before problems set in, however most ran well. We organized a "Nominated Time" run where each driver has to say how long he will take to do 1 circuit of the track from Station Start to end at Off loading Bay.

The results are as follows: See page 4

		Nominated	Actual	Diff	Run	
Driver	Loco	<u>Time</u> (Mins: Secs)	<u>Time</u>	(Seconds)	Number	Placing
Dave Russell	Dover	4:00	4:00	0	3	1 st
Ross Purdy	OS Porter	4:40	4:41	1	1	2 nd =
Steve Day	Sandy River 24	4:15	4:16	1	2	2 nd =
Gary Farquhar	Lex	4:05	4:09	4	1	4 th
Dave Russell	Dover	4:00	4:08	8	1	5 th
Scott Purdy	OS Porter	4:50	4:35	15	1	6 th =
Haydn Purdy	OS Porter	4:00	4:15	15	2	6 th =
Grant Anderson	Hotpot	4:10	3:55	15	1	6 th =
Lex Farquhar	Lex	3:50	3:34	16	1	9 th
Haydn Purdy	OS Porter	4:30	4:00	30	1	10 th

The afternoon was rounded off with a BBQ and some refreshments for all who attended; it was good to see some of our younger members participating in the train running and encouraging to see such a good turn out in general. A fun day was had by all.

Greville Wills

Bits & Pieces, General meeting 2nd March 2010

Conducted by Murray Lane, reported by Roger van Ryn.

First up was a large chuck key Murray is making for a large lathe at Motat. The key has a smooth round extension to the square part, and helps to keep the bleeding chuck key in the hole while one fumbles with the job with both hands and struggles to turn a stiff key with ones elbow... or at least that's how I do it.... When are they going to offer those Genetically Modified engineers with three arms? **Photo A**

Some pristine tool holders were presented by Mike Jack which he bought while in USA, made us all weep when we heard the good price. What lovely work. **Photo B**

Mikes awesome connecting rods for a customers A4 make the original samples look well, ...er.... a bit rough? Made better than the originals, with CAD drawings from photographs of the original Nigel Gresley in person, taken when Mike was in England. Mikes using P20(?!) steel....??? right...." P20 is a pre hardened high tensile nitriding tool steel which offers ready machineability in the hardened and tempered condition. .." (Wiki)oh! Photo C

Peter Woodford borrowed an electric box from a machine (hope his boss is not reading this) to show us. It's the bit that squirts the plastic and glue to make 3D protoypes. Amazing stuff. Peter also had sectioned some fridge units to illustrate what makes them go. As Peter states they go... for years, and are probably the most reliable item of whiteware in a kitchen. **Photo D**

Murrays been making a lovely machinists level from an original supplied by Graeme Bell. They are both "beuts" and Murray recons it's good for 1 thou over the length of the gauge or better. **Photo E**

Murray also gave us a blow by frustrating blow of the joys of pattern making.... Having been there and had a go myself, I appreciated some of the difficulties and took heart and might have

another go one day. The pattern is for Murrays improved Myford tail stock. Use was made of cling wrap and silicon spray as release agents. **Photo F**

Dave Russell did some inventive adapting and solved a problem with a \$3 stainless steel pot. Now he has a stainless guard for his 6inch Bench grinder. Very good too, should last forever. **Photo G**

A brass "whatsit" proved to be an oiler for a 303 rifle along with a butt to show us where it goes. Peter Tomkies has a few of these. Peter also showed another nice little "whatsit" which turned out to be a press for pushing in jewels? Or making the holes for the jewels? In clocks that is.

Photo's H & I

Graeme Quayle showed some lovely small engines and bits that a keen modeller had been making over the years as a recreational pastime to his work as a Bank Manager. Being self taught didn't stop him from producing some lovely models that are very practical working entities. These went to new homes. A wood lagged vertical boiler, "Maxwell Hemmens" oscillating engine driving a boat prop, small steam plant and a "Quayle Horizontal Engine" represented one mans creative work. **Photo's J & K**

Check out http://www.ministeam.com/acatalog/Maxwell_Hemmens.html. Get a shock \$\$\$.

An impellor for a "Roots" type blower (or sucker?) for Alan Fosters TS3 engine made from "ali", along with the intricate form tool used to make it. Alan tells me it (the impellor) goes in the exhaust to help scavenge the engine. Nice. **Photo L**

Mark Richardson had some questions about the tempering of Taps and Dies that he had made. These go down to 1.1mm thread! **Photo M**

Martin Plants piston valve and cylinder block for his Springbok is coming together well. Martin bandied some ideas with members about choices of valve material. A Viton seal tensioned by a Teflon ring being one suggestion from Mike O. **Photo N**

A BIG boiler for Mike Banks 5 inch gauge "King", had me thinking its for 7 ¼ as I wrongly stated previously. It sure is nice, with the interesting innovation of a formed fire hole which Mike previously showed us in progress. The inner firebox plate is extruded (by hand and many annealings) to form a smooth non-shovel-catching fitting. You can also see into the near corners of the fire-box easier. 6 months work, \$600 silver solder, 35kg weight, pressure tested and holding. Awesome. **Photo O**

Stan Locke donated some stainless steel grating material to "gratefull" recipients.

Greg Burrows nice axle boxes for his 7 1/4 are looking good. Is this for self aligning bearings? **Photo P**

An Allchin Safety Valve assembly shows Bob Craig has been busy, nice. Photo Q

Kevin Ryans family got him a Aussie "Bardic" for a present. Off e-Bay I think.

Some grey "stapler" looking things with milling cutter inserts turned out to be gyroscopic stabilisers for Air to Air missiles. The "milling cutters" are vanes driven by the airstream. Oh. Seems the mechanical boys got one over the electronic department in solving an accuracy problem. Yay! Saved them thousands of £'s. Brought in by Chris Ratcliffe. **Photo R**

A movie brought in by Lex Farquhar was very interesting, on building your own 747. I need to see that again in slow motion. Amazing.

Roger van Ryn













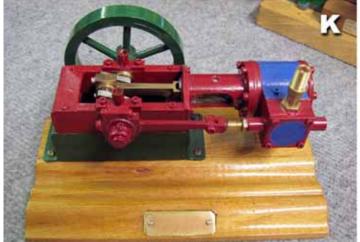




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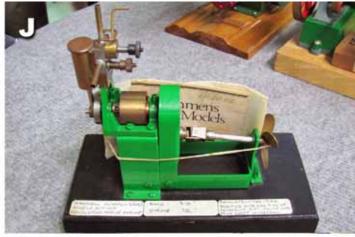




















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The Latest in Engineering

Extracts from The Model Engineer and Electrician of a century ago...

A couple of "tips" this time which may be of interest. I found Henry Cullum's letter particularly interesting, not so much for the tip itself, but mainly when I considered the environment in which he was working when he wrote his letter.

He would have been born around 1840, and would have witnessed incredible changes in the techology around him as he matured. The last few decades of the Industrial Revolution were in full swing, and one wonders what he would have made of the telephone, phonograph, and incandescent lamp, all of which would have started appearing when he was in his late thirties or early forties.

He would (presumably) have spent his whole working life at the colliery, starting off at the lowest level in his early teens (or even younger), and, from the cheerful tone of his letter, being in a perfectly fit state at age 70 and entertaining no plans to retire, assuming he could afford to do so.

Consider how skilled he would have been after a 45 year career with machine tools. Computers, pocket calculators, digital readouts and numeric controls were years away from existence. He would have relied solely on the feel of his hands and his "engineer's eye" to get the job done, and one imagines his work would have been to a standard most of us today would envy.

Did he make models in his spare time (assuming he had the luxury of spare time), or was his interest in reading "M. E. & E." purely brought about by his work as a machinist? What became of the things he produced and the contents of his workshop?

Did he have a large family? When did he die? Where did he live? The letter does not indicate precisely where Sunnyside Colliery was located but it's a pretty safe bet that no trace of it remains these days.

From the "M.E. & E." of March 17, 1910

Manipulating Tiny Screws.

By H. J. R.

The very small screws found in spectacles, watches, and other delicate structures, are often very difficult to handle and get properly fixed, because being so small they defy such clumsy tools as fingers to hold them. Holding with a strip of paper having a small hole in one end, so that the thread, but not the head, of the screw can pass through, will get over the difficulty. After a few turns of the screwdriver the paper can be torn off and the operation of screwing home completed. It is also useful to remember that a polished table is not a suitable surface from which to pick up these little screws, and the same applies to needles and to small pins. By pressing the ball of a finger of the left hand upon the screw as it lies upon the table it will be made to adhere to the skin, and can be easily picked off with the fingers of the other hand.

From the "M.E. & E." of September 9, 1909

Drilling Holes that Meet.

TO THE EDITOR OF The Model Engineer.

DEAR SIR,-I am much interested in THE MODEL ENGINEER, and especially in the efforts of the young men to overcome difficulties that I had to contend with some 45 years ago (I am now 70).

I shall be pleased to assist in any way that I am able, and herewith give my first item.

In last week's number, I think it was J. H. Clarke saying that in drilling holes that met angularly he broke a few drills just as the holes met. I make it a regular practice when I do similar work to plug up the holes with a piece of hardwood, then as the drill breaks through, its point finds support and breakage is avoided. I have drilled holes in tool steel when three holes would meet at one common point and have done it safely and expeditiously. Softwood will do, but hardwood is preferable. I save any broken hammer handles for this purpose. For drilling or boring holes in any kind of wood, a wire nail pointed like an ancient spear head or flattened like a screwdriver and used in the brace or in a drill stock will do excellent service, being cheap and handy in its many uniform sizes. The wood plugs, after saving the life of many a small drill, may be bored out with a wire nail used as described. I have used this kink many hundreds of time and always with satisfaction.

Wishing you and your "family" much success and pleasurable satisfaction.-Believe me, yours very truly. HENRY CULLUM, Machinist of Sunnyside Colliery.

Brian Cotton

Around the Clubs, reviewed by Alan Emerson

The Workbench, Durban ME Society

Club news and an interesting website that sells models of very old electric motors based on the steam practice of the time www.oldmodels.co.uk Also some good funnies.

The Generator, Palmerston North, Jan and Feb 2010

Cover photo of a model Offenhauser engine with an article on the building of it and of the original. Two" Letters from England " from Stan Compton, these cover a very wide range of topics and are always well worth a read. One in particular mentions a plaque on a wall in Ludlow in Wales that advertises the Aurora coach to London takes only 27 hours, the same time it now takes to fly to NZ.

An interesting article by Doug Chambers on the Duesenburg engines built for the Indianapolis races, it had three rows of eight cylinders in a w form. A write up on Labour Weekend at New Plymouth. A page of photos of the Nelson Event. Good article on repainting a loco. The cover picture on the Feb issue is of their Club's entry to the Les Moore Challenge. Great story by a fireman on a Great Western Hall.

Model Torque, Napier, Feb 2010

Much going on in Napier, the Mission Concert, the `50th celebrations at Waipawa and their Open Weekend. Good article on the good ship Wingatui.

Engine Booster, Los Angeles, Feb 2010

Assembling an OS Mogul kit in 124 ¾ hours, and it ran perfectly. Plenty of good reading and photos.

The Keirunga Park Platform, Autumn 2010

Open Weekend to be held over Easter, see poster on Club notice board. Good write up and pictures on the Nelson Convention. The dedication of the Fred Springer Park near Santa Fe. For sale are a Railmotor, a Honda 7hp engine and a Briggs and Stratton 3-5hp engine.

Blast Pipe, Hutt Valley and Maidstone, March 2010

A lot of good reading about, and pictures of, their recent events. For sale is a 5" gauge Ew class electric loco and carriage by Steve James.

Piston and Prop, Blenheim, Feb 2010

All the sections seem to be doing well, especially the aircraft one. Having the use of a large gym to fly in must be quite something. There are several models, parts and kits for sale.

Boilers, Rotorua, March 2010

The club now has it's own website, www.rsmenz.com . The running day has changed to the first Sunday of each month. A very good article on the life of Frederick Lanchester who invented a lot of the car ideas we take for granted today .More on the Hamilton firm that make loco name plate in most shapes and types seems the Rotorua members have had great success with them, The firm is named Awards & Engraving Experts, has a phone number 0800 34 11 34 ask for Mark. Or e-mail John Heald on jorol@vodaphone.nz or Awards on info@awards.co.nz.

Con Rod, Otago, Feb and March 2010

Good photos and articles from all the sections. Visit by a member of the Sydney tethered car club and his wife. Account of a visit to the Nelson event by several members.

Wheels and Floats, Tauranga, March 2010

Great collection of models on the Bits and Pieces table. Story of the Tornado rescuing stranded passengers when the electric trains froze up.

Northern Views, Whangarei, March 2010

Very good write up by Roger on his visit to the Nelson Convention and the West Coast. The Anniversary Weekend seems to have gone well, great photos of the new signal box.

Expansion Link, Hamilton, Feb 2010

Members visit to MLS. Ian Murie of ChCh visits a number of tracks and is a member of the Big Little Railway, a 101/4" track near West Melton. Congratulations on winning the Les Moore Challenge again. Open weekend to be held on the 20th and 21st of March.

Alan E

Classifieds

Lost / Wanted

- Neville Taylor is trying to locate an Electric Furnace that Jack Taylor had. It seems Jack may have
 loaned it to someone a year or two before he died. It had been a pottery kiln but Neville wants to
 use it for some annealing. The item is grey in colour and about the size of a large microwave. If
 anyone has it or knows of its whereabouts could they please contact Mike Jack, 527 8745
- Graeme Murray is looking for a small carbide cutter that he thinks he may have left behind at a club meeting or loaned to someone, contact **Graeme Murray**, **5762177**
- Glenbrook Vintage Railway are preparing to resume mainline running and are recruiting staff for this, Drivers, Firemen etc. If you are dedicated and enthusiastic contact gvr@railfan.org.nz

Contact Update

Please note the correct email address for Lex Farquhar is lexf@xtra.co.nz and not as printed in the recent phone list.

From The Web

Thanks to John McManus for the following links, well worth a look.

Instructables: www.instructables.com How to make any number of interesting projects. Gizmag: www.gizmag.com Technology Newsletter.

Roger van Ryn found this at: www.wordsmith.org

Here's a humorous article that we got from Wordsmith.... Its a website that sends a daily with origins of words etc. This one was about the word BEDLAM. The bit about the Imperial War museum is amazing, having been there it does seem to have an "Atmosphere" doesn't it?

MEANING:

Bedlam: noun: A scene of wild uproar and confusion.

ETYMOLOGY:

Alteration of the name Bethlehem, a hospital for the insane in London.

NOTES:

The Hospital of St. Mary of Bethlehem in London, now known as Bethlem Royal Hospital, is the oldest hospital for treating the mentally ill. The treatment was not always what's considered the norm today. At one time the "sane" used to go see the "insane" as if in a zoo -- there was an admission ticket.

A Wordsmith correspondent wrote in this:

I've always been impressed that the English located their Imperial War Museum in a former insane asylum. They at least know the proper setting to house a museum chronicling the history of 20th century warfare.

Didn't know that, did you?

Roger van Ryn

AUCKLAND SOCIETY OF MODEL ENGINEERS

Bereavement Assistance Scheme

I	
	(Please print full name)
of	
• • • • • • •	(Residential address)

request that in the event of my death or incapacitation, the Executive Officers (President, Treasurer, Secretary) of the Auckland Society of Model Engineers Inc (ASME) will:-

- offer assistance and/or advice to my trustees & executors on a "best endeavours" basis, for the disposal of my workshop equipment, materials, models, and technical books/magazines (the property) to their best advantage or in the way required
- explain to my trustees & executors, if requested, the general strategy recommended by ASME for the disposal of the items (Appendix 1 attached), and organize and manage the process for them
- endeavour to provide such further assistance in the matter that they request

I understand that:

- 1. This request is not binding, and I can withdraw it at any time by notifying the secretary of ASME in writing.
- 2. If or when assistance is required, the responsibility rests with my trustees & executors to make the request to ASME in writing, to which ASME will then respond.
- 3. My trustees & executors will be free at any time to instruct ASME that no further assistance is required.
- 4. Participation in this scheme cannot in any way affect my will, nor does it give ASME any authority whatsoever over my estate or to act in any way contrary to the wishes of my trustees & executors.
- 5. ASME may benefit by receiving items of the property according to my will, or by receiving as donations any items that my trustees & executors may decide upon, but will give assistance under this scheme without any charge or commission whatsoever and without any expectation of donations.
- 6. The Executive Officers of ASME will nominate a Panel of members to provide the assistance and will so far as possible ensure that the Panel has the interests of my trustees & executors as its sole objective.
- 7. The Executive Officers may replace any member of the panel at their discretion, and my trustees & executors may request the Executive Officers to make such replacement.
- 8. Communications between my trustees & executors, the Panel and ASME Executive Officers will be held strictly confidential.
- 9. The procedure for the sale of the property offered to my trustees & executors is as set out in Appendix 1, which has been approved by a majority vote at a properly convened ASME members meeting.
- 10. Participation in this scheme by my trustees & executors is to be on the strict understanding that they and all my beneficiaries indemnify ASME and all its members against any legal action or claim because of any act, statement, omission or other thing whatsoever done by ASME, its Executive Officers, the Panel or any of its members acting in good faith.

My Trustee / Executor full name is(Please strike out as appropriate)	(Please use block capitals)
Contact details for Trustee / Executor Detail any Special Requests or Instructions (usin	ng a separate signed sheet if necessary)
Signed:	Witness
	(Sign and print name, to be an ASME Club member)
Date	Date

A.S.M.E. recommends that members seek independent legal advice prior to completing this request.

