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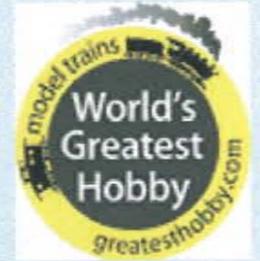
National Model Railway Association Inc

Australasian Region

AUGUST 2002

Volume 19 Number 3

This issue
Getting Started
Convention 2002
Train Length Challenge
Fading Freight Cars
Product Reviews & More...



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David Jupp 2002

NMRA

SETTING THE STANDARDS IN MODEL RAILROADING

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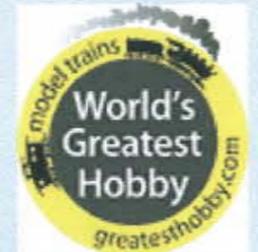
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NMRA

SETTING THE STANDARDS IN MODEL RAILROADING

TRUSTEE'S REPORT



The recent Board of Trustees meeting in Ft Lauderdale saw the final draft of the Long Range Plan approved. Much of the plan had been accepted at the previous meeting and there were really only a couple of areas that needed further discussion, and I'd like to bring you up to date on these.

The first area was Single Dues. Let me preface my comments by saying that by and large, the Australasian Region had already implemented much of the concept of single dues a couple of years ago while addressing the logistics of our remoteness from Chattanooga. The idea behind Single Dues is that a member paying their dues becomes a member at National, Region and Division Level and those dues are collected by either the National or the Region as one dues payment. The dues are apportioned between the National and the Region. Members can opt out of region membership if they wish provided the total dues sum is paid.

As you are aware, our region collects dues for all NMRA members living in our region and remits the National share to Chattanooga. The primary difference is that currently there is a dues difference if you only join the National and not the Region. This new structure simply reinforces the view that the NMRA is one organisation and new members will become members of the whole, not just part of it.

The second area discussed was the size and make up of the Board of Trustees. Currently there are 17 trustees elected by 17 regions. Historically this structure has proven to be cumbersome and unwieldy. All the existing trustees felt that a reduction in the size of the Board made sense. The devil was in agreeing to what that new size should be.

Constructive, positive debate led to the decision that the proposed board should consist of 9 trustees. The NMRA will be divided into six districts, each electing one Trustee as follows
Pacific District made up of Asia, Australia, New Zealand, and the Near East.
Atlantic District made up of England, Europe, Mexico, Central & South America, the Caribbean and Africa.

3 North American Districts; West, Central and East based upon the US National Convention rotation districts.

NMRA Canada.

That leaves 3 positions.

One will be a position at large elected by US members

One will be a position at large elected by non US members

The final position will be elected effectively by the 17 Region Presidents. The presidents (or their nominated representatives) will form a Regional Advisory Group and the board member they elect is intended to interact with and "represent" the outlook of the regions, not as a regional representative per se but to act as an interface between the National board and regional interests.

As a whole I believe the Long Range Plan is an excellent platform for the NMRA as we move into the 21st Century. It is essential that we evolve as an organisation to keep pace with the evolution of the hobby.

This new streamlined structure should improve efficiency and better reflect the makeup of the NMRA in this day and age. If you would like more detailed information on the LRP please contact me.

David North

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The next MainLine will be Published in November.

Did you miss out on the January & February Bulletins?

If you did not receive replacements before the US ran out of them, go to our web page where Gerry Hopkins and Trevor James have worked together to scan in the relevant pages. You may then download them if you wish (will take some time) or otherwise read them at your leisure.

The address is www.nmra.org.au/pages/bulletin

Toni Saxon, Membership Officer

Schedule of Divisional Meetings for 2002 / 2003

New South Wales

Sydney meetings co-ordinator John Baker (02) 9629-2349. Meetings start 2.00 Saturday unless indicated differently

August 11 th (Sunday)	Ken Scales	19 Goliath Ave	Winston Hills	(02) 9674-1563
September 14 th	Bob Best	34 Winicoopa Rd	Blaxland	(02) 4738-1953
October 13 th (Sunday)	Ron Cooper	47 Lincoln Ave	Collaroy Plateau	(02) 9982-1147
November 9 th	Erik Bennett	33 Kananook Ave	Bayview	(02) 9997-7971
December 14 th	Christmas Party Baulkham Hills Uniting Church Hall			
	Ruth Garbutt	Cnr Edgar & Charles St	Baulkham Hills	(02) 9686-4270
January 11 th	Colin Upton	6 Welland Close	Jamison Town Penrith	(02) 4731-3921
February 15 th	Laurence Nagy	4 Larra Cres	North Rocks	(02) 9872-6301
March 15 th	Lyndon Spence	53 Springfield Ave	Figtree	(02) 4272-9245
April 13 th (Sunday)	Rodney Smith	26 Peel Street	Baulkham Hills	(02) 9624-3912

Victoria

All meetings start 11.30 Sunday unless indicated differently

11 th August	Geoff Truman	12 Goodwin St	Hoppers Crossing	(03) 9748-7864
September 8 th	John Dennis	62 Owen St	Mitcham	(03) 9784-1684
October 13 th	Graham Meyer	2 Elizabeth Court	Emerald	(03) 5968-4518
November 10 th	Laurie Green	20 Nambour Drive	Sunbury	(03) 9744-5188
December 8 th	Grant McAdam	194 Booran Rd	Ormond	(03) 9578-8685

2003 Schedule not available at time of publishing

Canberra

3 rd August	Tony Payne	24 Darmody St	Weetangera ACT	(02) 6254-6985
31 st August	Ken Macleay	31 Shepherdson Pl	Isaacs ACT	(02) 6286-2624
28 th September	Kerry MacPherson	35 Mol Cres	Queanbeyan NSW	(02) 6258-1421
26 th October	Jess Brisbane	17 Forwood St	Monash ACT	(02) 6291-4260
23 rd November	Stephen O'Brien138	Nemarang Cres	Waramanga ACT	(02) 6288-3614

2003 Schedule not available at time of publishing

Queensland

September 14 th	Grahame Davis	41 Hersden Ct.	Benogin	QLD 4213
November 9 th	Garth Fraser	28 Sylvan St.	Buderim	QLD 4556
December 8 th	Division 1 Christmas Lunch			

For details of Queensland meetings and venue addresses, please contact Glenn Stevens. (07) 3207-2442

2003 Schedule not available at time of publishing

ON THE COVER: Modern Technology Brute Power on the Union Pacific

Straight from the factory, a pair of Kato SD-90/43MAC EMD locomotives use some of their combined 8,600 HP to haul a heavy freight consist, seemingly with ease over 'Rock Creek' on Rodney Smith's Sydney Layout. (Locomotives reviewed this issue page 12)

MainLine

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Editor David Jupp
Publisher John Saxon



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, either B&W or colour are welcome. Type written articles are also welcome.

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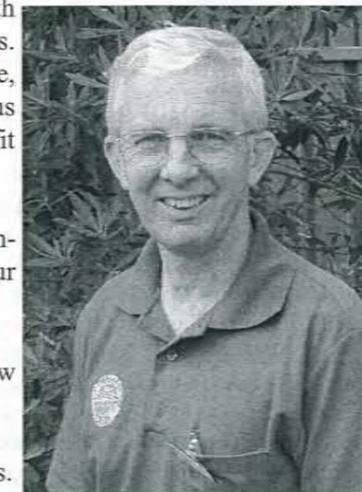
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National Model
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President's Report

Our Association draws its strength from the diverse talents of all members. Some of us model American prototype, some Australian, some European, various gauges and scales – but we can all benefit from the standards set by the NMRA.



The recent June Convention inspires us to greater achievements in our hobby.

- The clinics open our eyes to new ideas.
- The competition models inspire us.
- The social interaction with one another encourages and motivates.

The success of the convention was only possible because of the many members who volunteered their time and talents.

A significant volunteer area that largely falls on the shoulders of a few people is the creation of the *MainLine*. Keith McCarron has been the editor of the *MainLine* since April 1998.

Keith changed the *MainLine* from a newsletter style publication to the now familiar magazine style format which includes many photos. The first cover photo was of Geoff Nott's layout. This put the *MainLine* in good company with *Narrow Gauge* and *Shortline Gazette* and *Great Model Railroads* by bringing you world class modeling.

Well done Keith! I look forward to seeing the results of your next project, as you turn your talents to video production. Keith has now passed the editorial baton to David Jupp.

Volunteer editors are extremely rare! The Association is fortunate to have talented people who are prepared to share their creative skills for our mutual enjoyment. David looks forward to receiving *your* contributions to the *MainLine*.

Not all of us have the skills to be editor but each of us has a specific talent that we can offer the Association. Please consider what you can offer so our Association continues to grow.

Allan Garbutt

STOP PRESS

The DCC Seminar (part two) to be conducted by John Baker in August has been postponed. It is expected still to be held at a date to be advised. Please accept our apologies for any inconvenience caused.

From your Editor: (In training)



I am delighted to have been appointed your new editor, a task which I do not take lightly as I endeavour to maintain the high quality we have come to expect. I thank Keith McCarron for his contribution over the last 4 years and his offer of assistance to get me up to speed. Good luck with your move to video presentations and studies Keith. What I do want to make widely known is that this magazine is the result of considerable time and effort. In fact for the record I have put in well over 100 hours on this issue alone, formatting, reformatting, testing and printing. In time though I will get faster, however this is **your magazine** and it can only be successful with your contributions. By all means send me letters of criticism and ideas for change. They will all be looked at favourably but most of all I need those contributions.

When I hurriedly took a few photos of John Baker's Sydney layout and submitted them for the NMRA calendar last year, I thought there was little chance of a place in the publication. What a buzz it was for both John and myself when he called to say we had been successful and had the November slot. Your contributions to MainLine could possibly end up in other international non profit publications through our sharing of articles agreement. I particularly encourage those interstate, outside metropolitan and members from New Zealand to tell us about your layouts, share them through our publication. Without these contributions there would be no MainLine. This issue another first. We go colour on the front page at no additional cost to the NMRA thanks to advances in technology. The motivation for me to approach our president to allow this, is a combined effort from both Keith McCarron and myself. Thanks yet again Keith. I think this improvement lifts the quality of our publication yet another step. What next?

Who is David Jupp your new editor anyway? OK, I have been involved in Model Railroading since I was about 8 years old thanks to my Dad and my older brother. That's many more years than I wish to remember. I have built 3 layouts but following a move from New Zealand to Australia in 1977 I have not had the space to build my dream layout. I intend this to change, as I am passionate about model railroading and particularly DCC. My 4th layout will be based on the Union Pacific, specifically large and articulated locomotives with hopefully long consists. I know I must make time available to do that between family duties, creating issues of MainLine and my day to day job of managing the serviceability of the Foxtel Transmission Centre in Sydney. Strangely enough, I also enjoy the frustrations of the personal computer and desktop publishing. I am fortunate to have the backing of my good lady Kim who is a highly creative and keen scenery maker. I joined the NMRA about 2 years ago to get ideas, learn new techniques and to return to the association what I could. I was awed by the quality of many of the members layouts that I have seen. We have the expertise here down under to compete at a high level with our American brothers. This was particularly evident at the convention held in June where local members presented the clinics. Get involved. It's true, the more you put in, the more you get out. This issue, a new section *Product Review* has been added. If you've bought something that has just been released, please let us know about it. I am sure all members will benefit and be interested in your findings. Erik Bennett has submitted a *Train Length Performance Competition Ladder*. Sounds like a lot of fun. Take the challenge. Thanks to the contributors for this issue and particularly to John Saxon for his proofing help with the publication. I appreciate that. Enough from me, I have taken up too much space. Thanks and enjoyable reading everyone.

David Jupp



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THE ONLY DRIVE-IN HOBBY SHOP IN SYDNEY

Regional Roundup

Sydney

April

Ken Scales MMR

Forty nine people attended the meeting at the home of Vic and Beryl Quince and noted that Vic had done a lot of work on his layout since the last NMRA visit some years ago. In particular, a huge number of trees had been planted on the layout just prior to the meeting.

The scenery on the layout, which is almost complete, is built using an unusual method that Vic devised himself. Thin layers of foam sheeting are glued together shaped and covered with a mixture of glue and plaster. This is colored and flock is sprinkled over parts to represent grass and foliage. Combined with all the trees this gives a very realistic effect. The island portion of the layout has a seafront with a beach, stone retaining walls, a small inlet and an operating lighthouse.

The scenery is coloured to represent NSW and at this meeting he was running an impressive ar-

ray of NSW prototype rolling stock. He also has American days and runs Union Pacific and Southern Pacific rolling stock.

Vic is a member of the Dorrigo Railway Museum and was running a very interesting computer slide show showing the museums exhibits in his layout room.

Reports were given by the Vice President, the Treasurer and the Convention Chairperson after which an excellent afternoon tea was provided by Beryl. Peter Jensen gave an entertaining / inspiring talk about the up coming convention and many members registered on the spot.

Our new President was warmly welcomed as were the rest of the new committee at their first "public" meeting.

A very enjoyable afternoon was had by all. Our sincere thanks were extended to Viv and Beryl and Vic was presented with the usual plaque to mark the occasion.

This month we went to the northwest of Sydney to McGrath's Hill to visit the Mowhawk Springs and Northwood Railway of Doug Wallace. This was



A section of Doug Wallace's Logging Layout Photo Keith McCarron

The first meeting at Doug's layout and the attendance was again over 70 members and families and as usual the weather was great.

Doug's layout is housed in a "modified" single car garage and was well worth the trip. The scenery was well done and the trains ran very well. It is set in the far northwest of the USA and its main reason for existence is the local logging industry set in the '50s. This meant first generation diesels and some small steam power. The trains ran over high bridges, around mountains and through tall timbers.

Thanks to Doug and his family for allowing us to see his beautiful layout.

June

We again went to the west of Sydney to Bakersville (it used to be known as Kellyville) to visit the Module SIG layout. The layout develops each time we visit. A number of the trains had sound systems installed but it was difficult to enjoy because of the incredible 80 + members who attended.

In another of the buildings at 'Bakersville' the

to the usual feast. (The large dog made sure no one over ate). Allan presented 'The President's Award' to Keith McCarron for 'Editorial Achievement' with development of the MainLine. Then Ken Scales announced the Shoup Award for significant achievement for modeling in the AP program. Absentee recipient George Paxon will be receiving this beautiful award sponsored annually by Rick Shoup from the US.



Thanks to John & Natalie for their hospitality.



Presidents Award to Keith McCarron

SHOUP award received by Ken Scales on behalf of George Paxon

Canberra

Viv Brice

The May 2002 meeting was hosted by and held at John Gillies home in Lyneham. We began with a slide session of 1978 travels including the area and equipment being modelled in the train room and included slides by Rob Nesbitt when he had rail-fanned the same area. John also provided us with a handout describing his version of the Burlington Northern Spokane Division 1st Sub-Division in late 1976 that he is modeling. The handout included a description of the prototype and how he intends his layout to portray it.

John went on to talk about what had happened with his layout since his last meeting and his plans for the future. Then it was time to visit the layout room to see for ourselves the progress. Much discussion centred on the control panel John had just built for his hidden staging yard, including operational train detectors based on an article in the March 1999 edition of our own MainLine by Julian Israel. Everybody enjoyed the time together and thanked John for sharing the layout with us.

The June 2002 meeting was held at Stephen Walker's home with the themes being a comparison of HO and N scales plus the rationale for Stephen's own

layout. Stephen has now gained management approval for the use of some space for a layout and he now plans to model the Burlington Northern's Spokane Division's International Sub-Division.

It does seem strange that, within the Canberra group, we now have five modelers of the same area, with layouts or planned layouts that effectively interconnect, even if in different scales! Stephen gave us a history of the Spokane International Railroad, both fact and fiction. The fiction, or perhaps imagineering is a better word, will allow him to run equipment that is not completely prototypical, either in source of traffic (a fondness for cabooses and Canadian freight cars plus the occasional CP or CN run-through) or in time period (eg F7s with SD60s). It also allows him to compress the division into the space he has available.

Stephen then went on to display some of his duplicated models, following a change from HO to N scales, with a nice selection of like models in each scale. (Your correspondent actually took a couple of digital photos of these and then proceeded to wipe them out - oh well, back to the drawing board). One of the most interesting points, at least to this HO modeler, was the level of detail now available in N scale models, and also the smooth performance of modern N-scale locos. We look forward to seeing Stephen's layout when we next return there.

Again, our thanks to Stephen for his generosity in allowing us to visit.

Victoria

April

Report by Grant M^cAdam

The second Sunday of the month and another Division 3 meeting of the NMRA. This time it was to the home of first time meeting hosts John and Lyn Cracknell. It was a very pleasant day although the weather was a little cool. It was our usual format of a lunch time meeting with plenty of discussions, both railway and non-railway related. Lyn and John put on a great spread with others offering some assistance on the catering front. John has a home layout under construction and we will be pleased to see the progress over time. Attendance was down a little this month with 11 members making the trek down to Norlane. There were four apologies that would have taken us up to our average meeting attendance. The strong support of the local membership is greatly appreciated.

There were a range of show and tell items this month, with a leaning toward O scale and in particular narrow gauge. Grant M^cAdam has been busy assembling O scale tree ferns from HO scale palm trees sold by Simply Glues. He also had the magazine Narrow Lines and the book How to restore the Old Aussie House. Buildings were well represented with Laurie Green displaying Appleton's local store and the Mill Creek Market. Laurie displayed these buildings as dioramas and finished them off by using picture frames as part of the base. In fact the Appleton's local store structure was based on the picture that came

with the frame. Laurie also had several logging books. The building theme was continued by Glen Mills who had assorted HO scale buildings in which he had used a range of techniques to represent the mortar. He was seeking advice from those present as to other techniques that he may be able to try. Steve Cullen brought along an O scale Langley telephone box and Matchbox car. This month we had another On30 Na assembled by Peter MacDonald for Steve Holian.

May Report by Laurie Green MMR

The May meeting found us once again heading up into the Yarra Valley, north east of Melbourne, to the township of Healesville and Mario Rapinetti's home. It was with apprehension that we started our journey, as the weather forecast wasn't very encouraging - snow might have been on the cards! However the 16 local members and one visitor who attended enjoyed a remarkably pleasant day, with the bad weather holding off till after the meeting. There were 3 apologies from regular attendees (all were overseas or interstate) and with 17 attending the meeting, the Victorian Division continues to grow and remain strong. Our division remains very narrow minded, with nearly every active member modelling the slim gauge. We need some standard gaugers to keep us in line. Once again there were many models, books and other items on display from members. These included Peter MacDonald's kit built N.S.W. 38 Class Locomotive, Steve Cullen's On30 Shay converted from a Bachmann HO Shay, Geoff Truman displayed his built up kit of the B.G.M. On30 'Na' as well as a Bachmann 0-6-0 locomotive kit based into an On30 0-6-2 Switcher, while Laurie Green had some 'O' scale vehicles modified from supermarket cheapies. There were also many books on display, as well as Mario's vast collection of books, layouts, dioramas and models.

The formal part of the day included a report on discussions and other matters of the Association, plus a general discussion amongst the members. A change a date was announced for Gavin Hince's July meeting, now to be held on Sunday July 21st.

As in the past, Mario and his family were great hosts and we thank them for their hospitality.

June Report by Grant M^cAdam

Most members look forward to our annual visit to Steve and June Cullen's. Steve's home layout "Bellbird" is in On30 and very capably demonstrates what can be achieved in a relatively small space. There is a high level of detail but the layout does not look overdone. The layout has evolved over the years with Steve refining the track work and rolling stock. The layout is a pleasure to run as the locomotives and couplers operate faultlessly.

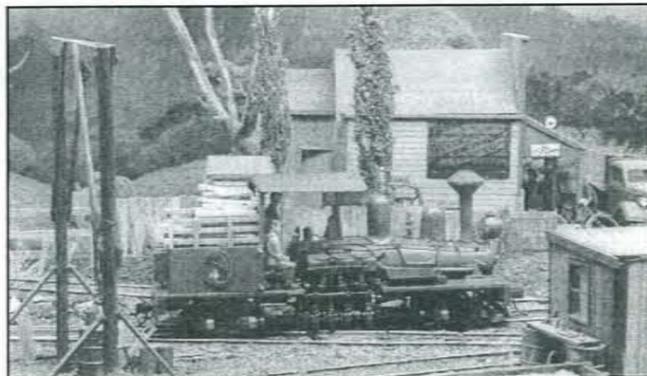
Sixteen members made the trip out to Melton, with some of the members car pooling to ease the trip. Once again there were several apologies for the meeting. Steve had very capably prepared for the meeting, as June was restricted in her movements due to a recent arthroscopy on her knee. We wish her a speedy recovery from her planned knee replacement surgery.

A very pleasant day was had by all with the predicted bad weather staying away. However, in the earlier afternoon the day turned cooler and the meeting moved into Steve's family room that also contained his layout.

The formal meeting part of the day was kept brief as Grant M^cAdam was still recovering from a cold that he picked up on his way back from the UK. Grant thanked Steve and June for hosting the meeting and gave him his host plaque. Several other plaques were presented for previous meetings as Grant had forgotten to bring them along. The members were once again reminded of the change of date for the July meeting until the 21st July at Gavin Hince's.

There was a large range of display items this month. There several copies of the recently released book on the Walhalla line (Peter MacDonald and Steve Holian). Peter MacDonald had a copy of a book on the Pichie Ritchie Railway that he obtained on a recent trip to South Australia to attend their annual exhibition. Grant M^cAdam had numerous items he had picked up on his trip to the UK including photos from the trip. He had also completed the O scale English cottage we had seen at a previous meeting. Our S scale fan, Paul Richie, brought along a Forney tank locomotive and a combine kit. He was also converting a Bachmann On30 flat car to a standard gauge S scale flat car. He also had copies of Sn3 Modeller and S Dispatch. Steve Cullen had an On30 0-6-0 Baldwin. Further reading material was provided by Michael Holian (Steve's son) who brought along several magazines and a guide book for the Puffing Billy Railway.

All too soon another very enjoyable Division 3 meeting had come to an end.



Steve Cullen's Bellbird Line in On30 contains a wealth of detail as can be seen in these photographs taken by Grant M^cAdam

Queensland "FOREST HILL" wins the Annual NMRA Award

The annual NMRA Award for the "Best Layout as Judged by Railway Modellers" for layouts exhibiting at the Toowoomba Model Train Exhibition was awarded to "Forest Hill", a HO_n3.5 layout representing Queensland Railways during 1965. The award was announced by Glenn Stevens, the Division 1 Superintendent, at the Exhibitors Dinner on 15 June.

For the last three years, with the agreement of DDMRC, Division 1 has sponsored the trophy to be presented at the annual Exhibition. Each year, the judging panel comprises representatives from both the NMRA and DDMRC, and uses the NMRA Achievement Program philosophy and guidelines when judging the exhibited layouts, the main guidelines being conformance to prototype practise, construction technique, and attention to detail. The inaugural award was presented to "Caintode Flats", a QR based layout, with the 2001 award going to "Ravenstor", a British Rail based N Scale layout.

As happened in the last two years, the judging was too close to call with the three layouts in close contention, so the judging panel was altered to include a different members of both clubs for re-judging of the finalists, with the winning layout decided on count back.

The NMRA is proud to sponsor this award, with the standard of layouts exhibiting getting better each year. Congratulations to Stephen Colclough and his band of merry men for a job well done.

It is interesting to note that "Caintode Flats" has been in the top three each year, and this year's winner, "Forest Hill", was in the final three in 2000. The other runners-up were:

In 2002, "Moelfryn", a 009mm layout representing Welsh narrow gauge, In 2001, "Lyncombe Vale", a OO English layout, and In 2000, "The Greenbelt Midland Division", an N Scale modular



Glenn Stevens presents the award to Stephen Colclough for "Forest Hill"

layout representing the western USA.

Division 1 NMRA Activities.

The second Division 1 meeting for 2002 was hosted by Bob Brown, a UPMRC member and supporter of the NMRA. Bob models UP and AT&SF, with his layout spread over one room, through a wall and into his garage.

The next meeting is a double header, designed to get value into a trip to Toowoomba. The first meeting is at 11 a.m, hosted by Mark Ward, a member of both the NMRA and the DDMRC. Mark models late Burlington Northern, with his OMA Belt about two thirds complete. Following lunch, the second meeting will be at 2 p.m, hosted by the Darling Downs Model Railway Club at their Toowoomba club rooms

The addresses are 421 McKenzie St, Toowoomba, and Old Maunsie House at Bailee Henderson Hospital. Mark's phone number is (07) 4636-6257, so don't forget to give him a call to let him know you are coming.

Glenn Stevens

Modelling Snippets (Tractive Effort Vs Horsepower)

An article in RMC (11/78) discussed tractive effort vs horsepower and how to use these parameters as limits for model operations rather than use any engine to pull any train. It sets interesting limits in model operations and highlights why the prototype RR's use so many units in their long trains.

It needs to be understood that horsepower is the engines ability to maintain a high speed, whereas tractive effort is the engines ability to start with a heavy load. This explains why a RR would use an SD-9 (1750 HP/89,000 TE) over a GP-9 (1750 HP/62,500 TE).

The article set limits at 200 HP per car and 6000 lb TE per car, with the following showing what the limits would be on train size using popular models and these self imposed limits.

Increasing the qty of loco's, changes the limits in proportion.



	HP	Cars	TE	Cars
SW-1	600	3	4850	8
NW-2	1000	5	6210	10
SW-7	1200	6	6050	10
GP-7	1500	8	6140	10
GP-9	1750	9	6225	10
SD-9	1750	9	8950	15
F-7	1500	8	5850	10
GP-30	2250	11	6600	11
GP-35	2500	12	6550	11
SD-35	2500	12	9713	16
U25B	2500	12	6752	11
U25C	2500	12	9637	16
GP-40	3000	15	6524	11
SD-45	3600	18	9725	16

PRODUCT REVIEW
KATO HO SD90/43 MAC

Kato's SD80/90MAC's are finally here, after getting them home from the local hobby shop and setting them on my workbench my first impressions were that Kato had made an excellent model of the SD80 MAC and SD9043 MAC. These locomotives are impressive, over 80 Feet long and away from the sameness of the SD50 to 75 lines. They are distinctive by their large flared radiator at the rear of the long hood. The SD 80 and 9043 MAC's are very similar and should not be confused with the SD90MAC H which has sloping engine roofs hiding the 6,000HP engine, they are numbered from 8500 to 8521. A phase 2 version of the SD90MAC-H has also been produced which can not be confused, as it has a very angular cab, numbered from 8522 to 8561. SD80MAC's use a 20 cylinder engine to achieve 5,000HP with AC traction Motors. They were made for Conrail in 1995, total production was less than 40 units. Originally the SD9043MAC were built by EMD as convertibles starting in 1996 for the Union Pacific. They received the same engine as the SD75, rated at just under 4,400HP and have AC transmission for heavy hauling. The idea was that when the new 6,000HP engine was ready, then under development, it would be swapped making the convertibles true SD90MAC-H's. Problems developed with the new engine and cost soared making the conversion not economically viable, I heard that they were looking at 2 Million US for each locomotive conversion, many times more than initially expected. The major issue was due to the total rewiring and internal plumbing of the units as well as the weight distribution problems caused by the much heavier engine. Thus the SD9043MAC's have become a breed to themselves. In all UP acquired 309 of them, by far the biggest buyer, CP and CEFX also acquired these units in smaller numbers. UP units are numbered from 8000 to 8308. 50 units from 8025 to 8074, received the We Will Deliver slogan on the sides of the engine compartment.



The Kato Model is of modular design and the fitting of the pieces is suburb. The moulded detail is of the same high Kato standards as on previous models. It comes with flush filling windows with gaskets included and a detailed interior. Something new on these models is that Kato has included some of the many small data labels, however they are only a crude reflection of the true label. Keen modelers could purchase the Microscale data set for them and replace them with more detailed ones. Painting continues to be one of the weakest points of Kato's models. In some places the paint is thin and see through and still the wrong shade of yellow for the UP. I have heard that the Conrail blue is also incorrect for the SD80MAC. The locomotive comes with many add on parts and takes about 3 hours to complete each one. Disappointingly, there are no sun shades or exterior mirrors included. Use a number 77 drill to clean out the pre drilled holes or the included cleaning wire and use a good pair of tweezers to install all the small pieces. Kato has included some extras just in case. Handrails are a modular design and include white vertical pieces as per the prototype. They are still oversized and much has been said on the web about this. Truck details accurately reflect the latest HTRC II steerable trucks from EMD. These monsters ride on 44 inch wheels which look oversized, but that is how they are. Antennas and the horn are only correct for the first 40 units, as these details changed on later units. Please check prototype pictures for correct antennas and horns. I

have found that Details West make these antennas and Miniatures by Eric the Horn. Cone and Wedge antennas replaced the tear drops at the front and a lollipop at the front middle of the cab roof. Additional details such as step lights and the toilet drain can be added to enhance the finished model. During assembly painting of small detail parts such as mu cover and fuel caps red, antennas silver, spare knuckles rust and some handrails white. Step sides should also be

Painted white and the grills can be washed black to add a greater depth as they are not see through. The locomotives have directional white LED lighting and working ditch lights. Operation was smooth and silent straight out of the box. Some of them have been reported to be noisy, but so far so good. The coupler boxes contain Katos knuckle couplers, Kadee number 5 and 58's drop right in. A potential short circuit problem has been identified when operating with DCC, so please read the flyer included. These locomotives should not be operated on tight curves as the length of the locomotive will cause derailments. Longer shank couplers should be used if this problem occurs. However with any mass production model, compromises must be made, so if you model the current period, then this new Kato model is a must. Overall it is the best model by far made by Kato and comes close to rivaling custom made and Brass models at a fraction of the cost. There should be a second run, and recently announced are N scale for CSX and N&S for the SD80MAC and a Winged 8246 for UP and the CEFX lease engines that UP and CP currently operates.

What's Available?

SD-90/43MAC	Union Pacific	6 Numbers
	Canadian Pacific	3 Numbers
SD-80MAC	Undecorated	
	Conrail	3 Numbers
	Undecorated	

Retail Price \$Aus 270 - 290

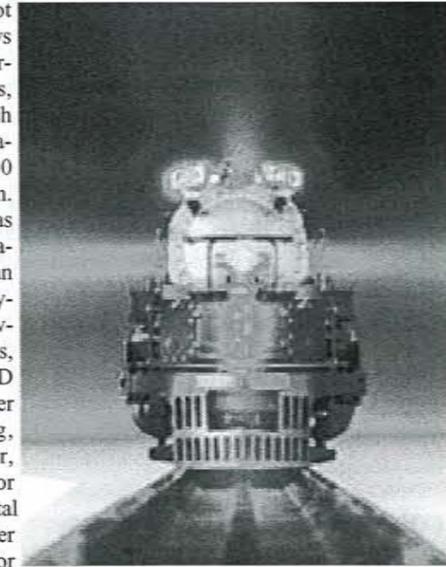
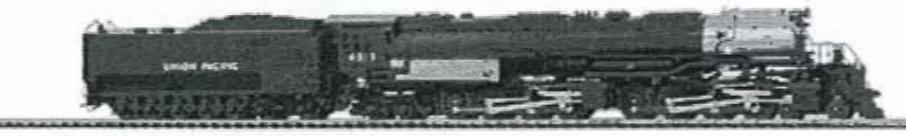
Andrew Jordan



PRODUCT REVIEW
TRIX UNION PACIFIC 4-8-8-4 BIGBOY

The Union Pacific Big Boy is one of the most famous locomotives ever produced. First Built in 1941, they developed 6,100hp at 35 mph and had a tractive effort of 135,000lbs, only recently matched by the EMD SD90H AC and GE AC6000CW in a single engine locomotive and not to be confused with convertible models, such as the SD9043 recently released by Kato in HO and N scale. The Big Boy was originally developed for the Wasatch Mountains to haul 4000 ton trains without helpers. Their range later extended to Cheyenne. Towards the end of their service they operated out of Cheyenne over Sherman hill to Laramie. Occasionally they were also double headed over the hill. The last revenue run was in July 1959, and a few were kept for the fall rush which never happened. Each of the 20 of the first run from 1941 had accumulated over 1 million revenue miles, while the later 1944 era 5, just under the million miles. They were replaced by the New Super Turbines and more mundane EMD GP9's which were delivered in 1959.

Trix has released a 2 rail DC version of the Marklin Union Pacific Big Boy. Measuring 46.5cm long and weighing just over 1,100 grams it is the heaviest production locomotive to date and heavier than most brass. I would suggest very good bench work and some bridge strengthening before running this locomotive otherwise there could be tears. The locomotive is numbered 4013 as it appeared in the late 1950's prior to retirement. The model comes in a nice wooden presentation box that can be used to store the locomotive when not in use or for easy transport. The articulation system is similar to other mass production models in that the rear drivers are not fixed. This allows the model to operate on tight curves, but it looks much better on large radius curves over 30 inches or 150cm. The locomotive has the following features such as Can motor with fly-wheels, RP25 drivers and wheels, directional LED lighting, Number board lighting, DCC connector, full cab interior with crew, metal frame and boiler and provision for smoke generators. A number 18 Kadee comes installed in the tender but could be replaced with a smaller 58 with some care. Where this model differs from the older ones is in the level of detail. There are many separate factory applied parts such as piping, coupler lift bars, throttle, grab irons, sand lines and many more. A dummy coupler can be inserted in the front or a Kadee 18, which in my opinion looks toy like. With a bit of ingenuity a 58 could be substituted here.



Sitting next to a recent Brass Steamer, the Trix Big Boy holds its own. The Bopox Drivers measure at 65 scale inches, only 3 less than the 68" on the prototype and the size difference is not that noticeable and is much better than the Rivarrosi 61 scale

inches. The cab interior can be accessed by removing the cab roof. The backhead has all the major gauges and controls represented which can be painted white and red to enhance realism. The painted crew members can be glued to the seats. I used a small dab of liquid nails to hold each figure down. The tender has the same high level of detail as the locomotive, with piping and other details

included and is attached to the locomotive by a permanent draw-bar that spreads on curves, but keeps the tender close on tangents. The paint is crisp and clean and you can actually read the builders plates on the side. The engine comes DCC ready and sound has been promised in the near future. This will be a proprietary sound module from Marklin / Trix and will be housed in the tender. Access to the tender is not immediately obvious, nor do the instructions mention it. The front water inlet hatch pulls off to reveal a hidden screw. This one screw releases the complete tender

body from the chassis revealing the future speaker enclosure. Do not attempt to remove the tender wheels. The result will be many hours of frustration

reassembling them.

There are a few negatives that I have found in that I feel the locomotives rear drivers should have been fixed and some of the lettering appears to be slightly too small. But these can be lived with. My biggest disappointment came when I tested it for the first time. The engine made an awful noise and then stopped. Not quite what you want from a brand new locomotive. So onto the work bench it went for disassembly. 1 errant screw and 4 hours later the problem was fixed and the model then performed flawlessly. I know of other owners models that performed flawlessly out of the box though. It is recommended that this model be dismantled with the utmost caution. Its construction is quite complex and very intricate. Tests from magazines show that it can pull up to 130 cars on the level, and this is without traction tyres. On a 4% grade, these numbers reduce to 26 cars. This model comes in at a hefty \$1,300AUD which is expensive, but when you have had a close look at it, it is well worth it. Compared to \$5,000AUD for a recent brass locomotive, it is relatively cheap in comparison. Marklin have now released a second Number (4015) as part of a large set so lets hope Trix produce more numbers for this outstanding locomotive. For any Union Pacific buff this locomotive is a must. They can still be found on the web discounters. I obtained mine from a local shop after some wait. They were all pre-sold, so they might be hard to find locally. Expected later this year, are multiple number Union Pacific reefers (20) coal hoppers (3) and cabooses (2). They will all be plastic bodies mounted on metal chassis.

What's Available? UnionPacific # 4013

Retail Price \$Aus 1,200 - 1,300

Andrew Jordan

PLANNING FOR THE CONSTRUCTION OF A MODEL RAILWAY

or
more simply

GETTING STARTED

By Phil Calvert

PREAMBLE

This topic was presented at the 2001 Convention. Following the proceedings, several attendees suggested that the handout be submitted as a potential article for MainLine. Since the Convention, both the content and the format have been revised to make the subject more readable. Although the content best serves those embarking on the hobby, some of content should prove worthwhile for longer term modelers.

INTRODUCTION

One could be justified for considering that this subject is simply common sense. However, even we model railway enthusiasts are mere mortals and thus have a tendency to embark on projects without first having a long think about it, not only what we are letting ourselves in for, but more importantly, just how we should proceed towards attainment of our goal. Certainly my experience, over more years than I care to recall, indicates that many modelers have neither a realistic goal nor a considered plan to achieve same. Furthermore, there seems to be an attitude with some that one cannot really be involved in the practical aspects of the hobby until one has, in one place, all that is necessary for the ultimate construction of a model railway and in particular, the required space.

AIM

The aim of the article is therefore to assist in the process of determining an appropriate goal and developing a sound plan to achieve this with a view to undertaking preliminary work.

DEFINING THE OBJECT

Prior to embarking on any of the practical aspects of building a model railway, and as is the case with any major project, it is most important to have a soundly based objective or goal, that is, one must define in quite precise terms, what is to be achieved. Detail can be decided later, but the basic parameters of the objective must be the initial consideration and should become clear with answers to the following questions:

- 1 Is the concept for the model railway to be;
 - An accurate representation of a prototype railway in a given place or area
 - Maybe during a particular era
 - Even at a point in time or,
 - Simply a freelance arrangement or,
 - A combination of the above options.

- 2 Is the proposed model railway to be:
 - A fixed installation or,
 - Of modular construction.
- 3 Does the model railway need to be readily transportable?

My answers to these questions led to the following

- A model railway based on a fictitious but prototypical station somewhere on the western slopes of The Great Dividing Range in NSW.
- A rural setting with lots of grass and eucalypts. At this location, the heavy double track mainline from Sydney gives way to a lighter track right-of-way. Thus there will need to be facilities for changing, servicing and turning of locomotives – all steam powered. A capability must also exist for the breaking down and building up of consists. As the model railway has been designed for incorporation in a club project, it must be both modular and transportable. Thus, in recent years I have been able to direct all my modeling effort towards this particular objective – pending the availability of the required space and time to undertake the necessary work.

Before proceeding further it is appropriate to delve a little deeper into the concept of fixed installation construction. As distinct from modular construction, fixed installation model railways certainly have inherent advantages, however, if this option is adopted, then, because of uncertainties of life, it is strongly suggested that construction be such that the model railway is capable of being dismantled, with relative ease, into manageable sections which can be transported to another site for re-assembly, or to be placed into storage.

CONSIDERING RESTRAINTS

Having defined an object that is the overall concept for a model railway, it is then necessary to consider any factors which may, in the short and / or long term, influence the attainment of the objective. Possible factors, that is constraints, could include:

- Time
- Space
- Finance
- Information
- Skill
- Patience

This list should not be considered as being exhaustive – there may be other constraints which could affect the attainment of your particular objective. For example, you could be undertaking a joint venture and the ideas of the other party will need to be considered, or, you could have some physical impairment which will impact on what you can achieve. Now draw up your specific list of constraints and set aside for the time being.

THE PLANNING PROCESS.

There are a number of elements of a model railway that need to be considered – preferably in a logical sequence.

THE PRELIMINARY TRACK PLAN

This is the crux of any model railway and whereas the primary consideration will be the actual track diagram, due consideration must also be given to the basic landform. The logical process here is to compile a series of rough sketches and then proceed with scale drawings. Once a track diagram is decided, add the basic landforms, ie, the main hills and hollows. This moulding of the landform to conform with the proposed track alignment is, of course, 180 degrees out of phase with reality, so great care should be taken to ensure that the final image portrayed will be one of the topographical features having been cut or filled to carry the right-of-way.

Now determine how each of your constraints will affect what you have decided by asking such questions as:

- Will I have *TIME* to hand lay track and construct turnouts or will I need to depend on proprietary items?
- Will I now or in the future have sufficient *SPACE* to achieve the conceived plan? Is my choice of scale appropriate?
- Will I now or in the future have the necessary *FINANCE* to achieve my plan?
- Can the required *INFORMATION* be gleaned from the prototype, extant printed material, other modelers etc?
- Do I have the necessary *SKILL* to hand lay track and/or construct turnouts – or even lay proprietary items? If not, can I acquire the skills or will I need to seek assistance? Is help available?
- Do I have the *PATIENCE* to undertake a task of this magnitude?
- Etc.

As a result of such deliberations, you will inevitably find it necessary to amend your track plan.

STRUCTURES

Here, there are several categories to be considered, namely:

- Those associated with the actual right-of-way, such as: stations, coal bunkers, bridges etc.
- Those to do with habitation, such as: towns, villages, lone farm houses with associated out buildings etc.
- Those supporting any industry that may be serviced by

the railway, such as: cattle yards, grain silos, sawmills etc.

Now compile a list of all the structures you consider necessary – decide their location – then mark on the Preliminary Track Plan the area each will occupy.

The next step is to analyse how any of your constraints could affect what you have decided by asking such questions as:

- Do I have the *TIME* to scratch build or will proprietary items have to suffice? If intent on scratch building, do I have the *TIME* to produce structures to my required standard?
- Will the planned structures fit into the available *SPACE*? If not, can some be modified or will some need to be deleted?
- Is *FINANCE* available now or in the future to purchase the required structures ready made, in kit form or as materials for scratch building?
- Is the *INFORMATION* available to permit the recreation of the desired structures?
- Do I have the *SKILL* and *PATIENCE* to produce the structures to my required standard? Is help available?
- Etc.

Following such deliberations you will likely find it necessary to amend your inventory of structures.

ROLLING STOCK

Included under this generic title are locomotives, passenger cars, freight wagons and any other vehicle that may use the right-of-way.

The next phase of planning is to decide the trains that are appropriate to your chosen environment. The main categories for consideration are passenger, freight and mixed. How many of each do you require and what will be the consist of each train? It is most worthwhile to make these decisions early in the planning process as such will provide a control mechanism which will govern the proprietary items and kits acquired – you only need the locomotives, cars and wagons necessary to make up the trains you have decided on.

Now consider how your rolling stock inventory could be affected by your constraints by asking such questions as:

- If proprietary models and/or kits are not available, do I have the *TIME* to scratch build? Do I have the *TIME* to accumulate the necessary information to enable me to scratch build to the standard I require?
- Is *FINANCE* a concern?
- Is the *INFORMATION* available to reproduce prototypical consists and individual cars and wagons?
- Do I have the *SKILL* and *PATIENCE* to scratch build or even detail proprietary rolling stock? Is assistance available?
- Etc.

It may now be necessary to amend your inventory of rolling stock.

OPERATION OF TRAINS

Having decided the composition of trains that will run on your model railway, the next step is to determine just how each will operate. For each passenger train - will it simply pass through stations or will it stop - if it is a stopping train, will all cars proceed to successive locations or will some be dropped off - or, will extra cars be added? In the case of freight trains - will they be broken down with individual wagons or rakes being shunted into industrial sidings for example.

Concurrent with the above it will be necessary to decide such aspects as:

- Are loops and sidings of the required length?
- Can locomotives be changed or turned in a prototypical manner?
- Are the turnouts located in optimum locations - do they face the correct way?
- Are there sufficient uncouplers - are they positioned for most effective operation?
- Are signals located in prototypical fashion - what will be their method of operation?
- Etc.

Having decided how trains will operate, it could well be that changes need to be made to your Preliminary Track Plan and/or the consist of trains. Thus a most worthwhile cross check has been enforced.

THE FINAL TRACK PLAN

This drawing can be full size or to a convenient scale and should include the following detail:

- Track and ancillaries such as uncouplers, signals etc.
- Landform contours.
- Areas taken up by structures.

Whereas a scale drawing may suffice, a full size plan by section or module has definite advantages:

- An absolute feel for track work can be obtained.
- Turnouts and the like can be constructed directly on the plan or on copies thereof.
- Mockups of terrain and structures can be tested in place.
- Knowing the precise location of such items as uncouplers and signals - if all or any of these are electrically driven - will assist greatly in the planning of the support structure - so avoiding the construction problem, not to mention the frustration of a turnout motor being located directly over a member of the support structure.

PRELIMINARY WORK

Having devised what is hopefully a workable, and perhaps of greater importance, an achievable plan, initial practical activities can commence. In so far as rolling stock and structures are concerned, proprietary models and kits can be acquired and detailing and/or assembly started - materials can also be acquired and scratch building started - but more of this later.

SUPPORT STRUCTURE

For the purpose of this article, support structure should be considered as that part of a model railway below the track bed, that is, cork underlay or similar.

FIXED INSTALLATION

The support structure here will most likely consist of a rather complex timber framework with 'T' or 'L' girders supporting a track base of for example, medium weight plywood, cut to the pattern of the track bed. Depending on your particular circumstances you may or may not be able to proceed with this construction.

MODULAR CONSTRUCTION

It is most likely here that work can proceed on the support structure. Modules will normally comprise a framework to support a track base. The latter will invariably comprise sheet material, for example, medium weight plywood, which can be attached directly to the framework as an entire sheet or cut to the pattern of the track bed and attached to risers - so allowing for areas of the landform to be below track level. If the chosen method of construction is to utilize entire sheets of material then it should be recognized that:

- In designing the framework, due cognizance needs to be taken of the actual track plan such that cross members of the framework will not foul any mechanism protruding below the track base.
- The ability to provide for landform areas below track level will be limited.

Regardless of the style of track base adopted, that is, utilizing entire sheets or cut-outs to the pattern of the track bed, and if storage space is very limited, it may be worth considering an alternative but rather radical approach to construction - leave the framework until later and simply lay the track bed and even the track on the track base. When more space becomes available, module framework can be made up and track bases attached.

TRACK

Dependant upon your circumstances, in particular, whether you have chosen to construct your model railway as a fixed installation or as modules, it may be possible to actually lay some/most/all of your track - even if the necessary space is not available to link all the sections/modules.

Prior to acquiring any track, consider the relative merits of the various codes available, that is, the aesthetics and scale of the lower code numbers versus the practicability of the higher code numbers - the ability to run wheelsets with oversize flanges.

Whereas the use of proprietary track may be quick and relatively easy, considerable expense can be saved by hand laying and scratch building. Turnouts can be made for about the same cost as a length of flexible track - they are not all that difficult to construct and will provide smooth running if assembled correctly. Furthermore, hand turnouts can be constructed to fit situations where proprietary items are impracticable.

TECHNICAL OPERATION

There is actually quite a lot that can be achieved in this area prior to the construction of any model railway. In particular, some major decisions can be made:

- The type of control system to be used - conventional or digital. Is there a requirement for inter-operability between these systems?
- Is it essential that the entire model railway be capable of operation by one person?
- How many fixed control panels are required for optimum operation?
- Will throttles be incorporated in control panels or be walkaround - or will there need to be a combination of these types?
- How will turnouts, uncouplers, signals, turntables etc be operated - remotely from control panels or manually by levers, rods or wires mounted on a fascia in proximity to each item?
- Etc.

When such decisions have been made, a comprehensive wiring diagram can be drawn up - possibly as a trace or overlay to the Final Track Plan. Having progressed thus far, there is no reason that some elements of the control system cannot be started, for example, wiring looms can be made up, levers and linkages built and control panel cases designed and fabricated - some fitting of electrical components may also be possible.

THE BASIC LANDFORM

Because of storage space limitations and the potential for extensive damage, it is unlikely that any aspect of this phase of constructing a model railway can proceed prior to final assembly. However, some preliminary action can be undertaken:

- If required, rock castings can be mass produced - it can be a challenge to find masters that will produce castings appropriate to the environment being modeled, however, the final result will be worth the effort.
- If your model railway comprises section / modules the frameworks of which are entirely covered by sheet material, then, using the Final Track Plan, transfer contours onto the track base - use full lines for areas above track level and broken lines for areas below.

It is worth noting here that, when deciding the shape of the landform, take note of the locations and areas occupied by structures - to achieve the most natural effect, land should be removed for the installation of structures or the foundation of same built up to conform to the landform.

There are many books and magazine articles describing the various ways of building up basic landforms. Choose the method that suits you best, however, keep in mind the principal of maximum strength for minimum weight.

ROLLING STOCK

From the time a rolling stock inventory is finalised, proprietary items, kits and scratch building materials can be acquired and work commenced. To avoid a

vast accumulation of items it is worth considering completing one train at a time - thus, specific milestones are reached on a fairly regular basis.

Great satisfaction can be attained by adding to and / or improving the detail of proprietary items and kits so as to more accurately represent the prototype. Along with this action, seriously consider the application of weathering - there are various techniques - investigate these and experiment with them. The golden rule here is to apply less weathering than you consider necessary - it is far easier to add than remove. Although all prototype rolling stock weathered very quickly, some locomotives and passenger cars were maintained in relatively pristine condition. Photographs always provide a perfect reference for the application of weathering materials.

A further sense of achievement can be had by scratch building rolling stock. This may not be the easiest task in the hobby but it is quite possible - start with a flat wagon and proceed from there.

STRUCTURES

As is the case with rolling stock, proprietary items, kits and scratch building materials can be accumulated from the time your inventory is finalised.

If you opt to use proprietary items and / or kits of plastic then seriously consider the application of weathering materials and / or dullcote to dramatically improve appearances. If using timber kits, thoroughly investigate the various finished available in order to achieve maximum realism.

If scratch building has not been attempted, then start with a simple project and gradually build up skill and confidence. Once again, there is much satisfaction to be gained from this area of modeling, not only from the diversity of structures found on model railways but also from the use of various combination of materials - timber, metal, plastic, cardstock etc - and further, in the application of a diverse range of finishes. Because this is an area of the hobby where no technical expertise is required, we can all become involved.

SCENERY

This is normally the last phase of model railway construction. Once the basic landform is in place, the application of detail is, more often than not, an ongoing process. Never the less, some items can be acquired, for example, vehicles and people and others made, such as, trees and fences.

CONCLUSION

Hopefully, it will now be evident that much of any proposed model railway can be planned, acquired and assembled well in advance of final construction.

In the course of the above, each element of a model railway has been addressed as separate entities. In practise, and to provide variety in modeling, any combination of the elements could be worked on at any point in time - it could be that you decide to build trees as your first practical project.

Whereas the above considers the planning and preliminary work that can be undertaken prior to the final construction of a model railway, it could be that you are in a position to actually have a section operational. If this is the case then it could be advantageous to pursue this course as you will then have experienced the requirements of the various aspects of model railway construction and so will be better prepared for the remainder of the project. In furtherance of this concept, the approach could be to construct four corner modules which can be joined to form a small but viable model railway but with the provision to add intermediate or branch modules at a later date.

Hopefully you will have derived some benefit from that which has been addressed but which should be regarded as a guide rather than all embracing. Use the information as you see fit – disregard those aspects which you may consider to be of little value – develop what has been proffered to your own benefit. At this late stage it can only be emphasised that time spent on planning is seldom wasted – inevitably, frustrations will be minimised and unnecessary expense alleviated. Don't spend the rest of your life planning – set a realistic goal and get started on the practical aspects of the hobby.

Look for these New Products recently Announced.

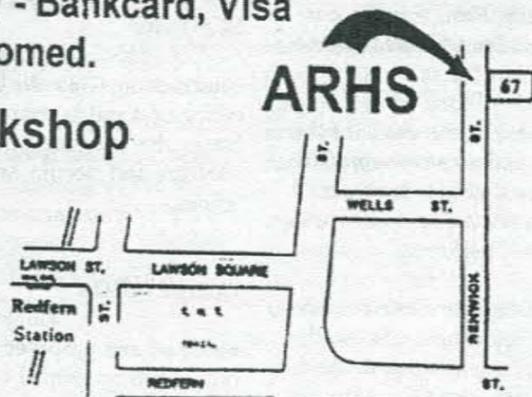
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THE NMRA STANDARDS GAUGE

David Jupp



The NMRA "STANDARDS GAUGE" is often mentioned in articles and publications. It is a very handy tool and should be part of our tool inventory if we are in the planning or construction stage of our model railroad. So how do we use it and what do all the angles and markers mean? The profile or silhouette of the gauge actually represents the clearance required for any obstructions which are close to the track. This clearance refers to tunnels, bridges, platforms and adjacent structures relating to straight track. Obviously curves will mean greater clearances, especially where long wheel-base rolling stock is used. A tunnel entrance on a curve is vulnerable to clearance problems and whilst all may appear satisfactory when the layout is built, the addition of modern rolling stock such as double stack containers can give rise to some serious derailments and worse, i.e. major adjustments to scenery. We as modelers are not alone as the prototype railroads have frequently had to lower tunnel floors or reduce double track to single track to allow passage of newer rolling stock.

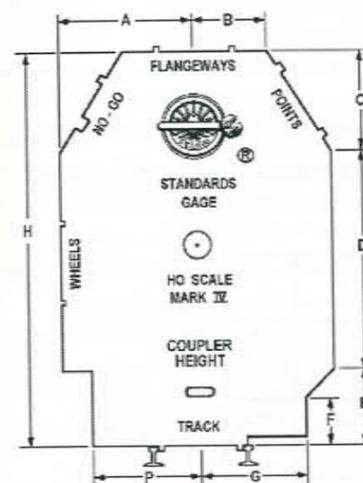
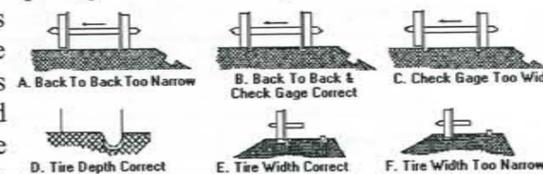


Figure 1

Because we as modelers work in multiple scales, we use the letters and refer to the NMRA standard chart included in your supplied member document package. The measurements are shown in the table at the end of this article for HO and N gauge only. Measurement H refers to the height above the rail head and in HO relates to 3 inches. Modelers beware, if you are running or intend to run the before mentioned double stack container wagons, then 3 inches (21.75 scale feet) may not be enough if the containers are non standard. As we also do not necessarily scale accurately with scratch built models, then this dimension need to be carefully watched.

Are you having frequent and unexplained derailments? Obviously can't be the wagons because they are brand new! Right? Wrong! You would be surprised how bad wheel gauging can be on new production models. They should be checked preferably before running on your track or definitely if there are continuing derailment problems. The wheel flanges should fit precisely in the slots on the "WHEELS" part of the gauge as in "B" figure 2. I am assuming you have already changed to metal wheels so it is usually a simple matter of removing the axle from the truck, holding a wheel in each hand, twisting at the same time as pulling or pushing repeatedly until they fit the gauge slots. In



In checking wheels be sure that:
 Wheel treads and flanges are free of "flash" and other projections.
 Wheel flanges have proper contour [see D].
 Wheels spin freely and "true" in their trucks without excessive wobble.
 Where wobble is observed, check wheels at several points to insure the entire wheel is within limits.

Figure 2

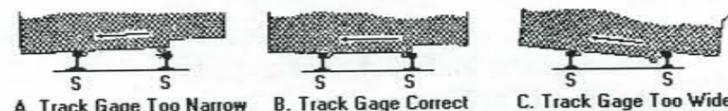


Figure 3

addition, track whilst usually in gauge could occasionally be wrong. The two protrusions at the bottom of the gauge on the "TRACK" section should fit neatly between the railhead as in "B" figure 3. "A and C" indicate problems. Excessive heat from soldering power connections may have damaged the rail security in the plastic spikes causing a gauge problem.

Spacing of Guard Rails, Wing Rails and Frogs are checked with the "FLANGWAYS" side of the gauge. Application of light side pressure toward the frog against the Guard Rail (see arrow). Figure 4 shows the interpretation of the results. Gauge prongs must clear all obstructions below the rail head as in D. Use "NO-GO" side prong of Gauge to check Flangeway width at the Frog in E and F.

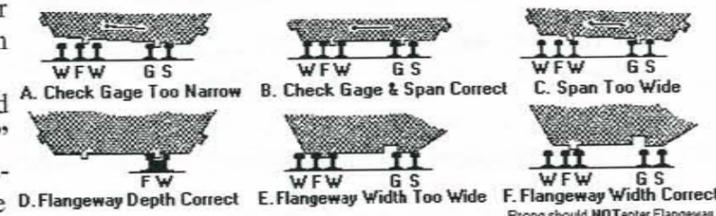


Figure 4

The "POINTS" side of the gauge is used to check against excessive spread. Apply light side pressure against the gauge side of the closed switch point rail as shown by the arrow. The opposite prong on the gauge

should drop fully into the gap between the open switch point rail and the adjacent stock rail. This ensures adequate Electrical Spread, while dropping only to the step on the inside of the prong shows adequate Mechanical Spread. Clearance of the outside of the prong checks Track Gauge. Make this check along the entire length of the switch point rail. See Figure 5.

The "COUPLER HEIGHT" is checked by mounting a coupler of your choice in the center of the slot on the gauge and matching all other couplers to that height. The gauge should sit on the track as in Figure 1. Measurements E and F on the gauge refer to platform clearance.

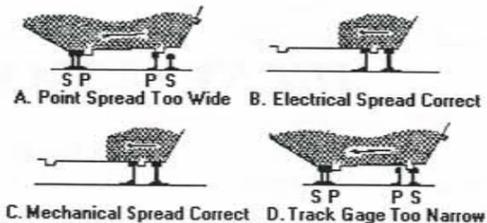


Figure 5

Where can I get a gauge? See advert on this page.

Be aware that constant use and particularly mis-use of this gauge will cause errors simply because of wear. Treat it with respect! It will treat you well.

	A	B	C	D	E	F	G	H	P
HO inch	1 1/32	9/16	13/16	1 5/8	9/16	11/32	13/16	3	13/16
HO mm	26.2	14.3	20.6	41.3	14.3	8.7	20.6	76.2	20.6
N inch	19/32	5/16	7/16	29/32	5/16	3/16	15/32	1 21/32	15/32
N mm	15.1	7.9	11.1	23	7.9	4.8	11.9	42.1	11.9

Track gauge drawings reprinted with kind permission.

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Train Length Performance Ladder

Erik Bennett

On a pleasant Sunday in March, a few friends came around for a Union Pacific running session. Andrew Jordan and David Jupp had brought their big turbines, so there was plenty of horsepower on hand. Being runners (as opposed to operators), we started experimenting with long trains and ended up hauling 124 cars with 7 powered engines. The engines were all high quality and fairly well matched for speed, so things went very smoothly.

Here are the details of the train:

At the head was Andrew Jordan's 3-unit OMI turbine, followed by two Kato SD45s. After car #42 was an Atlas C30-7 and a Railpower SD90MAC with Overland drive, also owned by Andrew. After car #100 was a Kato Dash 9-44CW.

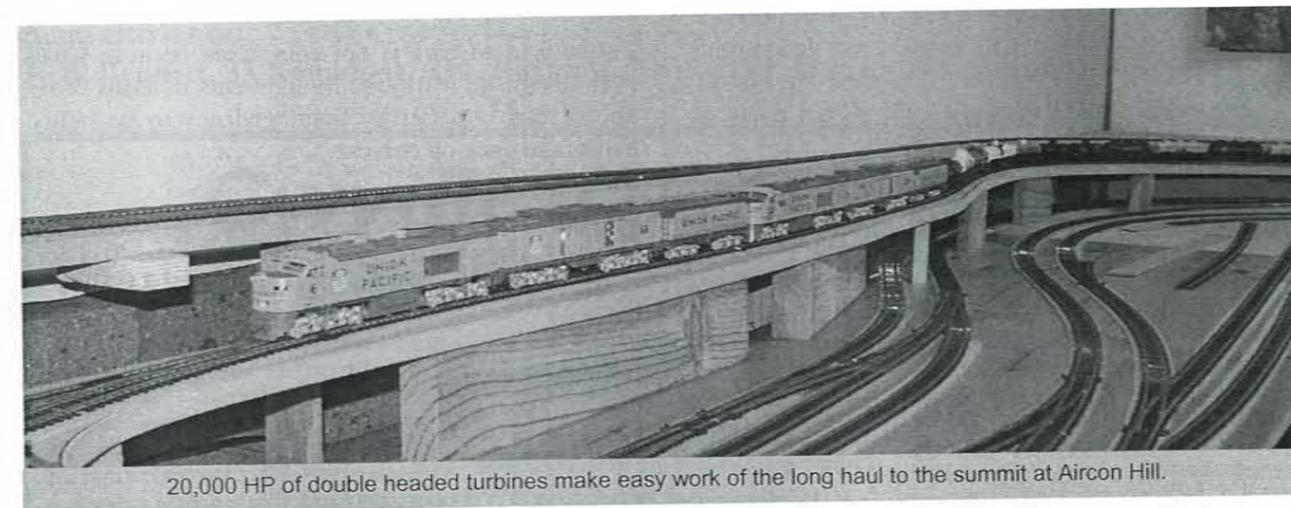
The turbine was a model of the re-worked 10000hp version. SD45s are 3600hp each, a C30-7 is 3000hp

we asked it to power the train up the grades to the top section. The 3-unit turbine had two powered units, so there were seven motors running.

A very pleasant afternoon was had by all and we agreed that perhaps the most significant factor in the enjoyment of model railroading is the smooth running of locomotives and rolling stock.

Afterwards, I recalled that when I used to play squash, the club maintained a Squash Ladder. Members could challenge other players higher on the ladder and, if they won, could move up a rung on the ladder.

So I thought I would propose a Train Length Performance Ladder, open to any NMRA member. The objectives would be:



20,000 HP of double headed turbines make easy work of the long haul to the summit at Aircon Hill.

and a Dash 9, 4400hp. The SD90MAC was a model of the 6000hp version, not the more common 4300hp and, unlike the prototype, it ran faultlessly. The prototype locomotive horsepower was, therefore, 30600hp. There were 36 tankers, 40 reefers, 26 40' boxcars, 8 50' boxcars, 12 hoppers and 2 cabooses. The train was 19.850 metres long and we had it travelling at about 50 kph prototype speed.

The layout was driven by a DC transistor throttle (no DCC engine matching here). The current overload detection circuitry whimpered a little when

1. to promote good trackwork, free-running rolling stock, good coupler systems and smooth-running engines,
2. to give members the opportunity to write about their layouts, engines and rolling stock and generally show-off, and
3. generate interesting articles for Mainline.

The idea is to run a long train around your layout, describe the event, ie, how many freight cars, locomotives, etc, describe the layout, conditions on the day, etc, etc, and send in an entry to the Ladder

Chair. The Ladder Chair will award points and position the entry on the Current Ladder. The Current Ladder will be published at monthly meetings and in the Mainline.

I made up a few rules and a scoring system, set out below. As an interim measure, I appointed myself Chairman of the Ladder Committee, the Disputes Committee and the Rules Committee.

Rules

1. An entry may be made by any NMRA member, however the ladder entry is made in the name of the layout owner.
2. The owner of the layout must be present at the event and the event must be witnessed by at least one other NMRA member, ie, two members must be present.
3. A train comprises any number of locomotives plus any number of freight cars or coaches (hereafter "car") coupled together.
4. Points will be awarded for the number of powered locomotives or tenders, the number of cars and overall train length. A powered loco is any unit with a powered chassis and drive train. A steam loco with a powered engine and powered tender is two locos. A Bachmann DD40AX with two motors is one loco. An un-powered locomotive counts as a car. Un-powered tenders are considered part of the locomotive and do not count as cars.
5. The train must complete at least 5 laps of the layout with no derailment or train break.
6. The train must move at a minimum prototype speed of 30 kph, ie, 5.7 metres/minute in HO. (This rule counters the use of "crawler" type pulse throttles, which are not in the spirit of the Ladder.)
7. Entries may be made in one of the following categories:

Category 1: The train crosses at least 6 switches or crossovers. The whole train alternates between levels separated by at least one unit of NMRA vertical clearance.

Category 2: Train crosses at least 6 switches or crossovers. The train travels for a minimum of four metres at an elevation of at least one unit of NMRA vertical clearance above the rest of the train.

Category 3: The train crosses at least 6 switches or crossovers.

Category 4: The train crosses up to 5 switches or crossovers.

Category 5: The layout has no switches or crossovers. This caters for purpose built layouts.

8. Objections or disputes must be forwarded to the Disputes Committee Chair.
9. New rules or amendments to existing rules must be ratified by the Rules Committee and submitted in the first instance to the Rules Committee Chair.

Scoring

Scoring takes into account a number of performance factors. These include the number of cars, the length of cars, ie, the length of the train, and the ability of locos to pull. If a long train can be pulled by one loco, that speaks highly of the loco and the train coupler system, thus one loco earns more points than many. However, the more locos, the greater is the need to match their speed/pulling power, so that is also reflected in the point system.

The weight of cars is not considered because whatever advantage is offered by light cars in terms of reduced load is offset by their tendency to be pulled across the track on curves.

Cars

One point is awarded for each car in the train.

Powered Locomotives

1 Locomotive: 20 points
2 Locomotives: 16 point
3 and above: 3 each

If all locomotives are steam, locomotive points are doubled.

Train length

50 points per kilometre of prototype train length. To work this out, measure the length of the train in metres accurate to the nearest millimetre. If present, include front and rear couplers in train length. Multiply by 4.350 (HO) and round to the nearest whole point.

For example, an HO train which is 10.985 metres long would earn $10.985 \times 4.350 = 47.78475 = 48$ points. This train would be over 955 metres long in prototype length.

Weighting

The total point score is multiplied by a weighting factor depending on the category of entry. The weighting factors are designed to compensate for the relative difficulties associated with hilly terrain and turnouts. Hauling a long train up a hill is more telling than running it on the flat. Crossing frogs is far more dangerous for highly loaded wheelsets than running on plain track.

The weighting factors are:

Category	Weighting Factor
1	1.50
2	1.40
3	1.25
4	1.20
5	1.00

Send entries to:

Erik Bennett, 33 Kananook Ave, Bayview, NSW 2104 or ebennett@blackwoods.com.au

Challenge

The train we ran on 11/3/01 has points calculated as follows

Cars	124 x 1	124
Engines	7 x 3	21
Length	19.850 x 4.350	86
Total		231

The layout could accommodate the entire length of the train at a higher level than base level, and meets the requirements for Category 1. Multiply by Category 1 weighting factor, $231 \times 1.50 = 347$ points

The layout is owned by Erik Bennett and the event was witnessed by Andrew Jordan, David Jupp, John McEvoy and Paul Smith.

At the time of publication, this entry is the only entry on the ladder.

Ladies and gentlemen:

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Jan Rons

Tuolumne Tank, Trout Lake, Niagara Bridge, Vance Junction, Placerville Turn, Scrapping the Wye.

Kenneth G. Bowen

Shunting at Darling Harbour, Noonday at the Gong, Picking up Goods at Koorawatha, Morning Departure at Cootamundra, Sunday in Junee Roundhouse.

Brian Baigent

Thunder in the Highlands, Journey of the Giants, Branch Line Duties, Thoroughbred in Steam, The North Coast Mail, Prince of Rails.

John Brown

Night Shift at Junee.

LAST DAYS OF EUROPEAN STEAM.

By Philip Moss

After reading the article Why Not Rent-a-LoCo in a recent Mainline I thought that it would be interesting to see if you could do anything similar elsewhere in the world. After a search on the internet I found one in a most unlikely location, in the town of Wolsztyn in Western Poland, about fifty miles west of the city of Poznan.

Wolsztyn is a small mainly agricultural town with a population of only 30,000, but in recent years it has become a tourist mecca for rail enthusiasts from all over the world. This is because the town is the home of Europe's last surviving working steam railway depot, complete with a roundhouse and sixteen fully operational standard gauge locomotives.

Although it may sound like it is merely another rail museum, it is in fact considered to be living history and quite unique. Unlike all the other steam museums all over Europe, here the tourists themselves drive and fire the huge steam locomotives on regularly scheduled main line operations.

Over a period of a week, visitors are trained by Polish State Railways personnel who then under instruction get to take the controls of five different timetabled trains during their stay. During the week you get to ride in the cab of various locomotives on both passenger and freight services while alternating jobs between engine driver and fireman. Normally three to five engines are rostered on each day so over the period you get the chance to experience operating many different types of locomotives. Most of the locomotives are of German manufacture with the remainder coming from other Eastern European countries. The lo-

comotives used consist of mainly two types, the OI49 Class 2-6-2, which is similar to the American Pacific's, with the rest being made up of various Ty class 2-10-0's.

On an average weekday, there are at least 10 steam-powered passenger trains and 4-6 steam-powered freight movements operating over seven lines. Passenger trains operate eighteen miles north to Zbaszynek, twenty-five miles south to Leszno, and fifty miles east to Poznan. While freight services are scheduled daily as required, operating the fifteen miles west to Konotop, fifteen miles north west to Kargowa, twenty two miles east to Grodzisk, and thirty eight miles south to Wschowa.

Some people might query the safety case of allowing untrained personnel at the controls of a passenger carrying train. But due to the extra attention the Polish crew give in training and supervision, over the last three years enthusiasts from all over the world have safely driven Polish steam locomotives over a quarter of a million miles without an accident of any type.

As well as those used in their daily services the Wolsztyn depot also maintain two extra locomotives and eight preserved coaches all of which are regularly used for special excursion trains. The locomotives are a Tk13 Class 2-6-0 tank engine and a Ok22 Class 4-6-0, while the coaches include one with an open balcony either end and a converted mail van.

Unfortunately all of this may soon disappear as the Polish State Railways are presently talking about closing down all steam operations at the end of 2002.

On a very cold evening in June John Baker, at the request of an old friend opened his HO DCC Layout to a group of the First Oakville Scouts. John, along with helpers Piet Hamersma and David Jupp were present to make trains run and answer questions. What they were not prepared for was the number that arrived. In total, approximately 50 boys and girls, fathers and leaders showed up for what turned out to be a most enjoyable evening. The highlight came when a request to pull loaded coal wagons up John's 1.5% incline turned into a 'challenge' to keep beating the record. Some of the questions showed great interest and it was amazing to hear comments from fathers along the lines of "I must get my trains out of storage." A sausage sizzle was held from a trailer mounted BBQ and constant supply of hot drinks made available to the operators all courtesy First Oakville Scouts. All credit to John for opening his home and promoting The 'Worlds Greatest Hobby' for the modelers of tomorrow.



Convention Report

The Convention was a one day affair held on the last weekend of June, not the long weekend as is usually the case. This enabled members who had family commitments on the long weekend to attend. The convention was held at the Dence Park Craft Centre at Epping, this being the home of the Epping Model Railway Club.

There were over 100 attendees and all the feedback so far has been positive. The convention followed a slightly different format this year with the theme being, Taking the First / Next Step.

The first stream started from basic bench work through track laying, scenery, ballasting, sky boards, backdrops, structures, to putting rolling stock on the track. This stream was aimed at new modelers or those who had been collecting for years and now wanted to start a layout.

The second stream was aimed at those looking to expand their horizons and willing to look at other methods of modeling. These included double deck layouts, foam decking, photo backdrops, hand laid turnouts, decaling, weathering rolling stock, locomotives and buildings and alternative interesting ways of constructing scenery. All clinics were very well attended and I think everybody benefited and learnt something new.

As usual the Photo and Modeling Contests

were held at this time. Although the number of entries was slightly down, the quality was very high. The positive side was that many of the contest entrants were first timers. Congratulations to all those who entered and we hope to see your models next year. (The next issue of MainLine will contain a report on the contest categories and winners. Ed.)

The trade stands (Model Railway Craftsman, The Railcar and Simply Glues) were again a big drain on the plastic with the variety of items on sale. There is always something you didn't know you needed until you see it! Four raffles were also run with vouchers to spend at our supporting suppliers. Many thanks to those suppliers for their continuing support and to the ladies who sat at the tables selling the raffle tickets.

The roast evening dinner was most welcome, and thanks go to those those ladies who organised both the cut lunches, the dinner and the serving of the dinner.

This was one of the most socially enjoyable and mentally stimulating conventions I have attended. Thanks to all the clinic presenters and those who attended. We hope to see you all again next year. It was a most professional event once again extremely well organised by Peter Jensen and his team.

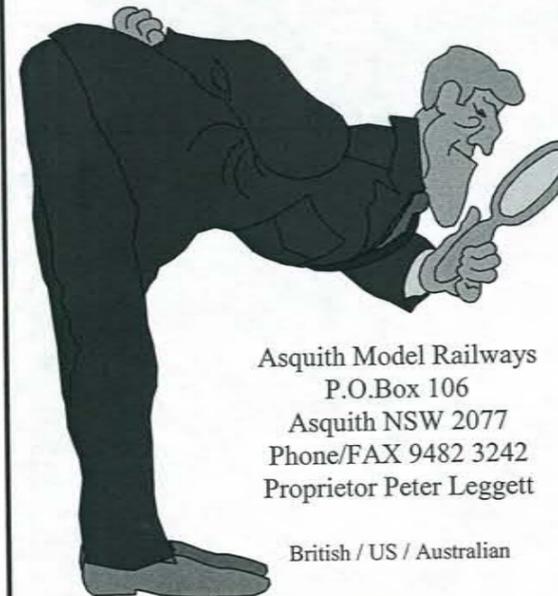
Gerry Hopkins MMR

Computer CDs of the 2002 convention will be available if not already. Contents will include all the clinic notes and pictures. Cost approximately \$8.00 Contact Gerry Hopkins for details. Ed.

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Faaaaading Freight Cars

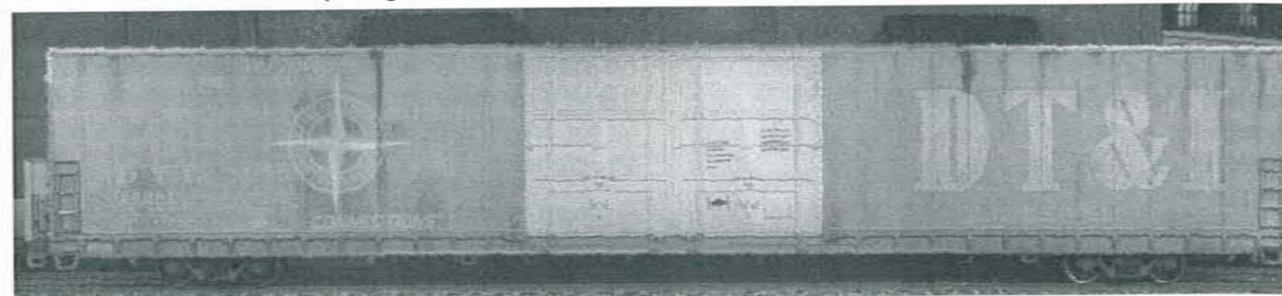
By Mike Rose

I don't know about you, but as a prototype modeler, one of the things I try to do is recreate what I see trackside. This includes, among other things, producing the effect of fading paint on rolling stock. There are a number of methods of achieving this look, and we'll examine a few of them for their various merits and provide examples of what they look like. Often one has to use a variety of methods to achieve a certain look (see my article on ex- C&C PS5344 Athearn Boxcars, December 2000 RMC).

Our first example is a Walthers 86' DT&I boxcar. When I got this car in it was in the as-delivered scheme of shocking pink/purple, so vivid it literally hurt my eyes to look at! The car was nicely detailed, but totally useless to me in that eye grabbing paint job. This car might possibly have set a record for "fastest-weathered" car that I ever did after acquiring it! I don't have a

carefully done boxcar red hoppers had all blushed to a whitish look! Examining each car in anguish at the work that had been ruined, I decided to gamble, and re-DullCoted one of the cars. To my intense relief the blush vanished, like nothing had happened! This turned into the only fully reversible weathering technique that I know of.

After taking the DullCoted 86' boxcar, letting it thoroughly dry for at least 24 hours (and doing two coats, very good coverage is required for this to work properly), I then took my handy pump sprayer and did the entire car liberally, a very wet wash on the entire car including the roof. Magically, as the alcohol evaporated (a spray booth is an ideal location for doing this, by the way), the car faded to the shade seen in the photos, and even the roof looked like oxidized zinc (galvanize), perfect for adding some rust. I



"before" photo of this car for comparison, but any of you who have seen the car know what I'm talking about! I just couldn't stand it long enough to photograph it in the un-weathered state. On the other hand, it hit me as a really nice car with a lot of potential.

The first thing I did was DullCote the car, very thoroughly. This took any sheen off the car, protects the paint, and serves as the basis for most of my weathering jobs. Next, I used a trick that I learned quite by accident. You see, I had been doing some scenery work on my layout, and I had a line of Conrail hoppers that I had painted and lettered sitting on the siding at Brockway Mine, which is very near where I was scenicizing. After doing some ground cover, I took a pump sprayer and hit the whole area with ordinary isopropyl rubbing alcohol. This provides a wetting agent for the diluted glue spray or matte medium to follow, and prevents the ground cover (or ballast) from blowing away from the spray or balling up. (By the way, use only in a well ventilated area, use a fan if necessary!) Once I was done, I discovered to my horror that my line of

used my standard oil colors to add rust effects to the car, and there it was, much improved! At least to me it looked like every other DT&I car I'd ever seen painted like that. I used an airbrush to add grime to the lower parts of the body, especially around the draft gear boxes and underframe that should never show electric purple, plus did my usual dirty rust treatments to truck sideframes, wheels, and couplers. The result is pictured. It went from being hard to look at to one of my favorite and most commented-on cars. And it was easy!

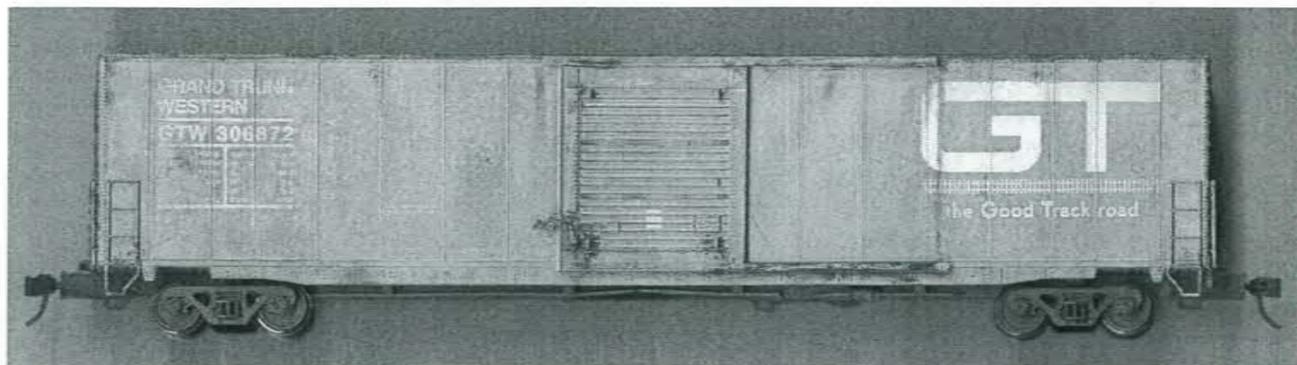
My favorite car is the GT boxcar from Atlas. This 60' auto parts car is a really nice model, needing only a minimum of detailing to bring it up to a high standard of realism. Pictured is a similar car from Walthers, and trust me, the Atlas car really was this same color when I started! I again used the two-coat DullCote method, with one day of drying, then the same liberal application of alcohol spray to fade the car. However, the results were disappointing this time, with a bit of a blotchy effect as a result. Although I was tempted to DullCote it again and forget the fade, I didn't,

and the car sat for some time. I finally decided to try a fine overspray of lighter blue paint on the car, in fact, the same spray I used on the aforementioned ex-C&C PS5344 boxcar. By using a very fine, light spray, I was able to control how much of the paint went on and where. Basically all I did was even out the blotching. The result was just what I was looking for.

I added my standard rusted wheelsets, truck sideframes and couplers, plus fabricated a coupler cut lever from wire and a DW Sy-2202 eyebolt, plus created a trainline air hose with a

rust on the roof and I had another unique car for my roster. The picture of the two cars coupled end to end says it all in terms of before and after!

Other methods of fading cars include just using the lighter paint overspray, and also using chalks. Some cars are so faded that they need to be created by starting with an undecorated model and custom-mixing the paint to match the faded prototype. However, I'd encourage you to try the DullCote/alcohol method and see if you like it. And if you don't, just re-spray and no harm done! (By the way, if you are doing a loco-



brass Cal-Scale air hose and a couple of Athearn handrail stanchions to hold it in place, and you can see the result. The Atlas stirrups were nice enough for me to not replace, though if they ever break, I'll probably use the A-Line stirrups. Some

motive or caboose that has any clear glass in it, be sure to either remove it or mask it off prior to these experiments. Incidentally, this is also useful for creating frosted glass for factory and other structures.)

This is the first of two articles on weathering freight cars. The next article on rusting cars will be printed next issue.

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EXHIBITION DIARY

MURWILLUMBAR - NSW.	Aug 17 - 18 Murwillumbar High School Nullum Street 9 to 5 Sat, 9 to 4 Sun
BRAYBROOK - VIC.	Aug 24 - 25 Braybrook Secondary College Burke Street, 9 to 6 Sat, 9 to 5 Sun
NEWCASTLE NSW.	Aug 31 - Sept 1 Basketball Stad. Young St. Broadmeadow, 9 to 6 Sat, 9 to 5 Sun
THE GAP - QLD.	Sept 7 - 8 Uniting Church Hall 1050 Waterworks Road, 9 to 5 Sat, 10 to 4.30 Sun
WARRIMOO - NSW.	Sep 14 - 15 Wycliffe Christian School Wickard Road
BORONIA - VIC.	Sep 14 - 15 St Joseph's School Boronia Road, 9 to 6 Sat, 9.30 to 5 Sun
TAREE - NSW.	Sep 21 - 22 PCYC Commerce Street, 9 to 5 Sat, 9 to 4 Sun
LIVERPOOL - NSW.	Oct 5 - 7 Whitlam Leisure Centre Memorial Avenue, 9 to 6 Sat Sun, 9 to 5 Mon
OLD REYNELLA - SA.	Oct 12 - 13 Reynella Neighbourhood Centre Old South Road, 9 to 5
GOLD COAST - QLD.	Oct 19 - 20 Sunbury Memorial Hall Barkly Street, 10 to 6 Sat, 10 to 5 Sun
SUNBURY - VIC.	Oct 26 - 27 Sunbury Memorial Hall Barkly Street, 10 to 6 Sat, 10 to 5 Sun
BLACKHEATH - NSW.	Nov 2 - 3 Blackheath Public School Leichardt St, 9 to 4.30 Sat, 9.30 to 3.30 Sun
BURWOOD EAST - VIC.	Nov 16 - 17 World Vision Centre Vision Drive, 9 to 5
HORNSBY HEIGHTS - NSW.	Nov 16 - 17 St Lukes Church Galston Road, 9 to 5 Sat, 12 to 4 Sun
WARRNAMBOOL - VIC.	Jan 11 - 12 Archie Graham Centre 10 to 5 Sat, 10 to 4 Sun

THE LIBRARY CAR

Video List as at 14/2/2002

- | | |
|---|---|
| VT14 USA Railroad Layouts (compilation videos 1 - 6) | VT43 Burlington Northern's Crawford Hill |
| VT15 USA Railroad Layouts (compilation videos 7 - 13) | VT44 NMRA Australasian Region 1998 Thornleigh Mini Convention (Rolling Stock, Soldering, Weathering Your Models and Pine Trees) |
| VT16 Airbrushing for Model Railroaders | VT45 Trains On Location Stevens Pass |
| VT17 Weathering Railroad Models by Malcolm Furlow | VT46 Toronto To Chicago Railfan Way |
| VT18 Scenery Tips No 1 Rock Moulds by Donald Davis | VT47 Tehachapi Trains on Location |
| VT19 Scenery Tips No 2 Backgrounds by Donald Davis | VT48 Great Layouts US Prototype |
| VT20 NMRA Australasian Region 1993 (Tony Koester's Clinic) by Kevin Brown | VT49 Scenery Tips No 3 by Donald Davis |
| VT21 Waitemata (Auckland New Zealand) Convention 1990 by Gerry Hopkins | VT50 Prototypes To Make You Comfortable by John Armstrong |
| VT22 Piki Piki Tram (Visit to famous NZ Narrow Gauge Layout of Merv Smith) | Memorable Locomotives by Charlie McCoy. Frequently Seen Seldom Modeled by Jim Cope |
| VT23 Diamond Valley Lines (Visit to famous layout of Fred Gill) by Gerry Hopkins | VT51 Signals Made Simple by Mark Hanslip. Computer and Railroad Together by Mark Hanslip |
| VT24 US Pittsburgh Convention by John Saxon | VT52 Trees From Weeds by Louis Godbold. Weathering and Aging with Pastels by Robert W Baily jr. rolling Stock From Cardboard by W Meijndert Van Alphen. Foam Core Buildings by Robert Hubbard. The Art of Illusion by C J Riley |
| VT25 All Aboard An introduction to Model Railroads by Madeline Trimby (Kevin Brown's conversion of tape Slide clinic) | VT53 N Scale and N Track by Jim Fitzgerald and Ben Davis Model Railroad Photography by John Allen |
| VT26 Optimum Use of Space by John Allen (Kevin Brown's conversion of tape slide clinic) | VT54 NMRA National Convention 1998 Kansas City Layout Tours |
| VT27 Gorre & Daphetid Railroad by John Allen (Kevin Brown's conversion of tape Slide clinic) | VT55 Convention at Marayong 1995 and Clinic Presentations By Allen McClelland |
| VT28 NG & SL 1991 Convention Clinic by Gerry Hopkins | VT56 Union Pacific Big Boys Volume 2 |
| VT29 Exhibition Layouts 1982 to 1989 by Gerry Hopkins | VT57 Southern Pacific 1941 Volume 1 |
| VT30 Layout Tours No 3 by Gerry Hopkins (Visits to Sowerby Smith's & Geoff Nott's Layouts) | VT58 Santa Fe 3759 Final Run over Cajon Pass |
| VT31 Realism with plastic structures (video conversion) | VT59 Santa Fe War Bonnets Through Raton Pass |
| VT32 Convention 1993 and three layout tours | VT60 Santa Fe Odyssey Vol 1 |
| VT33 The Clinic (Woodland's) | VT61 Santa Fe Odyssey Vol 2 |
| VT34 Distinctive Rolling Stock by Dean Freytag | VT62 Santa Fe Seligman Sub and New Mexico Main |
| VT35 Convention 1995 at Marayong & Layout Tours | VT63 1997 National Convention Madison USA |
| VT36 Rocks & Basic Scenery Made Easy by Dave Frary | VT64 Little Engines of New Zealand |
| VT37 Painting Model Structures by Dave Frary | VT65 The Two Foot Gauge Tramway (New Zealand) |
| VT38 Finishing Your Scenery by Dave Frary | VT66 Model Railways of Australia |
| VT39 Southern Pacific Vol 2 (Tennessee Pass) | |
| VT40 Union Pacific Vol 5 (The LaGrande Subdivision) | |
| VT41 Santa Fe's Arizona Mainline | |
| VT42 Santa Fe's Mojave Mainline | |

8th Australian N Scale Model Railroad Convention

The Eagle Conference Centre
La Trobe University
Bundoora
Melbourne

24th to 27th April 2003
Anzac Weekend
Layout Tours - Clinics

Web site: <http://nscaleconv2003.alphalink.com.au/index.html>



NEW MEMBERS



Please welcome the following new members.

Stuart Hall	Canada Bay NSW	N	Nth American
Tom Rix	Queanbeyan NSW	Z	Norfolk Southern
Gavin Ferris	Figtree NSW	HO	NSW
Doug Clarkson	Toowoomba QLD	N	USA/Canada
Peter Irving	Eastwood NSW	HO	NSW
Rob Barker	Artarmon NSW	HO	SOO (1990)
Garry Hatch	Queanbeyan NSW	HO	US and Australian
Phillip Anderson	Gladesville NSW	HO	Canadian
Peter Delsorte	Seven Hills NSW	HO	Not Stated
Graham Rooke	Blackburn VIC	All	Diesel / Gasoline powered
Michael Nott	Willoughby NSW	On3	Logging
Rob Pritchard	Hornsby NSW	N	NSW
John Houghton	Laverton VIC	HO	Union Pacific
Bob Williams	Thornleigh NSW	N/HO	CN, CPR, BC Rail
Paul Stevenson	Gynea NSW	HO	C B & Q
Alan King	Tamworth NSW	HO	Euro / Australian
Les Hodgson	Beckenham WA	HO	SP
Bill Black	Emerald VIC	N/S	D & RGW
Mathew Herman	Richmond NSW	HO	C & NW
David Ashton	Coburg VIC	HO/Hon, 7.25"	All
Allan Eagle	Narara NSW	N	Not Stated
Robert Hammill	Bass Hill NSW	HO	American
Frederick Sparkes	Kingsbury VIC	HO	US
David Swinfield	Umina NSW	HO	NSW / ANR
Leon Israel	Killara NSW	HO	C & S
Murray Reddie	Mittagong NSW	HO	Not Stated
Paul Greleck	Heatley QLD	HO	SP
Stuart & Susan Sharp	Earlwood NSW	HO	North American
Jessica Brisbane	Monash ACT	N	BNSF
John Dever	Wyoming NSW	HO	NSW
Tony Hampton	Ringwood North	N/HO	Australian
Brad Hinton	Mt. Colah NSW	HO	Australian / Some UP
Bernie Benson	Sunnybank Hills QLD	HO	WM
Bruce Kennedy	Pymble NSW	HO	Not Stated
Lance Stuckey	Chisholm ACT	HO	American
Philip Collins	Illawong NSW	HO	NSW & Some CN
Rod Hutchinson	Mooroolbark VIC	HOOn3	VR NG & Logging
Rowan Lee	Ryde NSW	N	Pre-merger BN
John Pearse	Merrylands NSW	HO/HOn3	UP / SP
John Geremin	Hombush South NSW	HO	PRR
Ian Conway-Powles	Pendle Hill NSW	N/HO/On3	Narrow Gauge
Bob Backway	Belgrave Heights VIC	1:87, 1:24, 1:6	Victorian NG
Graham Emery	Macleay Island QLD	HO & GUP	
Neill Phillips	Jerrabomberra NSW	N	N & W
Mark Bradbury	Cherrybrook NSW	N/S	Not Stated
Dieter Chiedel	Rouse Hill NSW	HOOn3	Chile Line
Peter Knife	Sydney NSW	N/S	Sth Australian NG
Bob Brown	Bray Park QLD	HO	Western US
Mick O'Hanlon	Springwood NSW	Sn3	RGS
Stuart Ellis	Gosford NSW	HO	Not Stated
Greg Icton	Glen Waverley VIC	HO	NSWGR

Note: The above also include the names of some former members who have renewed after a long absence together with some members of the US who have now also joined our Region.

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