

MainLine

National Model Railroad Association Inc - Australasian Region

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Laurie McLean's Layout featured in Convention 2008 Layout Tours



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Photo Credits

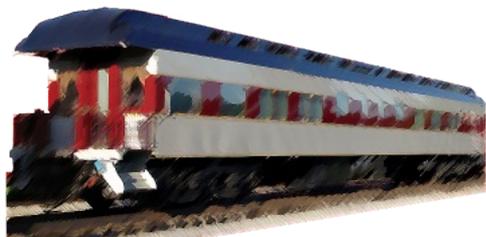
Front cover - Fred Gill's Diamond Valley Lines

Centre photo - Fred Gill's Diamond Valley Lines

both photos by Gerry Hopkins MMR

**Back Cover - Gavin Hince's Northwest Railroad - photo
by Rod Hutchinson**

**Fred Gill's Diamond Valley Lines - photo by Gerry
Hopkins MMR**



From the Business Car

This Mainline will reach you after our AGM and the old Committee that has served you for the last two years will have all stepped down and, as announced on the web, the new committee will have taken over. As you can see, I have been re-elected, unopposed, for a second and final consecutive term as President.

I would like to thank all the members of the committee for all of their hard work over the last two years and, of course, that includes all our Divisional Superintendents and all the members who have served in volunteer roles. Retiring at this election are David North (VP), Marcus Amman (Member), Ron Solly (Div 6 Super) and, earlier in the year, Gerry Hopkins who stood down from the committee to better concentrate on all the other things he does for the Association. Thank you all for the time and effort you have put in for the benefit of the Association.

Your new committee consists of myself as President, David Howarth as Vice President, David Jupp as Secretary and Eric Bennett as Treasurer. Eric and David have both been appointed to the Committee. They have already served two or more consecutive terms on the Committee. No nominations were received for these roles and, as per our Constitution, the previous committee unanimously appointed them. New to the Committee as Members are Julian Israel, Ron Seddon and Bob Williams. Peter Jensen (Pacific Director) was not up for re-election this year. In Division 6, Alan Harris takes over the role as Division Superintendent. I would like to welcome all the members of the committee to their roles. We will all do our very best to serve the Region and the hobby.

During the last year, the region held its Annual Convention at the Blue Mountains Grammar School in Leura, NSW and it was an excellent event. Unfortunately I missed it due to being overseas on family matters. I would like to thank George Paxon for acting as Convention Chair and John Montgomery for all their hard work and effort in staging the event. Later this year we will be having our first ever Annual Convention in Brisbane and I would like to thank Glen Stevens and his committee for all the work they have done in preparation for what is shaping up to be a very interesting and exciting National Convention. We have the convention committee in place for our 25th Anniversary Convention in 2009, chaired by VP David Howarth. Planning is well advanced with the venue chosen, Oak Hill College, at Castle Hill in Sydney's North West and we are now getting down to the nuts and bolts of clinics and speakers. Our keynote presenter will be Charlie Getz from the USA and we will have lots of interesting clinics and speakers on the program. The National President of the NMRA will also be attending from the USA. As you can see from the financial statement prepared by the treasurer, our finances are in excellent shape and our committee will continue to be prudent with the Region's funds.

I mentioned earlier about the association volunteers who contribute so much to the running of a group like ours. Denise Bennet, Membership; Kelly Loyd, MainLine Editor; Gerry Hopkins, AP Chair, Contest Chair and Web content producer; Wayne Eagle, Web Master; David Howarth, Librarian; and Rob Peterson, Public Officer. Thank you all for your involvement over the years. A special thanks to Rob Peterson for all his work preparing the amendments to our constitution. These were small changes but it took a lot of work to finalise them. Peter Jensen, our Pacific Director, has been working very hard to update our Rules of Association. This is a major document of well over a hundred pages defining all the roles of the various officers and volunteers as well as the association's policies. This document, along with the Constitution, helps to retain the collective knowledge of the group and provide guidelines for the committee running the association. It is a project that has taken several years of consistent effort and I would like to thank Peter for his diligent work cajoling and persuading us all to finalise the various parts.

I have inevitably missed many members who have given of their time to help with layout visits, assisting at events and conventions plus all the hospitality of our meeting host's partners. Without all of you choosing to be involved we would all be the poorer. I look forward to the next two years as President in the knowledge we have a great committee, an exciting program planned and a grand membership.

Finally, as President, once a year I have the pleasure in announcing the names of the recipients of the President's Award. This is for outstanding service to the Region. The awards this year go to Gerry Hopkins and Ron Solly. Congratulations to you both for all of your work and efforts for the Association.

It is with great sadness I have to report the passing of a giant in the local hobby retailing scene. George Berg of Berg's Hobbies passed away in his sleep on the 26th May. His funeral was on the 28th and I attended on behalf of myself and the Association. Any modeller of the Australian scene will be aware of George's pioneering work bringing superb Brass locos and numerous loco and structure kits to the local market. George was a long time member of the association and always generously supported our conventions. My condolences go out to his wife Lorie and son Peter daughter Karin and all the members of George's family. A short obituary by Bruce Lovett appears later in the MainLine.

Sowerby Smith
President NMRA AR

Pacific Director's Report

By Peter Jensen

There is little to report from HQ this issue as most activities are currently centered on the upcoming Anaheim convention.

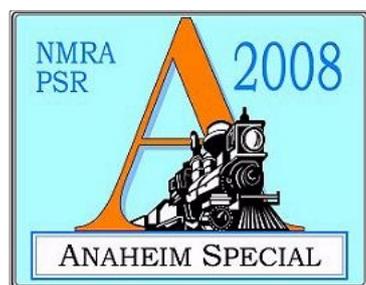
The good news is that President Brestel has recovered well from his recent medical issues and is full steam ahead once more.

For those attending the National Convention in July, you are invited to attend a welcoming reception on the Sunday afternoon (July 13th) from 4:00 pm to 6:00 pm at the Marriott Hotel. It will be a chance to catch up with other local members. The Australasian Region will have a room in the vicinity (location to be advised) so that we can work on our plans for the week.

For those of you still thinking of attending, remember that you can register online from the convention web site.

Talking about web sites, if you haven't visited the national web site recently, have a look. It has a new look and feel, and is certainly much easier to use.

Happy modelling!!



Are you going to Anaheim in July?

Contact Peter Jensen on jenso@bigpond.net.au and let me know. I will compile a list of all AR attendees.

The Welcome Reception is at 4.00pm on Sunday, July 13th. We will have a hospitality room for AR in the reception area.

VALE GEORGE BERG

In 1957, George Berg's first venture into the hobby industry was the purchase of Northbridge Sports Store, a combination sports and hobby store. George soon realised that the majority of railway modellers resided in the Western Suburbs of Sydney, so, in 1958 he sold the Northbridge store and set up his first real hobby shop in Parramatta, the present store being the eighth location.

Over the past fifty years, George and his son Peter, have produced a range of N.S.W.G.R. prototype brass, white metal and plastic locos and rolling stock in N, HO and O Scales, both ready to run and in kit form. They also produced a range of wood and metal lineside structure kits in HO and O Scales and have been the Australian agents for the excellent Shinohara ranges of track and points.

George was really a very shy person and shunned the limelight. He preferred to work behind the scene and in so doing assisted many individuals, clubs and associations including the N.M.R.A. and A.M.R.A. To recognise his enormous contribution to the hobby, the N.M.R.A. presented him with a suitably inscribed plaque in 1992 which was one of his most prized possessions.

Over the past ten years George's health deteriorated, however, with every setback he battled and overcame the setback. His last battle was fought on Tuesday, 27th May, 2008, when he passed away peacefully at the remarkable age of ninety three.

He will be sadly missed by his wife Lori, son Peter, daughter Karin, two grandsons, Robin and Jim from Berg's Hobbies and his hundreds of model railway friends.

Another Australian model railway pioneer has dropped his fire.

Bruce Lovett



Highball! - Editorial

Department of Signals & Communications

Part 2 of the Kansas City Subdivision Signal System appears in this issue. This will be a landmark series of articles for me. When I sat down to document the system, I began to see the large scope of work this involved. Like building a layout, there were many decisions made and solutions tried, scrapped, re-worked, fixed and a final product that is fun to operate. Signals really enhance the whole railroad operation experience. I hope the articles can serve as an inspiration to try adding signals to your layout.

Tribute to Fred Gill

I decided to feature the modelling skills of the late Fred Gill as a tribute to an extremely talented modeller. You can see more of Fred's amazing work on the NMRA AR website.

http://www.nmra.org.au/Layout_Tours/FRED/fred.html.

There is inspiration in there for all of us.

Letters to the Editor

I did receive one email from a member this quarter.

Hi,

Just a short note to say how well the contents in the Magazine are presented especially the article by Stuart Sharp and John Nash, "In Defence of Code 100 Track".

Would you pass on my congratulations regarding the point about the difference between Railroad Modellers and Model Railroaders. I thought it was very good and true.

Now probably the colour of the side of the rail web (Shiny v Rusty/weathered) is just as important. Also we should think about the view into the empty interiors of passenger carriages .

Regards, Bob Deakin (Caloundra Queensland)

Thank you Bob for writing to us. I'm sure Stuart and John will appreciate your feedback. As an aside, my entire layout is weathered Code 100 and so far no-one has noticed it too much.

Now, if you will excuse me, I have to add more detail to my layout! Until next issue, Happy Modelling!

Kelly



NMRA Australasian Region Brisbane Convention September 12th -15th

Mount Gravatt Showgrounds, Logan Road, Mount Gravatt.
Clinics & Workshops Layouts at the Convention
Modelling Contest Layout Tours & Ladies Program
After Dinner Speaker Traders Stands

Renew old friendships, make lots of new ones and share a great time enjoying the hobby. Don't delay act today. An application form is included with this issue of MainLine and also full details of program, accommodation and tour details are on the web at www.nmra.org.au

Meet your New Committee

Sowerby Smith - President



I see my role over the next two years as President of the NMRA Australasian Region to be one of building upon the Association's strengths which are inclusiveness, embracing all modelling scales and prototype interests as well as maintaining the NMRA's commitment to standards and strengthening the fellowship

we offer to our members. Additionally, the international nature of the NMRA offers our members unprecedented access to modellers around the world. I am very pleased that during this term I will be able to help bring our 25th Anniversary Convention to our members in 2009 and increase our international profile within the NMRA. I will strive to work harmoniously with our Committee and membership to pass on to my successor an even stronger group of modellers and friends.

David Howarth - Vice President



I am 63 years old and a civil engineer by profession. I have recently retired as Chairman of Australia's premier consulting engineering company. Recently, the Australian Government appointed me a Director of the Australian Rail Track Corporation. This is a part-time role, hence I have more

time to devote to the NMRA and why I have put myself forward for the position of Vice President.

Over the past few years I have contributed by undertaking a number of activities as follows;

- active member of the Committee for the past two years,
- Regional Librarian since September 2005. I introduced a wider distribution of Videos and DVDs to the Divisions, purchased many great new DVDs and arranged for the Videos to be copied into DVD format,
- 2009 Convention Chairman, our 25th Anniversary Convention,
- Author of articles for the MainLine magazine.

I am an active O scale modeller who believes in the NMRA as an educational organization to enhance the skills of its members and to encourage friendships and to have fun!

I see the Vice President's role as one of support for the President and the Committee as a whole, and I believe I

have the people skills and experience to undertake this effectively.

David Jupp - Secretary



I am the current Secretary and, as there were no nominations for this position, I have made myself available for a third term following a request from the President. Prior to my secretarial work, I stood as a

Member representative and was the MainLine editor for 3 years. Three years ago we moved to a house that at long last has space for a layout and all I need now is the time. My chosen prototype is the Union Pacific RR and its associated fallen or consumed roads. I find the UP particularly interesting because of the different and unusual locomotives involved in the make up of the organisation. I am particularly enthused that the NMRA is standing its ground with major contributions in some of the legal challenges that could otherwise strangle the hobby if allowed to continue. Although I have grey hair and over 60 years of life gone, I am still employed as an electrical/electronics engineer with TV operator, Foxtel, in Sydney. I may just need to retire to get that railroad cracking.

Erik Bennett - Treasurer



I have been the NMRA Treasurer for four years and, as there were no nominations for this position have, have made myself available for a third term following a request from the President. During my time as treasurer I have used my knowledge of Microsoft Excel to ensure that every financial transaction is historically

recorded for audit and review. As Treasurer, I believe I can make a contribution by bringing my knowledge of business finance to the financial operation of the Australasian Region. My philosophy is accountability and high visibility for all financial transactions.

As a Committee member, my intention is to be innovative in devising added benefits for members and to broaden the attractiveness of the NMRA in the Australasian Region. In particular, I want to invest in youth in the hobby, which I believe is the way of the future.

I have a medium sized layout and model NSW (or Australian, as it is since privatisation), Union Pacific and BNSF. The era modelled is 1956 to the present. The layout has all of its trackwork finished but needs some more work on scenery. The holdup is that I play trains

too much and fiddle around with NCE radio DCC and sound.

Member Representative - Bob Williams



My name is Bob Williams. I have been an NMRA member for about ten years in two stints, and am also a member of The Hills Model Railway Society at Baulkham Hills. I model in N scale, mainly Canadian, with a bit of SP, and my

other interests are HO American at the steam/first-generation diesel era. Again, western roads predominate in my choice of roads. I have been interested in DCC, assisting in building the two Hills Club DCC layouts, and have now bitten the bullet and gone NCE radio. I now would like to be able to contribute to the running of the NMRA Australasian Region.

Member Representative - Ronald Seddon



My name is Ronald Seddon. I have been an NMRA member for 14 years and would be able to contribute greatly due to my past and present experience on committees.

I am presently Vice President of the Hills Model Railway Society Inc., of which I have been a member

for 24 years, and have spent much of that time as a committee member - including being President for a period of time. During this time I had also served St Columba Soccer Club as team manager, coach and club secretary. I am retired after 37 years with Australia Post - being a team leader for part of that time. My interest in railways started from an early age and my modelling commenced at the end of high school and has continued to this day.

My interest in the hobby is NSW HO with a bit of USA

HO and N for variety. In particular, I enjoy scratch building structures and scenic detailing.

Member Representative - Julian Israel



I have been a keen model railroader since my early teenage days having built my first HO NSW model railway in 1971.

My enjoyment in railways never ceased, but whilst establishing my career it took a back

siding for a few years. My enthusiasm was renewed again when I joined the NMRA in December 1990 and decided to get seriously back into the hobby.

I was drawn to the narrow side of things and started designing and building my HOn3 Colorado and Southern Narrow Gauge empire. I have participated in the achievement program and I have earned several AR certificates as a result of the construction of my NG railroad.

I joined the Australasian Region board as Vice President in 2002 and served for two years. During that time I contributed to a review of the local constitution, planning of region conventions and the regular operations of the Association. Over the past two years I have been heavily involved running the operations of a major corporate and traveling overseas but now, firmly back on terra firma, I am ready again to assist the hobby and support our Australasian Region Committee.

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Re-numbering Rolling Stock

By David Latham

In the early 1990s, Life-Like turned the model railroad community on its head when they released the Proto 2000 (P2K) range of HO scale rolling stock kits (and ready-to-run locos). These kits used tooling similar to that of Intermountain, Red Caboose and other highly detailed kits but P2K kits were much cheaper (about 50%). The first freight car released was a 50 foot automobile boxcar (followed by tank cars, gondolas, single and double deck stock cars and flatcars). I bought and built four ATSF 50 ft boxcars, all with the same road number. Their primary purpose was to fill my railroad's roster and serve a car manufacturing plant on my first layout.

On my new layout I am now contemplating operating at a more realistic level but haven't decided yet on car cards, timetable or sequential sessions. This has now presented me with an obvious problem – more than one car with the same number.



Figure 1 - Original car

I have assumed that all the dimensional data and build dates etc. were correct for the boxcars involved. All I had to do was change the numbers on both the cars' sides and ends. Surely it was only necessary to change the last or last two digits. However, a search through the Microscale catalogue and my small collection of decal sheets revealed a lack of decals exactly the same as the numerals printed on the cars. I came to the conclusion that it is just as easy to replace the whole number and change the digits to suit. In my case, a study of data for the ATSF FE-24 boxcars showed that the ATSF had only 200 (#10300 – 10499) of this class of car so my renumbering had to be kept in that range to make them prototypically correct.

Microscale (and other manufacturers) make several sheets of letters and numbers in different fonts and colours in most scales. Ultimately I used a sheet printed for ATSF freight cars to fill the new numbers needed. I didn't want to have to repaint the cars involved so I

removed the old, pad-printed numbers paying particular attention not to stray too far from the area involved.

I sparingly used PollyS Lift-off or metholated spirits to soften the number paint (and hopefully not the base paint) and the edge of a scalpel blade. It was meticulous work but it was worth the effort to work slowly and not score the underlying car side. A little touch-up with 800 grit wet and dry sandpaper was necessary on some cars despite my best efforts. It was at this stage that I realised the cars were made of brown styrene and I had also removed the brown paint from the car side. Not a major problem for this car (see below).



Figure 2 - Number removed

My first effort at decaling didn't look satisfactory. I then realised that the spaces between the numbers were too wide. I had used numbers that were adjacent on the decal sheet to 'save time' but the incorrect spacing soon became apparent. For my second attempt I cut and applied the numbers individually and the result looked much better. In HO scale the numbers on the ends of the car are rather small so work slowly. I let the decals dry overnight and then applied Microscale decal softening and setting solutions (Micro-Sol and Micro-Set) to ensure the decals were sitting as flush as possible.



Figure 3 - New numbers, no weathering

New decals are obvious in certain light because of reflection from their gloss surface compared to the matt finish of the car. Dullcote fixes this problem, followed by some weathering. The weathering also helps to hide

minor stuff-ups in your enterprise.



Figure 4 - After basic weathering

After renumbering the P2K kits, I searched through all of my rolling stock to find duplicate numbers. Sure enough, there were several. Intermountain, Branchline, Red Caboose and Athearn kits in my collection needed new numbers and some P2K locos as well. A word of warning, some kits are made from styrene of a different colour to that of the paint so a minor colour patch up might be necessary. One solution would be to completely paint out the number area in contrasting colour and stencil the new number over this patch. This was necessary at times when railroads swallowed others and renumbered cars to fit into the mother road's class numbering system. Obviously, this would be more complicated than the intention of this article. Try it and write an article for inclusion in MainLine!

Happy modelling.

David Latham

(Now I have to fix that broken stirrup!)

NSWGR Buff Point Branch Layout History By Sam Mangion

Like most boys, I was fascinated with trains and at ten years old I received my first train set, a Triang Princess Elizabeth. I then set up a circular track and after about half an hour of running was totally disappointed with the prospect of watching my loco and carriages going round and round and round...

Some years later I tried to design a layout to fit into a 10 x 12 foot room. This was based on no experience, no knowledge of the railway system and no money. Due to a whole lot of factors I did not proceed with the layout and instead I did a whole lot of other things, one of which was joining a Rover Crew. Through one of the leaders I was reintroduced to train modelling.

It was not until I was married with two boys and a mortgage that I decided to build a layout under our

house in Hornsby. This layout was started following much labouring over the *101 Track Plans* book by Lynn Westcott and a little advice from my wife's family who had been modellers for years.

I recall the advice given to me at the time was "you probably will not get near what you want until you have done the fourth or fifth layout". Truer words were never spoken.

The layout was 25 foot long with a 3 foot wide centre section, a 9 x 12 area at one end and 6 x 9 areas at the other. It had two levels with hidden sidings underneath.

I had scened one end to a basic level but with, work commitments, it did not proceed much further. Except for allowing the boys to use the layout whenever they wanted, this proved to be a great investment in interest creation and the net result is that my younger son developed and has maintained a strong interest with a new 31 x 30 foot double level layout presently under construction.

But I digress.

Hornsby never did get completed and when Jan and I finally made the break and moved to the Central Coast I gave the layout to a friend of Rowan's with a silent regret that all of its faults, based on my inexperience, went with it and what I had learned would 'never' be repeated as I was not going to build another layout. Such great words always come back to bite one in the most unmentionable of places!



NSWGR Buff Point Branch - Middleton Station

Behind every modeller there is a very understanding partner and in my case I am fortunate to have my wife Jan supporting me. As I said, I did not intend to start another layout but I succumbed to a small 14 x 6 foot area with low ceiling space adjacent to my workshop (under the house) and I started construction of the framing. Jan's cousin, John Saxon MMR HLM, invited us to attend the NMRA meeting being held at his residence in November 2003. I saw some of the library videos that could help in my new mini world of trains but, not being a member, I could not borrow them. My ever helpful wife paid the money and there I was - a new member of the NMRA.

From this event I took over the whole area, a 14 x 13

foot space that encompassed my workshop and previous small train area. I designed a layout and being retired could now spend my time on the construction of this new edifice. The most important help I ever received was being invited to join the Central Coast Wednesday Night Group in March 2004. This gave me exposure to some 10 working layouts and the combined experience of some 15 other people which I supped up with a vengeance and applied where necessary to my layout. Meanwhile, Rowan was living with us and also had joined the NMRA and the CCWN Group.



Knight Central Marshalling Yard

As with most modellers, we are always self critical and realise there are better ways of doing things on our layouts. I had been realising more and more the inadequacy of my layout and in November I decided to extend the layout to something bigger. In the process we also decided to design a NSW layout, so all my American cars were put in drawers and forgotten. Meanwhile, the *By Ways of Steam* were checked and earmarked for possible examples of layout material. We finally settled on Wyee, Morisset and Blayney as the basis for three main stations and as typical country station designs.

From December '04 to April '05 we dug out clay, replaced brick piers with posts, a concrete floor was laid, a connecting wall was removed and now I had an area 27 x 13/15 foot wide. The previous layout was demolished and new framing was built.

The Buff Point Branch of the NSWGR was opened to an NMRA meeting in March 2007. At that time it was 80% scened and 99% operational (nothing is ever 100% complete).

The layout is a growing thing and is being improved all the time with details and operational possibilities.

Sydney and Cox Yards:

A loop line and storage area with 4 holding tracks is beneath the peninsular. This also includes a reversing loop. The storage tracks are accessible from both ends of the loop line. A Shay shelf leads up from the main yard to a logging area and continues to a colliery.

Generally the layout is as follows:

*Framing - all pine of various sizes but predominantly 45 x 20 mm.

*Top - 9 mm plywood.

*Underlay to track - 5 mm High Density Foam (original density now not available).

*Pelmets - 3 mm ply both to valence and front plate to layout.

*Code 100 track and No. 6 (medium) points have been used which, when painted and scened, tend to minimise the rail height.

*Minimum radius - 24 inches.

*Gradients - were planned to be 2% but this was relaxed at times to 2.5% and in some cases 3%.

*Points - operated by Tortoise switch machines on the main line and controlled by slide switches on a Controllers Board. Point indications are via a red/green LED on the board, giving clear indications of main line condition at all times. All other points are operated by a slide switch and wire in tubes under the scenic medium with red/green LED indicators at track side or at the slide switch location.

*Signalling - has been started and will be continued as time proceeds. The present signals are linked to the Controllers Board.

* Structures - generally Walthers' kits which have been cut, altered and added to, as required. Some structures have been totally scratch built such as the coaling stage, coaling platform, trestle bridge, 'A' framed bridge, stone viaduct and diesel shed. Other structures have been kit-bashed.

*Rockwork is of three types. Plaster cast from moulds made on site. Foam plaster impregnated. Real shale from the Blayney area.

*Gum Trees - all except three, are made in the Mangion Workshop with the help of Hecki, wool and other scenic materials.

Planning Decision Changes

As is expected when track has been laid and locos move on the rails it dawns on one that the configurations could have been done better. This layout suffered as much as any and quite a few changes have occurred to improve the operation of the layout.

Kelsey Power Station

A second point and track was added and extended to allow more storage of coal wagons

Norton

Points C16 added to allow cross over of East Main into Knight Central Yard and also to allow access to Oatway via Eades Tunnel. Points C17 added to allow cross over From East to West Mains

Double Mains

Originally the layout had double mains to points at the corners near Barlow Tunnel and near the stock yards, giving only two tracks crossing the access bridge. This was creating an operational problem in that it did not allow continuous running of trains, jammed up

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operations and caused quite a few derailments at the reducing points. The answer lay in building an enclosed tunnel inside my workshop, making the access bridge wider by 45mm and creating rock tunnel entries at both ends of the work shop tunnel. The bridge now has three tracks and it was decided to build an additional crossover at C1 and C2. This has allowed for continuous running for display purposes. That is, two trains East and two West. This has also improved the operational aspects of the layout that allows East trains to cross over the West Main and access the Sydney Yards and storage tracks underneath.

Towner Station

The original station was some 80 scale feet wide with a curved East Siding and a straight West Siding. The track from Cox Yards through Hastings Tunnel was only a passing loop and dead end siding was for a helper. This was totally unacceptable when seen on the layout; the station platform was cut and rearranged to suit the configuration of four platforms, three passing tracks and a reserved dead end track for Rail Motors.

Finlay Wheat Silos

This was serviced from the front (aisle side) by a short dead-end track. This was always questionable as silo operations usually have a passing track to allow slow passage and filling of wheat wagons. An additional point has been added off the West Main to service the silos from the platform side allowing for a slow passing and

filling of wagons. This also created a second access to Knight Central Yard from the west. Similarly a wye has been added to the first track from the aisle to allow a short siding for a shunter to park when off duty.

Planning errors unable to be Changed

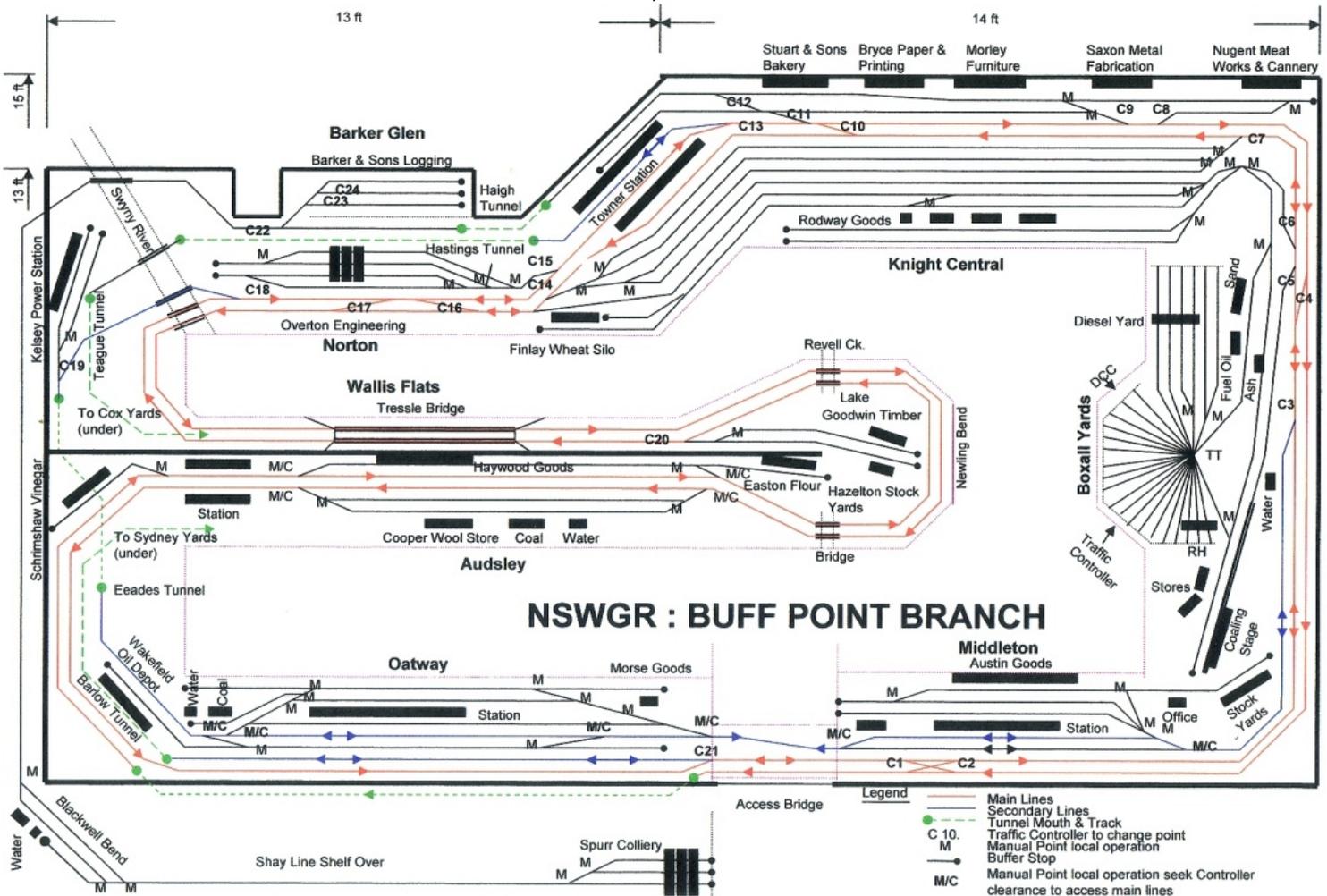
Shunting Necks

At the east and west ends of Knight Central Yard the creation of shunting necks would be very helpful and avoid the use of the main lines in shunting operations. These are not possible due to the lack of space but I must say that by good fortune or good management I have been able to correct most of the other deficiencies and oversights.

Staff System

Most US layouts use a paper based dispatchers control system and some use radios. I have toyed with an idea for quite some time to try a Staff System and after bouncing ideas around and gaining some support I developed a simple Staff System and with the help of some good friends put this together and tried it with some 14 people in the train room. After some confusion, it started to work as operators became accustomed to the names and the location of the staff changes. Having now used it a second time, I believe it is going to be a good tool during operating sessions.

As stated previously, a layout is a growing thing and is always being improved. So, for the moment, I shall leave it at that.



Invitation to the 2008 NMRA National Convention- “Modelling the Prototype”

Members of the NMRA and their partners are invited to attend the 2008 National Convention in Brisbane during September 2008. The Committee has organised railway and non-railway activities for you over a three and a half day period, with the convention site within easy access to Brisbane by public transport to those of you who wish to do your own thing.

Friday

The program starts on Friday the 12th, with two layout tours in Toowoomba, a bus trip to the Sunshine Coast, and an informal “Meet & Greet” session at the Convention venue.

For twenty ladies, the Committee has organised a day trip to the Sunshine Coast for a “what to wear/what not to wear” session with Kerryn Swan, known locally as the Doctor of Dress. Kerryn will present an informative talk and slide show on what she believes every lady needs to understand before she goes shopping, followed by individual discussions with each member of the group. The bus will then travel to Buderim for lunch and a tour at the Buderim Ginger Factory, with free time to roam the Buderim Ginger Factory tourist precinct.

Toowoomba is 100 kilometers west of Brisbane, and is the home of the Convention’s first two layout tours.



Darling Downs Model Railroad Club Zenkeville

The Darling Downs Model Railway Club (DDMRC) will be opening their clubrooms from 10 am to 3 pm, with HO, OO, N, and Z Scale layouts on display. DDMRC are a 100% NMRA club with nearly 70

members, and are very active in the region, displaying their layouts at shows and community events, as well as running one of the premier annual train shows every June.



Mark Ward's OMA Belt Lines

Mark Ward is an NMRA member who operates the OMA Belt Lines, used almost exclusively by the Burlington Northern. The OMA Belt isn an HO scale, two level, point to point layout, running NCE DDC, with a yard at each end. The OMA Belt appears on Gerry’s Layout Tour XXXI DVD, and will be open from 10 am to 3 pm.

At the end of the first day, you are all invited to the “Meet & Greet” from 6:30 to 9:30 pm at the Convention venue. It is a catered gathering, to get everyone together and to catch up.

Saturday

Saturday is the main Convention day with a full clinic program, a bus trip to Mt Tamborine in the Gold Coast Hinterland and capped off with the Convention Dinner that evening.

The day starts for the tourists (or non rail delegates) when they board their bus for Mt Tamborine, traveling through rain forest and past waterfalls to sample locally made cheeses, fudges and wines, as they stroll along Gallery Walk. A light lunch is organised, plus a visit to the Glow Worm Caves, before a leisurely trip back to the Brisbane in plenty of time for dinner.

The day for the modelling fraternity amongst us will be spread between the programmed clinics, a number of “See Me About...” stands as well as Trade Stalls and a Small Layout Display. The clinics are scheduled every hour for 45 minutes, and include the following topics, all supporting the Convention theme of “Modelling the Prototype”:

“The Chief and his Tribe”, by Bob Cuffe and Colin Barnett.

“QR in Steam/Diesel Transition” by Dennis Campbell.

“The Louisville & Nashville” by Ian Venables.

“Cane Railways” by Lynn Zelmer

“Modelling the Prototype Today” by Ken Schofield

A sixth clinic is in the works at this time

Following the day’s activities, you are all invited to the



Centre Photo - Diamond Valley Lines
by Fred Gill
Photo by Gerry Hopkins



RED STAR

RCS

mairen

PLANTER

Convention Dinner at the Pacific Golf Club for a buffet dinner. Pre-dinner drinks and savouries will be served at 6pm on the grassed area overlooking the 18th green, with dinner at about 6:30. At this stage, the guest speaker is in a state of flux, however the Committee expects confirmation of our second choice within two weeks.

Sunday

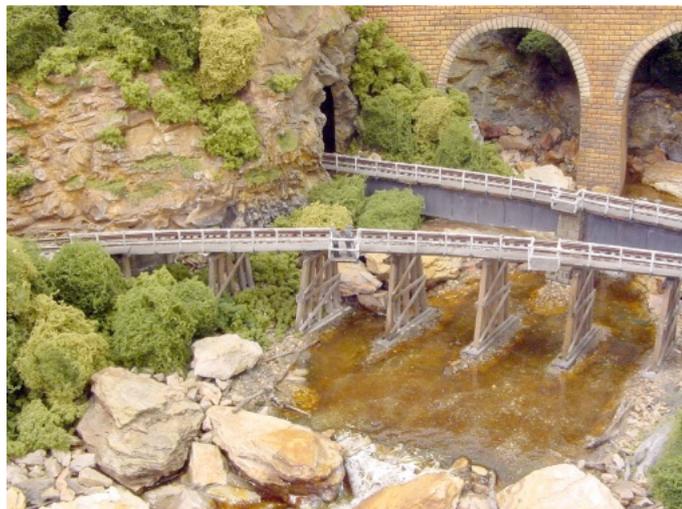
Sunday is the second main Convention day. A full program of layout tours has been arranged, with self drive tours to two local Brisbane clubs, and homes of two local NMRA members.

At this stage, there is no specific program arranged for non-rail delegates.



Bob Brown's ATSF Layout

Bob Brown is an NMRA member who models the ATSF. Bob's layout is an HO scale, two level layout, with a branch line heading down into the garage via a helix. Bob runs DC and NCE DDC, and his layout appears on Gerry's Layout Tour XXXI DVD. It will be open from 9am to 11:30am.



Denis Lane's Layout

The Union Pacific Model Railway Club (UPMRC) will be opening their clubrooms from 11am to 2pm, with their HO Scale Sierra Central layout on display. The

UPMRC has 24 members, of which 11 are NMRA members, and are active in the Southeast Queensland modelling scene with their Open House and Annual Train Show every November. UPMRC Members will have a BBQ lunch for sale.

Denis Lane is an NMRA member who operates his Westridge Railroad being used by the Clinchfield, the B&O, and the WM. The WRR is an HO scale, dual level layout, running NCE DDC. Denis's Westridge appears on Gerry's Layout Tour XXXI DVD, and will be open from 1pm to 3:30pm.



Garth Fraser's Layout

The All Gauge Model Railway Club (AGMRC) will be opening their clubrooms from 1pm to 3pm, with their HO, OO, and N Scale layouts on display. The AGMRC has approximately 30 members, and are active in the SE Queensland modeling scene with their HO/OO layout on display at shows throughout the year.



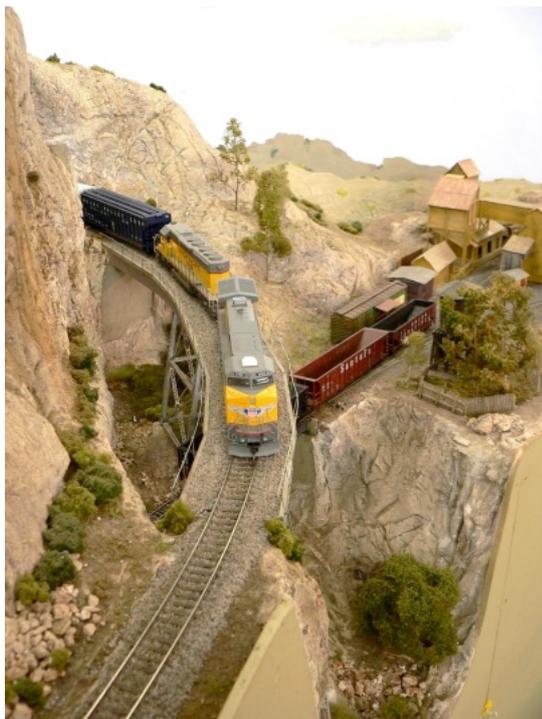
Gold Coast Model Railroad Club

Monday

To cap off what we hope will be an exceptional weekend, and for those of you who are still here on Monday, the Committee has been in touch with the Workshops Museum in Ipswich and has confirmed that a tour of the Museum and Back Shops is available for

booking on Monday morning.

Please visit the Convention Website at www.nmra.org.au for more detail and for the Registration Form.



UP Model Railroad Club

Region Roundup

Division 1 Queensland

By Ian Venables

2007 Division 1 Annual Report

1. This Annual Report is an overview of activities within Division 1 during 2007, and is submitted for information of the Australasian Regional Committee (ARC) and members of Division 1.

Membership

2. At the end of 2007, division 1 had four 100% clubs and a group of 40 members not affiliated with any of the 100% clubs, giving a total membership of 156. This was an overall increase of six members in the year.

- a. Darling Downs MRC in Toowoomba: 68 members.
- b. Caloundra & District MRC on the Sunshine Coast: 18 members.
- c. Logan & District MRC in Logan: 22 members.
- d. Downs & South Western MRG in Warwick: 8 members.
- e. Un-affiliated members: 40.

Meetings

3. The scheduled bi-monthly meetings are held in the Brisbane/SE Queensland area, with an average attendance during 2007 of 18 members and 3 visitors at each meeting. Considering the diverse geographical nature of the Queensland membership, this attendance is

considered to be quite reasonable.

4. Eight meetings were scheduled for the year. These were made up of six meetings hosted by members, a meeting hosted by the Darling Downs Club in Toowoomba, and a railway oriented weekend held in Bundaberg, originated by John Lebsanft.

Model Railway Exhibitions

5. The following is an overview of attendance by Division 1 members at SE Queensland model railway exhibitions during 2007.

Sandgate PCYC:

DDMRC with Z, N, & HO layouts.

Division 1 members with one 9mm, 2 x N and 1 x HO layout.

AMRA:

L&DMRC with 1 x N, 1 x HOn3 and 2 x HO layouts.

Toowoomba:

Division 1 Modular Group.

L&DMRC with 1 x N, 1 x HOn3 and 2 x HO layouts.

Division 1 members with 1 x 9mm, 2 x N and 1 x HO layout.

RMCQ:

DDMRC with 1 x N layout.

Division 1 members with 2 x N scale and 1 x HO layout.

Taree:

L&DMRC with 1 x HO layout.

Ipswich Workshops:

L&DMRC with 1 x N scale, 1 x HOn3 and 1 x HO layout.

DDMRC with 1 x Z, 1 x N and 2 x HO layouts.

UPMRC:

L&DMRC with 1 x N layout.

Community Events/Celebrations

In addition to the above shows, both DDMRC as a club and other members of Division 1 exhibited their layouts at various community events throughout the year.

Achievement Program

During 2007, 5 AP certificates were awarded to members of Division 1. Laurie McLean was awarded the Golden Spike, Structures, Scenery and Electrical Certificates and Lynn Zelmer was awarded the Volunteer Certificate.

Glenn Stevens,

Div 1 Superintendent,

24th Feb, 2008.

Ideas Wanted!

Geoff Aldridge has recently shifted house and the layout room is, of now, vacant, in need of his ideal model railroad. He is still looking for ideas, druthers, dos and don'ts. These could be profitable for us all. We will publish the best of them in the Newsletter or some other format so that all of us will get to see these ideas.

So far Geoff hasn't been overwhelmed with responses,

even though I know many of you have heaps of ideas! So please get in touch and pass on your suggestions. Here you can put some of your theories into practice without having to take on the commitment yourself!

Exhibition Layout

Work is still proceeding with particular attention being paid to track joints over module joins. The aim is, of course, to ensure reliability, ease of erection and good appearance.

The May AMRA Show

As usual the annual AMRA show will be held on the long weekend in May; the 3rd, 4th and 5th. Besides the large number of layouts on display there also be many trade stands, society stands and others. This is also a wonderful place to meet up with modelling colleagues and in particular those you don't often see.

Convention Extra

One of the activities associated with our September Convention is that guests have been invited to spend some time on the Friday in Toowoomba. Mark Ward's fantastic Oma Lines will be open as will the always interesting Darling Downs Model RR club rooms.

This has been planned to be an attraction especially to those travelling by road from the south up the New England Highway. Instead of turning right after Warwick towards Cunninghams Gap, they could motor on to Toowoomba and take in these delights. Some might want to spend a night in Toowoomba and there are plenty of good motels and eateries there. Besides, the famous Carnival of Flowers will be starting a week later but the gardens will be just about at their peak so Toowoomba will be a beautiful stop over.

The Federal Motel in Geddes Street just off James Street (1800 650 839) is a very good motel at a reasonable price. Also, a dinner or lunch at Weis (4632 7666), Margaret St East is an event to remember.

Family Day

I've occasionally made a comment about how useful non-modelling activities can be to instil a new awareness in model railroading. Let's consider how useful one non-modelling activity was to us modellers. This year's Family Day at the Tramways Museum was one such occasion. Along with the trams, the nostalgia and the normal friendliness, there were examples of Lynn Zelmer's cane rolling stock there that made me think about how cane trains might be a good way to go for those of us with limited layout room and with eyesight lessening with age. And lets not forget that cane trains in Queensland didn't just carry cane.

Just a few minutes of riding in a tram was enough to take my memory back 40 years. All the noises, the smells and some of the sights of riding in the tram made it seem as though we hadn't been without them for so long. The authentic advertisements in the upper corners of the cabins contributed to the overall feeling of

nostalgia. For anyone who hasn't seen the museum get there soon and start the re-learning.

There were a lot of stories being aired about how our members used trams in their youth. Volunteer staff at the museum were most helpful and we rode all of the serviceable trams on display, from the earliest to the most modern.

Snippets

Here's a few "let-outs" for those modelling a particular period yet having the odd car that may not fit into your era.

Vertical brake staffs were outlawed in 1928. Yet from the photos in *The Postwar Freight Car Fleet* by Kline and Culotta (published by NMRA, Chattanooga, 2006) there were still plenty of boxcars, hopper cars, refrigerator cars and stockcars in interchange service in 1946-48 with vertical brake shafts. From the same source we read that there were still a few cars in the mid forties equipped with arch-bar trucks.

Railroad Model Craftsman, October 2007, has an article on scratchbuilding a wooden vinegar tank car; but not from the early 1900's. This one was put into service in April 1957! This would be an excellent choice for your first scratchbuilding project.

Comment

Most of us are always thinking of ways to improve our model railroads. Many improvements can be made in the simplest of ways and one of the best ways is to look at prototype photos for inspiration. What can you glean from a photo in a book or magazine or DVD? It is often the little things done well that are the most effective.

Going up to Buderim with Bob Cuffe and John Saxon to see Garth Fraser's layout and his work on the Palmwoods-Buderim Railway loco, we mentioned one book that is full of such inspiration. Thanks to Graham Prideaux's vigilance, all three of us have a copy and we have often looked at it. The book is *Steel Wheels Rolling* – the photos of J. Parker Lamb. All of the photos are monochrome and that probably gives them some of their dramatic appeal. Here are a few ideas from that book.

Bridges are often numbered to facilitate location finding for repair crews. Small number labels made on your computer would be a great start. Remember to make several numbers the same for each bridge as you might want one for each end and also on the abutments.

Anchor your model crossing control cabin to reality with conduits running from the tower to the ground. A couple of different diameters of copper wire will be useful here.

Don't forget dwarf signals. These can be bought or you can make them yourself from bits of Evergreen. For a bit of "scenic animation" they should be lit. With small LEDs carefully filed down to size or with fibre optic strands you can easily accomplish this. They are

used at diamond crossings, in yards and even at the end of platforms for passenger trains.

Tools for washing or outdoor small repairs can be left in the area where this work might be carried out. A ladder, hoses, buckets, brooms, large spanners etc. can be left there and slop a bit of clear gloss around to make it look as though water was used there recently.

Most electrical service poles have bevelled tops to rid the pole of rain water. But there is one in a photo where one of the six poles shown is not bevelled and has about eight foot of pole above the top crossarm. It just looks different and ever so "human".

Another photo has the electrical crossarms on only one side of a short pole because this pole is anchored to the girders of a bridge. We have all seen that in Queensland. But I'll bet you haven't seen it in a model.

Anyone as old as I am will remember turntables being operated from the air supply of a loco. There is a beautiful picture of a diesel being turned in this manner. For modelling though, the safety railed operating platform with a rolling stock Ajax brake wheel to open and shut off the air supply would look great.

Here's one I've never seen before. Several lengths of wood suspended over a similar number of tracks by wire anchored, at each end, on poles. These lengths of wood carry Tell Tales over each track. They are positioned just prior to a bridge or a tunnel over those tracks.

There are eight ideas from just a few photos. I don't think I've seen any of these ideas modelled on a layout except maybe for the dwarf signals on one or two great Australian layouts. The effort required to construct any of these ideas is minimal yet they would go a long way towards giving your layout the look of a landscape that is populated by clever yet fallible people.

March Outing



Garth Fraser and Glenn Stevens look absolutely mystified trying to think how they are going to fit the decoder into this 1:1 loco of the Palmwoods-Buderim Railway. Photo by Laurie McLean.

The outing to Buderim and Garth and Myra Frazer's was, as usual, a most pleasant day. We were taken to see

the Krauss locomotive that has caused Garth to change scales for much of his recent life. It is amazing what volunteers can do. We were then taken to a part of the right-of-way on the western side of the mountain. This turned out to be a delightful walk through wet scherophyll forest with cuttings, culverts and bridges etc. We all then enjoyed afternoon tea at the Fraser's and many availed themselves of the opportunity to see Garth's layout before driving back to Brisbane.

May Report

Convention Extra

We have missed out on our hoped for US guest speaker as while he is wanting to come his wife is unable to make the trip due to work commitments at that time. We will keep him in mind for future events as he is someone many of us would find to be of great interest. We are now looking for another guest speaker and we hope to get a particularly good one locally.

Ideas Wanted!

Geoff Aldridge has recently shifted house and his layout room is, as of now, empty, in need of his ideal railroad to fill it. He is still looking for ideas, do's and don'ts. These ideas could be helpful for us all. We will publish the best of them in the Newsletter so that all of us will get to see them.

So far Geoff hasn't been overwhelmed with responses but I know many of you out there have heaps of ideas. So please get in touch, especially those of you with layout planning ideas. Here's your chance to put some of your theories into practice without having to take on the commitment yourself!

Exhibition Layout

Work is still proceeding with particular attention being paid to track connections over module joins. Rail joining segments have been made to go between each module. The aim is, of course, to ensure reliability, ease of erection and good appearance. The yard points have been further re-worked and re-designed. We hope to have the layout at the Toowoomba Train Show in an easy to erect and far more reliable condition with better scenery than previously displayed.

The May AMRA Show

As usual the annual AMRA May show will be held on the May long weekend on the 3rd, 4th and 5th. Besides the large number of layouts on display there will also be many trade, club and society stands. This is also a wonderful place to meet up with modelling friends, especially those you don't often see.

Snippets

I've said it before but it is worth repeating, the NMRA's *Scale Rails* magazine is a top class source of modelling information and better than some of the commercial ones we've grown up with. For instance, look at the February 2008 issue. A great article to

improve DCC reliability with simple filters and a seminal article on hand-made turnouts for those using or intending to use the Fast Track jigs or any other method of hand laid turnouts.

Comment

I was recently a leg in an NMRA email, asking "What's on your bench at the moment". Although this was an informal questionnaire, and perhaps no one kept records, it did reveal some interesting things.

Firstly, it seems that we all have workbenches. That seems to say that we all need to do some manual work at some time in our hobby. I say, "thank goodness", that with all of the fantastic gear out there we still can't build a decent model railroad straight out of the boxes. A lot of items still require some work on our part.

Locos need weathering, freight cars don't necessarily come with the couplers we like nor the right sort of door, structures need a roof gutter, bridges need shortening etc. I hope it is always like this so that we all can have the thrill of putting our own stamp on items. Besides, there are many of us who just like using our hands. From this questionnaire, it seems we all do.

Diesel modifications to suit our particular railroad's characteristics featured highly in this survey. These were the small details such as horns, winterisation hatches, sunshades and so on. I didn't notice anyone saying they were installing rerailers however. These are pretty obvious details hanging below most diesel running boards. Even more so in the modern era where most are bright orange in colour!

One frightening thing was the number of us having things on our workbenches but unable to work on them because of an injury or illness. There were so many of these, myself included, that it almost seemed that bad health was a requirement to belong to the NMRA! Perhaps what it was really saying was, we are getting old – many of us at least.

This really did sound like a plea for us to quickly get new, younger members. Guys who will have things on their workbenches and doing something with them! We need two thrusts here; a plan to get the young teenager, sick of the amusement cul-de-sac that computer games lead us to. And secondly, a plan to get the late 30's to 40's who are wondering how are they going to use their time after years of sideline football shouting and being a student taxi.

Then we should nurture them so that they'll be writing interesting articles in journals for us and taking the reins of our various NMRA management committees. We oldies can sit back and read their stuff! Luckily for us in Division 1, we have some young members but we need some more. If every Division went out and got one extra young member per year right throughout the NMRA, think what a team of experts we would have in a few years!

How about a different approach? If every Division found a single keen young modeller, we could pay for

his or her membership for the first year. Now that wouldn't be too much out of our budgets. A few might drop through the cracks but I am sure we would have a surge in young membership that we would all gain from in years to come.

When I first joined the NMRA a long time ago, there was a *Bulletin* which had in it an article about the advantages of NMRA membership. I keep meaning to do a hunt for this but never seem to get around to it. Can anyone remember it? If so please dig it out because it should be published at least once a year.

We do need to have a better public front. That recent article in the Brisbane *Courier Mail* and many other publications about Rod Stewart's layout could trigger off a rise in membership. I'm not into pop or rock and roll but I'm sure there must be fans out there that are thinking about following their idol. Maybe we need more articles about high profile people in our hobby press. But we also need to add to those articles with reasons why we model and why this is the best hobby in the world.

Daniel Calvert's Portland and Western RR

Daniel's railroad is based on the contemporary Portland & Western RR (PNWR), a shortline with over 500 miles of trackage in Oregon, USA. The PNWR runs on ex-SP trackage and interchanges with the UP. The PNWR is owned by the Genesee & Wyoming (G&W), a company that owns shortlines in several states in the USA, Mexico, Canada and even Australia. G&W amalgamated two Oregon RR's under its control, the Willamette Pacific (WP) and the PNWR. Although PNWR is now officially the sole entity, the corporate herald on quite a lot of equipment is lettered for the WP!

From the modelling perspective, the PNWR offers rich potential. Oregon is a very green state and a layout portraying it can legitimately make ample use of wooden trestles, tree-clad hillsides and plenty of industries. The loco fleet is a fascinating and colourful mix of pre-owned diesels, some painted in the PNWR orange and black, many in other liveries including original SP, St. Lawrence & Atlantic, Utah Belt Railway, ex-ATSF war bonnet yellow and even the last remaining SDP40F still decorated in ex-Maersk colours applied by ATSF!

Recently a GP40-2 in full Alaska RR colours has arrived on the scene. There is also a GP9 in 'black widow' colours. Motive power includes GP40s, GP39-2s, SD9s, SD45s and SW1500s. A privately owned F7 painted in GN colours and an RSD5 in Nickel Plate colours have also been used when motive power is short. Up to 7 locos can be allocated to a train although many consists have 3 or 4 engines up front.

There is a very active Yahoo discussion group devoted to the PNWR. Hence it is easy to keep up to date with events, rumours and developments on the prototype. A dedicated group of enthusiasts keep a regular stream of images coming onto sites such as

Railroad Picture Archives. I visited Oregon in 2006 and took advantage of the contacts I had made to explore some of the PNWR system and facilities and take as many photos as possible!

Layout construction commenced about fourteen months ago. As my track is being hand-layed, progress is best described as leisurely. However, a circle of track now navigates the 26 x 14 foot room complete with passing loops. The objective is to have a yard, loosely based on Albany, Oregon, that allows for interchange with the UP and a route to a second yard with customer industries and trackage running through typical Oregon scenery. The intention is to impart a feeling of the prototype without being overly specific about exact locations, particularly of specific industries and towns. However other aspects, such as motive power, will be very close to prototype. A project currently underway is the conversion of an Atlas GP38s (early model) into GP39-2s that requires heavy kitbashing and detailing.

Now that the NMRA visit is over several sections of track have already been pulled out for the implementation of a revised track scheme. I have a strong interest in detailing and weathering freight cars, detailing locomotives, building structures and scenery yet my time is limited. So in the next twelve months I need to remember to keep things fun - as they should be. I will attempt to balance my modelling interests by introducing some finished motive power, some detailed centrebeam lumber cars, some structures and scenery plus aim for completion of the track work.

Below are listed some references you might find useful for handlaying track and points as well as the availability of scenic material.

For handlaying turnouts *Model Railroader* December 1989, p.104-113, by Tony Koester.

Model Railroad Craftsman May 1998, p.86-93 and June 1998, p.82-89, both by Rich Fortin.

Good advice available from Iain Rice in *Model Railroader* January 2004, p.144-147.

Building points at the bench then shifting them to the layout by Tom Piccirillo in *Model Railroader* December 2007, p.82-87.

More handlaying ideas in *Model Railroader* August 1985, p.66-69 by Jim Mansfield and *Model Railroader* May 1991, p.96-99 by Lee Vande Visse.

To answer some queries, 10 kilo lots of plaster bandages may be purchased from:

Art Business Pty Ltd

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Mortdale NSW 2223

Australia

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Website: www.artbusiness.com.au

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The current price on the site for the 10 kilos carton is \$79.95+GST \$7.99 Total \$87.94.

Daniel Calvert

Division 3 Victoria

By Rod Hutchinson

Report for February 2008

The first meeting for 2008 was held in February on Sunday 17 at the home of Paul and Kath Ritchie. The February meeting is traditionally at this venue located in the city of Ballarat west of Melbourne on the road to Adelaide. Warm to hot temperatures ensured that summer kit was de rigueur for the day, and 17 people signed the attendance book.



Dolly Varden Powerhouse

Models on display

John Hunter (courtesy of Dan Pickard) - O scale Dolly Varden Mine House, Paul Ritchie - O scale Strong Station, Laurie Green - O scale Garage Diorama, Ken Hughes - O scale structure; John Cracknell - HO Austrains VR Y class diesel; Peter Macdonald - O scale Bachmann Porter and Shay and BGM NA Baldwin (Puffing Billy); Rod Hutchinson - HO N30 O&K kit from Japan and Nigel Lawton (UK) N scale Bachmann Docksider re-motoring kit. Grant McAdam - O scale vehicles.



Laurie Green's Garage Diorama

Reading matter

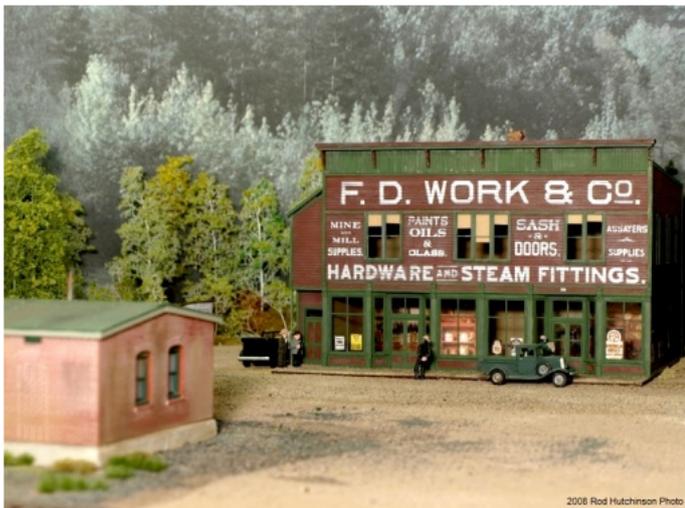
John Dennis; Snailbeach District Railways (UK) and The Bellreive to Sorrell Railway (TAS).

Paul Ritchie has an extensive layout in Southern Pacific style. There is a mix of HO and S scales. Paul also has an interest in US trolley cars, and was spotted displaying them at the Sandown exhibition in March.

Our Superintendent, Grant McAdam, reminded participants of the up and coming model railway shows. Paul Ritchie advised that the Ballarat Model Railway Exhibition will not be held in 2008. Grant closed the meeting by thanking Paul and Kath for their hospitality in opening up their home by presenting them with an NMRA thank you plaque.

Report for March 2008

The second meeting for 2008 was held in March on Sunday 16 at the home of Bill and Karen Black. The March meeting is traditionally at this venue located in Emerald, not far from the sights and sounds of the Puffing Billy Railway's station at Emerald.



Bill Black's Layout

Another hot summer ensured that summer kit was again de rigueur for the second meeting in a row, and 18 people signed the attendance book. Attendees came from far and wide to this meet, one from Warragul (SE), Kyneton (N) and two from Geelong (SW). It is really good to see that modelling is alive and well in rural Victoria. Bill has an extensive Sn3 layout based on the D&RGW System, with sound and DCC. Most of his equipment is high quality imports from the United States.

Models on display

John Franklin - HOn3 WSLC side opening wagons; Mal Carroll - O scale VR narrow gauge NT & NH scratch built stock; Grant McAdam - O scale hand painted people; Gavin Hince - railcar; Adrian Gunzberg - scratch built Sn3½ WAGR Dd & W class steam locomotives; Bill Black (host) - Sn3 D&RGW layout.

Reading matter

Bill Black - Colorado Central; Rod Hutchinson - Australian Railway History, Jan 200; Light Railways,



Adrian Gunzberg's scratch built WAGR W Class Sn3 1/2

Feb 2008; Newsrail, Jan 2008.

Our Superintendent, Grant McAdam, reminded participants of the up and coming model railway shows this Easter weekend at Collingwood and Bendigo.



Peter MacDonald's O Scale Bachmann Porter

NMRA conventions will be held in Brisbane, September 2008; Sydney, October 2009; and the Australian Narrow Gauge Convention in Sydney, Easter 2009. Some members have advised they will be attending the National Narrow Gauge Convention in Portland, Oregon, in Sep 2008. Grant closed the meeting by thanking Bill and Karen for their hospitality and presenting them with an NMRA thank you plaque.

Report for April 2008

The April meeting for 2008 was held on Sunday 20 at the home of Gavin and Louise Hince. Gavin is the owner of the On30 Pacific Coastal Railway, and Editor of the *Narrow Gauge Down Under* magazine. A beautiful Melbournian Autumn day ensured a pleasant meeting was had by the 20 people who signed the attendance book, including two guests, Matthew and Timothy Bastin (father and son).

Models on display



Mal Carroll's scratch built VR NT in O Scale

Rod Hutchinson - Scenic Express super tree material (bulk pack), Mini Metals HO 1936 Ford, Athearn HO Model T Ford; Dan Pickard showed off four O scale scratch-built buildings for the Dolly Varden Railway that he and John Hunter are building; John Franklin -



Grant McAdams O Scale figures

HOn3 PSC Gramps tank car; Michael Holien - HO Broadway Ltd Big Boy, NA 18A and Climax 1694 built by Peter MacDonald; Peter MacDonald - Bachmann On30 Shay, Climax and Porter; Robert Powell - 1:24 Presier people and 1:24 Corgi Mettoy tinsplate London taxi; Laurie Green - Large scale oil storage tank and O scale casting masters; Gavin Hince (host) - On30 Logging Layout.

Reading matter

Grant McAdam and Robert Powell - An assortment of mostly Narrow Gauge prototype and modelling magazines; Rod Hutchinson - Book, Tuning for Beginners by Ron Lafever.

Our Superintendent, Grant McAdam, reminded participants of the up and coming NMRA conventions that will be held in Brisbane, September 2008; Sydney, October 2009; and the Australian Narrow Gauge Convention in Sydney, Easter 2009, for which a strong Victorian contingent is expected. Four members have advised they will be attending the National Narrow Gauge Convention in Portland, Oregon, in September 2008. Grant closed the meeting by thanking Gavin and Louise for their hospitality and then presented them with an NMRA thank you plaque.



Paul Ritchie's O Scale Strong Station

Division 4 Western Australia

By Frank Godde January

We started the year's events off with a meeting at Peter Scarf's residence. Frank spoke about the new program and what he had planned for the group this year, dividing the months into six meetings, six workshops and asked for our support throughout the whole year.

Phil Knife presented Rod Tonkin with his achievement award for Author. Rod has been a contributor to the Australian scene for many years, writing about his layout and various diesel electric locomotives. Rod produced a graph in scale millimeters advising recommended weights for rolling stock. All present took a copy.

Gerry Hopkins and Sowerby Smith had sent DVDs which were to be given at the next meeting for members to view.

Peter was then called on to give the first talk of the year which started off with handouts of the Washington Idaho & Montana Railroad map and a tour route map. Having set up two computer screens and starting with a photo show of where he toured whilst in the United States, he proceeded to tell us about the Depot at Potlatch which was being brought back to its former glory by the local historical society and ending with a finished shot of the building. Running for more than 30 minutes, complete with handouts, Peter achieved points towards a certificate. This seemed like a good idea and so I thought up a plan for next month's meeting. As a footnote, Potlatch was known as "The White Pine Line". The wood was mainly used for making paper. We finished with some refreshments and some time in the railroad room.

February

Before I start with this report, I must mention the phone call I received from Jim Anderson asking for help to break down his N scale layout. Four lads showed up on a Saturday and away we all went. For the first part it was quite easy but as time progressed it became frustrating. The use of so many screws and full strength glue made it quite impossible to remove certain sections. We saved three large sections and Jim was grateful.

The February Meeting

The President's award or The Hopkins/Bone award was presented to a smiling Allan Perry (photo attached) [*Ed. Allan's Profile will appear in the Spring MainLine*]. Frank gave a brief description on the reason Allan was the first to receive it and reiterated that it was open to all others should they have the urge to inspire themselves.

'Tank Day', as it was named, started off with a hand out of various sketches of tanks and positions to place them. Frank ran through the notes firstly explaining how



Allan Perry receives the Bone/Hopkins Award from Frank Godde

various tasks were done. Rod T. had brought along some printouts of a spring water tank on a wagon and also paper work on a pickle wagon which really looked good. An explanation was given as to why the Americans used these wagons and most of the members present requested copies of the drawings.

Not everyone there were interested in 'tank day' but I had four participants whilst the others read the *Narrow Gauge Gazette*. Others just watched on as Frank showed them how to make a shed out of polystyrene to sit the water tank on. This involved cutting the styrene and turning it into stone block work. All were asked to take away materials to carry on with the work at home.

Refreshments were served by the host and much chatter was had... of course. It was a good day.

Division 6 South Australia By Ron Solly

The April meeting's location had to be changed as Trevor T. became ill so it ended up at the home of Ron Solly - at the other end of Adelaide compared to Trevor's. Nine names appear on the attendance sheet.

The ARC are not having ballots this year, as there were just enough nominations with the details as follows: -

Pres: Sowerby Smith, VP: David Howarth, Sec: David Jupp, Treas: Erik Bennett,

Member Reps: Julian Israel, Bob Williams, Ron Seddon.

The raffle was discussed and a new system will start next meeting. This is the last formal meeting under Ron as Div. Super who hands over to Al Harris on June 1.

In between arriving, formalities and after modelling discussions, members could see and discuss Ron's new DCC controlled layout that is slowly developing.

Ian then gave a talk on tree making. Unfortunately, due

to the short lead time, he could not give a full demonstration.

He also displayed new trees from DCC Concepts and the one that we all agreed was first class was the palm tree with etched fronds. Some of the various ground covers available were also on display.



Ian Wade demonstrates trees

As Trevor is not available until after the next meeting in June, Ian Wade has offered to host it again.

June 14 at the DECCA clubrooms.

Please let him know by Wednesday Jan 30 if you are attending and can be contacted on either 8346 5394 or email to neverton@excite.com

Division 7 New South Wales By John Montgomery February Report

The meeting in February was held at Kelly and Gianna Loyd's home in Newcastle. Although the trip for some was lengthy and driving conditions were effected by the weather at least 62 brave souls made their way to the meeting. Due the location of this meeting a number of the attendees were visitors and members from northern divisions. As a result many of the members from each of the respective divisions were able to meet members from other divisions.

Kelly's layout is DCC and is based on the Kansas City Sub of the Milwaukee Road. The predominant feature of the layout was the introduction to the members of his recently installed CTC board. Kelly, Gerry Hopkins and John Parker demonstrated the operation of the layout by sitting at the board and controlling the signals and the points on the layout. Although his layout is not large it proves that it is not the layout's size that determines your enjoyment of the hobby. Kelly's modelling skills were

also on display and it was quite obvious that he is exceptional in this field. The layout ran flawlessly all afternoon and the members that I spoke to were very impressed.

Members were reminded about the bus trip to Taree in June and the upcoming Conventions in Queensland in 2008 and Sydney in 2009.

A visitor from *Motive Power* and his son attended the meeting and showed us the latest copy of his magazine and some of their electronic equipment. This equipment is now on sale to the public.

Three achievement awards were presented. Two of these awards went to Kelly Loyd.

A number of the members met Kelly's parents who were visiting for 6 weeks from the United States. We hope they have a wonderful time in Australia and they have a safe return home.

A wonderful afternoon tea was provided by Gianna who was ably assisted by some of the members' wives.

March Report

A large contingent of members headed for the Hills in March as visitors of the Hills Model Railway Society in Baulkham Hills. Some 70 members attended, not including the dozen or so members from the Hills Club.

The clubhouse contains 5 layouts in 3 separate rooms for members to view. Three of these layouts are HO and two are N scale. Both the new N Scale and HO Scale layouts attracted the most attention.

The N Scale layout had its inaugural run on the meeting day as the wiring was only completed in the week leading up to the meeting. The night before the meeting it was turned track side up. To the relief of the members and visitors it performed flawlessly. The Hills Club members used the day to run in the layout by using very long trains. Some as long as 90 wagons with up to 6 locos doing the pulling. It is hoped that the layout will appear soon on the exhibition scene.

The HO layout also performed well and was very well scened. Many of the Hills Club members ran their trains on this layout during the afternoon. It was pleasing to see so much switching being conducted as well as mainline running.

In the main part of the meeting the members were informed John Baker had his operation and was doing well. Mention was made of the upcoming Fred Gill auction/sale. Ray Walter announced the sale of an On30 collection. Steve Pettit promoted the mini layout competition for the Narrow Gauge meeting. Jason McNair informed us of the upcoming exhibition in August at Bligh Park where the Coffs Harbour group were displaying their exhibition layout. Eric Bennett also advised that he had a DVD of his layout running a train of 207 pieces of rolling stock and you can contact him for a copy of this DVD.

Gerry Hopkins informed us that all of the relevant information was now available on the NMRA web site

for the September 2008 Convention in Mt Gravatt in Queensland.

It was announced to the members that the Taree bus trip was cancelled due to a blow out in costs and the lack of member support.

Our thanks go to the wives of the Hills Club who prepared and served a wonderful afternoon tea for the members and visitors.

April Report

The April meeting was held at the home of Gerry and Lauris Hopkins on the Central Coast. As usual more than 70 members and their wives attended the meeting. It was also noted that there were quite a few members who travelled from the Newcastle area to the meeting.

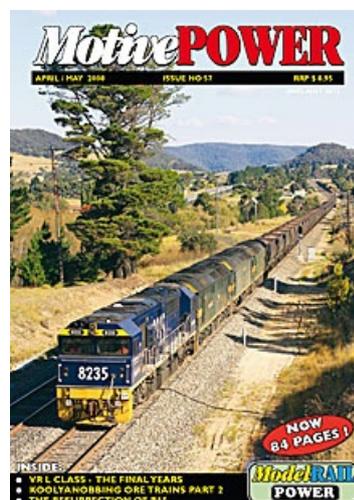
The layout has been improved since the last visit. Gerry has been busy upgrading the scenery with some new trees and buildings. More of the rolling stock have loads added to them reflecting that the trains have a purpose for running on the layout. The layout, as usual, ran extremely well. The members were very impressed at the quality of the layout. Gerry enlisted the help of a few of his Central Coast group to assist in the running of the layout on the day. Anyone else who was interested in taking in throttle was also encouraged to participate.

The business part of the meeting was relatively short but contained information on the upcoming Queensland Convention which is fast approaching, the upcoming sale/auction of the late Fred Gill's estate at his former home at Winston Hills on June 7. Further information on the sale/auction can be found on the NMRA web site where there are many pictures and information on the items.

One scenery award for the Achievement Program was given to Sam Mangion for the wonderful work he has undertaken since we have last visited his layout.

I would also like to thank the ladies for assisting Lauris in preparing a very nice afternoon tea.

Check out Motive Power, available at your newsagent or favourite hobby shop!



Signals on the Kansas City Subdivision

By Kelly Loyd

Part 2 – The Design

Some definitions (from the Consolidated Code of Operating Rules)

Before starting to design a signal system, it is worthwhile to review the definitions from the Operating Rules of the North American prototype. For me, that is The Milwaukee Road in the 1970s. Railroads need to have precise definitions so that the interpretation of the rules will result in safe operation. If there is any chance of rules being interpreted more than one way, the rules have to be updated. Since Railroads also need Signals to work with their already established timetable and train order operation, notice the definition of CTC below. CTC has signals supercede train authority. The whole idea of a signal system is to authorize train movement safely and to expedite the movement of trains. I realize these definitions may seem a little dry, but they are necessary to the proper implementation of a signal system.

Block – A length of track of defined limits, the use of which by trains and engines is governed by block signals, cab signals or both.

The Block is the basic unit of track that a train may occupy. Blocks could be long or short, depending on the traffic density and other factors. If a railroad had a high traffic density, then they could put in more blocks. It helps to think of it this way – 1 train per block can run at maximum speed; two trains in a block means that the following train will have to move at a restricted speed. So, more blocks = more trains that can run at speed in a section of railroad.

Block Signal – A fixed signal at the entrance of a block to govern trains and engines entering and using that block.

This is just the general definition of the signal that controls entrance to a block. Later on we will come to different types of signal.

Absolute Signal – A block or interlocking signal designated by an 'A' marker or by the absence of a number plate.

Interlocking Signals – The fixed signals of an interlocking.

Interlocking Limits – The tracks between the outer opposing absolute signals of an interlocking.

Interlocking – An arrangement of signals and signal appliances so interconnected that their movements must succeed each other in proper sequence and for which interlocking rules are in effect. It may be operated manually or automatically.

Manual Interlocking – An interlocking operated by an employee by means of an interlocking machine.

Centralized Traffic Control System (CTC) – A block signal system under which train or engine movements are authorized by block signals whose indications supersede the superiority of trains for both opposing and following movements on the same track.

See how all the definitions come together here? You have blocks and signals controlling all train movements.

Control Operator – An employee assigned to operate a CTC or interlocking control machine.

Signal Aspect – The appearance of a fixed signal conveying an indication as viewed from the direction of an approaching train; or the appearance of a cab signal conveying an indication as viewed by an observer in the cab.

Signal Indication – The information conveyed by the aspect of the signal.

What the system needed to do.

Where I have put information in parenthesis (), it refers to the definitions given previously.

1. *Detect Train locations (Blocks)*. I decided that I would need to be able to determine where trains were located on the layout, so I needed some kind of system to detect trains sitting on track. Refer to the Block definition.

2. *Control turnouts (Interlocking)*. I needed to be able to remote control turnouts as this is a basic requirement of interlocking plant on railroads.

3. *Control signals (Interlocking Signals)* The dispatcher needs to be able to request that a signal is cleared.

4. *Lock turnouts when signals are cleared over them and when trains are on the turnouts (Interlocking)*. It's no good giving a train a clear signal when someone else can change the turnout under the train.

5. *Prevent unsafe signals to be displayed (Interlocking)*. The system should perform all of the checks to ensure that the signal is safe to clear.

6. *Show train location on a control panel (CTC Manual Interlocking)*. The dispatcher needed to be able to see at a glance where trains are located on the track so they can check on movements and see when it is clear to authorize another movement.

7. *Show Signal status on a control panel (CTC Manual Interlocking)*. When the dispatcher/operator requests a signal be either put to stop or cleared, they need to see if their request was granted. When trains pass by signals, the signals should then display stop and this should also be reflected on the control panel.

8. *Show Turnout status on a control panel (CTC Manual Interlocking)*. When the dispatcher wants to change a turnout, they will need to see if it is locked and whether it is lined correctly.

9. *Read signal lever position on control panel (CTC/Manual Interlocking)*. This is how the dispatcher will request that a signal is cleared. Note that the dispatcher does not have direct control over the exact

signal indication, but rather they request that the signal shows a 'proceed' indication.

10. Read turnout lever positions on control panel (CTC/Manual Interlocking). This is how the dispatcher changes the turnouts on the layout.

11. Show 'direction of traffic' indicators on control panel (CTC). This perhaps the most complex requirement in that the system needs to keep track of the direction the block was signaled for when the train entered the block. This is done so that an opposing train cannot get a clear signal to proceed against the first train.

Design for each requirement

1. *Detect Train Locations.* I chose current sensing detectors and divided the railroad into electrical blocks. The detector outputs are connected to SMINI board inputs. The current sensing detectors can detect as little as 1 milliamp of current flow between the rails. For locomotives, this is easy. For rolling stock, I had to make resistor wheelsets so that each and every piece of rolling stock could be detected. If you leave a boxcar sitting by itself on my main track, the panel will show the block as occupied. Even after you turn the system power off and back on again. This arrangement would use one input pin per block. The layout was divided into 9 blocks in total. A larger layout would require many more blocks. I selected Bruce Chubbs DCCOD (DCC Optimized Detector). This is a good design as it isolates the DCC track power from your signal electronics. It is very sensitive and very accurate. I was able to build 10 of these for a unit cost of \$15.00

2. *Control Turnouts.* I chose to use 2 output pins from the SMINI to control the tortoise switch machines. The circuit for this control is found in the C/MRI User Manual.

3. *Control Signal LEDs.* I chose to use 2 output pins from the SMINI to control each bi-colour LED that is used on the layout. Some signals have 3 LEDs, others have 2 LEDs and some have just 1 LED. The circuit for this control is found in the C/MRI User Manual.

4. *Lock Turnouts.* I chose to use a software program to control turnout locking. This is where the C/MRI system really begins to shine. You give all of your equipment meaningful names and then you can write simple program statements to control these. I designed this so that a turnout within an occupied block would be locked. The turnout is also locked if there is a signal cleared across the turnout.

5. Use computer software logic

6. Use output from SMINI board to control LEDs on control panel.

7. Use output from SMINI board to control signal indicator LEDs on control panel.

8. Use outputs from SMINI board to control turnout indicator LEDs on control panel.

9. Use inputs from SMINI board to read switch positions on control panel.

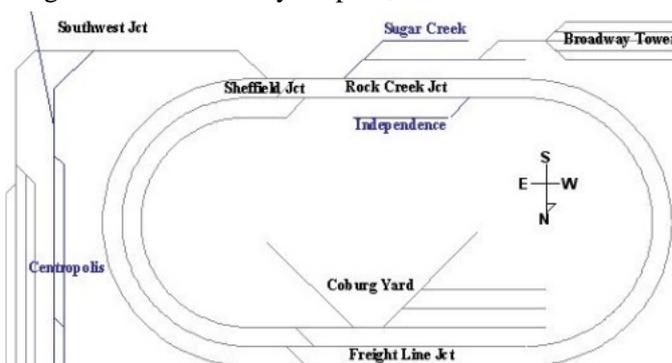
10. Use inputs from SMINI board to read switch

positions on control panel.

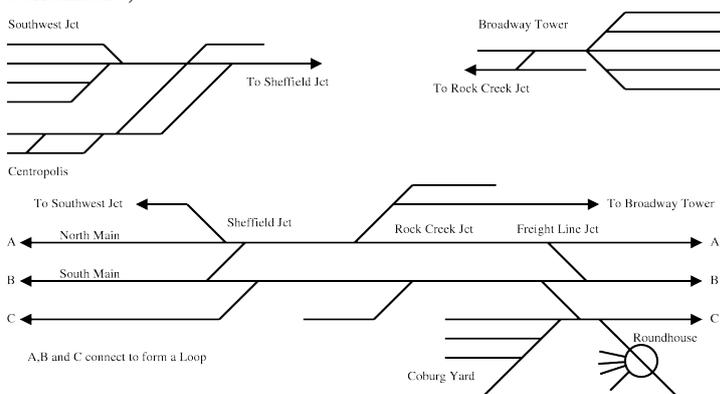
11. Use outputs from SMINI board to control direction of traffic LEDs on control panel.

Design for the Control Panel

I began by converting the layout plan into a schematic diagram. Here is the layout plan;

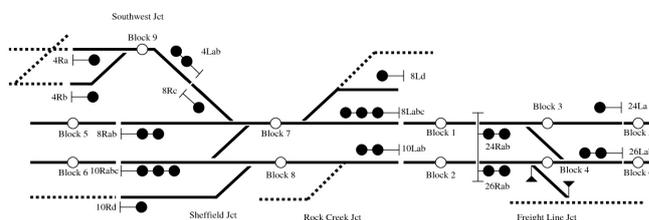


Taking a cut out of the loop on the left hand side and straightening out the track yields the following schematic;



Southwest Junction and Broadway Tower are staging areas and are not signaled. Centropolis is an industrial switching district and is not signaled.

The next step is to decide where signals should go. The results are below:-



Blocks

The tracks with dotted lines are uncontrolled track. There is no block detection in these areas. Each white circle represents a block. The block extends from one line break to the next line break.

Signals

The black circles represent signal heads. Where a signal faces to the right, it means that a train approaching from the left of the signal will see the signal. Likewise, when

a train is moving from right to left, the train will observe all of the signals that point to the left. A signal protects the entrance of each block. For example, a train travelling from Southwest Junction (top left of the diagram) will encounter Signal 4R first, then Signal 8R, then Signal 24R. A train travelling from Broadway Tower (top right of diagram) will encounter Signal 8L first, and then Signal 24L. All signals have left and right positions. The rule is all trains travelling from Left to Right will be governed by Right signals. Trains travelling from Right to Left will be governed by Left signals.

Turnouts

Each turnout is labeled with an odd number. Some turnouts are crossovers and comprise both turnouts in the crossover. The Normal position of the turnout is the unbroken line, and the Reverse position of the turnout is the broken line.

Now there is enough information to describe the movement of a train from Broadway Tower to Freight Line Junction on the North Main (refer to the schematic, this is the top of the two main tracks.). First, Turnout 15 must be in the Reverse position. Turnout 9 and 7 must be in the Normal Position. There must not be a train in the block on turnouts 7, 9 and 15 and there must not be a train in the block beyond. Finally, Signal 8L will be cleared (shows green). This will allow the train to proceed to Freight Line Junction where they will probably stop at signal 24L.

Using the Panel Levers, the operator would set Turnout 7 and 9 to Normal and Turnout 15 to Reverse. After the Turnouts completed their movement (remember these are electric motor style turnouts and can take up to 10 seconds to complete their traverse), the Operator would use the Signal Lever for Signal 8 and set it to the L position. If all the conditions for a safe signal are present, then Signal 8L will show green. The Turnouts will then be locked so they cannot move while a train is

moving over them. The Turnouts will stay locked until the train leaves the block on the turnouts.

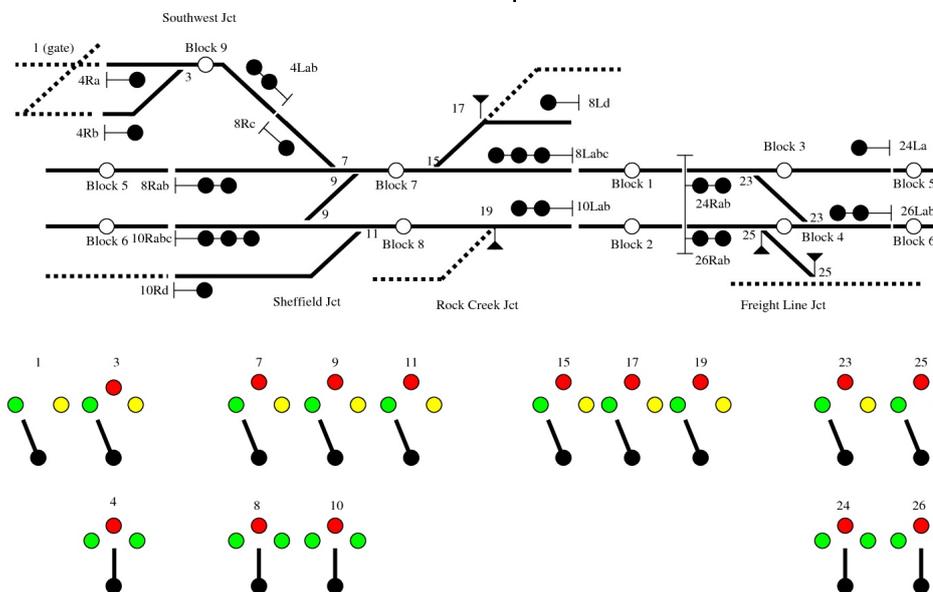
See bottom of page for full signal diagram.

This shows the arrangement of the levers. The top row are the turnout levers and the bottom row are the signal levers. The normal position of the turnouts is the lever set to the left, while the reverse is the lever set to the right. The normal position of the signal levers is straight up at stop. To clear a right signal, the lever is moved to the right. Likewise to clear a left signal, the lever is moved to the left. You can see that it is not possible to clear two opposing trains into the same block that is protected by opposing signals on the same lever as the lever can only be left or right, not both. Other checks are made to ensure that no other signals oppose the movement. I will provide more detail on that when we come to the logic design.

The circles above the levers are indicator LEDs which confirm the lever input. If you give a right signal and it is not safe to do so, the indicator will not change. So the indicators are feedback to the operator which confirm the operator's input. The middle indicators above the turnout levers are lock indicators and they show that the turnout is locked from moving. The turnout could be locked because there is a signal cleared across it or a train is standing on the turnout. In either case it is not safe to move the turnout, so the system locks it. The operator can move the lever, but no action will take place.

Next Issue - Part 3 - A Lesson In Logic

We will discuss the computer connection and how software brings the Signal system to life. Right now, it is simply a collection of switch motors, signal leds, panel indicators and panel switches. Now we need the logic behind all of these physical components to actually make something happen.



Fully worked CTC Control Panel - based on Union Switch & Signal Prototype

Retail Directory

<p>ARHS NSW Bookshop 67 Renwick St, Redfern NSW 2016 Ph: (02) 9699 4595 Fx: (02) 9699 1714 www.arhsnsw.com.au Mon-Fri 11am-5pm Sat 9:30am-3:30pm</p>	<p>Model Railroad Craftsman Shop 2 - Level 1, 64-70 Main Street, Blacktown NSW 2148 Ph: (02) 9831 8217 Fx: (02) 9831 4132 Email sales@mrrc.com.au http://www.mrrc.com.au Tue-Wed 10am-5pm Thu 10am-7pm Sat 9:30am-3:00pm</p>
<p>Casula Hobbies 62 Moore St Liverpool NSW 2170 Ph: (02) 9602 8640 Fx: (02) 96028874 Authorised Walthers Partner On-Line Dealer Email casulahobbies@casulahobbies.com.au www.casulahobbies.com.au Mon-Fri 9am-5:30pm Thu 9am-8pm Sat 9am-3pm</p>	<p>The Signal Box Model Railways 8/15a Gt Western Hwy Blaxland NSW 2774 Ph: (02) 4739 1799 Mail & Phone Orders Welcome Open Tuesday-Saturday</p>
<p>Anton's Trains Order Service PO Box 236 Castle Hill NSW 1765 Fx: (02) 9899 4484 Email: bognar@bigpond.com</p>	<p>Mountain Blue Miniatures PO Box 287 Blaxland NSW 2774 Email: keith@mountainblueminatures.com, www.mountainblueminatures.com.au Full range available at: The Railcar (NSW), Model Railroad Craftsman (NSW), Buffer Stop (VIC), Cyanotic Hobbies (VIC), Brunel Hobbies (VIC), Christmas Every Day (QLD) Trains & Track (QLD)</p>
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<p>Gwydir Valley Models PO Box 740 Glen Innes NSW 2370 Ph: (02) 6732 5711 Fx: (02) 6732 1731 Email: info@gwydirvalleymodels.com www.gwydirvalleymodels.com</p>	<p>The Railcar 17 The Breakwater, Corlette NSW 2315 Ph: (02) 4981 0668 Fx: (02) 4981 0668 Email: railcar@hunterlink.net.au www.railcar.com.au Contact: Herna or Paul Ward</p>
<p>Berg's Hobbies 181 Church Street Parramatta NSW 2150 Ph: (02) 9635 8618 Fx: (02) 9689 1840 Email mail@bergshobbies.com www.bergshobbies.com Open 7 days</p>	<p>Junction Models Shop 5/449 Main North Rd Enfield SA 5085 Ph: (08) 8349 7464 Fx: (08) 8349 7463 www.junctionmodels.com.au Open everyday except public holidays</p>
<p>Vic Barnes Cycle & Model Train Centre 213 Lambton Road New Lambton NSW 2305 Ph: (02) 4952 1886</p>	<p>Asquith Model Railways Unit 4/113 Hunter Street Hornsby NSW 2077 Ph/Fx: (02) 9482 3242 (PO Box 106 Asquith NSW 2077)</p>
<p>Austral Modelcraft Shop 15 Fairfield St Mt. Gravatt QLD 4122 Ph: (07) 3849 2655 Fx: (07) 3849 8664 Walthers Dealer Tue 9:30am-1pm Thu-Fri 4pm-8pm Sat 9am-4pm</p>	<p>Tom's Hobbies 1001 Victoria Rd West Ryde NSW 2114 Ph: (02) 9809 0530 Fx: (02) 9809 0650 Email: info@tomshobbies.com.au www.tomshobbies.com.au Mon-Fri 8:30am-5pm Sat 8:30am-3:30pm</p>



2008 Rod Hutchinson Photo

Gavin Hince's Pacific Northwest Layout - Sawmill



Sassen Vinegar - Fred Gill's Diamond Valley Lines