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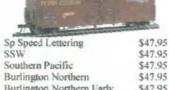
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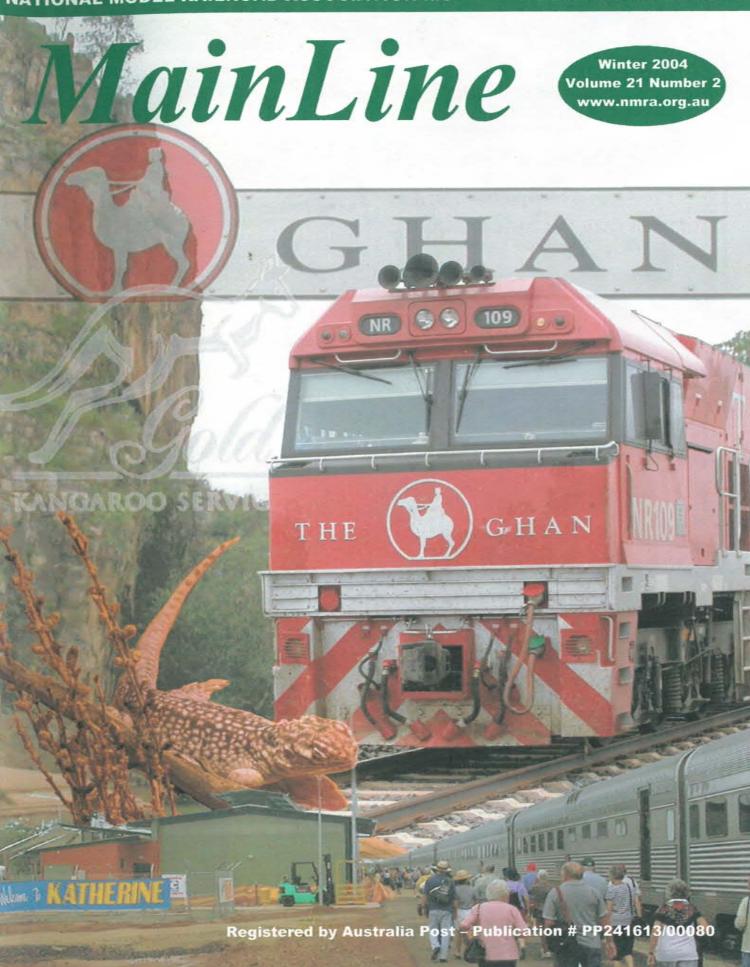
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ON THIS COVER:

Images include NR 109, a lizard from the Wildlife Park in Alice Springs, detraining at Katherine and Ghan signage, all overlaid on a background image from the Katherine Gorge. This computer-generated composite is similar to a series of four exhibition prints featuring the Ghan train prepared following the trip.

Composite image and original photos copyright © Lynn Zelmer, 2004; Gold Kangaroo and Ghan logos are the property of The Ghan/Great Southern Railway.

The next MainLine will be published September 11th.

Schedule of Divisional Meetings for 2004

Division 1 Queensland

For details of Queensland meetings and venue addresses, please contact Glenn Stevens. Meetings start at 1.30 unless advised

(07) 3207-2442

June12/13th	Toowoomba Model Train E	xhibition NMRA (Div 1)	Stand Carolina Pacific Layout
July 10th	Bob Brown	63 Viscount Street,	Bray Park
September 11th	Grahame Davis	6 Waimea Drive,	Robina
November 6th	Glenn Stevens	6 Gunsynd Court,	Birkdale
	Division 1 Christmas Picnic		

Division 2 Canberra

June 12th	Jess Brisbane	21 The Pines Avenue	Narrabundah	(02) 6260-6427
July 3rd	Stephen Walker	5 Pasmore Close	Kaleen	(02) 6242-8786
July 31st	John Bullen			(02) 6288-7312
August 28th	Ken Macleay	31 Shepherdson Place	Isaacs ACT	(02) 6286-2624
September 25th	Peter Weller-Lewis	5 Tarilta Court	North Terrace Queanbeyan	(02) 6284-4363
October 23rd	John Gillies	14 EarleStreet	Lyneham ACT	(02) 6248-8408
November 20th	David Service	1 Kleinig Street	Nicholls ACT	(02) 6255-7447

Division 3 Victoria

All meetings start 11.30 Sunday.

June 13rd	Geoff Truman	12 Goodwin Close,	Hoppers Crossing	(03) 9748 7864
July 18th	Rod Hutchinson	40 Erskine Ridge,	Mooroolbark	(03) 9726 6187
August 15th	Peter MacDonald	4 Boyd Street,	Bacchus Marsh	(03) 5367 3601
September 19th	Laurie Green	20 Nambour Drive,	Sunbury	(03) 9744 5188
October 10th	Gavin Hince	25 Dwyer Street,	Clifton Hill	(03) 9489 4527
November 14th	John & Lynn Cracknell	55 Donnybrook Road,	Norlane West	(03) 5274 1569
December 5th	Grant McAdam	194 Booran Road,	Ormond	(03) 9578 8685

Division 7 New South Wales

Sydney meetings organiser Divisional Superintendent John Baker (02) 9629-2349. Meetings start 2.00 Saturday unless indicated differently. 24 hour recorded message meeting information line now in operation for NSW Group (02) 9975-5565

June 12th		Erik Bennett	33 Kananook Avenue	Bayview	(02) 9997-7971
July 10th	(11am - 1pm)	John Parker	108 Gallipoli Avenue	Umina	(02) 4341-6347
NB: Double Meeting	(2pm - 5pm)	David Swinfield	13 Castle Circuit	Umina	(02) 4342-0700
August 15th	Sunday	Colin Brettle	140 Fragar Road	South Penrith	(02) 4736-4266
September 11th	(llam - lpm)	John Booth	Dora Street (go to end)	Adamstown, Newcastle	
		Newcastle Model Raily	vay Club. Sausage sandwich lunch will	be provided for \$3.00 each or 2 for \$5	.00. Soft drinks \$1.00 each.
NB: Double Meeting	(2pm - 5pm)	Doug Cook	41 Mawson Street	Shortland, Newcastle	(02) 4951-6925
October 9th		Bob Carr	22 Haywood Street	Epping	(02) 9614-2731
November 13th		Rod Smith	26 Peel Road	Baulkham Hills	(02) 9624-3912
December 4th		Christmas Party	Venue to be advised.		

Stan Agar*	Christchurch NZ	HO	L&N	
Barry Meynell*	Atherton QLD	НО	Gulf & Northern	
Stephen Reynolds	San Remo NSW	On30	Australian	
Ian Roffey	Oyster Bay NSW	НО	BR 1940-70s	
Peter Grace	Redfern NSW	HO/On30	DRGW/SP/BNSF/UP	
Peter Whitsed	Hornsby NSW	НО	UP	
Al Harris	Modbury North SA	НО	AT&SF	
Anton Bognar	Castle Hill NSW	НО	Australian	
Roy Berryman	Graceville QLD	НО	AT&SF/BNSF/DRGW	
Barry Pate	Greensborough VIC	HO/On30	Logging/VicRail	
Chris Hinchliffe	Charlestown NSW	N	BN - SF	*Already members of US,
John Arrowsmith	Riverstone NSW	НО	AT&SF 1953	now also joined AR
Ian Carson	Altona Meadows VIC	HO	Streamliner Era	now also joined Aix



Official Publication of the Australasian Region

NATIONAL MODEL RAILROAD ASSOCIATION

Registered at Australia Post Publication No PP241613/00080

Editor / Publisher **David Jupp** Assistant John Saxon

ARTICLE SUBMISSIONS:

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

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MainLine President's Report

Division 7 NSW created

The very strong support by you, the members, to amend the Australasian Region Constitution has enabled your Board to formally recognise that Division 2 really only covers the ACT and surrounding areas.

A Division 7 covering NSW has now been created with John Baker as the Division 7 Superintendent, John has been the Sydney Meeting Organiser for several years and from a practical viewpoint nothing will change. Sorry John but the same salary and conditions apply as before!

Division 6 South Australia

The Region layout along with David North our Region Trustee, Rod Smith and myself will be in Adelaide in June. Ron Solly and the Division 6 members invited us to bring the lavout to the exhibition in Adelaide over the Queen's Birthday holiday weekend.

This will be a great opportunity to meet South Australian members and promote the benefits of Region membership.

By exhibiting the layout the Division 6 members will raise funds for their Division and the Region. Well done Ron and the

2004 Convention

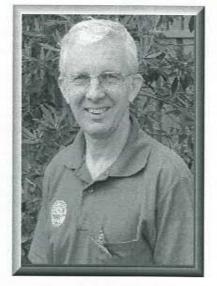
Yes, a convention will be held this year. To encourage interstate members to come to the convention it will be held on the same weekend as the AMRA exhibition at Liverpool on the long weekend 2 to 4 October.

Ron Solly from Adelaide has already indicated that he will be attending.

Members will be able to attend two great model railway events on the same weekend.

You will have the opportunity to come to Sydney and see one of the major model railway exhibitions at Liverpool on the Saturday morning.

Saturday afternoon and evening will be



layout tours followed by a sausage sizzle and hands on operating session at HO SIG's modular DCC operated layout.

The convention will continue on the Sunday at the Epping Craft Centre at Dence Park, Epping, with a convention dinner and guest speaker in the evening.

Monday will again be at Dence Park and will conclude mid afternoon. This will assist those members with long travel

There will be clinics; hands on workshops and side show alley activities. A bring and buy stand for members to sell surplus items from their collection as well as model and photographic contests and model display opportunities.

I am excited by the clinics and activities planned so far and encourage you to come along to learn, participate and socialise with your fellow modellers.

A promotion for the Convention is in this issue of the MainLine. (see page 6)

Full convention information will be sent to all members in August.

Check the Region website for the latest news on the Convention. www.nmra.org.au

Happy modelling

Allan Garbutt

MAINLINE MAINLINE Page 4 Winter 2004 Winter 2004 Page 5



From the Editor:

Firstly, in last months edition I published Piet Hamersma's name incorrectly spelt. Please accept my apologies Piet. It can happen very easily but there is no excuse for it. My mistake.

This issue we start a new initiative called "Meet the Member." I encourage each Divisional Superintendent to select someone who

doesn't already have a high profile and encourage them to submit a picture and some information along the same lines of Ron Solly's introduction on page 13. Please submit to editor@nmra.org.au At this stage we will publish one profile per issue and see how it progresses. For the first time also, you will find a centre picture spread which I hope you find enjoyable. I'll try to make sure there is a good variation in subject material to suit all your interests. This issue it's the turn of the Narrow Gauge loggers. I'm happy to receive contributions for this feature but they need to be high resolution, well focussed and well framed pictures.

Following the rather impressive voting response in our recent ballot, (all take a bow) our constitution has been amended to allow for separate ACT and NSW divisions. Viv Brice will continue as the Superintendent for the ACT (division 2). John Baker has been approached, after a decision by the Board of Directors, to take on the role of NSW Superintendent and has accepted. NSW is now known as Division 7. John has been what could be classed as defacto

Superintendent for many years, organizing meeting hosts in Sydney. Thanks John, you are now officially recognized for your valued contribution and work. We appreciate your efforts in co-ordinating the monthly venues for sometimes in excess of 100 members.

I noticed recently in a publication that Mikes Train House (MTH) recently demonstrated a DCC sound decoder that was capable of operating with both his own proprietary system, NMRA specified DCC and suitable for HO models. I read also that another well known manufacturer is intending to release an extremely cost effective DCC control system. We hope that this competition will be good for our hobby as we await too the release of the new digital Soundtraxx Tsunami sound decoders allegedly held up due to the threatened litigation from MTH. As mentioned in a previous issue, MTH claims to own the patent for 'back emf' control of model trains (read constant speed or cruise control) and is not interested in licensing the technology. It is interesting that Broadway have disabled this feature in its QSI decoders. Lionel has not and use the same OSI decoder. Atlas will be OSI equipped too. Lionel in fact advertise this as a feature in its brochures. Lenz too continue to manufacture decoders with this feature. Could it be that Lionel with their background and financial backing are not afraid of the threat. Perhaps they were not threatened. Unfortunately though, in the meantime end users of Broadway product miss out. We hope that one day the feature will be able to re-activated somehow without cost. Meantime, some great product keeps rolling out from the

Broadway Limited studios. Have fun.

David Jupp

NMRA Australasian Region

Sydney Convention

Saturday 2 October—Monday 4 October 2004

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

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

Model & Photo Contests—Bring & Buy—Ladies Activities—

Sunday Night Dinner & Guest Speaker

Latest news on the website www.nmra.org.au

Regional Roundup

Division 1 Queensland Ian Venables

On a perfect Autumn day, 18 modellers gathered at the home of Allan Thomas at Mudgeeraba just inland from the Gold Coast. The 18 included a good number of our regular NMRA members plus members of the Gold Coast - Tweed Railway Modellers & Diorama Club. As we entered Allan's large garage area two things stood out. Firstly the along-the-wall shelf layout of a QR branch partially completed but with some beautiful work. Secondly, the best models of Australian trees I have ever seen; but more of that later.

The business part of the meeting included a report by the Division 1 Superintendent, Glenn Stevens, on the progress of the Division 1 display layout. The benchwork would be made professionally as it would be cheaper and quicker than building it ourselves, thus saving saving a heap of our valuable (and scarce) time. An overview of the proposed layout was given, which is basically two separate mainlines, running NCE DCC, with the emphasis on scenery and trains. Glenn also reported that Division1 had booked space for an NMRA information stand at the Toowoomba Train Show, 19th & 20th of

After the business was over, the meeting focus became Show & Tell. Leo Fitzsummons of the Gold Coast group displayed his partially complete QR BB18 1/4 that he is scratch building using tin can sheet. His bends/curves were very cleanly executed making the cab in particular, very accurate. The stack was made from a medical thermometer case as this had the perfect beading, with the sand dome made from the base of a small light bulb.

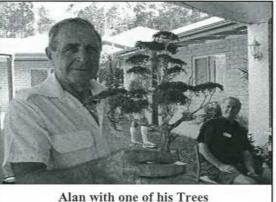


Modellers are known to be very resourceful, but Leo showed by his example, that good models could still be made using the most basic of materials.

Ian Venables 1 displayed the progress of an 0-6-0 switcher which is being highly kitbashed from a MDC Roundhouse kit bought at a Buy & Sell for \$20. Many brass parts have been scratchbuilt for this loco so that eventually it will be a model of the L & N Class B-4 switcher.

Next on the agenda, our host Allan Thomas, explained

how he made those beautiful trees. He had used the old electrical wire method but with a few different twists (pun intended). The frame of trunks and branches were made from multi-strand wire, sometimes with the insulation left on in places. Extra strands were twisted around the main trunk and fanned out in a realistic manner. He had then "painted" them with "No-More-Gaps", and by using rough or smooth brushes he controlled the bark texture. This took away the wire appearance and left him with an armature/branch that was flexible so that further adjustments could be made and bits wouldn't fall off if the tree was bumped.



trunks were then painted in a most realistic way so that a few of us were saving. That's a paperbark, or

eucalypt". Allan then used fine fibre and the usual ground foams to foliage his trees. Another plus was that his trees were a realistic height, some 60 feet or more, and so on the layout we looked at his scenes in a typical manner.

Finally Bob Brown showed us some of the latest offering from Hornby that he had purchased. There was a BR dining coach with the table lamps and the centre interior lights that all lit. A very nice brake van model was shown. The valve gear on the locos was just as impressive as the best American models. The quality of these models was first class and in particular the two steam locos shown couldn't be bettered. Bob said that the 7 pole skewed armatures made these locos perform superbly. Then he displayed his Kato SD-70 that he changed from the original BNSF colours to BN heritage livery, which looked outstanding.

Mention must be made of Allan's On30 Shay that had been much kitbashed by him with added steam winches, chains, tools, etc. Some even said that they could recognise the crew! This was a most enjoyable outing for us all and people seemed reluctant to leave even though many had the drive back to Brisbane and beyond to do.

Division 7 Sydney John Saxon Kim Bradlev

Approximately 40 members attended David Latham's meeting held in his lovely new home overlooking the Georges River at Kangaroo Point. Apologies were given for Allan and Ruth Garbutt (in Canberra with the NMRA layout), David Jupp and Kim plus David North and John Baker who were both ill. David had a 1/12th model of his proposed new layout on display and Bill Kerr brought along a few samples of his wares for the attention of the attendees.

Phillip Moore was the lucky recipient of the lucky door prize,

MAINLINE Winter 2004 MAINLINE Page 6 Winter 2004 Page 7 an Atheam AT&SF reefer provided by John Baker.

In the absence of a layout, clinics were given on soldering, digital picture manipulation, computer tuning of DCC decoders and spreadsheet use for model railroaders by Alex Danilov, Sowerby Smith, Rob Peterson and Gerry Hopkins MMR respectively.



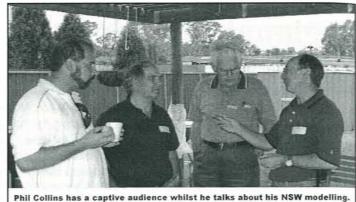
Gerry presented a Golden Spike certificate to Doug Cook and AP certificates to Jack Parker, Bob Carr and Kelly Loyd.

John encouraged members to vote in favour of the new Long Range Plan. He also announced that Peter Jensen had been appointed chairman of this years convention to be held at Dence Park, Epping on the Sunday and Monday of the October long weekend and that the next BOD meeting would decide on the appointment of a NSW superintendent following the changes to the constitution approved at the recent annual general meeting.

Saturday May 8th was a beautiful day in Sydney and approximately 68 members including a large contingency from the Newcastle area turned up to John and Natalie Montgomery's place for an afternoon of friendship and model railroading discussion. John's HO logging layout continues to grow around the perimeter of the double garage and attracted considerable attention. Gerry Hopkins used the layout to present a clinic on getting the best out of digitally photographing your layout. He concentrated in particular on focus and optimising depth of field by using aperture priority and time exposures. The official part of the meeting chaired by Allan Garbutt centred on the welcome to John Baker as the official Div 7 superintendent. David North thanked members for voting for the LRP and Gerry Hopkins presented an award



to John
Parker. Allan
spoke about
the
forthcoming
Convention,
more details
of which are
available on
page 6 of this
issue and will
be
forthcoming



on the www.nmra.org.au website this month. More details as they come to hand.

Thanks to John and Natalie for their hospitality.

Narrow Gauge Special Interest Group

Steve Chapman

The third Narrow gauge SIG meeting was held at Geo Paxon's residence in the sunny Blue Mountains. Attending

where eleven members and three Nonmembers. Meeting started with a show and tell with Ray Walters telling us about some interesting passenger car kits he was



assembling. Next was Mick O'Hanlon going into great detail explaining how to stop glue running down the car body ruining the paintwork. His ideas on fixing the problem were very interesting and clever. We hope to have Mick to do a story for

MainLine on this one. Steve Pettit was next, he showed us his logging trucks explaining how he weathered them and



fitted them out. He also showed us a small building explaining how he did the signs using his computer and printer. Next, John Montgomery showed us how he was building a lighthouse out of a salt shaker, this one looks really interesting. He also went into great detail on how to make a boat out of balsa painting the sides with Jo Sonja's Folk Art texturing paste for a nice textured finish. Next was Peter Grace who went into great detail on his plans for making different models in a few gauges, On30 and Narrow Gauge HO. Hopefully Peter will be telling you directly through the MainLine all about his model making plans.

After the show and tell we had an election for Narrow Gauge Coordinator between John Montgomery and myself. I was given the chance to stay on for another three years service. After the meeting the attendees took turns in inspecting George's fine On3 layout, it just gets better every time I see it. Well-done to George and Celeste, many thanks from all who attended for the fine afternoon tea, and for your splendid hospitality.

Division 2 Canberra

Viv Brice

In February, we met at Tony Payne's place, a little apprehensively since it was during this meeting last year that the Canberra bush fires hit! However, all went smoothly this time. We were pleased to welcome Toni and John Saxon on their visit to Canberra. Toni gave us a little spiel about membership and name badges and then urged us all to vote in the (then) forthcoming NMRA election and proposed rules change. She must have been effective because she left with orders for several new name badges and a request for an application to join!



Tony had the HO modules that he and I are building set up for us all to view and some interesting suggestions were made. We then went up to Tony's layout and had a demonstration of my Broadway Limited Imports Pennsy M1a operating on DC. While several of the sound effects are not available on DC, it was surprisingly easy to operate using quick flips of the forward – reverse switch.

Rob Anderson hosted the March meeting and his theme was 'Recycled Dirt'. Rob has been trying out using real dirt to provide natural colours to his Great Southern Railway layout (Geelong to Eden via the coast). The idea was inspired by Laurie Anderson's layout that we all visited in Cootamundra in January and also from thinking about the cost of scenicking a big layout using commercial products. He gave us a demo of how he takes the raw dirt and then sifts it through various sizes of mesh to give him a variety of sizes of dirt, which while not all the same colour, are all consistent. Rob then showed us his layout and where he had used the dirt and I must say it looked pretty good. He added that dirt does not glue very well with 'wet' water and white glue, so he added up to 20% casting plaster. Again, watch your pennies – search for plaster suppliers to get a large bag of plaster as this is much the cheaper way to buy.

A problem that can arise with this method is the presence of magnetic particles within the dirt which can get attracted into fine mechanisms, but Rob has talked with a local geologist who has assured him that this does not happen with local Canberra dirt. However, for anyone attempting this method, be aware of this potential hazard. You also need to be careful of organisms that live in dirt.

Rob is also the constructor of the woodwork for all of the groups HO modules and he showed us where he is with this construction and described how he is going to produce the corner modules.

CMCRI Exhibition

On the weekend before Easter, the Canberra Model Railway Club Incorporated (CMCRI) held its annual exhibition at the Lyneham Hockey Centre here in the ACT. We exhibited the



NMRA layout featuring a variety of rolling stock from local members. Given the small number of local members, it was perhaps not surprising that there was preponderance of Pennsy



locos and stock! We even had an Australian intermodal train running, and a highlight was Ken Macleay's wreck train. It was interesting to use the layout again after a year and to see the changes made to it. The small engine house is a definite plus, making that corner of the layout much more complete. Our thanks to Allan Garbutt who came down for the weekend and took the layout back to Sydney on completion.

In April, I hosted the meeting. Graeme Hodges I brought along a dual gauge crossing that he has made from scratch in O scale and what a beautiful piece of work it was. Tony Payne showed us how to get flashing lights into our railroad crossing signs using LEDs and an extremely simple control circuit.

Division 3 Victoria

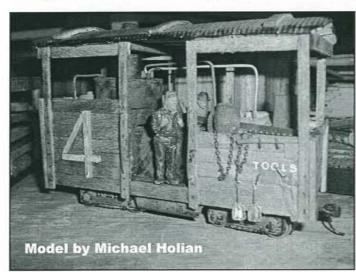
Rod Hutchinson

The **February** meeting was held at the home of Paul Ritchie in the provincial centre of Ballarat. The day started out

a nice summer day and ended as a bit of scorcher, particularly for those wearing long pants. The meeting was well attended by members from the west side of Melbourne though two stalwarts from the east made the long journey.

Grant McAdam conducted the formal part of the meeting, keeping it brief and thanking the hosts for again opening up their home.

A number of items on display included an assortment of magazines, 2004 Walthers Catalogue, Fast tracks Point



Making Jig, Grifhold Pounce Wheel set (used for embossing rivets on thin brass and plastic) and a number of models in O and HO. Of interest is Ian Mitaxa's construction of an incline railway in HOn30 in which the wagons have an automatic opening side panel. The model is in its' early days and looks like it will prove an interesting addition to modelling in Victoria.

As the temperature rose to 35 deg the day finished early and we headed home after and enjoyable days' modelling and a pleasant trip into the country.

The March meeting was held at the home of Bill Black in the glorious Dandenong Ranges, east of Melbourne. The weather was perfect and the host looked after us in his most inimitable style. The meeting was well attended by members from as far away as Geelong and a number of very welcome guests.

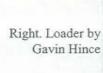
Bill has a large S Scale railroad with a Colorado theme. Work in progress is extensive and provides some exceptional running. Items on display included an assortment of magazines, a number of O Scale locomotives and the usual high standard of models concentrating on older American structures and vehicles. Mario Rapinett provided movies of the some layouts and the 2004 Box Hill exhibition showing the work of Grant McAdam, Laurie Green and John Hunter who many believe use the attendance of exhibitions as an excuse to indulge in an orgy of model making.

Grant McAdam again conducted the formal part of the meeting, keeping it brief and thanking the hosts for again opening up their home.

The writer left early but noticed that most attendees appeared to be quite relaxed sitting under Bill's beautiful shady tree enjoying the weather and romancing about what maybe, or might have been.

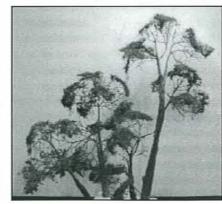


Above. Division 3 team relax



The April Meeting

was held at the home of John and Linda Hunter in Corio (Geelong). John is one of NMRA Victoria's prolific modeller of buildings and the proud owner of Mount Ash On30 Exhibition layout. John has an uncanny knack of creating a warm, warn, cosy feeling in his models. The meeting was held on the same day that Beyer Garratt G42 made it's public debut on the Puffing Billy Railway after completing a lengthy restoration program, Despite this competition 18 or so NMRA members turned up including new member, Barry Pate. Barry showed off his Sierra West Works Train kit and Bachman HOn30 Shay. Other items on display were two Broad Gauge Models On30 NA (Puffing Billy Baldwin) kits, John Hunters latest mini diorama complete with a static Goose, Peter McDonald's OO scale "Lion" loco, Gavin Hince G Scale Porter in timber and white metal with an interesting O Ring drive in lieu of gears, Paul Ritchie's scratch built HO interurbans, one on a Bowser tram chassis the other powered by a NWSL SPUD; Broadway Ltd AC4; Irdot sensor,



Geoff Truman trees made from Hydrangea Stems; a kitbashed NSW "K" wagon into a VR "RY" wagon, Laurie Green brought a completed USA style "O" scale depot and plans . Grant McAdam brought current copies of Narrow Lines, Timber Times and the Finescale Railroader -

2004 Logging, Mining & Industrial Annual and Paul Ritchie, Sn3 Modeller and Train magazines. Rod Hutchinson had a clear out of old British and USA magazines which were unevenly distributed amongst the more nimble fingered members. A current copy of NGSLG appeared by person or persons unknown.

South Australia

Ron Solly

Saturday March 20th, 2004 saw the meeting of NMRA members (5 of & 2 visitors) take place at the home of Ron Solly. Ron's layout – Hanover & Peterboro RR is being built in the new layout room of 3.8 x 7 metres. It is HO, point to point with a continuous run option, American outline mainly of the Eastern States roads & controlled using the original DCC (direct current control). Hopefully it will be fully up & running before the next meeting at his home.

One of the previous meeting visitors Allan Harris

signed an application to become a full member of the NMRA & it is hoped that the new visitor, Scott Jones will also join soon.

Ern Raddatz then showed the meeting his proposed new layout plans, which included the rooms in his house that will be used. He said that it will be yard to yard with a considerable amount of shunting allowed for. He indicated that the basic layout height would be 1.5 Metres (60 "). Comments of various types were freely given & Ern make take some of them up – time will tell!

Discussions also occurred about Exhibitions considering that the latest issue of AMRM and The Shunter being the newsletter of the ACT MRS, both had that theme.

Modelling ideas flowed as the afternoon wore on.



This
magnificent
structure from
the George
Sellios' Fine
Scale
Miniatures
collection
recently built by
Rod Smith and
seen here on
his Missouri and
Pacific Sydney
layout



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PRODUCT REVIEW Broadway Limited Cab AC-4

Sowerby Smith

This is a much anticipated model and it has been well worth the wait. Don't bother reading the rest of this review, if you can afford it, buy it and if you can't afford it, sell the wife!

It is that good. Not perfect but very, very good. Now I have the breathless part of the article over with let's get down to business. The AC4 – AC5 locos were the first cab forwards to be built as simple expansion engines. The characteristic cabforward design enabled the crews to breathe in the long tunnels and snow sheds of the Sierra Nevada. With ruling grades of up to 2.66% for much of the route the SP needed all the power it could get. Broadway's model arrived in its huge beautiful glossy maroon box. Inside, hard grey foam and wrapped in plastic the model arrives fully assembled and ready to run. Included is a very comprehensive programming book of 24 pages, a short history of the prototype models taken from information in Robert J Church's "Cab-Forward" book.



We could not wait to put the model on the track and see how it ran. The tender is connected via a simple draw bar and a multi pin plug attached to the sound and control module in the tender and all this is hidden by a hinged deck plate between the loco and tender. Auto detection, switches between DCC and DC. I use DC and opening the throttle the loco does not move. Opening it a little more the sound system starts up with the generator noise and hissing, wheezing and the sound of the air pumps hammering away. The headlight comes on slowly in step with the whine of the generator. A quick flip of the reversing switch starts the bell ringing and a slow flick and hold action starts the whistle. What a beautiful baleful sound. Recorded from a real cab forward, it's magic. Crack the throttle a little more and accompanied by synchronized chuffing of two sets of cylinders the loco slowly pulls away and gathers speed. Rock steady with no shake or hesitation. No binding and bucking and kicking of the wheels so common on Rivarossi's excellent model of the AC11. This loco has a superb mechanism. The sound is the best I have ever heard and remember this is on DC not DCC. As the loco gathers speed the chuffs blend into a syncopated rhythm as it did on the prototypes. As one slows the engine the brakes squeal and couplers clash as slack comes into the train. We then started to read the instruction book. Lightly oil the visible valve motion.

Ooops! A few drops of LaBelle plastic compatible oil eases our conscience. Not that it seemed to need it. Most models are oiled to within an inch of their life, with oil but a little should go a long way.

Now to the model. Gosh it's Ugly! Flat faced articulated consolidations are as ugly as they come. 4100 was the class leader, one of ten in the first order delivered from Baldwin in 1928, another 15 AC5's followed in 1929. Almost identical, the main spotting feature being the running board over the air pumps, it is straight in the AC5 and rises up in the AC4. The model was of 4100 as the loco appeared near the end of their life from approx 1939. The cab is more accurate for the AC5 class of locos. Above the headlight is a funny box which I think is the water cooler and this only appears in my references on AC5 locos. The pilot is also unusual in that it is filled in, also only usually appearing on late AC5's. AC4's had boiler tube pilots throughout their lives or if they were on the Sierra's, snow plow pilots were the order of the day. Still on the flat face the outside front windows have mullion bars across them and this is not correct as they had a split windscreen glass for ventilation. Very minor and very nit picking but wrong. Easy to fix, just pull off the water cooler, cut out the mullion and fit a plough. The model is generally so good and very accurate that these discrepancies seem strangely out of place. Also the large pipe on the top of the boiler has a rather strange shape near the cab, there should be a bulge on the feed water heater pipe near the lead engines cylinders and one ladder on the tender bulged outwards slightly on this model but it was easily corrected. Also there is too much air under the cab and the small ladder on the engineer's side is correct for the AC5 not the 4. Only by direct comparison to side on pictures are these discrepancies able to be noticed. If you get the AC5 version nearly all the above items are not an issue. Also missing is the supply pipe with flexible hose from the tender to the feedwater heater.

Now the good bits. Designed for model corners similar to the ones on my layout, iIt will negotiate 18" radius and easily takes the 24" on my hidden track. The pilot and trailing trucks track beautifully and nearly all driving wheels have pick ups for power. Even the tender trucks are used for power collection. There is no backup light fitted to the tender and my reference shows a small light on the rear tank or a Pyle



headlight on the top of the tank in later years. The wheels are bright plated and unlike the sintered iron wheels of the early Broadway models, pick up power very well. Driving wheels are complete with brake hangers and sanding pipes, very nice. Unlike the prototype where only the rear engine was articulated

the model has both engines pivoting in the style of a diesel loco. Well disguised and very sensible. I hate it when prototype fidelity makes the model impossible to use on the average layout. The tender is complete with almost all the visible detail that appears on the prototype. A prominent brake cylinder with

linkages is fitted under the Vanderbilt tank and it sits on very nice trucks. A removable water hatch allows access to the programming reset switch. If you have messed up your programming set this switch to the rear and all is forgiven and the factory defaults are restored. Under another removable hatch is the volume control for the sound system. 16 levels of volume from too loud to off, also adjustable via programming in either DC or DCC. And in program mode the loco talks to you telling you the settings.

Moving forward to the loco the deck over the front cylinders has fine detail on the handrails and there is a deck plate to fill the gap between loco and tender. The boiler front is rather devoid of details because unlike the later engines it has nothing but a smoke box door. Air pumps and feed water heater balance each other on either side of the engine boiler and are very well detailed with nearly all of the piping of the prototype. The smoke box has the characteristic double funnel with exhaust splitter. This splitter was there to divert the blast from the exhaust to help reduce damage to snow shed roofs, many of which were just made of heavy wooden planks.

On removal of the body to have a look inside, the loco seems to have provision for 2 smoke units. There are two holes under the funnels and a circuit board contact beneath with a wire leading to it. Power is provided by a fine can motor and it is equipped with two turned brass flywheels. Universal joints and lay shafts transmit power to the diesel like gear towers on each engine. All wiring is fantastically neat. The detail on the top of the boiler is very well done and what at first appears to be a parting seam down the centre of the boiler is the join in the

boiler jacket complete with minute joining clips. The pop valves are turned brass as is the whistle and bell. A little dark grey paint on these items will add to the realism All piping is free standing and the handrails are blackened wire of scale size on very nice stanchions. The Steam dome is a press fit and

under it is one of the two screws holding the boiler in place. The other screw is under the removable cab roof. The cab roof is interesting in having an opening roof vent. It slides backwards to allow better ventilation. Inside, the cab is equipped with seats and control stand detailing though the Johnson bar is the wrong shape. The cab also has

opening side windows, sunshades and full length cab steps. The number boards are also lit and of the type fitted later in the loco's life. The original ones were smaller and stuck out the front more. I almost forgot the valve gear. Beautifully detailed and plated in a dark silvery metal that is the closest I have seen to polished steel. All the wheel plating is of a similar colour. The loco is fitted with Kadee metal couplers front and rear. As usual with Kadee couplers, check the glad hand clearance above the railhead as our one came to a sudden stop at a grade crossing. A dummy coupler is supplied for the front pilot if desired. Air hoses are fitted to the pilot and the tender and also a steam heating fitting on the tender. Painting and lettering are superb though I could not find a reference photo showing silver steps and handrails on the cab. Easily fixed.

Running or "How much will it pull mister." On DC it does take a while to get used to the locos starting characteristics as it forces you to take your time. But once mastered it is most rewarding. On my layout with 2.5% mainline grades it would pull 18 cars. On level track it pulled 40 cars. Tractive effort is governed by adhesion and is equal on DCC. I ran the loco on John Bakers layout using DCC and the loco starts moving on notch 1 and has smooth control throughout the range. The chuff sound is load sensitive and if the loco is pulling hard the sound changes to reflect the load. Very nice.

Conclusion: Looks marvelous, runs great and sounds fabulous. I have got to get a least two!!!

References for this article "Those Amazing Cab Forwards" by George H Harlan and "Cab-Forward" by Robert R Church.

Kato AC4400CW

Andrew Jordan



In 1994, GE delivered the first AC4400CW locomotive, their answer to EMD's successful SD70MAC. Nearly 10 years later, the AC4400CW has become one of the most successful locomotives in the history of North American railroading. The AC4400CW is operated by railroads from East to West and Canada to Mexico and has come to dominate the AC traction market. A higher horsepower version was developed in the late 90's, the AC6000CW, rated at 6,000hp, but due to technical problems it has been abandoned mainly due to the success of

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the AC4400CW. (BLI will be producing the AC6000CW later this year). AC traction has allowed the locomotive to develop well beyond the constraints of Direct Current (DC) locomotives. AC locomotives have much more rugged traction motors which together with Hi-Ad trucks have resulted in phenomenal adhesion numbers, over 160,000lb of traction or 40% adhesion which is nearly double that of DC locomotives. AC locomotives however cost nearly double that of their DC counterparts which has kept DC models in the catalogue for both EMD and GE. This however might change with EMDs new SD70ACe which is a hybrid AC/DC locomotive but with the impending tier 2 emissions standard coming into effect in 2005 the AC4400CW production will come to a end as the similar ES44AC evolution replaces it.

Union Pacific owns the largest fleet of AC4400CW locomotives, with over a thousand locomotives on the roster which is full of variation. Some of UP's locomotives have come through mergers with Southern Pacific and Chicago & North Western. Trains Magazine has featured some excellent articles in the recent past on AC traction, General Electric and the AC4400. The main spotting feature for the AC4400CW, when compared to the similar DC C44-9W cousin is the large Inverter Cabinet behind the helper's side of the cab (left/ conductor/brakeman's side). Due to this feature the locomotive has gained the unfortunate nickname of the Toaster. Kato's new AC4400CW locomotive is "Sound Friendly." The design allows for easy installation of a 1" diameter speaker in the fuel tank, allowing easy installation of DCC sound decoders. Instructions are included with the locomotive for installation of a speaker Cab type, Inverter Cabinet, Number

Board type and location, and Fuel Tank are correct for each roadname. Additional features include directional headlights illuminated with white LEDs, lighted ditch lights, lighted printed numberboards, separate windshield wipers, 8-Pin DCC socket, painted step edges, and Kato Type-E Magnetic Knuckle couplers. These models are equipped with the powerful Kato motor with dual brass flywheels and scale blackened metal wheels in trucks that replicate the prototype's GE Hi-Ad truck. The drive train runs smoothly but it has been reported that there are issues with the circuit board burning out in DC mode after about 2 hours. New scale handrails have been incorporated but need to be improved as they are not rigid enough and are easily distorted. Kato continues to improve their paint jobs and lettering is very sharp. The supplied grab irons can be used but I prefer to replace them with Details Associate drop grab irons and 0.12 brass wire. Using Badger acrylic paints they are easily touch painted to match the prototype and look much better. Details West make some additional parts that can be used to super detail the underframe and fuel tank. Brake cylinders and struts are cast onto the truck side frames which is disappointing. These could be carved off and replaced with Athearn parts. However these locomotives are a vast improvement on the Atheam locomotive and due to the rise of the AUD against the USD are much cheaper. I picked mine up from Toms at West Ryde for a very good price, under \$200. Roadnames in Katos first production run include 2 numbers for each of the following roads, BNSF, CEFX, 2 versions of CP and 2 versions of UP. Expect more runs in the future covering other roadnames.

LIONEL VERANDA TURBINE

Andrew Jordan

In 1948, the ultimate motive power solution was seen in demonstrator #100, a product of the American Locomotive Company and General Electric. It would eventually become Union Pacific #50, the first of the only fleet of Gas Turbine Electric Locomotives ever run on U.S. rails. After a successful period of testing #50 was returned to GE and UP placed an order for 10 production models #51-60 delivered in 1953, differing from #50 in that they only had one cab. Liking these locomotives so much the Union Pacific ordered a second series



#61-75 delivered in 1954 which incorporated some improvements such as roof-mounted air intakes and recessed side walkways that gave trainmen greater access to the turbine's vitals. Because of the latter distinctive feature, the new units became commonly known as "Verandas."

By essentially using a jet engine to spin a turbine, the GTEL produced electricity through a generator that, as on a diesel-electric locomotive, powers electric traction motors. Initially, advantages over both steam and diesel locomotives

were found in this novel power plant. Fewer reciprocating parts to maintain and the cheap Bunker C fuel oil that the turbine burned led to decreased operating costs. The GTELs generated more horsepower per foot of locomotive than any diesel. The 4,500 horsepower Veranda produced 137,930 pounds of starting tractive effort. They pulled the same tonnage several miles per hour faster than a diesel of equal horsepower. The GTEL were initially assigned to the Ogden Utah to Green River Wyoming run which incorporated the Wasatch grade, replacing the big boys. This was extended to the whole eastern division of the Union Pacific with the addition of 24,000 gallon tenders constructed from retired 4-12-2 steam locomotives tenders. Verandas later in their careers were almost always double-headed with a pair of GP9 diesels which had been converted to burn the bunker C fuel making

8000hp sets.

Impressed with their #51-75 GTEL's, the Union Pacific ordered a further 30 turbines of a new design, rated at 8,500hp and numbered 1-30 & 1B-30B they were often referred to as 3 unit turbines, including tenders. Their locomotive represented the pinnacle of GTEL development and is still today the most powerful locomotive ever made.

(An interesting side note is that the UP also commissioned



studies on Atomic powered locomotives at around the same time!!!)

Despite impressive performance records, the turbine era on the Union Pacific was brief with the last Veranda retired in 1964, and the last GTEL in 1970. After two decades, it became clear that the GTEL would not replace the diesel-electric. Once a cheap by-product, Bunker C fuel oil became as expensive as regular diesel fuel by the mid-1960s. Although initial maintenance costs were low, after several years of service, expensive parts like nozzles and turbine blades began to wear out largely due to the corrosive effect of the heavy fuel oil. The turbines proved to be fast, heavy freighters, but their fuel consumption at low speeds was enormous, compared to diesels, making them inefficient for light loads or slow speeds. Although their career was short, the Union Pacific turbines remain a testament to a truly unique period of American railroading.

Lionel has released a HO scale model of the Veranda GTEL #61-75. The locomotive features a die cast body to assist with weight, is DCC/DC equipped and features QSI Quantum sound located in the locomotive. Unlike recent steam locomotive releases, the turbine can therefore operate without the tender if desired. The locomotive rides on four B trucks with only the middle two powered but has all wheel electrical pick up. Overall the locomotive is nicely done but rides too high on the chassis. Some painting is required such as the walkways and bottom of the handrails which should be painted UP grey, the top of the steps UP yellow and the interior of the cab light green. The rest of the paintwork is spot on, however the locomotive looks odd straight out of the box as it is too clean as they usually had oil spills on the tender sides and exhaust stains on the roof. This is easily fixed and makes the locomotive look much better.

One of the best features of the Lionel locomotive is its QSI sound. The locomotive has both diesel and turbine sound effects plus many other accessory sounds. You need DCC to get

the best from the sound system. All GTELs had small diesel engines used for light movements of the locomotive around the terminals. The diesel engine was also used to start up the turbine engine, by spinning the turbine up to minimum revolutions before the combustion chambers were ignited. This process took about 7 minutes in real life and is featured in the transition from diesel to turbine by the QSI sound system. The turbine sound is very loud just like the prototype and does not vary considerably once running as the turbine was either on or off in real life, no idle phase. Under diesel operation the locomotive is limited to 25mph as per the prototype.

I am very happy with the locomotive and they have not surprisingly sold-out very quickly. Some details such as the excessively blue white LEDs, the lower Mars light should be red, the disappointing brake wheel on the rear platform, lack of detail in the truck frames and the non flush window glass annoy me, but the alternative is an OMI Brass model, costing much more. We also noticed that when hauling a heavy load, because the rear loco coupler is truck mounted, de-railing of the rear trucks was frequent. This occurred with 40 wagons in tow but ceased to be a problem at speeds below 25 scale mph or with fewer wagons. We felt it could be corrected with a body mounted coupler however this is clearly a design deficiency in the pivot point of the trucks. Hopefully Lionel will announce a second run to meet the demands and fix some of the problems. With a bit of weathering this model looks really nice and this brings the otherwise hidden detail out. The handrails are made of plastic, easily distorted, a trifle over scale and the paint chosen is clearly not flexible enough as it was already starting to flake from our model. The Bunker "C" filler hatch on the tender was offset in the wrong direction. It is offset toward the front and should be toward the rear. I regard myself as difficult to please but overall I am delighted with the model. All these faults aside, this is the first opportunity for the modeller to purchase a 'mass produced' turbine. Keep your eyes out for future announcements if you are interested in purchasing one of these locomotives. Toms at West Ryde and The Model Railroad Craftsman at Blacktown have both had these models in stock be it only for a short while and would be the best place to reserve any future order if available. Surely the next release from Lionel has to be a standard turbine or maybe a 3 unit turbine. The model is better than the brass versions from SOHO but for real detail buy a brass Overland! \$\$\$\$\$! Many thanks to Sowerby Smith for the remarkable photographs. Reference: Lionel Trains and Turbines Westward by Thos Lee.



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"I'm a Mountain Man".

"I like mountain scenery."
The Burra Valley Railroad (BVR) goes Sky-wards.

As you will have read in the previous introduction article, the BVR is a relatively fictitious HO scale layout that comprises a very large squashed oval mainline (emulating some PRR operations such as coal hauling) and a single track branch line that rises to the top (or near the top) of some rugged mountains. Being in a custom built train room (60 feet by 24 feet, with lots of free space) the hills could not just be pimples on some cardboard.

The decision was made by the BVR CEO (Mark Walker) in July (2003) that it was time to start making some mountains out of molehills. Being located in a rural environment (the train room, that is) many useful materials were already at hand - and "we ain't goin' t' town just for a packet of CHUX". The Chief Engineer did a quick review of the 2002 Convention CD to see what was really needed. All OK - we had about one-third of the listed materials and equipment. No sense in waiting until everything was procured (it could take the stores section weeks to finalise such a varied requisition/buying order). The 20kg (big bag) of Casting Plaster was produced, the chicken wire was brought in from behind the stables, the staple gun was reloaded with long staples (see separate stapling note). The fencing pliers were borrowed from the garage and we were ready to go.

Actually the 'hot glue gun' was deemed to be a useful item and the Engineering Department was given special dispensation to purchase one whilst in the 'big smoke' between visits to the layout. Bulk paper towels (none of the flimsey kitchen towel rolls for a large scale railroad like the BVR) were also deemed another urgent item.

Meanwhile - back next to the track - a few 2 x 1 uprights were installed (inches not millimetres - remember this is a PRR style layout) to remind the Survey Crew where the peaks of the hills would most likely be found.

Now for the chicken wire. Did I mention

that the roll was 4 foot wide and was not really for little chickens. It was rabbitproof fencing wire manufactured from 16 gauge wire strands and really did need fencing pliers to cut the strands. The



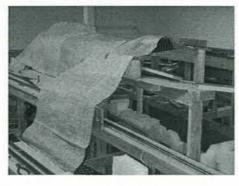
holes were about the size of golf balls. The advantages were - it was there, hence cheap - it was strong enough to hold up plaster. The disadvantages were - it was strong, hence not easily shaped or handled - it was sharp, too hard to fold over the cut edges - the holes were too big and gave a big honeycomb effect even with two layers of plaster. Cutting took time - snipping one strand at a time with the fencing pliers. We finally only used it for narrow strips over the uprights where the peaks would be.

That was the end of the first stage - the Chief Engineer had 'fine' chicken wire added to his approved urgent purchase order list. Back to the big smoke after an extended long weekend.

Stapling Note: The Track and Signal Division had stocks of theree different lengths of heavy duty staples on hand. These ranged from 1/4 inch to 1/2 inch and were previously used for holding electrical cables in place. No problems in their earlier usage. When trying to staple down the chicken wire (into 2 x 1 pine or pineboard sheets) the staples nearly always stopped about 1mm up in the air regardless of the size of staple used. I have not worked out why yet. This of course meant that the fancy green hammer was needed to give them the final clout!

Last year (2002) the CEO acting as the Bridge Division, built a 500 foot trestle bridge to cross a deep gorge on the mountainside. Basic building material was balsa strips. The running rails were hand laid and glued. With all the shocks from the staple gun and the green hammer, the rails and guard rails have all come adrift. 'Track Closed' until further notice.

Next visit - it is now August. Chief Engineer arrives with commercial restroom style paper towels, el-cheapo hot glue gun, 5ft wide commercial catering (bright yellow) paper tablecloth, two packets of imitation chux, and some



domestic grade chicken wire - well actually the label does not mention any chickens, but suggests aviary usage amongst other things. This was 10M long, 0.9M wide and made from 0.6mm strands. This proved to be relatively easy to cut (eg with plastic handled domestic shears), easy to push, pull, and form into odd shapes. It was also pretty easy to break individual strands when trying to staple down at the edges. I guess a distinct advantage was that the cut edges could very easily be bent over to hook into the monster chicken wire.

OK - now for some real productivity. Out with the hot glue gun. Read the (almost) non-existent instructions. Try to remember not to apply glue to fingers! The chux seems to like the hot glue - but tends to get holes in it if pressed too hard. The various instructions do not specify any spacing for the glue dabs - try to get about 10 per chux. First

mistake (discovered later) was doing the higher chux before the lower ones. The plaster forms a ridge if the lower chux is laid on top of a higher one. This may not be a real problem in the long run. It was later found that cardboard can be glued to the chux (or even hard plaster) if wishing to alter shapes on the fly (actually - on the hillside).

The first batch of plaster was mixed up in an oval Pyrex baking dish with the intention of trying the paper towel method first at the top of one rise. The plaster was made pretty stiff, as one would for making moulds. Big mistake the paper towel was laid in the bowl, and came out with about 2mm of plaster adhering to one side of it. Needless to say this was rather heavy and the paper towel could not handle the weight. The plaster was only on one side, so a decision had to be made - sticky side up or down? I opted to face it skywards figuring that it may all fall off if I put it sticky side down on the netting. Quick decision - try painting the rest of the bowl onto the chux. This went on rather thick and without any real mess - it was too thick to ooze through the chux.

By the way, the CEO always started with water in the bowl and added plaster as required. Needless to say no two batches were the same starting consistency. Most of the plastering was done with a 'used' 4 inch paint-brush that also doubled as a trowel when the plaster started getting thick. The most manageable mix seemed to be one that did not drip off the stirring stick. This advered to the chux quite well, although it sometimes looked as if the chux was going to come loose from the chicken wire.

Did I mention that most of the mountain track is at eye-level or above and standing on a box and painting at head level brings back all the RSI pains that are best forgotten. Other mistakes were the commercial paper tablecloth, too wide, not enough holes to bond to the netting, and probably too shiny to allow the plaster to impregnate as it does with paper towel. We also tried old synthetic lace curtain, but again the plaster did not want to impregate and stick - it was happy enough to go through the mesh. We have not tried cheap hessian yet, but may do so later.

We tried laving newspaper over the netting and spraying it with water to try and get it to take the shape of the chicken wire but that dis not seem to be any use. We later tried gluing some newspaper down with Selleys Gel-Grip, it seems to stick but the shaping is not very encouraging. Why are we trying these different methods - well the hot glue gun came with six small sticks of glue. Would you believe that the very large (in NSW) hardware chain did not have spare glue sticks to suit last week? And did you know that glue sticks come in different diameters for different guns? I could have bought skinny sparkle glue sticks, but having seen the simple feed mechanism I know that they would be a waste of time. Motto, make sure of the spare supplies before laving out real

dollars for new equipment.

type strands that will need to be removed from near the tracks.

We are now half ready for more plastering. I say half ready because there are bare patches of netting where I cannot reach to lay out the chux and glue them down. It did not seem to be a real problem when putting in the chicken wire - some of it was tied together from underneath, but putting on the plaster from underneath does not sound like a good idea. The carpet again.

that it had a tendency to dribble. Not

good on the carpet. Lots of spider-web

We are going to have to devise some sort of scaffolding to get at the rest of the mountain sides and valleys. Another problem for another day. There are situations where the scenery should be installed before the tracks. In our case the whole job would have been much simpler if the mountains were in place before the

trestle bridge was finally installed. Instead of scaffolding we used an old school desk and the 'athletic' CEO climbed up next to the trestle bridge to glue the fake chux to the netting. We have now used seven packets (ie 70 at 600mm x 300mm) so that will give you an idea of the extent of the main mountain range. This afternoon the CEO will have to climb up next to the trestle bridge again to lay some plaster, but first I will

have a go at the eastern side of the hill. A kitty litter tray has been sourced so that paper towels can also be processed. Some recent advice from the Israelis says that the paper towels should be cut in half to make them easier to handle.

All seemed to be going well last night until the trigger pressure on the glue gun got rather high. It did not seem to want to exude any glue. It still seemed to be hot enough but it was behaving as if it was only half warmed up. Another annoying feature? of the el-cheapo hot glue gun is

Third session, more glue (from another

imitation chux, lots of old newspaper to

square mesh netting was obtained from a

builders hardware supply company - this

strands and is certainly a lot stiffer than

mathematical or engineering types in the

NMRA it should be .64/.36 times stiffer -

cover the trackwork. Another roll of

lot seems to be made from 0.8 mm

the 0.6 mm stranded stuff. [for the

ie almost twice].

chain store in Queanbeyan), more

Afternoon break time. We have done about 5 batches of plaster. Still experimenting with different consistency of the mix, mainly because we seem to spend a lot of time mixing compared with laying the plaster coated paper towels over the netting. Still trying to get a 'custard consistency' so that a reasonable layer gets on the job with minimum dribbles. Some of the batches have started out with a one litre of water

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and lots of plaster added until it looks right. Inevitably some of the plaster seems to go off in the tray and gets wasted. Lots of cleaning up to do between each batch. There are only two of us so it will be a prolonged effort. The CEO has suggested adding common salt (NaCl) to the mix as he does with white-wash in order to slow down the setting rate. At this time of year in the Burra Valley it is not what you would call warm - we have a big heater going all day and jumpers are the norm. I don't think that the temperature is a major factor in the quick plaster setting rate. The CEO complains about the paper towels being old an 'not very strong' - i.e. he has to be a bit careful or else they tear and end up with folds and wrinkles. Trying to scrape out the settled plaster from the bottom of the tray with a paint scraper to trowel on the el-cheapo chux does not seem to work - it is very lumpy and tends to tear the chux. At this stage I cannot tell how thick the plaster is on the netting, but I guess less than 2mm - I am not looking forward to 4 or 5 layers to get up to 6 -

At this stage it looks like the plaster has not oozed or seeped through the pseudo chux. Or if it has it is not obvious. I had vaguely expected that the plaster would seep though and adhere to the netting. Another interesting observation - where we have glued newspaper or similar to the netting it looks like the newspaper has sucked surplus water from the plaster mix and in first! a number of places the water has run down the slope to form puddles. Is this a sign that the mix was too runny?

The salt experiment was a decided failure - instead of slowing down the setting it seemed to speed it up. Three-quarters of the batch was wasted. The CEO says it was a disaster.

So far it looks like the 20Kg bag of plaster will not do the whole netted area, probably only 7 or 8 square metres. It seems that as the afternoon and evening have progressed? we seem to be having less success with the plaster, as in it seems to go off

quicker and we are spending much more time trying to clean out the plastic tray, etc.

Is there an economical additive that slows down the setting rate? (editors note: try vinegar)

Is there any real difference between 'casting plaster' and 'modelling plaster'?

Late notes - What is difference between 'plaster' and 'gyprock cement'?

The CEO mentioned when we were discussing the problems of mixing reasonable sized batches of plaster that the building trade uses premixed (20 Litre drums) of Gyprock Cement (also available dry in bags) that takes hours to set rather than minutes - is it economical?

For mixing we have used a piece of old masonite as a paddle and have added plaster to the mix until it looks and feels workable - ie not so runny that it drips all over the place. It has been suggested that a small hand-held electric kitchen mixer would be quicker and thus give us more papering time before the plaster goes off. Don't forget to clean the mixer paddles

Next project - construction of a dozen or more tunnel portals (one proto-sample has been approved). Some debate over tunnels versus very deep cuttings on the main line. John Geremin, Chief Engineer, Track and Signal Division, Burra Valley Railway.

[on secondment to the construction branch] NMRA member and (vintage) trainee MMR.



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from Shinohara - Code 83 HO Finescale track DCC ready.



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

With the introduction of this new range of track, Bergs Hobbies would like to offer for a limited time only, a 10% discount off the retail price,

for every order received between 1st May 2004 and the 30th June 2004. The August issue of the Australian Model Railway Magazine will contain a review of this new range.

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EXHIBITION & CONVENTION CALENDAR

EXHIBITIONS

BALLARAT - VIC. June 12-14, 2004 at the Ballarat Secondary College East Campus, Cnr Victoria & Fussell Sts. Open 9.30am-5nm (Sat to Mon).

MARSFIELD - NSW. June 12-14, 2004 at the Epping Boys High School, Cnr Epping Rd and Vimera Rd, Marsfield. Open 10am-5pm (Sat, Sun, Mon).

WANTIRNA - VIC. June 12-14, 2004 at the Hungarian Community Centre, 760 Boronia Road, Wantirna. Open 10am-6pm (Sat & Sun), 10am-5pm (Mon).

STAWELL, GRAMPIANS - VIC. July 10-11, 2004 at SES Hall, Sloane St, Stawell. Open 10am-6pm (Sat), 10am-4pm (Sun).

CASTLE HILL - NSW. July 24-25, 2004 at the Harvey Lowe Pavilion, Castle Hill Showground (Off Carrington Rd). Open 9am-5pm (Sat & Sun).

BALD HILLS - QLD. August 7-8, 2004 at Memorial Hall, Gympie Road, Bald Hills, Brisbane. Open 9am-5 pm (Sat) 9am-4 pm

CANBERRA - ACT. August 7-8, 2004 at the Malkara Special School, Wisdom Street, Garran. Open 9.30am-5pm (Sat), 9am-

MURWILLUMBAH - NSW. August 14-15, 2004 at the Murwillumbah High School Elliott Centre, Nullum St, Murwillumbah. Open 9am-5pm (Sat) & 9am-4pm (Sun).

TAREE - NSW. August 21-22, 2004 at the Taree PCYC hall, Commerce St, Taree. Open 9am-5pm (Sat) 9am-4pm (Sun).

NEWCASTLE - NSW. August 28-29, 2004 at the Newcastle Entertainment Centre, Broadmeadow. Open 9am-6pm (Sat) 9am-5pm (Sun).

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

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Mario Rapinett, PO Box 1541, Healesville VIC 3777

This letter written to Atheam by Ron Solly and the reply. Seems Atheam have a little RTR problem.

Last week, I purchased from my favorite hobby shop 7 of the HO Ready to Roll railroad cars (reefers, box cars & tankers). While the price was dearer than the usual blue box kits, they look very good considering wheels, etc. BUT they do not roll down a grade at all. - the old plastic wheel sets in the Blue box kits run better. If I replace them with wheel sets such as Kadee or even the wheel sets from the blue kits, I have no problems. Of the 14 couplers on the seven vehicles, six of them are at the correct height, the other 8 are too low & will either need washers between bogie and bolster or changing to underset couplings. In general, I do not consider them ready to roll & I will be advising the hobby shop accordingly. I have two options - return them as unfit or change wheels to other metal wheels & couplings but I thought I would advise vou.

We apologize for the problem that you have encountered with your Ready-To-Roll equipment. We are in the process of getting some new wheels made for these cars and when we get them in stock we will be happy to replace yours. Please let us know what your shipping address is along with the number of wheel sets you will need replaced and we will send some to you once we have them in stock.

Athearn Inc.

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INDUSTRY NEWS

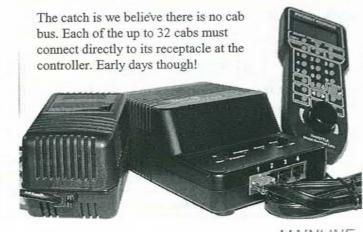
- GEORGETOWN After reaching an impasse with the Colorado Historical Society, the Georgetown Loop Railroad, Inc. will end operations at the Georgetown Loop Historic Mining & Railroad Park at the end of the 2004 season.
 - This will mark the 30th and final year Georgetown Loop Railroad, Inc. has operated the tourist train. The Georgetown Loop Railroad Inc.'s final season will begin May 29 with daily trains operating until Oct. 3, 2004.
 - The Georgetown Loop Railroad, Inc. is a family business that served more than 115,000 passengers from around the world last year. The family has been the only operator since the railroad was brought back to life three decades ago and helped with that restoration and rebuilding process. The Georgetown Loop Railroad, Inc. will be taking proposals for the use of its locomotives, rolling stock and operating expertise at other routes around the country, www.georgetowncolorado.com.
- Railworks have announced their retirement from the world of brass model railroad importing. This is the second importer to cease production following Oriental Brass Imports from this niche quality collectors market. Railworks production centred on Eastern railroad prototypes and has been greatly appreciated by collectors and modellers. They will be missed.

Electronics Industry Note:

- The lead times of many electronic parts used in DCC products are starting to stretch out. Historically, lead times have run 2-8 weeks making it relatively easy to get items needed for production. Recently, we've been getting notices that lead times for MOSFETS (transistors used in decoders and DCC boosters) and Multilayer Ceramic Capacitors are moving out to about 26 weeks, with the very real possibility of these parts going on allocation later this year. Some DCC manufacturers has been stockpiling parts in preparation of this shortage since last October and anticipate that they will have an adequate supply until the semiconductor manufacturers can ramp up their production to meet industry needs. Expect increased parts prices as shortages occur.
- Regretfully, the Steamtown National Historic Site has also announced the delay of all steam-powered mainline rail excursions originally scheduled to resume during the US Memorial Day Weekend. This decision is based upon the unexpected high cost of liability insurance premiums affecting steam-powered rail excursion operating on Class I railroads. These high costs have had an impact upon many museum and tourist railroad operations throughout the country and are by no means resultant of any fault on the part of local railroad owners and operators, as they can not control the costs associated with insurance coverage. Following the tragic events of 9/11, insurance premiums skyrocketed. Further influenced by current world events, they have continued to escalate. Steam-powered passenger service, utilizing vintage equipment, is a high-risk business. The liability associated with - and safe conduct of - these

excursions rests upon the track owner and operator. Therefore, maintaining sufficient insurance coverage is a necessary element in doing business in today's world. Unfortunately, the cost of this coverage has finally caught up with Steamtown's "Live Steam" interpretive program. Steamtown remain optimistic that some mainline excursions will resume later this year. In the interim, Steamtown will operate "Live Steam" within the railroad vard only daily, beginning Saturday, April 24th. Programs will include short train rides and cab tours. We will also roll out some special vintage equipment to provide an opportunity for passengers to ride on board a wooden caboose, a business car, and a parlor car. In moving forward with the implementation of our recently developed Comprehensive Interpretive Plan (CIP) - a five-year strategic plan to guide all programs and activities at Steamtown - will continue to introduce new programs, beginning with the Memorial Day Weekend. The CIP provides the basis upon which we will develop and expand upon the "Live Steam" experience to create a consistent and more diverse schedule of activities for our visiting public. This new approach to programming at Steamtown may even produce a few pleasant surprises for our visitors. For example, we may find it possible to operate two steam locomotives, simultaneously, or even conduct multiple "Live Steam" activities, such as photo run-bys in the railroad yard - with freight or passenger cars in tow.

♦ There is a new kid on the block for DCC control! Walthers has just posted a photo of the new DCC System from MRC named Prodigy Advance. The following is a product description from the Walthers website: "A DCC system as easy to use as the original Prodigy DCC, yet has all the advanced features that modellers desire, whether for home use or a club layout. Use up to 32 LCD-equipped, clearly labeled handhelds through MRC's highly advanced DCC network. Features include: two or four digit addressing, 14/28/128 selectable speed steps, easy programming and locomotive selection, program on the main, CV programming, advanced consisting, and Fast Clock with adjustable ratios." The hand controller uses the same package as the older 2 digit rotary switch version and the resemblance to the Wangrow/NCE system is remarkable...



New Products on the Horizon.

- NCE decoders all have new features such as torque compensation for ultra smooth low speed performance.
 Special effects lighting now includes a cool fire box effect that changes intensity as a function of load and RPM. Brake on DC assists automatic train control plus a programming lock option for 2 decoder installation applications.
- BLI is producing HO passenger coaches. First off the California Zephyr in C, B & Q, D & R G, Western Pacific in the prototypical setups. Expect about 12 coaches in each road to be delivered at the rate of 2 per month from November of this year.
- BLI to manufacture HO E3 / E6 and F7 locomotives all with QSI DC / DCC Sound.
- . BLI to re-run NYC Hudson with all new chassis and pickup.
- BLI C30-7's with Sound and DCC for delivery early 2005
- BLI EMD F7s A & B in num road names. (DC and DCC both with sound)
- BLI E8/9s A & B in num road names. (DC and DCC both with sound)
- BLI N&W Class J 4-8-4 with Sound and DCC for delivery in December of this year
- · Atlas HO SD-24 and SD-26 models available DCC ready and also separately with DCC and Sound.
- Lenz DIGITAL plus LS150 turnout decoder, designed for cost effective turnout control for up to 6 independent turnouts of
 any combination of 6 Atlas, Bachman, Kato, LGB, Peco, Tortoise or other brands of twin-coil snap action or motorized
 switch machines. Also available under the AtlasMaster name.
- · Atlas N Scale 50' Flatcars are back with New Road Names and Road Numbers.
- Atlas HO Trinity 17,600 Gallon Corn Syrup Tank Car.
- · Atlas HO GP-7 Locomotive in new road names.
- . Kato "N" Scale Bethgon Coalporter Gondola.
- . Kato "N" Scale EMD SD70MAC's.
- · Kato "N" Scale AC4400CWs.
- . Trix Union Pacific Big Boy #4011 complete with Loksound.
- Trix Mikado DCC with LokSound in NYC class H6, UP Class 2400 and PRR class L2.

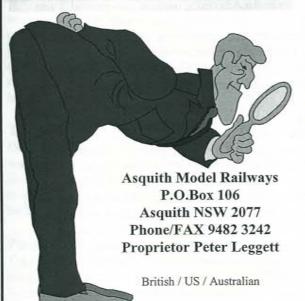


TRACKS

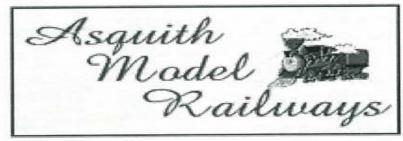
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Tupper Lake & South Junction - A History.

John Diamond

When my family took a holiday some years ago through the beautiful New England countryside we were taken by the idyllic setting this part of New York created. As a model railroader, the Adirondack region opened up many opportunities for a layout. While in Lake Placid I came across a bookstore selling books on the history of the railways that ran in this region. I bought four of them, Delaware and Hudson by Jim Shaughnessy, Adirondack Railroads Real and Phantom by Harold K. Hochschild, Railroads of the Adirondack - A History by Michael Kudish, and The Adirondack by Clyde H. Smith.

in a room 10x15ft was a challenge, but with trial and error and giving the trains a relatively flat section in the middle it was accomplished.

Scenery.

Scenery was made on a base of cardboard strips, hot glued together. I like this method as any mistakes can be rectified easily with hot glue and scissors. The skin over the strips was made from industrial strength paper towels dipped into plaster, the usual but messy method. Halfway through this I came upon

an article by Geoff Nott who built the beautiful Leigh Creek layout, He uses white glue painted onto strips of industrial paper overlapped for strength. On trying this method I found that not but is just as strong. The trains run on cork roadbed laid on half inch plywood Engineering code 70 and 83 flextrack. I chamfer every rail join and solder every joint. Turnouts are #



stock, but also Canadian Pacific and Delaware & Hudson coming in on the right hand side. The Vermont Railway makes an appearance from time to time as it has trackage rights with the NYC.

Operation.

Inspiration.

I took a region around

on two levels, on up to

Chateaugay near the

Canadian border . My

railroad is called The

Tupper Lake and South

Junction RR. a subsidiary

of the New York Central. I

can run not only NYC and

Junction loco's and rolling

Tupper Lake and South

The railway is really a bridge route for my home road with plenty of interchange. The layout was started in 1997 and finished in 2001, but details have been added in the last two years. It is built in a room 10x15ft and is the third layout built in this room. The line rising to the upper level rises 16" in 23ft, so helper engines are needed on all freight trains. There are three staging yards which can bring trains on line when needed. The layout is run with NCE DCC with great results.

Motive Power.

Steam trains run on this railroad with early diesels. But because the setting is in the late 40's early 50's more modem diesels are making there presence felt. Broadway Ltd has come out with some wonderful Hudsons and Mikados, all lettered for New York Central with sound, so all that is needed is a little weathering. The sound has to be heard to be believed, especially traveling through tunnels and rock cuttings.

Construction.

The layout is built on traditional lines, L girder benchwork for the middle section, with around the walls track cantilevered out on brackets around the room. Getting from one level to the next

only is the mess eliminated, subroadbed. Track is Micro 6 with some curved # 8s in places. The tricks I have employed

to enlarge this layout, was to hide all curves with scenery either with tunnels, buildings, rockwork in cuttings and trees. Making trains run behind buildings and trees takes the viewers eyes away from the fact that the train is just rounding a curve of a few feet. The rockwork is made from homemade rubber molds orientated every which way to look different. I love scratch building bridges, and on this layout there are ten of them, and because we are in the Adirond's, water scenes abound. I was running Dynatrol on the last two layouts I built, but when DCC really took off, I switched over with no regrets. If you have ever tried to put a dynatrol receiver into an RS3 you know what a pain that can be. With NCE DCC or any of the other digital command control receivers, wiring them into tight places is a breeze.

Electrical.

My turnouts are powered by Switch Master slow action switch machines and behave faultlessly. The only problem I have encountered is when you wire around your turnouts and make before break happens, because the switch has tripped too early. I thought about this for some time, and suddenly a light bulb switched on above my head. Why not use one side of DPDT center off. The frog is wired to the center terminal, with the two others wired each side of your turnout at the closure rails. It is a simple matter of throwing the switch for the slow acting switch machine, whilst making sure your wired around DPDT center off is really in the center. When the closure rail makes contact

with the other side throw your switch up or down for the correct polarity of the closure rail. I make sure when installing these ewitches in the fascia board that both are orientated for the correct polarity. I find that most shorts on model railroads are caused by wiring, in switch machines. It is a simple matter to put all of your DPDT center off position and activate your slow motion switch machines one by one. Sooner or later you are bound to find that a switch was not in the right position. The whole layout is signaled, each turnout switch when activated also throws a signal with a correct color (red or green) repeated in the fascia board.

Structures.

Many structures are scratch built, or craftsman kits such as Campbell, Design Preservation Models etc. No plastic kits are allowed on this layout. I try and alter these kits as much as possible so they look different from the manufacturers instructions.

Operation.

Operation on DCC is a joy. Formal dispatching is still in the development stage. We are using train - order rules at present. We use car- card and waybill system for freight car forwarding. We try and run as many trains as possible in a two or three hour session. There is a lot of freight interchange on this railroad, but



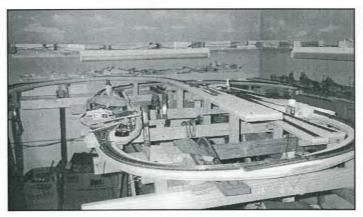
we do see many NYC passenger trains coming from the East. I would like to thank my two grandsons Brandon age 16 and Justin age 12 for their help and constant enthusiasm in the building of this layout.

The Future.

Down the track we are looking to add wireless control to this layout, which will free up movement around the isles which tend to get a little tight in a 10x15ft. bedroom.

Profile.

John Diamond has been an HO modeler since 1979. He and his grandsons have built two layouts together, his wife Wendy an Australian Masters Bridge champion is



very supportive of his hobby. They have two daughters Kerry and Cindy who bring lots of their friends grandchildren to view the layout. When not working on his railway John is busy on his computer and following his other hobby, photography.

The Layout At A Glance.

Name- Tupper Lake And South Junction. Scale-HO (1/87th)

Size I5ft x 10ft.

Prototype- New York Central.

Locale- Adirondacks upstate New York.

Period- 1940s to Late 1950s.

Layout style - Linear walkaround.

Layout heights- 48" to 64".

Benchwork-1x3 open grid.

Roadbed-cork on half inch plywood.

Track-Code 70 and 83.

Length of mainline run- 70ft.

Turnout minimum- no 6.

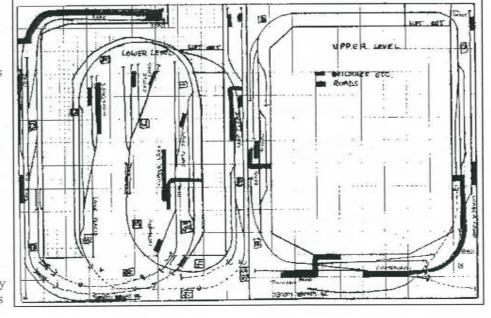
Minimum radius- 30".

Maximum grade 2 percent. Apart from a 16" ascent to the upper level.

Scenery construction- hardshell over cardboard strips.

Backdrop construction- painted masonite.

Control System- North Coast Engineering DCC.



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Gerry(atric) Ramblings

From time to time I get phone calls about DCC, and I have noticed that the biggest miss-understandings are about Consists. So, I am going to explain as much as and as simply as I all you ever wanted to know about consists but were afraid to ask!

What is a consist? It is when a number of locomotives are connected together and are controlled by one driver – with one throttle. The following information covers all brands of decoders and all brands of systems.

There are three types of consist, Basic, Standard (sometimes referred to as 'old'?), and Advanced.

The Basic

consist has locos that all use the same number as the address. These would typically be an AB set, an ABA set, or ABBA set. Many railroads used the same number on these locos and just added an A,B,D,C, after the number. Modelers use the Basic consist when the lead loco has a normal decoder and the 'B Unit" has a sound decoder. Both decoders respond to the same command at the same time.

The Standard

("Old") consist is stored in the Command Station and normally uses the number of the lead loco as the consist number.

- This type does not change any of the programming in the decoder.
- There can be 4 8 locos in the consist depending on the command system used.
- The consist address is normally the same as the address for the lead loco.
- Digitrax, EasyDCC and Lenz use this as the default type of consist.
- Only the lead loco functions are active.
- With NCE all locos are treated as 14 step decoders.
- All decoders can be used in a Standard consist.

The Advanced

Consist is a property of the decoder and is a 2 digit number (any number between 1 and 127 is a 2 digit number).

- Being a value in the decoder the consist is portable –
 can be moved to other layouts and still be in a consist.
- When using the consist address the loco number is inactive.
- Some decoders e.g. Soundtraxx, allow you to program which Function is active when in the consist. Example: the headlight, bell, horn and Dynamics on the lead unit and only the dynamics on the other units.

The Advanced consist can be created in either of two ways.

- By entering the 2 digit number directly into CV19, if the loco is running backwards in the consist add 128 to the number.
- · By following the options on the command station. This

method will allow you to use the number of the lead loco when assigning the throttle with some systems.

This is where the biggest mis-understanding occurs. If the locos are removed from the track and possibly taken to different layouts – none of the locos will answer to their loco address – not even the lead loco. ALL locos must be on the track, on the layout where the consist was set up and then have the consist deleted.

If you know the number of the consist you can remove the locos from the track, delete the consist on the command station, put the locos back on the track and they will only answer their consist address. It is easy to remove the consist – using ops programming (programming on the main) call the loco by its normal address and set CV19 to zero. This applies to all systems.

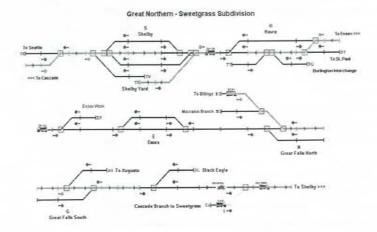
Modelers who have regular operating sessions and use advance consisting normally use the first 2 digits of the lead loco as the consist number. This becomes a psuedo standard or reference point among regular operators.

Some decoders do not have Advanced Consist capabilities – MRC and the 120 series from Digitrax.

Some Broadway Limited locos need to have a 2 digit address before they can be put into an advanced consist, i.e. E7. QSI are working on this problem.

The moral of the story is, if you take your loco to a mates place or the local club and it will not respond when you get home – just set CV19 to 0 and it should be back to normal. There are pros and cons for all forms of consisting, I use all 3 forms depending on the application. The one time you do not use a consist is when you are using helper engines on a grade, have two drivers who communicate by whistle.

Gerry Hopkins MMR



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MEET THE MEMBER



Ron Solly (Division 5 South Australia)

I have been interested in the hobby of model railroading since the late 1950's when as a teenager I joined the newly formed South Australian Railway Modellers Association SARMA. I left that group after about 4 years & until 2001, I was a Lone Ranger in the hobby working on HO & N scales but not at the same time. I had kept in contact with a few modellers but did not get involved any groups until 2001. Prior to that date, my modelling was very freelance (USA, UK & even Australian all at the same time) & I got most enjoyment of building my own

track & points in both scales. My best effort was a curved scissors crossover in N scale. Now I am content in just building points in HO.

Three years ago, I joined a local round robin group which is now my main interest (two nights a week) & this resulted in a change from N to HO and concentration on the USA modelling scene. I am mainly freelance but favour the Eastern States. I like track laying, electrics (the old analogue DCC, not the new version), buildings & scenery. I also hope to get to update some of my rolling stock. In Oct 2003, I decided to rebuild the layout into a new & larger space of 3.8 x 7 metres and so far nearly all track has been laid. It is basically point to point with 4 main and one terminal stations and two hidden storage yards. In 2001 I rejoined SARMA and in the last three years had spent time as VP & Secretary but stood down from this committee so I could devote more time to my own layout as well as the local groups (two of) together with the NMRA. It was the late David Rayson who also joined SARMA and the NMRA almost at the same time that got me involved in getting the South Australian group going again. I probably can point the finger at David North for his efforts in getting me going this far in the NMRA

Being involved with others in this hobby my skills and knowledge have increased. It was following the death of my wife that I got involved in groups back in 2001. As a result I have made many more friends. Life goes on so I decided to make the most of it after that "burn steer" from life.

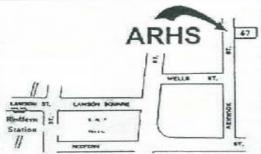


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THE GHAN Lynn Zelmer All Photos copyright © Lynn Zelmer, 2004.

Travelling on the Ghan: 14-16 March 2004

The inaugural trip on the new Ghan was too expensive for this model railroader and spouse but I was convinced by said spouse to spend a few days at the Adelaide Festival mid-March and then be off to Darwin on the Gold Kangaroo Service.

Our 2979 km journey started late afternoon with an introduction to the crew on the Adelaide platform. We had flown from Queensland to Adelaide and would fly back from Darwin so didn't need to load a motor vehicle, but the cost would have been very reasonable. Not quite red carpet, but there were flags on each carriage and personalised service as we boarded.



On-train attendants being introduced to passengers prior to boarding at Adelaide.

Our cabin was a standard upper/lower berth with en suite, familiar from the earlier Alice Springs trip and on the Indian Pacific. While the 'standard' 244 passenger Ghan will only have 15 carriages, plus Locomotive and Motorail, ours was much longer and required two locomotives. On-train staff indicated that advance bookings were heavy enough that the expanded Ghan would operate at least through September. Not bad for a line that wasn't intended to have any passenger services.

Incidentally, Gold Kangaroo Service is the premium sleeping service, normally for up to 88 passengers, with all meals included. There is also a Red Kangaroo Sleeper Cabin, normally for 32, and Red Kangaroo Daynighter Seats, normally accommodating 124, for a standard load of 244 'guests' (their terminology) plus vehicles. The train is non-smoking throughout, except for a small smoking 'capsule' located at one end of each lounge car. The service operates Adelaide to Alice twice per week, but only one of the trains continues through to Darwin.

The expanded train size has caused some minor difficulties, especially with staffing and off-train attractions, but we didn't



Transfield tamper TS 3 near Adelaide Station.



Detail shot of tamper mechanism

experience any significant problems ourselves. Our difficulties, on the other hand, resulted from poor communication between Great Southern Railways, operators of the service, and travel agents regarding the off-train activities.

The train departed Adelaide on time at 5:15 pm CST, giving us a run through South Australia's farming country as we enjoyed a three-course gourmet meal and noteworthy sunset. There were two choices for each course and portions more than adequate for our appetites. The only niggle with the meal arrangement was an early sitting (there were two sittings) in the evening meant an early breakfast as well.

Our cabin had been made up for the night while we were at dinner so we tried out the shower, lots of hot water but the floor stays wet for a long time, and retired to the berths. There really isn't enough space to sit up on the lower bunk for reading so we both migrated to the top bunk for a while, only venturing out again to get a late night 'cuppa' from the carriage attendant's cabin. Choosing take-away cups/tops, instead of cup and saucer, meant that I could navigate the corridor without spilling.

Our night in an unfamiliar bed was punctuated with some rough track and occasional stops, thus we didn't have a great night's sleep. The second night we were more accustomed to the motion and slept all the way through.

Morning was announced with a cup of tea, followed by breakfast and a run through the Red Centre. There had been



Derelict cattle wagons standing on parallel track and photographed from the train as the Ghan was leaving Alice Springs.

cardboard box early the second morning for eating in our cabin and we detrained to an overcast Katherine on time at 8:00 am. This was followed by a half hour bus trip to the first Gorge and a two-hour opensided boat trip through the first two Gorges. Katherine had recently received twice as much rain as normal so the Gorges were somewhat fuller than would have been the case in a dry season but the

some rain showers over the past weeks so we were treated to both very dry and some greener areas. We had resolved the miscommunication regarding our Alice Springs stop and were ready for arrival just before noon. Waiting busses took the Darwin bound through passengers to the Desert Park for lunch and a couple of hours wandering through the Desert Rivers, Sand Country and Woodland habitats as well as the Waterhole exhibit, Nocturnal House and Cinema. We did hear some complaints that some individuals would rather have visited Alice's historical sites (telegraph station, School of the Air, etc.) but this relatively new park is a fantastic way to quickly learn about the Territory and its flora and fauna.

We were back onto the train well in time for our second dinner and the opportunity to purchase tickets for the optional excursions at Katherine the next morning. The helicopter tour of the Gorges was sold out almost immediately (\$290 pp) but extra busses had been laid on for the \$50 pp boat tour of the first two Gorges. Alternatively, one could take a low cost shuttle bus into Katherine to explore the town.

A substantial Champagne Breakfast was delivered in a sturdy



Detail shot of derelict cattle wagon

rain held off so that we had a dry trip.

We were back onto the train by noon with the first lunch sitting 20 minutes later and an afternoon run through increasingly wetter tropical countryside. We arrived a few minutes late (roughly 5:00 pm) in Darwin to a tropical rain storm. Complimentary busses then transported us to our hotels.



The Ghan at Katherine pulled by NR 109 and NR 29. Both locomotives are Goninan/General Electric CV40-9i locomotives weighing 132 tonnes and developing 3000 kw.

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Operating Systems For Model Railroads

Gerry Hopkins MMR

In the last issue of Main Line Stuart Sharp gave us a good account of an alternative to the Car Card System. The card system that Stuart mentions must be some hybrid Australian system that I have not come across and I totally agree with his comments on the system he mentions.

There are also many switch list systems on the web that can be used to generate switch lists for your layout. I have used a number of these but, for me, they require too much time in front of the computer during an operating session and is a big job to correct if things are not done in the right order.

As an EX-Technician I hate paperwork so the least amount is best for me - besides which, nobody can 'reed what i ritt'

I hope that someone writes about Time Table / Train Order operations in the next issue.

Operation Car Cards and Way Bills

Operation means different things to different modelers. I like to use a local freight running between classification yards setting out and picking up cars at industries along the way. To instill a form of reality to these operations I use car cards and waybills.

Firstly what are car cards? Well if you look at the end or side of a unit of US freight stock you will see a 'Tack Board', this is where some of the information required to move the car is shown. It could have a chalked message or a piece of paper attached.

HO rolling stock is too small for this, so, a car card is substituted for the purpose of carrying the message. The car card would carry the minimum amount of information to identify the car. The reporting marks (road name), the car number, the type of car (using simplified AAR codes). For the benefit of the novice operator the card also carries a short description – Brown Box Car etc.

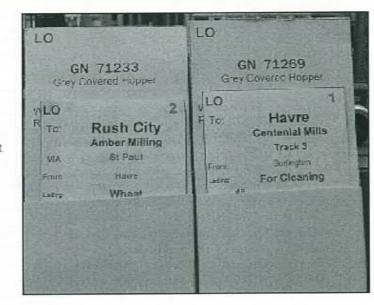
I print the car cards on 200gsm card stock with information stored on a spreadsheet. The spreadsheet acts as a main database for my rolling stock. The card folded up as shown to make a pocket for the waybill.

The folded card is held together with a clear address label. They are easier to use than sticking tape, and, I have a few thousand of them doing nothing.

I print the car cards on the printer because my handwriting is so bad (no, I'm not a doctor).

The spreadsheet puts the information in the right place,

Secondly, the waybill is our representation of the "bill of lading" that is attached to the car or carried by the conductor. I



use a spreadsheet to set up and then print the waybills on normal 80gsm paper. The original idea of the format came from a web page by Wolfgang Dudler

The waybill spreadsheet takes a little more time to set up than the one for car cards but is easily updateable at any time. This system has been around for many years in various forms, my system is only a slight variation.

The way bill is 4 sided, and in the normal sequence of things the waybill is turned between operating sessions. This means that the car may come back again in 4 months but this can vary from industry to industry and the efficiency of the operating crews.

The waybill carries the information as to where the car has to go, I.E. town, industry, track spot, goods carried or MT. A typical waybill for a covered hopper could be set up as:

Side 1 =

Havre, Centennial Mills, Track 2 spot 1. MT.

Side 2 =

Rush City, Amber Milling, wheat. VIA St Paul

Side 3 =

Woodinville, Ferndale Grain, barley, VIA Seattle

Side 4 =

Willamete Valley Inc, Eugene, grain, VIA Billings

System of Operation (On The Great Falls Sub-Division)

Initial setup

I put a car in its location at each industry along with its car

card. I then go around the layout and add a suitable waybill to each car card.

My layout has 3 main staging yards and 2 branch line staging yards. Staging yards are used to represent the towns off the layout. These towns are shown in the VIA section of the waybill.

In the example shown above, the town of Rush City is to the east of the area I model so instead of saying east staging I use the main yard in that direction which is St Paul.

Running the System

A mainline freight comes from St Paul onto the layout and enters Shelby yard. Here it will drop the cars for delivery on the layout, it will also pickup any cars for its destination which is normally Seattle. Cars which have a VIA on the waybill are obviously "through traffic" and are of no concern to the operators on this section of layout. Another, and better, name for 'this layout' is "this Sub-Division".

The cars dropped at Shelby are then sorted into "locals" for each of the industrial towns on the sub-division. The local has 5/6 cars and caboose. The reasoning behind this is that it takes about an hour (real time) to travel to location, switch each industry, and return to the yard. To have too many cars means the local is gone all session and can run out of work time. Once at the yard, the loco has to be returned to the loco yard for service and refueling.

The Great Falls Sub has 84 'industry spots' to be serviced. The Op Session held in March went from 7.30 to 9.00 and then 9.30 to 11.00. with 9 operators. There were 68 cars delivered to industries and a corresponding number sent to other destinations.

Between Sessions

Because the staging yards are stub ended, the trains used in the session are facing the wrong way for the next session. So, between sessions, the trains are reversed out to Shelby, new locos are put on the other end and the caboose moved to the back. The waybills are then turned to the next side and the train is then reversed back into the yard ready for the next session.

The waybills of the cars delivered to the industries are also turned to the next side. Not all cars get moved in a session. There are normally 3 cars for each industry spot, but for variation and to go with seasonal flow there can be 2 or 4 cars for an industry. As each car is set out, a car is removed from



that exact location. This stops the industry or yard being swamped with cars.

Your System?

The above system can work for any size layout. Once the car cards have been printed there is no need for further paperwork.

The system is self-repairing in that any car not where it should be can easily be located and the card moved to match. If a car is not moved in a session – no problem – it gets there next time.

And There's More . . .

As a conductors aid, there can be switch lists available. The conductor can write out the order of cars to be located while the engineer is pumping up the air in the train.

The towns and industries I use on the waybills come from a downloadable spreadsheet at the Op SIG web site. It has a listing of 8,000 industries in the USA showing the name of the industry, the state, the railroad, goods in and out. This makes the whole operation more believable.

There are normally two operators per crew. One drives the loco, the other is the conductor and tells the driver where to go (in a nice way!).

There are a number of layouts that use the use the car cards and waybills, but use them differently. John Saxon's layout has few switchable industries but there are numerous Interchanges with other railroads so a cut of cars is dropped at an interchange and any cars waiting there are picked up and taken to the next yard for further processing.

You can download the templates for the car cards and the waybills from the NMRA - AR web site - at the Op Sig.

Get off the merry-go-round-and-round and try a little operation, and, have fun.



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TRUSTEE REPORT

Many of you will be pleased to hear that I have just finished dubbing, labeling and boxing an additional 29 odd tapes for the Region Library. This represents 55 additional titles being added to the library. Among these are the tapes donated by Bob Carr, Mick O'Hanlon and the Pratt family in memory of Keith Pratt who passed away earlier this year. Our thanks again for these generous

While the library is located in Sydney, our aim is to send a box of tapes to each Division so you have local access and then rotate them to the next Division and in turn receive another batch. These will be in addition to the tapes now held in each Division as mentioned below. Recently, each Division was presented with 28 tapes made up of some videos from the NMRA and also many taken by NMRA

As I prepared these tapes it occurred to me that nearly all the

"member produced" videos were provided by members from here in Sydney!! Now I know that there are many excellent layouts owned by members outside of Division 7 and so I'm asking you to get your cameras out and shoot some video and then post it off to me so I can dub it and add it to the Division Libraries. You may already have some of existing or past layouts and that would be great to add as well. So come on guys, let the rest of the Region see some of the great layouts in YOUR Division. Its also time to start your long term planning for our Region Convention that will be held over the October Long Weekend here in Sydney. This weekend was intentionally selected as the AMRA Exhibition at Liverpool is also on. So here is an opportunity to double your enjoyment and attend both Liverpool and our Convention. Lots of dealers, lots of layouts, lots of clinics, lots of fun. See old friends and make new friends. What more could you ask for? Hope to see all of you there.

Region Trustee

THE CANBERRA MODEL RAILWAY EXHIBITION

By chance, I was in Canberra on the weekend of 3rd and 4th April, when the Canberra exhibition was held.

The structure housing the exhibition is similar to the Whitlam Centre in Sydney and the internal layout also takes on a familiarity. The only difference is the lower number of layouts and exhibitors and this gives visitors more room to see the displays and other things.

The one highpoint was the Sweetgrass layout of the Association. It was staffed by Viv Brice and his fellow members who displayed a unity not only by their matching dress but by the friendliness of spirit that was being conveyed to enquirers. There was a steady stream of people interested in digital control and Viv and his colleagues were eager to allow interested visitors to sample

the throttle, under supervision. It seems that the layout has become a marketing arm of the well-known DCC manufacturer whose equipment is used. How much more appealing would it be to upgrade the system to wireless control?

Much joy was experienced by the reviewer and others in dialogue with our fellow members. They are to be congratulated for their effort. The boys in Canberra also had on display two modules of their proposed modular HO scale layout. It is clear that Canberra

is setting a keen pace on direction, application, commitment and enthusiasm.

Stuart Sharp



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D.1.5	Dirty Brush	VT41	Santa Fe's Arizona Mainline	VT84	F & SM – GMR#24
r2 *	Clinic - Perfect Decals	VT42	Santa Fe's Mojave Mainline	VT85	Rock Island Railroad (Pentrex)
T3 *	Clinic – Modelling Tips & Tricks	VT43	Burlington Northern's Crawford Hill	VT86	BSNF Sand Hills Sub
	Clinic – Freight Car Loads	VT44	NMRA Australasian Region 1998	VT87	All Aboard Series Vol 2
T4 *		V 177	Thornleigh Mini Convention (Rolling	VT88	All Aboard Series Vol 5
T5 *	Clinic - Styrene Construction/Casting			VT89	
T6 *	Clinic - Planning Realistic Operations		Stock, Soldering, Weathering Your		Rock island Railroad (Grn Frog)
T7 *	Clinic – Detailing Passenger Car		Models & Pine Trees.)	VT90	Forks Creek Central - Ron Morse
	Interiors	VT45	Trains On Location Stevens Pass	VT91	California's Baldwin Diesels
L8 *	Kansas City Convention 1998 Layouts	VT46	Toronto To Chicago Railfan Way	VT92	Santa Fe's Raton Route
	Tours	VT47	Tehachapi Trains on Location (Massing)	VT93	Santa Cruz Northern GMR#35
19 *	San Jose Convention 2000 Layouts	VT48	Great Layouts US Prototype	VT94	ATSF Argentine Div GMR#29
	Tours	VT49	Scenery Tips No.3 by Donald Davis	VT95	East Broad Top
10 *	St Louis Convention 2001 Layouts	VT50	Prototypes To Make You Comfortable	VT96	Classic Chicago Railroading
	Tours		by John Armstrong Memorable	VT97	All Aboard Series Vol3
14	USA Railroad Layouts (compilation		Locomotives by Charlie McCoy	VT98	SP's Central California Mainline
	videos 1-6)		Frequently Seen, Seldom Modeled by	VT99	NYC - The Beach Collection
71.5	USA Railroad Layouts (compilation	2	Jim Cope	VT100	Union Pacific
15	1450. 32			VT101	Southern Pacific - Last Cab F'ward
	videos 7-13)	VT51	Signals Made Simple by Mark Hanslip	V 1 101	over Donner Pass / SP 1941 / SP The
16	Airbrushing for Model Railroaders		Computer and Railroad Together by		
17	Weathering Railroad Models by		Mark Hanslip	7 2004 0.0	Coast Line
	Malcolm Furlow	VT52	Trees from Weeds by Louis Godbold	VT102	Union Pacific - UP Challengers / UF
18	Scenery Tips No.1 Rock Moulds by		Weathering and Ageing with Pastels		Big Boys / UP Steam
	Donald Davis		by Robert W Baily jr	VT103	Union Pacific - UP Turbines of the
19	Scenery Tips No.2 Backgrounds by		Rolling Stock from Cardboard by W		Wasatch / UP Mighty Turbines / UP
	Donald Davis		Meijndert Van Alphen Foamcore		Trilogy
20	NMRA Australasian Region 1993		Buildings by Robert Hubbard	VT104	Santa Fe - Challenge for Tomorrow
20	(Tony Koesters Clinic) by Kevin Brown		The Art of illusion by C J Riley		Vintage Diesels / SF, The Diesel Lo
nT.		VT53	N Scale and N Track by Jim Fitzgerald	VT105	This is my Railroad – SP Diesel
2I	Waitemata (Auckland NZ)	V 133		¥1103	
	Convention 1990 by Gerry Hopkins		and Ben Davis Model Railroad		Version / SP Daylights, Cab Forwar
22	Piki Piki Tram (visit to famous NZ		Photography by John Allen		& Early Diesels
	NG layout of Merv Smith)	VT54	NMRA National Convention 1998-	VT106	UP Last of Giants / UP 6900
23	Diamond Valley Lines (visit to famous		Kansas City Layout Tours		Centennials
	layout of Fred Gill) by Gerry Hopkins	VT55	Convention at Marayong 1995 and	VT107	Lou Sassi West Hoosac GMR#23/ L
24	US Pittsburgh Convention by John		Clinic Presentations by Allen		Nicholas Utah Colarado GMR#27
	Saxon		McClelland	VT108	Glory Machines Vol 3 / Glory mach
25	All Aboard An Introduction to Model	VT56	Union Pacific BIG BOYS volume 2		Vol 4
23	Railroads by Madeline Trimby (Kevin	VT57	Southern Pacific 1941 volume I	VT109	UP Steam over Sherman / Otto Perr
	Brown's video conversion of tape/slide	VT58	Santa Fe 3759 Final Run Over Cajon	11107	Santa Fe
		¥130		VT110	UP Battle up Sherman Hill / Pennsy
	clinic)	10000	Pass	V1110	
26	Optimum Use of Space by John Allen	VT59	Santa Fe - War Bonnets Through	1277111	Racetrack 1940-1980
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30	Layout Tours No 3 by Gerry Hopkins			V1117	- Contraction of the Contraction
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Ron Solly	9 Grey Crescent	Evanston Gardens	5116	(08) 85222536
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Laurie Green MMR	20 Nambour Drive	Sunbury		(03) 9744-5188
Peter Weller-Lewis	5 Tarilta Court	North Terrace Queanbeyan		(02) 6293-8282
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EMAIL COMMUNICATION

Allan Garbutt	president@nmra.org.au
John Saxon	vicepresident@nmra.org.au
David Jupp	secretary@nmra.org.au
Erik Bennett	treasurer@nmra.org.au
David North	trustee@nmra.org.au
Richard Roth	richard@nmra.org.au
Robert Peterson	robert@nmra.org.au
John Montgomery	john@nmra.org.au
Sowerby Smith	publicofficer@nmra.org.au
Toni Saxon	membership@nmra.org.au
Glen Stevens	div1sup@nmra.org.au
Viv Brice	div2sup@nmra.org.au
Grant McAdam	div3sup@nmra.org.au

John Baker Gerry Hopkins (MMR) Laurie Green (MMR) David Latham David Jupp Steve Chapman

Convention Chair

Michael Nott

Kelvin Sherson

Ron Solly

div5sup@nmra.org.au div6sup@nmra.org.au div7sup@nmra.org.au apchair@nmra.org.au contest@nmra.org.au apvicelaurie@nmra.org.au videos@nmra.org.au editor@nmra.org.au books@nmra.org.au memberaid@nmra.org.au convention@nmra.org.au comms@nmra.org.au

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