

**Punchbowl Hobby Centre Pty. Ltd.**

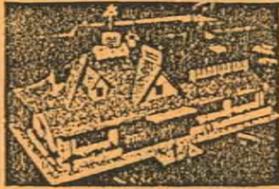
545 Chapel Road, Bankstown, N.S.W.  
Australia 2200  
Telephone: (02) 709 5082

REMEMBER:-



FOR  
**BUILDINGS IN HO & N SCALE**

**THE HO RANGE**



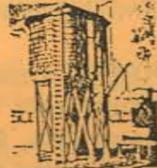
760 **ROADSIDE RESTAURANT**  
5-5/8" x 9-5/8" \$12.65



750 **LUMBER YARD & OFFICE**  
3-3/4" x 8-5/8" \$11.50



**TELEPHONE SHANTY**  
705 & POLE  
1-3/8" x 3-1/16" \$3.40



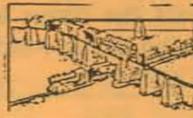
**WATER TOWER**  
703  
3-1/4" x 3-1/4" \$9.20



706 **PASSENGER STATION**  
4-1/16" x 8-7/8" \$12.65



**TRACKSIDE SHANTY**  
702  
2-1/4" x 3-1/8" \$6.30



**PIER SET**  
703  
(46 stone masonry piers, graduated in height; 1 pier girder; snap-in shims) \$16.00



**REFRESHMENT STAND**  
704  
\$5.75



**STATION PLATFORM**  
707  
2-1/8" x 3-1/8" each \$4.60



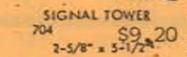
**ELEVATED GATE TOWER**  
701  
1-3/8" x 2" \$6.30



**CURVED CHORD BRIDGE KIT**  
87 \$25.50



**3" BRIDGE PIER**  
81  
pkg(4) \$2.95



**SIGNAL TOWER**  
704  
2-5/8" x 5-1/2" \$9.20



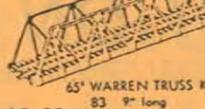
**65" MANUAL TURNTABLE**  
302 (7" dia.) \$32.00



**65" THRU PLATE GIRDER BRIDGE**  
85 truss \$6.30  
885 nickel silver \$6.70



**PONY TRUSS BRIDGE KIT**  
86 \$10.00



**65" WARREN TRUSS KIT**  
83 9" long \$6.30



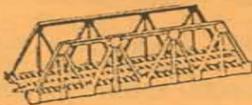
**301 TURNTABLE MOTOR DRIVE UNIT**  
\$39.00

Atlas structures are easy to put together.  
Parts are molded of styrene in appropriate colors.

**BRIDGES & PIERS**

**THE N GAUGE RANGE**

HIGHLY DETAILED AND AUTHENTIC BRIDGES READY TO INSTALL



#2546 **WARREN TRUSS** \$4.60



#2547 **DECK TRUSS** \$4.60



#2548 **PLATE GIRDER** \$4.60

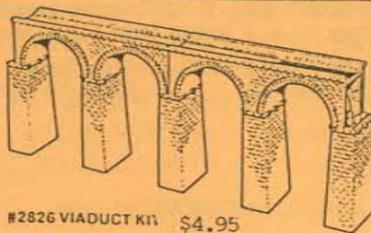
All same length as standard 5" straight section. Snap them together atop the #2543 Bridge Piers in any number and arrangement for an impressively realistic multi-span structure.



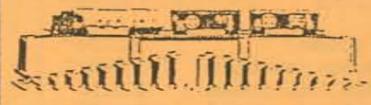
#2543 **BRIDGE PIER** \$2.30

Poured concrete piers, 1 1/4" high, securely support and align all Atlas bridges and track by means of rugged snap-lugs.

Easy to build kit assembles into impressive 4-arch cut stone masonry single-track viaduct. Arches are 2 3/4" center-to-center and 3 3/4" high. Can be joined end-to-end for any length viaduct and piers are easily shortened to any desired height. Arch assembly without piers is 1" high.



#2826 **VIADUCT KIT** \$4.95



#2541 **OVER 'N UNDER PIER SET**

Two each of 12 graduated concrete piers plus #2542 Straight Pier Girder. Pier heights range from 3/4" through 1 3/4" by 1/4" increments. Grade with piers spaced at 5" intervals is 2.8". \$6.80



#2542 \$2.30

**STRAIGHT PIER GIRDER**  
Add realism and strength to end-supported track on bridge piers. Straight girder is 5" long.

**ATLAS STRUCTURES**

"A SNAP TO BUILD"

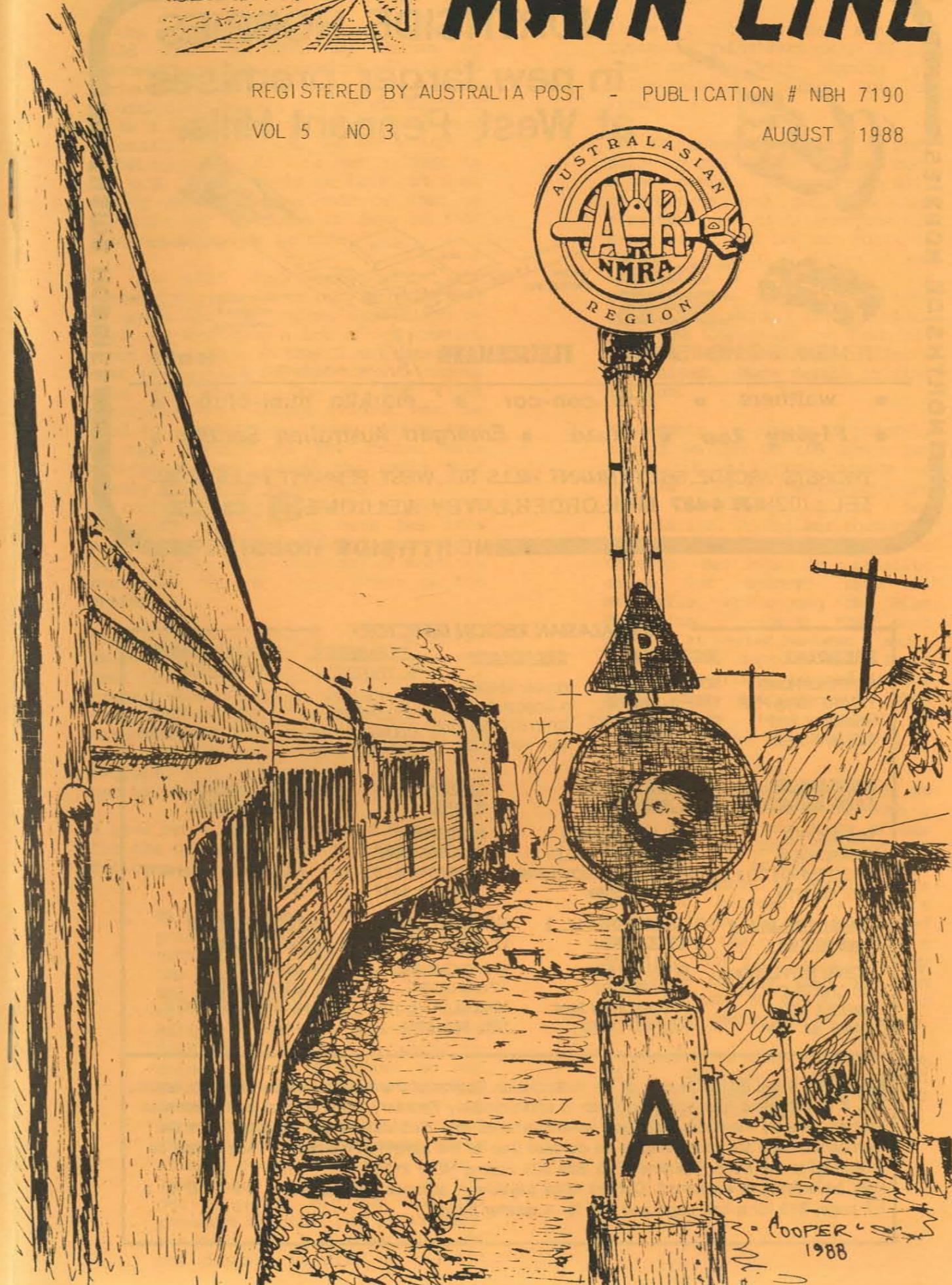


**MAIN LINE**

REGISTERED BY AUSTRALIA POST - PUBLICATION # NBH 7190

VOL 5 NO 3

AUGUST 1988



COOPER 1988

NORTHSIDE HOBBIES

# NORTHSIDE HOBBIES

## in new, larger premises at West Pennant Hills.



HO Self-driving trucks  
-DC motor built in.  
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NORTHSIDE HOBBIES

### AUSTRALASIAN REGION DIRECTORY

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MAINLINE is the official journal of the Australasian Region of the National Model Railroad Assoc., Inc. 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 Mainline, P.O. Box 529 Epping NSW 2121.

Paid advertising is welcomed. Current rates payable in advance for four issues are \$110 for a full page, \$60 for a half page and \$30 for a quarter page.

FROM THE PRESIDENT

As the second President of our region, I would like to open my column by acknowledging the tremendous efforts and achievements of John Saxon and his crew in establishing this region and building it to a level that can support two very successful conventions and see growth in membership when decline was evident in the U.S. Fortunately we have not lost John's valuable experience or that of his crew and I intend to draw on that resource from time to time.

In the past few weeks since the convention I have been busy prioritising my goals for the region, assembling my crew and absorbing a lot of information about our region so that I may determine what is possible and what is not (thanks John and Bruce). One of the first priorities that became evident was the need to identify our resources so that we can administrate the region more efficiently and spread the tasks more evenly across the membership.

Of course being spread over a piece of geography the size of ours has it's problems and so Sydney based members who seemingly have the advantage of meetings etc. also cop the lion's share of the duties.

Therefore if you examine the crew roster below you will find a few changes not the least being a single point of contact for membership and renewals (thanks Jack). Other changes include the establishment of a company store so now you may call or write to Bob if you require logos, templates, standards etc. Bob has reasonable supplies in stock.

I have set a few priorities and goals for the next two years and they are as follows:-

1. Mainline must be of first priority as it is often our only contact with members spread over the largest geographic region in the Association. However it is our largest expense with each edition costing approximately \$475 (\$1.90/copy). By going to column format throughout we can trim this cost without reducing content. But to keep it interesting we need articles and illustrations to complement those already produced by Bill Cooper, John Saxon and others. So put pen to paper, dig out that old research material and if you have not seen your last submission, do not despair it will be printed

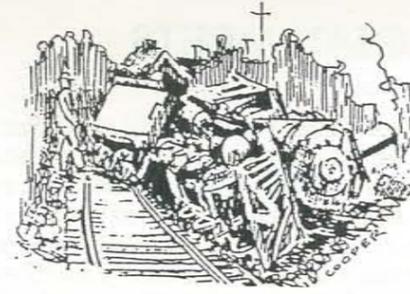
(some articles are awaiting typing or illustrations). If you can assist with typing or illustrations, please let us know.

2. The achievement programme is next priority and will be given a much higher profile. Richard Roth will co-ordinate and publicise the programme so that everyone is aware of it and can set goals to further their skills and interests in the hobby. A certification panel has been established which I hope to widen into the Divisions so that all members may have their efforts recognised. More detail in this edition.
3. Membership is always a priority and if we can do the above two right, it will grow because we will be able to demonstrate the value in belonging to our association. To further encourage membership, I would like to develop meetings in satellite areas (of Sydney) such as Newcastle, Wollongong and Blue Mountains. Hence the next meeting at Warren MacLean's and I urge all to support it. There will be meetings planned in the other two centres and when established, will become a regular part of the programme.

4. The recent standardisation of Ho modules has provided us with a means to widen the scope of our interest and participation at meetings. I intend to earmark suitable venues as module meets so that besides the host's layout, those who are interested may bring their modules for a session. The first will be at my residence for the Xmas meet and will include a scenery clinic (hands on) performed on a module.

OK, that's the plan. Let me have your feedback, ideas and opinions. What would you like to see in the Main Line?

Peter B



### SNEAKY

From a male point of view, women are just great! Without them, life could be pretty miserable. When it comes to our hobby, however, they can get mighty sneaky. Men can, too, of course, but only in retaliation.

Even in this enlightened age, most hobbyists are male, with some notable exceptions. The reasons are complex, but are probably due as much to peer and parental attitudes as anything. Just as male knitters are not exactly encouraged, neither are female modellers. At exhibitions and layout visits, there are some pretty bored-looking females about.

But let a naive model train nut reveal his passion to his new girlfriend. Assuming that the relationship survives this revelation, a transformation may occur. She may show (feign?) interest, listen attentively, even defend her guy from the great unwashed among her acquaintances. Her parents are generally laid back about the new beau's 'secret' - in terms of future prospects, it beats drug-running, stealing hubcaps, or working for an ad agency...

Girlfriends even manage to tolerate your nutty friends, though a deep-seated, latent rivalry is there - flattering, really, until you realise that you're the zebra in a lioness-hyena confrontation.

For the really fortunate, some surprising presents may come their way. Doubled-edged, perhaps, like an On3 addict getting a 'cute' Lima XPT.

So, in the hiatus between playing trains as a kid settling in post-nuptial serenity to some real modelling, the poor, innocent train nut is lulled into a false sense of security. If the staggering cost of purchasing sufficient living space to include our dream empire wasn't enough, we are confronted with an awful 'change' in attitude. Something like.. "Right, now that we're manacled together, you can forget that model train nonsense and start behaving like an adult" (i.e. sit around watching the idiot box, like normal people). Casual mention of 'buying another brass loco' provokes such ire that the crestfallen newlywed will either give up, or at least shut up. There is no change. The antagonism was always there, just suppressed for a time. That was the sneaky part.

Two can play at that game. The newlywed wiley modeller, sprung smuggling in some unportended purchase, is likely to say, in a slightly high-pitched tone, "Oh, just something I threw together from some cotton reels and plastic sheet, dear".

#### ON THE COVER ... #99 TAKES SIDING AT CHORRO

Yes, that's a GS-4 up front. #99 is the Southern Pacific's *Coast Daylight* and it is clearing its 'eastbound' (southbound) twin #98, in lovely 1954. *from a Steinheimer 'photo, in TRAINS.*

The colour light signal is of a type that can be built from a series, starting next issue, on the means of signalling a layout.

Most members will know that Bruce and Barbara Walthers recently visited New Zealand and Australia and also attended our recent convention.

For interest, reproduced below are Bruce's comments as expressed in a recent issue of WALTHERS Craft Train News (supplied by courtesy of Northside Hobbies).

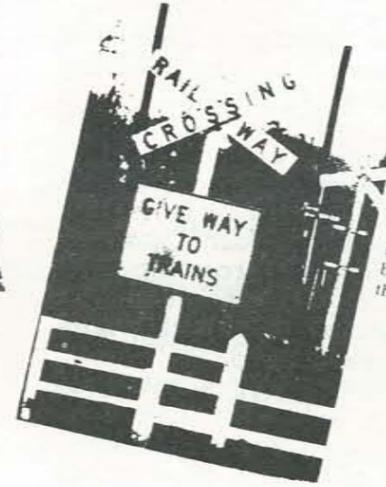
### TALKING THINGS OVER

by Bruce Walthers

## MODEL RAILROADING DOWN UNDER



As if driving on the left side of the road wasn't enough of a problem, Australian English (the sign indicates a passing zone) sometimes meant additional troubles!



No matter how you say it, it's good advice! Here, the familiar crossbucks are joined by an extra warning sign at this Australian grade crossing.

**G'day Mate!** Barbara and I spent most of May checking out model railroading in New Zealand and Australia. Here are some of our thoughts and observations.

It's easier to walk upside down than it is to drive on the left side of the road. Failure to look right before starting to cross the road may be a fatal error. We both massacre the same language, but there are enough grammatical, spelling and language differences to make it more interesting to talk about than the weather. Kiwi and Aussie energy and passion for sports is exceeded only by their boundless hospitality. The people are competitive and proud of their countries and anxious to show them off. Getting to know the people was the highlight of our trip.

Background and traditions are English, but since the U.K. joined the EEC, Australia and New Zealand are influenced economically much more by what happens in the U.S. As English-speaking "Islands" in the Asian hemisphere, they are very aware of Japanese expansion and influence in the Pacific. Japanese is rapidly becoming a second language in Sydney, where many store signs, menus and brochures are written in two languages.

The work force is heavily unionized with many restrictive work rules which limit productivity. Inflation has been running 8-10% (in Australia) to 12-14% (in New Zealand) and interest rates are correspondingly high. The public sector is larger and the tax burden heavier than in the U.S., but there has been a move to

privatization of government-owned businesses and tax reduction. Both countries appear to be entering a period of strong economic growth.

The NMRA Regional Convention in Sydney (May 21-22) was well organized with a number of excellent layouts on display. Clinics were well-done and the entire event, up to the closing luncheon, ran on schedule.

On display was the award-winning "Franklin County", a portable display layout completely finished with many scenery vignettes. A non-model railroad visitor observed that "all it needed were push-buttons so the viewers could operate the layout". A worthwhile comment and something that we tend to overlook. "Running the trains" (or, "making it work") is the ultimate satisfaction of the hobby. We would all benefit if we found ways to share that pleasure with viewers and visitors.

Model Railroading is about evenly divided between British, U.S., and "Other", including Aussie, New Zealand, Continental European, etc. prototypes.

EXPO '88 with its special theme, "Leisure in the age of Technology" could have been a blockbuster for Craft, Model and Hobby type activities, but unfortunately, the public relations people who had access to the millions of dollars spent for the various pavilions seemed unaware of anything as uncompetitive and completely relaxing as a year-round hobby. Judging

by the pavilions we visited, it appears the organizers believe that we will be spending our increased leisure time in travel and sports. 28 countries (and about a dozen individual states and provinces) promoted their scenic and cultural attractions, obviously hoping to increase tourism. The USA pavilion featured a display of home-exercise equipment. If you discount the inevitable souvenir stand, this was probably the most product-oriented of all of the exhibits we saw.

The West Germany show (a 20 minute movie showing hundreds of flash-scenes) included one of a family operating a model railroad layout. Many of the exhibits featured displays based on professional model work. But this was the media, not the message.

IBM included a room with about 50 PC's set up so novices could touch-screen to work through a sequence of menus to learn details of Australian History, Geography, Scenery, Sports, Animals, Reptiles, Fish, Birds, etc. Practical and well done.

Crowd handling was good. People were generally moved through each exhibit in 20 to 30 minutes. Queues were seldom longer than one show (i.e. 20-30 minutes). Often, we got in immediately by joining the end of a long line, while a show with no line meant a 20 minute wait. With 51 pavilions, I estimate it would take a full week to see all the exhibits. We had the equivalent of two full days, and saw about a third of the exhibits.

*Bruce Walthers*

Some members were heard to comment at the AGM that the executive only presented awards to it's office bearers (or so it would seem). Well perhaps they were the only ones identified as doing anything and that is as much a criticism of the general membership as it is the executive. The achievement programme has been in existence for some time now and has had reasonable exposure to members through this journal and the Bulliten.

Well put your hands up fellas, because now we are better equipped to recognise you.

Richard Roth is the primary contact for recognition and is responsible for publicising the programme and ensuring certification is arranged within a reasonable time. To assist Richard, a Certification Panel has been created and although mainly Sydney based at the moment, will be expanded into the regions when suitable members are identified.

Each category will be featured in Mainline over future editions to give members a better appreciation of what is required. The brief description in the yellow circular will be expanded and will include tips such as what the certification panel is looking for. Occassionally we will publish a list of members who have been awarded Achievement Certificates. So hop into it and get certified.

**CERTIFICATION PANEL**

- |               |                |
|---------------|----------------|
| Phil Knife    | Ian MacFarlane |
| Bill Cooper   | John Saxon     |
| Jerry Hopkins | Don Turnbull   |
| Warren McLean | Jeff Knott     |
| Bruce Lovett  | Peter Burrows  |
| Sowerby Smith | Laurie McLean  |

Idealy the above panel would consist of members holding certificates themselves. However with one or two notable exceptions this situation does not yet exist and so members with extensive experience in judging or demonstrated expertise in a particular skill have been selected. Not all members of the panel may certify all categories and the appropriate panel for your request will be nominated by Richard Roth.

Hi there fellow modellers, we had our June Meeting at John Hamiltons and what a great night we had. Our meetings are informal and left up to the host member to do their own thing to entertain fellow members. John showed us the progress on his layout, then we watched a couple of videos on U.S. proto-type which were very interesting, then supper which is the highlight of the evening (love food) and an excellent job done by John's friend Sue. After supper we had a general discussion about re-participating in A.M.R.A. Camberwell Exhibition next year. We will be building a small layout again and hope to sell it at the end of the exhibition. We would like to welcome all new members as well as some of the old faces again to our meetings, they are held on the FIRST FRIDAY of every month, starting at 8.00. If you can attend, phone the host member as to whether you can come or not, it makes it easier to cater for supper. We have agreed we will have one clinic every quarter (4 a year) which will be held in our normal Friday night meetings. The first one being on the making of trees and foliage also we are going to have layout tours one a quarter on a Sunday. The first one will be advised in the next issue of MAIN LINE. Anyone who has news, gossip, stories or information on modeller or proto-type please forward to Neville Scantlebury. Below is a list of host members where meetings will be held for the next four months.

- 2 September 88 Neville Scantlebury  
5 Ironbark Drive  
LOWER TEMPLESTOWE  
Phone: 850-9552  
CLINIC: TREES & FOLIAGE
- 7 October 88 Graham Nitz  
20 Alpha Street,  
BALWYN  
Phone: 857 6959
- 4 NOVEMBER 88 Robert Dall  
7 Murchison Avenue  
VERMONT SOUTH  
Phone: 221 6034
- 3 DECEMBER 88 Saturday Xmas Meeting  
B.B.Q. Lunch  
B.Y.O. Drinks & Meat  
  
Robert Williams  
26 Meadowlark Lane,  
MOOROOLBARK  
Phone: 726 0804

Saturday July 16, 1988 saw members visit the excellent N scale layout of Lawrence Nagi. Situated in 1/2 of a two car garage at a very comfortable 5' above the ground the model represents a section of the Pennsylvania Rail Road with lovely green rolling hills (and lots of trees). It consists of a single track twice round loop with several interchanges and branch lines with staging tracks to hold complete trains out of sight.

The eye level viewing has the added advantage of providing not only a great view of the trains but also very easy duck under giving excellent access and really showing off the 1955 era pike. It was a pleasure to see N scale so well presented. Apart from the Pennsy main line there are interchanges with The New York Central, Reading and the Pennsylvania and New England Short Line. The major industries are a lime kiln and a foundry with cement and coal represented by through working of coal and cement trains. Leighigh Yard is the major Division point on the line and trains run through Green Pond Junction also there is a branch to Locust Summit.

Motive power is provided by a bunch of great running locos from Atlas, RS2's RS4's assorted EMD diesels by various makers, a Pennsy 2-8-0 and a 2-6-0 Camel back on the Pennsylvania and New England, and a Reading USRA Pacific. The cars and locos are all nicely weathered, freight cars being an appropriate mix of Kadee and Atlas etc. The layout has only been under construction in it's present form for the last 9 months. The benchwork was reused from a previous layout and all the roadbed track and scenery are new and the almost totally scened layout is a credit to Lawrence. Track and points are Peco Electro-Frog hand thrown and Lawrence uses a very neat micro switch arrangement for switching the frog.

Special mention must also go to Irene, Lawrence's long suffering wife who has not only supported Lawrence in his layout building effort but also provided a great afternoon tea that was much appreciated by all the members. All in all a most worthwhile use of a Saturday afternoon.

Sowerby Smith July 16, 1988 ref mag

**NEXT SYDNEY MEETS**

- \* 27 AUG - WARREN MACLEAN, 5 ROSLYN AVE. ISLINGTON (NEWCASTLE) 049-621 804  
FOR CAR POOL INFO CALL SOWERBY SMITH 411 5726
- \* 17 SEPT - BILL COOPER, 2 MASON AVE. CHELTENHAM 86 1724
- \* 15 OCT - HILLS MODEL RAILWAY SOC., BALCOMBE HTS. COMMUNITY CENTRE  
SEVEN HILLS RD. BAULKHAM HILLS. FIRST SET OF LIGHTS AFTER  
WINDSOR RD. SECOND ENTRANCE LEFT - SECOND BUILDING GROUP ON LEFT.
- \* 5 NOV - JACK PARKER, 34 STRICKLAND ST. BASS HILL 724 5348
- # 10 DEC - PETER BURROWS, 175 PRETORIA PDE. HORNSBY 477 2395  
XMAS MEET & B-B-Q, DETAILS NEXT EDITION.

ALL FROM 2P.M. PLEASE CALL HOST TO CONFIRM ATTENDANCE.  
# DENOTES MODULE MEET

**WELCOME ABOARD**

WARREN WILTON, DAVIDSON, NSW  
LAURIE McLEAN, GARDEN ISLAND, NSW

# TANGARA

## TECHNICAL DETAILS

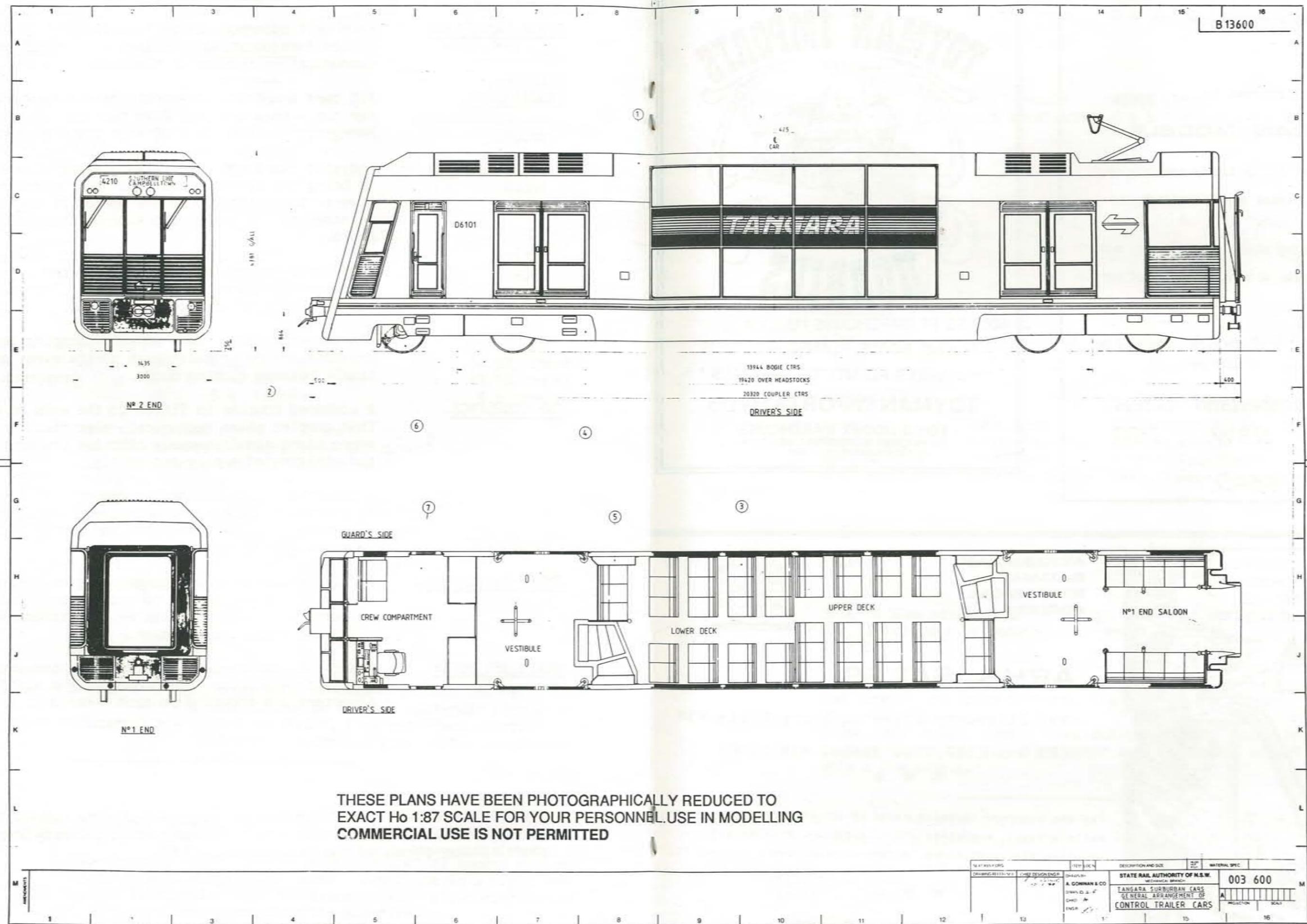
<u>PRINCIPAL DIMENSIONS</u>	<u>CONTROL TRAILER CAR</u>	<u>MOTOR CAR</u>
Coupled Length	20320mm	20220mm
Length Over Headstock	19420mm	19420mm
Bogie Centres	13944mm	13944mm
Overall Width	3000mm	3000mm
Maximum Height above Rail	4406mm	4406mm
Bogie Wheelbase	2400mm	2400mm
Wheel Diameter (new)	940mm	940mm
<u>PASSENGER CAPACITY</u>		
Seated	98	112
Standing (6 pass/metre <sup>2</sup> )	150	160
Total	248	272
<u>MASSES</u>		
Tare	42.25 tonnes	50.00 tonnes
Gross (65kg/passenger)	58.40 tonnes	67.70 tonnes
Bogie	5.9 tonnes	9.6 tonnes
<u>PERFORMANCE:</u>		
	Maximum service speed - 130 km/h	
	Maximum service acceleration - 0.8 m/sec <sup>2</sup>	
	Maximum service braking - 0.9 m/sec <sup>2</sup>	
	Emergency braking - 1.2 m/sec <sup>2</sup> (average)	
	Percentage axles motored - 50%	
	Motor Rating (continuous) - 170kw	)
	725 volt	)
	265 amp	) (35% Field)
	2130 rpm	)
	Starting Tractive Effort Motor - 30kN (approx.)	
<u>STRUCTURAL DESIGN:</u>		
	Monocoque principle. Analysis carried out using proven finite element analysis software.	
<u>MATERIAL FINISH:</u>		
	Externally - Stainless steel structure with stainless steel exterior skin of clean, smooth, low reflective finish having no visible spot-weld blemishes.	
	Internally - Vandal resistant, fire retardant plastic laminated plywood and glass fibre reinforced plastic.	
<u>BOGIES:</u>		
	Bolsterless direct air-spring secondary suspension design with traction forces transmitted through a deep centre pivot and Watts Linkage.	
	The primary suspension incorporates conical bonded rubber springs with winged axle boxes. The frame is a rigid one piece fabrication with box transoms with air-spring control reservoirs incorporated in the side frames.	
<u>BRAKES:</u>		
	The cars have pneumatic, dynamic and regenerative braking. All cars have bogie-mounted disc brakes with microprocessor controlled anti-skid.	

<u>MULTIPLE UNIT SETS:</u>	Trains operate in fixed 4 car basic units (Consist CT-M-M-CT). Two units may be coupled for extra passenger capacity.
<u>TRACTION SYSTEM:</u>	1500 volt DC GTO Thyristor 4 Quadrant Chopper Control.
<u>TRAIN MANAGEMENT:</u>	Each unit incorporates an "intelligent" Train Management System incorporating auxiliary electrical control and communication throughout the train.
<u>VENTILATION:</u>	All cars are fully air-conditioned. Air-conditioning capacity per car - 68kw cooling, 22kw heating. Airflow 2500 l/sec. Emergency ventilation (120 volt battery) airflow 875 l/sec.
<u>PASSENGER DOORS:</u>	Bodyside doors are externally sliding with a plug-in feature to bring the closed doors flush with the car exterior. The powered bi-parting doors are opened by the passengers (when released by the guard) and automatically closed by the guard.  Wide inter-car powered access doors are provided which can be opened by the passenger at will. Doors will close automatically after about 10 seconds.  All passenger doors have an anti-clamping feature which prevents injury to passengers in the event of their being caught between closing doors.
<u>CAR COUPLINGS:</u>	A combined coupler is fitted to the ends of each 4-car unit. This coupler makes mechanical, electrical and pneumatic connections simultaneously allowing trains to be separated and amalgamated easily and safely.  Within the 4-car unit semi-permanent couplings are employed to produce a rigid bar connection. Couplings are designed to eliminate the inter-car slack and associated noise attributed to existing couplings.
<u>INTER CAR GANGWAY:</u>	A full perimeter sealed gangway system is provided between cars within a 4-car unit to provide safe and easy access between cars. This results in a considerable reduction in noise and noise transmission.
<u>AUXILIARY POWER:</u>	Power for auxiliaries is obtained by converting the 1500 Volt supply to 415 Volts 3 phase AC using a static inverter. Two inverters are provided on each 4-car unit each rated at 130KVA

We wish to thank Mr. T. Hatton (Project Manager, Tangara Project) of the State Rail Authority of NSW for his kind assistance in producing this feature. Our thanks also go to Sowerby Smith for his time & efforts in photographically reducing the original plans to 1:87.

MORE PLANS NEXT EDITION





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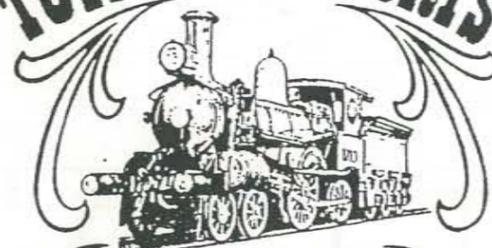
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Runner-Up - George Paxon D & RG Shay On3

### Passenger Cars

First - Don Turnbull NSWGR CPH HO  
Runner-Up - Jack MacMicking C & S Combination On3

### Freight Cars

First - George Paxon D & RGW Flat Car On3  
Runner-Up - Gerry Hopkins SR & RL Box Car HO2½  
Hon. Mention - Hal Saxon Early Box Car O  
Hon. Mention - Ian Venables B & O Wagon Top Box Car HO

### Cabooses

First - Gerry Hopkins Logging Caboose HO2½

### Structures

First - John Saxon Antonia No. 1 Mine Tipple HO  
Runner-Up - Keith McCarron Freight Office HO  
Hon. Mention - John Saxon 4 Stall Roundhouse HO  
Hon. Mention - Jack MacMicking Early Timber Bridge On3

### Traction

First - George Paxon M of W Electric Motor Car XI On3

Best-in Show was awarded to George Paxon's M. of W. Electric Motor Car XI followed by John Saxon's Mine Tipple and then by George's Flat Car.

The Wm. K. Walthers Inc. award for passenger cars was presented to Don Turnbull by Bruce Walthers, Chairman of the company.

Under NMRA rules, models must achieve 75% of possible points to qualify for an award. Many other models entered missed places by only a few points.

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4-8-4 GS-4 Southern Pacific, BACHMANN Looks great but non-runner due slipped driver quartering. Good candidate for Bowser repower kit (US\$46) \$25.

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# Rails Down Under 88 Model Contest Winners

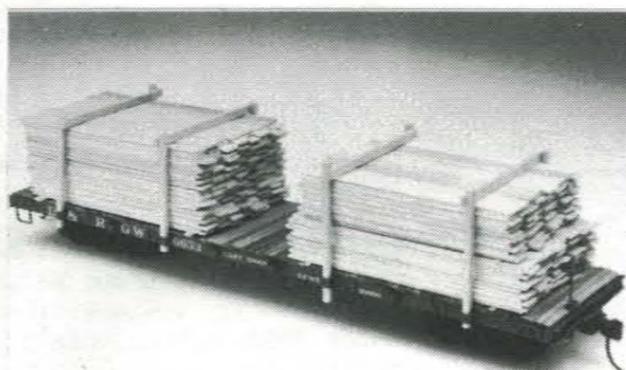
## Best in Show



George Paxton O Maintenance of Way Electric



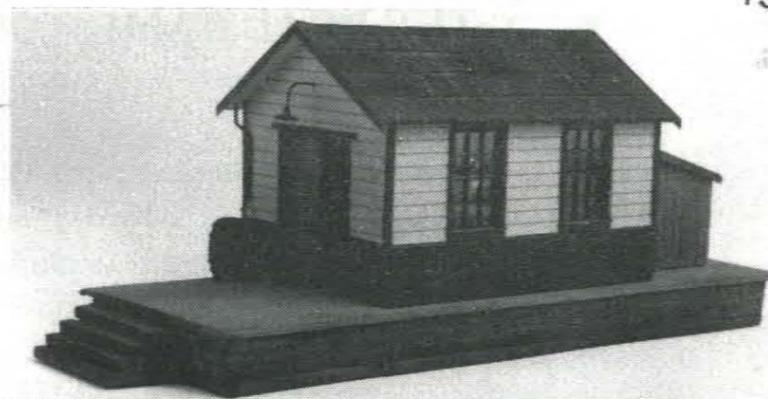
John Saxon  
Mine Tipple



George Paxton  
On3 Flat Car

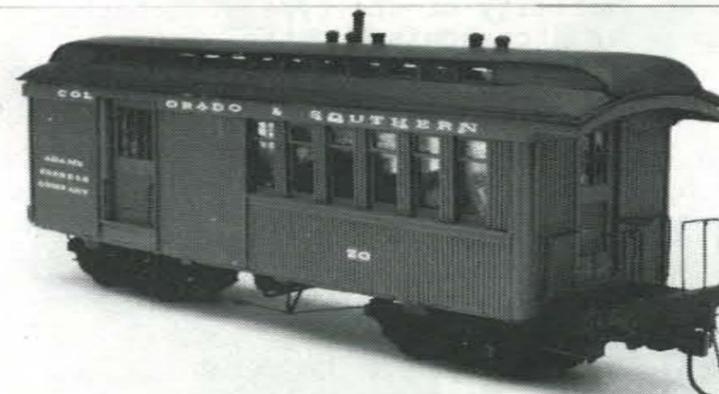
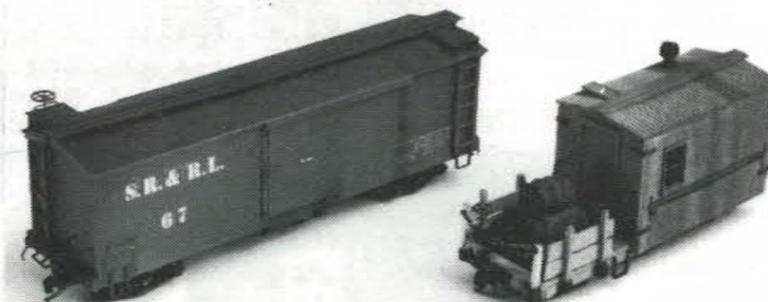
PHOTOS BY SOWERBY SMITH

Keith McCarron  
HO Freight Office



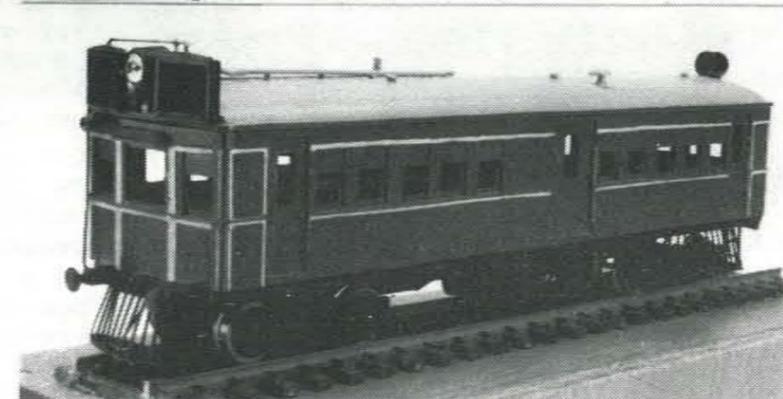
Don Turnbull  
HO C. 36 Loco

Gerry Hopkins  
HOn 2 1/2 Box Car  
&  
HOn 2 1/2 Caboose



Jack Macmicking  
On3 Combine

Don Turnbull  
HO C.P.H.



## THE REAL HAMILTON CREEK

by Bill Cooper

The last two issues of *Mainline* have contained an article on the HAMILTON CREEK RAILWAY, a standard-gauge shortline. Though fictional, for freedom in design, the line is based firmly on reality. There was a line just like it, whose profile demanded Shays in mainline service ... and whose failing traffic source let the original equipment serve from birth (in 1907) to death (in 1934). Here, then, is the Commonwealth Oil Corporation's WOLGAN VALLEY RAILWAY, in the Blue Mountains, NSW, Australia.

### THE WOLGAN VALLEY RAILWAY

#### WHY WAS A RAILWAY BUILT:

A Railway was built to Newnes to serve the kerosine shale deposits. During the last century the mining of such deposits was an attractive proposition. Some other workings were at Hartley Vale, Joadja and Torbane.

#### THE HISTORY OF THE SHALE OIL INDUSTRY AT NEWNES

The Wolgan Valley, is shut in by inaccessible cliffs, 2000ft. above the narrow valley floor. Access was possible at a few points and by bridle tracks only, until in 1897 when the N.S.W. Public Works Department constructed a road into the valley.

This road enters the valley at its south-western end, via the Wolgan Gap, and is a steep winding descent and is still the only way to Newnes by car.

The existence of high-grade shale was known as early as 1865 but a company was not formed until 1905 when the Commonwealth Oil Corporation Limited was registered.

With the development of the mining operations, a preliminary survey was run by Mr. J.H. Cardew for a railway from Clarence on the New South Wales Government's main western line to a spur overlooking the works site, from where a ropeway would be constructed. This survey was superseded by an ingenious line, which carried the eventual line down to the works itself.

In 1906 the Corporation purchased the properties of the New South Wales Shale Oil Co. Ltd. at Hartley Vale and Torbane.

A road was built from Clarence along the line of Cardew's survey to a point about 20 miles out where it descended to the valley by a natural pass and crossed the Wolgan River and met up with the Wolgan Gap Road.

The Corporation established its works and built its railway, but failed to make it pay, mainly due to technical difficulties in the nability of the type of retorts used to carbonise the rich shale efficiently. The Corporation also sold metalurgical coke to the Cobar Smelters but the closing of the smelters in 1912 ended this form of income. In 1912 the Corporation went into liquidation and production at Newnes ceased. However operations continued at Torbane until 1930.

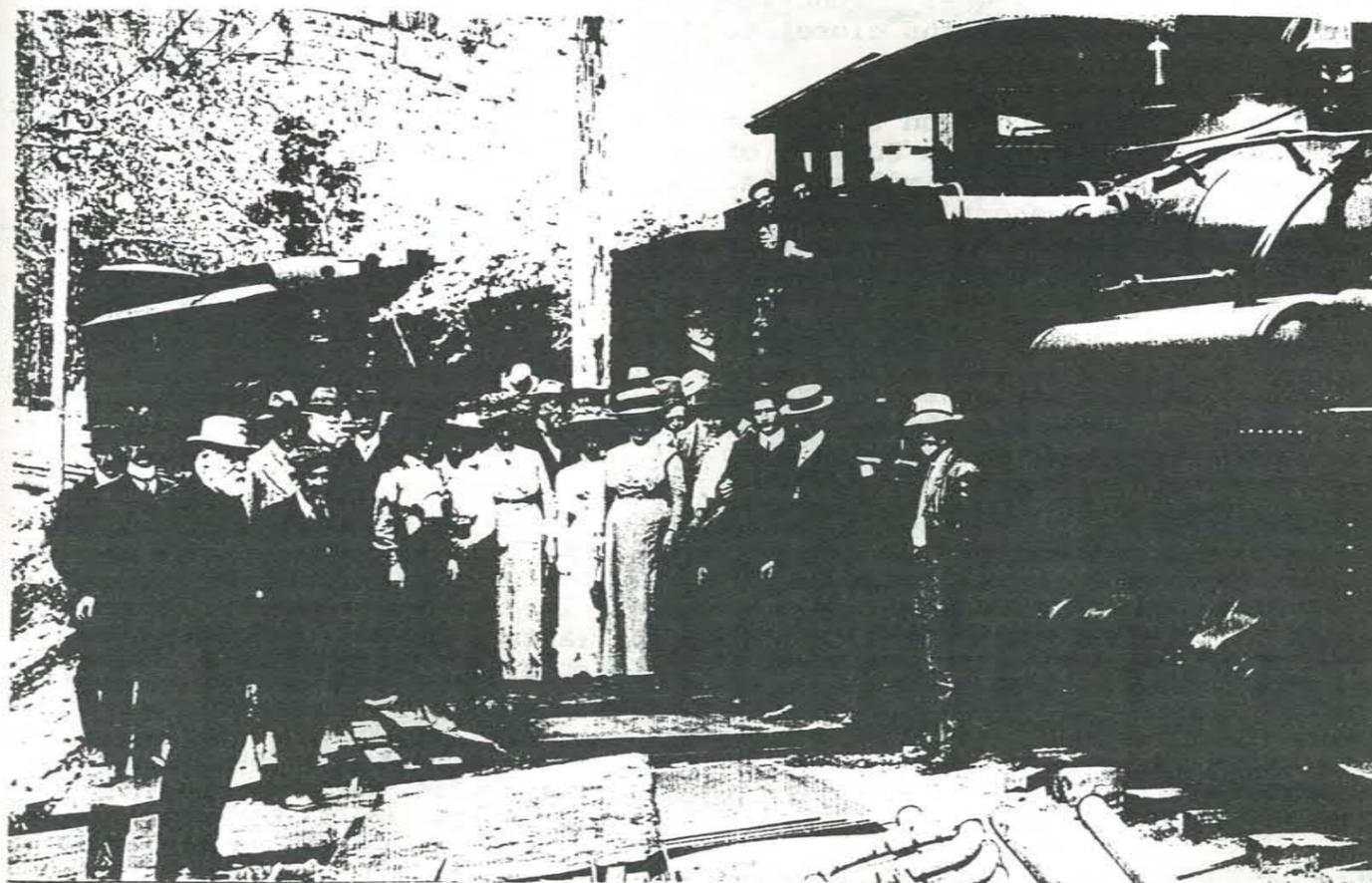
The works at Newnes were re-opened by John Fell & Co. Ltd. in 1914 and after alterations to the retorts, was kept going until 1924, when a sudden drop in the price of fuel oil again closed the mine.

From 1932 operations sponsored by the new South Wales Government and controlled by the Newnes Shale Oil Development Committee were conducted for a year or so without success. From then on the works and railway were abandoned.

The Corporation elected to establish its works at Newnes rather than the neighbouring Capertee Valley which offered far more favourable mining conditions; because the Wolgan Valley offered a far better water supply and facilities for railway access.

The Corporation intended to use the Capertee depoists and mining operations were directed towards the driving of a tunnel through the mountain. Two miles was still required to connect Newnes with the Caperte Valley when the works finally closed.

After investigations, which included proposals of completing the tunnel and using the Newnes works and railway, National Oil Pty Ltd. in 1940 decided to establish a new plant in Capertee Valley. Portions of the Newnes Plant were transferred and the rest sold or scrapped. A 3" pipeline was laid across the mountain and along the old railway formation to Newnes Junction where it was loaded into tank cars. A road from Capertee served the short-lived town of Glen Davis.



VIP VISIT TO THE SHALE OIL WORKS, ABOUT 1908  
NEWNES, COMMONWEALTH OIL CORPORATION

*print courtesy of the Mitchell Library*

In April 1906 Mr. Henry Deane, formerly Chief Engineer for Railway Construction in New South Wales was engaged to take charge of the survey and construction of the proposed railway. After survey it was found that 5 chain curves and 1:25 grades were unavoidable if the cost was to be kept within reason. It was decided that it would be essential to use the standard gauge (4'-8 1/2") and the line should run into the valley instead of terminating 1,200 ft. above the works as originally planned.

Substantial log culverts were provided where the line crossed watercourses. the two tunnels on the line are driven in solid rock and are unlined.

Mr. Deane stated that the cost of the line (without rolling stock) was 4,000 per mile, about 130,000 altogether. A line with 12-chain curves and 1:40 grades would have cost about 4 times as much.

## DESCRIPTION OF THE LINE

The line terminated in a dead-end runaway siding adjacent to the New South Wales Railway's western line. Access to the Government line was by staff locked connection in the Dargans-Clarence electric staff section. The junction was 86m. 70c. from Sydney at an elevation of 3611 ft.

A passenger platform was located on the Government line and known as Newnes Junction from the 27th November 1906.

Passing along the line through a deep cutting to the exchange sidings at 20c., consisting of two loops with catch points. There was also an engine siding with ashpit and shed for one engine, a coal stage and water tank accessible from both siding and mainline. a little further on there was a triangle for turning the engines and an up home signal.

When the Zig Zag Deviation line was opened in 1910, Newnes Junction Station was moved 20 chains closer to Sydney.

After leaving the junction the line begins to climb up to the Summit of the ridge (3960 ft.) at milage 6m. 66c. On the way a short spur siding, facing to down trains, known as 3 Mile Siding, was located at approx. 3 3/4 miles. This siding was constructed to serve a small sawmill used for cutting of mining timbers. The line continued to rise up grades of 1.30-33. At the top of the ridge there was a 990ft. long crossing loop named Summit, but was mainly used for timber loading as there were few crossings on the line.

From Summit the line descended on an almost continuous 1.50 and sharp curves to 12m. 20c. where Murray's Swamp was crossed on a timber culvert. A few yards futher on was Sawmill or 12 Mile Siding, trailing to down trains, and leading downhill to the Sawmill.

After investigating several alternatives Mr Deane determined the site for the Junction at about 1/2 miles on the Sydney side of Clarence.

The descent from the ridge into the valley needed much expenditure of time and money by the surveyors. The final design led to a grade of 1.25 uncompensated (equal to a ruling grade of 1.22) for up trains in the section between mileage 19 and 29. Between the junction and mileage 19 the ruling grade was 1.50 against up trains and 1.30 against down trains.

The earthworks and permanent way were carried out by day labour under the supervision of the Engineer-in-Charge, Mr J.D.Simpson, thus saving in the time that would have been required to prepare the drawings.

Earthworks at the junction were commenced in November 1906 and by December a start had been made at 26m. 50c, working back towards the tunnel. Work was also started on the steep grades between 20m. and the valley.

No. 2 tunnel was completed in July 1907, and the laying of rails to mileage 31m. 50c. by November, leaving only a large cutting to be completed. For anyone who has seen the country that this line was built through can see what a remarkable feat it was in completing it in 12 months.

Some second-hand 75lb double-headed rail was purchased from the New South Wales Railways to lay as far as mileage 28m. 60c. and the rest was laid with second-hand 60lb rail from Tasmania. 12,000 sleepers were purchased and the balance cut at the Corporation's Sawmill at Murray's Swamp. They were laid at 9 per eight yard length of double-headed rail and 11 per eight yard length of flat-bottomed rail. When the line was laid it was originally unballasted but was gradually ballasted with local sandstone or coarse sand.

Formation widths and tunnel clearances were the same as the New South Wales Railways for the period except that the tunnel haunches were widened to allow the longest passenger cars then in use on the Governments system to pass through on the 5 chain curves.

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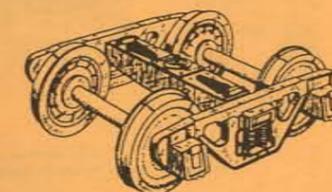
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