

Main Line

National Model Railroad Association

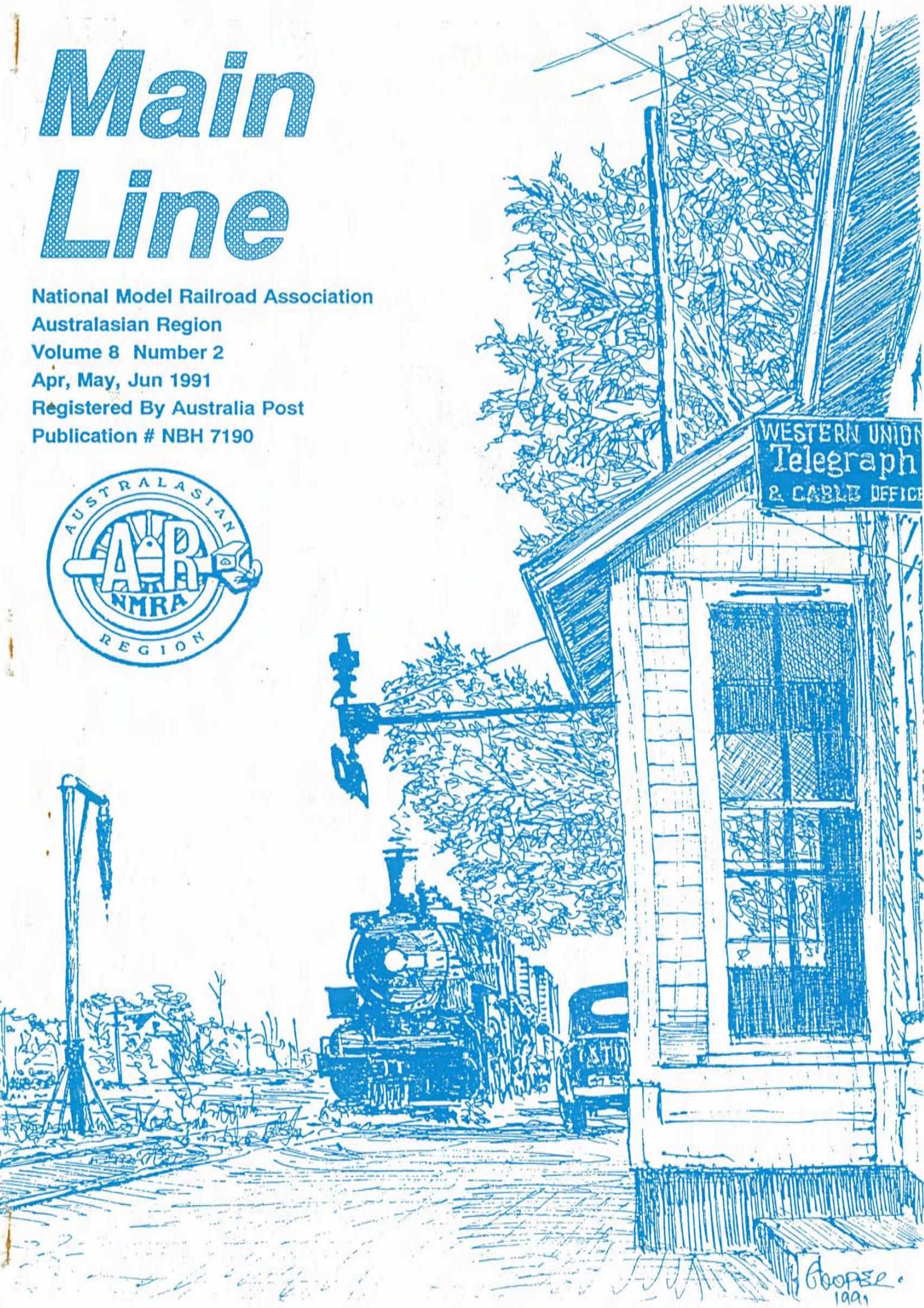
Australasian Region

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Main Line

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Main Line is the official journal of the **Australasian Region of the National Model Railroad Association Incorporated**. It is published four times per year in approximately February, May, August, and November. Articles, letters, members classified advertisements and club notices are solicited from the membership and are considered to be donated free for the benefit of the hobby. They should be forwarded to:-

**THE EDITOR,
Main Line,
7 Booralie Road,
TERREY HILLS. N.S.W. 2084.**

Articles can be submitted on a computer disk (IBM Compatible) 3.5" or 5.25". Most WP packages can be read at this time. This magazine is prepared on a Canon A200SV (386SX) computer and LBP-4 laser printer using Wordperfect 5.1 and Drawperfect 1.1.

Paid advertising is welcomed. Current rates for four issues are \$130 for a full page, \$70 for a half page, \$40 for a quarter page and \$150 for the back cover. All enquiries regarding advertising should be directed to the secretary:-

**N.M.R.A.
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EPPING NSW**

ON THE COVER:

UP steam wasn't all Big Boy, Challenger and Northerns. To the end, small, homely branch line power was in service. Here, on the Ord branch in Nebraska, 2-8-0 #428 arrives at North Loup, on an amazingly late 28 October 1958.

Bill Cooper

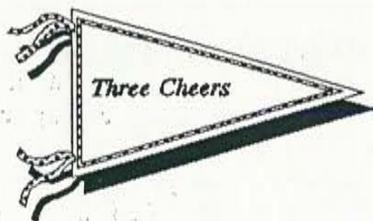
Waybill

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MEETING SCHEDULE

| | |
|--|---|
| Sat 15 Jun | Jack MacMicking, 247 Eastern Valley Way Middle Cove NSW (02) 958 5988 On3 RGS |
| | Henk Molenkamp 26 Birdwood Ave, Upwey VIC (03) 534 4126 |
| Sat 13 Jul | Gary Norwood, 271 Vardys Road Blacktown NSW (02) 622 5859 HOn3 D&RGW |
| Sat 10 Aug | Newcastle Exhibition NSW's Premier Exhibition |
| Sat Aug 19 | John McClure Brynmaur Road, Camberwell VIC (03) 809 2419 |
| Sat 14 Sept | Scout Hall, Abbots Rd Curl Curl NSW Gerry Hopkins – HOn2/2 Laurie McLean – HOn3 + Module Meet (02) 450 1033 |
| Sat 5 Oct | Liverpool Exhibition Sydney NSW |
| Sat 16 Nov | Rob Dall 7 Murchison Ave Vermont South VIC (03) 801 6034 BYO BBQ start from 11.30am |
| ALL MEETINGS START AT 2.00pm Unless otherwise Stated. | |

Due to parking restrictions at Gary Norwood's Home, please refer to map on page 10 for the July Meeting.

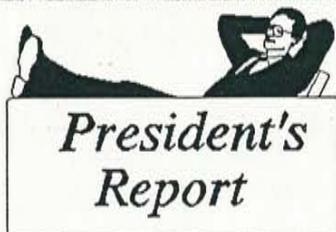


Happily, our search for a new President is over with our Vice President Sowerby Smith formally accepting the role until our elections, due May 1992. Sowerby has been of course acting President since Peter Burrows stepped down at the beginning of the year. (See my report in the last Main Line for background.)

Our Librarian, Glen Coventry, volunteered to take on the additional Vice President job for which we are most appreciative.

It is not too early to remind **YOU** that we will be looking for a new committee early next year. Many of the present executive have indicated they will not be running again. So, if you think you would like to give something back to the Hobby and Association for what it has given you in the past, talk to me or telephone or drop me a line. I will be happy to fill you in on what is required in each of the jobs.

John Saxon
Trustee.



Changing hats in mid stream, from acting President/Vice President this is the first of my reports as President of the Region. A role I have taken over for the balance of the present term. I would like to thank our Past-President Peter Burrows for all his hard work for the Region, most of which is seen only by the committee and for making my task easier and leaving the Region in very good shape for the future. This report I find a little more difficult than writing about layout visits. That task will now be undertaken by my new Vice President Glen Coventry who has agreed to take on that roll, starting with John Saxon's visit. Glen agreed to take over the Vice-Presidency at John Gordon's meeting and I would like to take this opportunity of welcoming him to the board of directors and hope that he enjoys the additional involvement.

As with any organisation we are only as strong as the quality of new blood entering it, otherwise we stagnate and disintegrate. We have seen in the last few months an increase in our local membership and I hope that they enjoy what we have to offer and as time goes on they join in all the aspects of the Region.

As I write this the convention is looming, and it will be over by the time you read this, consequently I have not formulated any earth shattering changes in direction for the region. It really doesn't need any. The goals I do have are to continue with our formula of monthly meetings that are attracting ever increasing numbers and to expand the appeal and membership base.

We are currently short of a November and December venue and I would appreciate a couple of volunteers in that regard. If you feel you can help please call me anytime.

Sowerby Smith
President

Membership and Subscriptions

Due to the increase of subscription rates for the NMRA in the U.S., brought about by increased U.S. postal charges, it is necessary to raise the

rates of subscriptions for the Australasian Region. The increase covers the U.S. section only, this Region's rates do not change.

The various types of membership shown below

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and the rates shown cover BOTH the U.S. and the Australasian Region, however you must be a member of the NMRA(US) to be a local Region member.

Classes of Membership

REGULAR: \$44.00 per Year
All benefits of membership and all publications issued during term of membership.

AFFILIATE: \$29.00 per Year
All benefits of regular membership with the following exception. This membership does not receive the monthly publication, The BULLETIN.

YOUTH: \$29.00 per Year
All benefits of regular membership. This membership is available to those under 20 years of age, date of birth is required.

FAMILY: \$7.00 per Year
A member in any class, may enroll their spouse and/or minor children residing at the same address as Family members. Family members don't receive literature.

LIFE: Contact Home Office
All benefits of regular membership for life. Fee is based on an actuarial table according to date of birth. Date of birth required. (Not available to clubs or groups. Not refundable or transferable.)

At the annual General Meeting I will move that the new rates be adopted for the Australasian Region.

Please note that when paying your subs, by cheque etc. to make it payable to the NMRA and not the Membership Officer.

Jack MacMicking
Membership Officer



Welcome Aboard

Robert Baker 37 Cambridge Drive
Rankin Park
Newcastle NSW 2287

Don Palmer P.O. Box 796
Cleveland Qld 4163

Scott Weatley 3 Arcacia Place
Greystaines NSW 2145

Vic Unicume 5 Biddenden St
Thornlie WA 6108

Barbara Ballment 14 Kooranga Place
(Mrs) Normanhurst NSW 2076

Kevin Harris Lot 96 Dymond St
Bargo NSW 2574

Laurie Green P.O. Box 435
Penshurst NSW 2222

Russell Aspry P.O. Box 398
Maryborough VIC 3465

Jenny Smith 174 Fuller Rd
(Mrs) Chatswood NSW 2067

Fred Gill 80 Barrett St
Winston Hills NSW

Michael Flack 14 Dawson St
Epping NSW 2121

David North 1 Dickson St
Forestville NSW 2087

Stephen Foster 41 Thompson St
St Marys NSW 2760

Martin Betts Old Station Rd
Snug TAS 7054

Bob Johnson 2 Hill St
Port Macquarie NSW 2444

Rowan Cole 1/125 Thomas St
Hampton VIC 3188

Noel Webb P.O. Box 33
Carnegie VIC 3163

Greg Cowley 9 Tugulawa St
Balmoral QLD 4171

Frank Wagner 37 Steven St
Pennant Hills NSW 2120

Ian Thompson Farm 593, Progress St
Yanco NSW 2703

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| Peter Clayton | P.O. Box 281 Abbotsford VIC 3067 | Bob Hart | C/- Hobby Wholesalers Penrith NSW |
| Ross Evans | 31 Wakefield St Sandgate QLD 4017 | Ian Petherick | P.O. Box 1733 Kambah ACT 2606 |
| Ken Frazer | Whirinaki Valley Rd Rdi Ngakuru Rotorua NZ | Ted Howe | 11 Appleton Ave Wentworth Falls NSW 2786 |
| Jim More | 119 Walker St Riverton NZ | Trevor Pullman | 4 George Evans Close Wentworth Falls NSW 2786 |
| Gary Willis | 4 Manuroa Rd Takanini Auckland NZ | Louise Pullman (Mrs) | 4 George Evans Close Wentworth Falls NSW 2786 |
| Les Street | P.O. Box 15144 Hamilton NZ | Anthony Carr | 28 Eastview Ave Leura NSW 2780 |
| Merv Smith | 435 Point Chevalier Rd Auckland 2 NZ | Jim Gibson | 19 Leila St. Traralgon VIC 3844 |

MEETING REPORTS

Our February meeting and it's off to Newcastle for our annual visit to Warren McLean's. As usual we are in for a treat. Situated in an inner suburb in Newcastle, Warren's can't be too hard to find for over 50 members turned up to see the latest developments in Warrens Diorama style modular layout construction.

We had several visitors from Port Macquarie and at least one each from Canberra and Melbourne. It is great to see members and guest from distant locations at our meetings.

The afternoon was equally split between Warrens Workshop/Layout room/Showroom and the newly rebuilt church hall across the road, which has been restored after a devastating fire last year. The highlights of the afternoon were the mini clinics, the first by Warren on hints and tips of module construction. Warren's modules are approx 5'long and 18" deep and about 2'high. The sky wraps over with concealed lighting and a valance along the front hiding the lamps. The whole structure is very strong, being a rectangular box with an opening in the front.

The scene is logging narrow gauge in O scale. The painted backscene is Warrens first and he copied the brush strokes from the cover of the

"Gazette" to create his own painted backdrop. I'll never look at the painted cover of the "Gazette" in quite the same way again. Look no ballast, logging roads did not bother with the stuff so the ties sit on top of the dirt. Trees that go on for ever. Just like the photos in the logging books, Warren's trees went right out of shot, through the sky. Trees are BIG!! and the pine trees in the forests of the North West dwarfed the trains. One advantage of such big trees is you only have to model part of the tree. Warren used wood complete with bark for the trunk and Heiki foliage material on the small branches he inserted in the usual way. Lots of new ideas and an excellent standard of modeling.

Gerry Hopkins then presented a short clinic on wiring your layout with hints on where to buy your wire, what colours to use and how to string the stuff up. Very useful tips from one of our experts with electronics.

Afternoon tea prepared by Jackie and assisted by the ladies in the group was demolished in our usual manner. Then a few brief announcements and on with the talk and trains.

I had to leave about 6.30pm and just as I said goodbye to Jackie dinner was being prepared!

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Thirty for dinner and into the evening with videos etc.

Sunday morning a visit to the Broadmeadow Loco Depot laid on by Ray Hunt and the report I had indicated a great time was had by the large group that were able to go (approx 20). Unfortunately family commitments made my own attendance impossible.

I would like to thank Warren and Jackie for their invitation and all the time and effort that they put in for our visit and also Ray Hunt for organising the tour to Broadmeadow Loco Depot.

Sowerby Smith

Visit to John Gordon's Layout.

On Saturday the 9th March the weather was beautiful, warm and sunny, over forty members descended on John Gordon's house in Roseville, a leafy Lower North Shore suburb of Sydney.

John's layout is situated in a 10'x9' room at the rear of his house. The layout is a folded dog bone with a walk in area where the main control panel is situated. Code 100 flex track and mainly Peco points all of which are electrically operated. 18" radius curves are the order of the day due to the small space John has available with small urban yards. Lots of fine structures are dotted about with freight handling facilities giving a logical reason for the trains to be there. John has an extensive collection of both European and US prototype equipment and during our visit it was all western road UP and SP being much in evidence.

John's layout is fully sceniced with a painted backdrop all around. The feeling of space is enhanced by the backscene. A logical grouping of the buildings roadways helping to make the railway a complete mini-scene. What the members did not see that day was that less than 5 months before our visit John had totally stripped everything off his baseboard and raised it up about 8" to give a more comfortable working height. He then rebuilt all the track and electrics in time for our visit. He has installed a large folding control panel with all the controllers and switch gear on it. When not running trains it hangs down out the way.

John is an accomplished modeller and not just with trains. At the front of the house John has his collection of ship models in 2 very large display cases. Most are completely scratch build and really beautiful. Several of our members, who are ex Navy, expressed more than a passing interest.

Set up in the enclosed back veranda was a 20' test track for members to run their own trains which was much appreciated by several of the members and guests.

We held a short meeting outside on the lawn, followed by our now regular short mini clinic. This one was by me on using Selley's Clear for rushing water. Afternoon tea was served and John's wife Gwen must be congratulated, it was excellent. Warren's trailer provided its usual array of goodies and a most pleasant afternoon passed all too quickly. Our thanks to John and Gwen for inviting us all to their lovely home.

Sowerby Smith.

April Visit

April's meeting took us back to John and Toni Saxon's place, home of the Cedar Valley Lines. John had done a lot more work since our last visit - plenty of scenery - working colour light signals - more bridges. John had prepared a hand out for visitor, this is reprinted below.

BACKGROUND

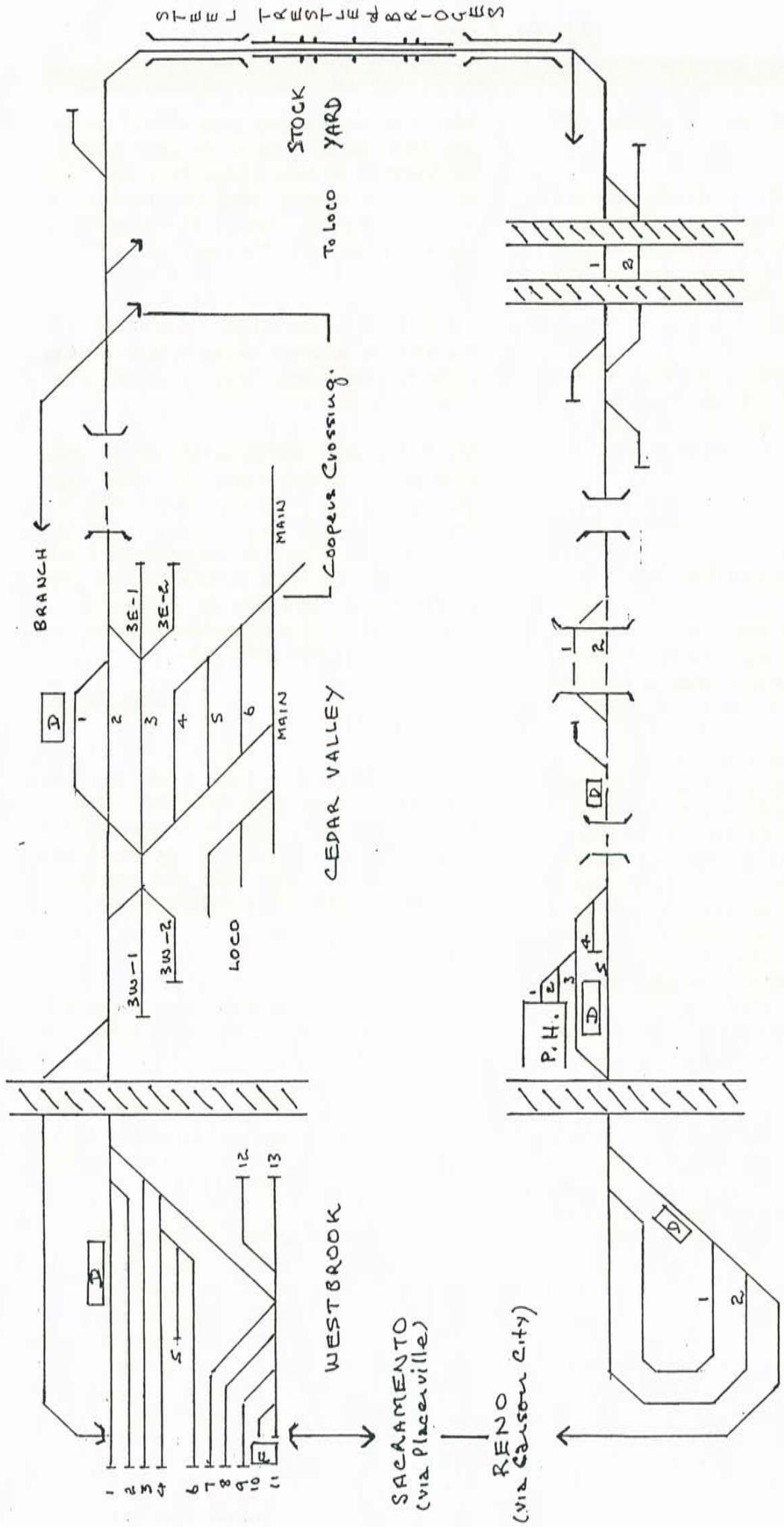
The Cedar Valley represents a short line situated in the western region of the United States as it was in the 1950's.

It is a publicly owned line which mainly serves several mines in the area by transporting loaded hoppers of product to a power house situated near the picturesque Johns River area.

Due to its strategic location connecting the cities of Westbrook and Easthaven,(near Sacramento and Reno respectively) several larger U.S. first class railroads have stockholdings in the Cedar Valley to obtain trackage rights when the usual route via Donner Pass is closed due to weather. Consequently, it is not unusual to see trains from Southern Pacific and other major western carriers traversing the line and with first class priorities over Cedar Valley trains.

CEDAR VALLEY SHORT LINES

21.3.1991.



EAST HAVEN JOHN'S RIVER GRANT ARMSTRONG HELPER CRAIG LOOP SUMMIT TAHOE JUNCTION

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The spasmodic routing of foreign trains over the Cedar Valley, whilst interesting to the railfan, causes severe over-capacity problems for CV operating personnel and CV trains may not always run to schedule.

Cedar Valley management have been innovative in their choice of motive power with locomotives purchased second-hand over the years from many first class railroads including one or two from eastern lines. Currently, contemporary diesels are under trial as to suitability for CV operations.

Again, passenger and freight cars have generally been purchased from wealthier lines as they have modernised and arch-bar trucks may still be seen

under some CV freight cars. However, due to the high utilisation and heavy loading, Bettendorf trucks have been fitted to all hoppers which are generally of composite steel and timber constructions.

The locomotives of the present roster include

products of PFM, Tenshodo, Westside, Sunset, KTM and other shops whilst many of the freight and passenger cars were built in the Cedar Valley's own plant.

OPERATION

Operation on the CV is largely through freight and passenger consists from Easthaven to Westbrook and return in due course. Both terminals are situated in an adjoining room.

A peddler freight does operate picking up and dropping off at Cedar Valley, Tahoe Junction, Grant and Johns River. In addition, the peddler usually collects loaded hoppers at Cedar Valley for the power house at Johns River and collects empties on its return from Easthaven for disposal at Cedar Valley.

Branch operation is usually an 8 car loaded hopper consist from the mine at Digity Ridge in the mountains to transfer sidings at Cedar Valley and empties in return.

Gerry Hopkins

Convention '91 Report

Our 1991 Convention followed a similar format to that of 1988. This year we had 139 people registered for Saturday's full program of activities at Macquarie University, and on the Sunday

a layout tour was followed by an informal gathering at West Epping Park Hall.

After registration and the opening address the clinic program got under way with Phillip Moore's "Researching the Santa-Fe" telling how he obtained the prototype data for his home layout. Next was Garry Spencer-Salt's "Improving your Rolling Stock", with some useful tips on improving the look and running of freight cars. After the lunch break we were entertained by Keith McCarron with "Photography for Model Railroaders". A spectacular audio visual display. George Paxon gave us "The Illusion's the Thing", showing how to provide the illusion of structures using backdrop, building fronts and partial buildings. Garry Norwood, who models Colorado narrow

gauge, showed us how to make realistic "Deciduous trees". Finally Merv Smith showed us how he uses "Walkman Control" to enhance operating sessions on his Pikipiki Tramway.

This year for the first time the model contest was judged at two levels, the Modellers Contest and the Masters Contest. This was designed to encourage greater participation in the modelling competition and was fully explained by contest chairman Phil Knife in the March Mainline.

In the main room Laurie McLean had his new module of Durango loco depot. Complete with motorized turntable and sound equipped locos operating. Warren McLean showed us his two new On3 logging modules featuring pine trees that, even in O scale, tower over the trains just as they did in the prototype. Kennebec County, Gerry Hopkins newly completed exhibition layout like his previous Franklin County features a freelance Maine 2' gauge railroad. Some interesting electronics Gerry has built allows

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automatic train control to simplify operation at exhibitions. During the lunch break Gerry ran a switching competition on the layout.

Lots of items were received for the silent auction, and the room became a hive of activity toward closing time with buyers trying to outguess and outbid each other. The auction raised about \$450.00 for club funds.

Warren McLean set up his Quality Scale Models Shop; he always has some interesting new products to drool over. This year for the first time Don and Heather Palmer of Pacific Belt Lines came down from Brisbane, their specially being a re-powering service for Athern locos. Easyway detail casting and log car and lumber load kits were on display. Shirley MacMicking ran our company store as well as selling heaps of raffle tickets all day.

Late afternoon it was time to cross your fingers and stroke your rabbits foot as the various raffles were drawn. The lucky door prize was an Athern Diesel provided by Punchbowl hobbies, and there was a raffle of an A & B set of Stewart Hobbies F7's in Santa-Fe War-bonnet, donated by Pacific Belt Lines, which looked so good I would have run them on my layout even if I modelled the Civil War!! The big raffle was for the TV and VCR and was won by Eva Lovett.

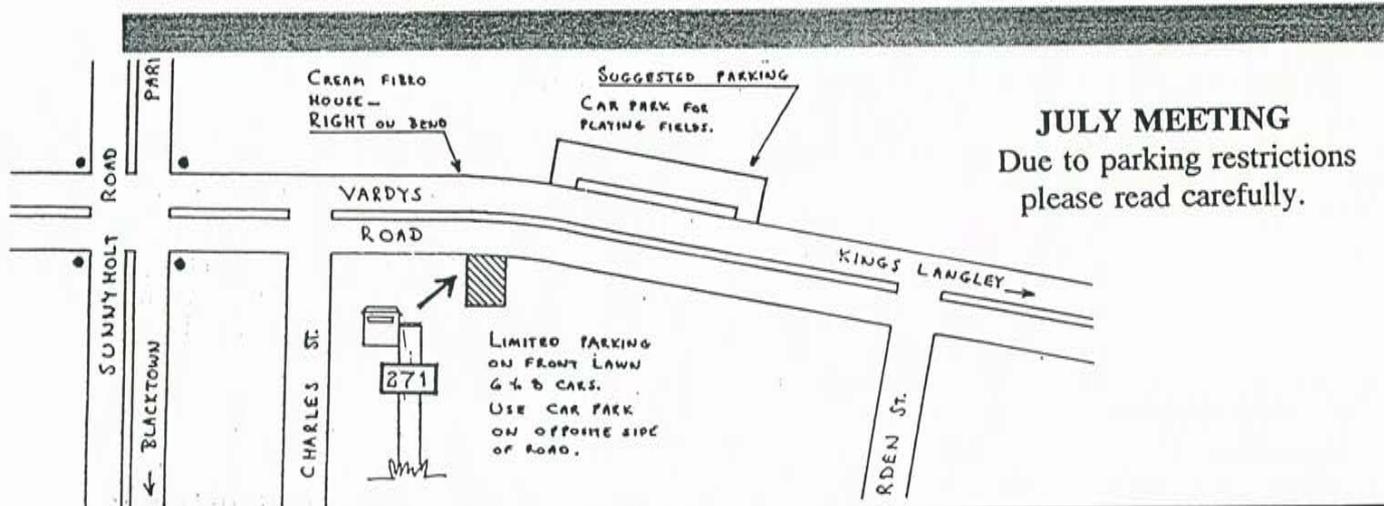
Sixty people attended the dinner that evening at the University Union. After dinner Merv Smith, who is an announcer on Auckland radio when he's not modelling, regaled us with the story of his trip on the trans Siberian Express complete with a Russian accent that had the room in stitches.

Sundays Program began with a layout tour. In the morning over one hundred people managed to view Geoff Notts "White Pass and Cowlitz", Bob Benson's "Great Northern", Lawrence Nagy's "Pennsy Railroad", and Phil Moores "Santa-Fe".

We then met at West Epping Park Hall for a low key afternoon. A large range of O scale models was on display plus several kitbashed LGB cars showing how they can be made to look more prototypic. Videos of several local layouts were shown. In addition J & D Toy Imports and Powerline Models had stands. The company store and the library were on hand. But mostly it was a chance to relax and talk, which was pretty difficult during Saturdays full schedule.

Altogether it was a very successful convention. We learned new techniques, got to see what other people are achieving, and talked to people we hadn't seen for some time. I would like to thank the following people who made it all possible by giving their time on the day and beforehand:- Bob Benson, Colin Brettle, Kevin Brown, Peter Burrows, Bill Cooper, Jim Crum, Paul Ferguson, Ian Forsyth, Greg Hiley, Geoff Hoad, Gerry Hopkins, Ray Hunt, Roger Johnes, Phil Knife, Bruce Lovett, Eva Lovett, Jack Macmicking, Shirley MacMicking, Keith McCarron, Laurie McLean, Warren McLean, Chris Moore, Helen Moore, Phillip Moore, Garry Norwood, Geoff Nott, Don Palmer, Heather Palmer, George Paxon, Hal Saxon, John Saxon, Toni Saxon, Jenny Smith, Merv Smith, Sowerby Smith, Garry Spencer-Salt, Geoff Willett and everyone else I have failed to mention -Thank You-

Glen Coventry



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PACIFIC BELT LINES

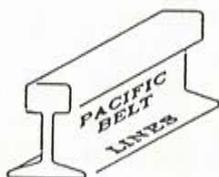
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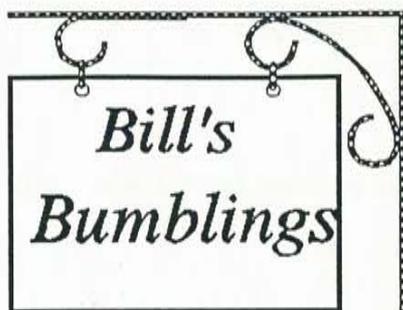
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For a copy of our free 46 page catalogue, please send a large self-addressed envelope (the size of this page), together with an 80c stamp (90c outside Qld) to the above address. We look forward to hearing from NMRA members.

Don Palmer
(member NMRA)

Created By Enthusiasts

For Enthusiasts



SCRATCHBUILDING

Full-size railways rarely scratchbuild. Generally, they try to buy off-the-shelf, ready-to-run equipment from the trade. They sometimes have to finish off with a custom paint job, perhaps a few fittings, but generally, they use what they get straight from the manufacturer. That sounds like good practice to me. Not just for rolling stock, but for buildings too. Kits are also popular. It is cheaper to buy CKD (completely-knocked-down) kits for gons, hoppers, tanks from a specialist supplier in most cases than to build from scratch in the company workshop.

Modellers who are intent on building an operating outfit could well follow this precept....buy what you can, build what you can't from kits and, as a last resort, scratch what's left. There's just so much time to devote to layout building, so it shouldn't be frittered away on unnecessary projects. The rewards of operating an effective, realistic layout are so great that **anything** detracting from its completion should be discarded. The laissezfaire approach ('do what feels good') can be self defeating, as scratchbuilding some favourite item robs you of valuable time, better-spent on the layout as a whole.

For example, a dear, now-deceased friend of mine in the NMRA "wished" that he had an operating layout, but "never had time". Yet the "time" that he did have was devoted to such time consuming diversions as scratchbuilding EMD Blomberg trucks, sideframes, gears and all, to ride under an Athearn F7 body! Considering that superb ready-to-run Blombergs are available from Athearn, Roco, Kato, Front Range, Precision Scale, etc., in his chosen HO scale, and his overt envy of working layouts, his modelling schedule was just plain stupid. His desires remained unfulfilled.

NMRA contests encourage this sort of thing, by penalising kit bashing. Having been a long term model contest judge, both in and outside the NMRA, I have long thought that the end result justified use of whatever shortcuts existed to achieve them. Some of the most authentic looking stock I've seen has originated from an over-the-counter shake-the-box kit, tastefully altered and detailed, yet have fared badly against rougher, less realistic scratchbuilt stock in NMRA contests. The existing judging rules were formulated in a different era, when scratchbuilding was vital to the layout building agenda... you scratchbuilt or went without. Not so now. Kit-bashing, once rare or non-existent, is now common, but unlikely to gain you many points in an NMRA contest. No wonder such a low proportion of total members even enter such contests, let alone win anything.

Nevertheless, there **IS** a place for scratchbuilding and perhaps even gaining the odd contest certificate for the wall, **providing** it fits in with some overall layout scheme - assuming, of course, that an operating layout is your target. Even in the most popular scales: HO and N, there are many opportunities for scratchbuilding a key element or two; mine and concentrator buildings; logging loaders/unloaders; city terminals, silos, stations, or the occasional key item of rolling stock. The Model Railroader has recently had some excellent scratchbuilding articles. King's signal box; Freytag's coke plant.

So, if you want to scratchbuild, fine, but if you want to put together an operating layout that works well and looks good, you can still scratchbuild, but try to limit it to a shallow topping on your modelling diet...otherwise, you'd better aim small if you ever hope to finish it. And if you model in G, O, S, HO, N, or Z, forget those scratchbuilt Blombergs!!

Bill Cooper



Main Line

NMRA TAPE/SLIDE CLINIC + VIDEO LIST - AUSTRALSIAN REGION - 3/91

A: LAYOUT TOURS

| NUMBER | TITLE | SLIDES | TIME |
|--------|--|--------|------|
| 1 | TROLL & ELFIN RAILROAD | 70 | 30 |
| 2 | CHARLESTON EAGLE RIDGE & WHEELING RAILROAD | 94 | 35 |
| 3 | PROSPECT & UPPER RIDGE RAILROAD | 81 | 50 |
| 4 | UNLIKELY & IMPROBABLE RAILWAY | 126 | 45 |
| 5 | INTERALKE VULCANIAN RAILWAY | 63 | 38 |
| 6 | ROCK ISLAND WESTERN | 89 | 32 |
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* * * *

VIDEO LIBRARY



- * **Narrow Gauge & Shortline Convention 1990**
3 Hrs of clinics
 - Research by Gary Norwood
 - Trees by Ray Walter
 - Scenery by Gerry Hopkins
 - Structures by Geoff Nott

- * **New Zealand Convention 1990**
(Layout Tour) 30 mins

- * **Exhibitions 1982-1989**
by Gerry Hopkins.

A tour of some prize winning layouts at major exhibitions from Sydney, Adelaide, Newcastle, Bowral.

- * **Weathering Plastic Structures**
Videod by Keith McLaren

This is one of the popular tape/slide clinics transfered to video with **Australian** commentary and background music.

- * **Layout Tour #2**
By John Saxon

This tape takes you on a tour of some of the layouts at the Pittsburgh Convention '90. Also included are "Tuolomene Forks" of Bob Brown, San Diego Club Layout plus a host of others.

- * **Layout Tour #3**
By Gerry Hopkins

A compilation showing a few "well known" and "not so well known" layouts; Rio Grande Miniland; Franklin County; Diamond Valley Lines; D&RGW; Kennebec County; Cedar Valley Lines.

Available From Tape/Slide Dispatcher Bill Cooper, a small handling fee will be charged. Please specify VHS or BETA format (PAL SYSTEM only at this stage).

LIBRARY NEWS

As notified previously, we now have the basis of a library. The stock currently stands at the following:

- * **Model Railroader,**
Bound volumes 1978 through 1985

- * **Railroad Model Craftsman,**
Bound volumes 1978 through 1985

- * **Painting Miniatures**
by Floquil

- * **Track Planning for Realistic Operation**
by John Armstrong

- * **Scenery for Model Railroaders**
by Bill McCanahan

- * **How To Wire Your Model Railroad**
by Linn Westcott

- * **101 Track Plans**
by Linn Westcott

- * **Easy To Build Railroad Structures**
by Willard Anderson

- * **Practical Guide To Model Railroading**
by Linn Westcott

- * **Classic Articles From Model Railroader**
by Mike Schafer

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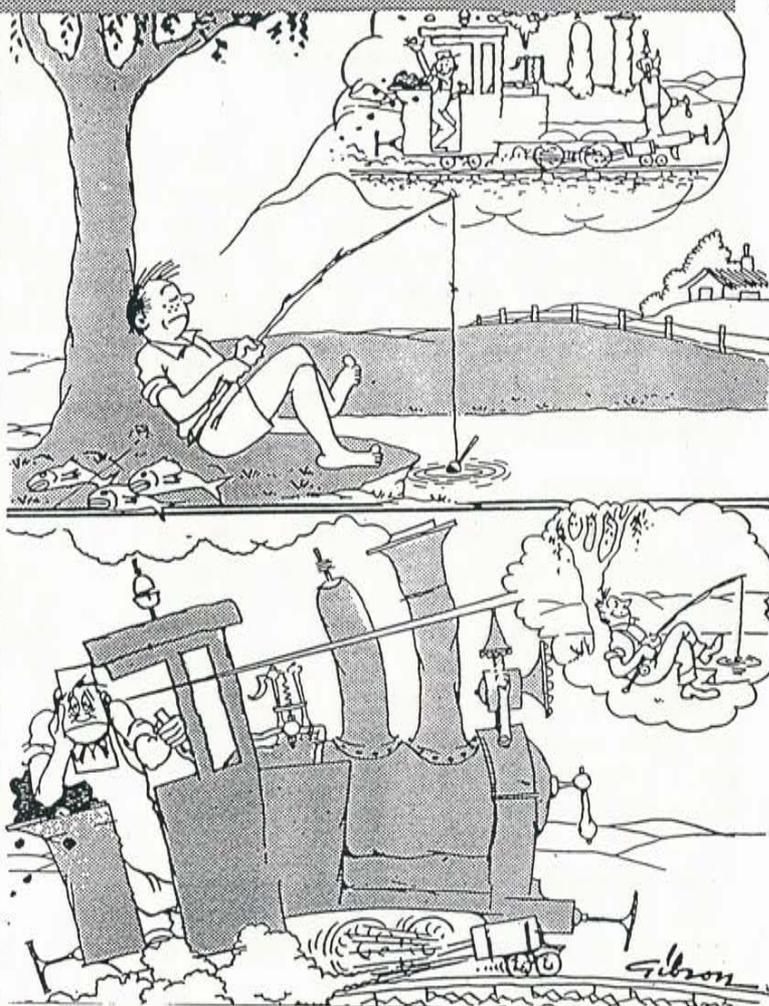
Our Librarian is Glen Coventry, of 16 Lanai Place, Beacon Hill, N.S.W. 2100. Phone (02) 452 2131. Books will be available at Sydney Meetings or by writing or phoning Glen.

Borrowing fees will be just sufficient to cover costs and postage. More details next edition or if you are keen to borrow immediately, call Glen.

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The Life of a Diesel Cab!

The Idea.

While reading an early 1970's copy of "Model Railroader", I discovered an interesting article on building a toy box for a child's room in the shape of a "box car". Although all our children had grown past this stage, the idea floated around until I decided to endeavour building a diesel cab as a bed head for our youngest son, Jason, who at that time was modelling *Illinois Central* in "N" scale.

The Construction.

Not needing to scale it precisely, I drew up plans from photographs of a GP40 and changed dimensions as I went along to keep at *Visually acceptable proportions*.

Constructions began with off-cuts of chipboard and three-ply, some aluminium angle, wood glue, nails, screws, wood putty, paint and sandpaper.

Some months later it rolled out of the *Lansvale Shops* in shiny orange livery of "IC" numbered 9868, which represents Jason's birth date, ready to go into service.

In Service.

The accompanying photographs show "9868" in service on the mainline, Jason's Bed, undoubtedly experiencing lots of "Sandman's Z Z Z Z Z's" on its many trips to *Morning Town*, during its first few years of faithful service.

Re-assignment.

As time went on, Jason's interests turned to other things. 9868 was relegated to less important branchline service, a bookcase in the spare room (photo 2) until one day it was returned to *Lansvale Shops* to await management decision - Restore or Scrap.

Disaster.

While awaiting its fate, 9868 suffered considerable cab damage when, in February of this year, a fierce hail and wind storm struck, which resulted in a large gum tree being uprooted and falling across the shop's iron roof. The damage allowed water to run in. On inspection it was found that water had caused the

three-ply and chipboard to split and open up. Management was now convinced to scrap 9868!

Reprieve.

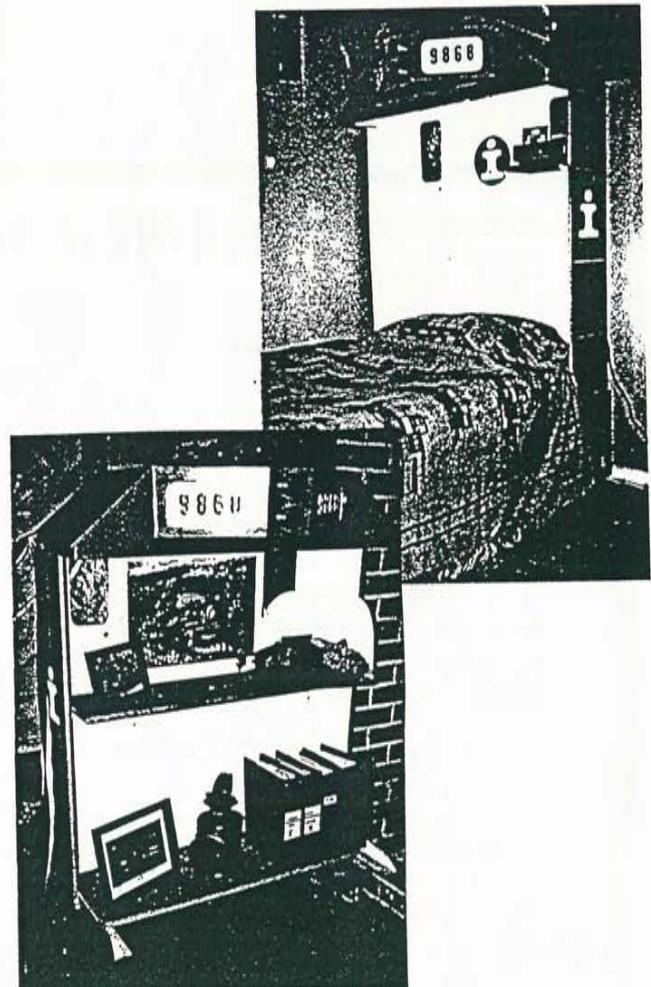
As it happened, "Rio Grande" had been looking to upgrade its "ski train", an aging F9, with a second generation diesel and saving the cost of a new unit, would be able to give 9868 a full overhaul and new paint job at a reasonable cost.

The future.

It is now planned to fully restore No. 9868 and repaint it in Rio Grande colours, and also give it a new loco number - 4049.

Yes its true, Rio Grande had no 4000 series in its loco roster, but this represents my birth date. When restored and returned to service on the "ski train" (glass shelved display case) should see many more years of faithful service.

Keep-em-rolling,
Geoff Willett.



NO ROOM FOR A LAYOUT ?

- A Cost Effective Solution

We often hear model railroaders say they have no layout because they lack the space for one. With the trend toward smaller homes (because none of us can afford big ones any more!) this problem probably will persist.

We found ourselves with just this problem with our move to Sydney. As some fellow model railroaders might benefit from the solution we arrived at for our lack of space, we felt it worthwhile to share some thoughts with you.

Initially we planned to build a shed in the back garden for our layout. This approach was quickly dismissed, however.

After careful study the cost estimate of approximately \$25,000 for a no-frills shed with power, a few windows, and no other environmental controls was just too much. Additionally, we anticipated problems obtaining Council approval as several trees would have needed to be removed.

A return to the planning stage sent us to crawling through our underfloor space.

After some serious thinking we arrived at a very workable solution. We removed the multitude of brick piers under our lounge and dining rooms, installed new bearers, excavated to yield a reasonable headroom of 1.9 meters, installed a concrete floor and retaining walls, installed electrical lights and power points, gyprocked the ceiling, and waterproofed the existing walls. The out-of-pocket cost of the total project was about \$6,000 which was certainly a sizeable saving over our previous option. We provided most of the labour, and if we had used contractor labour, several thousand dollars additional would have been expended.

The approach we used is illustrated in the sketch of a cross section of the layout room.

Using this floor and shelf arrangement provides necessary head clearance without disturbing the existing footings of the house. It also minimises the amount of dirt that needs to be removed from under the house. The drawback of the approach is the limited elbow room between the layout and the concrete shelf for access to wiring and switch machines.

The size and spacing of reinforcing steel and the thickness of concrete will depend on the requirements of local councils, but the basic approach should be readily acceptable anywhere. An Engineer experienced in your municipality will be familiar with the sizes and will prepare drawings accordingly for council approval.

Before undertaking similar construction, a few test holes should be dug to rule out the presence of rock as this would increase the cost of excavation significantly.

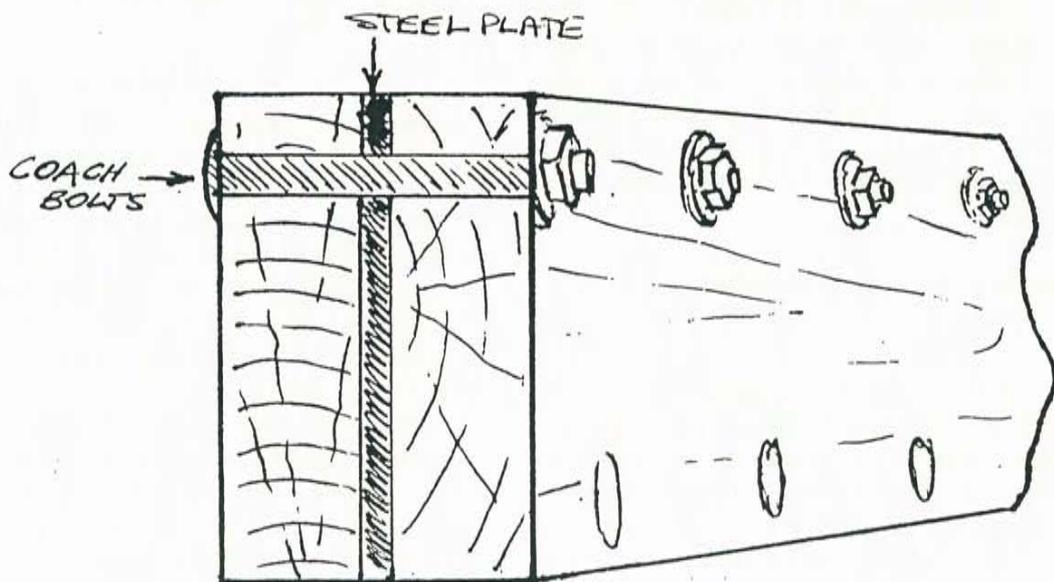
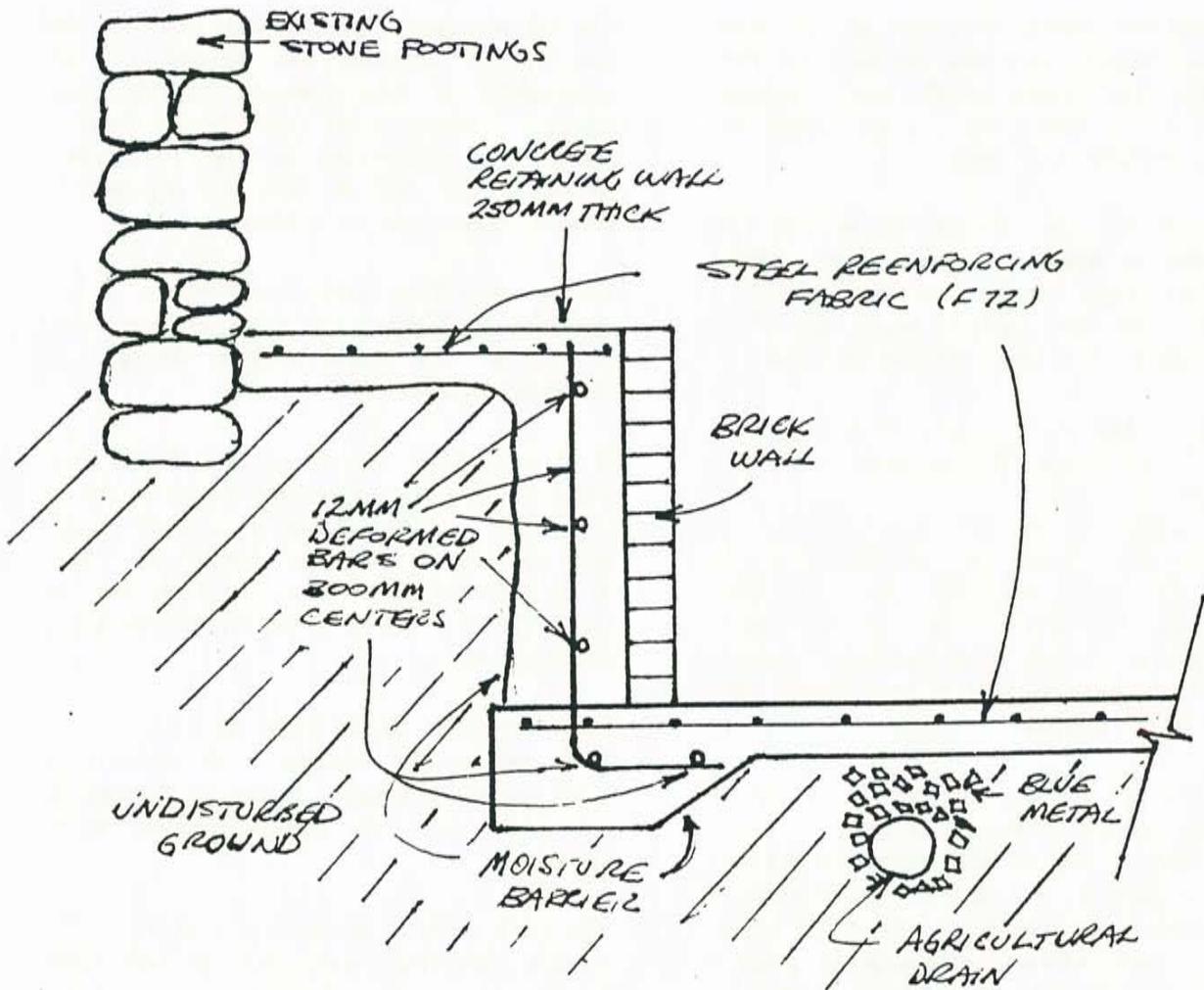
If at all possible install an agricultural drain under the new floor extending the drain out to the garden to ensure hydraulic pressure cannot build up under or behind the concrete. The outlet of the drain should, of course, be lower than the drain. This step will do much toward ensuring a dry layout room.

Place a moisture barrier under all new concrete. When pouring the concrete work carefully to avoid tearing the moisture barrier, and if tears do result, patch them with scraps of moisture barrier and tape.

The brick work is installed as a form for the concrete retaining wall, but it will need temporary bracing with timber to resist the lateral pressure from the weight of the wet concrete. The bracing can be removed 24 hours after the pour.

Another point that would be of interest to anyone contemplating a similar project is the economical method we employed to support the floors above the layout room. Prior to excavation, we constructed new bearers, removed the existing bearers, installed the new bearers, then demolished all the brick piers that supported the old bearers as they were in the way of the upcoming excavation step. Universal beams ("I" beams or Rolled Steel Joists) could be used and would make excellent new bearers, but they are quite expensive. Instead we used two lengths 150 by 50 millimetre timber with a 150 by 10 millimetre steel plate sandwiched between the timber members. Bolts 10 millimetre thick held

Main Line



Main Line

Cost Breakdown for Underfloor Layout Room (Approx 50 Sq M)

| Item | Material or Service Cost | Labour Cost (estimated) |
|--|-----------------------------|----------------------------|
| Architect, Engineer, and Council Fees | \$350 | |
| Steel, Timber, Bolts for New Bearers | 350 | |
| Assemble Bearers | | \$100 |
| Install temporary props, remove old bearers, install new bearers, remove old piers | | 400 |
| Excavate approx 18 cu m of clay & sand | | 750 |
| Have excavated material hauled to tip | 400 | |
| Purchase and fix agricultural drain, blue metal, moisture barrier, deformed bars, re-enforcing fabric, plates, chairs, tie wire. | 550 | 300 |
| Concrete for floor | 750 | |
| Concrete pump | 350 | |
| First pour labour | | 200 |
| Purchase bricks, sand, cement for retaining wall | 550 | |
| Lay bricks | | 400 |
| Temporary brace brickwork | | 200 |
| Concrete for retaining wall and shelf | 900 | |
| Concrete pump | 350 | |
| Second pour labour | | 200 |
| Electrician and material | 350 | |
| Waterproof walls (silasec and cement paint-3 coats) | 50 | 200 |
| Gyprock ceiling | 200 | 300 |
| | ===== | ===== |
| | \$5150 | \$3050 |

the sandwich together and they were spaced 250 millimetres apart alternating from top to bottom of the bearer. A sketch of the cross section of the bearer is included. The rigidity and strength of the bearer is provided by the steel plate in the middle of the sandwich. The timbers keep the steel in a vertical position. If only a steel plate were used, the loads imposed by the floor would tend to roll the steel plate over. In a Universal beam the load is carried by the web of the beam (the vertical member) with the flanges (horizontal members) only resisting the buckling of the web. The steel and wood sandwich accomplishes the same job as a universal beam at a reduced cost when loads are light.

The steel was ordered from a steel supplier cut to exact lengths with 12 millimetre holes pre-drilled for the 10 millimetre bolts and the plates

were primed. The steel plates were used as templates to drill holes through the wooden members of the sandwich. The new bearers were then assembled using the 10 millimetre bolts. Following assembly, the ends of the bearers near any potential dampness were painted with bitumen and wrapped in aluminium damp course material. The new bearers were then wrestled into place. Some temporary props will be needed to support the floor while you remove the old bearers and install the new ones. Its a good idea to remove good china and dishes to a safe location and temporarily relocate any prized furniture to prevent any possible damage. Remember that breaking the good dishes in your zeal to build your layout room probably won't endear you to the lady of the house.

The spans we bridged with our 150 mm deep

bearers were about 4.2 meters. Longer spans may dictate a deeper bearer., but the savings over a universal beam will still be proportional.

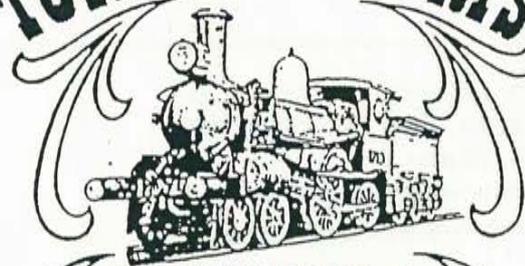
A recap of the costs we incurred in building our layout room are provided in the table. For labour, an estimate is provided based on the hours we devoted to the work.

The method described above has provided us with an "L" shaped layout room with about 50 square meters that will have good year round temperature control. Careful placement of a moisture barrier, installation of agricultural drain under the new floor, and waterproofing the existing walls should all work to ensure a dry layout area. We are also particularly happy about the reasonable cost.

If you are itching to build a layout but don't have space, consider this alternative. If you want more details or moral support, get in touch with us.

George Paxon

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WIRING - A Few Thoughts By Gerry Hopkins

Many people often ask if there is a standard for wiring a layout or whether there is a set of colour codes to follow when wiring. The answer to both these questions is no, but here are a few thoughts which may help the beginner/expert to think in the right direction when it comes to wiring.

One of the most important considerations is the requirement to fault find at a later date or make alterations as the layout is modified or expanded. The first point is the size of the wire used; for all track feeds and power distribution lines (aux power for lights/accessories and supply to other throttles) a heavy duty hook-up wire is required.

The majority of electronics shops sell at least 2 sizes of hook-up wire - the heavy duty and a light duty. The light duty should be used for indicator lamps, control of relays, control of point motors. Telephone wire can be used but because it is single stranded it tends to break easily if you try and move it at a later date. Currently Jaycar sells reels of heavy duty hook-

up wire for \$3.95 for 30m and comes in 8 different colours.

I use yellow for AC power lines and red for +12 volts, brown for +24 volts and black for 0 volts. These colours are not used for any other purpose what so ever.

For the track feeds I use blue for the North rail and orange for the South rail and green for the frog of any turnout. South is the rail closest to the operating edge or on the inside of a cicle. White and grey are used for the supply between the throttle and the block switches/relays.

The light duty hook-up wire is available in many colours or you can buy ribbon cable which has many colours. The cheapest and easiest form of connectors under the layout are printed circuit board available at all electronics shops, just cut a strip 10-15mm wide and glue/screw/tape to the underside of the layout. Always keep a note book to list all of the connector strips and their wire colours, this will help a few years later.

Main Line

Power Supply -- 1.5 volts

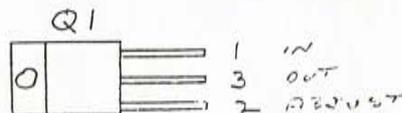
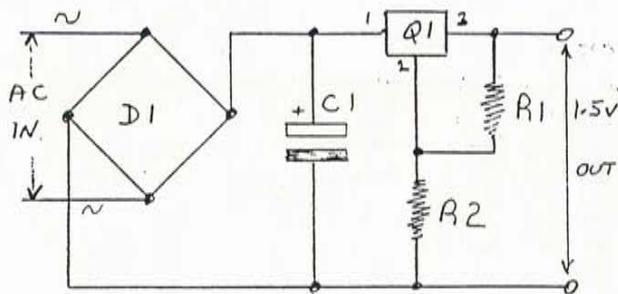
By Gerry Hopkins

The availability of 1.5 volt lamps for the railroad modeler leads to a requirement for a good power supply form these sensitive little beastsies.

The following circuit is very easy to build and gives a constant 1.5 volts and can handle 20 - 50 microlights. The input voltage can be AC or DC and 4 - 24 volts, which means it can run from any auxiliary power unit. Cost of components is around \$7.00.

Components:

- D1 Bridge Rectifier 1.4 amp
- C1 220mf 25volt electrolytic Capacitor
- Q1 LM317T Regulator
- R1 220 ohm 1/4 watt
- R2 39 ohm 1/4 watt



A LOAD OF ????

By Lawrence Nagy

Most proposals for loads in/empties out operations revolve around the use of unit trains that travel in a continuous run fashion through the industries, complete with locos and cabooses. I tried a slightly different approach on my N scale Pennsylvania New England layout. I'm happy to say it runs reliably and provides satisfying and realistic operation.

Refer to the attached track plan. Anthracite coal loads appear to originate at the Locust Summit No.3 colliery breaker, which is served by the Wilkes Barre & Northern Railroad. The switcher (the WB&E's only loco) hauls the eight to twelve coal cars of simulated loads from the bowels of the colliery and pushes the loaded cars across the scales for simulated weighing. After weighing all the cars, a Combine is tacked onto the rear and the train departs for the interchange at Beaver Meadow.

Meanwhile, "50 miles" away at Triechers, the PNE road switcher hauls the eight to twelve empty cars from a spur track that disappears through the trees to an unmodelled coal consumer. A caboose is added and the train heads for Oxford Furnace where it swings onto the WB&N tracks and travels via trackage rights to Beaver Meadow. The PNE and WB&N trains then swap cars and return to their respective terminals.

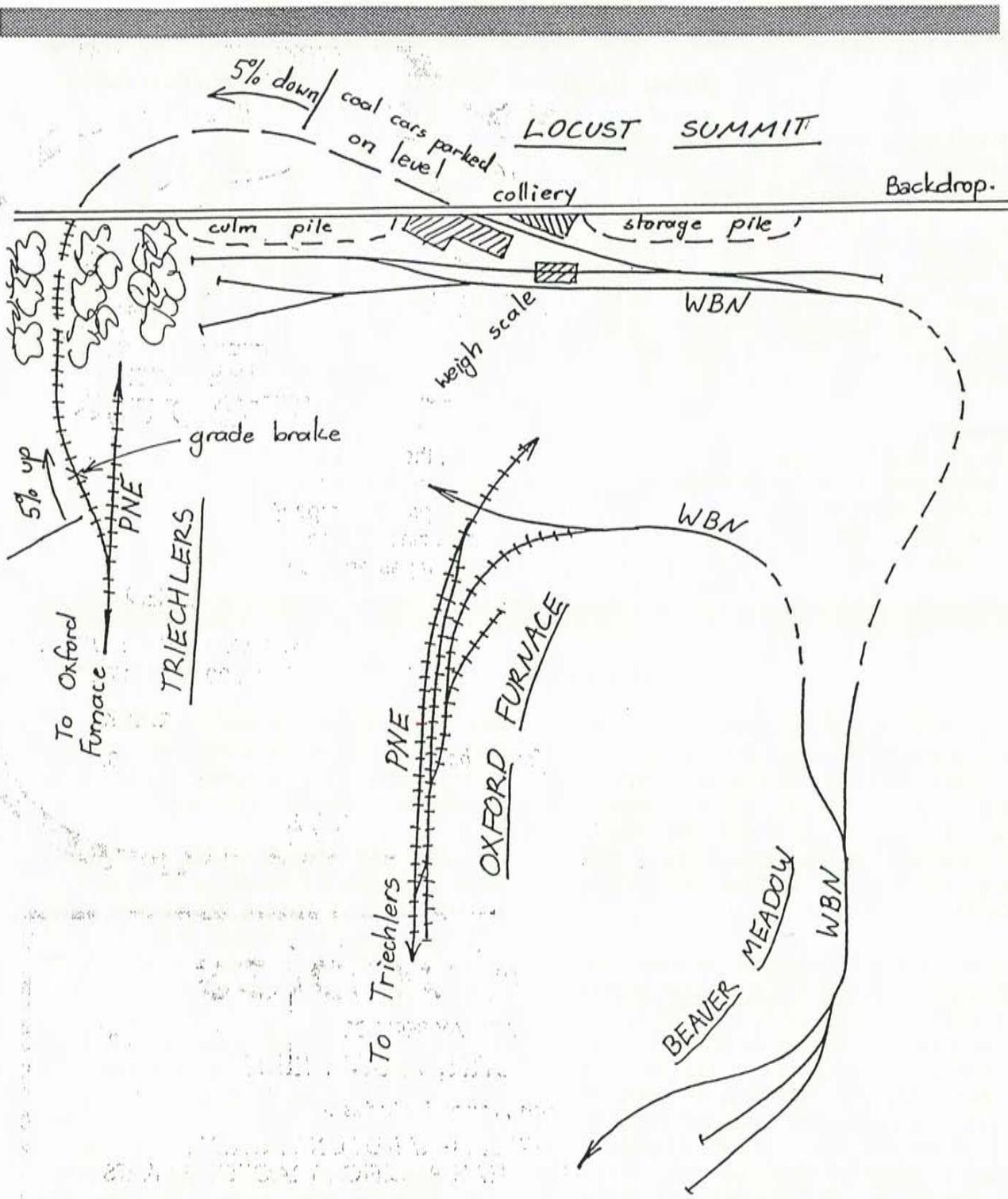
After arriving at Locust Summit, the WB&N loco pushes the empties into the colliery and cruises off to switch the other industries in the town, including the Lackawanna interchange.

The PNE road switcher returns to Triechlers where the empties are hauled out of the spur (so the WB&N has to complete its switching before the PNE can start its own), the loads are pushed up out of sight and the empties returned to the spur for storage until required for the next cycle.

The spur at the Triechlers end is on a 5% grade with a 300mm radius curve. The loco pushes the loads up the hill with its Kadec coupler in the "delayed" uncoupling position. Operation is 100% reliable as long as the coal cars are over weighted by NMRA standards (they are filled completely with Woodland Scenic cinders) and have body mounted couplers. The grade tops out one train length before the colliery opening in the backdrop so cars can be spotted at the colliery without rolling down. A grade brake made of 1mm dia wire pushed through a hole in the roadbed snags the axles of parked hoppers and holds them on the grade.

That's how loads in/empties out works on the Pennsylvania New England.

Main Line



A Personal Note

I wish to take this opportunity to thank the people who showed concern and offered their best wishes during my health problems over the last 6 months. The doctors now tell me I have a clean bill of health but it will still be a few months before I'm 100% again. (Was I ever 100%?).

I still require some articles for the next edition of Main Line, to be printed in mid August. Please forward ANY items as soon as possible. If you can supply them on a disk (IBM format, ASCII code) it would help me greatly.

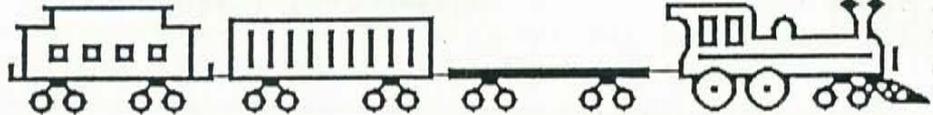
Yours in Modelling
Gerry Hopkins

Main Line

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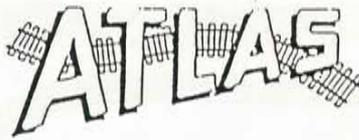
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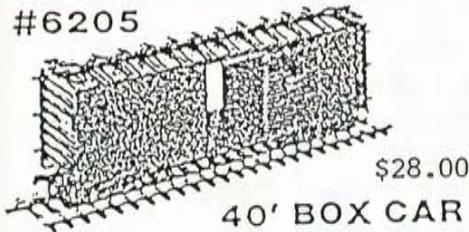
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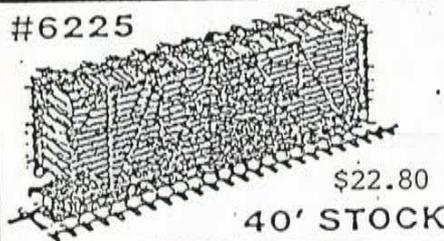
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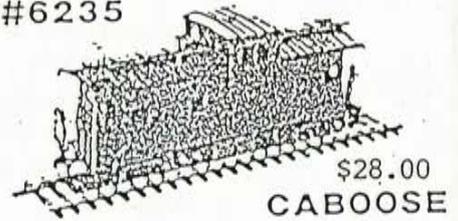
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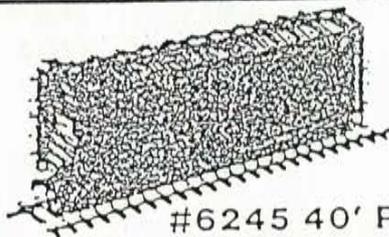
40' STOCK

#6235



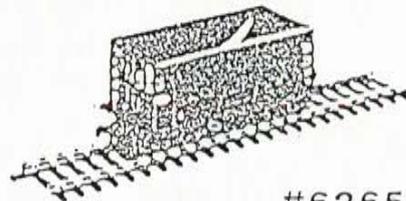
\$28.00

CABOOSE



\$22.80

#6245 40' PLUG DOOR



\$21.50

#6265 70 TON ORE

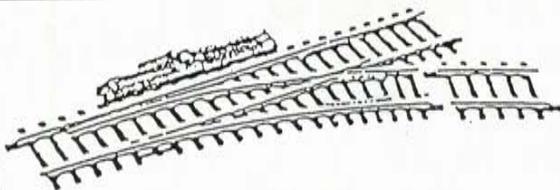
- Sliding doors on prototypical guides
- Separately applied brake rigging

- Murphy diagonal roofs
- Easily snaps together

O Gauge

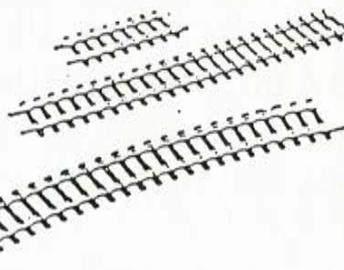
TRACK

O Gauge



SWITCHES

- #6021 Left hand Remote } \$20.00 each
- #6022 Right hand Remote }
- #6023 Left hand Manual } \$9.50 each
- #6024 Right hand Manual }



TRACK SECTIONS

- #6000 36" Flex Track \$10.90
- #6001 12" Straight Section \$2.40
- #6004 4" Straight Section \$1.20
- #6010 24" Radius Section \$2.40
- #6014 1/4-24" Radius Section \$1.20
- #6018 Terminal Track Section \$2.75

IDEALLY SUITED for O gaugers with severe space problems. Short-wheelbased diesels, 0-4-0 and 0-6-0 switchers easily negotiate the 24" radius curves. Great for trolley and Interurban layouts and layouts that have to be taken up and put away.

PLYMOUTH SWITCHER ea \$85.00



Pre-painted, pre-lettered plastic body, metal wheels, 6-wheel drive, 12v DC motor, operating headlight. Two rail operation only.

- 150-6121 Santa Fe
- 150-6122 Illinois Central
- 150-6123 Reading
- 150-6124 Union Pacific
- 150-6125 Midvale Steel

METAL RAIL JOINERS

#6041

\$2.75 per Pkt.



You're on the RIGHT TRACK...with ATLAS O Gauge