

# MainLine

Spring 2004  
Volume 21 Number 3  
www.nmra.org.au

## TOM'S DISCOUNT HOBBY WAREHOUSE

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## TRUSTEE'S REPORT

The results of the vote, on what has come to be known as the Long Range Plan, were released at the Board meeting in Seattle. The result was convincing, with 80% of votes supporting the by-law changes.

The new National (International) Board will be made up of 9 Directors.

Five of these will be elected by members in North America. One by members in Europe, Central and South America and Africa. One by the 17 Region Presidents. One by members living in Asia, Australia, New Zealand and the Middle East. And one 1 by members worldwide

As one would expect there will be a number of changes within the Australasian Region.

Firstly, the AR Trustee's position will cease to exist, and will be replaced by a Pacific District Director, mentioned above. Secondly, our region President will vote with the other Region Presidents to elect "their" Director. Thirdly, all AR members will be able to cast their votes for the Worldwide Director.

So, not only are we able to vote for two Director's positions, we are also able to stand for those positions.

The aim is to have the new Board in place by July 2005, so between now and then we will have an election for Pacific District Director, and an election for Worldwide Director. If you are interested in more information about either of these positions please contact our Region President.

Region Board members will also be busy, looking at our Constitution to see what changes are required to align it with the new National by-laws. If changes are needed then you will be asked to vote on those changes in due course.

When joining the NMRA in future, a new member will automatically become a member at National, Region and Division levels. Currently we have Affiliate and Full members with ScaleRails part of the Full member package. In future ScaleRails will be offered as a subscription to all members.

At a local level, Allan Garbutt and I took the exhibition layout to Adelaide for their show in June. Ron, Ray and the guys did a great job promoting the NMRA and I understand the contacts made at the exhibition have already been invited to a monthly meeting with about 12 attending. We also caught up with Liz Rayson, whose late husband David was instrumental in re-establishing the SA Division. My thanks to Ron and the guys for their hospitality especially Ray and his family for putting us up.

Congratulations also to Ian Phemister for being appointed as Div Super for our new Northern Rivers Division. Ian tells me there is lots of enthusiasm locally and the modules they are building are progressing well.

Lastly, also at a local level, our Region Convention is fast approaching (Oct 2, 3 & 4 long weekend) Registrations close Sept 24<sup>th</sup> so if you haven't registered please act now so you don't miss out.

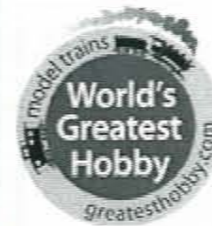
Cheers, David North

## INDUSTRY NEWS

- On June 14, 2004, Horizon Hobby, Inc., announced that it purchased Model Die Casting/Roundhouse, a Carson City, Nevada-based manufacturer of N and HO scale model trains. The firm's operations will be moved to Carson, Calif., home of Athearn Inc. Tim Geddes, Athearn's president, will oversee the operations of both product lines. Model Die Casting was founded in 1938 and was originally known as The Roundhouse. The company currently produces N scale steam locomotives and rolling stock, HO scale freight car kits and ready-to-run models, and HO scale steam and diesel locomotives.
- As the vast majority of you will affirm, our hobby is rumor laden, but not necessarily fact filled. Thus, some are likely already informed that Samhongs Co., Ltd. is no longer in the scale model train business. With a Samhongs's foreseeable end in site, Challenger a major brass importer has ceased including that name in its advertising and has announced replacement plans for

Korean firm Boo-Rim Precision Co. While the demise of Samhongs is a sad happening, it is not a terminal event for the brass importers. Agin of Korea is still a major brass manufacturer for Overland and they also produce product for Broadway Limited.

- Model railroader John Armstrong, passed away July 28th 2004. For those of you that didn't know or don't know of John...he was one of the greatest model railroad designers of our time, very active in the NMRA and was still giving clinics at the National Conventions even up until last year. He often opened his home up to fellow modelers for conventions and tours and if you called ahead he would even open it up for private tours. John was well known as having written several very in-depth books on designing layouts and he devised the 12" Square System for model railroad design. He was also very active in the Layout and Design SIGs. The hobby has lost one of the real "Greats" in his passing.



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2004  
20 Years of NMRA  
in Australia

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### ON THIS COVER:

An AC-4 Cab Forward from Broadway Limited is seen here completing a turn on Sowerby Smith's Southern Pacific Shasta Division turntable. Detailing and weathering of the locomotive have been added by Sowerby. This locomotive due for a re-release this month with fan driven smoke was reviewed in our last issue. Photo by Sowerby Smith.

See additional picture on pages 20 and 21.

The Summer edition of MainLine will be distributed on December 4th.

# Schedule of Divisional Meetings for 2004

## Division 1 Queensland

Division Superintendent Glen Stevens.

For details of Queensland meetings and venue addresses, please contact Glenn Stevens.

(07) 3207-2442

Meetings start at 1.30 unless advised

September 12 <sup>th</sup>	Bert Toogood	1 Bon Villa Avenue,	Innisfail
September 18 <sup>th</sup>	Denis Lane	3 Tyron Close,	Springwood
November 6 <sup>th</sup>	Glenn Stevens	6 Gunsynd Court,	Birkdale
	Division 1 Christmas Picnic		

## Division 2 Canberra

Division Superintendent Viv Brice.

September 25 <sup>th</sup>	Peter Weller-Lewis	5 Tarilta Court	North Terrace Queanbeyan	(02) 6284-4363
October 23 <sup>rd</sup>	John Gillies	14 Earle Street	Lyneham ACT	(02) 6248-8408
November 20 <sup>th</sup>	David Service	1 Kleinig Street	Nicholls ACT	(02) 6255-7447

## Division 3 Victoria

Division Superintendent Grant McAdam.

All meetings start 11.30 Sunday.

September 19 <sup>th</sup>	Laurie Green	20 Nambour Drive,	Sunbury	(03) 9744 5188
October 10 <sup>th</sup>	Gavin Hince	25 Dwyer Street,	Clifton Hill	(03) 9489 4527
November 14 <sup>th</sup>	John & Lynn Cracknell	55 Donnybrook Road,	Norlane West	(03) 5274 1569
December 5 <sup>th</sup>	Grant McAdam	194 Booran Road,	Ormond	(03) 9578 8685

## Division 6 South Australia

Division Superintendent Ron Solly.

September 25 <sup>th</sup> (1.30pm)	Geoff Chatwin	23 Herriot Court,	Mt Barker	0414 702 755
November 13 <sup>th</sup>	Ron Solly	9 Grey Crescent,	Evanston Gardens	(08) 8522-2536

### Proposed 2005 Meeting Dates

January 15 <sup>th</sup>	TBA.
March 19 <sup>th</sup>	TBA.

## Division 7 New South Wales

Division Superintendent John Baker.

Sydney meetings organiser Divisional Superintendent John Baker (02) 9629-2349. Meetings start 2.00 Saturday unless indicated differently.

### 24 hour recorded message meeting information line now in operation for NSW Group (02) 9975-5565

September 11 <sup>th</sup> (11am - 1pm)	John Booth	Dora Street (go to end)	Adamstown, <u>Newcastle</u>
	Newcastle Model Railway Club. Sausage sandwich lunch will be provided for \$3.00 each or 2 for \$5.00. Soft drinks \$1.00 each.		
<i>NB: Double Meeting</i> (2pm - 5pm)	Doug Cook	41 Mawson Street,	Shortland, <u>Newcastle</u>
October 2 <sup>nd</sup> - 4 <sup>th</sup>	Convention	Dence Park,	Epping
November 13 <sup>th</sup>	Rod Smith	26 Peel Road,	Baulkham Hills
December 4 <sup>th</sup>	Christmas Party	Uniting Church,	Baulkham Hills

### Proposed 2005 Meeting Dates

January 15 <sup>th</sup>	Baulkham Hills MRC	Seven Hills Road, at the Jasper Road traffic lights.	Baulkham Hills
February 12 <sup>th</sup>	George Paxon	5 Appleton Avenue,	Wenworth Falls
March 16 <sup>th</sup> (Sunday)	Steve Pettit	26 Aleppo Street,	Quakers Hill
April 16 <sup>th</sup>	Gerry Hopkins	15 Narara Crescent,	Narara
May 14 <sup>th</sup>	Stuart Sharp	6 Paris Avenue,	Earlwood
June 11 <sup>th</sup>	Doug Wallace	12 Meares Road,	McGraths Hill
July 16 <sup>th</sup>	Sowerby Smith	174 Fullers Road,	Chatswood
August 13 <sup>th</sup>	TBA.		
September 10 <sup>th</sup>	TBA.		
October 15 <sup>th</sup>	TBA.		
November 12 <sup>th</sup>	John Baker	54 - 60 Rosebery Road,	Kellyville



# MainLine

Official Publication of the  
Australasian Region  
of the

## NATIONAL MODEL RAILROAD ASSOCIATION

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Assistant **John Saxon**

### ARTICLE SUBMISSIONS:

*MainLine* welcomes articles, photographs, drawings, cartoons, letters to the editor and other related material as contributions to the mutual enjoyment of the hobby by the membership. Material should have wide appeal and preferably be sent by email or post to the editor. Articles may be submitted on either 3.5 inch floppy or CD in any Windows format. Preferably include hard copy of your contribution. Sharp photos, may be submitted for inclusion. Type written articles are also welcome. The NMRA accepts no responsibility for the accuracy of articles, which are published in good faith and at all times deemed the opinion of the author. Publication of any article shall be at the discretion of the editor.

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**ADVERTISING:** Rear page, full page, half and quarter page space is available at attractive rates. Contact the editor for information. Rates are for one year. Magazine is published quarterly. Advertising contained in the *MainLine* in no way constitutes endorsement or guarantee of product by the NMRA. The NMRA reserves the right to reject or refuse advertising for any reason and it is the responsibility of an accepted advertiser to comply with regulations associated with the Trade Practices Act.

Local Membership fee of \$55.00 includes posted quarterly publication *MainLine* Magazine. Additional Fee for US Scale Rails Magazine posted monthly \$45.00 All fees are payable in Australian Dollars to Toni Saxon, Membership Officer.

Please note that fees must be received by the 8th of the due month in order to maintain continuity of Scale Rails delivery.

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National Model Railroad Association  
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Forestville NSW 2087

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# President's Report

### New Division Created

NMRA Region is alive and well and growing on the North Coast of NSW. The creation of the Northern Rivers Division presently centred at Coffs Harbour, was recently approved by the Region Board.

Ian Phemister and his fellow members have been busy promoting the hobby and the Region at the recent Broadmeadow Model Railway Exhibition. Congratulations to Ian and the team.

### Division 6 South Australia

The Region layout along with David North, Region Trustee, Rod Smith and myself were made to feel very welcome by Ron Solly, Ray Brownbill and Division 6 members in Adelaide last June. The Region layout was exhibited by the Division 6 team at the Adelaide Model Railway Exhibition at Angle Park over the Queen's Birthday holiday in June.

It was a privilege to present Len Opie with a special certificate. Len has been a member of the NMRA for 57 years and is the longest standing member of the NMRA in Australia and a foundation member of the Australasian Region.

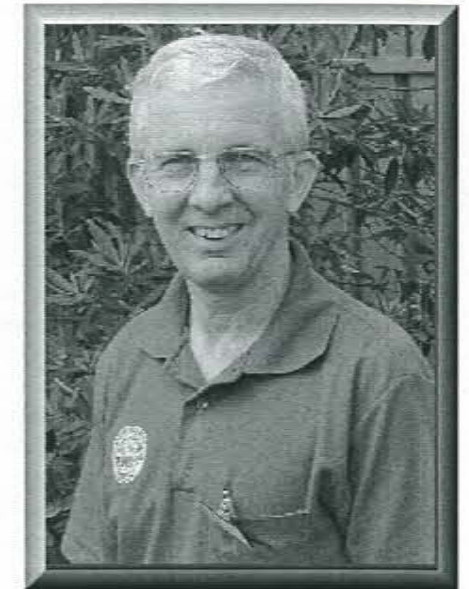
It proved to be a great opportunity to promote the NMRA to the Adelaide public and the modelling fraternity. Fifteen people were offered complementary membership to attend three Division 6 meetings. A number of these people have subsequently attended a meeting.

Although Division 6 were entitled to half of the contribution given by the Exhibition's organisers for exhibiting the layout, they generously donated their share to the Region for the benefit of all members.

We look forward to meeting with Ron Solly, Ray Brownbill and other South Australian members at the Sydney October Convention and reciprocating the billet provided to David North and myself by Ray Brownbill.

### 2004 Convention

The NMRA National Convention at Seattle was attended by eighteen of our members. We look forward to seeing some of the hundreds of photos and stories of the Convention and of the railfanning and general sightseeing of America and Canada.



At the Region's Sydney Convention to be held on October 2,3 and 4, the highly skilled presenters will share their skills with members at clinics, workshops and demonstrations.

Phillip Moore will offer insights into the planning and efficient construction of a large layout. Geoff Nott will be bringing his latest layout to the Convention and will be speaking on some of his scenery techniques. You will have the opportunity to visit the AMRA Exhibition at Liverpool - one of Australia's largest. Just a few of the activities available to Convention attendees.

By the time you read this you will only have a few days left to register (close off for registration 24 September - see application form with this issue).

I look forward to meeting new faces, old friends both local and interstate members at the Region Convention, 2,3,4 October 2004.

### NMRA National Long Range Plan

I was really pleased to see that the Long Range Plan was approved by membership ballot, held earlier this year, and the result declared at the recent National Convention in Seattle. This plan is designed to guide the NMRA into the future. David North's Region Trustee report comments on the impact of these new regulations at a local level.

*Allan Garbutt*



### From the Editor:

It's rather sad to see another brass manufacturer, this time long time industry leader Samhonga close its doors. This follows firstly Oriental and then Railworks, all known for quality and detailed product. The reason may well be that the quality of injection moulded plastics and castings has risen to an all time high at affordable prices. The latest Mikado

offering from Marklin off-shoot Trix, is possibly the best most highly detailed locomotive that HO modellers have seen other than brass 'hand made' and sets a standard that the other manufacturers will I am sure choose to emulate. As Broadway Limited moves to their next phase of providing fan driven smoke a la the large scale manufacturers. Not being a fan of the possibility of smoke oil staining scenery and causing track electrical pickup problems, I never-the-less think the realism completes the picture. As more and more manufacturers are supplying ready to run with sound I indeed wonder, what next? I recall a repetitive and fitting statement from a contributor to the Atlas internet group, "one of everything please".

For those yet to start layouts, there is welcome news that Peco has started to release code 83 turnouts (insul frog & electro frog) and flex track. A range of product will be available with No 5 and 6 first followed by No 8 turnouts. Expect also curved turnouts and slips soon. This is good news and provides a happy compromise between over scale code 100 and the realistic but installation accuracy demanding code 75. Between Peco and the already available Shinohara / Walthers and Micro Engineering range there is now a great modelling choice available in track.

It seems that in order to stay competitive, more manufacturers have seen the necessity to join the DCC/DC sound scene revolution with Proto 2000 now releasing their Heritage 2-8-8-2 with the now well accepted industry standard QSI sound module. Expect re-releases of other Proto models with sound would be my guess. Also I notice that Intermountain have just announced that all their future locomotives starting with the F3A & B, then continuing with the FP7 and FT models will be equipped with QSI sound. Have Soundtraxx missed the boat with the continual delays in their Tsunami offering? Originally Athearn Genesis announced that their 4-6-6-4 Challenger would be available in separate DCC and DC models. At some stage however in their development program they decided to build a common model and have included a wireless sound controller to get the best of the available sound in DC mode. Whilst not as comprehensive as the DCC offering, with this remote control you can control the whistle, bell, water injector, air release, blower hiss and the sound of the firebox door. Release 1 of this model should be available at the time we publish. Have fun fellow modellers, whatever your chosen scale or prototype.

David Jupp

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## Regional Roundup

Division 1 Queensland Mark Ward

On Tuesday, 2<sup>nd</sup> March 2004, the Union Pacific Model Railroad Club (UPMRC) of Brisbane kindly ran an operating session with Division 1 members as invited guests. The evening at their Holland Park clubhouse was eagerly anticipated, with eleven Division 1 members attending. The weather was perfect for what was to be a thoroughly enjoyable evening.

Each member was personally welcomed on arrival, and for those that had not previously seen the layout an introduction to the layout's design and construction was provided, and given guided layout tour on arrival. The efforts of many UPMRC members over 30 years have contributed to a layout which resulted in a large model railroad with a purpose - operations.



Pacific Flats Yard  
With  
UPMRC Members Kim, Mike & Graham

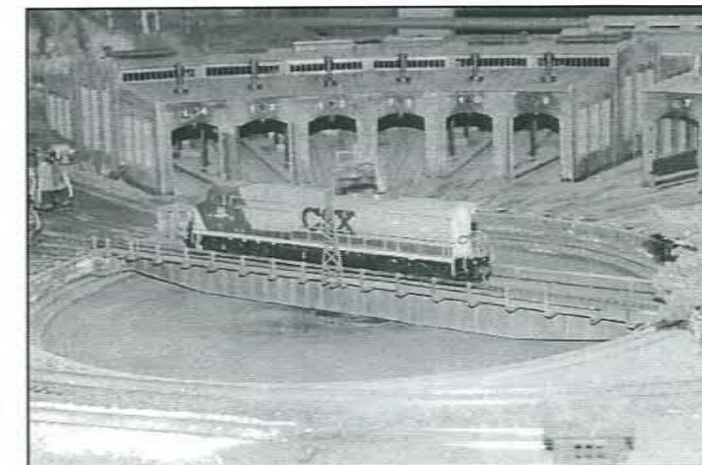
At approximately 8pm the call was made for all operators to take their positions. Communications were established between the centrally located Dispatcher's Panel and ten mainline or yard operators. Walk around control with numerous plug-in points, in conjunction with radio headsets makes operating this layout a complex and yet organised process.



Dispatchers Panel  
With  
UPMRC members Ray, Anatol & Jim

Although asked to keep visitor movements within the confines of the layout to a minimum, the camera in my hands provided me with a somewhat plausible (albeit weak) excuse to 'roam the land' in search of images of interest.

Needless to say, many were found, and taking interesting photographs on such an established layout was indeed a straightforward proposition, with all operators being more than willing to assist in the occasional "would you just briefly stop there?" requests. Fortunately for me, those driving trains were able to still comply with the Dispatchers instructions, and allow me to take those pesky photos.



CSX at the Sierra Central Roundhouse

To the credit of all involved, and with years of practice, the instructions provided to each operator were clear and precise resulting in a smooth running session. In the midst of the seemingly organised chaos, much laughter was had by many over the course of the evening, and during my travels in the middle of what is a large fully operating layout, the friendship of those involved was clearly evident. The banter experienced when this many model railroad enthusiasts get together was terrific, and each member that I came across was genuinely interested in making the evening an enjoyable experience for all.



UPMRC Member Bob Clelland  
Switching at Bliss Siding

When the operating session proper came to its scheduled end, the call was made for any/all visitors to man the throttles and participate in running the layout. No second requests necessary here! For the next forty five minutes, various NMRA members made great use of this generous offer, which

capped off an excellent evening. What more could there be left to offer us guests on this evening? - cakes, tea and coffee of course! What a well rounded and brilliant visit for all concerned.

Glenn Stevens, our Superintendent, on behalf of all the NMRA members attending, provided a heartfelt thank-you to the President and members of the UPMRC for their efforts on this memorable evening, and presented an NMRA Meeting Appreciation plaque in recognition of the visit.

**Division 2 Canberra Viv Brice**

Our **May meeting** was held at the home of Peter Dinham. Peter is an N scale modeller of the Uncle Pete (has he paid his licence fee yet?). Family circumstances dictated the size and shape of his layout, as it probably does for most of us, but in Peter's case, the available space was very limited. However, in typical model railroader fashion, his solution has allowed him to get the maximum operating solution into that space, using a fold-up



Peter Dinham's fold away layout

layout. This layout is a very old one that has been thoroughly modernised and rewired, and Peter has made a lot of progress since we last visited him.



To allow the layout to fold away, Peter builds the high parts to be removable.

In **June**, we assembled at Jess Brisbane's home although I'd got my programming wrong and scheduled this meeting for the long weekend and so the turnout was small. Jess's theme was 'Material, Tools & Useful Gadgets' and she talked about some of the items that she has found to be most useful in building



model railroads. The accompanying photo shows some of these tools and gadgets, including a tiny go-anywhere digital camera so that she can take pictures of anything that catches her modeller's eye. She talked about how to look at materials



Jess Brisbane's octagonal layout is progressing well.

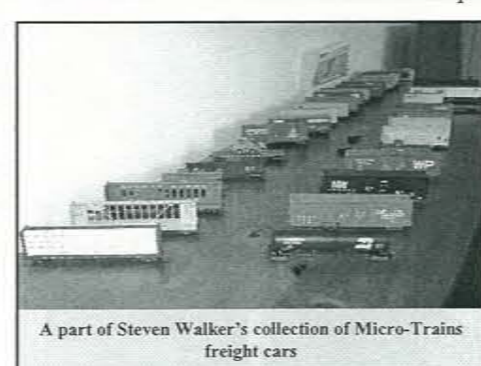
is using for an O scale model she is building. Other items which impressed me were the deburring tool, the liquid electrical tape and the gizmo for picking up tiny things that you've dropped. We also had a chance to view the progress that Jess has made on her octagonal N scale layout.

Stephen Walker hosted the first **July meeting** and as his theme, gave a presentation on Micro-Trains. Micro-Trains is a spin off from the Kadee company, begun by the twin Edwards brothers, Keith and Dale (hence KD) in 1940. I never realised that the patent for their HO Magnematic coupler was granted as early as the 1940's. Anyway, in the '60s, they began to manufacture their N scale line and in 1972, introduced their complete freight car line in N scale.

In 1990, the original Kadee company was physically divided into two, Micro-Trains Line Co. Inc, under the ownership of Keith Edwards, covering N, Nn3 and Z scale with Kadee retaining all the rest.

Micro-Trains success has no doubt arisen from the fact that from the beginning, they have been synonymous with quality. They are a major source of N scale freight cars and now locomotives and an after market source of high quality trucks and couplers. They also believe in variety with, as of May 2004, the release of their 96<sup>th</sup> body style, a bi-level open auto rack. Add to this their release of many body styles in a wide variety of road names. A supreme example is the 20000 series PS-1 boxcar, first issued in 1972 and subsequently included in over 300 releases in more than 150 paint schemes!

Micro-Trains has spawned what in some cases may be described as almost a cult following, with up to \$1300 being paid recently for a NYC single door boxcar which many consider to be the rarest of Micro-Trains products. A quick



A part of Steven Walker's collection of Micro-Trains freight cars

look at eBay shows well over 500 Micro-Trains items for sale. If you need more information, then visit Micro-Trains on the web or even contact the unofficial Micro-Trains fan club, the N Scale Collector.

The **second meeting for July** was hosted by John Bullen who gave us a fascinating presentation on the 'Trans Europ Express'. Unlike the many famous express trains of the twentieth century, the Trans Europ Express, or TEE, was conceived not as a single train but as network of trains giving high quality service to business travellers between all of

outside the direct theme of model railroading and outside the strict scale limits of your chosen field. An example in the photo is the package of 1:35 scale military field workshop items, several of which she

Europe's main business centres. The idea was the brainchild of the then Director of the Netherland Railways, Dr Ing F Q den Hollander and his inspiration was the formation of the European Coal and Steel Community in 1952. If they could transcend national frontiers, then surely the railways could do the same.

The agreed standards for the TEE included: First class only, obligatory seat reservation, standard coach design, maximum three seats across, full restaurant service, minimum speed 140 kph and all cross-border activities conducted onboard. Initially all trains were to be diesel powered to avoid engine changes where national electric systems changed but this was later overcome by multi-system trains. The TEE grew from a limited beginning in 1957 with 11 routes to its maximum network size in 1974, covering numerous cities in the Netherlands, France, Belgium, Germany, Denmark, Luxembourg, Switzerland, Austria, Spain and Italy. However, the TEE never quite overcame all of the nationalistic attitudes and with vast improvements in both road and air transport, by the 1980s, it was in serious decline, sliding to only three remaining routes in 1987 and finally closing in 1990. The TEE may only have lasted 30 years but it was legendary while it lasted and rightly so.

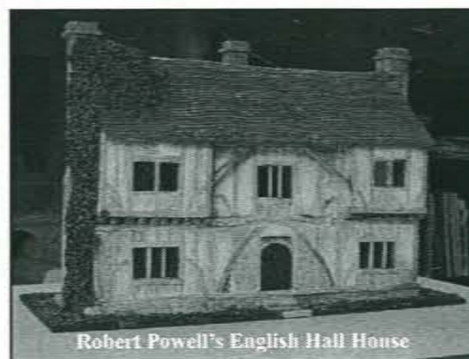
Finally, we welcomed John Prattis back from the NMRA convention in Seattle and congratulated on him on winning third prize in the Black and White photography competition.

**Division 3 Victoria Rod Hutchinson**

The **June Meeting** was held at the home of Geoff and Di Truman at Hoppers Crossing just to the west of Melbourne.

A wintry Melbourne day did not stop around 20 or so intrepid modelers and guests from getting together. Part of the meeting was viewing the wares from Geoff Truman's previous business, Werribee Hobby Centre. He has lots of goodies left from the shop he will happily sell to you.

John Hunter trotted in with the beginnings of his new creation, two modules of Narchuca Wharf, an O scale switching layout based on the wharf at Echuca, Victoria. Laurie Green brought along an O Scale contest model he will be taking to the National Narrow Gauge Convention in Santa Clara California in September. Robert Powell presented us with a 7mm scale English Hall House complete with removable wall showing the



Robert Powell's English Hall House

interior. The house is made from timber and polyfilla. Grant McAdam showed his O Scale false fronted shop complete with removable window displays. Ken Hughes brought along some O Scale carriage stock and bits including curly spoke wheels he will be making available for sale at the Sunbury Exhibition.

Magazines included Narrow Lines, Colorado Rail



Grant McAdam's O scale shop



Ken Hughes' early spoked wheels

Annual No 14 and a book on the South Geelong and Queenscliff Railway.

Grant McAdam conducted the formal part of the meeting including promo's for the NMRA convention in October and the Australian Narrow Gauge Convention next Easter. In his usual gentlemanly style thanked the host for giving up the home and hopefully found the thank you plaque to present to the host. The rain held off and great day was had by all.

The **July Meeting** was held at the home of your correspondent **Rod & Julie Hutchinson** in the outer eastern suburb of Mooroolbark. A cold and sunny wintry Melbourne saw seventeen enterprising souls get together. Five apologies were received.

Laurie Green showed us further development of his O Scale contest model, *McPhee Maintenance Shed* he is taking to the USA.



Laurie Green's McPhee Maintenance Shed

Robert Powell presented us with a 7mm scale Tudor House. Grant McAdam brought two completed O Scale false fronted shops complete with window displays and lighting.



Michael Holien's O-Scale Fire Station

Michael Holien brought an O-Scale Fire Station built for Steve Cullen's new Bellbird and a freelance kit bashed stake truck. Mario Rapinett brought along some fine examples of his soft rock and Rod Hutchinson showed off

his tree ferns made from pipe cleaner and emu feathers. Peter McDonald showed the latest additions to the NA being constructed for Phil Badger.

Andrew Davenport brought along a book on the Canadian Pacific 8000 class locomotive

Grant McAdam conducted the formal part of the meeting mentioning both the NMRA convention in October and the Narrow Gauge convention next Easter. The host trusts that every one enjoyed the food provided by his wife, Julie and hoped they all had a wonderful wintry day full of inspiration and model train talk.

The **August Meeting** was held at the home of *VR Models* proprietor, **Peter MacDonald**, in Bacchus Marsh west of Melbourne. A cold, sometimes cloudy; sometimes sunny, wintry Melbourne saw fourteen rail fans from afar as Belgrave in the east, Ballarat in the west and Geelong in the south get

together to discuss their latest contribution to the hobby.

Laurie Green showed us a photograph he will enter at the 24th Narrow Gauge Convention in Santa Clara USA. A



large number of models were on display including VR R Class steam and X Class diesel by Geoff Truman and an S



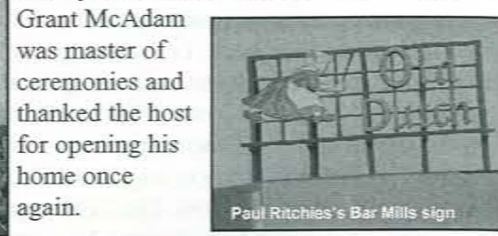
Class tender by Peter McDonald in HO. Ken Hughes brought another of his O Scale critters; Bob Jenson has built the *Steam Era* VR. Water Tank and John Cracknell is building his O Scale NA 2-6-2. Grant McAdam had an O Scale printing press for his next shop project. Rod Hutchinson brought trees built from



Eucalyptus twig and *Sedum Autumn Joy* cuttings to represent a Messmate or Mountain Ash Tree and Ti-Tree for use as under storey. Bob Backway suggested that a NZ plant, *Cotula*



*Perpusillia* may be used to simulate small ferns. The usual plethora of magazines from the USA and UK were received and a copy of *Walhalla Heyday* provided inspiration for building construction. Paul Ritchie showed us a variety of *Bar Mills* laser cut timber signs.



Grant McAdam was master of ceremonies and thanked the host for opening his home once again.

### Division 6 South Australia

Ron Solly

On a cold & miserable Saturday, July 17th, 2004, the meeting of NMRA 8 SA members & 13 visitors took place with Al

Continued on page 11

Register  
Now

## NMRA Australasian Region Sydney Convention

Saturday 2 October—Monday 4 October 2004

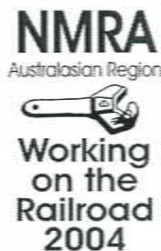
Saturday: Liverpool Exhibition from 9am Layout Tours from 2.30pm

Sunday & Monday: Clinics & Workshops at Dence Park, Epping from 8.30am

Model & Photo Contests—Railway Marketplace—Ladies Activities—

Sunday Night Dinner & Guest Speaker

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[www.nmra.org.au](http://www.nmra.org.au)



Harris as the host. Ron Solly welcomed all especially the visitors who came as a result of being contacted after their show of interest in the NMRA at the June AMRE Exhibition in which Allan Garbutt, David North & Rod Smith from Sydney attended. One of the visitors, Ian Wade handed to Ron his application to join so Ian & his wife Irene were again welcomed. Discussion with other visitors indicated that they could also be joining over the next couple of meetings. A brief talk including subs, MainLine and the forthcoming convention took place.

Ray Brownbill as our Division Achievement Program contact gave information session about the AP & this will be followed up with more detail in later meetings.

Past meetings here in SA have seen the host provide refreshments with members & visitors providing nibbles, etc but it is now proposed that all attendees in future will donate \$3 with the host providing refreshments & finger food. Cups, coffee & tea will be purchased in advance & can be used at all meetings. The host will be compensated for the cost of any drinks & food with surplus funds retained for Divisional activities.

During the June Exhibition, Allan Garbutt present Ron Solly with two items for raffling & this is proving popular and a good income earner for us. The raffle will be drawn at the September meeting.

Thanks also to Geoff Chatwin who indicated that he would donate a couple of items from his previous model business for future raffles. Al Harris was presented with the plaque as

meeting host.

The modelling side of the afternoon was in two parts. The first was a demonstration & talk on DCC & signalling by Con Vologiannis, a visitor specially invited for this subject. He is getting ready for his own layout in "N" scale & has a test track, which he had at the meeting. Questions were asked & he & other DCC modellers provided the answers. The second part on weathering, was given by Al Harris who explained & demonstrated his technique. He uses heavily diluted Polly S acrylic paints brushed on then uses a toothbrush to get it into the small bits on the models. He even learnt something from the gathering in his presentation about using "wet" water or rubbing alcohol.

We then indulged in refreshments & other goodies whilst many modelling ideas were kicked around. The meeting concluded around 4.30PM & appeared to be quite successful.

Narrow Gauge

Steve Chapman

Our July 24th Narrow Gauge SIG meeting was held at Peter Grace Work Place at Redfern. 7 members and 4 non members were present. It was good to see two interstate members, Mario Rapinett from Melbourne and Charles Schuster from Canberra attend. Thanks to both of you gents for travelling so far to attend our local narrow Gauge SIG.

First off the rank Mario Rapinett gave us a clinic on his techniques on making soft rock or what does he call it "Frock".

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He has taken Mark Fry's ideas and changed it around considerably by using different materials. Turned out a real treat, we will have to get him to do a clinic at the convention in October. Another attraction was a very attractive On30 layout owned by Peter Grace called "Idaho Springs". This layout may be available for our convention in October. Also there was two models of the new On30 Steam Loco produced through Bergs Hobbies called Archie, one of four Krauss 0-4-0T locos built for the contractors of NSW's Burrinjuck Dam. A very special little On30 loco indeed. Peter Grace also told us about all his modelling projects too numerous to mention. Things like Hon C16, Garratts, different sorts of tenders, On30 Puffing Billy Loco and Carriages etc. After the Clinic and a cuppa we all sat down and discussed the Narrow Gauge SIG modules. Of major interest were the overall dimensions of the proposed modules and how they would be setup.

The Modules will mainly be On30 but there was a move by at least two or more members to have HOn modules as well.

If you also have an interest in HO Narrow Gauge, let me know and I will send you in the right direction.

It was decided to make the modules out of Aluminium tube with plastic joiners. Combined with other reinforcements like the layout base and backdrop the frame should be very strong.

Mario claims he can sit on his frame and it wont bend or warp. Mario Rapinett will be producing a cutting list for the Aluminium tubing as soon as possible. Steve Pettit, Mario Rapinett and Mark Kendrick will be organizing this exciting module project. They wish to make it Australia wide with modules from every state.

This Module idea sounds like a very exciting project. If you want to be involved, give me a call.

**Division 7  
Sydney**

**Kim Bradley**

June 12th, and nearly 60 assembled at Erik and Denise Bennett's Southport home. Being a long weekend the numbers were reduced but we were pleased to welcome a few visitors. Allan Garbutt, David North and Rod Smith were in Adelaide to help Ron Solly and his team present the region layout "Sweetgrass" at the Adelaide train show. The members were addressed by John Saxon with contributions from David Latham, Gerry Hopkins and Erik Bennett. Firstly Erik spoke about the forthcoming convention promising 1 and a half days of cost effective intense clinics (Sunday and Monday) combined with the Liverpool exhibition and layout tours on the Saturday of the October Labour weekend holiday. Ladies will be catered for too with proposed 'hands on' craft creations. Gerry presented well deserved achievement awards to both John Diamond for scenery and electrical and John Baker for electrical. Mention was made of the improvement to the MainLine section of the web with thanks to our editor David Jupp and the new release MainLine was also available for collection. In the web site, go to *region* then *mainline*. Alternatively go straight to <http://www.nmra.org.au/>

**MainLine/Mainline.htm** A large number of Sydney members are off to the NMRA convention in Seattle which promises to be an exciting time for the fortunate ones. David Latham, also off to Seattle will miss the next meeting and passed the Library duties temporarily to Phillip Anderson and James Stublely. John Baker presented to host Erik and thanked both he and Denise for their hospitality. Erik's layout of a double folded dogbone design in its own room has recently shown signs of scenery being added. You may recall that Erik was the initiator of the Train Length Challenge. He models Union Pacific in HO with long trains now run under NCE command control. The



highlight demonstration was of the sound system utilizing functions F9 through F12 of the recently released Lionel Veranda Gas Turbine. These functions were controlled from a



laptop running 'DecoderPro' software. A most pleasant time was enjoyed by all present. The ladies at one stage retired inside to discuss and view Denise's array of beautiful hand made quilts. Thank you Erik and Denise for a most pleasant and relaxed day.

July 10th turned out to be wet but by the time we arrived on the Central Coast at John Parker's place the rain had stopped. The day was to be a split meeting with the second and formal part of the meeting up the road at the home of David and Joan Swinfield. John Parker's layout is in middle stages of construction, multi-leveled and highly innovative. A helix is

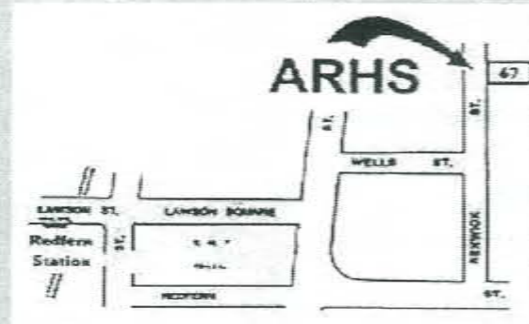


John Parker's Helix

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central to the level changes and a high degree of electrical connectivity and fail-safe switching with multi-colour LED mimics enhances the operation. Similarly the use of a mirror to



The Mirrored Yard

extend the perceived distance seen in the picture above works very well. Trains under the control of Easy DCC ran well and human access to the room was through electrically interlocked swinging bridges. Another accurately aligned ingenious feature. Thanks John for your hospitality and preamble on the construction and plans for the layout.

After leaving John's place we took time out to lunch and by chance found a home made pie shop down the road. By all accounts it was a popular choice indicated by the queue out the door. Once inside the reason for the delay became obvious. Half of the Division 7 NMRA members were already there. Great pies and cakes were consumed by us and the shop profits for the day swelled.

Upon arriving at the Swinfields for meeting two, you could hardly not notice the million dollar view. All this and trains too.



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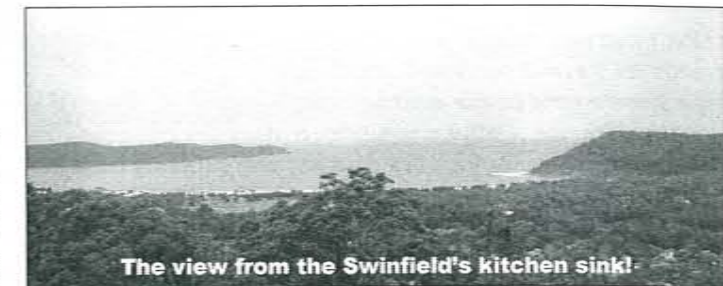
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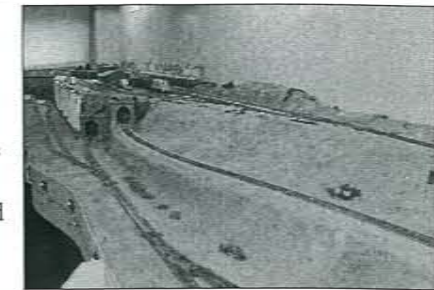
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The view from the Swinfield's kitchen sink!

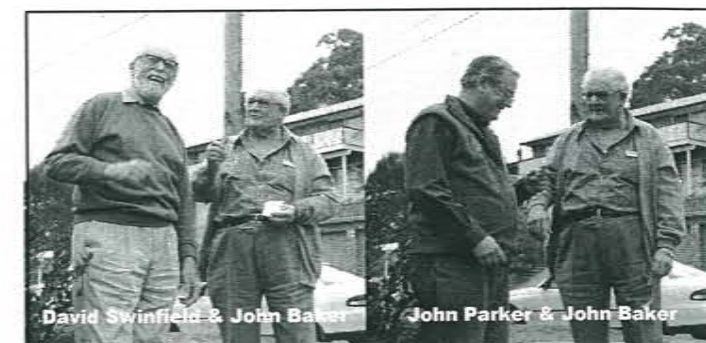
How could David ever find time to build a layout with this distraction. But build he has, and in just over 6 months too. So enthused by this effort, he has decided to rip it all out and start again. This is a layout that is in a room perhaps 15 metres by 4 metres or even longer, just a guess. No small feat! Once again Easy DCC operated almost now the Central Coast de-facto digital control standard.



The official part of the day was chaired by Allan who spoke about the October convention and John Saxon in Gerry's absence, made an award presentation to Phil Calvert. An award for Rob Barker was unable to be presented as he had left early. The lucky door prize, won by Sowerby Smith, was kindly donated by Anton's Trains. John Baker then presented meeting plaques to both John Parker and David Swinfield. Another sumptuous afternoon tea was presented



Phil Calvert



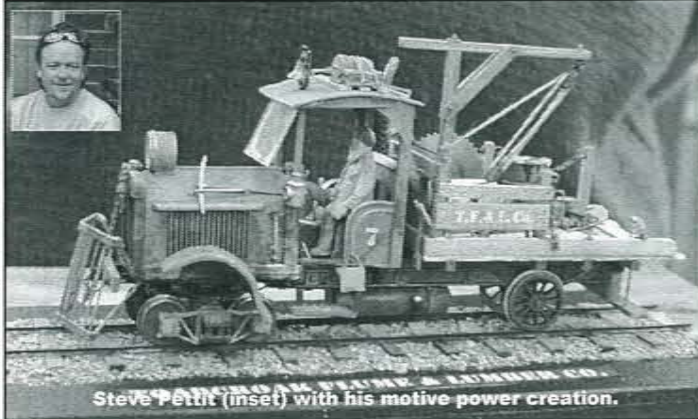
David Swinfield & John Baker

John Parker & John Baker



but after those pies, enough said although I guess a fair bit of the afternoon tea was still consumed. Thanks guys, the weather held off and it was a great double meeting.

On *August 15th*, the weather was kinder, Sydney having being buffeted with high winds for a few days and also suffering bush fires on the South Coast. We all meet at Colin Brettle's home at South Penrith. Colin's layout has undergone a complete transformation since our last visit including the addition of NCE DCC. You can take a break now Colin, well done. Those present who had travelled to Seattle looked refreshed and enthusiastic. The official part of the meeting saw Allan and Peter Jensen advising members of the October Convention, promising a weekend of great workshops and social events. Gerry presented



AP awards to Rob Barker (Dispatcher) from last month and Steve Pettit for prototype modelling. Steve also had on display a scratch built motive power unit he had built in just three days.

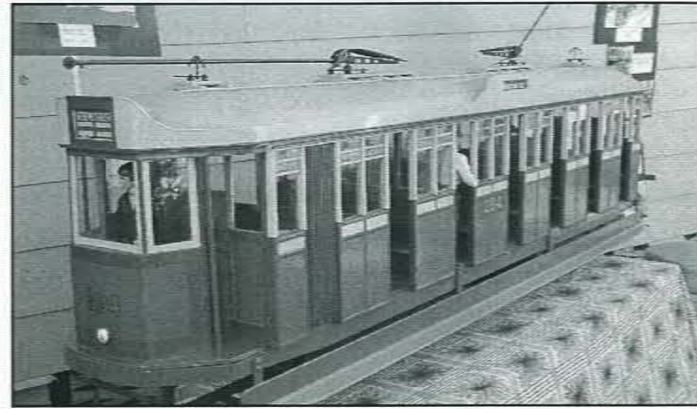
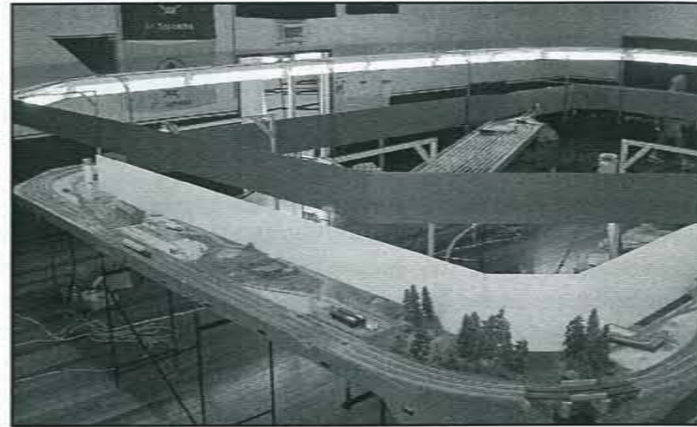


It was also great to have Bob Carr and Stuart Sharp join us for the afternoon. Bob is recovering from heart surgery, Stuart from pneumonia and is scheduled for knee replacement surgery soon and we wish him well and a speedy recovery. A great afternoon was had by all and our thanks go to Colin and Jan Brettle. Lucky door prizes were won by Rob Peterson and Trevor Humphreys, with thanks to Anton and John Martin.

**Division 8  
Northern Rivers**

**Ian Phemister**

Recently our division hosted an open day at the local scout hall. The idea was to raise funds for the scouts and it was most successful. The pictures tell the story, from pain to pleasure but everyone agreed, it was a great success. Our next display will be at the Broadmeadow Model Railroad show with our 20 plus modules. See you there!



**- MODEL TRAIN OPERATIONS -  
THE EASY WAY**

*Stuart Sharp*

**THE FOURTH STEP**

The operator walks to the spot on the layout where his/her locomotive is stabled. After climbing aboard, the operator searches the nearest yard for the required empties. If none are in the yard, he asks the dispatcher to supply the number of freight cars from another source. The dispatcher then issues instructions, either orally or written, to another operator to supply the required empties either directly to the industry or to the yard of origin of the first operator.

**THE FIFTH STEP**

The operator instructs the dispatcher, either orally or in note form, of any vehicles that have to come from other parts of the layout outside the control of the operator. The dispatcher then issues instructions to another operator in control of that part of the layout where the wanted vehicle is located.

**THE SIXTH STEP**

The operator forms his/her train and departs, setting down and picking up cars en route. A note on scrap paper may be made of what vehicles are going where, but that depends on the whim of the operator. There is no need to record a car number, merely its type, colour and owner.

Freight cars that have been requested from other parts of the layout will probably not be delivered prior to train departure time. They can be stored in the yard for a later train in the session. If there is no later train, the order for vehicles is forgotten.

**THE SEVENTH STEP**

This step takes place when the operator has reached the terminating point of the train. The train is split. The objective is to operate model trains in such a way that draws on the appeal of the prototype but is very simple to use.

The objective is to operate model trains in such a way that draws on the appeal of the prototype but is very simple to use.

The easy way involves no cards and no forms. Set out below is the way it works.

The model layout has a number of industries. When the operators arrive, they are handed the usual set of operational rules. In this case, those rules are accompanied by descriptions of each industry and the type and source of materials received by each industry. Also, the descriptive notes list the customers and where they are located.

**THE FIRST STEP**

The dispatcher allocates industries, depots and trains to each operator. The operators have the choice of which and how many industries they wish to bring on-line. More experienced operators may handle all those allocated whereas a novice to the layout would start with a single industry.

**THE SECOND STEP**

Each operator walks around and inspects each industry under his/her control which he/she intends to bring on-line. Two things are noted. The first is the capacity of the siding to receive freight cars. The second is the number of cars already in the siding.

**THE THIRD STEP**

The operator decides the number of freight cars to be received and despatched, including the pick up of empties, and the various origins and destinations, having regard to the layout description notes. If the operator is in charge of only one industry, the operator remembers the intended pattern of operation. If more than one industry is to be operational, the operator scribbles the arrangements on a piece of scrap paper as a memory jogger.

The objective is to operate model trains in such a way that draws on the appeal of the prototype but is very simple to use.

The easy way involves no cards and no forms. Set out below is the way it works.

The model layout has a number of industries. When the operators arrive, they are handed the usual set of operational rules. In this case, those rules are accompanied by descriptions of each industry and the type and source of materials received by each industry. Also, the descriptive notes list the customers and where they are located.

### THE FIRST STEP

The despatcher allocates industries, depots and trains to each operator. The operators have the choice of which and how many industries they wish to bring on-line. More experienced operators may handle all those allocated whereas a novice to the layout would start with a single industry.

### THE SECOND STEP

Each operator walks around and inspects each industry under his/her control which he/she intends to bring on-line. Two things are noted. The first is the capacity of the siding to receive freight cars. The second is the number of cars already in the siding.

### THE THIRD STEP

The operator decides the number of freight cars to be received and despatched, including the pick up of empties, and the various origins and destinations, having regard to the layout description notes. If the operator is in charge of only one industry, the operator remembers the intended pattern of operation. If more than one industry is to be operational, the operator scribbles the arrangements on a piece of scrap paper as a memory jogger.

### THE FOURTH STEP

The operator walks to the spot on the layout where his/her locomotive is stabled. After climbing aboard, the operator searches the nearest yard for the required empties. If none are in the yard, he asks the despatcher to supply the number of freight cars from

another source. The despatcher then issues instructions, either orally or written, to another operator to supply the required empties either directly to the industry or to the yard of origin of the first operator.

### THE FIFTH STEP

The operator instructs the despatcher, either orally or in note form, of any vehicles that have to come from other parts of the layout outside the control of the operator. The despatcher then issues instructions to another operator in control of that part of the layout where the wanted vehicle is located.

### THE SIXTH STEP

The operator forms his/her train and departs, setting down and picking up cars en route. A note on scrap paper may be made of what vehicles are going where, but that depends on the whim of the operator. There is no need to record a car number, merely its type, colour and owner.

Freight cars that have been requested from other parts of the layout will probably not be delivered prior to train departure time. They can be stored in the yard for a later train in the session. If there is no later train, the order for vehicles is forgotten.

### THE SEVENTH STEP

This step takes place when the operator has reached the terminating point of the train. The train is split up and cars are stored or delivered as required.

The operator tells the despatcher, in any fashion, about freight cars that need to be delivered to other parts of the layout. It is then the task of the despatcher to arrange the onward forwarding of the cars.

### THE NEXT STEP

The pattern starts all over again.

### HIDDEN STAGING YARDS

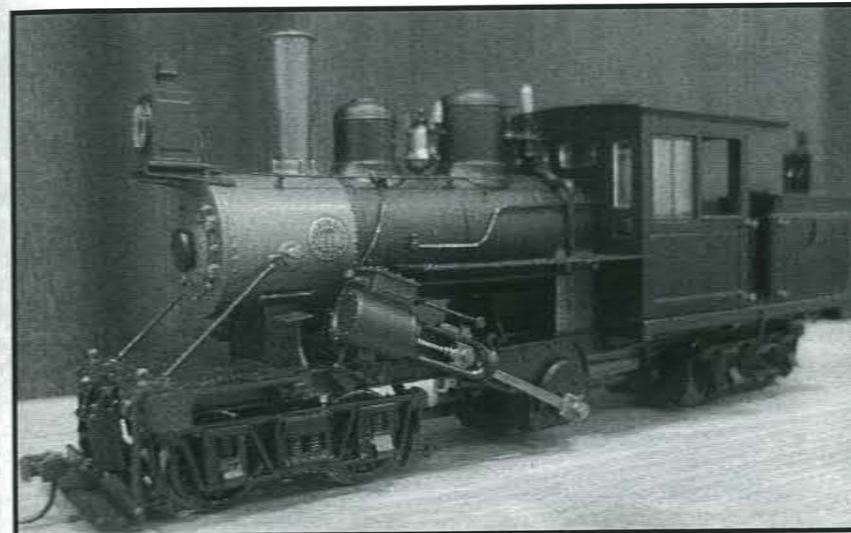
These present no change in use for block train loads. Trains come out, go along and disappear again.

For other trains, two possibilities are mentioned. In the case of two on-layout stabling yards, trains are brought on to the layout and terminated at the first yard. The vehicles are then used as required. The second yard is used as an assembling point where trains are composed of the various industries on the layout for despatch to off-layout destinations.

In the case of a single on-layout yard, that yard combines the functions of the two receiving and despatching yards.

### SUMMARY

The easy way involves a system that reflects prototypical operations, based on industries. The use of operators to make decisions about which industries, what numbers of vehicles and origins/destinations maximises the randomness of operations. No forms are required and the use of scrap paper as memory aids is an option, not essential to the task.



**BACHMANN**  
recently announced a 28 ton 2 truck On30 Climax which is to be available late this year. The good news is that an HO variant will follow.

This picture was taken at the NMRA Train Show in Seattle by Barry Dupler

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## EXHIBITION & CONVENTION CALENDAR

**CROYDON - VIC.** September 11-12, 2004 at the Croydon Secondary College, Croydon Rd, Croydon. Open 9am-6pm (Sat), 9.30am-5pm (Sun).

**LIVERPOOL - NSW.** October 2-4, 2004 at the Whitlam Leisure Centre, Memorial Avenue. The 42nd Sydney Model Railway Exhibition. Open 9am-6pm (Sat & Sun), 9am-4pm (Mon).

**NMRA NSW Convention** October 2-4. See details in advert page 2 of this magazine issue.

**ADELAIDE - SA.** October 9-10, 2004 at the Mitsubishi Entertainment Centre, 1284 South Road, Tonsley Park 5042. Open 9.30am-5pm (Sat), 9.30am-4pm (Sun).

**BLACKHEATH - NSW.** November 6-7, 2004 at Blackheath Public School, Cnr Great Western Hwy & Leichhardt St, Blackheath. Open 9am-4.30pm (Sat) 9.30am-3.30pm (Sun).

**GLEN WAVERLEY - VIC.** December 11-12, 2004 at the Brentwood Community Youth Club Hall, Brandon Park Reserve, Ferntree Gully Rd, Glen Waverley (opposite Brandon Park Shopping Centre). Open 9am-5pm (Sat & Sun).

**GEELONG - VIC.** January 28-30, 2005 at the Corio Model Railway Club, Centenary Hall, Cox Rd, Corio. Open 6-9pm (Fri), 10am-6pm (Sat), 10am-5pm (Sun).

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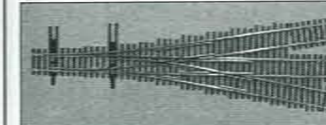
**NEW**

from Shinohara - Code 83 HO Finescale track DCC ready.

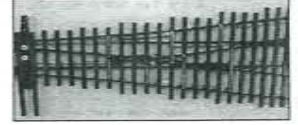
**NEW**

With the increase in popularity of digital command control (DCC), Shinohara have just announced a range of DCC friendly points in HO scale Code 83 nickel silver. Shinohara is the first company to produce DCC friendly points in any scale. Please refer to the price list underneath to see the variety of track-work available.

With the introduction of this new range of track, Bergs Hobbies would like to offer for a limited time only, a 10% discount off the retail price, for every order received between 1<sup>st</sup> May 2004 and the 30<sup>th</sup> June 2004. The August issue of the Australian Model Railway Magazine will contain a review of this new range.



### CODE 83 DCC READY HO NICKEL SILVER



		suggested retail each		suggested retail each	
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8806	#8 Right Hand Point	37.50	8889	#7.5 Right Hand Curved Point	59.50
8807	#4 Wye Point	34.50	8890	#2.5 Wye Point	34.50
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Welcome to the following New Members of the Australasian Region

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Rex Hollier	Narabgba QLD	HO	All
Ryan Hollier	Narangba QLD	HO	All
David Parker	Umina NSW	HO	AT&SF
Garry Glazebrook	Lewisham NSW	HO	NSW/US
Peter Jones	Kilcoy QLD	HO/G	Aust/US
Rowan Mangion	Buff Point NSW	HO	NSW
Trevor Hewitt	Rosebud VIC	HO	BN
Joshua Loyd	Warners Bay NSW	HO	KCS
Ian Wade	Ridleyton SA	HO	US
David Stokes	Evanston Park SA	N	N/S
Richard Biggs	Oakville NSW	HO	NSW

**HELP ME TO HELP YOU!**

Renewal reminders are mailed between the 10<sup>th</sup> and 18<sup>th</sup> of each month. My report to the US headquarters is emailed on the 20<sup>th</sup> of the following month so that it meets the US deadline of the 23<sup>rd</sup> for processing. If I do not receive your renewal in time to meet my deadline, members receiving the US ScaleRails magazine run the risk of being suspended from the mailing schedule. So, please, deal with the reminders when received to help me and to help your self!

Many thanks,  
Toni Saxon  
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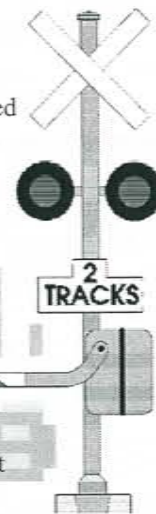
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## New Products on the Horizon.

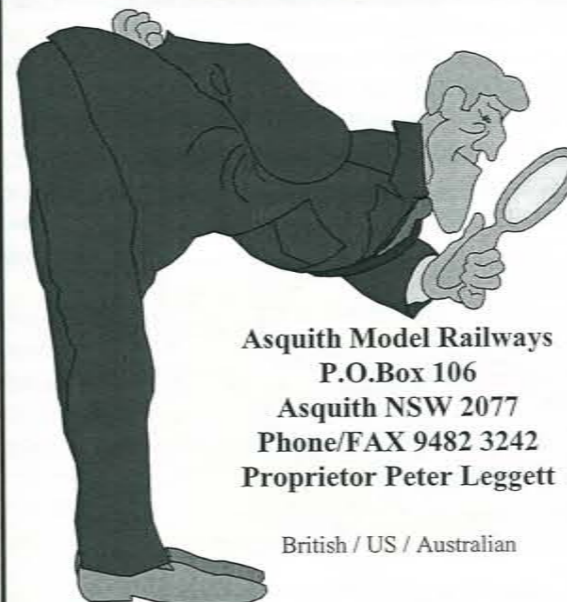
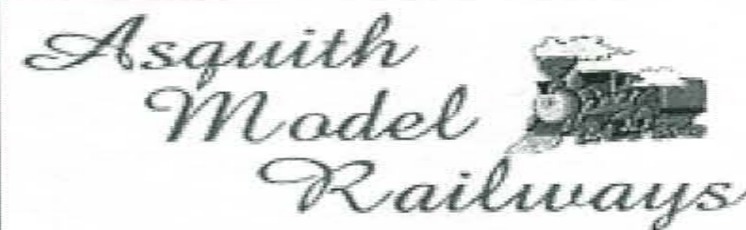
- **Peco** have announced a line of HO Scale Code 83 Track with turnouts available in Electrofrog and Insulfrog configurations. The turnouts will be made in prototypical US geometry with releases coming in #6, #5 followed by #8. Products are expected to be available as we publish with new items released monthly. Included will be 36 inch flexi track with crossovers and slips to come shortly.
- **Bachmann** 1:20.3 Scale 38 Ton Two-Truck Shay. Like the 36 Ton Shay (voted 1997 Product of the Year in MODEL RAILROADER, this 38 Tonner will be equipped with the cutting-edge technology and details that made that Spectrum® locomotive so successful.
- **Bachmann** 0n30 28-Ton Two Truck Climax due late this year. Also coming in HO.
- **Athearn** SD70MAC coming soon in HO fully assembled. New tooling with DCC plug.
- **Athearn** HO SD-45T-2 will be part of the Ready-To-Roll Series. The long awaited Tunnel Motors coming soon.
- New animated fluoro signs from **Miller Engineering** available from Gwydir Valley Models.
- All new models from **Eureka Models Australia**. First model, the mighty NSWGR AD60 4-8-4 + 4-8-4 Garratt followed by the NSWGR 620/720 2 car diesel set. Both due 2005.
- **Austrains** VR-V/Line X Class due October this year.
- **Trainorama** NSWGR 44 Class locomotive and SAR 930 Class Locomotives due 2005.
- **BLI** Cab Forwards now with fan boosted smoke, DCC and DC sound.
- **Walthers** new HO Streetlamps in 3 different styles, also Diesel and passenger car wash rack.
- **Athearn** SD70M flared and non-flared.
- **BLI** has announced an HO Alco RSD15 Locomotive in the Paragon series. BLI also announces a Platinum variation to their Paragon series with more detail. First will be the PRR K4s in die-cast construction.
- **Aristocraft** has announced a live steam "G" scale 2-8-2 Mikado. Loco will be complete with electronic butane gas lighting with remote control throttle and reversing. Startup from cold in 10 minutes complete with on board sound effects. \$US1650.
- **Atlas** N scale 2 truck Shay and 2-6-0 Moguls.
- **Kato** N scale AC4400CWs.
- **Con-Cor's** Burlington Pioneer Zephyr in HO.
- **Lionel** HO announces more Gas Turbine cab numbers and body variations.



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# Improving Athearn Mechanisms

## Introduction

Many modellers started in the hobby with Athearn locomotives or used Athearn mechanisms to re-power other locos. Athearns have all-wheel pickup, all-wheel drive and are excellent value for money. The standard mechanism is, however, a trifle noisy and does not start as smoothly as many modellers would like.

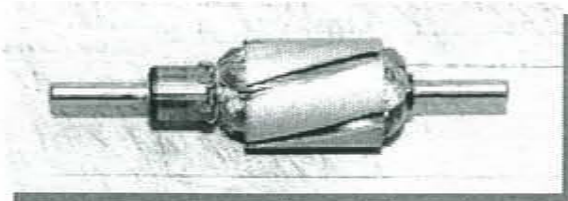
In recent years, new locos have appeared on the market with smoother, quieter mechanisms. Despite them being more expensive, most modellers add a few to their roster with the result that the poor starting and noisiness of the original Athearns stands out in contrast. Consequently, even though the Athearns may be well detailed or have some other attraction, they fall out of favour because of the way they run.

Recently, to improve starts and reduce noise, Athearn modified the drive system of new locos to use a hexagonal slot in the flywheels rather than universals. Unfortunately, all my favourite engines use the original standard mechanism, so I set out to find out how to make them run better in a low cost way. This article is the result of that research. It describes how for about \$5 for several locos, to make the minor modifications to make the original mechanism run smoothly and silently.

## Motors

There are at least five variants of the motors used in standard Athearns. (Note we are not talking about Genesis here.) The first motors were round, which required the bodies the early hood locos to be wider than prototypical. These were replaced by flat sided motors and there have been various versions of these.

Skew wound motors started to appear in the early 90s. These made starting a lot smoother because the motor coils are wound on a coil former that is skewed along the axis of the spindle so that a part of each coil is always in the magnetic field. Skew wound motors can start very smoothly and run well at slow speed. You can tell if the coil is skew wound by looking at the coils from both ends of the motor. Check where one of the coil loops is aligned when viewing from one end. Without moving the spindle, look at the loop from the other end. On skew wound motors, a different part of the loop will be visible.



An Athearn armature with skew wound coils

The final development of the standard motor is the version fitted to the Dash 9's, called a High Performance motor in

Athearn parlance. It is an excellent motor in its own right and similar designs are used by other manufacturers to power their much more expensive locos. It starts at very low voltage, is reasonably quiet, draws much lower current than previous Athearn motors and is very robust. Also, it can be completely disassembled, making it easy for full maintenance at any time.

## Motor Upgrade

The best overall value upgrade motor is the High Performance motor as fitted to the Dash 9s. The benefit is that they just fit right in with no need to modify the drive couplings or motor securing clips. They will definitely provide better starting than the non-skew wound motors and will draw less current than the early skew wound motors.

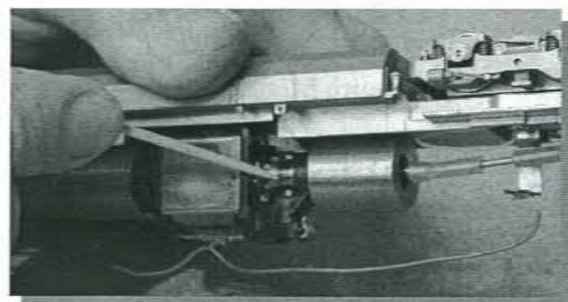
Other alternatives are can motors such as Mashima. These may start at slightly lower voltage and draw a little less current than the Dash 9 motor but, because they are totally enclosed, they cannot be fully maintained. A non-standard drive system needs to be installed and an alternative method for securing the motor is needed. (The procedure for this is described below.)

## Motor Maintenance

Maintenance involves checking the brushes and ensuring that the commutator and surrounding areas are clean and that there is a drop of oil on each bearing. This is best done by taking the motor out of the mechanism but, if it is obvious that the brushes are in good condition, it can be done in situ.

Use CO Contact Cleaner, available at electronics or hardware shops, to spray the commutator and surrounding coil areas. Use the spray jet to clean all carbon particles from the area of the coil visible from the commutator end, particularly just near the coil solder joints. Carbon particles settle in this area over time and form a conductive path that draws waste current and makes the whole motor run hotter.

While the commutator is wet from the contact cleaner, clean the commutator with a lint-free rag. Then use a toothpick to clean the insulation gaps separating the commutator segments. Clean with a motion towards the bearing end of the commutator and get all the gunk out. Then use the contact cleaner spray to flush the commutator free of all dirt and rubbish. If you are doing this in situ, hold the loco upside down so the contact cleaner drips away from the mechanism. Also, hold it over your waste-paper bin so it does not drip onto your workbench or carpet.



Cleaning Commutator with Toothpick

When dry, use a toothpick to place a drop of oil on the bearing surfaces. The motors use sintered bronze (Oilite) bearings which theoretically do not require lubrication but a drop of oil helps it along and cuts down noise. Don't use too much oil.

## Brushes

Check that the brushes are serviceable and not too worn. It takes a lot of running to wear them out but if they are less than 3mm length over all, consider replacing them. They and their springs are available as an Athearn part number.

## End Play

Motors vary in the amount of shaft end play. If the end play is excessive, it can be reduced by taking the motor apart and adding one or more shim washers that are available as an Athearn part number (or an equivalent). End play should not be excessive but generally speaking, is not too important. The motor drives opposing gearboxes, consequently there is no resultant torque or end thrust on the motor. Drive thrust is taken up in the gearbox worm shaft bearings.

## Gearboxes

Athearn gearboxes are the component that differentiates the Athearn mechanism from more expensive mechanisms. They are mass produced and, generally speaking, cannot compete with the finer tolerance design found in the more expensive locos. One attribute of the Athearn design is that most gearbox components are common across the range of locos.

The worm shaft assembly consists of a worm pressed onto a 3/32" shaft with spacer washers and sintered bronze bearing blocks. When new, the shaft sits neatly in its cavity formed by the two halves of the gearbox casing and the end play is generally correct. If the locomotive lurches when changing direction or when running downhill with a train it is possible the end play needs attention. Spacer washers, available as an Athearn part number (or find equivalent), can be used to minimise end play. There needs to be a small amount of end play to allow running clearance.

Gears run on Delrin axle pins moulded into the gearbox body. The gears have quite a loose fit on their axle pins and there is plenty of side clearance between gears and the gearbox body walls. It is these loose tolerances that can combine to make gearboxes noisy.

A cyclic noise or hesitation at the wheel speed might be cogs binding because they or their axle holes are out of round and the luck of the draw in their assembly produces the combination that binds. This can often be fixed by disassembling the gearbox and swapping the location of cogs or wheels, or by replacing some cogs. Cogs are available from Athearn distributors such as Punchbowl Hobbies in Sydney and are generally interchangeable across the range of models.

Another source of noise is flash on gears, axle pins or gearbox

casing. To make the gearboxes as smooth and noise-free as possible, check that there is no flash and that all friction surfaces are smooth, then adequately grease all friction surfaces with plastic compatible grease. I have heard that some modellers pack new gearboxes with toothpaste or other abrasive and run the loco for a short time to "run in" the gearboxes. They then strip them down, wash and lubricate normally. I have never done this, believing that the wide tolerance of the gearbox components does not justify it.

## Connecting Shafts & Transmission

Motors are connected to the gearboxes by connecting shafts and universal joints. These are mass produced and, whilst the transmission system can be quite true and in line in some locos, in others it can be very sloppy. Drive shafts out of true are the main reason a loco does not start smoothly. The motor wants to start but has to overcome considerable starting resistance caused by the universal links being slightly out of alignment. Once moving, the starting resistance is overcome and the loco moves away smoothly. The overall effect, however, has been a hesitant and jerky start.

Sometimes a new locomotive will make a repetitive noise which varies with speed. It may only be heard when the loco is travelling in a certain direction or around a certain curve, or it may be there all the time. This type of noise is usually caused by flash on the moulding of the universal socket on one or both of the gearbox worm shafts. The flash hits the bogie bolster and makes the noise, maybe only in a certain orientation of the drive shaft to the bolster. To fix the noise, use a Stanley knife, file or sandpaper to clean off the flash to ensure that the universal can never touch the bolster.

## Noise

The noise made by a loco comes from vibrations in the motor, gearbox and transmission. The motor transmits noise to the chassis via the motor mounts, the gearbox via the bolster, and the transmission system via both. The chassis transmits the noise to the body which amplifies it like the baffles of a loudspeaker.

Noise in a motor is caused by imbalance in its armature/flywheel assembly causing the motor shaft to rattle in the bearings. Noise is also generated by bearing friction and, to a minor extent, commutator/brush friction. High quality motors have well balanced armatures and flywheels and precision bearings and make minimal noise. However, all motors make some noise. On the noise front, the Dash 9 motor competes favourably with most other motors.

Noise will be louder if the motor is allowed to touch the body. This is possible on the narrow hood diesels, eg, the Dash 9 and SD40-2, where the clearance between the motor and the body is very fine. There is often a little play in the motor mounts, so, when re-fitting the body, make sure it is central to avoid it contacting the body. In particular, DCC players who mount the decoder on the motor should make sure that it is centred and there is no contact with the body.

Gearbox noise is the result of the tolerances found in mass production of components. The amount of noise produced by a particular gearbox depends on the luck of the draw of components used in its assembly. Noise can be minimised by ensuring that friction surfaces are smooth and well lubricated.

The major source of noise is the transmission system, ie, the universals and connecting shafts. As the motor starts to spin, the shafts rattle in the universals. The universals are often not central (the result of mass production) so non-centred universals and flailing shafts create quite a din. At certain speeds, the noise resonates with the body and the resultant clatter can be quite loud.

### Noise Solution

The solution is to service the motor and gearboxes as described above and then to replace the main source of noise, the transmission system. The principle of the approach is to produce a transmission system that is straight and true and has no imbalance. Imbalance causes vibration, the source of noise. If there is any imbalance, the lower the weight of the imbalance the lower the volume of noise produced.

The best and cheapest replacement is one you can build from model plane fuel line and K&S aluminium tube. The fuel line is soft silicone tubing and comes in small and large bore. It is available at model plane shops, eg, Wings and Things, and costs \$2.20 a foot. The K&S aluminium tube is available at most model shops and costs less than \$2 per length. It is used to create connecting shafts. The fuel line tubing is used to couple the connecting shafts to the motor and gearbox shafts. Aluminium tube is recommended because it is the lightest material available, however brass rod works fine, so if aluminium tube is not available or if you have some brass rod on hand and want to use it, then do so.

### Materials

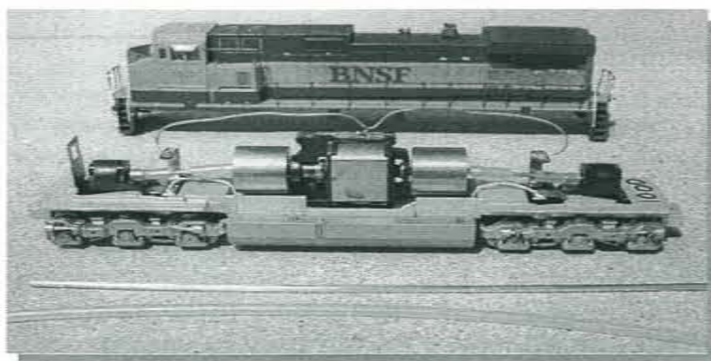
The existing motor shaft is 1/8" diameter but does not protrude beyond the flywheels. About 40mm of 3/32" OD aluminium tube will be used to make two new "motor" shafts to protrude from the flywheels. About 100mm of 1/16" OD aluminium tube will be used to make two connecting shafts. About 100mm of the small bore fuel line will be used to connect the connecting shafts to their new motor shafts at one end and to the standard 3/32" diameter gearbox shafts at the other. You also will need a 3/32" (2.3mm) drill.

### Procedure

Remove the motor by first releasing the gearbox worm shaft clip and removing the gearbox worm shaft, universals and shafts, then by pushing up on the four inserts visible from under the fuel tank. Remove the removable part of the universal from the universal inserts in the flywheels and run the motor by itself to test its balance. Make sure the bearings have been lubricated with a drop of oil.

If the motor is old and worn, consider replacing it with a Dash 9

motor. You can use the flywheels from the old motor. If it is a late model motor it should be fairly quiet. If it is not, it is probably caused by the flywheels being out of balance. If this is the case, consider removing the flywheels (see the section below, Installation without Flywheels).



### Flywheel Conversion

Carefully drill out the hole in the centre of the flywheel universal insert using the 3/32" (2.3mm) drill. Drill it carefully by hand and do not round out excessively. Cut off a 20mm piece of 3/32" aluminium tube and press it into the hole. If the hole is drilled carefully, the tube will be a firm enough fit. If needed, give it a touch of Superglue. There should be about 5 mm of tube protruding. Fit a 25mm piece of small bore fuel line to the tube.

Refit the motor. If you have some thick double-sided tape, use it to secure the motor in its original position. This is not essential as the original clip method is fine but the tape reduces vibrations transmitted to the chassis and slightly lowers the motor, allowing a straighter alignment of the connecting shafts with the gearbox. Make sure the motor is refitted centrally so that it will not touch the body sides when reassembled.

Turning to the worm shaft assembly, remove the pressed-on universal fitting. First remove and set side the removable bronze bearing block and its washer. Then grip the shaft with flat surface pliers (or other non-injurious method) and twist off the plastic universal fitting. Avoid holding the worm whilst twisting as you might twist off the worm. Use a solvent such as methylated spirits to wash any oil away from the shaft area previously occupied by the universal fitting. Fit a 25mm piece of small bore fuel line to the worm shaft, refit the bearing block and its washer and refit the shaft to the gearbox. Using the fuel line, rotate the worm shaft to make sure the fuel line does not touch the gearbox housing as it turns.

Cut off a piece of the 1/16" aluminium tube 4mm shorter than the length between the piece of tube protruding from the flywheel and the worm shaft. Remove the worm assembly and fit the aluminium tube into the pieces of fuel line attached to the motor shaft and the worm shaft. Ensure a gap of about 2mm at each end then refit the worm assembly. This gap is not critical but about 2mm is desirable.

Do the same to the other drive shaft. Tune the new system by rotating the motor by hand and checking that the fuel line is

fitted to each point with even tension, does not bulge and that the overall coupling rotates evenly. The objective is to have no out of balance which will flail. Bench test by applying power to the motor and adjusting the fuel line until the transmission is true and there is no imbalance. Double check that the pieces of fuel line fitted to the gearbox shafts do not hit the gearbox housings.

Reassemble the body and test on the layout. When power is applied to the motor on starting, the entire transmission path will now be in alignment – as opposed to having universal links that might have been out of alignment. The result is that the loco will move off much earlier, more smoothly and silently. If there is some noise (not counting the gearbox), remove the body and check for trueness. Adjust fuel line if necessary.

### Installation Without Flywheels

The disadvantage of removing the flywheels is that it reduces the momentum effect a little when crossing dirty track and reduces the weight of the loco. The advantage is that it makes the motor as quiet as possible and the big advantage is that it makes plenty of space for DCC, including sound. The weight disadvantage is offset by there being plenty of room in most locos to put additional weight. On a Dash 9, for example, there is space for a fair sized fishing sinker, suitably processed by a hammer, on the little ledge in the radiator.

To remove the flywheels remove the motor then, with one flywheel in each hand, twist until one moves. Remove it then

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remove the other by holding the shaft with flat bladed pliers and twisting it off or by using a suitable puller.

For this installation, you do not need the 3/32" aluminium tube as you will be using the actual motor shaft. The small bore fuel line used in the installation above will not fit over the 1/8" motor shaft, so you need some large bore fuel line in addition to the small bore. Cut a connecting shaft of 1/16" aluminium tube about 4mm shorter than the length between the worm shaft and the motor shaft and fit a piece of small bore fuel line over the motor end of the tube. Fit a piece of large bore fuel line to the motor shaft and fit it over the small bore on the connecting shaft. The installation from then on is the same as above.

### Conclusion

Atheams have good bodies, good motors and half decent gearboxes and many modellers have quite an investment in them. With a small investment in dollars and a little time, as described above, they can be made to hold their own in any diesel roster.

Erik Bennett

Sydney March 04

## EPPING MODEL RAILWAY EXHIBITION

This 23<sup>rd</sup> annual exhibition was held over the three-day Queen's birthday long weekend. It is a small exhibition but has a traditional base of keen supporters. Many NMRA members attended. When the reviewer was present, there were at least 100 visitors in the main exhibition hall. The sign of a well-attended exhibition is the difficulty in getting to see the exhibits and talk to the traders. No matter where one went, the visitor had to wait a little to get the front row. This is definitely a good sign.

The outstanding layout of the exhibition was one operated by the Epping Model Railway Club, the organiser of the exhibition. It was called "Brunswick Park" and was based on a section of line between North Strathfield and Concord West. The scratchbuilt models and scenery were good but the outstanding feature was the method of operation. The boys who operated it looked a class act in their yellow T-shirts and they managed to have a train before the public on an average of every 15 seconds. It was a wonderful display of variety of trains and was a big hit with every visitor.

The Epping Club knows how to do things correctly. A primary market must be kids and there was no shortage of fun things to do and see. There were Thomas train rides and miniature car rides and a couple smaller things which had the kids intrigued. One was a small layout called Wombat Flats which had an operating merrygoround and other moving amusement rides. The other layout the kids liked was Setagaya which was a model of city life in Japan, with trains operating on three levels, including a cut-away underground section.

*Stuart Sharp*

## Building a simple railway scene

### The placement of detail

By John Hunter

Over the years I have seen many great individual model structures either in dioramas or located in strategic areas on a layout and they usually look fine within their own environment. Over the years I have also learnt that a good model can look great or a great model look terrible within its environment. This brings me to suggest that the surrounding scenery and the placement of detail parts around a structure can be of great importance. I have seen so many times where a beautifully constructed model structure with all the correct dimensions and character has been sadly let down by the surrounding environment. I understand that the construction of scenery is not everybody's cup of tea and that the railway and its operation to them is of more importance and that's fine. In my case I lean towards the opposite. I like my scenery and my structures. My railroad is secondary to my main interest of modelling. However, as I develop new skills, I find myself putting more and more effort into the construction of locomotives, rolling stock and the operational side of my layout, because I now realize that these aspects of my hobby are also part of the environment that I am trying to achieve. Now I am developing skills in track laying and trackside realism and my interest in locomotives and stock is growing because of the desire to improve the end result, hence a better railway. As a narrow-gauge



modeller, we are very lucky in many ways for we are able to model prototypical railways or totally freelance layouts. As we all know narrow-gauge

railways throughout the world were very creative in how they went about their business from their locomotives to their structures, almost bizarre in some cases. This then is a great opportunity to model and almost anything can be an asset in getting our structures, scenery and environment looking just right. I often recall my back yard when I was a small child. My father was a bit of a hoarder and nothing went to waste, whether it was an old spring bed or a wine barrel. Even old rabbit traps and railway spikes dawned the back yard behind the shed and if you asked him what he was going to do with it all, he would reply "It might come in handy one day." All



this wonderful trash was just thrown in a heap and the more he collected, the wider longer and higher the pile would grow. Now with that in mind, a structure, fence, back yard, between the railway lines, the end of a siding or even a dried up riverbed can be dramatically changed by simply adding a pile of junk. The placement of that junk is also important as too much can look over done. Too little and the scene looks incomplete, so finding just the right balance can make or break a scene. The type and amount of junk used is also important. I like to vary the size of the items used and in O scale, (1/48) the scale I model, I am again very lucky with the size of items. A hammer or saw can be seen more easily in this scale so the amount of junk can be greater and more obvious to the viewer where in HO or N scale, the same effect is more challenging but still achievable. So with that said, let's begin.

I start by choosing the type of junk pile I would like to achieve. eg. if it's the back of a garage, then I will choose old drums, engine parts, car parts in general and empty parts boxes. After choosing the detail parts, I paint and weather all the items individually and then put them aside to dry. I then look at the area where I will incorporate these parts. Usually I like to put a junk pile up against a fence or a wall of a building. I then place long grass up against that wall or fence as this suggests that the junk has been there a while and that the grass has grown long and in some cases higher than the junk pile itself. Then once that is done I place larger items at the rear. Drums, old signs, lengths of steel, in fact anything that will create height and then working forward, I place smaller more abstract items like gear



boxes, diffs, and boxes in front while working my way out, leaving a little room in-between items again allowing for grass to grow up through the junk. A favourite thing for me to do, is to place a length of timber between two drums and then place smaller items like tins, hub caps, a box of old tools or rope on top of the now created shelf. This not only adds height but also changes the feel of the scene to a more organized pile of junk. Once I have placed all my major items, I then start to fill in the gaps with smaller items like a tyre imbedded in the ground or a old cash register just thrown out the back. A good idea is not to fix any item down with glue at this point keep moving things around. Choose some different items and change things around. The slightest movement can in many cases enhance the scene and eventually you will find just the right combination of items as well as the amount to bring

your pile to life. I sometimes leave a pile of junk unfixed for several weeks, occasionally making small adjustments until I am happy. On other occasions, I seem to get it right the first time. Another way to create that dumped look is to just throw your smaller items on top of the pile and I have found that where it falls is probably the correct place for it to be just like my dad's back yard. Try to bring the pile out towards the viewer and direct their eye into the pile not away from it. This is why I like to use a fence line meeting a wall as a the guide. The eye will follow the fence then follow the wall. This takes the viewer along the wall to maybe another scene. I recently had a person at a railway exhibition keep coming back several times each time saying that the more he looked the more he saw. This not only kept his interest, but made me feel that he was enjoying himself and that I had achieved what I had set out to do which was to create a more interesting environment around my structure. Once you are happy with your pile of junk, get some fine scenic material and lightly fill in some areas around the items on the ground. Again I suggest grass or moss, perhaps some large more chunky pieces right in the front will help to create texture to the whole scene. My final touch is to add a sign or two to the wall or fence, then get some rust coloured weathering oxide and lightly dust the low parts of the piled junk I then dry brush the more prominent parts with white this adds depth and texture. To the scene. I then sit back and enjoy my model. I hope this short tutorial may help you become a bit more adventurous with your structures and trust that you enjoy your creativity as much as I do.





**Introduction**

Puffing Billy Railway is a Heritage steam Railway which carries about 250,000 passengers a year though the beautiful Dandenong Ranges east of Melbourne in Australia. The train runs on a narrow gauge (two feet six inch) rail line through the magnificent tall tree forested areas of the eastern section Dandenong Ranges and open rolling hills of the western section toward Gembrook. Puffing Billy services run on 25 km of line between the towns of Belgrave and Gembrook.

Puffing Billy presents to the public as an historic railway and puts a lot of effort into the design and presentation of buildings, platforms and fittings, signalling, locomotives and carriages being restored consistent with the era of significance; the 1900-1930.

Puffing Billy's main locomotive is an A-class locomotive built by the Baldwin Co.

The narrow gauge railways were established around 1900 primarily to carry freight from forests and farms to the broad gauge railheads for shipment to the growing population centre of Melbourne. However, these narrow gauge railways in Victoria were closed down in the mid 1950's and early 1960's, when road transport became more economical for the shipment of produce.

The Victorian Railways announced the closure of the Gembrook narrow gauge line in 1953 after a landslip closed the track between Belgrave and Menzies Creek. Prior to this time the Gembrook line had become popular as a tourist railway.

A group of volunteers, supported by Melbourne newspaper 'The Sun' decided to run a 'farewell' train from Ferntree Gully to Belgrave. This attracted support from about 30,000 Melbournians, and the train travelled overflowing with passengers. This public support stimulated volunteers to band together a form the Puffing Billy Preservation Society in 1955.

The Society was able to secure six of these locomotives before they were scrapped. Early services were run by the volunteers putting up the running costs and providing volunteers for ticketing, station services, and conductors and Victorian Railways providing engine men.

The Victorian Railways provided a new broad gauge rail for an electric commuter train between Ferntree Gully and Belgrave which opened in 1962.

The Society volunteers progressively restored the track around the Landslide and to Menzies Creek by 1962. Tourist trains were run on weekends and public holidays from Belgrave to Menzies Creek.

During this period the Society also actively collected locomotives to preserve them and with the view to some of them being restored. These included a Garratt (No42), The Climax, TACL (Tractor Appliance Co. Ltd - Melbourne built engine using a Fordson Tractor engine), Shea, Posiers, A

Fyansford Garratt, and a RMP locomotive.

**The Climax**

In 1926 the Forest Commission of Victoria were logging the Central Highlands forests in Victoria and in the absence of good roads, were having difficulty getting timber out. They decided to construct a 2'6" timber tramway from Erica to Tyers Junction; a distance of about 12 miles (20km).

A Harmon Locomotive was built in Melbourne but was a failure. A TACL was purchased but it lacked the power required.

Order No. 66482 was placed with the Climax Manufacturing Co. in USA for the purchase of a B-Class locomotive. This is reportedly the last B-Class Climax made.

Climax Locomotive 1694 was shipped to Australia in 20 boxes and was remarkably assembled in 16 days with completion on 30 August 1928. The locomotive weighs 25 ton, is 28'6" long, 11'3" high, and 8'3" wide.

1694 entered service on 7 September 1928, hauling six trucks of sawn timber from Tyers Junction to Collins Siding, a distance of about 5 miles.

Over the next six years it hauled a huge volume of timber, but not without incident. It had four broken axles, one broken crankshaft and the engine had overturned on one occasion.

Steps were taken to avoid this including making new axles with higher quality steel, and lowering the operating boiler pressure from 200 psi to 180 psi. Three more broken axles occurred over the next six years and the boiler was retubed in 1940. New tanks were fitted in 1944.

The line closed in 1949, and 1694 was moved a couple of times and came to rest at the Erica State Sawmill. Attempts to sell the locomotive between 1951 and 1959 by public advertisement were unsuccessful.

In 1959 it was offered to a museum, who declined. On 5 July 1959 the Rail Roadians of America wrote to the Forest Commission of Victoria, urging preservation of the locomotive.

Mr N E Wadeson wrote to the FCV requesting the donation of the locomotive to the Puffing Billy Preservation Society. This was agreed and on 5 May 1965 the locomotive was transported to Puffing Billy's museum at Menzies Creek. Many volunteer hours were spent cleaning and painting the locomotive so that it could be the feature display of the museum, where it stayed for 16 years.

In May 1981 volunteers Graeme Daniel and Rodney Martin prepared a restoration concept. After some investigation the Emerald Tourist Railway Board (the Statutory authority set up to manage Puffing Billy) approved the restoration on 10 May 1982.

Fund raising activities like raffles, auctions, social events and the collection and sale of aluminium cans for recycling were run by volunteers.



Our Climax Locomotive

For several months my company threatened to send a group of us to the USA for training in our new software 'toolset'. As time progressed the threat turned into a promise and the venue was announced to be San Jose, California. We were to be there for a full week so the timing was perfect to slap a weekend on each side and see what Railroad activities I could find.

Once the dates were set at the last week of March I decided to try out a trick I had seen on the various email list groups. I sent an innocent message explaining that I would be visiting the area to both the USA NMRA general list and the Yahoo Hon3 list. In the following few days I must have received six or seven offers to meet up with people, including some offers to be shown around several layouts. I can tell you these are very welcoming people and this is a great way to make new friends!



The coordinator of my tour was Ray de Blieck. Ray is taking up the roll of General Manager of the NMRA Convention Department as the

central organisation takes on additional responsibility for future national NMRA conventions. As we visited different layouts we seemed to pick up more tour group members and that added to the fun.

First layout we visited was Rick Fortin's Santa Fe 4th Sub-division. Rick's layout is based on a fictional theory that the Santa Fe has built a line that travels up the Sacramento River Valley. As I understand it this is the same geography as traversed by the SP Shasta Route but the Santa Fe does it a bit differently and I am sure Rick would say the Santa Fe does it better.

Rick has a website I recommend you check out. It is a little old and I know he is working at updating it. Back in 1999 as his layout developed his railroad's rationale was a bit different and time and the layout has evolved. The layout is now double decked and has near perfect quality hand laid track work. Check out Rick's website at: - <http://www.fortinweb.com/sys-tmpl/swsf/>

Keep in mind that the railroad name has changed. It is now the Fourth Sub of the Valley Division. The web site will be updated sometime soon.

The next layout that Ray, myself and now Rick Fortin visited, was the On3 Durbin Branch of the D&RGW owned by Dave

Adams. Dave was having a full blown operating session and it was only 10 minutes before I had a throttle in my hands and was driving a stock extra through Chama to the end of the line. My conductor was Jim Vail who is a regular columnist in the Narrow Gauge & Shortline Gazette. We had a ball and I learned just how effective animation can be on a layout.

As our train pulled into Chama, Jim told me we would need to water and coal up for the onward journey. As I pulled up to the tank I was instructed to press the "water" button on the track control panel. I watched as the tank spout lowered gently over my tender. I scored a "D" in spotting my locomotive as we gave my coal load a good wash!

Next was the Coaling Tower and this time I tried to stop right on the dime! Another button (labeled coal) was pushed. No moveable animation this time but the sound of coal falling from the tower chute and filling my tender was loud and clear. We then called the dispatcher for clearance and highballed out of town to deliver our stock cars to their destination.

A must visit business in the San Jose area is "The Train Shop". It is a well-stocked store with most everything a modeler could want and especially good is the selection of books - one might seriously damage their credit card in the Train Shop! Ray and Rick were specifically ogling the new Walthers Southern Pacific wood side caboose. I closely studied the second run Con-Cor Hon3 Goose in the tourist configuration.

Next port of call was Dave Biondi's Sierra Railroad. Here I learned the true nature of the "California Basement". That is the double garage we are all familiar with in most current new housing estates in the Sydney region, with a nice wide driveway leading to the garage. You need the wide driveway to hold your cars because the layout is occupying 100% of the garage floor space and you would never fit a car in without first demolishing the layout.

Dave was also in full swing with an operating session. There must have been 15 adults in the garage performing different rolls as engineer, conductor and yardmaster. There was no DCC



radio throttle problem but the dispatcher (sitting in the lounge room) had difficulty raising anyone on his walkie-talkie.

We arranged to visit Jim Dias next, his layout is based on the Western Pacific in the Feather River Canyon and was featured a few years ago in Model Railroader with a stunning cover photo of his model of the Keddie Wye. It is a beautiful almost fully scened layout in a double garage, with a new extension under construction that proves that we never finish a great layout. By now it was late afternoon, Ray, Rick and I drove to the airport to meet Henry Freeman from New York. Henry is also an enthusiast of model railroad operations and models the B&O. After a steak dinner the four of us descended on Jim Vail's Glenwood & Black Creek HO3 layout.

Jim's layout fills the downstairs area of his house. In doing so it seems to fill several rooms and all available closet space. Closets seem to make locations for neat looking dioramas. The level of detail on Jim's layout has to be seen to be believed. I could visit again tomorrow and see completely new things.

Next morning we met for breakfast. That is Ray, Rick, Henry myself and now Jim Vail. Our itinerary for Sunday was simple enough, to visit the layout under construction of Otis McGee.



He also has a web page - <http://www.spshtaroute.com/>

Otis layout is the last professional plan of John Armstrong. It fills a room built above a 5 or 6 car garage and is already planned to be featured in some of the model rail press in the future. It is a fairly faithful reproduction of the Shasta Route of the Southern Pacific in the steam to diesel transition era. The layout is build as a multi level, mushroom plan and will be a major destination for keen Op Sig people in the future. Dispatch will be undertaken (eventually) from a prototypical period CTC panel with CMRI logic controlling the turnouts and providing track detection on this massive layout.

Final layout of day was Dr Richard Miller's - O Scale & On3 D&RGW layout. This layout has floor to ceiling scenery and is equipped with sounds coming from all around you, from the factories, the trees, the mines and yes even the house of ill repute. Well I am not so sure if the bordello has sound effects but the details were amazing!

Dr Miller is a building enthusiast. He had several complex O Scale structure under construction on an old dining table in his lounge room and the layout was bursting at the seams with many others. He also has a few building gems constructed by others, such as Greenburg and Nash who were well known semi-professional modelers in the 1980's.

To round out our day we visited Tilden Park and road the 15-inch gauge live steam railroad that runs around the hills. It is a ten-minute train ride for \$1.75 - who says you can't find a bargain in the USA these days?

I learned a few interesting things during these two days. DCC is the control system of choice for the serious operators in the Bay Area. The layouts we visited were a mix of NCE and EasyDCC products all with some degree of radio remote control. Sound is equally popular both in the models and in surrounding scenes, as is some degree of animation. It all certainly gives one the feeling of being in a real rather than a toy environment.

Lighting is an interesting challenge on most layouts. Several used the Christmas tree strings we read about in the press. These are not the same as the light strings we have in Australia they are more like the light strings I recall from childhood with large 3cm candle shaped lamps. They come in strings of 50 or so and put out a lot of heat for a limited amount of light. Strip fluorescent and halogen lights also exist but only as work lights unless they were installed by a far sighted planner in the earlier stages of layout construction.

The Christmas lights provide a nice warm late afternoon glow to a layout. But these layout rooms seem to suck the light so that photography is difficult. Jim Vail's layout has 4000 watts of lights but even my flash photography comes out quite dark. By contrast fluorescent and halogen lights put out less heat per watt and are digital camera friendly. One final thing - being a Model Railroader means you need coffee in bulk. You can drink it at the operating sessions, but you need those bulk cans for the prototype dirt expeditions!



All in it was a great weekend and I had engineered a second one at the tail end of my visit but with more prototype things to chase. But that is a story for another day.

All photos by Brett Payne.

## COVE VALE RAILWAY

David Jupp

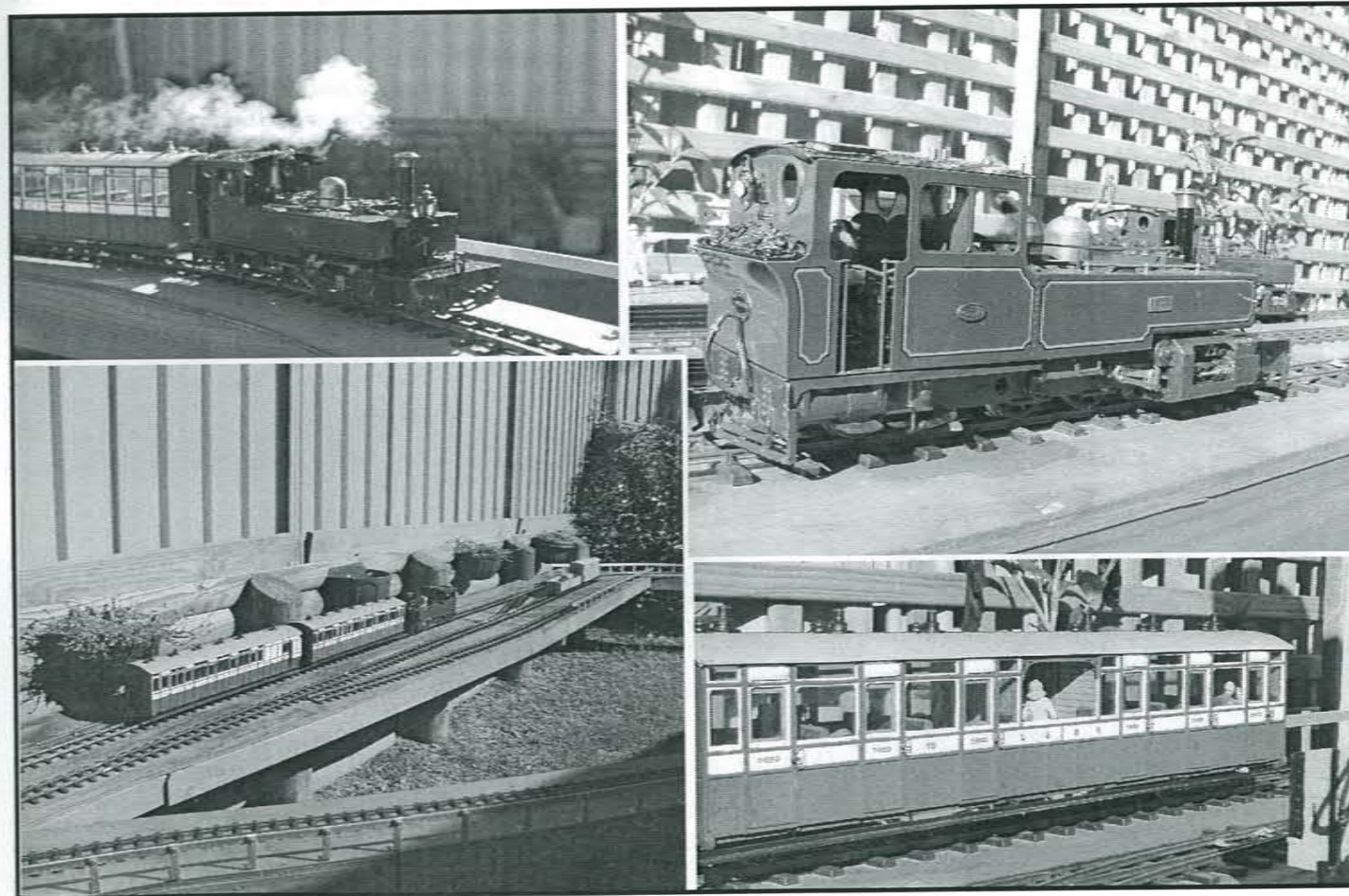
After the March issue of this year when we presented Train Mountain and its "ride on live steam" I had to admit that I became more than a little interested in live steam. From what I understand, a large number of members also said the article and pictures from Barry Dupler have had a lasting affect. Not having the resources to move into big time steam, I became particularly excited when Jack and Shirley MacMicking invited me to their new home to sample their Cove Vale Railway live steam first hand.

The names Jack and Shirley are NMRA icons as they have been extremely active in the AR for years. They recently moved from their home in Chatswood to a unique private village at Lake Munmorah between Gosford and Newcastle up on the Central Coast north of Sydney. In the short time they have been there and bearing in mind both Shirley and Jack have been through many a convalescing time window, the railway has been built. How long have many of us been talking about building our railroads? Years I bet! Well, Jack's railroad prototype 2ft gauge live steam in Sm32 scale sits on the perimeter of their back yard and it works beautifully. The rolling stock and station platform complete with passengers and flour bags are removed after each operating session. When I arrived all the gear was in place. Following a sample of the MacMicking hospitality we moved rapidly to the garden railroad. After a top up of steam suitable oil, the boiler was filled with a measured supply of water. This is particularly important so that the fuel supply becomes exhausted before the

water is fully expended. The fuel, (cigarette lighter gas, butane I believe) was injected into the tank through a one way valve from a pressure can. Jack opened the gas flow valve, created a spark above the funnel and whoosh, the heater became active and the process of steam generation began. Within 10 minutes, steam started to emit from the safety valves and there were signs of water spitting from the funnel and valves, the result of hot steam condensing on the cold cylinders. We were ready to run. A radio control servo operates the throttle and a manual lever on the frame operates the reversing gear. The locomotives are British built but many of the beautiful items of rolling stock have been scratch built by Jack. The layout is composed of a central passenger station with a single track line to a reversing loop also containing some passing sidings. The track work is either suspended from the garden wall at about waist height or is supported on timber legs supported on galvanised brackets embedded in concrete.

The two British tank locomotives ran beautifully smoothly under the command of the radio controlled throttle and the faint chugging sounds were very satisfying. Even more satisfying was the sight of the expended steam as it visibly mixed with the cold autumn air. Did I have anything to say? Well just quietly I'm hooked and after returning home, I starting scanning the internet for live steam suppliers. That's a worry!

Thanks Jack and Shirley for a great day. It will be a while before that day fades from my memory banks. Oh did I mention the construction of the 'O' scale layout in the garage?



## Meet the Member. Len Opie – NMRA member since 1947.



At age 5, Len had a Hornby No.0 Tank Locomotive. His mum made rice sacks for loads and background scenery was made from the labels on pineapple tins that were cut out and mounted on card.

In later years he used the plans of a Central of

New Jersey switcher and New York Central Hudson and caboose from an Australian engineering magazine to make O gauge models. Following World War 2, he saw a Lionel New York Central Hudson in a shop for US\$75.

In the late '40's he modelled in US 00 Scale.

He made castings from cerrobend metal. This involved using plaster moulds that were swung around above his head on a chain and hopefully not spilling hot metal in the kitchen - a crude form of centrifugal casting.

Len spent some time on leave in Japan during the Korean War. There he found an upstairs workshop that was later to become Tenshodo. He bought a Chicago and North Western Mikado and swapped it for a New York Central Hudson with a US

serviceman.

Len went to see Tetsudo Mokeisha (who was to found Shinohara) where Tetsudo was using a brazier and a large soldering iron to make model locomotives. He gave him a locomotive plan and 5 Pounds Sterling and returned in a week to collect the locomotive. This model maker was later used by M.B. Austin to produce brass locomotives that were imported into the US.

Through riding in Korea on a US American Car and Foundry built hospital train Len made contact with ACF. He wrote articles for ACF and earned around US\$75 per article. US dollar currency was difficult for Australians to obtain in the early 1950's and Len was able to buy American made models through an American friend using these US\$ funds he had earned.

Len joined the NMRA in 1947 and with several friends and NMRA members formed the Adelaide Model Railroad Club. After several moves they bought a railway instruction car at North Adelaide. They eventually moved to the signal cabin at Mount Lofty railway station. This group became the Adelaide Model Railway Society Inc. around 1967.

Len started the NMRA 'Booster' magazine in the late '40's that was later taken over by Tim Moss in Sydney and became 'The Australasian Model Railway Magazine' in the early 1960's. After leaving the Army in 1973 Len again became active in the Adelaide Model Railway Society and donated many of his buildings to the club layout. He still enjoys making buildings and understanding the logic behind the 'details' and is still active in the Adelaide Model Railway Society.

Len has been a member of the NMRA for 57 years and is the longest standing member of the NMRA in Australia and a foundation member of the Australasian Region.

Allan Garbutt



Your Convention Committee meet regularly. From left; Erik Bennett, John Montgomery, Ken Scales, Ruth Garbutt, Allan Garbutt, Phil Collins, Peter Jensen with Sowerby Smith behind the lens.

## THE LIBRARY CAR

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VT 1 *	Clinic - Painting Backdrops with a Dirty Brush	VT41	Subdivision)	VT83	Erie Railroad - GMR#18
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VT 3 *	Clinic - Modelling Tips & Tricks	VT43	Santa Fe's Mojave Mainline	VT85	Rock Island Railroad (Pentrex)
VT 4 *	Clinic - Freight Car Loads	VT44	Burlington Northern's Crawford Hill	VT86	BSNF Sand Hills Sub
VT5 *	Clinic - Styrene Construction/Casting		NMRA Australasian Region 1998	VT87	All Aboard Series Vol 2
VT6 *	Clinic - Planning Realistic Operations		Thornleigh Mini Convention (Rolling Stock, Soldering, Weathering Your Models & Pine Trees.)	VT88	All Aboard Series Vol 5
VT7 *	Clinic - Detailing Passenger Car Interiors	VT45	Trains On Location Stevens Pass	VT89	Rock Island Railroad (Grn Frog)
VT8 *	Kansas City Convention 1998 Layouts Tours	VT46	Toronto To Chicago Railfan Way	VT90	Forks Creek Central - Ron Morse
VT9 *	San Jose Convention 2000 Layouts Tours	VT47	Tehachapi Trains on Location (MISSING)	VT91	California's Baldwin Diesels
VT10 *	St Louis Convention 2001 Layouts Tours	VT48	Great Layouts US Prototype	VT92	Santa Fe's Raton Route
VT14	USA Railroad Layouts (compilation videos 1-6)	VT49	Scenery Tips No.3 by Donald Davis	VT93	Santa Cruz Northern GMR#35
VT15	USA Railroad Layouts (compilation videos 7-13)	VT50	Prototypes To Make You Comfortable by John Armstrong Memorable Locomotives by Charlie McCoy Frequently Seen, Seldom Modeled by Jim Cope	VT94	ATSF Argentine Div GMR#29
VT16	Airbrushing for Model Railroaders	VT51	Signals Made Simple by Mark Hanslip	VT95	East Broad Top
VT17	Weathering Railroad Models by Malcolm Furlow	VT52	Computer and Railroad Together by Mark Hanslip	VT96	Classic Chicago Railroad
VT18	Scenery Tips No.1 Rock Moulds by Donald Davis		Trees from Weeds by Louis Godbold	VT97	All Aboard Series Vol3
VT19	Scenery Tips No.2 Backgrounds by Donald Davis		Weathering and Ageing with Pastels by Robert W Baily jr	VT98	SP's Central California Mainline
VT20	NMRA Australasian Region 1993 (Tony Koesters Clinic) by Kevin Brown	VT53	Rolling Stock from Cardboard by W Meijndert Van Alphen Foamcore Buildings by Robert Hubbard	VT99	NYC - The Beach Collection
VT21	Waitemata (Auckland NZ) Convention 1990 by Gerry Hopkins		The Art of illusion by C J Riley	VT100	Union Pacific
VT22	Piki Piki Tram (visit to famous NZ NG layout of Merv Smith)	VT54	N Scale and N Track by Jim Fitzgerald and Ben Davis Model Railroad Photography by John Allen	VT101	Southern Pacific - Last Cab F'ward over Donner Pass / SP 1941 / SP The Coast Line
VT23	Diamond Valley Lines (visit to famous layout of Fred Gill) by Gerry Hopkins	VT55	NMRA National Convention 1998- Kansas City Layout Tours	VT102	Union Pacific - UP Challengers / UP Big Boys / UP Steam
VT24	US Pittsburgh Convention by John Saxon	VT56	Convention at Marayong 1995 and Clinic Presentations by Allen McClelland	VT103	Union Pacific - UP Turbines of the Wasatch / UP Mighty Turbines / UP Trilogy
VT25	All Aboard An Introduction to Model Railroads by Madeline Trimby (Kevin Brown's video conversion of tape/slide clinic)	VT57	Union Pacific BIG BOYS volume 2	VT104	Santa Fe - Challenge for Tomorrow / Vintage Diesels / SF, The Diesel Loco
VT26	Optimum Use of Space by John Allen (Kevin Brown's video conversion of tape/slide clinic)	VT58	Southern Pacific 1941 volume 1	VT105	This is my Railroad - SP Diesel Version / SP Daylights, Cab Forwards & Early Diesels
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VT30	Layout Tours No 3 by Gerry Hopkins (Visits to Sowerby Smith's & Geoff Nott's layouts)	VT62	Scenery & Water - Convention 1997	VT109	UP Steam over Sherman / Otto Perry's Santa Fe
VT31	Realism with plastic Structures (video conversion)	VT63	1997 National Convention, Madison USA	VT110	UP Battle up Sherman Hill / Pennsy Racetrack 1940-1980
VT32	Convention 1993 and Three Layout Tours	VT64	Little Engines of NZ	VT111	D&RGW, SF & BN Joint Line / UP Vintage West 1960-1980
VT33	The Clinic (Woodland's)	VT65	The Two Foot Gauge Tramway (NZ)	VT112	Today's Chicago Railroads
VT34	Distinctive Rolling Stock by Dean Freytag	VT66	Model Railways of Australia	VT113	1997 NMRA National Convention Layouts
VT35	Convention 1995 at Marayong & Layout Tours	VT67	Gateway 2001 USA Convention Models, etc	VT114	Railfanning the Silverton
VT36	Rocks & Basic Scenery Made Easy by Dave Frary	VT68	Modelling The Prototype (Gerry Hopkins)	VT115	Around the Narrow Gauge Circle
VT37	Painting Model Structures by Dave Frary	VT69	Great Northern Vol 1	VT116	The Rio Grande Southern / The Denver & Rio Grande Western
VT38	Finishing Your Scenery by Dave Frary	VT70	Great Northern Vol 2	VT117	Victorian Div of NMRA Aust Region / Bulla Convention 1994 Clinic Presentations
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		VT79	Piedmont Div of WM - GMR#12	VT126	Santa Fe Mojave Sub Division, Caliente to Mojave
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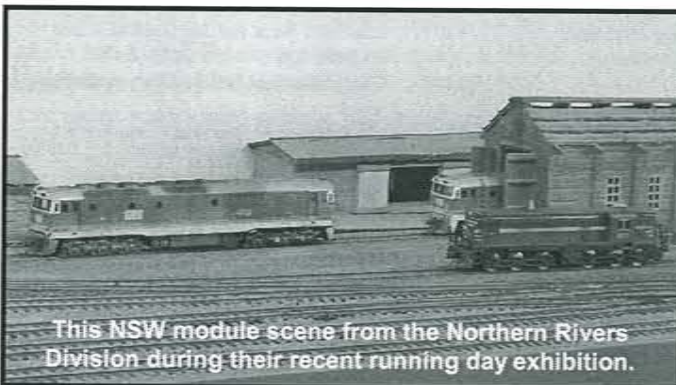
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VT138	Gunnison on the D&RGW			VT163	Rails in Kansas City Part 1 - 1998
VT139	The EMD FT103 Diesel Story			CD1	DCC Forum Chaired by Peter Jensen
VT140	Franklin & South Manchester Part 2 - GMR#24			CD2	1999 Convention Opening Address by Jack Burgess
VT141	The Uintah Railway			CD3	PC Data - photos, shareware, etc.
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VT143	Great American Train Rides Vol 2				

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