

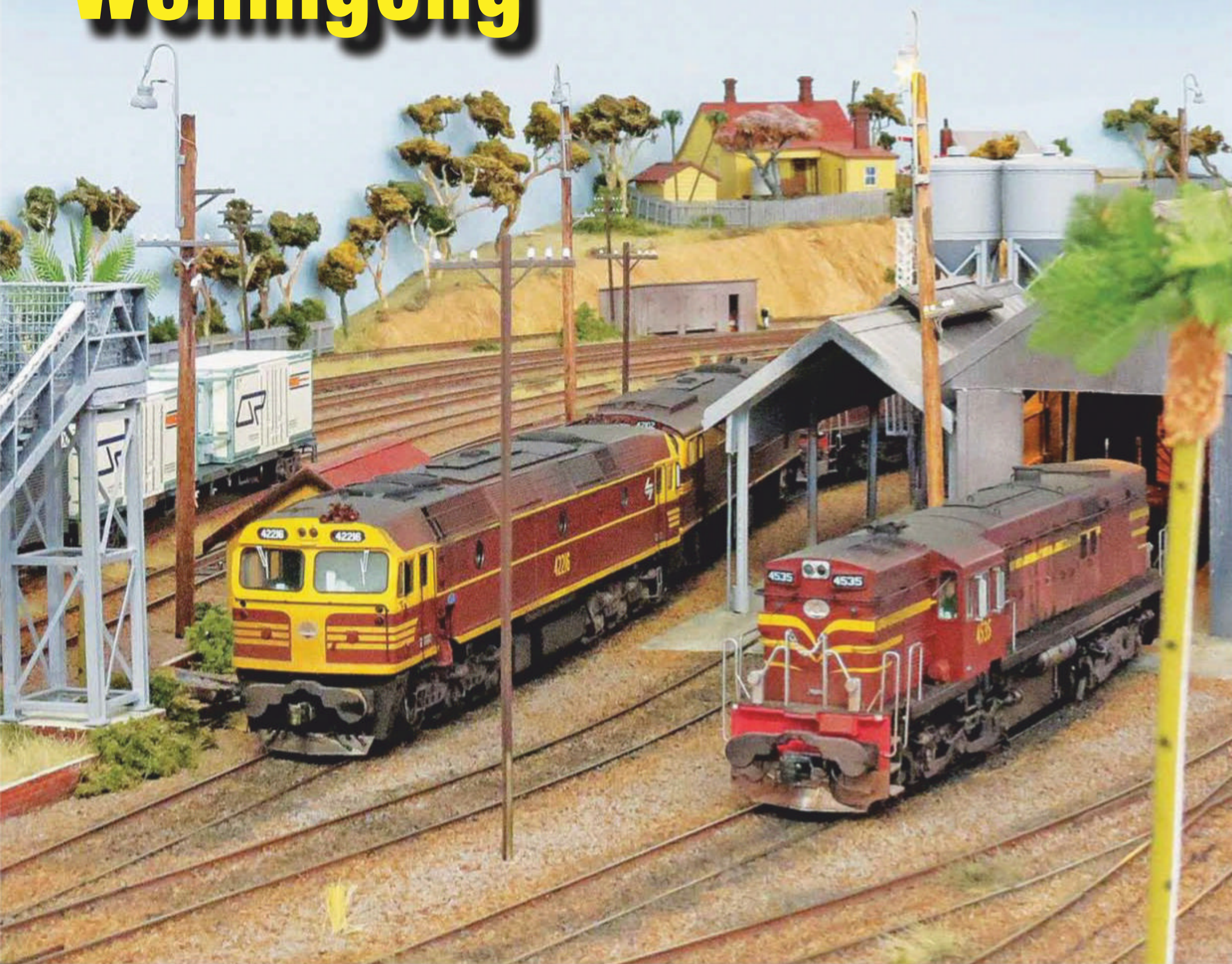
AUSTRALIAN

\$10.00
JUNE
2019

MODEL RAILWAY

MAGAZINE

Wellingong



Gallery: Modelling the Railways of SA
Making GyMEA Lilies
Midland Railway A Class Locomotives
Reviews • Mailbag • AMRM News

Issue 336 Vol. 29 No.3

ISSN 0045-009X

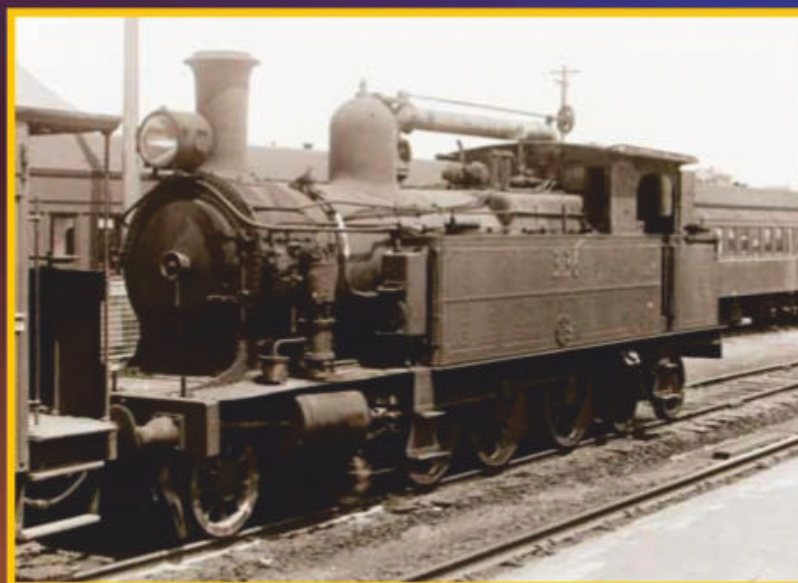




AUSTRAINS Pty. Ltd.
P.O. Box 3076, Putney, NSW, 2112
Email: austrainspl@tpg.com.au
AUSTRAINS Pty.Ltd. A.C.N. 073 183 258

C30 Class Tank Loco

IN STOCK!



THE WAY AN RTR MODEL STEAM LOCOMOTIVE SHOULD BE!

ALL AUSTRAINS LOCOS FEATURE:

**5 Pole Skew Wound Motor with Flywheels Full Die-Cast Metal Chassis, Boiler & Side Tanks
Gear Driven To All Driving Wheel Axles**

Stainless Steel Coupling Rods, Valve Gear & Driving Wheel Tyres

12 Different Numbers 3 Different Coal Bunkers DCC & Sound Ready

PRICE \$595.00 per loco. plus \$17.00 registered post



VR D³ Class 4-6-0 Loco

EXPECTED DELIVERY JAN 2020



PHOENIX REPRODUCTIONS PTY LTD
P.O. Box 804,
Winston Hills, NSW, 2153
Email: sales@phoenixreproductions.com.au

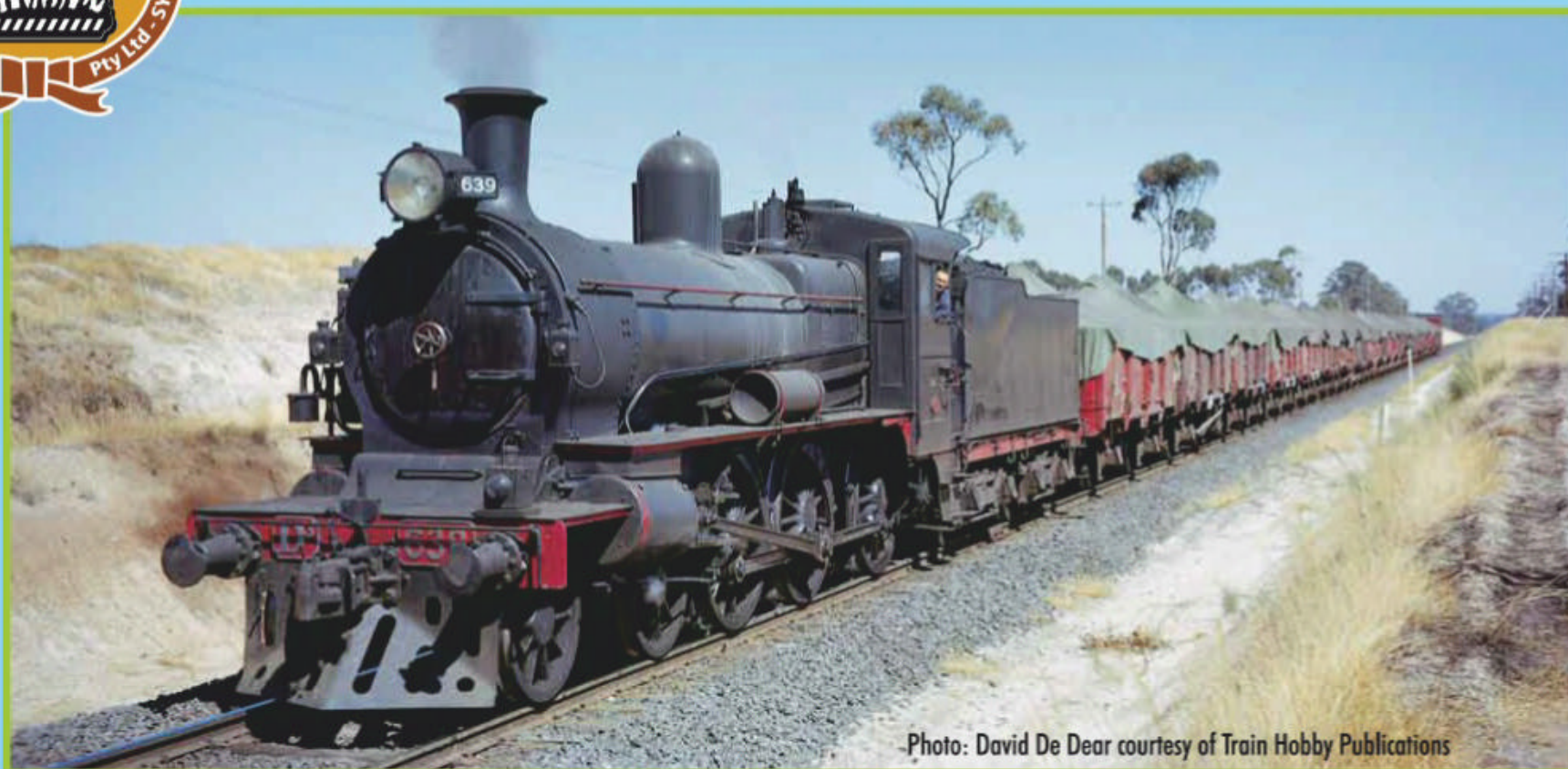


Photo: David De Dear courtesy of Train Hobby Publications

From the same Chinese factory that made the magnificent Locomotion Models Stirling Single

**Full Die-Cast Metal Chassis, Boiler & Footplate.
Rod and Gear Driven To All Driving Wheel Axles
2 Tender Types, Reflecting 1950s to Present Day.**

PRICE \$660.00 per loco. DCC + Sound Option \$110.00 extra plus \$17.00 registered post

Orders open 24th August. 1200 pieces only!



GAUGE
H0
1 : 87

Photos courtesy P. Turtle

NR class Locomotive

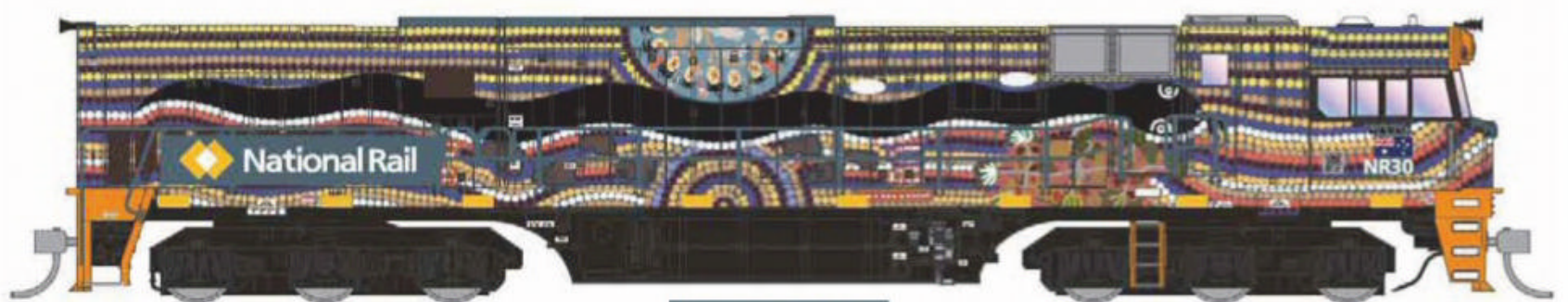
In late 1997 National Rail Corporation out-shopped two NR class locomotives bearing indigenous design based on the work by Alice Springs artist Bessie Liddle.

The first was launched in Sydney by Cathy Freeman in November 1997, Warmi NR30, featuring an Aboriginal Dreaming story. Decorated by Bessie after a Warmi dot painting showing a snake, bush tucker and women's footprints.

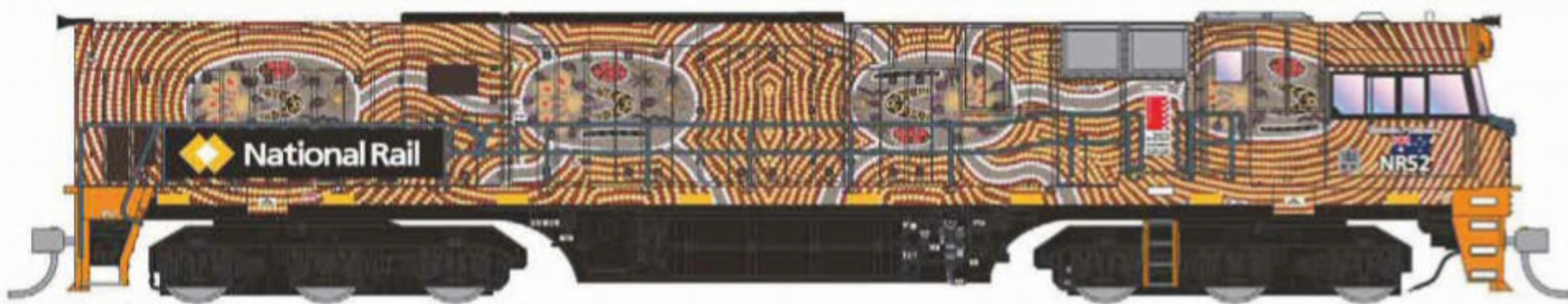
The second was launched in Alice Springs by Mark Vaile in December 1997, Kungara Mankurpa NR52, this design depicts the Star Dreaming story Seven Sisters. Decorated by Bessie, a dot painting showing the travels of the Seven Sisters and their pursuit by the Snake Man in Pitjantjatjara country.

The production is limited to a total of 660 units across the 6 options and is fully licenced by the artists agency.

SRRP: Non-Powered \$ 235.00
 Powered - DC \$ 375.00
 Powered - DCC / Sound \$ 495.00



NR 30 WARMi © Bessie Liddle / Copyright Agency



NR 52 KUNGARA MANKURPA © Bessie Liddle / Copyright Agency

Model Features:

- Highly detailed Ready-to-Run HO scale model
- Precisely tooled plastic body (ABS)
- Genuine Kadee scale head whisker coupler
- Separately applied handrails and detail parts
- 5-Pole skew wound electric motor and dual flywheels
- All wheel drive and electrical pickup
- LED headlights, marker lights, number boxes and ditch lights
- All models come standard with an MTC 21 pin motherboard



Editor: James McInerney

Issue 336 Vol.29 No.3

FEATURES

18 Wellingong

Grant Dodd describes his transportable HO scale home layout.



27 Billabong Marina 5: The World Beneath Our (Wet) Feet

Tom Carlos adds water-related scenery to his layout.

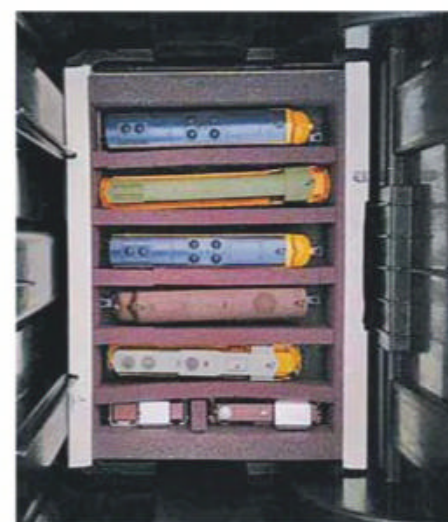


30 The Midland Railway Company of Western Australia A Class Steam Locomotives

Phil Knife describes another Western Australian locomotive and then builds a model of it.

34 Transport Your Models the Easy Way

Martin Vella describes a secure method of transporting models.



36 In the Loop: 'Unbuildable' Kits, Varying Skill Levels and Mobilising Your Mates

Trevor Hodges discusses the problems of differing skill levels and kit quality and what to do about both!

38 Making GyMEA Lilies in HO Scale

Joe Dal Forno constructs models of a very distinctive and scene-setting example of the flora of the Sydney basin.



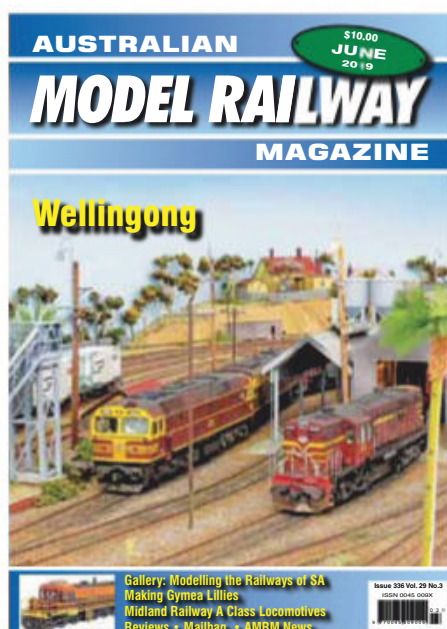
OTHER FEATURES

- 40 Gallery: Modelling the Railways of South Australia: 2018
- 56 Vale: Peter Ford
- 57 Vale: Bob Dunn
- 58 Vale: Neville Murray
- 59 Recycled Rollingstock: MBCs at Goulburn

REGULARS

- 44 Reviews
- 51 Recent Releases
- 52 AMRM News
- 58 Diary
- 59 Mailbag
- 70 Advertisers' Index

ON THE COVER: *It must be Sunday! A scene at the locomotive depot on Grant Dodd's HO scale NSW home layout, Wellingong, featured in this issue, beginning on p.18. Photo by Grant Dodd.*



On Presentation

So we have built our model railway empire and after many years of painstaking work, we have become keen to show the layout off to others and share the experience of running sessions. But how many of us plan to 'display' the layout in our planning and building stages?

I know I did not, but then the railway was to be for four of us, all close friends and as I did not visualise my skills as sufficient to display to others, no real effort went into how the layout would look to those others. Of course, this attitude did not take in the 'impact scene'; that scene just inside the door of a high bridge over a river gorge that was intended to impress. Much planning went into this scene, but no thought went into the surrounds, the backscene and 'below the layout'.

For some the jury is out on backscenes. I decided on a clean wall. That is, nothing would be on the walls behind the trains and the scenery except for a blank blue wall. I have now modified that view and have been adding 300mm high scenes against the wall. It changes the layout immediately and the task was not all that difficult.

One of my problems has been the flat areas of the layout, those sections that are awaiting scenery such as stockyards, goods sheds, a shearing shed and maybe fields of sheep. I have that disease that I understand many modellers have, if there is a flat area, put something on it! I return from the hobby shop and the purchases are put on the first available flat spot. I do some plastering; the remnants are left on an adjoining flat spot. I am sure you get my gist. My problem is further exacerbated by my work; when I am busy I do not get to the layout for quite some time and the mess builds up.

However, I have been encouraged by viewing how others cope with this issue and share these observations with you. One is a well-planned and constructed model railway, special room in house and all, and the other just grew into a wonderful operating railway.

The first needs good planning skills and a large number of plastic boxes, all clearly marked as to their contents and a specific location for them to be stored under the layout. And here, everything below the layout is covered by the use of curtains attached to the underside of the benchwork. There are no backscenes, but there's a wonderful work area where models can be worked on, batteries can be changed and recent purchases can be placed without the beauty of the layout being compromised. All due to well thought out forward planning.

The second does not seem to have been planned at all; a space under the house initially provided the area for a workbench and a basic layout. Over time the adjoining garage gave way to a quite lengthy model railway. All this has a story of its own, but initially, for me it was just like mine, half-worked on models sitting beside the track, workbench seemingly covered by many tasks, all in various stages of repair/construction. Then retirement came and, after many months, a model railway was born. The simple task of clearing away part-build models made a significant change, but so did the black pelmets above and below the scenes, the black curtains below the benchwork and the clean workbench, which now provides a location for the laptop that can be used during an operating session.

Subtle lighting behind the pelmets is sufficient to light the scenes that were built using the most time-efficient processes. The operator walkways have been made safe with raised timber sections where the operator needs to be closer to the railway, but the lighting is dimmed and places the emphasis on the models.

Both of these layouts are an inspiration, and I guess both will be easily identified by the many modellers who have been invited to visit. One has been in AMRM a couple of times and the other most likely will be in the future.

To me the most important aspect of both displays is the discipline to keep everything in its place. This may not be the case when visitors are not around, but that is not the point. The displays are that, displays that create a wonderful impression. Something we should all aspire to.

SOUTHERN CROSS MODEL RAILWAY ASSOCIATION

The Annual Membership Fee for SCMRA is \$60.00 from March to February and the Joining Fee is \$20.00, which includes the membership data pack. Applications must be received by the first of the odd month to meet our mailing list deadlines. For applications received between the 2nd September and the 2nd January the Half Annual Fee is \$30.00 plus the (\$20.00) Joining Fee (does not include October issue of AMRM). All fees are GST Inclusive.

Membership entitles you to participate in the activities of the Association, to receive AMRM and our regular news-sheet *Booster*. Standards, Recommended Practices and Information Sheets covering model railway practice are included in the joining kit together with a vinyl ring binder and are also issued at regular intervals.

For further details write to the Secretary or contact the divisional representative.

Meetings are usually organised on the second Saturday

of each month in New South Wales. For further details and location please contact the divisional representative.

Membership services include magazine binders and photocopies of articles from out of print issues of AMRM at discount prices.

Secretary: Bob Gallagher

Membership Enquiries:

PO Box 345, MATRAVILLE, 2036

Phone (02) 9311 2036

DIVISIONAL REPRESENTATIVES

New South Wales:

Graham Windmill, Ph. (02) 9626 0351

Victoria:

David Brown, Ph. (03) 5986 2363

email: cigam41@gmail.com

Editor **James McInerney**
 Editorial Assistants **Alan McKenna, Phil Knife**
 Production Assistants **Jade Por, Chris Jones**
Pete Grant, Louise Smithers
 Office Manager **Melissa Cullen**
 Subscription and Sales Coordinator **Karen Baldini**
 Illustrators **Ian Thorpe, Pete Grant**
 Design **John Casey**
 Computer Programmer **Grahame Davis**
 Webmaster **Peter Knife**
 Draughtsman **Roger Johnson, Mitch Campton**

SCR Publications – General Manager
Bob Gallagher

SCMRA PUBLICATIONS COMMITTEE
John Bevan, Fred Gooch, Ian Dunn,
Trevor Moore, Bob Gallagher, John Parker

AT ISSN 0045-009X

The official Journal of the Southern Cross Model Railway Association (SCMRA) in Australia.

Published bi-monthly by SCR Publications of PO Box 345, Matraville 2036 for the Southern Cross Model Railway Association. (ABN 70 000 558 574) All rights reserved and all editorial matter copyright. Print Post Approved. Imaging by Imagination Graphics Pty Ltd. Printed by John Fisher Pty Ltd, Marrickville NSW. Most editorial and distribution tasks are carried out by voluntary labour on a non-profit basis.

EMAIL: amrmagzn@tpg.com.au

WEBSITE: www.australianmodelrailways.com

FACEBOOK: https://tinyurl.com/y8oykqkx

DISTRIBUTION: Subscriptions, SCMRA members, hobby shops and Associations by SCR Publications; newsagencies and bookstalls by Network Services (A division of ACP Magazines).

CONTRIBUTIONS in the form of articles, photographs, hints, Letters to the Editor, drawings or trade press releases are welcome for publication in this magazine. All items received will be acknowledged upon receipt. Contributions can be made as 'hard copy' and/or electronically. Contact amrmjmes@tpg.com.au before submitting electronically. Please pack photographs and diagrams between stout cardboard before posting. Indicate whether photographs/slides are to be returned.

PRINT & DIGITAL SUBSCRIPTIONS: Details on page 65.

ADVERTISING: Details available from SCR Publications, PO Box 345, MATRAVILLE, NSW 2036. Phone (02) 9311 2036 (9.30am-2.30pm, Mon-Fri). Fax (02) 9661 4323. (24 hour).

ADVERTISING DEADLINE for all copy and **RELEASE DATES** are:

	Advertising Deadline	On Sale Dates
August 2019	7.6.19	19.7.19
October 2019	9.8.19	20.9.19
December 2019	4.10.19	15.11.19
February 2020	29.11.19	17.1.20
April 2020	1.2.20	15.3.20
June 2020	5.4.20	17.5.20

This publication accepts no responsibility for the accuracy or reliability of articles or advertising contained herein, statements made or opinions expressed in papers or discussions, nor do we necessarily subscribe to the views expressed or implied by contributors. Neither is any guarantee implied or expressed as to the good conduct or practice of advertisers herein. This publication reserves at all times the right to refuse acceptance of any matter considered unsatisfactory for publication. The Australian MODEL RAILWAY Magazine is published by SCR Publications, PO Box 345, Matraville, NSW 2036. Please address all correspondence to the Editor.

COMENG SERIES 1

STAINLESS STEEL

DOUBLE DECK-S SETS with Tulloch Double Deck Trailers

Manufacturing 2 models, Mk1 power car and Tulloch DD trailer car in the combinations listed beneath.

Coloured Livery

- ☐ 557 - Tuscan Red - 4 Car Set - \$695.00
- ☐ 558 - Blue & White (Original) - 4 Car Set - \$695.00
- ☐ 559 - Blue & White (Revised) - 4 Car Set - \$695.00
- ☐ 560 - Indian Red - 4 Car Set - \$695.00

Stainless Steel Livery

- ☐ 561 - S/S with pre-2000 Grey Trailer - 4 Car Set - \$695.00
- ☐ 562 - Citydecker-S/S with thin stripe Yellow doors & Trailer in post-2000 Grey - 4 Car Set - \$695.00
- ☐ 563 - Citydecker-S/S with Yellow doors & Trailer in post-2000 Grey - 4 Car Set - \$695.00

Tulloch D/D Trailer

- ☐ 564 - Tuscan Red 2 Car Set - \$350.00
- ☐ 565 - Blue & White (Original) - 2 Car Set - \$350.00
- ☐ 566 - Blue & White (Revised) - 2 Car Set - \$350.00
- ☐ 567 - Indian Red - 2 Car set - \$350.00
- ☐ 568 - pre 2000 Grey - 2 Car set - \$350.00
- ☐ 569 - post 2000 Grey - 2 Car set - \$350.00
- ☐ 570 - post 2000 Grey with yellow doors - 2 Car set - \$350.00
- ☐ 571 - Flake Grey - 2 Car set - \$350.00



Photographer - John Hammett



Minimodels NEXT PROJECT

Sydney Suburban Electric Car series is the 1955 Comeng known as the "SPUTNIK".

Single deck 4car set and "W"-Sets
More info to follow



Photographer - John Beckhaus



Photographer - Jim Bruce

181 Church Street Parramatta. NSW 2150 • Phone : +61 2 9635 8618 • Fax: +61 02 9689 1840 • mail@bergshobbies.com.au • www.bergshobbies.com.au

NOCH Model Landscaping

Get Real • Get Hands-On • Get 3D Creative • Get Moving

1 Buy Your Layout Board

2 Create Your Landscape

3 Expand to Your Heart's Content!

- Base layout, roadways and mountains, mounted on stable wood frame
- Pre-cut underlay for the tunnels
- Track plans for all applicable systems
- *Preformed Layouts* DVD Guide
- 160 x 100 cm. Approx. 25 cm high

New Z21 App now available for download!

allaboardeexclusive.com.au



68-72 Old Hume Hwy, Braemar, NSW 2575 (02) 4871 2966
PO Box 388 Mittagong, NSW 2575 E: vic@allaboardeexclusive.com.au
Open 9.30-4.30. Closed Sundays, Public Holidays

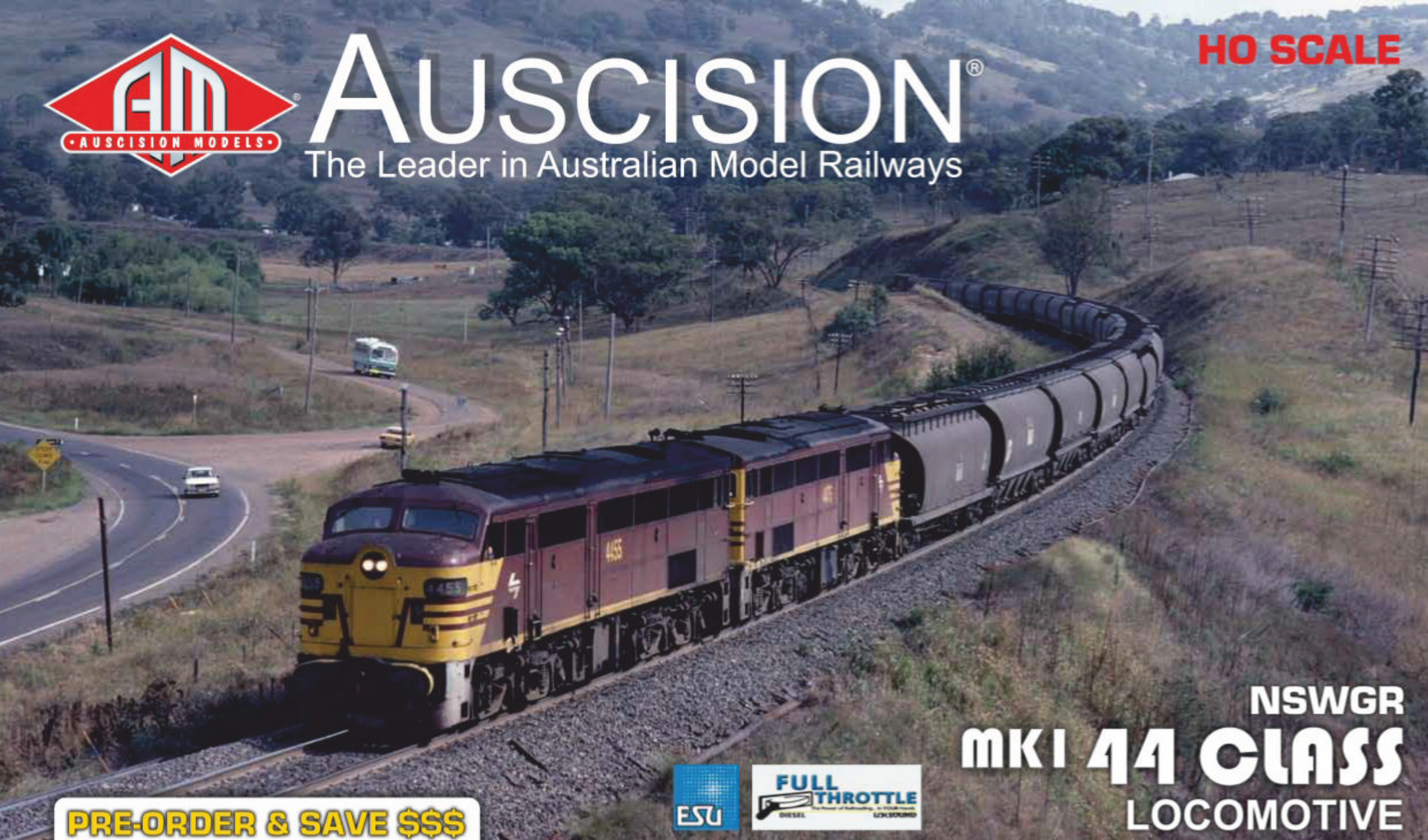
Z21 SPECIALIST • DCC INSTALLATIONS • REPAIRS • RETAIL • WHOLESALE • SALES, FRIENDLY SERVICE AND EXCELLENT ADVICE



AUSCISION®

The Leader in Australian Model Railways

HO SCALE



PRE-ORDER & SAVE \$\$\$

Save \$60.00 per locomotive when you pre-order directly with Auscision. Pre-order price will finish shortly before models are shipped from our factory. Order early to avoid missing out on the model of your choice.



NSWGR MKI 44 CLASS LOCOMOTIVE

Visit our website for further details and features

NOW ACCEPTING ORDERS
Delivery expected 2020*



44-1 4401 Indian Red



44-10 4442 Indian Red - Simplified Livery



44-5 4414 Indian Red



44-14 4420 Reverse



44-7 4415 Indian Red



44-16 4405 Candy



44-8 4431 Indian Red



44-18 4427 Red Terror



44-11 4402 Indian Red Austerity



44-20 4403 Freight Rail

*Model details & delivery dates subject to change without notice.

Artwork shown for livery reference only. Number fonts, body versions and some finer details may differ on the production models.



AUSCISION®

The Leader in Australian Model Railways

AUSCISIONMODELS.COM.AU

information@auscisionmodels.com.au

PO Box 1791, Castle Hill, NSW 1765 Australia

PH: 0425-866-442 FAX: (02) 9620-6695

Auscision Models Pty Ltd 2017 ABN 15 690 630 128

PAMAK HOBBIES

P 02 46842727 M 0408656446

www.pamakhobbies.com

info@pamakhobbies.com



**PIKO 2019 CATALOGS
OF TRACK, TRAINS &
BUILDINGS AVAILABLE.
HO SCALE 450 PAGES.
G SCALE 202 PAGES.
\$10 EACH + POST.**

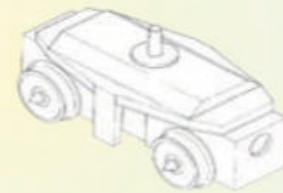


**Self Contained Drive Bogies powered
by Mashima 1220 or 1224 Motors**

Custom Assembled \$95.00

Black Beetle with matching dummy
Beetle \$122.00
Wheelbases from 25.5
to 40mm

9.6mm disc
10.5mm disc and 10 spoke
11.08mm 9 spoke
11.6mm disc
12.0mm disc
12.25mm disc and 12 spoke
14mm disc
Most sizes available in
RP25-110 and RP25-88 profile
All prices include GST



Phone: (03) 5956 9389
Visa, Mastercard.



**MODEL
KITS**

specialists in model kits & accessories

O-Aust Kits

**DJH
MODELLOCO**

PECO

**SLATER'S
SPASTHEARD**

dapol

ME

Visit our website & online store at www.modelokits.com

**COMING
SOON**

NSWGR Z13 Class Tank Locomotive

In fine scale 7mm kits and Batch Build Ready-to-run by DJH.

- **RTR locomotives** are fully built/running/tested, Includes number plates, decals, standard paint (black), working lights, 8 pinDCC interface (plug-in).
- **Detail includes:** slow running, real coal, detailed back head. Specific paint requests may/will incur additional charges.
- **Minimum radius:** 6'

Pilot Model Here For
Viewing Now!
Kits Available Now
RTR Production
Starts June



Kit Price \$1500 RTR Price \$2750

- Order forms available from our website or call us to order over the phone or we can post/email you an order form.

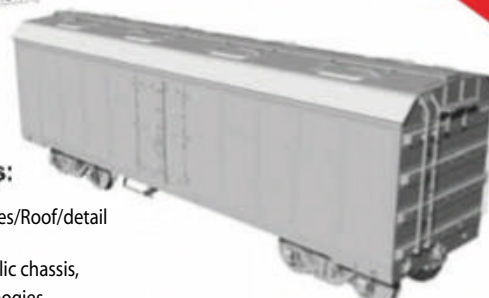


"TRC" WAGON KIT

**NOW
AVAILABLE**

Kit Includes:

- Etch Brass sides/Roof/detail components.
- Laser cut acrylic chassis,
- White metal bogies,
- 3D printed ends and detail components.

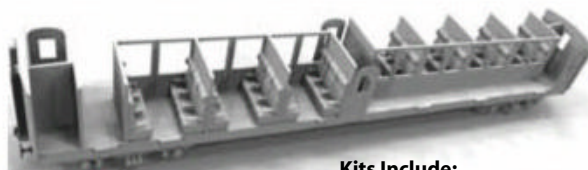
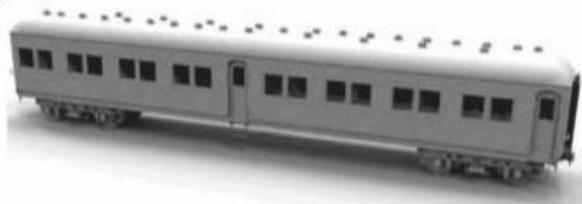


Price: \$275.00 per kit.

Available Now!

**COMING
SOON**

NSWGR FS & BS CARRIAGE KITS



**COMING
SOON**

Kits Include:

- Etch Brass sides & detail components
- Laser cut acrylic chassis
- Single piece styrene roof
- 3D printed ends, bogies and detail components

Available End of June 2019

Price: \$425.00 each.



**COMING
SOON**

NSWGR RUB CARS

Available in individual passenger cars or sets.
(Types SFS, SBS, OFS/OBS, RS, & PHS.)

Pilot models available for viewing June 2019

Kits available by order only: September Quarter 2019

Prices: TBA



**COMING
SOON**

We are now stocking in our Yagoona showroom a range of modelling products including:



**Now Stocking
British Dapol O Gauge RTR**



**Now Stocking
British Dapol O Gauge RTR**



**Now Stocking
Heljan British O Scale RTR**



**Now Stocking
ESU Decoders**

**Loksound V4 Decoders \$165
Loksound V4L Decoders \$230**

For shop opening hours visit our website.

Shop at Unit 4/61-71 Rookwood Rd Yagoona NSW 2199

**NOW
AVAILABLE**

Minerva Manning Wardle K Class

Versions available:

Black Lined Yellow/Red
Dark Red, lined Yellow
Deep Blue lined red/straw

These locos saw service on the NSWGR as engines 292 & 293 under P(127) class (Later 532 & 533) on the Camden Tramway, Clyde - Carlingford Line and Private Industrial Lines. If there is enough interest we may put together a conversion kit.



Prices: DC-\$495 DCC-\$595 DCC Sound-\$725



Interested in larger scale ride-on model railways?

Want to drive your own live steam locomotive?

Want to smell the steam, coal and oil?

Want to relax behind your own electric or IC locomotive?

Then you need a subscription to the **Australian Model Engineering** Magazine. You can subscribe by post, phone, fax, or via our secure on-line facility.

AME is also available in most Newsagencies.



PO Box 267
Kippax, ACT, 2615
Ph/Fax: (02) 6254 1641
www.ameng.com.au

The magazine for ALL model engineering enthusiasts

62 Moore Street, LIVERPOOL
PO BOX 3206, LIVERPOOL, NSW 2170
PHONE (02) 9602 8640
FAX (02) 9602 8874



Mail orders:
www.casulahobbies.com.au

Email:
sales@casulahobbies.com.au



Still the place for models of Australian Railways

TRADING HOURS: MONDAY-FRIDAY: 9.30am-5.00pm. SATURDAY: 9.30am-2.00pm. CLOSED SUNDAYS

Z19 Class 0-6-0 Steam Locomotive

R.R.P. after delivery to Australia will be
\$795.00 or \$1500.00 for any two
locomotives ordered at the same time.

Projected delivery date is second half 2019.

DCC-ready with 21-pin plug and 'sugar-cube' speaker

For orders prepaid before delivery \$650 each
or \$625 each for any two or more locomotives.

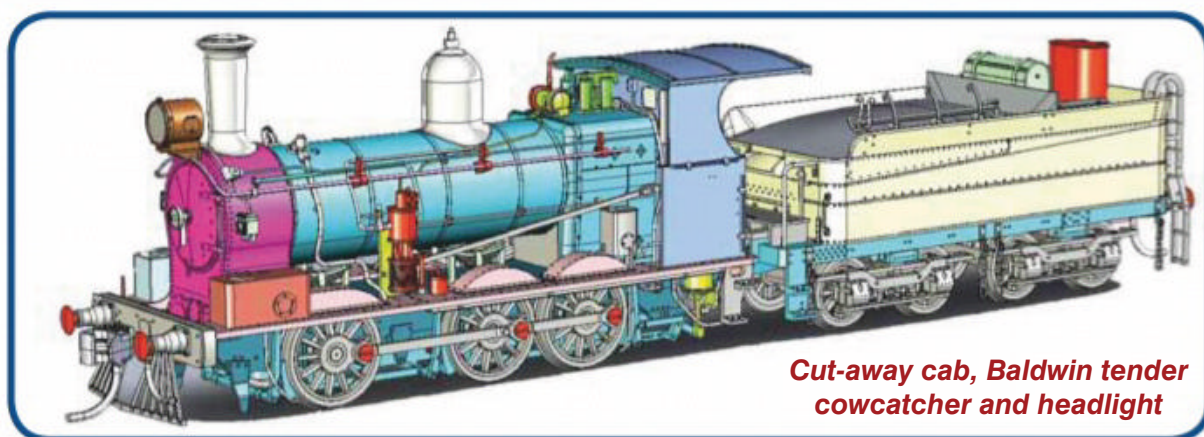
Lay-by facility available. Call us.

SEE WEBSITE FOR ORDER FORM

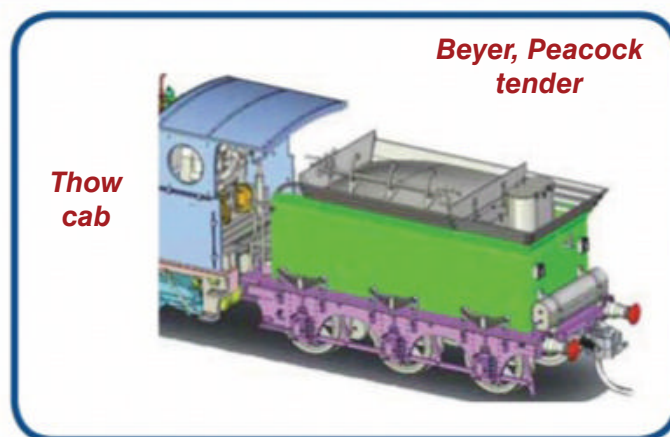
PRICE REDUCED!

Due to enthusiastic response, the production run has been increased, which combined with tooling economics, has allowed us to reduce the price to
\$650 prepaid, \$625 each for any two or more

If you have an order in for a Z19 for \$650 and would like to order a second model, you only pay \$600 for the extra loco. Thereafter \$625 each.



*Cut-away cab, Baldwin tender
cowcatcher and headlight*



*Beyer, Peacock
tender*

*Thow
cab*

HG VANS

Single pack \$110.00

- HG-1. HG 15016. Standard HG van with one passenger compartment, with side window
- HG-2. HG 15027. Standard HG van with one passenger compartment with side window
- HG 3. HG 15772. Standard HG van with one passenger compartment, NO side window
- HG-4. HG 15820. Standard HG van with one passenger compartment, NO side window
- HG-5. HG 4148. Van with one passenger compartment, modified for Yass Branch, 1950
- HG-6. HG 12351. Van for Yass and large yards with no passenger compartment, post 1962
- HG-7. HG 5434. Van for Yass and large yards with no passenger compartment, post 1962
- HG-8. HG 4148. Van for Yass and large yards with no passenger compartment, post 1962 LOW
- HG-11. HG 4148. Van with one passenger compartment painted red for North Shore line
- HG-13. HG 6299. Van with one passenger compartment painted red for North Shore line
Van with two passenger compartments

CR & EHO 2 car pack

CR COMPOSITE 1ST/2ND CLASS & EHO BRAKEVAN

CR 1183/EHO 1281 Tuscan & Russet	\$285.00
CR 1415/EHO 1290 Tuscan & Russet	\$285.00
CR 1386/EHO 1364 Tuscan & Russet	\$285.00
CR 1375/EHO 1462 Indian Red	\$285.00
CR 1372/EHO 1283 Indian Red	\$285.00
C 57/EHO 1459 Indian Red	\$285.00

R CAR SETS

Set 109 Green & Cream 6 cars	\$900.00
Set 109 Tuscan & Russett 6 cars	\$900.00
Set 109 Indian Red 6 cars	\$900.00
Set 108 Blue and Cream Caves Express 7 cars	\$1050.00
Set 108 Tuscan and Russett 7 cars	\$1050.00
Set 108 Indian Red 7 cars	\$1050.00
Set 121 Tuscan and Russett 4 cars	\$600.00
Set 122 Tuscan and Russett 4 cars	\$600.00
Set 120 Indian Red 3 cars	\$450.00

ONLY A LIMITED NUMBER OF R CAR SETS LEFT IN STOCK

LIMITED NUMBER OF EHO, CR & HR-4 TERMINAL CARS AVAILABLE IN KIT FORM

\$98.50 EACH

PURCHASE IN PACKS OF 3 MIXED OR THE SAME AT \$80.00 EACH

INDIVIDUAL CARS RTR MODELS

FR 1349 2nd Class Indian Red	\$150.00
FR 997 2nd Class Indian Red	\$150.00
FR 1055 2nd Class Indian Red	\$150.00
BR 1365 1st Class Indian Red	\$150.00
BR unnumbered 1st Class Indian Red	\$150.00
BR 1044 1st Class Indian Red	\$150.00
HR 1235 Terminal Car Indian Red	\$150.00
HR unnumbered Terminal Car Indian Red	\$150.00
HR 995 Terminal Car Indian Red	\$150.00

Tulloch Double Decker Cars

2 Car Blue & White

2 Car Indian Red

\$320.00 per 2 car set

NSW

GOODS WAGONS



MLV General Van Twin pack \$180.00

MLV 21169 + MLV 21151

MLV 21137 + MLV 21182

MLK Milk Van Twin pack \$180.00

MLK 21145 + MLK 21179

MLK 21153 + MLK 21172

E Wagon Twin pack \$160.00

E 1318 + E20713

E 21024 + E 21075



WT Water Tank Single pack \$95.00

NOW AVAILABLE and are listed on our website.

LAY-BYS WELCOMED AND LONGER PERIOD FOR MODELS IN PRODUCTION NOT HERE YET

Available Now - The NSWGR 32 Class

Centenary Lined Black 3264; Lined Green 3266; 3239 'Macquarie'. Lined Maroon 3201 'Wyong'.



**All versions \$495.00
 at model shops & exhibitions.**

Online from the Ixion website, add \$20.00 P&P.

**COMING
 SOON:
 A New
 HO Loco.
 WATCH THIS
 SPACE!**



Also still available:

3333: Angled footplate, Plain black with bogie tender.

3298, 3307, 3372: Angled footplate, Plain black, original 'P' Class 6 wheel tender.



**BGM, SETTING
 YOU THE
 CHALLENGE TO
 BUILD YOUR
 LOCOMOTIVES**

Phone
 (03) 5422 6127
 Mobile
 0427 047 411



VR D³ KIT

Having sorted the tooling from DJH we have found that the D³ tooling is missing. Subsequent information ex DJH tells us they cannot find it either. See news section for information on what's happening with this project.

Wanting a D³ or D¹, D²? D¹ will come with a flared tender, D² and D³ with conventional tenders. Taking order now.

**N/750. TAKING ORDERS FOR THIS MODEL
 LOCO NOW.
 NO DEPOSITS JUST NEED YOUR ORDER.**

On30 Little Yarra in production at long last, timing TBA.

BGM have two low melt solders available. 70 and 130 degree. Flux is still to be sorted. Expecting to have more in the near future.

SAR 620 – 2019/20

Email: b_chester@bigpond.com

Fully tested
 and guaranteed
 for 5 years

**MORLEY
 CONTROLLERS**
 Experience the ultimate in controller technology!

60 Years
 BTVR
 ESTABLISHED 1959

VANGUARD ZERO ONE

- 2 x 5mtr hand held controllers
- 1 x 12V DC accessory
- O gauge
- Twin track

\$299
 POSTED



VESTA ZERO TWO

- 2 x 2.5mtr hand held controllers
- 1 x 12V DC accessory
- N gauge
- Twin track

\$225
 POSTED



VECTOR ZERO TWO

- 2 x 2.5mtr hand held controllers
- 1 x 12V DC accessory
- OO/HO/N/009 gauge (1 amp per track)
- Twin track

\$225
 POSTED



VORTRAK ZERO TEN

- 2 x 5mtr hand held controllers
- OO/HO/N/009 gauge (1 amp per track)
- 2 x 12V DC accessories
- Four track

\$399
 POSTED



Each controller has state-of-the-art design, offering very best performance capability. Slow and fast speeds are superb. Internal separate transformers for each track from 220/240 AC mains.

CDU FOR POINT MOTORS ON-BOARD



<http://aus.morleycontrollers.com>

Email: mal@aus.morleycontrollers.com

Tel: 0421 359 487

Mail Order: please make money orders payable to E J Baybutt



PO Box 1230, Wangara BC, Perth,
 Western Australia 6947



PO Box 501, Southport, PR9 9ZL, UK. www.morleycontrollers.com

Made in the UK

ORIENT EXPRESS REPRODUCTIONS

SAR Train Packs

F Class Tank Loco +
2 x Centenary Coaches

or

F Class Tank Loco +
2 x M Vans +
2 x D Vans

\$675.00



Centenary Coaches

NEW!



New Glenelg Centenary Cars with new running numbers
"Basic" version without interior lighting

\$109 each

Available at upcoming exhibitions in

Perth

June 1st-3rd

Adelaide

June 8th-10th

Stawell

July 13th-14th

orientexpressmodels.com.au

ORIENT EXPRESS REPRODUCTIONS

2 King William Rd, Unley SA, 5061, (08) 8271 7861
sales@orientexpressmodels.com.au

Delivering for enthusiasts of South Australian Railways!



www.powerline.com.au

info.powerline@powerline.com.au

sales.powerline@powerline.com.au

Pricelist: www.powerline.com.au/pdfmenu/Pdlisting.pdf



Victorian Railways Z-Cars.

AZ, BZ, ACZ. BCZ, BTN & BZN

due within 12 months-Order Now.

See Facebook and Website for updates, information, order forms & sample photos.

NEW VR (Blue & Yellow) 'S' cars arriving in May 2019.

BCH
NSWGR Coal Hopper.(1951-79)
NHDA
NSW SRA (Post 1979 coded)



BWH
NSWGR GrainHopper(1953-79)
NGBA
NSW SRA (Post 1979 coded)



VHBF
Frt Aust Wheat Hoppers



All New
Rolling stock
feature
Metal RP25 wheels
&
Metal Knuckle
Couplers

The PR-TCTrain Set Controller



approved for use in Australia.



VR VSX/VSF/VLEX/VLEF/VLNX
In stores in numerous running numbers.



AS/NZS
C13PR14.1,
EMC, MEPS,
AS/NZS4665,
GEMS

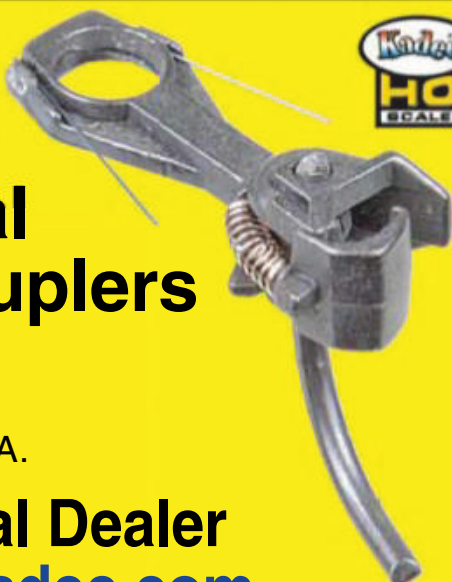
Kadee

All Metal Whisker® Couplers



Made in the U.S.A.

See Your Local Dealer
or Visit www.kadee.com



Patent number 5,662,229

©2018 Kadee Quality Products Co. • 673 Avenue C • White City, OR 97503-1078 U.S.A.
Tel: (541) 826-3883 • Fax: (541) 826-4013 • www.kadee.com

BRASSTIC KITS

By popular demand, the *Australian Model Railway Magazine* is once again stocking the brass castings for the BRASSTIC NSW 45 class, SAR 600 class and NSW 48 class modifications, as described in articles in AMRM.

45 Class	Cost is:	\$30.00
48 Class		\$30.00
600 Class		\$30.00

posted in Australia

Orders to:

SCR PUBLICATIONS

PO Box 345, Matraville 2036

Telephone: (02) 9311 2036.

Fax: (02) 9661 4323

www.australianmodelrailways.com

PIKO SmartControl
The Digital Future of
Model Train Control
is Here.

**CASH
CARD
PAYPAL**



Models 'N More

PIKO
SMARTCONTROL

Checkout
our
website:-

Ring for
Details

0412 556689

modelsnmore.com.au

**AUSTRALIAN
MODEL RAILWAY
MAGAZINE**

ADVERTISING DEADLINE

August 2019 Issue

Advertising deadline is:
6 June 2019

The August 2019 issue should be available at
the normal outlets around 18 July 2019.



AUSCISION®

The Leader in Australian Model Railways

HO SCALE



BRADKEN 120 Ton COAL HOPPER

AIR BRAKE & ECP VERSIONS

PRE-ORDER & SAVE \$\$\$

Save \$40.00 per wagon pack when you pre-order directly with Auscision. Pre-order price will finish shortly before models are shipped from our factory. Order early to avoid missing out on the model of your choice.

NOW ACCEPTING ORDERS
Delivery expected 2019*

• MODEL FEATURES •

- Ready-to-Run
- Fine Scale Details
- Precision Metal Wheels
- Metal Knuckle Couplers
- 4 Car Packs
- Factory Painted & Printed
- 15 Different Liveries/Versions
- Removable Coal Load

HO Scale 4 Car Pack: ^{Pre-order price} \$220.00

Okay so you have all these HO Scale Auscision C44ACI Locomotives but nothing to put behind them! Don't worry here are some Bradken 120 Ton Coal Hoppers that you can lash up behind your 92, 6000, 6020, XRN, GWU, CF & 5020 Classes. Don't be afraid to order lots as you will need at least 50 to look cool at the train club. Order forms and further details are available from our website. Delivery 2019*.



NCH-49 NHYH Pacific National Blue/Silver



NCH-56 PHEH Xstrata Blue/Silver



NCH-53 NHEH Pacific National Wagon Grime



NCH-58 PHEH Xstrata Wagon Grime



NCH-51 NHH Pacific National Blue/Silver



NCH-62 PHEH Glencore Wagon Grime



NCH-54 NHH Pacific National Wagon Grime/Black



NCH-65 GWA Orange/Silver

Artwork shown for livery reference only. Number fonts, body versions and some finer details may differ on the production models.



AUSCISION®
The Leader in Australian Model Railways

AUSCISIONMODELS.COM.AU

information@auscisionmodels.com.au

PO Box 1791, Castle Hill, NSW 1765 Australia

PH: 0425-866-442 FAX: (02) 9620-6695

Auscision Models Pty Ltd 2017 ABN 15 690 630 128



PO Box 407 SANS SOUCI NSW 2219

• Phone: (02) 9529 2235 • Fax: (02) 9583 9557

• Email: eureka.m@bigpond.net.au

• Website: www.eurekamodels.com.au

Eureka Models Pty. Ltd. ABN 50 828 362 868

IN STOCK NOW!

NSWGR 12 WHEELERS

MAL Sleeper,
ACS Composite,
AB Diner
Weathering

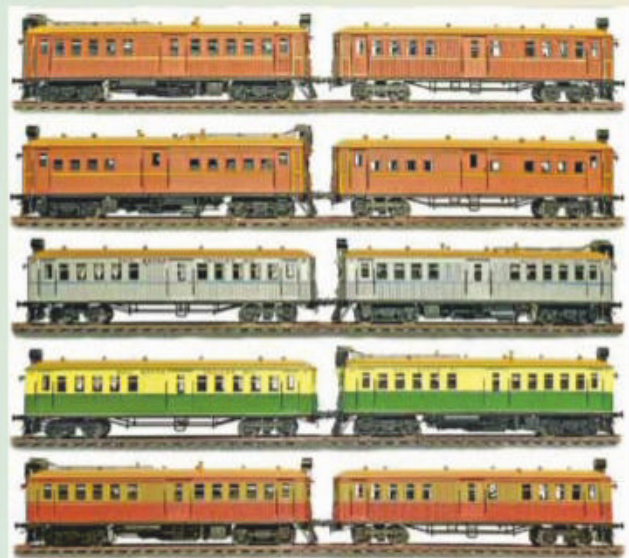
\$150.00 per car
add \$25.00 per car



NSWGR CPH/CTH RAIL MOTOR SET

Basic unit
Weathering
Sound

\$440.00
add \$25.00
add \$99.00



THE VR BOGIE OIL TANK WAGON

Pack of 3 (2 Golden Fleece & 1 Fuel Oil) **\$180.00**



THE NSWGR RSH 4 WHEEL HOPPER



Standard version
pack of 4 **\$165.00**
3 standard version + 1 fertiliser
\$165.00
Weathering add \$35.00

THE NSWGR LCH & CCH 4 WHEEL COAL HOPPERS



Pack of 10 LCH
Pack of 10 CCH
Pack of 5 LCH & 5 CCH
Price **\$440.00**

THE PRIVATE OWNER 4 WHEEL COAL HOPPER with timber underframe and size L hopper

Available in packs of 10
Pack of 10 hoppers

\$440.00



NSWGR 40 CLASS DIESEL ELECTRIC

In Green, Royal Blue and Indian Red

Price **\$330.00**
Factory Weathering add \$25.00
Sound add \$110.00



THE NSWGR G WAGONS

W44-GC 5 pack (Black) **\$275.00**
HGM wagon (Black only) **\$110.00**
NOCX wagon 2 pack (Red) **\$110.00**



THE NSWGR CG ORE WAGONS

CG in Grey 3-pack **\$195.00**
NOEF in Blue or Red, 3-pack **\$195.00**
Weathering add \$35 per pack



THE CHG 4-WHEEL BRAKE VAN BACK IN STOCK

Price **\$80.00**
Postage add \$15.00



Postage: Add
\$15.00 per delivery

THE NSWGR NCR SET

Four car set **\$550.00**
Factory Weathering (light dusting)
per set add \$35.00



THE NSWGR 50 CLASS

Price **\$680.00**
Factory Weathering add \$25.00
Sound add \$99.00



THE NSWGR BCW BOGIE CATTLE WAGON

1974 version
Packs of 3 **\$165.00**
Factory weathering
per pack, add \$25.00



THE RH FOUR WHEEL CEMENT HOPPER IN TWO VARIATIONS

Southern Portland Cement
NSWGR

THE NSWGR STEEL SIDED FOUR WHEEL COAL HOPPER

Pack of four hoppers **\$220.00**
Postage add \$15.00

EUREKA MODELS

"The Leaders in Sound"

EUREKA MODELS



ETA 2019

NSWGR DEB SET

Three Car set	Pre-delivery price \$495.00
Four Car set	Pre-delivery price \$595.00
Weathering	add \$35.00 per set
Sound	add \$130.00 per set

NSWGR 620/720 2-CAR DIESEL SET ORIGINAL AND AS MODIFIED

Before 30/12/18	\$440.00
After 31/12/18	\$495.00
Factory weathering	add \$25.00
Factory fitted sound	add \$130.00

Liveries will include CityRail Heritage Red, CityRail Grey, Candy and as originally issued to service Tuscan Red and Reverse Red.



ETA 2019



ETA 2019

NSWGR 600/700 2-CAR DIESEL SET

Before 30/12/18	\$440.00
After 31/12/18	\$495.00
Factory weathering	add \$25.00
Factory fitted sound	add \$130.00

THE NSW NTA 10,000 GALLON BOGIE OIL TANK WAGON

Featuring the WW2 DOD 40 ft tank on a 6" welded underframes as rebuilt after WW2.
Available in six company liveries in packs of 3:

- Pack NT1: 1 Ampol, 1 Esso, 1 Black
- Pack NT2: 1 Golden Fleece, 1 BP, 1 Black
- Pack NT3: 1 Mobil, 1 Shell, 1 Black
- Pack NT4: 3 Black

Price per pack	\$165.00
Weathering	add \$25.00
Postage	add \$15.00



ETA 2019



Photo: Graham Cottrell

ETA 2019

THE VICTORIAN RAILWAYS K CLASS

Full payment received before delivery	\$620.00
After delivery price	\$680.00
Factory Weathering	add \$25.00
Sound	add \$130.00



ETA 2019

THE NSWGR 59 CLASS 2-8-2 GOODS ENGINE IN BOTH COAL AND OIL BURNING VERSIONS

Pre-delivery price	\$620.00
Factory Weathering	add \$25.00
Sound	add \$130.00

THE NSWGR 38 CLASS RE-RUN

Streamlined

- 3801 In Green, Black And Grey
- 3802 in Special Green (1946-1953)
- 3803 in Special Green (1946-1953)
- 3804 in Black (late 1950s)
- 3805 in Black (late 1950s)

Non-streamlined

- 3806 in Green with Black Smokebox
- 3807 in Royal Train Black
- 3809 in Black
- 3815 in Black
- 3818 in Green with Black Smokebox door
- 3820 in Black
- 3822 in Green with Black Smokebox door
- 3827 in Service Green
- 3830 in Green with Black Smokebox

After delivery price	\$770.00
Factory weathering (light dusting)	add \$25.00
Factory fitted sound	add \$130.00
Postage	add \$15.00



EXPECTED DELIVERY: AUGUST 2019

THE VR S BOGIE FLAT WAGON



ETA 2019

E BOGIE OPEN WAGON IN VR AND SAR O WAGON VARIATIONS

Available in the following packs of three wagons:

- Pack E1: E Bogie Open Wagon (pack of 3)
- Pack E2: E Bogie Open Wagon (pack of 3 including 1 SAR O Wagon)
- Pack E3: S Bogie Flat Wagon (pack of 3)
- Pack E5: SAR O Wagon (pack of 3)

Price per pack	\$165.00
Weathering	add \$25.00
Postage	add \$15.00



ETA 2019



EXPECTED DELIVERY: JUNE 2019

THE NEXT IN EUREKA'S 12 WHEELER SERIES

THE TAM SLEEPER IN INDIAN RED AND CANDY LIVERIES

THE MCS SITTING CAR IN INDIAN RED

Pre-order price	\$130.00
Afer delivery price	\$150.00

EUREKA MODELS
"The Leaders in Sound"

For a leaflet and order form outlining full details of any of our models including paint schemes, numbers etc. and our easy regular payment scheme contact Eureka Models or see our website:
www.eurekamodels.com.au



**MANUFACTURER - RETAILER
- WHOLESALE**

Unit 2, Bldg 4, Lot 1A
LAWRENCE HARGRAVE WAY, PARAFIELD SA
(Behind P.A.L.S and the Salvos Store)

**Scratch Building Supplies - Scenery - Controllers - Loco's &
Rolling Stock - Points & Accessories - Buildings & Building Kits
- Books - Slot Cars - Monthly Workshops - Decoder &
Repair Service - Layout Advice - Hire Shop - Slot Car Racing**

**** WHOLESALE ENQUIRIES WELCOME ****

TAKING PRE-ORDERS NOW—Due 3rd Quarter 2019

SDS SAR 800 Class Locos
Approx price \$295.

COMING SOON

SDS NR Class Indigenous Livery Locos - NR30 Warmi / NR52 Kungara Mankurpa
Non-Powered \$235 / Powered \$375 / DCC Sound \$495

RE-RELEASE OF CATTLE VANS

ONLY 1000 RELEASED ~ \$136 for 2 Pack ~



SAR C Archbar Bogies
(Grey) or
High Speed Bogies
(Green & Gold or
Oxide Red)

~ ABS Plastic ~ Air Hoses
~ Kadee Compatible
Couplers

LARGE SELECTION OF NEW AND USED PRODUCTS...

Auscision, LGB, Bachmann, Proto 2000, Model Power, Flyslot, Marklin, Liliput, Evergreen, Woodland
Scenics, Micro-Trains, Walthers, Scalextric, Hornby, Ozrail, All Scale Scenics and many more...

HUGE RANGE OF SUPPLIERS!

If we don't have what you want in stock, just ask and we can order it in for you.



Lay-By Welcome - 10 Week Term.



ALL SCALE SCENICS—HUGE RANGE!

Trees, Shrubs, Ballast, Grasses, Crops, Flowers, Resin



WE BUY MODEL TRAIN COLLECTIONS

Ask for a no-obligation free quote.

Large collections are our specialty. Will travel interstate.

TRADING HOURS: WEEKDAYS 9AM TO 5PM, THURSDAYS 9AM TO 6.30PM
SATURDAY 9AM TO 4PM & SUNDAY 11AM TO 4PM - PUBLIC HOLIDAYS—CLOSED

PH: 08 8258 7665 / 0408 084 259

Website: www.ozrailmodeltrains.com.au / Email: info@ozrailmodeltrains.com.au

Like us on Facebook!



AUSCISION®

The Leader in Australian Model Railways

HO SCALE



NSWGR DEB SET RAILCAR

LOK SOUND
EST. 1999

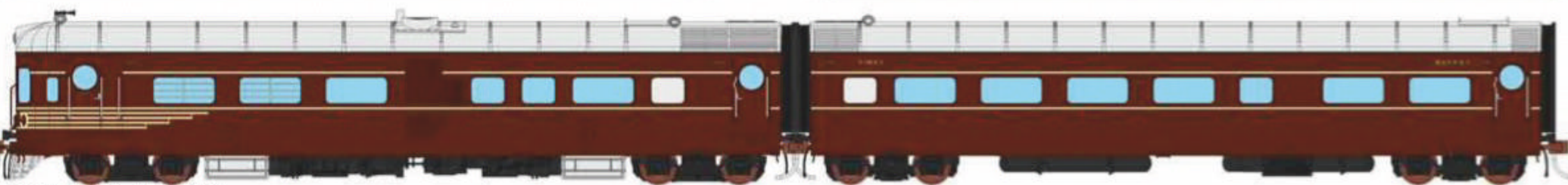
Auscision Models is proud to announce to our customers the forthcoming production of the NSWGR DEB Set Railcar Ready-to-Run in HO Scale. Our DEB Set will be available in both Standard DC & DCC Sound versions. Sound versions will include a 21 pin ESU LokSound V5 decoder with speakers in both the powered HPF & dummy PF cars so that sound can be heard from both ends of the train as per the prototype. We are building the DCC Sound versions to order so we advise placing your orders early if you wish to obtain a sound version. Once we have placed our final order with the factory and pre-orders have met our ordered quantity, no further sound equipped models will be available for that particular product/locomotive number in this production run.

PRE-ORDER & SAVE \$\$\$

Save \$100.00 per 4 car set when you pre-order directly with Auscision. Pre-order price will finish shortly before models are shipped from our factory. Order early to avoid missing out on the model of your choice.

Visit our website for further details and features

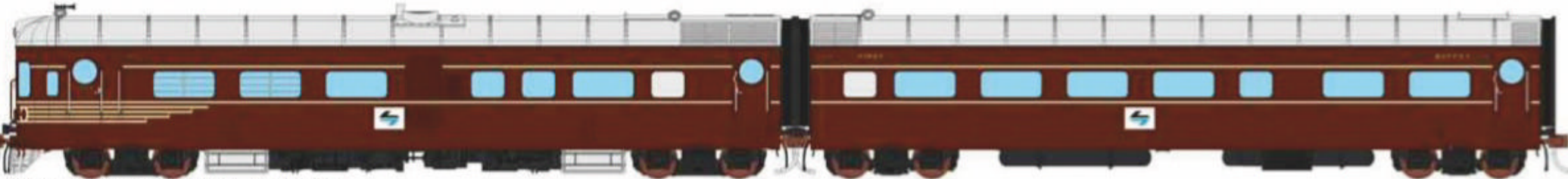
NOW ACCEPTING ORDERS
Delivery expected Late 2020*



NRC-1 Indian Red - 4 Car DEB Set



NRC-3 Indian Red with White L7 - 4 Car DEB Set



NRC-4 Indian Red with Black/Blue L7 - 4 Car DEB Set



NRC-6 Reverse - 4 Car DEB Set

*Model details & delivery dates subject to change without notice.

Artwork shown for livery reference only. Number fonts, body versions and some finer details may differ on the production models.



AUSCISION®
The Leader in Australian Model Railways

AUSCISIONMODELS.COM.AU   

information@auscisionmodels.com.au

PO Box 1791, Castle Hill, NSW 1765 Australia

PH: 0425-866-442 FAX: (02) 9620-6695

Auscision Models Pty Ltd 2017 ABN 15 690 630 128



▲ An overall view of the station and yard at Wellingong. A fast freight departs in the background while a general freight stands in the yard, waiting for authority to proceed.

▼ A 422 class departs with a short passenger train, reminiscent of the connecting service off the 'Riverina' that once ran from Junee to Albury on the days that the air-conditioned cars ran to Griffith.





A 45 class leads refrigerated vans and a rail tank car out of the station.

Wellingong

Grant Dodd has built an HO scale home layout that is transportable when that inevitable house move occurs.

Photos by the author.

Wellingong is a fictional junction station of two single main line routes, somewhere in NSW, in what I call the 'grungy' era of the late 1970s/early 1980s. The layout itself features Wellingong Junction at the western end of Wellingong station, a single line that circumnavigates the layout twice, and two off-layout semi-hidden sidings. The project was started in early 2013 and finished earlier this year, minus the odd bit of micro detailing and the ongoing addition of new rolling stock and locomotives.

Background

It has always been on my bucket list to build a model railway layout in retirement and, though retirement is still a few years away, I thought that I would make a start well before then. I had run out of projects and a move to the central Queensland coast took me away from one of my main pursuits, so there was spare finance and time available to direct towards a layout.

As a teenager and into my early 20s, I had built two layouts; one HO/OO with a British and European flavour and an N scale layout based in western England. When planning my current layout I dismissed British prototype, as OO is not an accurate scale, and European HO also, as most prototypical European railways are electrified and I wanted to avoid overhead catenary. American outline was also ruled out, as the trains are too long to model accurately within the space that I have available. Plus, the western USA is one of my favourite locations, but I didn't have the space to model the grandeur of the landscape to my satisfaction. I wanted to avoid N as I find it's too small for my liking so the choice had to be HO.

Over the years I had lost touch with the modern developments in model railways in terms of technology, the quality and variety of modern r-t-r locomotives and rolling stock, plus the proliferation of manufacturers. I had never considered Australian outline, or even knew of its existence, until a visit to one of the larger model train shows. So now the seed was sown, but as the railways of Australia are very diverse the next challenge was what system and what era to model.

After a lot of research and internet searching, I settled on the

NSW railways (PTC/SRA) in the late 1970s/early 1980s period, as this represented an era when there was a great variety in both rolling stock and locomotives and was late enough to avoid the steam era, which I have no desire to model. This era also encompassed what I call the 'grungy' days as everything was run down and covered in brake block dust which gave everything that rusty oxidation look, a feature now gone with the advent of composite brake blocks. Another feature that attracted me to the NSW railways was their style of architecture and infrastructure which I think lends itself to interesting modelling.

I wanted to keep the proposed layout as prototypical as possible, but would settle for a generic location. Despite having extensive railway operating knowledge, I knew nothing about the intricacies of the NSW system. In fact, I have never even lived in NSW so a lot of research and a few visits south were required. Thanks to the multitude of articles and images on the net, I was able to piece together a layout that resembles the look I was trying to achieve. The odd mistake will be evident in the images, the odd wagon the wrong colour or incorrect logo and maybe some of the buildings are the wrong colour for the era, but I can live with that.

One major requirement was that the track layout had to be as realistic as possible within my space limits. A major criticism I have always had with a lot of layouts is that the track work and signalling are totally incorrect and make no operational logic at all. I wanted a station that would have the track work as realistic as space would allow. It would include a goods depot and a small marshalling yard with arrival and departure roads, including head shunts, so that realistic shunting movements could take place. A modest, but practical, loco depot was also a requirement. I was happy to have a single line mainline that would complete two circuits of the layout. This was achieved by the use of two 1.3% (1 in 76) grades and a tunnel. The use of a single line has allowed more generous radius curves, more scope for scenery and a less cluttered look that I'm pleased with.

Module Construction

I'm a 'transient', so a permanently fixed layout was out of the question and the only space at my current home was in the 6m x



◀ A 45 class hauled wheat train crosses the plate girder bridge over the creek.

▶ A quiet day at Wellingong. The 73 class yard shunter does in the yard while the locomotive depot is all but deserted.

At A Glance

Scale: HO

Prototype: Generic NSW location

Period: Late 1970s/early 1980s

Layout type: Twice around continuous run home layout

Layout size: 4.8m x 3m

Rail height above floor: Varies between 900mm and 1.0m

Baseboards: Four plywood modules

Track: Peco codes 100 and 75

Control: NCE DCC

Buildings and other structures: Kit-built and scratchbuilt

Scenery: Carved styrene foam formation covered with plaster impregnated cloth, textured with real dirt and various types of ground cover

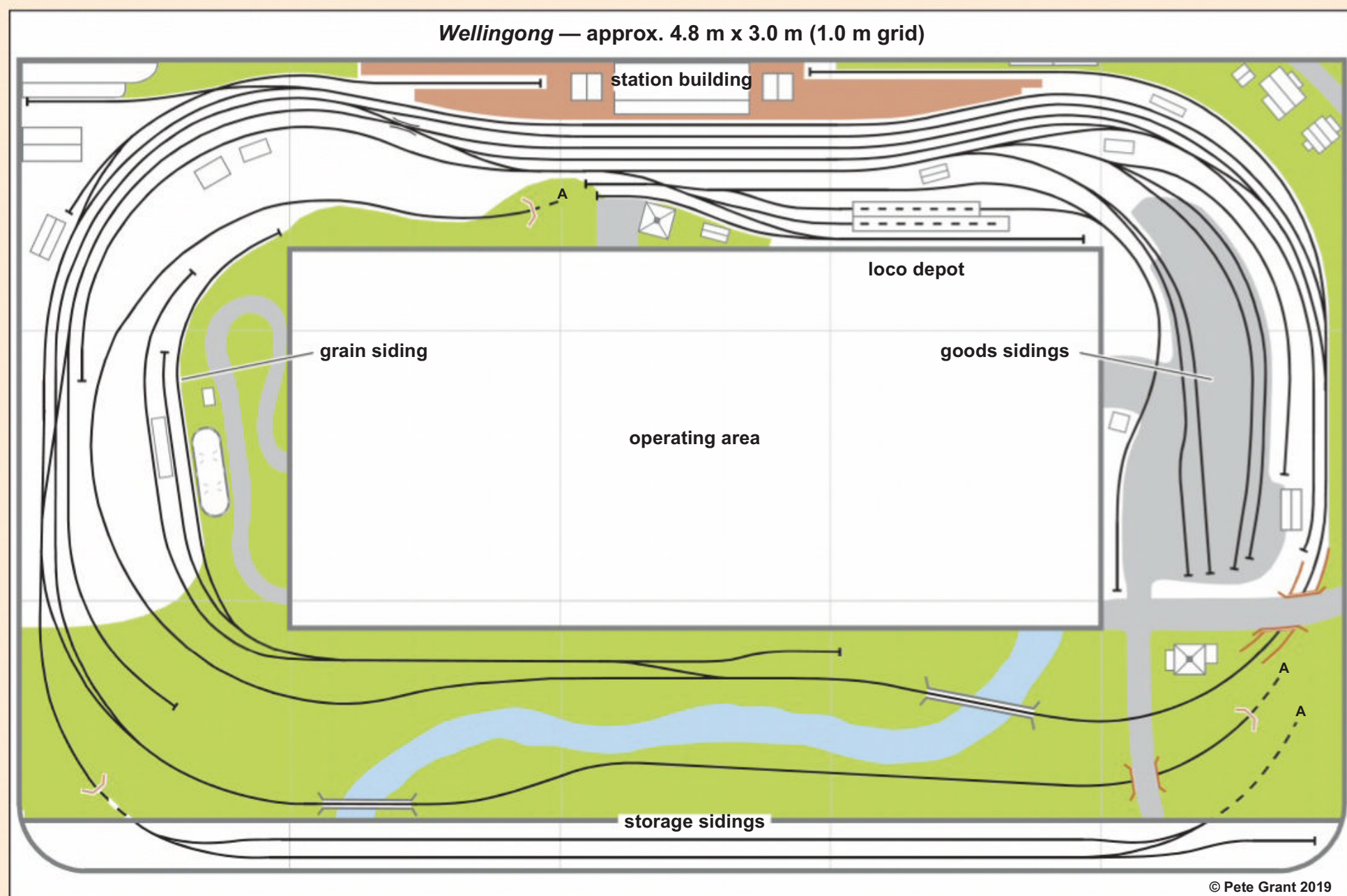
Locomotives: R-t-r

Rolling Stock: Kit-built and r-t-r

Builder: Grant Dodd

6m attached garage. With this in mind the answer was a fully portable layout. My wife agreed to park her car outside, so now I had 3m x 6m to play with, not a lot but, with a cunning design, I was confident of achieving something workable. The logical solution was to construct the layout in four transportable modules with a total outside dimension of 4.8m x 3m. One benefit from having to restrict the layout's size to these dimensions meant that the size of the project wasn't too overwhelming and I knew completion would be achievable.

The modules had to be both light weight and rigid enough not to twist. As I have some basic knowledge of aircraft construction principles, I designed and constructed the modules along the same principles as an aircraft wing. The four modules bolt together and I can disassemble and assemble the layout unaided. After five years there has been no distortion, despite living in the tropics. The majority of the module construction uses 7mm ply, with 12mm ply and some other timber used as gussets where necessary and all joints are glued and screwed. At the time of construction I had designed the track layout on paper, so this enabled me to build the different levels, grades and the basic geographic features into the ply frames.





The modules are designed to be stacked on top of each other for transportation, with one of the modules having castors fitted to the bottom of it so that the whole layout, when stacked, can be rolled around for easy handling. When assembled there is a void in the middle of the layout from which operations are managed; the only drawback is that you have to crawl under the layout to gain access. The modules sit on metal sawhorses.

Layout and Construction of the Track

Having designed the basic track layout, the next question was what brand and code of track. I settled on the trusty Peco code 100 for the main line and principal yard lines with all other yard, loco depot, goods depot and grain sidings being laid with code 75. I wanted to create that look of run-down sidings so evident in real life and this was achieved. In hindsight, I should have used code 83 for the mainline. All rails are painted rail rust and this certainly makes the code 100 appear finer.

Turnouts are a mixture of code 100 and 75, both Insulfrog and Electrofrog, with all but a few yard and siding turnouts that are within arm's reach of the operating area motorised. I have made frequent use of curved turnouts, which add appeal and variation, some of which I have slightly altered the radius to fit the situation. One diamond crossing where both tracks are curved was scratchbuilt, a process that I wouldn't recommend, as it was done in situ when I incorporated a new siding. There is some basic interlocking so as to avoid conflicting movements which has proved well worth the effort.

It's all very well to work to a plan, but as the track laying progressed it was changed somewhat, as I could see further potential to enhance the design. I'm pleased that I did this, as I feel I ended up with a more satisfying layout with more operating scope. One of the major changes was to build two storage sidings, accessed via the tunnels. These sidings allow trains to exit the layout while other trains are run, and allow me to swap the running order around without clogging up the Wellingong station yard.

All track was laid on a rubber underlay, this being glued to the baseboards with construction glue and, so far, I've had no problems or delamination from the baseboard. The track was glued to the underlay using PVA glue, then ballasted over after the scenery had been completed. The track did suffer the odd heat buckle before the track was ballasted.

I apply the ballast in multiple layers starting with a medium grade then progress to a fine grade and use various colour blends to get the look I desire, which varies from area to area as with the real thing. I used diluted PVA to hold the ballast in place after spraying the whole area to be ballasted with a mixture of water and detergent. Where the track meets at the interface with each module the underlay was terminated about 15mm from the edge of the module and replaced with a wooden strip, then the track was glued down with a two-pot glue impregnated with ballast.

The result has been extremely durable as the ballast covers the sleepers and the foot of the rail, holding it firmly, and visually it appears the same as the rest of the ballasted track.

Realistic trackwork is one of the key elements of a prototypical layout and I paid close attention to this and ensured that all mainline radius curves and grades looked realistic to the eye. I know some curves will be sharper than prototypical, but they still look realistic, the sharpest being 900mm and the steepest grade 1.3% (1 in 76). By keeping to these limits, I have had no problems with such things as buffer lock or with the locos' wheels spinning when lifting realistic length trains up the grades on the mainline. The only problem has been with one of the Peco small radius curved points in the grain siding. The 73, 48 and 70 classes are the only locomotives that will not derail on these points, but as these locos are the only ones used for shunting the grain siding, I can work around the problem.

Scenery

I had a list of features that I wanted to incorporate into the layout, including at least two bridges, one a truss and one a plain girder bridge, a tunnel, cuttings and grades, typical NSW rock features and a river. I also wanted to attempt to capture some of the various soil colours along with variations of rock formations and colours through the cuttings.

When constructing scenery you are now a three-dimensional artist and the layout board is your canvas. There seems to be a million ways to construct scenery with everybody claiming to have the best techniques and it gets confusing. But rules one, two and three must be that the track must blend into the contours of the land you have created as if the land was there first and the line of railway has been carved, tunnelled into and bridged over it, not the other way around. I will explain my ideas and techniques, but make no claim as to their superiority...

The whole process was approached by multi-layering materials, starting with the basic woodwork of the modules on different levels and then laying and thoroughly testing all trackwork. I then infilled the levels with polystyrene foam, which was then cut and rasped down to the rough profile that I desired. Next step was to apply plaster impregnated cloth wipes covering all the polystyrene and exposed woodwork and, when set, I painted over this with a thin plaster mix with earth coloured paint added. This gave me the form of the hills, cuttings and other features which has proven to be strong and durable.

Separate rock formations were then added. These rocks are individually made of polystyrene foam coated with water putty and glued onto the land form with the same water putty. All the rocks were then painted with pigments. Other rock formations in the cuttings and clay banks were carved out of applied water putty and, to give that eroded look as seen in many cuttings, the putty was carved when semi-dry.



◀ Looking across the yard from the locomotive depot towards Wellingong's impressive station building, based on the building still standing at Tenterfield.

Nothing beats the real thing, so all areas that were not rock or a clay bank were covered with real Aussie dirt of various shades, glued down with PVA. Turf is then scattered over the dirt in various thicknesses and in places the dirt is left exposed. Static grass has been applied where it looks like there should be long grass. After applying the grass I teased it up several times before the glue dries with a vacuum cleaner set on low.

Trackside infrastructure, such as retaining walls, bridge abutments and piers, platforms, fences and building bases were all built and installed prior to the turf. The last step was to ballast the track. The rails were all painted by hand immediately after laying the track. I work on the theory that the ballast sits on top of the soil, so apply the ballast last. Static grass can then be applied onto the ballast to give that neglected look in sidings.

Now comes the fun finishing work; the trees, bushes, scrubby growth and all those other bits of micro detailing. I've used a multitude of products trying to achieve that distinctly Australian country look and I'm happy with the overall effect that I've achieved.

Buildings

In my opinion NSW had some of the finest railway architecture found anywhere in the world, especially their examples of Victorian, Georgian and Gothic Victorian styles and their variants, which make excellent subjects to model and, thankfully, there are many local kit manufacturers catering for this. The buildings are a mixture of kits, dressed-up kits, seriously kitbashed kits and scratchbuilt. The main feature of Wellingong station is the station building, which is a modified and dressed-up kit of Tenterfield station from Model Train Buildings/Walker Models.

I have incorporated as many examples of the different architectural styles as practicable, including a scratchbuilt cool store in the Art Deco style. One kit manufacturer kindly obliged by producing a new kit after I approached him with a request for some lamp huts. I have tried to ensure that all buildings have a purpose or a historical one such as the old crossing keeper's house now being a private residence.

Locomotives and Rolling Stock

When the layout was in the concept stage my idea as far as locos went was to buy a small fleet and as they wore out just replace them. I soon realised the folly of this as the availability of locos is somewhat limited if not purchased upon or just after release. I bought a couple of different brands of locos to begin with, but soon came to the conclusion that I would only buy what I considered to be the superior brand to ensure trouble-free, non-frustrating operation.

All locos are weathered to different degrees and I have noticed that weathering generally really highlights the details and brings the locos alive. I have no intention of fitting sound, as one of my other interests is music which I listen to loudly very often when operating the layout. The loco fleet consists of two each of the following classes: 422, 421, 48 and 45, plus a single 44, 73 and 70 class machines. I have a further 422 class currently on

order. The 44 class had been temporarily withdrawn, but was recently rebuilt with some aftermarket parts and has now returned to service. These locos perform magnificently and pull authentic length trains, even up the grades.

The wagon fleet is a real mixture of brands and wagon types that would have been found in the late 1970s/early 1980s. There are probably some inaccuracies in colour and logo design, but I can live with that. Most of the wagons are weathered and I'm working through weathering the remainder as I feel inclined. As the wagons are weathered, I remove the Kadee coupler uncoupling arm, as these are extremely inauthentic. All these wagons run very well with no problems from derailling or uncoupling. I have made up various loads for the wagons and tarpaulins for the open wagons, so mixing and matching loads and tarpaulins adds more variety to the trains.

The layout has the capacity to handle 100 wagons before it would look too congested and at present approximately 70 are on the layout. So far, passenger traffic has been catered for by two FS cars, but at some time in the not too distant future I will buy a set of RUB cars to form a 'Daylight' express.

Electronics

It never failed to amaze me when I was researching layout electronics how complex some people can make it to the extent of being off-putting. As a reaction I decided to follow the K.I.S.S. principle as I'm not an electrical engineer, nor do I intend to become one!

I've installed an NCE DCC system for train operation and have used old-style switches and push buttons to control accessories and points motors. I find it easy to hold the cab unit in one hand and operate points by means of panel-mounted push buttons with the other hand. I have two cab handpieces; one exclusively for mainline operation and one for yard operation. I find that this reduces the occurrence of conflicting movements and the mainline handpiece acts like a staff for Safeworking.

The DCC wiring is conventional with a bus wire running around the layout with feeders to the rails as required and a lot of the rails soldered together to ensure conductivity. There are simple male/female plugs at the module interfaces. An emergency stop push button is fitted to the DCC bus wire that doubles as a two-way switch and is wired to a socket that a lead plugs into to power a loco wheel cleaning device; the Programming Track can be plugged into it as well.

Points are operated by simple push buttons; black for normal and red for reverse with power supplied by a dedicated transformer. As no more than three sets of points are interlocked, there has been no need for capacitors in these circuits. There is only one hidden set of points where I have used an LED on the panel to show normal or reverse, the rest I just visually check.

Other accessories such as yard and building lights are controlled by simple two-way switches. I found the wiring to be the most tedious of jobs especially working on the underside of the layout in the tropical heat. So far the wiring seems to be robust and I enjoy 100% reliability.



▲ A general goods train, which includes a few bulk grain hoppers, prepares for departure.

▼ The general goods train has departed, passing the still busy goods yard and the now superseded gatekeeper's cottage. The gatekeeper's cottage appears to be well-maintained by both the department and the lessee.





Operation

The fun bit and what all the works are for! Though, having said that, there have been hundreds of hours of enjoyment in building the layout. I'm the only operator, as I'm isolated from the modelling community owing to my location. I attempt to run trains as per reality within the limits of the layout and a bit of imagination. I only have the one station (Wellingong), but run trains from there to an imaginary station at the end of the line that looks an awful lot like Wellingong!

I use the old principle of a train running graph to show time, distance and stations with the various up and down trains shown as per schedule. I will pick one or two trains to run as per the graph. I can use the hidden sidings to cross and dwell any train as well as cross trains in Wellingong station. Trains range from passenger, express goods, goods and grain trains. I operate the layout as time and mood dictates and when I've had enough, I just turn the power off and walk away. When I return to the layout, which could be a week or more later, I just turn the power on and carry on where I left off! I clean the track before operations begin by running a track-cleaning car around as I've found that this saves a lot of time cleaning loco wheels.

Trains are made and broken up by authentic shunting operations, which the design of Wellingong allows. The longest train that can be made up within the yard equals 96 standard NSW wagon units (=96). The freight depot has various roads, two of which allow loading and unloading of wagons from trucks. Another road has a goods shed road and loading bank. Another road is for the servicing and holding of brake vans between duties. There are two general storage roads, one in the goods yard and the other runs off the running road in the marshalling yard.

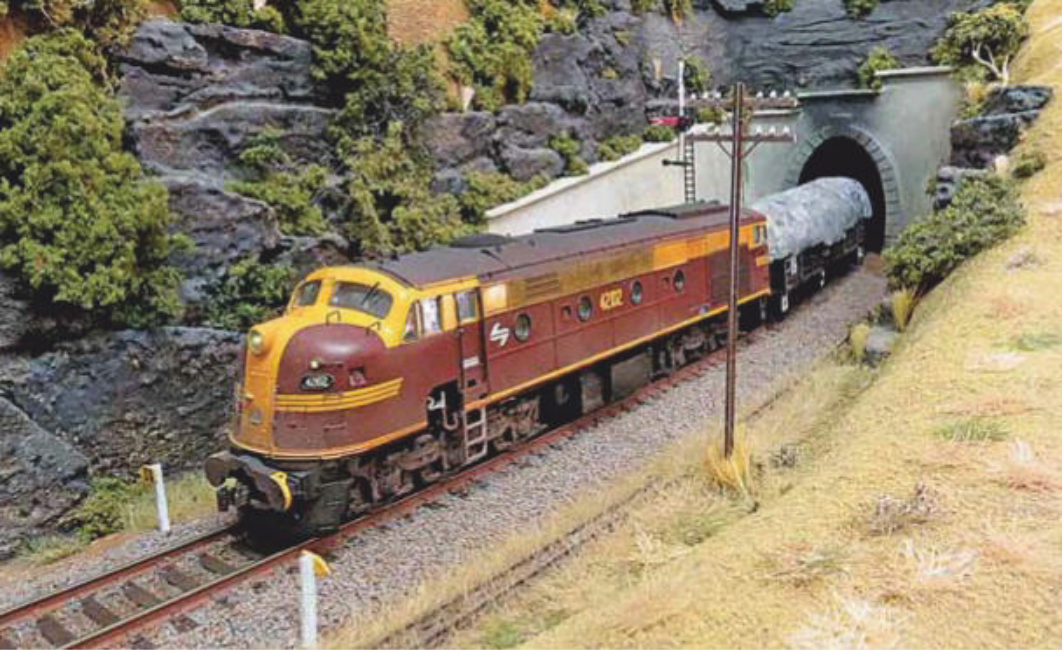
There is a grain siding accessed via lever locked points on the mainline within station limits and realistic loading of the wagons takes place by propelling or pulling the grain wagons under the loading chute at walking pace, which DCC allows. There are also two additional roads at this facility which share a loading bank.

The marshalling yard area is entered off the loop at either end of Wellingong, or via lever locked points about a quarter of the way down the loop from the junction end of the station. Next to the loop there is an arrival/departure road, then what I call 'three' road, then a through road that gives access to the loco depot and goods yard. At each end of the arrival/departure road there is a headshunt.



▲ Clyde-built 42216 stands at Wellingong's platform with a short passenger train.

◄ The station master has a good vantage point, to keep his eye on things, from his house overlooking the yard as a 45 class hauled goods prepares to depart.



▲ The late-1970s PTC-simplified Indian red colour scheme sits lightly on 42102 as it works hard in notch 8 on the approach to Wellingong, exiting the tunnel and attacking the grade towards the grain siding with a general goods train.

▼ A fine bracket signal and a standard design late 19th century timber-clad signal box stand guard over the junction pointwork on the outskirts of Wellingong.

A 73 class diesel hydraulic loco is used for shunting, as per prototype practice of the period, and wagons are made up into the trains on either the arrival/departure road or 'three' road, after which the locos are attached and then the train can depart. In-bound trains arrive in either of these two roads and the consists are broken up with the shunter attached to the western end of the train, as this allows the wagons to be propelled into the various goods depot roads and the longer heads-hunt is situated at this end of the yard.

The loco depot is a little compact, but was never intended to depict a major depot anyway. I've managed to squeeze in a provisioning road and small engine shed, a couple of holding roads, one of which forms a run-around road with the provisioning road thus allowing a bit more flexibility in running around and lashing up. There is also a road beside the engine shed that has room to place a loco fuel tank wagon when discharging fuel, as there is a fuel storage tank at the end of the engine shed. One road extends towards the goods yard area and is used for storing derelict wagons (rotten row). Despite the limited roads the depot is functional, the only feature missing is a turntable, but as it's a diesel only operation this is not an issue.

The main Wellingong station platform is long enough for eight FS carriages and there is a west end dock with platform capacity for two FS carriages and a van, as well as an east end dock which is a little longer (three carriages and a van).

Lineside Infrastructure

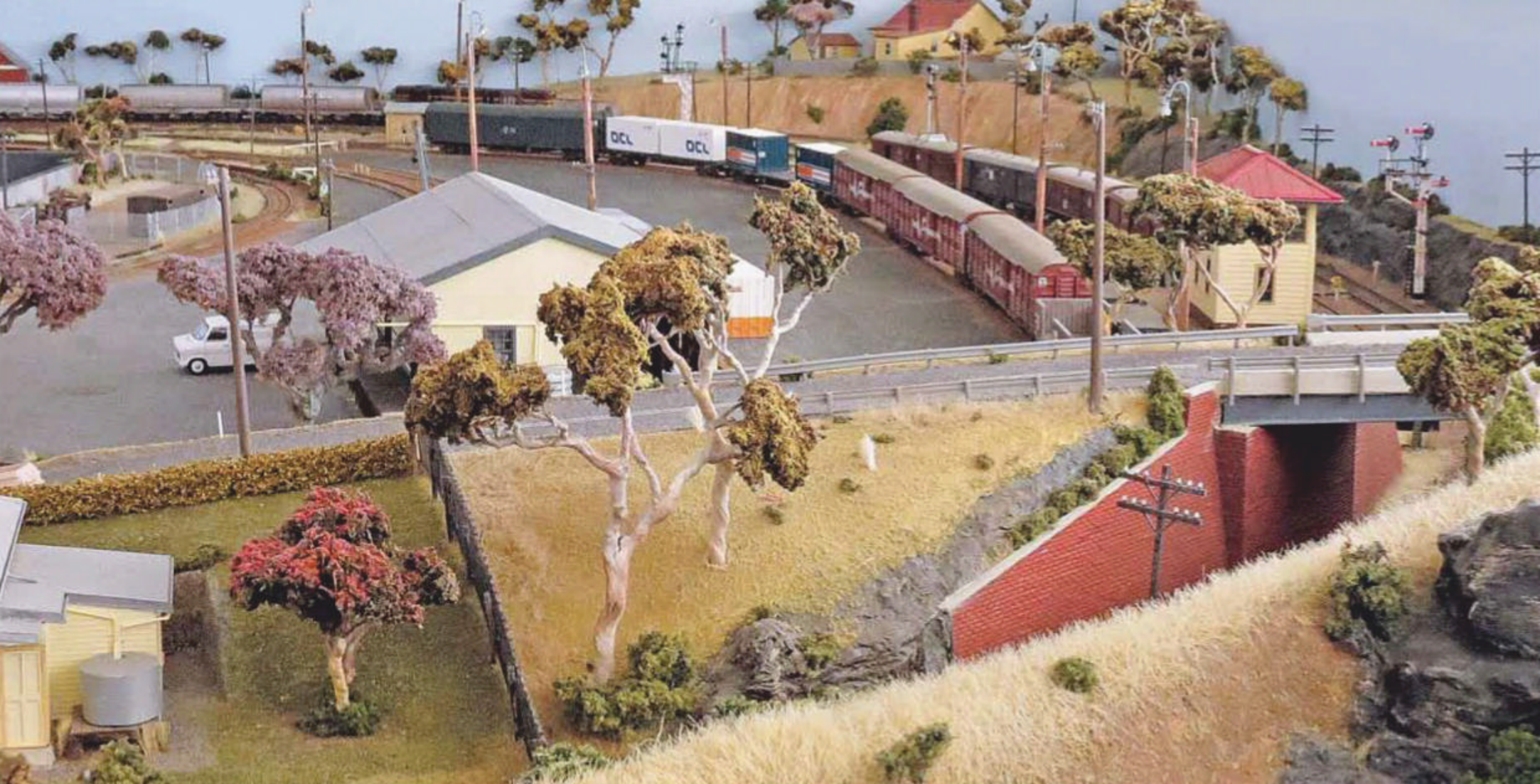
Lineside infrastructure really brings a layout alive. It gives character and the pleasure can be in the detail. I have attempted to include all that you would see in real life and what is missing I will



▲ The 45 class hauled general goods train seen in earlier photos has departed the yard and is now crossing the truss bridge over the creek.

▼ A short time later, 42216 rolls across the same bridge (as seen in the previous photo) with a passenger train.





slowly include as time permits. There are plenty of lineside accessories on the market that have been used together with scratchbuilt items.

The signalling was a challenge and I have installed NSW Standard Lower Quadrant semaphore signals, as not only are they typical for the period, but they are visually more interesting. I'm aware that there are some kits and Shapeways products on the market but, as signals are generally bespoke for the location and situation, I decided to build my own.

I spent hours researching images and interlocking diagrams on the net before settling on the signalling arrangement. I used Ratio GWR round post signal kits for the parts such as balance weights and ladders, but most of the construction was from scratch. They are not remotely controlled or interlocked, but the semaphore arms and balance weights all work.

Rusty lengths of discarded rails, sleepers and other trackside debris add to that grungy, derelict look.

Into the Future

At present the layout is at the limit of its current development dimension-wise, as I have no more free space, but we will move in the future and our intended location has more space available

(wife permitting). There is plenty of scope for future development when we move location, with either building alternative modules or building a branch line with a terminal station on another module. Another option is a helix up to an upper level built to the same outside dimensions.

More rolling stock will be added along with motor vehicles, which are a bit sparse at present. I will change to a wireless DCC system and more interior lighting will be fitted, plus the never-ending process of micro-detailing. As I have progressed through building the layout, my modelling skills have improved to the extent that I have gone back and rebuilt some of the scenery and various structures to a higher degree of quality and accuracy and I envisage this to be an on-going process. One future modification would be fully-working interlocked signals, but that's definitely a retirement project.

Finally, I would like to thank all those people out there in Cyberland who have forgotten more than I know about the hobby, but who have unwittingly contributed to my layout through their blogs, articles, diagrams, images and words of wisdom and inspiration. I know that for no financial reward they have tirelessly helped many people such as myself, so, thank you!



▲ A view over Wellingong's goods yard. A few short years later the SRA will abandon rail-borne small freight and the yard will fall into disuse.

◀ An interstate steel train under the care of a 422 class locomotive rolls past the Co-op siding adorned with a fine Art Deco cool store.

The World Beneath Our (Wet) Feet

*Tom Carlos adds water-related
scenery and ground cover to his
layout.*

Photos by the author.



Many of the buildings on *Billabong Marina* have already been discussed in previous articles in the series and there are still buildings, such as the station, cattle dock and the Tower Ales Tavern yet to be mentioned. However, all of these buildings needed something to sit around, so it is time to discuss the basics of adding scenery, especially the 'wet' bits!

"They" reckon that when the Earth was formed it was covered in water. Then the land started to appear. The natural scenery on *Billabong Marina* was planned from the water up. It didn't quite happen in this order, as you will notice from the images, but water is a good place to start!

One of the biggest questions, which can raise a healthy discussion among modellers and artists, is "what colour is water?" Sydney Harbour is blue, the Yarra River is brown and the water in the National Park near me is greenish. I went with the latter. This was mainly because I was planning to use the Scalescenes Dockside kit for the dock walls. It costs a few dollars to download the file and you can use it forever. All you need to do is print off another page. The bottoms of these dock walls are green from algae placed there by the rising and falling tides. As I had used this before, I had some green paint to use.

The plywood surface was sanded and gaps filled before painting the water colour. That is pretty much where it stayed for a long time. When everything else was done I added 'water'. I had to clean the surface as it had become dusty and I gave it another light coat of paint to freshen it up.

In the past I have used layers of PVA glue and stippled the glue as it was drying. This idea came from reading about the construction of Epping Model Railway Club's *Brisbane Water* layout in AMRM Issue 241 (August 2003). This time, however, I did something different. I had

seen Mod Podge used in an online tutorial. The results looked pretty good. Gloss Mod Podge is sold in pretty much every craft store. I used a size 20 goat hair mop brush. I dipped it into the Mod Podge and then dabbed it onto the water surface. The mop brush has softer bristles than your everyday hog's bristle brush – the sort that you get in schools. The idea behind this is that you get fewer bubbles as you dab the Mod Podge down. The dabbing also gives you little ripples in the water [Photo 1].

Once done, repeat these steps until you are satisfied with the result. The tutorial suggested ten applications. I was finding after the fifth and sixth applications

that I was starting to get more air bubbles when I was dabbing. To finish things off, I added some swans.

I had some gaps to fill between the water and the track. I used some polystyrene foam cut to suitable shapes and glued them into place with PVA. Next, I coated them with premixed Polyfilla as I had some around and it hadn't hardened. When it had dried I sprayed washes of craft paint in earthy colours. This had worked really well for me before with amazing results. Not this time. However, when I painted the water, the scene looked better. I wasn't totally happy, but I thought that the next item would help out.

I wanted a causeway as I reckon they



Applying the gloss Mod Podge to represent water. Despite this being the first image mentioned in the text, it was actually the last major work done to the layout!



The embankments have been painted and the causeway stones have been built up with the Mod Podge applied. This glue will dry clear and leave almost no trace. The white dust was from the bag of stones.

look good. A whole heap of rocks piled on top of each other would also cover any nasty bits of the embankment from the water. I found some rocks in a bargain bin at a local hobby shop and thought that they would be perfect for the job.

By now I had found out about matte Mod Podge from a bloke called Luke Towan, who produced very impressive 'how-to' videos on YouTube (<https://tiny-url.com/jzqjhoz>). This stuff is great. Unlike PVA, it dries without a glossy shine. It's a great substitute for the usual 50:50 mix of PVA and water when you are ballasting as it doesn't make the ballast look wet. The rocks were glued with matte Mod Podge, diluted one part glue to three parts water and a drop of dish-washing liquid. I used a 5ml syringe (the type that you use to give medicines to kids with, not hypodermic needles) to apply the glue and I mixed it up in batches of 20ml at a time [Photo 2]. It doesn't sound like much, but this would last me a couple of days on my tiny layout. Some of

the rocks had to be individually placed over the next couple of days.

As the application of water came after I had finished everything else, I needed to sort out the dockside walls first. I thought about the Scalescenes Dockside kit. It looks fantastic and is easy to use. However, years ago when a nearby model shop was closing, I bought a stack of Wills stone wall sheets for a purpose just like this. Out came the packs of sheets. They were cut to size and glued on. Once in place the walls were painted with a hobby paint. I used raw sienna as a base and dry brushed burnt umber and some other colour that I need to look up!

For the pilings which stop the boats from bashing against the dock walls, I sprayed some appropriately sized balsa dowel with weathered black paint, cut them to the right size and painted the tops of them white. I worked out where they should go, roughly four per sheet of walling, and used PVA to glue them in place.

Mention dockside railways and one

image that comes to mind is of cobblestones or concrete with inlaid track running in front of big warehouses and under cranes. The big warehouses aren't suitable for this small layout, but the inlaid track is possible and I wanted cobblestones. Then I found out what cobblestones are. They are round stones; I wanted square stones. These are called setts and they look just as good.

I had a couple of options. On a previous layout I used the Scalescenes Dockside kit. I glued the sheet to some cardboard and the job was done. I used Fuji Xerox A4 box sides from work as they seemed to provide the right height. Thinner cardboard was used in between the tracks. The whole lot was glued down to the baseboard using PVA glue. It looked good. If I was sticking with Scalescenes Dockside walls, I would have done this again, but I was using the Wills stone walls.

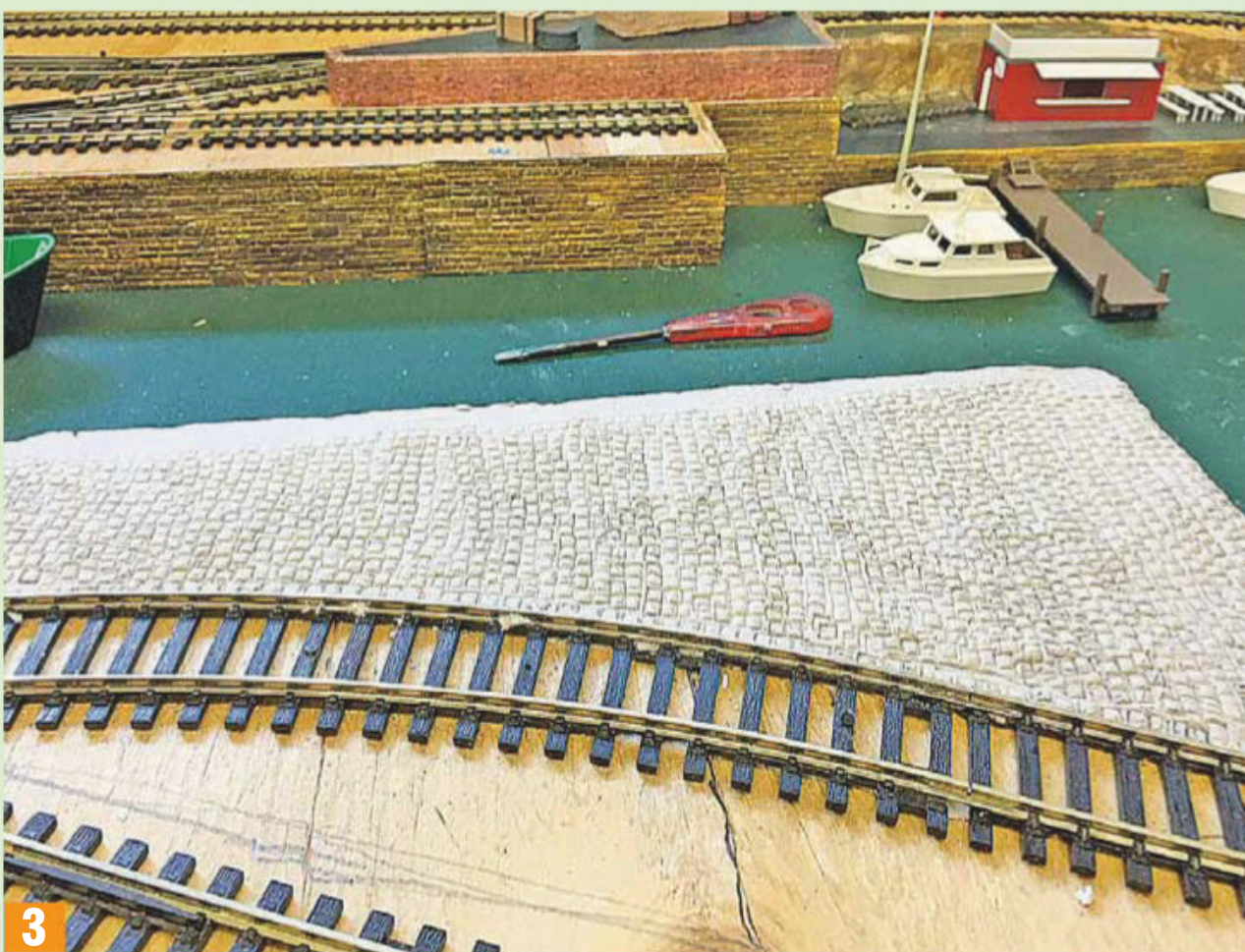
Other options were to buy some Wills cobblestones or just use styrene sprayed with 'concrete'-coloured paint. This layout was meant to be cheap and built quickly (it turned out to take longer). I ruled out the Wills cobblestones and the styrene painted grey wasn't what I wanted.

I could have used Polyfilla. This was suggested to me years ago and I gave it a go at the time. You make a mould around where you wish the Polyfilla to go and then you mix up a batch to a consistency that you can pour onto your layout and then you let it dry. Before it totally dries, you grab your oldest wagon with the deepest pizza cutter flanges and run it along the track. This will create a good gap between the Polyfilla and the rails for your trains. When I used this technique years ago, I found that I then had to gouge a lot out so that my wagons could roll over the rails.

The last technique that I knew of used Das modelling clay. I had seen this used in a British magazine. The bloke using it rolled a small bit of it into a snake and pressed it into the tracks. Then he used a ball point pen to make his round cobblestones. I've seen Das used to make buildings before. Make a wall out of card and then cover it with PVA and put the Das clay on it, rolling it out to about 5mm thick. Then scribe the stone work onto the wall and let it dry. I had bought some Das years ago to make a stone bridge for a previous layout, but we moved and the layout was not completed. Das clay seems to last at least ten years in the packet.

I had a section of square brass tube that was perfect for my stone setts. To test the idea, I nailed a scrap bit of track to a scrap bit of wood and opened the Das. The experiment went well, except that the dried clay came off. PVA soon fixed it into place.

I didn't do the cobble setts all in one go. I was working in fifteen minute chunks. I found the Das easy to work with and if it became a bit dry, I dipped my fingers in some water and smoothed it out. I used the brass tube to create the stones. I did make sure that the Das



Creating the 'setts' for the dockside surface. The Das modelling clay has been applied and the setts marked out with the use of a section of square brass tube.

didn't come too close to the top of the track, but was just above the sleepers. The last thing that I wanted to do was to remove any paint or clay with a track rubber. I also ran a deep-flanged wagon along the track to remove the clay from the edges of the track. There was very little gouging needed afterwards. It was while I was putting the clay down that I also inserted the tracks for the travelling crane. These tracks were the remains of some Hornby steel set track. I did need to take care around the points that there was enough room for the tie bar to move across and switch the tracks [Photo 3].

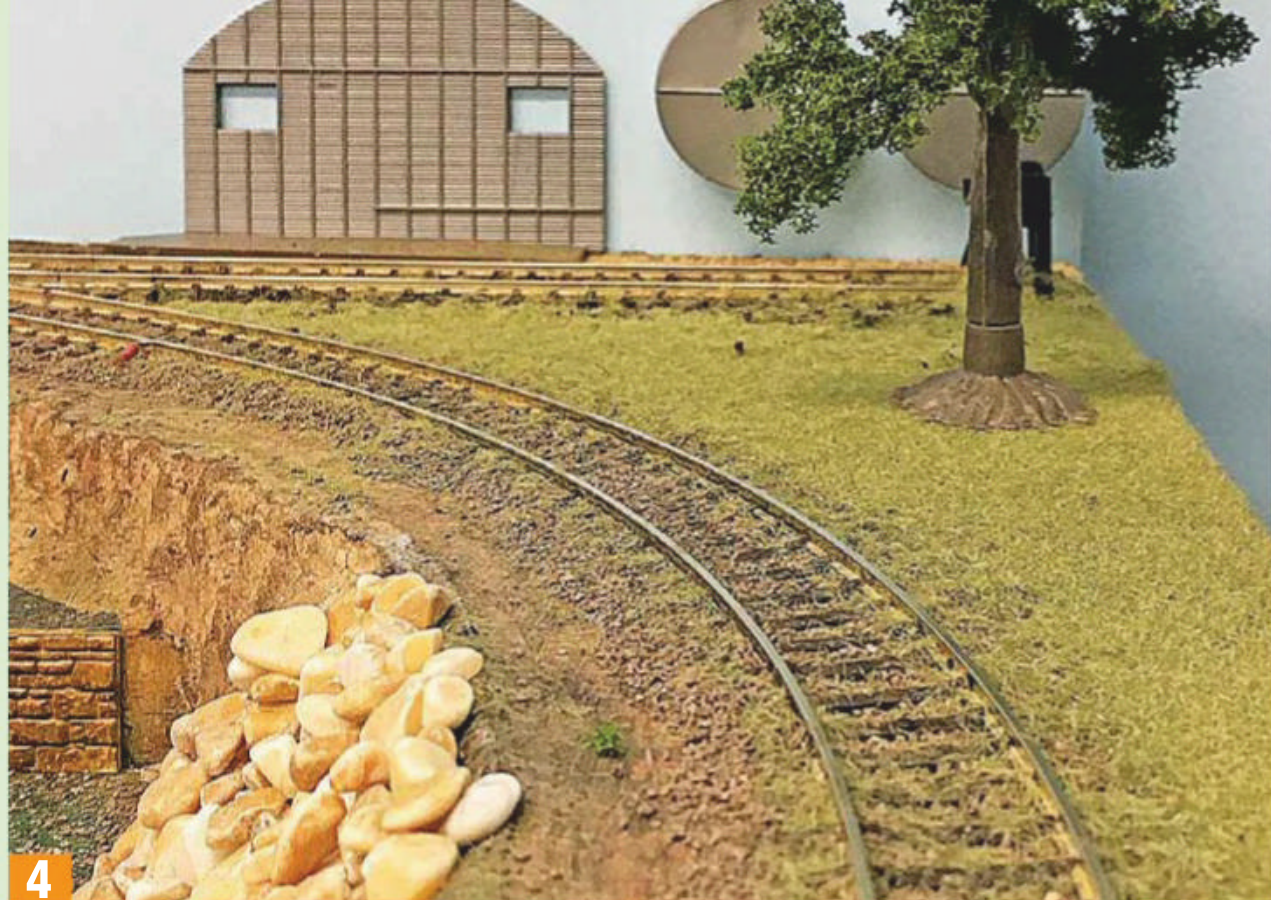
Once the clay was dry, I painted it with burnt umber and dry brushed it with raw sienna. I left the edge of the dock smooth without setts to represent some concrete edging. This was painted with some white paint, with a dash of black added.

In the past I left ballasting until last, but I have found that the glue ran into the edge of the grass and it made the grass near the edge darker. I didn't want to repeat that mistake so I glued down the ballast (from Matt's Ballast) first. I chose the Bombo ballast as my layout is set on a fictitious line on the Sapphire Coast of New South Wales, just a bit past Bombo!

There are many ways to ballast your track. I didn't have a lot to do and I did it in small batches. I spooned a little bit on to the tracks in the middle and each side and I spread it with a stiff brush, tamping it down where needed. When I was happy, I dripped a 1:3 matte Mod Podge to water mix, with the dishwashing liquid added, over the ballast from my syringe. When it dried it looked the same colour and dry, unlike the PVA mix which I have found makes the ballast look darker and glossy.

In between all the paving, track and buildings is grass. I have seen a few online tutorials on static grass. It looks great. I have always used dyed sawdust before, which is effective, but the static grass gives your layout just that little bit more of a realistic lift.

I used two colours of static grass to cover my open ground. It is a simple application. First you paint glue on the area that you are about to cover. Next, add a pinch or two of static grass into the



The author was suitably impressed with the result of his first attempt to use static grass.

applicator. I used a brass tube (now redundant from the cobblestones) gripped by the alligator clip as a rod to touch the layout. I switched the applicator on and gave it a gentle shake over the layout. The result was brilliant [Photo 4]. As I had only just started experimenting with static grass, all of the grass fibres were the same length. I have since purchased a couple of different lengths for the next project.

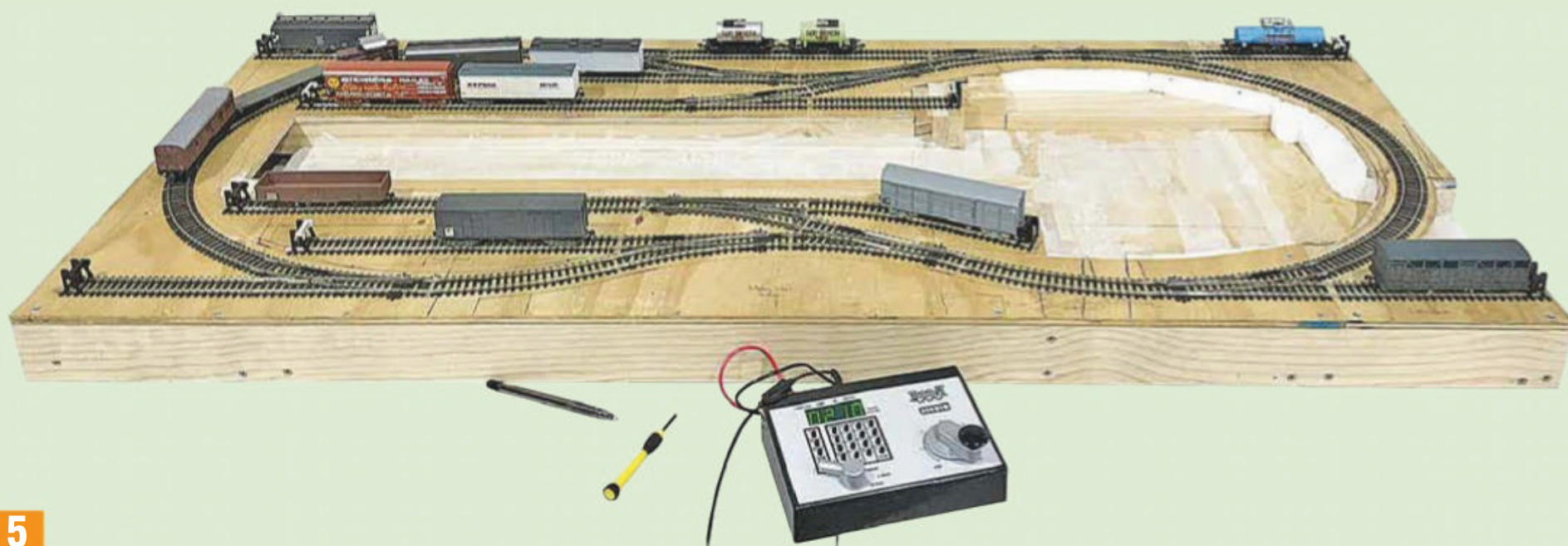
The grass does end up in places where you may not want it. When the glue is dry, all you need to do is stick an old stocking over the end of a vacuum cleaner nozzle and vacuum the unwanted grass into the stocking. Then you can store it in another jar or bag and use it again. I didn't return it to the original bottle as I had mixed different shades of green.

A word of warning when using one of these applicators. I heard a story of one bloke who had bought a cheap one on eBay. It had two switches that needed to be switched to off for it to be 'off'. He had switched only one off in his haste to reload the applicator. He told me that he

wasn't sure what had happened, but one second he was standing up and the next second he was on all fours on the floor of his railway room, feeling as though he'd been hit in the chest by a baseball bat. He reckoned that it took a couple of days to feel right afterwards. They may be powered by a couple of 1.5v batteries, but the extra electronics in them means that they can deliver a good shock.

Over the grass, I glued some bits of Woodland Scenics foam and bits of lichen to break up the scene and give the impression of clumpy foliage. I also added three palm trees. These are plastic trees that I have picked up over the years. I sprayed the trunks with some grey primer to get rid of the plastic shine. I may replace them later as there are better trees on the market. Before planting the trees, I put some leaf litter underneath them made by whizzing some dead leaves and twigs in a blender.

With all ground work done the layout was looking good and there was no more plywood [Photo 5] to be seen! Next time, we'll look at the rest of the buildings on the layout.



In the beginning there was bare plywood... now there is a complete layout (header photo).



WESTERN AUSTRALIAN LOCOMOTIVES

The Midland Railway Company of Western Australia A Class Steam Locomotives

*Phil Knife describes another WA steam locomotive class and his Sn3½ model of one of them.
Photos by the author unless otherwise credited.*

The seventy years from 1894 to 1964 saw the existence of the longest privately-owned common carrier railway in Australia, the Midland Railway Company of Western Australia (MRWA), which had its head office (London) and source of finance in the United Kingdom. Built to tap the rich farmlands of the Midlands district of WA, this 3'6" gauge line ran 227 miles (446km) north from Midland, an outer, eastern suburb of Perth, to Walkaway, some 18 miles (30km) south east of Geraldton.

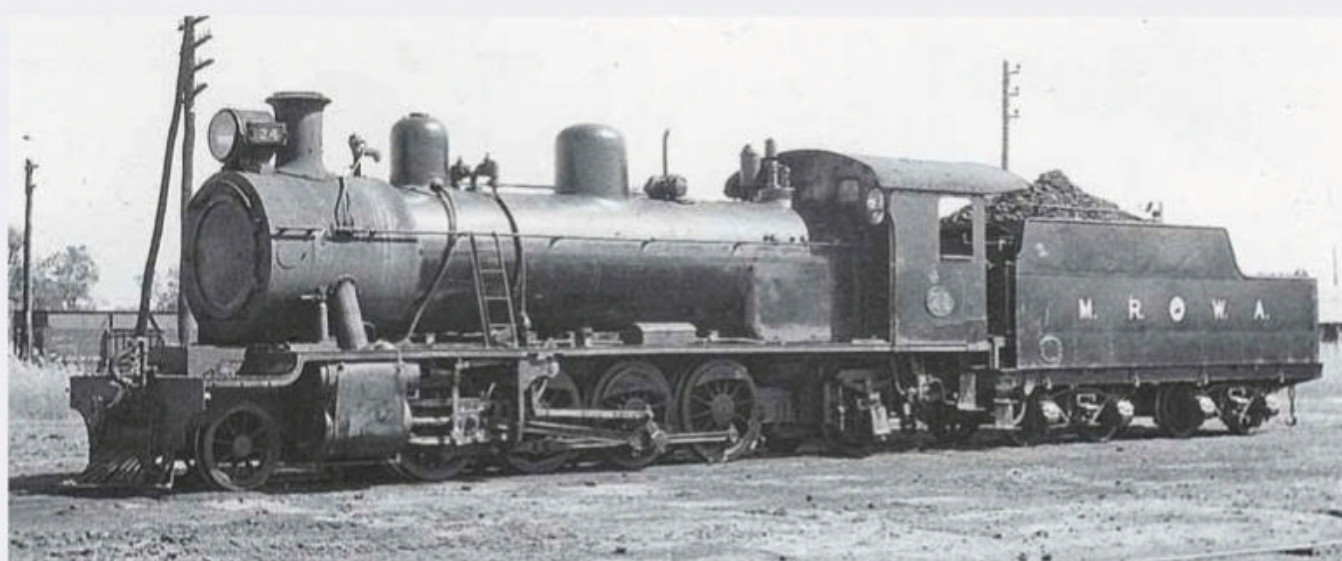
Its principal traffic was wheat and other agricultural products, destined to be shipped out from the ports of Fremantle and Geraldton. Curiously, and due, no doubt, to now unexplainable government policy, MRWA locomotives were not permitted to run on Western Australia Government Railways (WAGR) tracks. As a result, all goods wagons for destinations beyond Midland or Walkaway were attached to WAGR trains at those locations for transit to their ultimate destinations. Passenger trains ran through from Perth to Geraldton, but with locomotive changes between systems at Midland and Walkaway.

In spite of this extraordinary inefficiency, the MRWA route between Perth and Geraldton was considerably shorter than the competing WAGR route through Wongan Hills and Mullewa, although the government system did their best to avoid transshipment of goods. Through all this the MRWA occasionally turned a profit for its shareholders, but was always financially strapped. Nevertheless, it was an efficiently run system, and locomotives and rolling stock were carefully selected for their duties and were well maintained.

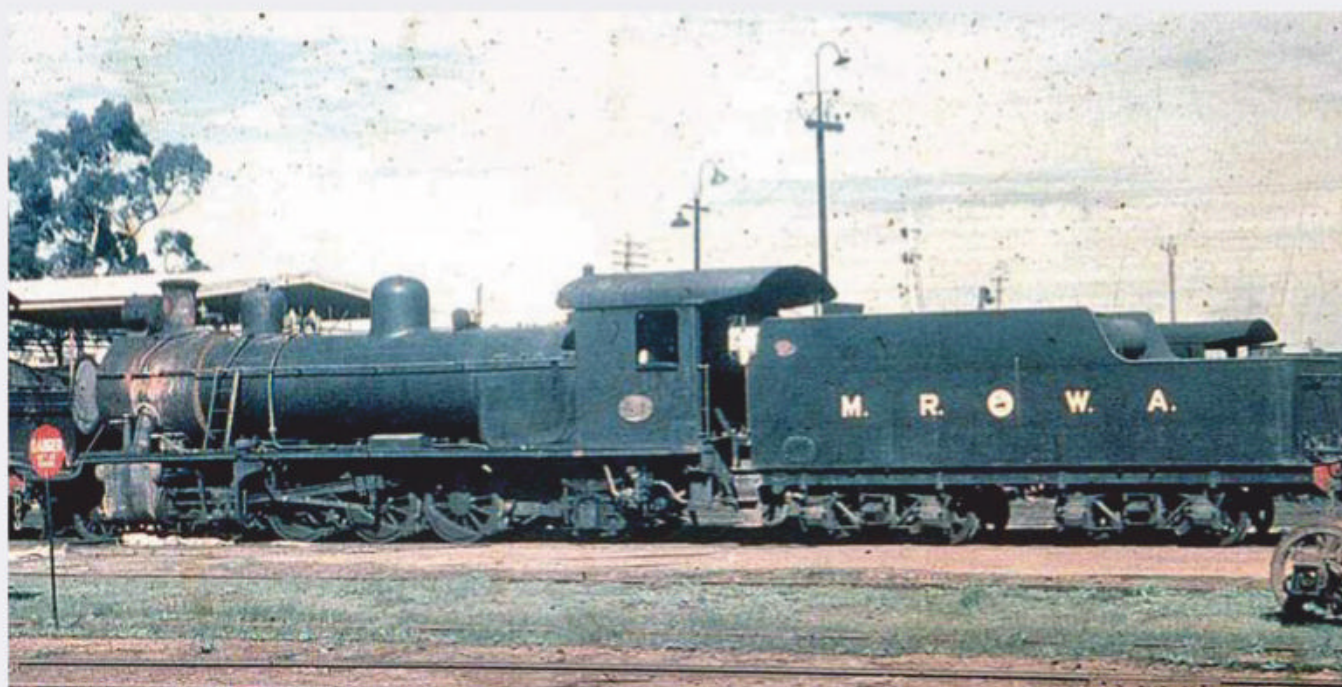
The Second World War took a heavy toll on the MRWA – and the WAGR too – to the extent that the system required

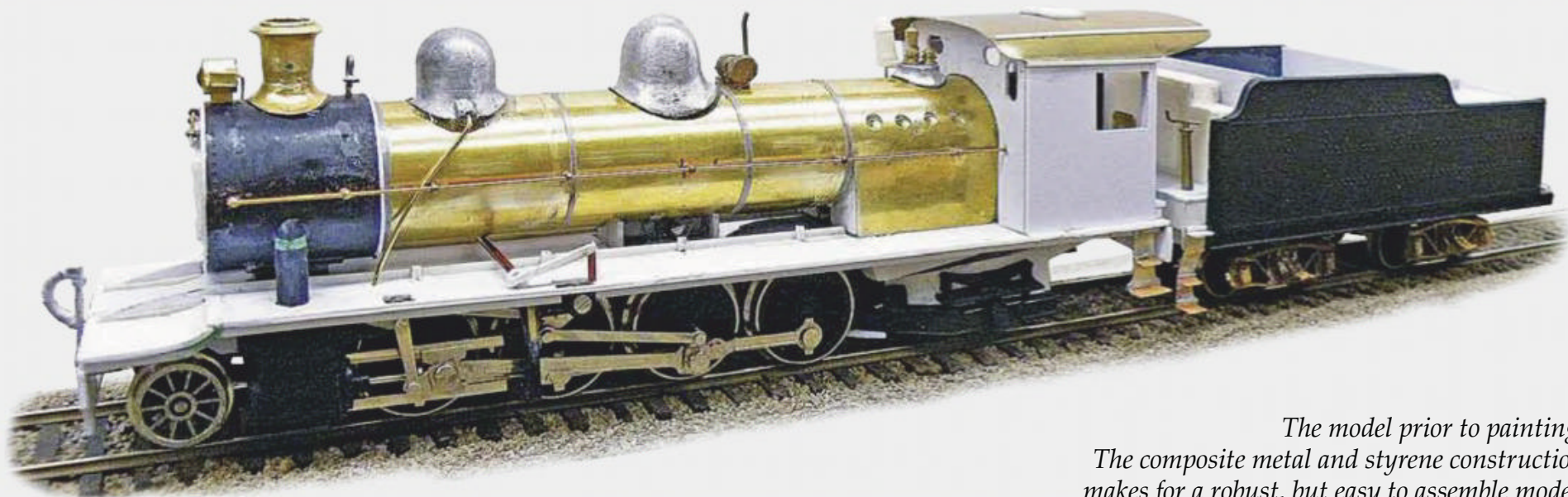
considerable expenditure on upgrading and rebuilding. The MRWA was early to dieselise its locomotive fleet, beginning in 1958. Once the diesels arrived the steam locomotive fleet was quickly withdrawn and scrapped and, regrettably, only one locomotive survived into preservation, an 1891-built B class 4-4-0. The company

soon followed, being purchased outright and incorporated into the WAGR in 1964. The main line from Midland to Walkaway is still in use today, if only for wheat traffic, but all the MRWA terminal yards and facilities were demolished. The present-day suburban train and bus station at Midland, and the adjacent Centrepont



Two photographs of A24, the inspiration for the author's model. Both images were taken in the mid-1950s at the MRWA loco facility at Midland and are from the RailHeritage WA collection, photographer(s) unknown.





*The model prior to painting.
The composite metal and styrene construction
makes for a robust, but easy to assemble model.*

shopping mall, are built on what was part of the old MRWA facility.

Having obtained a copy of *The Midland Railway Company of Western Australia Locomotives* by Adrian Gunzburg (published by the Light Railway Research Society of Australia in 1989), I was struck by how different this company's steam locomotives were from those of the WAGR and how interesting they would be to model. Mind you, unless modelling Midland Junction or Walkaway, it would be difficult to explain the presence of locos from both organisations on a layout together, but that's no reason not to want to build one!

I chose a Midland A class 2-8-2, a most attractive locomotive that was the backbone of MRWA goods traffic from 1926 until the last one was scrapped in 1959. None survives today. As you can imagine, getting sufficient information together to build a model of a locomotive that was scrapped nearly sixty years ago presents some difficulties. Even among our Sn3½ group in Perth, I found only a couple of people who had actually seen one of these locos, let alone remember much about them.

So, armed with the Gunzburg book and some photos from Rail Heritage WA, I set about building my model. I can't claim it is completely accurate, as it wasn't until after I had built it that I found someone with access to a general arrangement drawing of the prototype. Such are the joys of model building! But let me tell you a bit about the prototype locomotives, then briefly how I built mine.

By the mid-1920s the MRWA was seeking a new locomotive for heavy main line traffic, but suitable for the light 46lb rail then commonly in use on both the MRWA and the WAGR. After consultation with the WAGR they agreed on a 2-8-2 design and sought initially to have it built by the WAGR's Midland workshops. As these workshops were already busy with new WAGR locomotives, the MRWA sought elsewhere for builders. A design offered by Kitson and Company in the United Kingdom was accepted and three locomotives were ordered. These subsequently became the first members of the A class and were delivered through

Fremantle port in 1926. They were so successful that two more batches of three locomotives each were ordered from Kitsons, delivered in 1927 and 1929.

Replacing scrapped, obsolete locomotives, the new A class machines were numbered sequentially 21-29 as they were delivered. They were quite modern for their day, with long travel piston valves actuated by Walschaerts valve gear. The firebox was mounted behind the coupled wheels, supported by Cartazzi axle boxes in the extended main frames. Although quite British in detail appearance, the A class had a sand dome ahead of the steam dome, and a large electric headlight powered by a generator mounted on top of the rear boiler ring. They had 3'10½" coupled wheels and were quite handsome locomotives with a long, low profile. The A class were very successful and lived up to the company's expectations.

There were few modifications made to them during their thirty-year working lives, the most visible being the rebuilding of their tenders to increase the amount of coal carried. After WW2 some of these locomotives were fitted with WAGR-type top feed clack valves mounted between the domes. The A class locomotives were initially painted in the company's then chocolate brown livery, but during the war all were repainted black and remained so for the rest of their working lives.

Model

Before building my Sn3½ model (1:64 scale), I wanted to establish whether there was a suitable HO/OO mechanism available, or whether I would need to build my own. I already had the IHC (Mehano) 0-8-0 HO scale American switcher in stock and found that it had the correct size wheels at almost the correct spacing, Walschaerts valve gear and connecting rods driving on the third axle. This would, I thought, save me some time, so I built my model around this chassis.

I had bought the IHC loco a few years earlier when it was going cheap on the off-chance I could use it. As far as I know it is no longer available, so it was a lucky purchase. However, when I measured up the Mehano chassis, I found that the

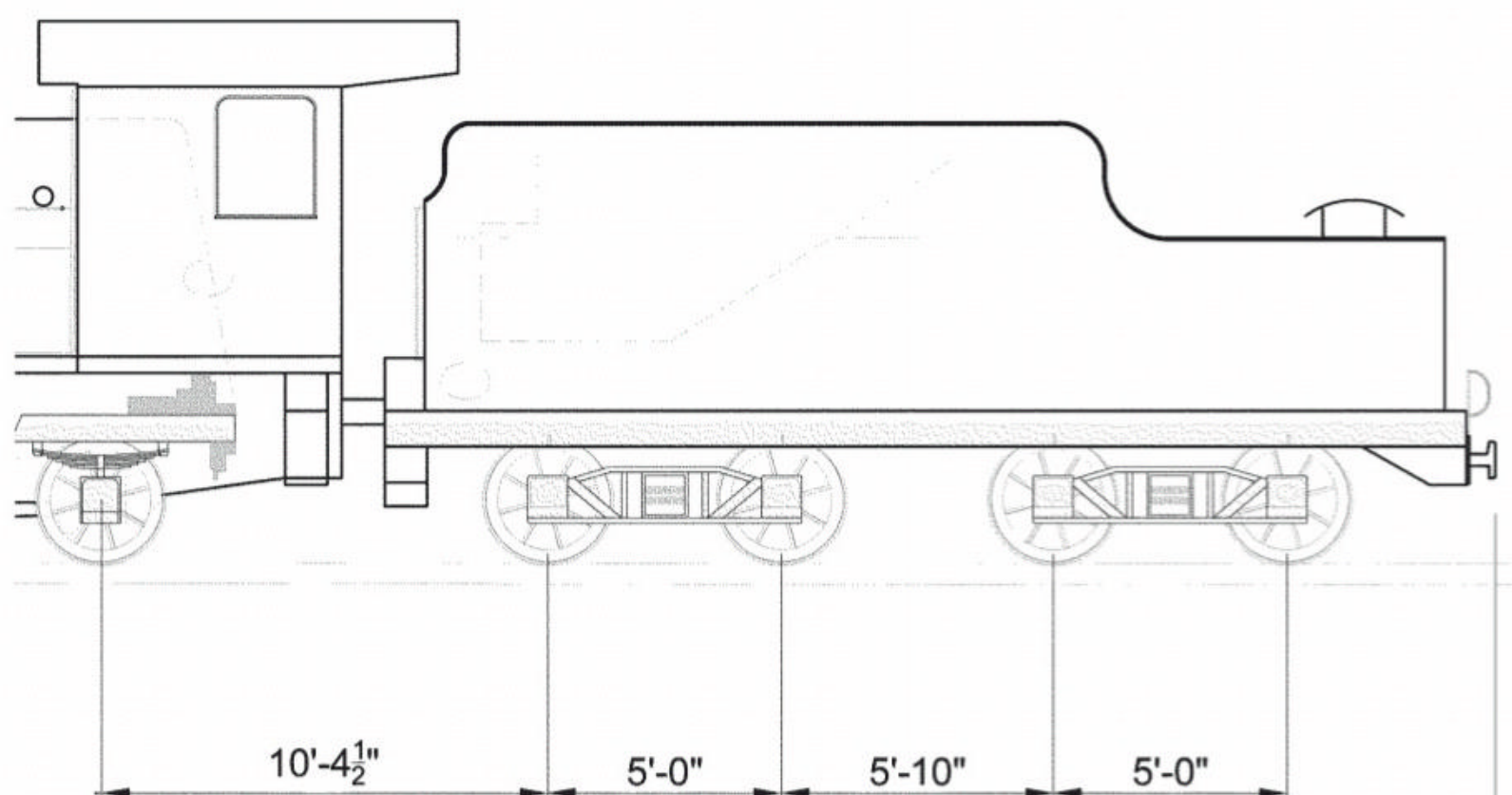
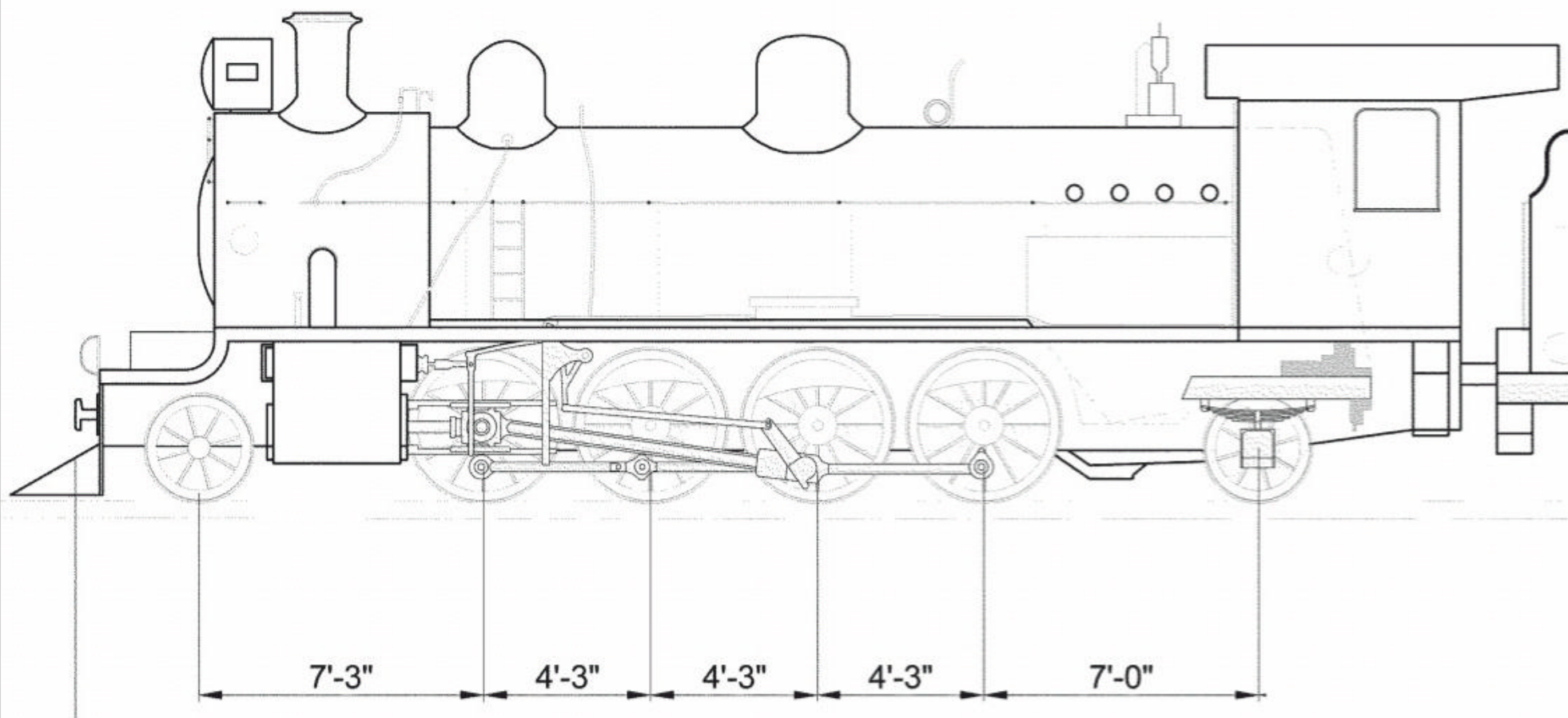
valve gear and cylinders were a fraction too wide and also the motor would end up right in the middle of the boiler on the A class. The width I could live with and as a result my model is about 2mm too wide. But the motor I could not – the A class has a lot of 'daylight' between boiler and frames. Furthermore, the boiler and firebox of the A class in S scale is smaller than that of the American HO scale standard gauge switcher.

Therefore I had to move the motor back along the chassis so that it sat in the new firebox and also ditch the rather fat Mehano motor and flywheel. I took the worm off the Mehano motor shaft and built a new gearbox around the idler gear of the mechanism, so that the worm remained in mesh. The new motor is a small Buhler can motor in its mounting on the chassis, driving the gearbox via a flexible shaft. I fitted new pickups to the chassis, bearing on the backs of all wheels, to replace the rather dodgy Mehano ones. There is also a TCS M1 DCC decoder mounted on top of the gearbox and the whole compact drive system is hidden in the boiler and firebox.

The locomotive body is built from styrene sheet, mostly 0.030" thickness. The boiler is rolled from 0.010" brass and provides a rigid 'keel' for the whole body. The cab roof is also rolled from the same brass sheet, but in this case it was tempered first to assist in rolling the compound curves of the roof line.

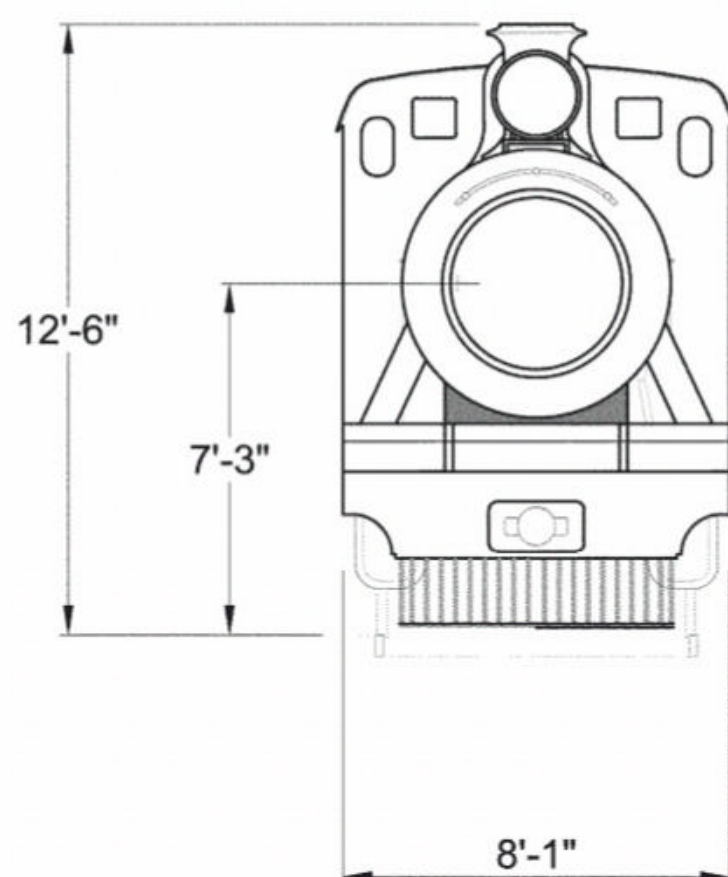
The boiler fittings are mainly brass and whitemetal components obtained from Railwest Models in Perth. A golden white LED is mounted in the headlight and wired through to the decoder. The trailing truck is a modified version of the trailing truck from a Mehano Pacific locomotive. In my model it pivots like a truck, whereas the prototype Cartazzi axleboxes are rigidly attached to the frames, providing flexibility through restricted side play. I have tried to disguise this bit of modelling licence, but it is better able to cope with typical model railway curves.

The leading pony truck is actually out of my junk box and comes from an old whitemetal loco kit. The front half of the boiler is filled with lead shot to give the model some tractive weight. There is



**The Midland Railway Company
of Western Australia
A Class Steam Locomotives**

© 2019 Mitchell Campton
Scale: 1/64 (S scale)
Length over buffers: 62'10³/₈"





more weight in the rear of the firebox, behind the motor.

The tender is a bit of a hybrid. The prototype locomotive, by the early 1950s, had the rebuilt tender which looks very much like an American USRA standard tender. As I had a few of these in plastic in HO scale left over from other WAGR modelling projects, I measured one up as a comparison. While not completely accurate, the shape and length of the HO scale standard gauge tender was very close to the MRWA narrow gauge tender in S scale.

So I carefully sawed the sides off the HO tender, ending up with two new sides for my MRWA tender. Railwest Models provided a tender underframe cast in urethane, which they had been experimenting with for doing just such a conversion, plus a tender front. These weren't quite wide enough, as I wanted my new tender to match the over-wide loco in width. That was no problem as I made a new tender floor, ends and top from styrene sheet and built the proper coal space to fit. Railwest again came to the rescue with the correct tender bogies cast in brass, and I fitted spoked 12mm wheels from my own stocks. With a few

more details added I had my A class tender.

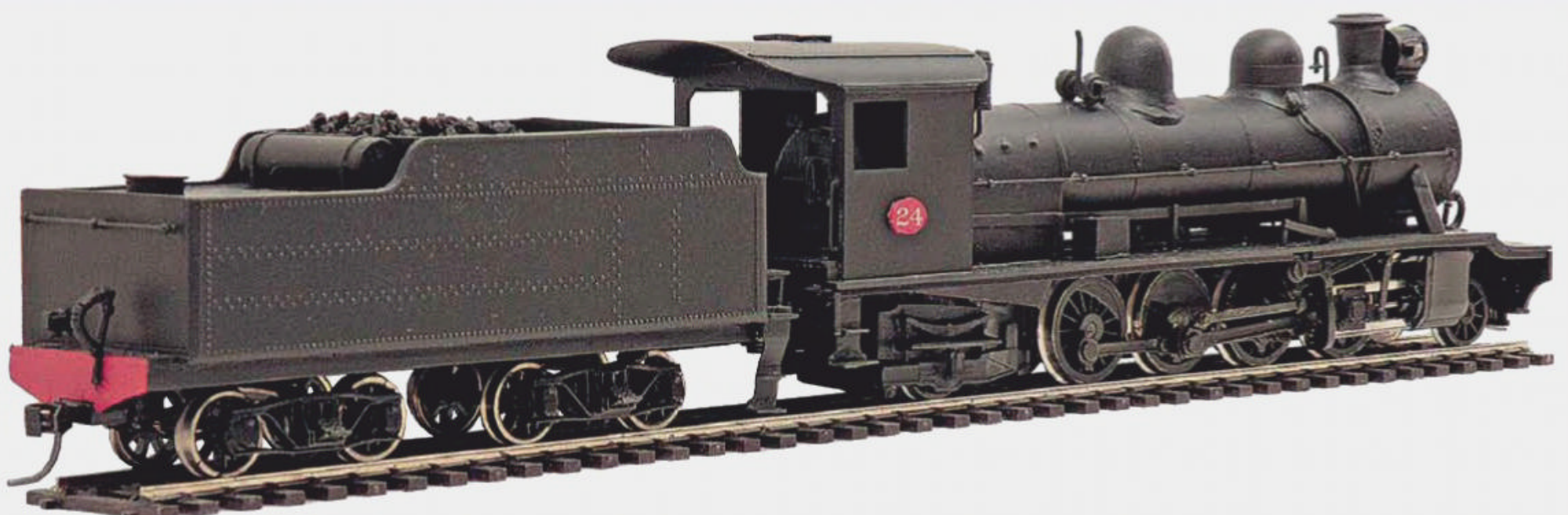
After undercoating the completed model with Tamiya spray primer, the whole loco and tender were sprayed with Tamiya XF-1 Matt Black. Buffer beams are red, and I made the oval number plates from styrene and painted them red. Some suitable transfers provided the numbers, and my A24 was ready for the road. The new motor and gearbox arrangement works very well and I think the model comes up reasonably well in comparison to the photos of the prototype.

It has been quite a challenge building a loco from scratch with only limited information to go by. The A class were most handsome engines, and I think it a great shame that none of them was preserved. The prototype of my model may have been scrapped nearly sixty years ago, but I have A24 to preserve that memory – even though I never saw these locos in their lifetime.

It is also fair to say, I believe, that the Midland Railway Company of WA has been sadly neglected by both modellers and enthusiasts alike. That gave me the incentive to build my own MRWA model but, as so often seems to be the case,

when I finished my model a new kit of the A class came out! Stuart Mackay has produced a cast urethane kit of the MRWA A class locomotive in his X Class Models range. His kit is designed for another Mehano mechanism and builds up into a lovely model, which has been very well received by the WA Sn3½ modellers – I like to think that he may have been encouraged by my scratchbuilt effort! Several other MRWA rolling stock models have since been added to his range.

I want to encourage all modellers of the Australian prototype to look again at the MRWA. Maybe you won't want to build models of this unique and important railway company, but there is so much to be gained by getting to know a lot more about Australia's longest privately-owned common carrier railway. Finally, my thanks and acknowledgement to Adrian Gunzburg for his fine book on the MRWA, upon which I have drawn heavily in producing these notes. I would also recommend Philippa Rogers' delightful book *Memories of the Midland Railway Co.* (published by Rail Heritage WA in 2014) for further reading.



Transport Your Models the Easy Way

Martin Vella shows a way of transporting models that is both secure and convenient. Photos by the author.

Having returned to model trains from a lengthy hiatus, I realised that I couldn't build a layout at home. This was partly due to me not knowing how to plan a layout, build the baseboard, or run a sophisticated electrical control system. I would have to re-learn all the skills I had forgotten since my twenties, when I knew it all! I still wanted to run my locos so what could I do? There was only one thing for it. I had to become social and join a club.

It was a great idea. I get to mingle with people who realise that X200 shunting engines shouldn't be double heading a freight on the main line even though they could in 1:87 scale, plus I get to see other people's rolling stock and I get to give mine a run.

All was going great, but I started to notice it was harder than it sounded to go to a running day at a club. Firstly, it was painful to bring all my locos and rolling stock to the clubhouse. The boxes were big, cumbersome and difficult to carry. It was also time consuming and annoying to unpack each item from its box and I tended to break something each time I pulled a delicate piece from its container. I

also found that, after all the years of inactivity, my locos needed maintenance, but I had not taken any of my tools with me.

There had to be a better way...

I then discovered the Auscision train storage boxes and they solved many, but not all of my worries. The fact that I could store many items in each box, without needing to individually package them, was a great time saver. The soft foam was also very kind to delicate brake handles and I was getting almost no breakages. The boxes still didn't carry my tools and carrying more than two boxes was extremely difficult when going up stairs.

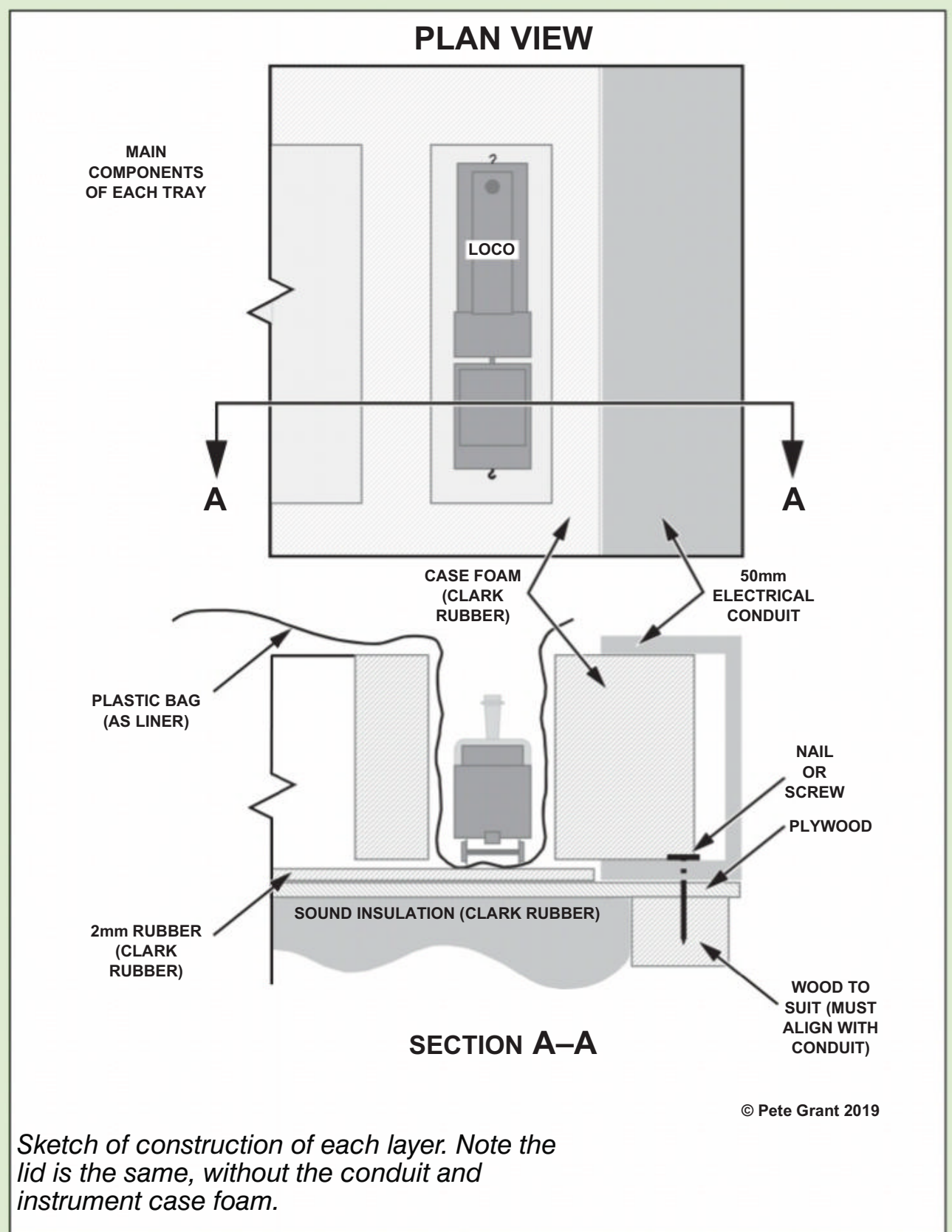
There was nothing for it but to kit-bash my own mobile storage box!

After a trip to my local hardware shop (Bunnings), I decided on a modular toolbox (DeWalt TStak) they had on sale. It consisted of a large box on wheels and two smaller boxes that could be attached that were good for storing the hand tools and the assorted loose items that we all need. Stuff like lubricants, Kadee couplers, wheel cleaners, solder etc.

The top two boxes were good for the tools, but I needed to create a safe system in the bottom box for holding the trains without them moving or getting crushed.

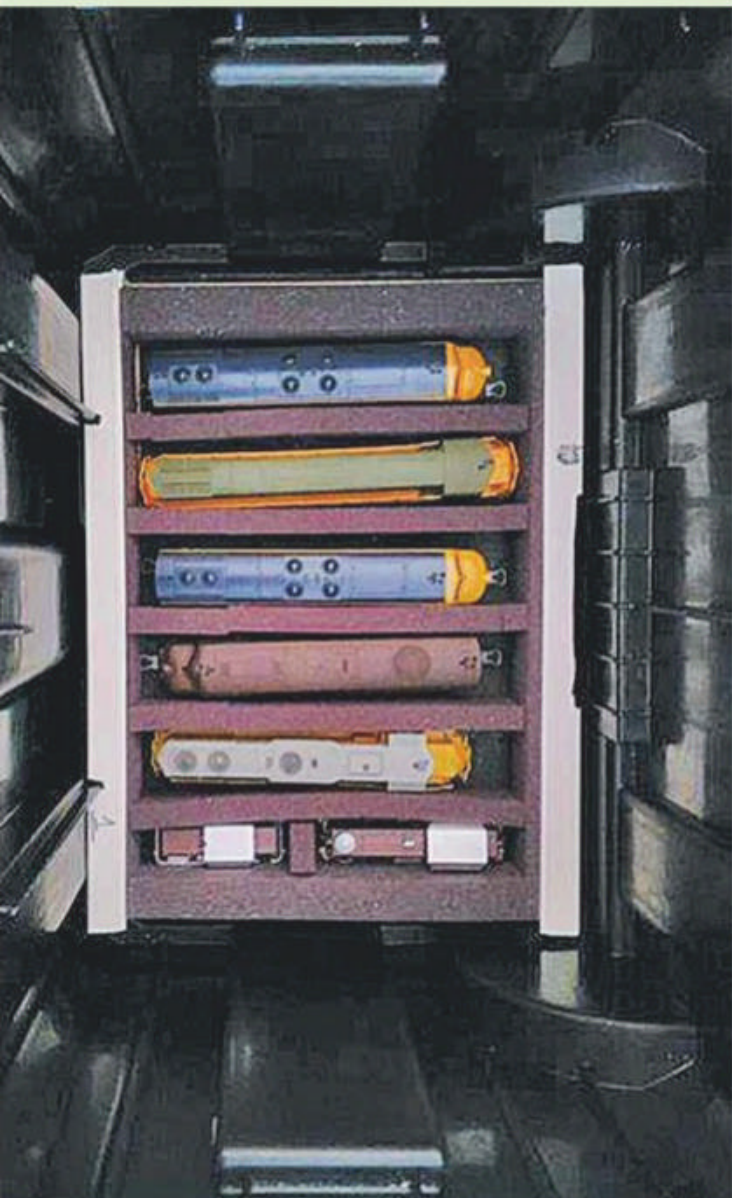


A DeWalt DWST1-75799 Portable TStak Storage System wheeled toolbox, available from Bunnings.





An end view of the finished product showing the layers of foam separated by rectangular electrical conduit that protects the all-important models from damage.



I wanted to be able to drop the box without the trains being damaged.

I decided on a system of layered trays (see drawing). The main protection from vibration and shock would be provided by foam used in instrument cases. To avoid the models from being crushed by the pressure though, I reinforced the sides with rectangular electrical conduit. This allowed me to close the toolbox lid and create pressure to hold everything together, but the weight of the lid and locos is transferred down the sides through the conduit and NOT through the models on the lower layers.

I joined the layers with glue and nails. Foams and rubber were bought from Clark Rubber and everything else from Bunnings. At \$250.00 to \$350.00 it is substantially more expensive than the Auscision Models carry boxes, which retail for around \$40.00, but I enjoyed building it and it fulfilled my design brief of giving substantial protection during transit and allowing me to carry tools and the ancillary equipment for running at my club.

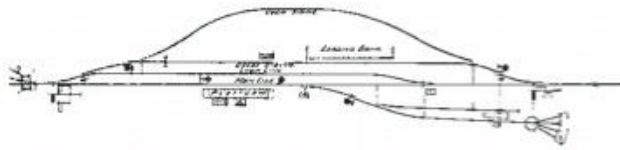


A closer view of one of the 'layers', loaded with rolling stock. Paintwork and details are protected from the foam by strips cut from plastic bags and wrapped around the models. Small sections of foam are also placed between each model to protect against them rolling into each other during transit.

◀ *The layers of foam and rectangular electrical conduit inside the box.*



▶ *The four layers of foam and conduit model transporter layers, plus the cover, sitting on top of the DeWalt wheeled toolbox.*



IN THE LOOP

'Unbuildable' Kits, Varying Skill Levels and Mobilising Your Mates

Trevor Hodges muses on the problems of kit-building, developing the required skills and getting your mates to help!

Photo by the author.

A number of years ago a kit for a steam locomotive was released in O scale that was purchased by many modellers working in 7mm (1:43.5) scale. While I'd seen a number of completed locomotives built from this kit painted and running, you could count such examples on one hand and, after talking to a few people who had made a start building the kit, the general consensus seemed to be that it was "a bit of a challenge" to build. It wasn't so poorly designed that it couldn't be built, but it was most definitely not a 'beginner's' kit, being more fairly described as suitable for an experienced builder.

Just because a kit has all the parts required to produce a particular class of locomotive doesn't guarantee it's easy to assemble into a working model. As I have an unbuilt example of this kit, I was interested in gathering any hints and tips for a project that was on the 'to do' list for me (hopefully in the not too distant future). What I was hearing wasn't terribly encouraging.

The dynamic between kits and the modellers building them is fairly complicated and placing the blame for a kit project grinding to a halt solely on kit manufacturers' heads fails to take into account the level of skill required to build kits, especially steam locomotive kits. I've been actively building kits in both HO and O for something like thirty years and, from my own experience and the experience of watching others struggle with kits in a wide variety of media – plastic, resins, etched metal, card and more recently 3D printed materials - I know full well that modellers often bear a fair degree of responsibility for a project being consigned to the too hard basket.

I was once asked by a friend to advise him on a suitable first locomotive building project, only to have this advice overlooked and I watched on as he embarked on an extremely complicated kit-built locomotive project. The project ground to an almost inevitable halt in fairly short order and there was a moment in a conversation I had with him later where it sounded as if he was blaming the kit manufacturer for the project ending in less than glorious triumph. With sound advice supplied by the kit manufacturer, and with help from a couple of modelling friends, the loco was eventually up and running, leaving smiles all round!

There is, however, another side to this story and it concerns kit design and the quality of the accompanying instructions. For these aspects of the kit-building experience manufacturers are most definitely responsible and they sometimes come up short. I know a number of kit manufacturers and all of them are hard working, honest individuals genuinely putting in a lot of effort to enhance the hobby. However, in spite of this, over the years I've come across some kits that were poorly designed or were accompanied by instructions that bordered on the unintelligible.

I'm sure many of us have had the experience of attempting to build a kit which has resulted in us saying we'd have been better off building the model from scratch. There's nothing pleasurable about having to significantly modify or, in the worst examples, replace kit components so they can be used to build the model pictured on the front of the kit's packaging. While

good instructions can make a poorly designed kit possible to build, if less than stellar design is combined with confusing instructions and this ends up in the hands of an inexperienced builder, it's no wonder there are so many unfinished models sitting in ice cream containers and empty shoe boxes.

If these two extremes – the neophyte, over-ambitious builder at one end and the manufacturer who is just a little too eager to get a product onto the market before it has been thoroughly debugged at the other - are the outer edges of the kit building experience, then surely this must mean the vast majority of kits are well within the capabilities of the 'average' modeller? Well... yes and no. While successfully completing the construction of a small, less ambitious, locomotive is likely to prove a good learning experience and hone the skills of the less experienced builder, this does not necessarily mean that having completed such a project that he or she is ready to jump straight into building a large, fully-compensated, articulated locomotive with Walschaerts valve gear.

I would define a beginners' or entry level locomotive kit as one where all parts (including decals, but excluding paint) are provided, where the instructions are written with the understanding that the modeller may have limited experience, where there is no requirement for specialist tools or machinery beyond what might be found in the average builder's modelling tool collection, where the modeller has a range of clearly laid out options for assembly (such as a choice between soldering and glue) and where all the really critical measuring and machining tasks are done for the modeller and included in the kit.

One of the more significant changes to the hobby over the past decade (or two) is that it's literally quite possible to build a layout and get trains running through relatively realistic scenes without ever having to build a locomotive, rolling stock or structure kit. The quality and variety of ready-to-use HO train and structure models is simply phenomenal and there would be few modellers out there who haven't taken advantage of what's on offer in the mainstream HO scale hobby these days. I use the terms 'HO mainstream' very deliberately, because not everyone works in HO, standard gauge, following a prototype based in one of the larger states.

Ready-to-use buildings that can be realistically sited on a layout depicting any region of Australia are available; however a model of a specific piece of line-side infrastructure, such as a highly distinctive sanding tower that only existed in one state in a limited number of locations, is likely to have a more limited market. We haven't reached the limits of what can be made commercially available in ready-to-use models, but there will always be structures, locomotives and pieces of rolling stock that modellers want that are never likely to be commercially viable in a ready-to-use form and some of these gaps are often filled by kits. This modelling and commercial reality becomes more apparent the further you move away from working in HO following the larger of the state railway systems in the late steam to modern period.

So, if we are willing to accept that most modellers at some

point will need to build a kit (or more likely a few kits) to allow them to run a particular locomotive or piece of rolling stock that isn't available in a ready-to-use form, what steps does one need to take to acquire the skills required to successfully assemble them? Perhaps the first and possibly most important step a modeller can take is to hold firm to the understanding that no-one is born with the required skills needed to assemble model railway kits. Everyone started from a point of knowing very little or nothing and built their skill set over a period of time.

If you ever find yourself standing at a model railway exhibition watching a thirteen year old assemble a kit with a level of skill and assurance that you feel you could never possess, I can assure you you're looking at it from the wrong angle. Such a young modeller isn't good because he or she is so young; they're good because they've probably been modelling since about the time they could first hold a soldering iron safely. I know this for a fact, because I know just such a modeller and his name is Tim Ryan.

Tim's not thirteen any more, but to watch him assemble brass etched kits at model railway exhibitions on his father's stand a few short years ago was a true pleasure. The fact that he could do so from such a young age is a credit not just to him, but also his father Keiran, both of whom will tell you he had to learn the requisite skills over time. They'll also tell you that if Tim can do it, so can you, but you've got to be willing to give things a try and ask for advice, possibly even from a thirteen year old at an exhibition. Just as a matter of interest, Keiran tells me that the skills and confidence Tim acquired over the years of modelling have come to serve him well as he establishes himself in his chosen career. Children gain far more from being involved in this hobby than just watching trains run.

One source of good advice about kit building can be model railway clubs, where you can usually find a number of experienced modellers who have travelled up exactly the same learning curve you might be on and who are more than willing to help out a fellow member. However, I realise that not everyone wishes to join a club and clubs don't exist everywhere across the country, so joining one may not be an option. What do you do under these circumstances?

I live in an area where there's no 'local' club and I happen to work in a scale which could accurately be described as in the minority. In the main, I find most railway models and activity around them, no matter what the scale, fascinating, but there can be times when there really is no help to be had from people outside your own particular scale or gauge and in these instances email, blogs and a wide range of other web resources are a real godsend. However, there are times when even these sources of information fall short: those instances when what I really need is hands on help and brains I can pick and in the same scale and gauge I work in.

Some of the modellers who purchased the locomotive kit I mentioned at the start decided to do something positive about trying to get their models assembled, so they organised a gathering of people who had found themselves in the same situation: they all had the same kit, but had struggled to get far with assembling it. One of the members of this group offered his home as a venue for a workshop-type gathering over a number of Saturday afternoons and they invited a modeller along who had successfully managed to get the kit assembled and running as a sort of guiding hand to help overcome problems they encountered along the way. It wasn't really intended that they would build the kits in lock-step, but rather sit together as they built their own kits, at their own pace.

A few months ago I found myself at the home of a fellow modeller and he asked me a few questions about some turnouts I'd been building for my layout. On the drive home from my friend's place I started thinking about the locomotive kit-building group and it occurred to me that another friend of mine had also been making some turnouts and that he might have liked to hear the answers I'd offered to my other friend. When I got home I wrote them both an email asking if they'd like to get together at my place over a number of weeks with the object of them each building a No.6 turnout. They both readily agreed and we gathered three times, after which they each had a completed turnout to take home. These gatherings weren't a prelude to us setting up a club, but neither were they solely social gatherings; we had a particular objective in mind and I remained very conscious that one of them had to drive almost four hours to get to and from my home. We drank lots of tea and coffee, I made them lunch and we chatted a good deal, but I also tried to ensure that the time we spent together was productive and of value. There'll be plenty of other occasions where we can just sit together and talk about trains.

I'm not sure how my two friends felt about the worth of these sessions, but all the learning wasn't one way by any means. Both of them are experienced, highly skilled modellers in their own right and, as I watched them work on their turnouts, I picked up hints and ways of doing things that hadn't occurred to me as I'd constructed my own turnouts.

Innovation has been a bit of a buzz word over the past couple of years and doing things smarter and better can't be a bad thing. However, innovation isn't just limited to the commercial, political or educational realm: we can be innovative in how we do our hobby, but doing things in a new, innovative way is most likely to happen when we have a need we wish to satisfy and when we have an open mind to new ways of doing things. The next time you see a thirteen year old assembling a kit at an exhibition are you going to say to yourself "*I could never do that*" or are you going to think: "*If they can do it, so can I!*"? The choice is very much up to you...



The author, Peter Krause and Phil Flynn gather to build themselves some turnouts and help prompt the topic for this column.



Making GyMEA Lilies in HO Scale

Joe Dal Forno builds some very distinctive Sydney area plants. Photos by the author.

About a year ago I was driving along Heathcote Road, in the Sutherland Shire (NSW), and noted how striking these plants were in flower with their numerous, large, spear-shaped leaves, singular flower stalk that can reach to 4m and the large, red, bowl-like flower. I thought they would make an ideal addition to my layout.

Some months later I was in an IKEA store and found an artificial plant that would be ideal for making scale models of the lily leaves. The artificial plant consisted of spear-shaped upright leaves in a shade of green that was ideal to represent the real thing.

Later, in the same store, I found another artificial plant that would provide the bowl-like flower for the lily. This was called, if I remember correctly, a Christmas bouquet. It consisted of a conifer branch (the leaves of which I have used to make grass trees), a branch with

red plastic balls representing berries (again in the right shade of red for the flower) and one other branch for which I have yet to find a use.

I felt that it would be easy to make models of the GyMEA Lily provided suitable materials were available so, when I found them, I set about making some. To date I have made a total of fifteen examples in two batches.

I chose to make three types of lilies: those about to flower, in flower and those with a dead flower. One pot of the *Fejka* plant made seven models using only the tips. I have since made a second batch, as I didn't believe that seven were enough for an adequate display on the layout. More leaves can be made from the remaining leaves in the pot by cutting them to shape with a scalpel or craft knife.

I decided to make the leaves 20-23mm long, with the flower stalk 50-60mm long

and 1.3-1.8mm in diameter, depending on the wire used or how much wire is used.

Preparation

1. From the pot, cut all the leaf tips off to the desired length. It is easier to have them all to hand when assembly is being undertaken.
2. Cut the straw to about 5mm in length for as many models as is required. For my second batch I found that plastic straws were hard to come by. Fortunately, I was in Melbourne recently and found a supply at Young and Jacksons, so you had better get down there quick! Don't forget to say hello to Chloe...
3. Cut the copper wire to length and assemble the strands to the desired diameter. Cover with No More Gaps if desired or leave as is. The stalk will be thin enough that the strands won't be noticeable when painted.
4. Cut the flat, clear plastic offcut into pieces 15mm x 15mm. These will enable the models to stand upright.

Assembly Process

1. From each batch I chose to make one model of a lily about to flower and one with a dead flower. The remainder were to be flowering plants. The stalk for the dead flower was painted a dark brown (using acrylics that I already had) and the remainder I painted green using Humbrol No.80 Grass Green Matt, again because I had some and it was a good representation.
2. The pieces of straw were located centrally and glued to the small pieces of clear plastic using whatever adhesives I had – superglue or Humbrol Poly Cement in this case – use whatever you prefer.
3. When the straw and clear plastic were secured to one another, I filled the straw with epoxy glue and then placed a stalk in each. I had some stalks leaning slightly for effect. When the adhesive has set the model can be easily handled with the stalk when attaching the leaves. I used a white coloured straw so I painted it green to hide the contrast.
4. I bent the leaves at their base in a way that allows them to stand at an

Materials Required

- *Fejka* range from IKEA; FEJKA Artificial potted plant, grass, Article No.102.144.87 for the leaves (Photo 1)
- *Smycka* range from IKEA, SMYCKA Christmas bouquet for the flower (Photo 2)
- plastic straw
- flat, clear plastic, cut from any blister pack
- scrap copper wire or similar
- No More Gaps filler (optional)
- adhesives (see text)
- green and brown paint of your choice
- ground cover (optional)



The source of the leaves; Fejka potted plant containing artificial grass from IKEA.

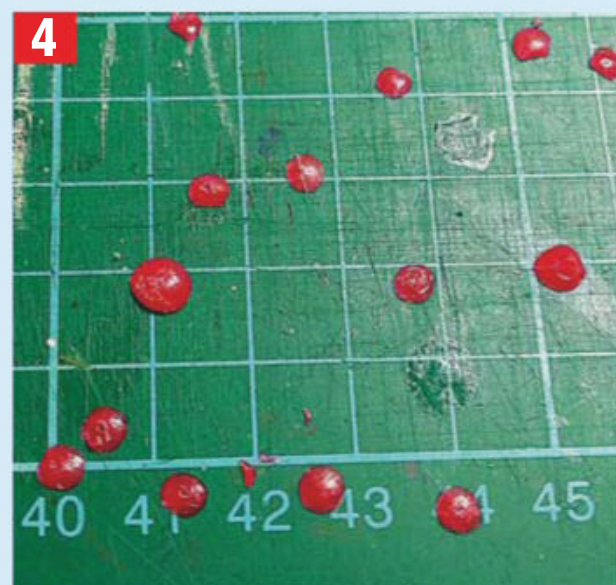


The source of the flowers; the Christmas bouquet, spruce, from the Smycka range, obtained at IKEA.



Attaching the leaves to the base of clear plastic after the stem has been glued inside the small section of plastic straw.

The 'flowers' in the process of being cut from the 'berries' of the Christmas bouquet.



An assembled Gynea lily ready for installation on the layout.

outward angle when attached to the straw (Photo 3).

5. Apply adhesive to the lower, bent part of a leaf and attach it to the straw piece. Repeat until the circumference of the straw is covered. Add as many additional leaves as you wish. I also made additional leaves by cutting them from the remaining leaves of the artificial plant.

6. It was now time to make the flower. I removed a red 'berry' from the Christmas bouquet and cut pieces from the circumference so that I had a flat surface with a round base (Photo 4).

As can be seen from the photo the exercise is one of hit and miss to obtain suitably sized pieces to represent the flower. Thankfully there were numerous 'berries' in the bouquet. I unintentionally cut larger pieces for the flower for the second batch and these look more realistic. Keep any unsuitable pieces for later reuse.

7. Glue the flower to the stem. To the underside of the flower I made an indent using a drill bit that was the same diameter (or near enough) as the stem. This enables the flower to have a resting place when glued to the stem.

8. The model is now complete, but for some final embellishment. The stem needs leaves and the flat flower sur-

face needs some decoration to remove the bland appearance of the flat top surface of the flower.

10. To make the leaves for the stem, I cut small slivers from a leaf offcut and attached them to the stem with superglue. I placed a few of these under the flower bowl for effect. Some small, chunky pieces were cut from offcuts of the red berry and a number of these were glued to the top of the flower (Photo 5).
11. For models without a flower, slivers of leaves were glued to the top of the stem instead of the red flower.
12. For models of Gynea Lilies with dead flowers, I painted the stem, leaves and flower in dark brown to represent a flower at the end of its life.
13. The clear plastic base of the model that was exposed was covered in PVA glue and ground cover. I used a ground cover similar to what was on my layout so that the models blended in with the rest of the scenery.
14. I located the models on the layout in clusters of uneven numbers (Photo 6).

Conclusion

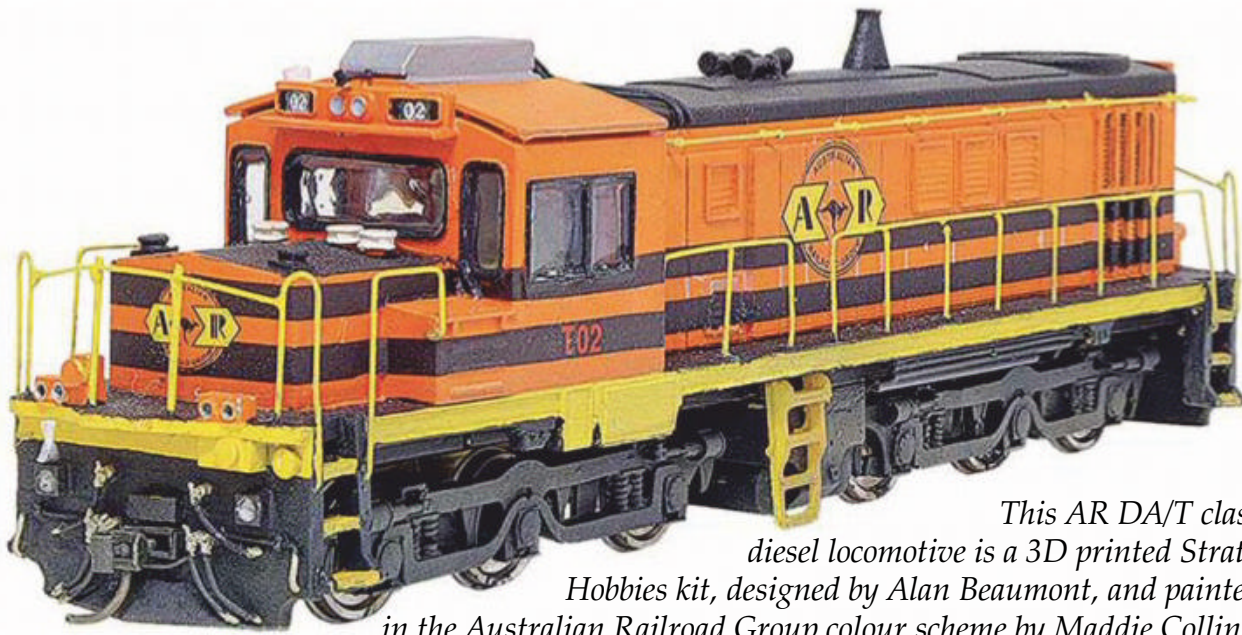
The lilies are realistic enough to enhance the layout, mine being one of no particular place or time. However, I will add more leaves in due course and locate the lilies in a more bushy location in keeping with their native habitat.

A group of lilies in place on the layout. Three are flowering, one has not yet flowered and the flower and stem of the last has died.



GALLERY

Modelling the Railways of South Australia: 2018



This AR DA/T class diesel locomotive is a 3D printed Strath Hobbies kit, designed by Alan Beaumont, and painted in the Australian Railroad Group colour scheme by Maddie Collins.

This locomotive, T02, was one of seven locomotives converted from the Alco SAR 830 class. It was converted from DA1 (originally 830 class No.849) to run on the narrow gauge woodchip train in Albany WA under the ownership of ARG. It was only short lived and was later passed on to Genesee & Wyoming and was numbered 901, and later, 902. The Australian Railroad Group was a joint venture between United States rail operator Genesee & Wyoming Incorporated and Australian rural services company Wesfarmers. The company was only in operation for five and half years, December 2000 to mid-2006.

Gavin Thrum has provided us with photos and details of just some of the models that were on display at the 2018 *Modelling the Railways of South Australia* convention. These models definitely highlight the considerable skills of the modellers active in South Australia, which doesn't enjoy anywhere near the commercial support enjoyed by the eastern states. We expect that the 2019 convention, due to take place on Saturday 7 September, will feature an equally impressive display, along with some fascinating presentations that provide much information to the modellers of South Australia's railways.



An HO scale Strath Hobbies kit of an SAR elliptical roof HB bogie horse box, built by Chris Semezuk, completed with additional brass detailing parts added and painted in the early SAR passenger stock green colour scheme.

This HO scale model of streamlined 520 class 4-8-4 No.524 was made from a Rocky River Models kit by Dwayne Norris. The donor chassis is a Bachmann 4-8-2 light mountain locomotive with a modified internal weight and a new motor fitted. It is modelled to represent the prototype locomotive as it appeared in the late 1950s/early 1960s.



This HO scale Australian National brake van was built by Dave Luketic for Alan Tessari. The body and floor were cast polyethylene made from 3D patterns (they needed a lot of cleaning up). Custom decals were made to suit and American Rapido Outside Swinghanger Trucks were fitted on the brake van as they are a very close match to the bogies fitted to the prototype.



A quartet of HO scale Trainorama 930 class Alcos modified and weathered by Dwayne Norris. No.956 is modelled as it was in ANR period of the late 1970s with staff exchangers and 'Piping Shrike' emblem removed. No.936 has the staff exchangers filled in and the 'A' end fitted with a vent cover plate. No.949 sports a filled in staff exchanger, while 960, still lettered 'ANR', has a plated over staff exchanger and yellow bogie side frames, as it was during the AN 'green and gold' period during the 1980s.

A manufacturer's sample of an HO scale SAR 600C class locomotive kit in development by Peter Carter, Nigel Gardner and Stuart Gamble, finished as No.609 'Duke of Gloucester'. The body is a polyurethane casting with etched brass details and it is powered by a modified Broadway Limited USRA Light Pacific chassis, which is available with factory-fitted DCC sound.



This HO scale model of the Beaumont Road overbridge in an area called Yantaringa in the Adelaide Hills was kitbashed from a Laser Rail Bits kit for a NSWGR overbridge by David Goedecke. The deck and railings were assembled per the instructions, but the trestle bents were modified to more closely represent the SAR prototype by removing one pile and respacing the remainder to match the SAR pattern, along with reversal of the diagonal bracing, additional headstock beams each side of each bent, Grandt Line nut-bolt-washer castings to add some detail and end concrete abutments that were fabricated from card. The structure's paintwork was a bit of a mixture, using some ideas from the web for painting weathered timber. David first tried to paint the whole structure in white undercoat and stain it with black fabric paint. This didn't work out as expected, so it was lightly brushed with Humbrol Camouflage Grey which was the colour recommended by some fellow modellers. The grime and smoke effects were done using AIM Grimy Black weathering powder.

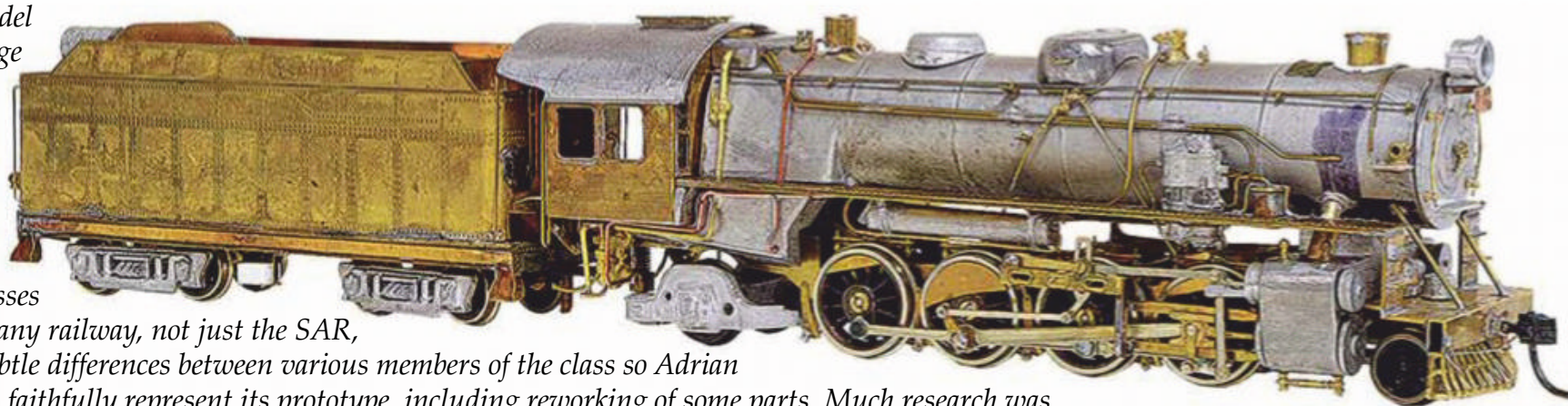
This HO scale model of Ambleside's station building was created by David Goedecke after an extensive kitbash of the Strath Hobbies Balhannah station kit (patterns made by Ross Hurley). The list of modifications is fairly lengthy, but included modifying the doors into the ladies' waiting room (moved from front of building to the waiting area), detail added in the waiting area with rear wall weatherboards, seats, placard rails, placards and waiting passengers. A new roof, trim, guttering, downpipes, chimneys, vents, men's urinals and rainwater tanks were also added.

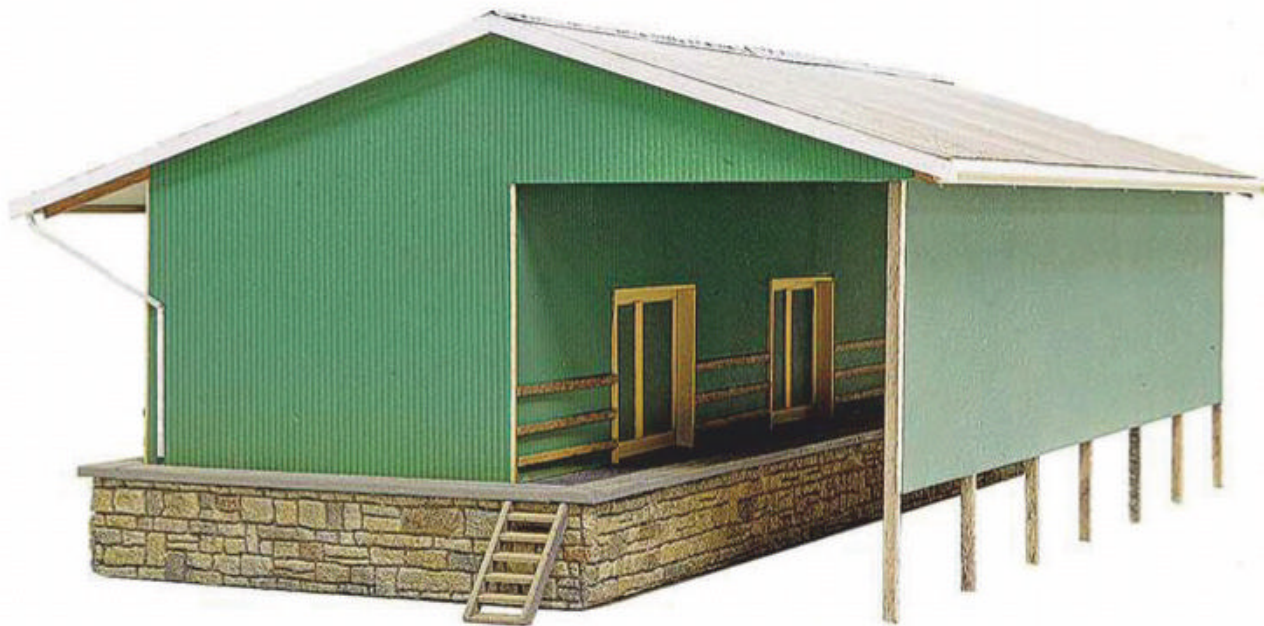


This HO scale model of SAR 900 class diesel electric locomotive, No.903, was built by Stuart Gamble, using a Broad Gauge Bodies polyurethane body with brass details added, running on a Proto 1000 'Erie-built' chassis, with modified side frames. The distinctively SAR polished stainless steel lower side panels were created using overlaid aluminium foil.

This HO scale model of SAR broad gauge 710 class 2-8-2 No.718 was constructed from a Broad Gauge Models kit by Adrian Crimes.

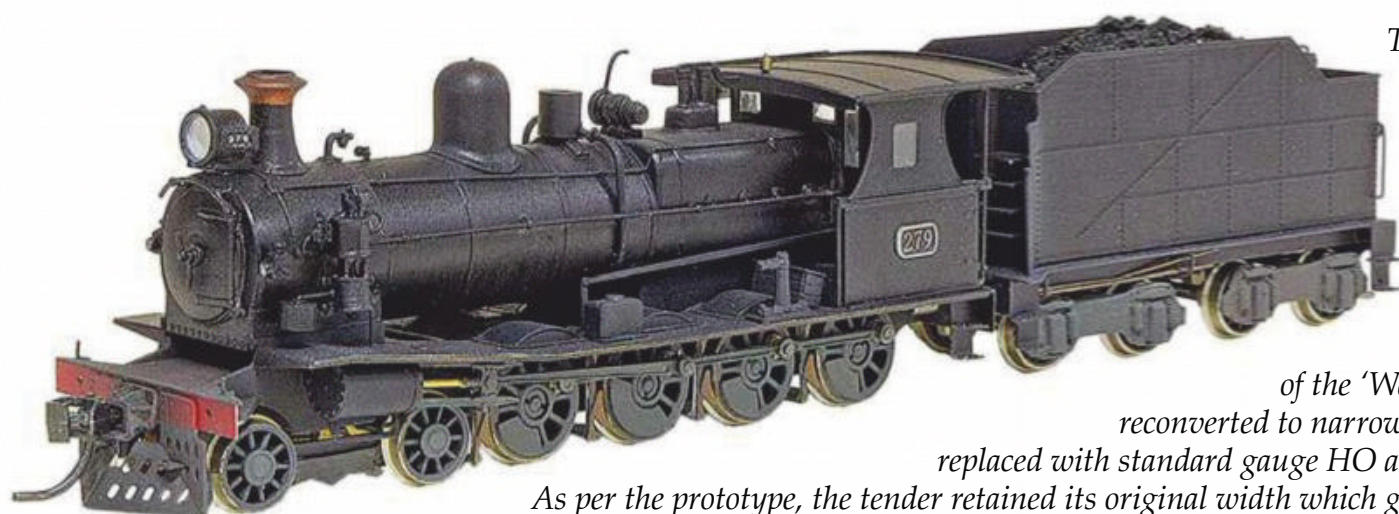
As with many classes of locomotives on any railway, not just the SAR, there are many subtle differences between various members of the class so Adrian modified the kit to faithfully represent its prototype, including reworking of some parts. Much research was done to achieve the correct placement of the details.





An SAR iron clad, gable roof, broad gauge goods shed scratchbuilt in HO scale by Don Bishop. The shed was constructed using balsa wood sheet with Northeastern Scale Lumber Company stripwood for the framework, trimmings, gutters and downpipes. Corrugated cladding was applied with sheets of Broad Gauge Bodies corrugated card. The platform was also of balsa construction with the stonework created using a Vollmer stone face product which required airbrushing with 'sandstone' colour then picking out the individual stone in various colours by brush.

This HO scale Commonwealth Railways first class Lounge Car, AF24, was constructed by B McGuinness from a 3D printed pattern that was used to produce a resin body shell. It is painted in the brown and cream colour scheme used by the CR from 1920 to 1932.



This HO scale model of SAR broad gauge Tx 4-8-0 No.279 is an extensively modified Broad Gauge Models kit built by Nigel Gardner using about half of the parts from the kit with added scratchbuilt parts. The Tx class were created when Islington Workshops modified five surplus narrow gauge T class in 1922/23, after the conversion of the 'Western' narrow gauge lines. All five were reconverted to narrow gauge in 1949. The HOn3½ axles were replaced with standard gauge HO axles and footplate and cab were widened. As per the prototype, the tender retained its original width which gave the model its prototypical mismatch.

This Sn3½ model of SAR Y class 2-6-0 No.97, towing an auxiliary 2000 gallon water tank, was constructed by Maddie Collins. The locomotive is a Strath Hobbies/Railwest Models brass and urethane kit, while the water tank is another of Maddie's 3D printed models.



An HO scale model of the TNT terminal yard in Adelaide was built and displayed by Sean Rendell. The container crane in the terminal is a modified Heljan kit. Some parts of the crane were reworked, totally repainted and featured electrically-operable container grabs, motorised cable lifter and traverser. Many of the flat cars and containers on the display were built by Sean and John Looker. As it happened there was a presentation during the convention on the TNT terminal, its layout, operations and the vehicles seen in the terminal during its relatively short life.



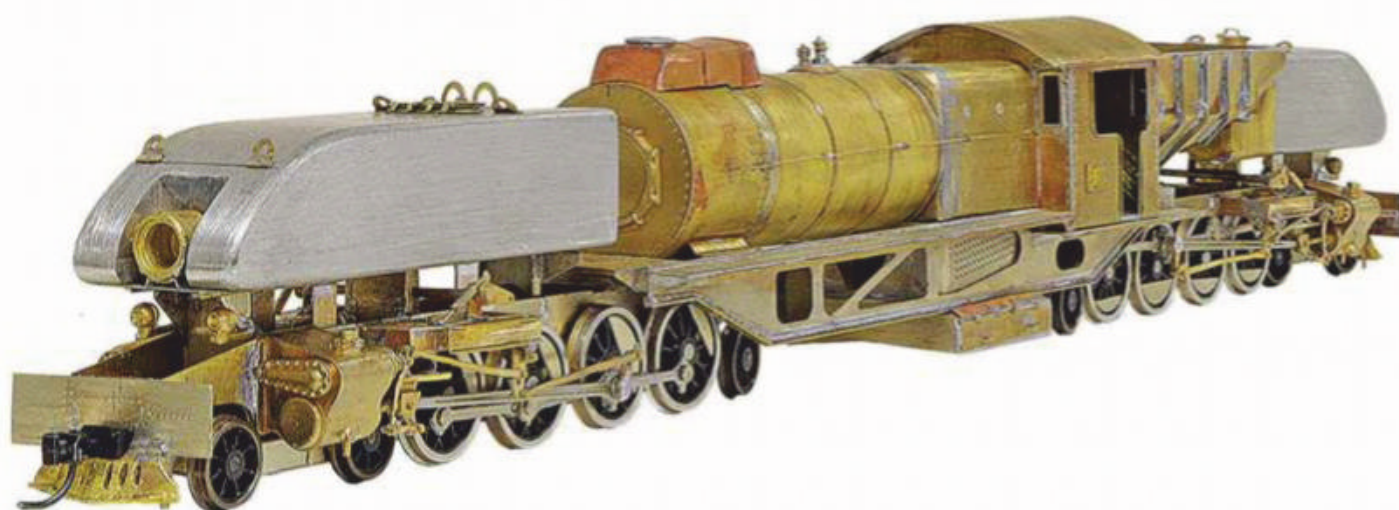


A scratchbuilt HOn3 model of SAR narrow gauge Wx class 2-6-0 No.56 by Adrian Crimes. The model includes brass and nickel silver in its construction, which occupied the best part of twenty years. Featuring some special-order Steam Era Models driving wheels and a 'Minimotor' in the tender, driving a gearbox in the engine via a double universal shaft through the cab.

This HOn3 SAR T Class 4-8-0, No.225, was scratchbuilt by Adrian Crimes. The model has a milled brass chassis, rolls on Sharman driving wheels, and has a solid brass boiler and sheet brass cab. A Mashima motor in the tender drives the gearbox in the locomotive via a universal shaft through the cab. The tender was made from styrene with Roundhouse freight bogies that were overlaid with scratchbuilt side-frames.



Maddie Collins displayed this 'in progress' model. It is an Sn3½ model of one of the Australian Standard Garratts (ASG), a wartime emergency design that was designed by the WAGR in the early years of World War Two for use on all the narrow gauge systems. Fifty seven were originally built by the VR's Newport, SAR's Islington and the WAGR's Midland workshops, as well as Clyde Engineering in NSW, and they operated in Western Australia, Queensland, Tasmania and South Australia. Not regarded as terribly successful, particularly in Queensland where they were universally hated, most were out of service shortly after WW2. In 1951 the SAR acquired six surplus ASG locomotives from the WAGR to overcome a locomotive shortage on the Peterborough division. The SAR classified them as the 300 class and used them on Broken Hill ore traffic from Cockburn on the SA/NSW border to Belalie North, just west of Peterborough, until the arrival of the 400 class Garratts in 1953, after which they were withdrawn and scrapped. This model of one of the SAR 300 class locomotives is being built by Maddie using a one-off Alyn Models brass and whitmetal kit.



Maddie Collins built this Sn3½ SAR narrow gauge 'Short Tom' car, named 'Flinders', using 3D printed parts and painted it in the standard SAR red livery with orange window frames. The prototype of this particular vehicle has been preserved and can be seen running on the Pichi Richi Railway at Quorn.

Another of Maddie Collins' models, also in Sn3½, is this SAR narrow gauge 'Long Tom' carriage, named 'Wandana', also built using 3D printed parts. It sports the green and cream colours that distinguished the SAR's isolated Port Lincoln Division on the Eyre Peninsula. The prototype of this vehicle has also been preserved by the Pichi Richi Railway.



Goods Wagons of the NSW Railways 1855-1905 by Ian A Dunn. Published by SCR Publications, PO Box 345, Matraville 2036. Ph: (02) 9311 2036. Fax: (02) 9661 4323. Website: www.australianmodelrailways.com. Price: \$110.00 (plus p&p).

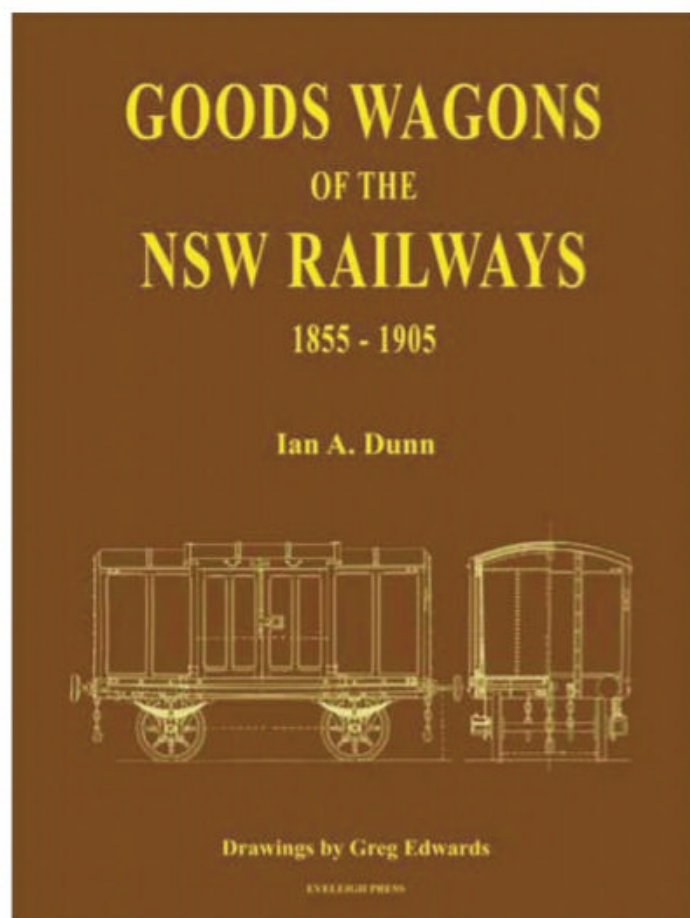
Following on from its highly acclaimed volumes on the coaching stock of NSW, Eveleigh Press has now turned its attention to the less glamorous, but equally important goods wagon fleet. Previous publications on this subject, though worthy for their time, have only skimmed the surface of this vast topic – now the depths have been plumbed!

Modellers of relatively modern outline are advised not to dismiss this book on the basis of its title – significant numbers of the wagons described in this book, and their progeny, survived a fair way into the twentieth century, and the background and development of goods wagon designs in NSW deserves a wider audience than merely those interested in 19th century matters. The array of excellent photographs alone makes this volume a must for anyone who has a passion for railways, both real and model, as well as the social history of the state and its railway system.

The author, Ian Dunn, has a writing style that is concise, authoritative, yet readily digestible, as you would expect from a career educator with an already impressive CV of publications. He appropriately acknowledges the invaluable research input undertaken by Don Estell and Robert Merchant, and text and images are ably supported by 85 excellent HO scale line drawings from Greg Edwards of Data Sheets fame.

The author takes us back to the embryonic days of goods wagon acquisition in NSW when, for a long time, as with the locomotives, proven British designs were the logical choice.

By the 1880s, the American influence was making its presence felt, both in locomotives and rolling stock, with bogie goods wagons being tried. Nonetheless, four-wheelers continued to reign supreme for a considerable time, though every aspect of componentry underwent evolution – frames went from timber to steel, brake blocks from wood to iron,



American Westinghouse air braking was introduced. This blend of British and American influences produced a broad, variegated canvas for the modelling enthusiast to be inspired by.

Such was the expansion of NSW railways, the lines radiating out as finances permitted in order to tap the produce of pastoral holdings throughout the state, by 1905 it was the largest industrial enterprise in the country. Many lines were constructed for strategic and political reasons, the line to Bourke for instance in order to challenge the river trade down the Darling to South Australia, tapping the grazing herd trade and then minerals from the Cobar branch.

The variety of products transported led to the development of many different types, stock wagons for livestock, open trucks for just about everything, including coal, wool, bagged grain and farm machinery, vehicles with removable hoppers, along with a number of other types, for minerals such as coal, flat wagons for timber, covered and louvered vans for perishables such as milk churns and fruit, tank wagons, ballast hoppers and their attendant plough vans, etc.

Other subjects addressed are service vehicles and accident cranes, and the evolution of wagon roofing design, initially canvas coated with waterproof dressings, later to be covered with 'shade'

roofs of corrugated iron. Of the various types tried, not all were successful, some were discarded or rebuilt. For example, many different types of refrigerator cars were experimented with for the transport of chilled meat.

Local manufacturers soon challenged imports in the production of rolling stock and it is surprising to this reviewer to discover just how

many local wagon builders there were. Some readers, as I was, may also be surprised to learn of the many versions of, say, the D wagon, the variations within the type, as well as the large numbers produced from a variety of sources.

The evolution and variety of underframe construction is described in great detail by the author. We learn of gussets and shackles, couplings, from chain link to auto, of improved wheels and their different spoke arrangements, axles, journals and suspension, of sprung buffers, of the development of steel channel solebars and composite underframes etc. Many of these improvements related to the ever more powerful locomotives that required trailing loads to have stronger drawgear.

Bogie wagons arrived reasonably early, which led to experimentation with different types of bogies and truss-rod tensioned chassis. Still, many loads in our widely dispersed, low-population state were small, thus the four-wheel wagon had a long career on the NSW railways. Iron and steel began to replace timber underframes on the four-wheelers towards the end of the 19th century and, although full metal wagons were tried, timber remained a major component of many goods vehicles until after World War Two. It is interesting to learn of the different timbers tried, a trial and error process, that led to Kauri and Tallowood being the

preferred types, as well as of the various fasteners, screws quickly finding favour over nails...

Knuckle couplers lengthened the operational lives of the four-wheeled trucks, proving stronger and quicker to apply than the unwieldy link couplings, thus improving safety for shunting staff, who all too frequently sustained injuries and fatalities. Transition links on autos are described, required to couple those older vehicles not suited to autos. It is salient to learn it was to be the 1980s before all stock was auto-coupled.

Whether it is painting, colour shades, vehicle classifications, lettering and numbering styles and placements, no stone is left unturned in the quest to cover all the ins and outs of the NSW goods wagon fleet.

A chapter with a curious title is *Dramatis Personae* (Latin for 'the main players') and this deals with the decision-makers at various points of NSW history, be it Whitton, Midelton, Goodchap, Eddy, or Thow, along with a host of others who did not always see eye to eye...

In summary, this is a thoroughly researched publication, replete with top-shelf diagrams, tabulations, drawings and photographs. It will be an invaluable resource for modellers and historians alike and hopefully its expected success will encourage the publishers to produce further volumes covering the 20th and 21st centuries, à la the coaching stock series.

Chris Sim

REVIEWS

The products covered in the Review pages have been supplied or made available by the manufacturer, producer, importer or retailer listed in each product heading. AMRM welcomes access to new product lines for inclusion in the Review pages and requests items be addressed to the Editor at Australian Model Railway Magazine, PO Box 345, Matraville 2036. Readers are reminded that the prices quoted in the reviews are those applicable at the time of going to press. Those using the prices as a guide to purchasing products by mail order should always add extra for postage, or contact the supplier for the additional cost for mail order.

Editor

NSWGR Six-wheel Brake Van kit in HO scale by Peter Boormans Workshop, 187 Old Ipswich Rd, Riverview 4303. Ph: (07)3282 3663. Website: www.peterboormansworkshop.com.au. Price: \$100.00.

Prototype

This kit is a model of the six-wheeled variant of the 'early days' goods brake van with raised cupola. The kit was designed with the assistance of a Data Sheet prepared by Greg Edwards. These vans were used on the NSWGR as goods brake/luggage vans. The width of the planks may have varied during construction of different batches. Some of the vehicles were possibly designed for through air for brakes; all survivors would have been so fitted after 1890.

I have used the following references to assist in the construction of this model:

- Instructions supplied with the kit by Peter Boorman
- Data Sheet drawing by Greg Edwards *Brake Van, Six-wheeled van with lookout No. BV-02 1867*
- NSWGR First Series Diagram No.23
- *Coaching Stock of the NSW Railways* (Volume 1), pages 38-39, David Cooke *et al*, Eveleigh Press, 1999.

Between 1879 and 1882 Hudson Brothers of Sydney were contracted by the NSWGR to construct forty brake vans, numbered 58-97 inclusive. These locally-built vans were based on the 1861 Wright-built vans with outside framing. They had six-wheels, with 3'0" diameter wheels on a 5'9" + 5'9" wheelbase. An iron floor brought the tare of the vehicle to about 11t15cwt.

With the widespread introduction of the Westinghouse brake to the goods wagon fleet during the mid-1890s, seventeen vans lost their centre axle and became four-wheeled vehicles (Cooke 1999). The actual numbers of those vans that became four-wheel brake vans are contained on page 38 of *Coaching Stock...* along with a photo of the six-wheel brake van No.85. The numbers of the six-wheel brake vans built by Hudson Brothers, dates in service, changes and condemnation of each are listed on pages 38-39.



This brake van was designed and built with an internal, wheel-operated, brake gear box. The brake operating rod has an external cover, mounted at the rear of the brake van, directly above the crank, which utilises a fulcrum system mounted on both sides of each wheel with brake shoes pulled onto each wheel. There were external sliding doors and two running board steps on each side with a 'ducket' window on one end (the internal brake wheel end).

The Model

On opening and inspecting the kit, which is only available direct from Peter Boormans Workshop, either by mail order or at exhibitions, all parts were present and in good order. The kit contains polyurethane and brass castings, decals and brass wire. There are three NMRA RP25/110 wheel sets included. I examined these wheel sets and found them simply too wide and not commensurate with the given time period. I have resorted to the use of RP25/88 (axle length 23.8mm) wheel sets. Not supplied with the kit are draw hook chains, safety chains (although the anchors were provided), clear plastic for the windows, or any representation of the air brake system (if it was ever fitted).

The construction plans supplied with the kit are basic, but must be examined closely in conjunction with the Greg Edwards drawing.

Reading both together gives clarity for constructing the six-wheeled brake van. All drill sizes quoted in the instructions are metric. Incidentally, the instructions use the term 'yard brake', not an NSWGR usage. The hand brakes on this vehicle were its very *raison d'être* and were constantly manipulated by the guard as the train travelled along.

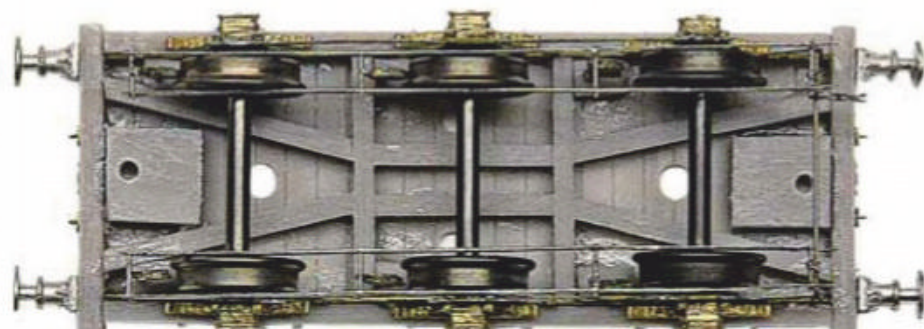
Construction

Loctite Superglue No.1577327 was used during construction; this glue when set is easily drilled, filed and when heated melts, so minor corrections can be made. Most of the construction is quite straightforward if you follow the instructions provided. I commenced by building the chassis, assembling it with solder and glue, as appropriate. Everything went smoothly as per the instructions, though one has to be careful when assembling the brake pull rods, as these are easily bent out of alignment. All

four need to be strengthened with light solder tinning on both sides to protect the straight alignment. Each rod has six holes which need to be drilled out with a 0.35mm drill. Use 0.30mm wire to ensure the holes are cleaned, aligned beside each other and the wire is at right angles to all rod holes. This is a critical test as the rods become internal and external brake rods for the correct positioning of the brake shoes, with brake hangers and brake shoes behind the wheel sets. This is not stated clearly in the instructions.

It is also very important to make sure that the wheels spin freely and are not fouled by the brake blocks. Check and make sure that all four brake rods are aligned at the rear with the brake trunnion (pivot) for later fitting of a two-piece actuating linkage from underneath the hand-brake gear box.

The instructions are not clear about what is required, or how the fitting of the brake pull rods is to be



The underside of an assembled chassis, showing the positions of the various items of brake rigging

performed, so refer to the drawings during construction.

The body needs to be cleaned of flashing, as usual with these types of urethane parts. The external sliding doors need to be fitted to the body. A modeller has two options here. The doors can be glued onto the body or a modeller can fix slides for working doors. I opted for the sliding doors with external slides as depicted in the Greg Edwards drawing.

Using the Dremel cutting blade, I cut the internal area for the doors from the body. Then I filed each side of both doorways back to the door jambs. I used Evergreen strip styrene, Item No.271 (an I beam, 0.060"/1.5mm). I cut four pieces 25mm long and filed back one side of the I beam giving the impression of a slide. I glued the slides into position, top and bottom, with 2.0mm glued to the body on the closed door side of each door frame, after ensuring the bottom slide was flush with the bottom of the body on a flat surface.

When fitting the doors into the slides, each was over height, so each top and bottom was reduced gradually by filing, along with the inside of each door, until each fitted and slid freely within the slides. The doors were removed and holes for door handles drilled with 0.30mm drill and counter-sunk on the inside with a 1.00mm drill for the glue to have a better hold on the brass 0.30mm wire handles. After the glue had dried and cured, file the back of the doors flat and flush so the doors with the handles fixed slide freely open and closed. I then set the body with the doors aside

while I completed assembly of the steps.

Upon testing on Peco code 100 track, the steps cleared the track and turnouts, and the chassis ran smoothly. As the steps were now fitted to the solebars I observed they were over-gauge. This is not mentioned in either the instructions or the Greg Edwards drawing, as no dimensions are stated in the half-end elevation and section. The steps may need to be reduced in width by 1.5mm to 2.0mm, on each side prior to soldering into position.

The instructions state that there is an actuating fulcrum to be made consisting of two parts. Studying Greg Edwards' drawing of the brake van will give the modeller clarity on how this is performed.

Place and dry fit the body onto the solebars and flooring. Using the window frame as a guide (see the instructions), a modeller will see how the two-part fulcrum is to be positioned and connected to the hand brake cover. The bottom part of the fulcrum is to be placed between each set of pull rods while threading 0.30mm wire through the middle hole in the four pull rods. Solder the wire only to the pull rods but not the bottom fulcrums.

A second piece of 0.30mm wire is now threaded through the brake pivot point, picking up the bottom part of the fulcrum. The top half of the fulcrum is threaded onto the wire between both sets of pull brake rods. The wire is pushed to the opposite side picking up the remaining bottom fulcrum and brake pivot point. The

instructions indicate this, but are not clear. As the bottom half of the fulcrums are linked to the top fulcrum cross arm, they can be soldered or glued to the cross arm. Leave the top part of the fulcrum loose as it later needs to be adjusted and later linked with the brake rod extending down from the hand brake cover as per the instructions.

When construction is almost finished, the model needs to be painted. I used the following paints:

- Body and chassis: Mirotone VY 6615 Grey Etch Primer
- Body: Model Master 1785 Rust
- Roof: Railey 001 Black Etch Primer
- Body interior: Tamiya XF-57 Buff, with light dusting of Tamiya XF-63 German Grey
- Chassis: Tamiya XF-63 German Grey
- Brake wheel: Tamiya XF-59 Desert Yellow
- Handbrake cover: Railey 001 Black Etch Primer (by hand)
- Hand rails/brake rods: Railey 001 Black Etch Primer (by hand)

The decals are supplied in two colours and appear to be correct in size and font. The modeller can choose which colour of decal to use:

- White – with *Guard, Van, Luggage* and *N.S.W R* with a range of numbers to choose from and sequenced for initial numbering or with later renumbering.
- Yellow with red shadowing – with *Guard, Luggage, Van,* and *N.S.W R* with the same numbers as above, but having the initial numbering sequence only.

I chose the white lettering and numbered it as No.87 (the prototype was introduced into service in 1882, later renumbered 10883 in 1909, then condemned in 1914 – Cooke 1999). Once satisfied with the placement of the decals and fully dry, I used Wattyl polyurethane matt spray to lock in the decals.

For the windows of the sliding doors and cupola I have used GBC A4 size, 200 micron crystal clear PVC plastic. These sheets can be purchased as a single item from any newsagent or photocopy shop. I used PVA glue, as it dries clear, when fitting the windows into place.

Finally, I connected the brake rod from the hand brake cover to

the upper fulcrum to give the appearance of the brakes fitted, and glued both into position as well as the body to the floor. I placed hand rails using a 0.30mm drill and wire into the body as indicated in the instructions. I used Kadee No.144 Short Underset Couplers to ease coupling to the rest of the stock in my collection, though specifically 'early days' modellers may prefer more prototypical hook and link couplers.

Upon completion it ran quite satisfactorily, except for an instance where I was shunting with a DCC-fitted locomotive and the engine kept stopping on turnouts with a short being indicated. I knew the engine was performing as it should, so I pushed the van slowly through the turnouts and a short was indicated. I examined the van and realised that the 0.30mm brass wire from the upper fulcrum which connects with all four brake rods was rubbing up against the RP88 wheel sets, creating the short. I snipped a 2.0mm section out of the rod, then stripped a 5.0mm piece of black coloured plastic from DCC wire to link the rod (0.3mm wire) back into alignment. This solved the problem.

Conclusion

The model runs well and is a good representation of this type of brake van as depicted on page 38 of *Coaching Stock of the NSW Railways* (Vol 1). Care and patience must be applied when constructing and connecting the brake shoe hangers, brake blocks and brake pull rods, as the tolerances are tight. The brake hangers and brake shoes must be square and level, aligned with the brake pull rods to obtain a good representation of the braking system.

The steps supplied with the brake van must be reduced in width as the standard items render the van over-width. A copy of Greg Edwards' drawing of the 1867 NSW brake van is essential to obtain a complete overview prior to construction. The instructions could have had more clarity; correct naming of parts and a clearer written explanation of the assembly sequence would be a big help. Overall, though, it is a good, accurate model and certainly looks the part. It will fit very well into any NSW 'early days' scenario.

Cliff Barrett



Nearly complete, but unpainted, model, showing the styrene door slides added by the reviewer.

NSWGR 1890 Four-wheel Ballast Plough kit in HO scale by Peter Boorman's Workshop, 187 Old Ipswich Road, Riverview 4303. Ph: 07 3282 3663. Website: www.peterboormansworkshop.com.au. Price: \$120.00.

Prototype

I have used the following as references for the construction of an 1890 four-wheel ballast plough:

- Peter Boorman's Workshop construction plans for the 1890 ballast plough (included in the kit)
- Greg Edwards Data Sheet drawing No.N-08 Ballast Plough of the NSW 1890
- Australian Railway Historical Society (ARHS) undated drawing No.D 03155 described as a Four-wheel NSW Ballast Plough Brake Van, with a cupola (Viewing windows)
- *Coaching Stock of the NSW Railways* (Volume 1), p.35, David Cooke *et al.*, Eveleigh Press, 1999.

In 1861 the NSWGR received six brake vans by ship from the English builders, Wright & Sons. Four were placed in service on the Southern system (Sydney) and given Nos 5-8. Later in 1862 two more were put into service at Newcastle and given Northern numbers of 3N and 4N. These vans had outside framing and were ventilated by louvred panels at cantrail level.

The guard's compartment at one end was 6" wider than the luggage portion of the van. Entry to the luggage area was via large outside-hung sliding doors. Van Nos 5, 6 and 8 were fitted with ballast ploughs in 1891/93 and served in this capacity until withdrawn at various times early in the 20th century. An overview of the number changes, conversion and eventual demise of these brake vans is listed elsewhere in this review (from *Coaching Stock of the NSW Railways* (Volume 1), p.35).

When originally delivered, a cupola was fitted to the roof over the guard's compartment, but this was removed when the three vans were converted to ballast ploughs.

Constructing the Kit

In my opinion, prior to constructing this kit, it is essential that a copy of the Greg Edwards drawing be obtained as this contains all



dimensions, a detailed side elevation of the braking system and how it works, along with the rear ducket type window, the position of the plough and other useful details that make construction of the model much easier when viewed in conjunction with the PBW instruction sheet.

Upon opening the kit all parts supplied were present, though a number of items were not supplied that this reviewer thought were needed. These are through air pipes for the buffer beams, air brake equipment, coupling chain links, the smaller safety chain links, plastic for the windows and prototypically correct split-spoke wheels (two NMRA RP25/88 standard spoked wheelsets, with short 23.8mm axles, are provided with the kit).

All drill sizes specified for construction are metric and I used Loctite No.1577327 superglue as my preferred choice of glue, as it is easy to file and drill, quick setting and when heat is applied will melt so that adjustments can be made. Most of the construction sequence is relatively straightforward if you read and understand the provided instructions and refer to the Greg Edwards drawing as required.

There were a few things that didn't quite go to plan. When fitting the top hat bearings into the bearing boxes, I found that the bearings did not sit evenly within the axle box. An examination found that a brass nipple at the back of the bearing was left after being turned up by the manufacturer. This was filed off, but the bearing still did not

sit flush within the axle box. A third of a millimetre was filed from the back of the bearing.

When soldering up of the chassis components is completed, the instructions state that a razor saw must be used to cut through the chassis cross beams. Ensure that the razor saw is hard up against the sole bars when sawing through the cross beams and only cut down to the bottom of the floor. Test, by dry-fitting the assemblies with the springs and axle boxes into the chassis. This should be a neat fit the entire length of the chassis with the springs just clear of the sole bar.

I fitted Kadee couplers, so the van could be coupled to my existing wagon fleet, but I also attached the safety chain anchors to help with the illusion that the model was fitted with prototypical hook draw-gear.

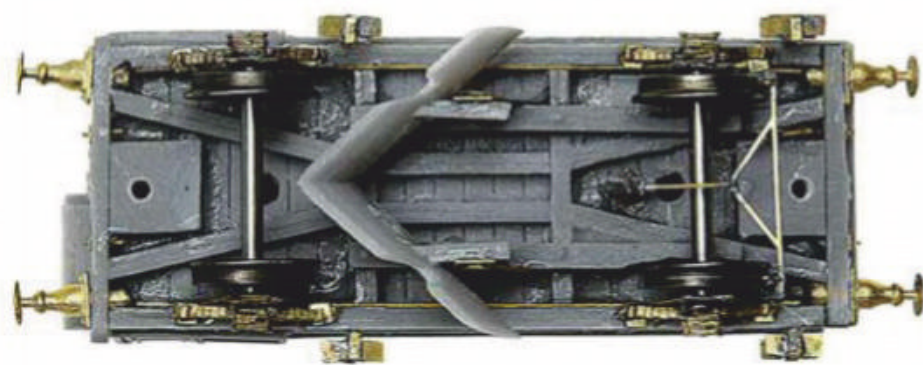
The builder should study the Greg Edwards drawing to determine which end of the chassis is going to be where the brake assembly is to be fitted, as one of the buffer ends needs to be round-

ed, extending out slightly from the edge of the sole bar. The opposite end is filed flush and square with the sole bars. The instructions are not clear on what exactly needs to be done, but perusal of the plan will clarify the situation.

When I got to assembling the wheelsets in the vehicle, the non-braking end wheelset turned freely. However, at the braking end, the wheels rubbed on the raised ballast plough bracing. To overcome this problem I used my Dremel, fitted with a narrow diamond-coated nibbler, to shave off 1mm from each external end of the plough bracing. On returning the wheels to their position they then turned freely.

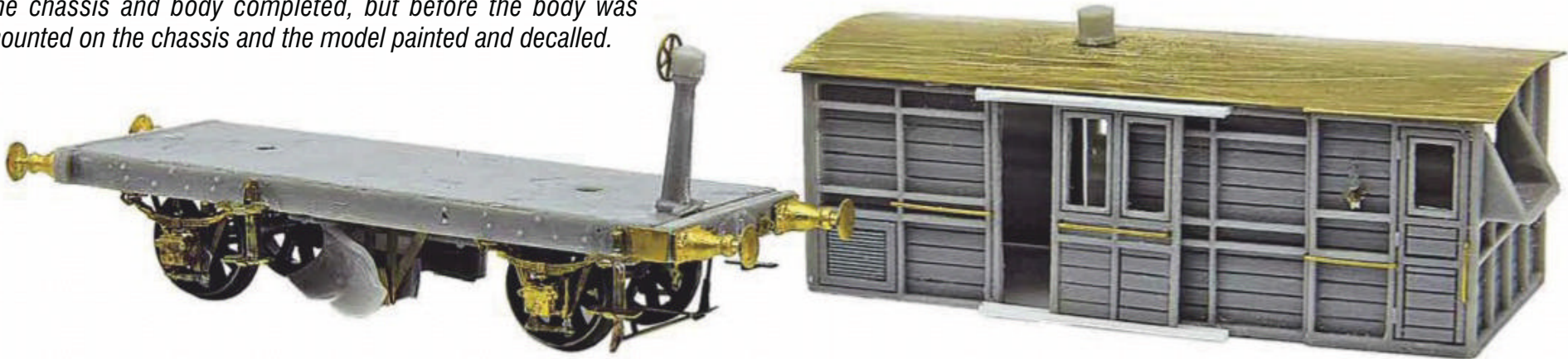
I had difficulty holding some of the brake rigging parts while soldering, so I used a mini clothes peg honed to a point to hold the parts in place during soldering. This was particularly useful while soldering the brake fulcrums.

On testing the assembled chassis on Peco code 100 track, I found that one of the brake shoes dragged on turnouts. A little gentle filing of the shoe solved that prob-



The underside of the completed chassis, showing where the mounting brackets for the plough have been ground away at the right-hand end between the wheels to clear the flanges.

The chassis and body completed, but before the body was mounted on the chassis and the model painted and decalled.



lem and afterwards the chassis ran true all over the layout.

Moving on to the assembly of the body, the modeller has two options for assembling the exterior

doors. They can be glued onto the body, or working door slides can be constructed, as depicted in the Greg Edwards drawing. The technique I use is described in my

review of the PBM six-wheel brake van kit printed elsewhere in this *Reviews* section.

The Greg Edwards drawing indicates that the plough blade was manually raised and lowered from within the van itself, but PBW do not supply any parts to replicate the controls inside the van. If you want to have the operating mechanism visible inside the van, especially if the doors are open, you will have to construct it yourself.

From the b&w photos perused it is difficult to identify the colour scheme applied to these vans and, certainly, given the time period in which they operated, a colour photo is extremely unlikely to appear! After consideration of known colour schemes and the likely employment of these vans, I decided to apply a grimy black finish, as follows:

- Body and chassis: Mirotone VY 6615 grey etch primer
- Body Interior: Tamiya XF-57 Buff, lightly dusted with XF-63 German Grey
- Roof: Railey No.167 Flat Black
- Chassis, wheels, buffers and plough: Tamiya XF-63 German Grey

- Yard brake stand: Tamiya XF-1 Flat Black
- Brake wheel: Tamiya XF-59 Desert Yellow (the prototype was brass).

To glaze the windows, I used GBC A4 size 200micron crystal clear PVC plastic. These sheets can be purchased as a single item from any newsagent or photo copy shop. I used PVA glue to secure them inside the window openings, as it dries clear.

A decal sheet with white lettering and the numbers 1-10 is supplied with the kit and these appear to be correctly sized, when compared to the prototype photo. Cut and apply with care as they are quite small. I numbered my van as No.8, then sprayed the van with flat matt polyurethane to protect the paint and decals from wear during handling.

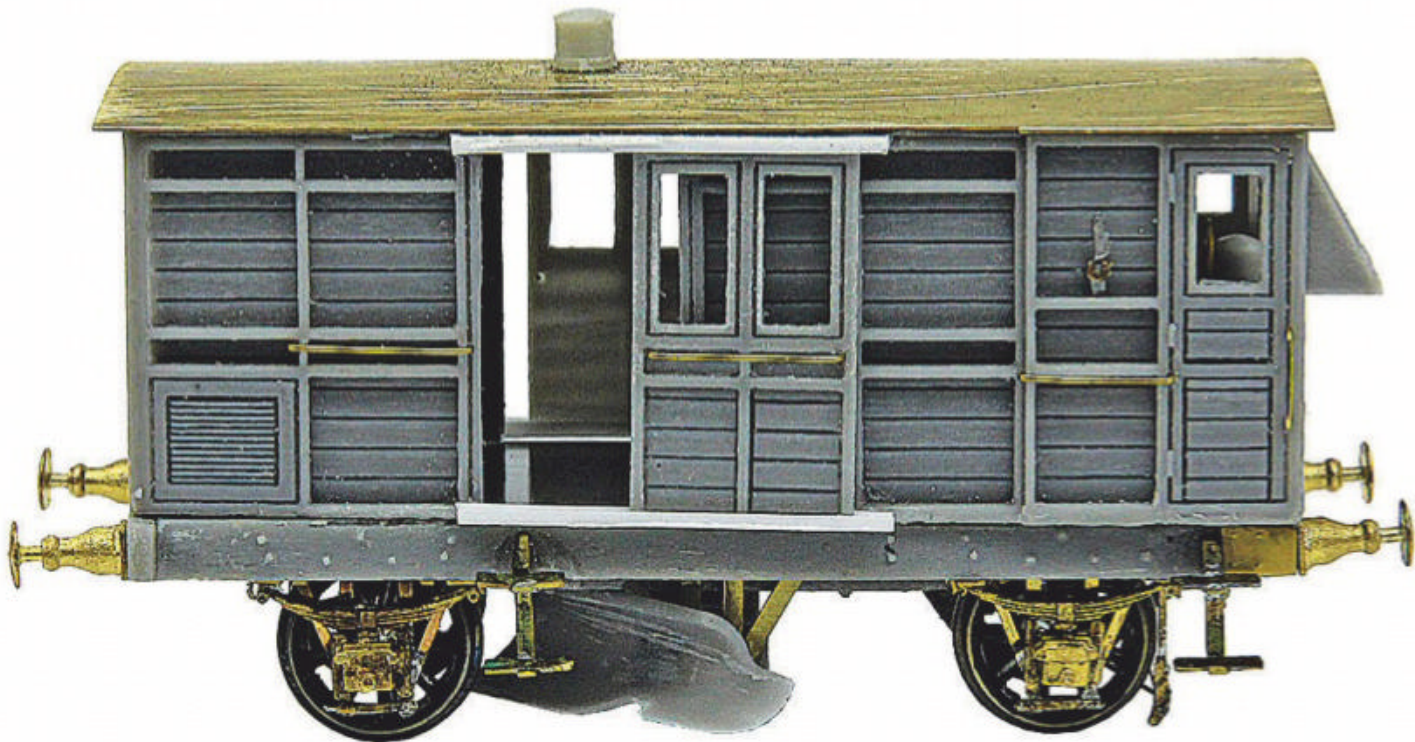
Conclusion

This is not a difficult model to construct, though soldering the fine parts can be exacting, and with patience and perseverance a fine running model can be achieved. As the instructions state, read the instructions twice before commencing construction! The assembly steps are not numbered, but are relatively easy to follow if you are reasonably experienced and understand terms such as “lamination” and “spigot”, as well as having a general understanding of how rolling stock body and chassis components go together, you should have no problems, though not all components described in the instructions are correctly named. The model is reasonably accurate to the drawings and certainly looks the part when complete and operating on the layout, especially when operating with appropriate rolling stock, such as PBM’s HBW four-wheel ballast wagons.

Cliff Barrett

NSWGR 1891 four-wheeled ballast plough (single plough)	Prototype	Model
Length	18'0"	18'0"
Width of luggage area	7'4"	7'4"
Width of guard's compartment	7'9"	7'10"
Distance between journals	10'	10'
Body height	7'5¾"	7'6"
Rail to top of underframe	2'11¼"	3'2"
Weight	7t 8cwt	26g

No.	In Service	Changes	Condemned
5	10.1861	9 (brake van) 1865-67 9 (ballast plough) 9.1891 Later 10792, X162 (5.1895)	9.1913
6	10.1861	10914 (ballast plough) 2.1891	11.1910
7	101861		11.1889
8	10.1861	X22 (ballast plough) 1893	Unknown
3N	7.1862		1887
4N	7.1862		1887



Complete and ready for painting.

Queensland Railways HJS open wagon kit in HO scale by Wuiske Models, PO Box 131, Jandowae 4410. Phone: (07) 4668 5976. Website: www.wuiskemodels.com. Price: \$45.00.

Queensland Railways introduced this class of wagon not long after the cessation of hostilities in WW2. QR was modernising its rolling stock and this 32' all-steel design suited the needs of the day (and for many years afterwards), which it did with great success. These wagons rode on several different bogie types during their lives and the bodies of many were modified in later years to carry specified loads, such as 4t cement bins. The wagons wore two colour schemes during their service, standard black when originally introduced and then QR freight wagon light grey from the 1960s.

The kit is a first for the local scene, as it is made from high-pressure injection moulded plastic (Chivers kits from the 1990s were made using the low-pressure injection process which doesn't allow the same fineness of detail). The styrene used ensures that the more commonly available glues, such as Revell or Humbrol plastic cement, will successfully bond the kit parts together, though any brand of styrene cement/solvent will do the job.

The kit has been very well thought out indeed. The removal of the sprue is best done with cutters. Once removed from the main moulding, parts can then be tidied up further with a scalpel. Take your time and you will not need to do more than minimal filing on the mouldings.

When you stop drooling over the detail on the ends and sides, you may want to start construction. Do wipe away any drool as this will affect the gluing process! The sides and ends interlock so that is simple. Take care as the truss rods are flexible, but not unbreakable. At this stage either end affixes to either of the sides. The false floor is now affixed and this will square up the ends and sides just nicely.

Once the false floor is attached, the steel weight is added onto the skeletal floor. I used two-minute epoxy for this step, but superglue would work just as well. Two-minute epoxy does, however, give you enough time to set the weight



A completed kit finished in the modern-era QR light grey colour scheme as HJS29477.

into the recess and straighten it accordingly.

Make sure that the skeletal floor is attached the right way around; otherwise the brake rigging and handbrake will not be able to be oriented correctly later. Ensure the brake cylinder guides on the skeletal floor are on the opposite side to that of the handbrake 'V', which has been moulded onto one side and truss rod piece.

The wagon is then tipped upside down and the brake cylinder and rigging fitted as per the instructions. There are two moulded guides into which the brake cylinder and brake rigging fit. These are different shapes, which greatly eases the modeller's task indeed. Even if you do not read the instructions, the photos in the instructions

will guide you to the correct orientation.

The door bangs are then added along both sides (six each side). Each door bang has a small protrusion on the back. These protrusions fit into the small holes on the side sill of the wagon. There are spares provided in the kit, as they can be "*slippery little suckers*". Then position the handbrake 'V' under the wagon. Attach the rod from that 'V' to the 'V' moulded onto the side and then place the handbrake into the groove on the sill. It really is child's play, it is so easy to put together.

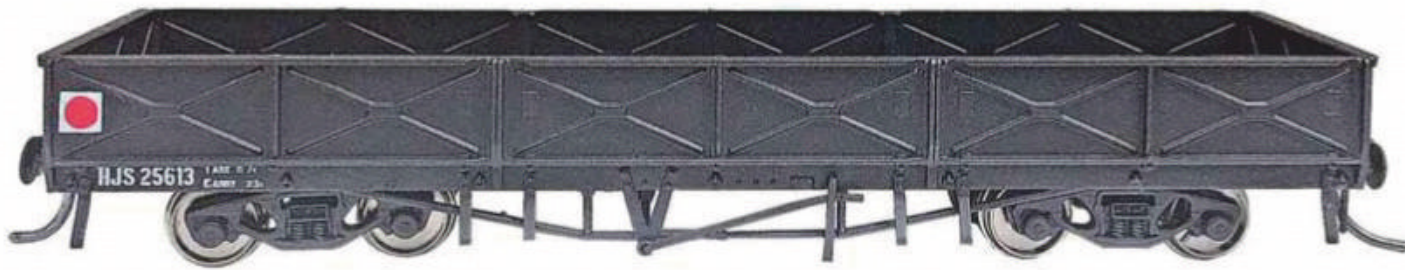
Moulded buffers have been included, as this vehicle was introduced in the 'hook drawgear' era. The supplied bogies represent a later era, but Wuiske is intending to

release suitable earlier period archbar bogies. As always, prime the wagon using a good quality primer (I use a spray can from Bunnings). When that dries, apply flat black for the pre-1960s era or QR freight grey for the later period (I use Tamiya TS-81 Royal Light Grey). If you're not an airbrush enthusiast, I suggest using 'Windspray' from the Dulux Metalshield spray can range; it is very close to QR grey and is available at your local hardware chain store.

Once the paint is dry, decal the wagon with the supplied decal sheet. Seal with a spray of Testors or Model Master flat sealer so the decals will never fall off. Finally attach couplers of your choice.

You can then weather till your heart's content and add any load





Completed model of HJS25613 wearing the steam-era all-over black colour scheme.

you can think of. I can recall seeing the oddest things in those wagons so it really is left to your imagination. For those modelling the later days of these vehicles, QR freight grey faded dramatically over the years and towards the end of the 1980s the colour was

more accurately described as being a very rusted creamy colour. There are numerous prototype photos of the wagon on the Internet, so you have no excuse not to go to town on these wagons when weathering.

On completion, the vehicle's

weight was just under the NMRA standard. If that causes you anxiety, then you could add some weight under the body, or put a load in it. The height, length and width of the model (in scale) conform to the prototype's dimensions.

In conclusion, may I simply say

that this kit, even for someone like me who has been modelling for years, was an absolute delight to construct. This kit has been very well designed and goes together extremely easily, so easily that even a novice should be able to construct it with little effort or anxiety. With a little patience and effort you will be rewarded with an absolutely beautiful wagon on your roster. As QR had several hundred of these wagons I will need a few more for my layout! I look forward with great excitement to the release of further kits from Wuiske Models if they are made to this extremely high standard. Well done, Adam!

Stephen Colclough

30 Days On Australia's Railways by David Burke. Published by Rosenberg Publishing Pty Ltd, PO Box 6125, Dural Delivery Centre 2158. Website: www.rosenbergpub.com.au. Price: \$14.99.

With a title of *30 Days On Australia's Railways* this little jewel isn't at all what I thought it was going to be. I had this mental image of some young college chap off on an 'end of summer romp' wandering around Australia by rail for a month. But no, not at all! I was ever so surprised (and pleased) with what this little book really has to offer!

OK, so what is this book really all about? Well, I would say the easiest way to sum it up is it's an eclectic set of odd, unrelated 'railway stories' that occurred over many years that just happened to have taken place in... the month of September! In fact, the late David Burke has compiled 30 different short stories (hence the name of the book) of events and different aspects of the railway systems in Australia over the years.

These 30 different unrelated stories are arranged by day of the month, but have nothing else in common, other than having happened in Australia! The stories range from less than two pages to a few pages in length. With this very short format, the book is easy to pick up for a few minutes and be done until the next time. I like to think of it as a book for the 'throne room'...

As I mentioned, most of the stories are not really related. But some are 'loosely' tied together. A case in point is the chapters: *Remove that Tram!*, then *Bring Back The Trams!* and my personal favourite: *Infernal Combustion!* With this book full of odd events that took place in the month of September in Australia, I must think that David had an active sense of humour!

These stories range from specific events to government programs to particular people who shaped the railway industry over the years. Of course, there are stories of the 'first of this' and the 'last of that' and everything in between. And I really enjoyed the first-person accounts from important and sometimes not so important people along the way.

This book has plenty of photos and drawings to accompany the stories. And for good measure, there are a number of prints of famous Phil Belbin paintings, appropriately placed to illustrate adjoining stories. In addition, there are what I like to call 'bits and pieces' from periodicals of the time.

My personal favourite 'bit and piece' came from the *Sydney Punch* dated 23 September 1882:

"That Horrible Tram

(A Route Residents Refrain)

Oh, that tram! The horrible tram!

Butting its way like a bellicose ram!

Floundering through our narrow streets,

Frightening the wits out of all it meets,

Smashing a youngster here and there,

Shaving skulls by breadth of a hair!

Snorting, wheezing, groaning along, Its cracked bell tinkling a dismal song:

For all our comfort and safety to damn,

There's nothing can beat that horrible tram!"

(What's not to like about that one!)

Now, you might be wondering what does this fun little book have to do with railway modelling? The simple answer is it has everything to do with it! With every one of my scenes on my layout and with every one of my photo modules I always build a 'back story'. I like to make up an entire story of what is going on, when and where it is staged and who the people are who are populating the area. I sometimes even go so far as to write an article to go along with the scene, then along comes this book with lots of different short stories of real people and real events! It is rich fodder that I can use to establish my back stories. Just think of all the scenes I can build using what I have found in this book! Let's see... The 'first' of this and the 'last' of that... and, of course, I just love trams. You get the idea...

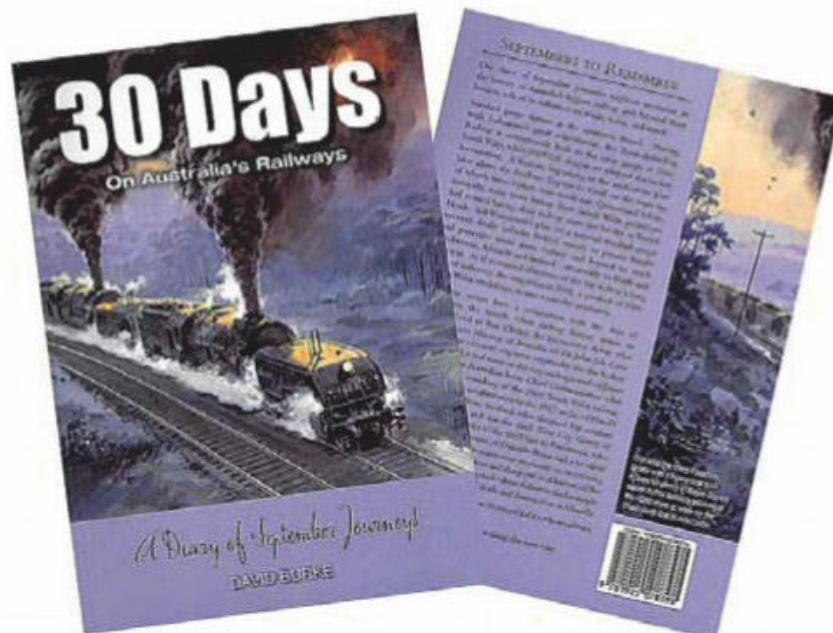
Well, there you have it. I don't want to tell you absolutely everything that's in this little book, as I want to leave some surprises for you readers to discover. This offering, *30 Days On Australia's Railways*, was really not what I had

expected, but it turned out to be a fun read. This book from start to finish took me about six fun-filled hours to read and it quite nicely kept my attention.

I would say that anyone interested in Australia and history and how the railways changed things will enjoy this little book. Without any doubt, the railway made the country what it is today. Simply speaking, Australia wouldn't be the place it is today if it wasn't for the railways and the people who made them work. We owe a great debt of gratitude to those visionaries and risk-takers who went before us.

I really enjoyed this little book, and I think you will also. Give it a try.

Dennis H Murphy





Southern Rail Trackside Sanding Tower, ready-to-place in HO scale by Southern Rail Models, PO Box 427, Salamander Bay 2317. Ph: 0418 282 564. Website: www.southernrailmodels.com.au. Price: \$139.00.

Rail's great advantage relative to road is the low rolling resistance of steel wheels on steel rails. Most rail vehicles these days use roller bearings, improving their mobility further. Which means that the least gradient can have unattended equipment disappearing downhill at a good clip if the hand brakes, or (in steam days) 'sprags', were not applied.

Going upgrade is another matter, as the relatively frictionless interface between wheel and rail can be inadequate to transmit power to the rail, causing driving wheels to slip. Judicious application of a friction agent is often necessary, traditionally in the form of sand between wheel and rail. Serious grades on dual tracks often display differently coloured ballast; light grey on the uphill track and dark grey on the downhill, due to sanding and braking respectively.

Loco sand boxes were initially set low, to suit manual refilling, but

large, powerful engines can get through a lot of sand, so in later designs, the dried sand was lifted (often by compressed air) and top-loaded in a sand box on top of the boiler of steamers or down the side in diesels. As manual labour became expensive, the task was mechanised, often in the form of a tower as per the subject of this review.

The Model

The Southern Rail sand tower comes in a good quality box, containing sculpted foam packing (to defeat the Post Office soccer players) and deliver a pristine structure to the customer. The foam only fits the model one way, so take care returning the model to its packing.

The model is quite impressive with busy, interesting detail, such as a pair of workman platforms astride the (not supplied) track. It is recommended that track is laid directly on the base or, if flexible track is used, to remove the sleepers and lay only the rails through the structure, to give sufficient vertical clearance. There is a sand supply pipe up from the base (from an off-scene sand drier shed) and there are two sand hose loading

systems, one over the middle for boiler-top sandboxes and one down each side for diesels. Both sand hose options come with the tower.

This is a fair-sized object, with the base a scale 27'6" square, standing 47'6" high. From the 2.5mm thick base, the loading gauge is about 15' to the sand pipe and 11' between the loading platforms. This is smaller than the NMRA standards gauge, so it probably won't take a Union Pacific *Big Boy*, but the more diminutive NSW locos should have no trouble. Straight track would be wise, as mounting the tower on a curve may cause clearance grief.

Construction is sound, with sturdy cross-sections and good, unobtrusive glue joints, so it should not shed parts. The tank access ladder and the sand hoses are a little over-sturdy perhaps, but not noticeably unless you're picky. For later eras, the ladder could be replaced by a finer one with a safety cage (e.g. Tichy Train Group).

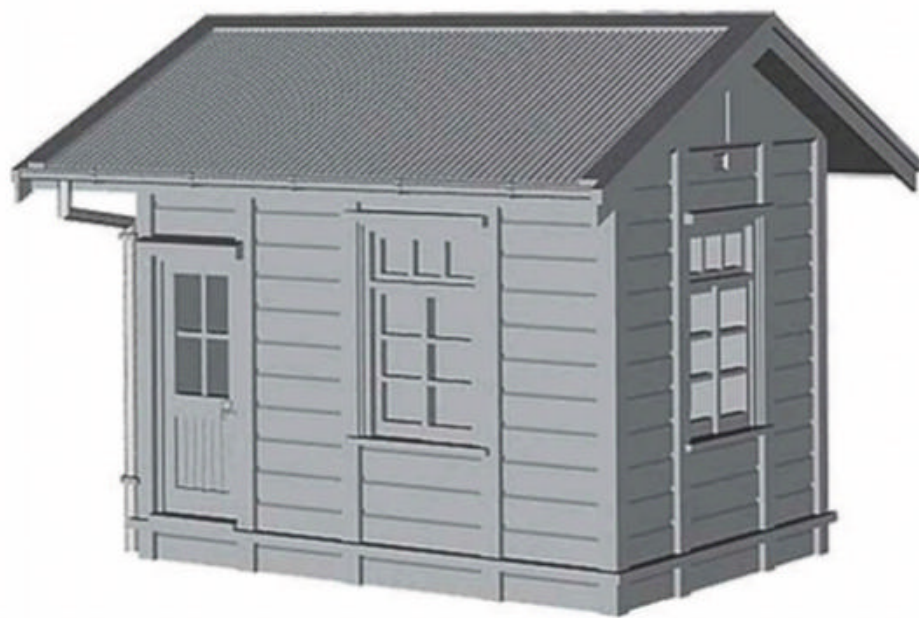
Speaking of eras, this design of sanding tower tank is based on the one at Cootamundra, in southern NSW, which was, I understand, built by the NSWGR for the 57 class locomotives, for which Coota was the southern limit of their oper-

ation until the Bethungra Spiral was opened in 1946. The 1940s era 38 class and 1950s 59 class also carried boiler-top sandboxes. The sand was decanted into portable containers for the older classes of steam locomotives that retained footplate level sand boxes, so this type of sand tower is suitable for any post 1940s era scene, whether featuring steam or diesel. The other states have similar structures, so its potential use is not confined to NSW layouts. As far as I know, the sand towers are still in use; they have adapted to diesels, which are just as skittish on grades as steam locos.

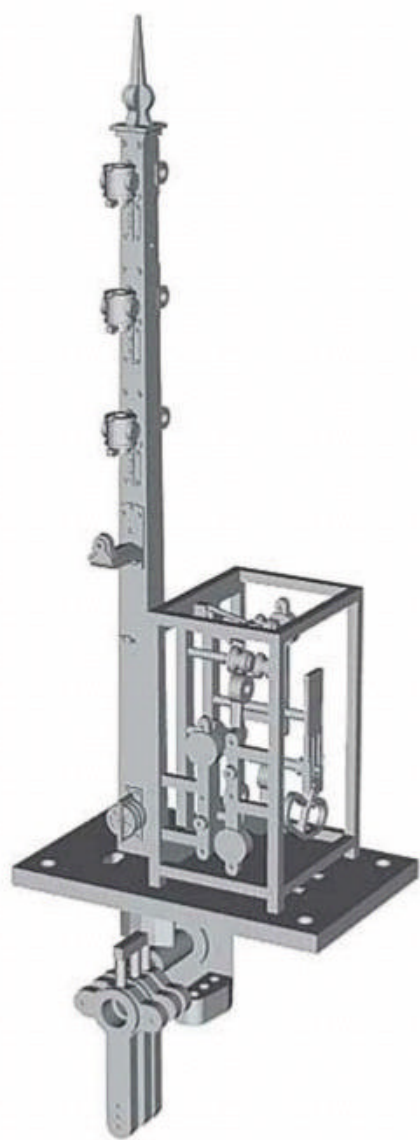
Locomotive servicing is a rather neglected modelling scene, but is really good for operations, with various engine types moving about purposefully, and coal/oil and sand loads, lots of stuff lying around and much of interest. They are a weatherer's paradise, very popular as layouts in UK and US exhibitions, some even including artistic smoke effects. This Southern Rails drop-in structure is just the ticket for such scenes. A good and useful model, which I am very happy with and have no problem recommending to fellow AMRM readers.

Bill Cooper

RECENT RELEASES



Signals Branch have released HO scale 3D printed parts to enable construction of the pre-cast concrete signal box that once stood at Gilmore on the Tumut branch in southern NSW. The walls and roof are available in either White Versatile Plastic or Fine Detail Plastic, while the detail parts; door, windows, gutters, downpipes and barge boards are available in Fine Detail Plastic only. The box at Gilmore was a standard design that was once widespread throughout the state.



Signals Branch have added to the signalling parts available from their shop on the Shapeways 3D printing website with the release of an 18' three-arm shunting signal post with detail parts and a signal ladder with cast base and safety cage at the top for the 18' post, both in Fine Detail Plastic in HO scale and in White Versatile Plastic and Fine Detail Plastic respectively in O scale.



Model Trains India by Nitish Industries have released HO scale models of VR 'somersault' home and distant signals. The signals are handmade from brass etchings and castings, are painted and lit, and otherwise ready-to-place, although the decision on how to operate the signal arms is left up to the purchaser (via a fully-mechanical or electrically-actuated connection to the operating balance weight and operating rod). At the moment the signals are only available via the Model Trains India website, though the company is looking for an Australian agent(s) to assist with retailing their current and planned range of Australian prototype products. A range of NSW signals is in development.



AMRM News



A few factory painted samples of the extensive range of r-t-r HO scale BDX/NOBX/RCFX NSW open wagons (some with doors removed, as per the appropriate prototype) which Auscision expect to be taking delivery of in 2019.



Scratchbuilding a VHO

Unfortunately, we have had to hold the last instalment of Kevin Tiernan's *Scratchbuilding a NSWGR VHO Passenger Brake Van* over for a future issue. It just would not fit in this one!

Models and Miniatures at Thirlmere

This year's annual *Models and Miniatures* event at the NSW Rail Museum at Thirlmere, NSW, to be held on the weekend of 13/14 July, will feature a selection of exceptional NSWGR prototype layouts, including Peter Lewis's acclaimed HO scale *Wyee* and the N Scale Group's impressive *South Creek*.

The special museum display on the theme 'Journeys' will feature a selection of models from the State and private collections, with a focus on NSW railway coaching stock.

The event will also feature live steam models from Rails in the Garden, the Meccano Modellers Association's display of working models of NSW locomotives and steam powered machinery, steam train rides on the Thirlmere Loop Line, mini-train rides on the museum site and various activities

Carson, a German company, is developing a ready-to-use HO scale, radio-controlled road vehicle system. The first release is a range of Volkswagen T1 vans, using a 2.4 GHz remote control system to control speed and steering. Powered by an integrated Li-ion drive battery, the vehicles can achieve a driving time of up to 35 minutes with a 30 minute charge cycle. The vehicle is recharged by plugging it into the transmitter. With a very small turning circle and fine speed control provided by the transmitter, it can be used to provide animated road vehicles on a model railway layout. At this time there are seven different variations on the Volkswagen van available, all painted and with working lights. The Fire Department van even has flashing lights and a siren. The van power unit is self-contained and can be used to power other similarly-sized models. The Carson range of radio controlled vehicles is available in Australia from Orient Express in Unley, South Australia.



schemes. The sets will be available in either standard DC or DCC-sound versions and will feature operating LED headlights and marker lights with a manual override switch allowing them to be turned off if not required. The DC versions will also be DCC-ready with standard 21-pin sockets for those who wish to fit their own DCC chip. The DCC-sound version will have an OEM ESU LokSound V5 21-pin decoder with speakers in both the HPF and PF so each power car of the set will emit sound, which will be the authentic sounds of the Cummins NTA-855-R4 engines and RVB three-chime air horns fitted to the prototypes.

Broad Gauge Models have received all their tooling from DJH, with the exception of the tooling for the VR D³ 4-6-0 steam locomotive, which appears to have vanished without trace! While this has been somewhat frustrating, BGM have taken it on the chin and arranged to have new (improved) tools and masters made locally, allowing more accurate reproductions of all the subclasses to be allowed for. Work proceeds on the D³, D^d, D¹ and D², with release planned for "as soon as possible".

The absence of BGM solder flux from the market (the supplier stopped manufacturing it) has finally been addressed with approaches to an alternative supplier in progress with a view to getting BGM flux back on the market.

The brass kit for the VR ZF brake van should be available around the time you read this.

Comrailmodels have released 3D printed body kits for the

aimed at children.

For more information contact Ann Frederick, THNSW Public Programs Manager, via email: ann.frederick@thnsw.com.au or ph: (02) 4683 6800.

New Products

HO scale

Auscision reports that their factory

has confirmed that the r-t-r NSW RUB air-conditioned cars are scheduled to arrive in May, in time for release at the Epping Model Railway Club's 2019 Rosehill exhibition on the June long weekend. Also confirmed by the factory are the NSW 85 class Co-Co electric locomotives, along with the 'tri-Bo', 8650 electric locomotive, all due in

June, with the re-run of the NSW 422 Co-Co diesel locomotives expected in July.

Just before we went to print, Auscision announced their intention to produce r-t-r models of the NSW 900 class (DEB set) diesel trains. The trains will be retailed in four-car sets, covering the Indian red, 'reverse' red and 'candy' colour



First factory samples of the planned range of r-t-r HO scale VR 'Tait' suburban cars which Auscision expect to be taking delivery of towards the end of 2019/early 2020. The driving and trailer car will be available in a number of four- and seven-car sets, with both spoked and disc wheels, while the parcel van will also be available with spoked or disc wheels and in two red and one blue/gold colour scheme.



Some factory-painted samples of the Auscision r-t-r HO scale NSW 80 class locomotives that are expected to arrive in Australia in August 2019.

Commonwealth Railways VEX/ABEX covered box vans, as built by Commonwealth Engineering, Bassendean, WA, in 1966 and allocated road numbers 1868 to 1873. Available from Paul Grundy's online shop on the i.materialise 3D printing site.

Eureka Models are expecting delivery of their r-t-r NSW four-wheel RH cement hoppers and the steel hopper version of the LCH to arrive in late May 2019, shortly after you read this.

At the time this item was prepared, factory-painted samples of re-run of the NSWGR 38 class 4-6-2 steam locomotives were expected to arrive in early May 2019. Eureka is confident that the production run should arrive later in 2019, perhaps even in time for release at the AMRA (NSW) October long weekend exhibition at the new venue in Homebush. The production run of the r-t-r NSW twelve-wheel TAM sleeping and MCS composite sitting cars is in the process of being assembled and should also arrive later in 2019. Eureka expects them to definitely be available at the AMRA (NSW) Homebush exhibition.

Ian Lindsay Models have received further stocks of their etched metal compensated W irons, allowing the NSWGR cast urethane five-plank D wagon to be made available again. The etches are also available separately for upgrading other manufacturers' four-wheel wagon kits and scratchbuilding vehicles not available commercially.

On Track Models were expecting to have received the re-run of the updated NSW 82 class Co-Co diesel locomotives by the time you read this. The upgraded model features new air hoses, MU cables, detailed dynamic brake grid, new speaker enclosure and an ESU-designed main circuit board. The sound-fitted option locomotives will have a factory-installed ESU Loksound 5 DCC chip with an ESU-provided custom-designed 82 class sound package. The model is also available in standard form (no sound) for DC users.

Also due to be delivered at the same time is the new run of the 40' curtain-sided containers with all new artwork and company designs. The containers will be available in two-packs and there will be 14 new packs available.

All these newly delivered items will be available at the On Track stand at the Rosehill exhibition over the June long weekend, as well as by mail order directly from On Track and through their current retail network.

Phoenix Models have announced that they will produce a r-t-r VR D³ 4-6-0 class steam locomotive, using a new manufacturer who has an excellent 'track record' producing models for Canadian firm, Rapido, and Britain's National Railway Museum, among others. The model will have a choice of two tenders, the original part rivetted/welded, or the later fully-welded design. The original tender will have a new body on the Eureka K class tender underframe, while the welded tender will utilise the tender already in production for the Eureka K class. The models are currently expected to be available in the first quarter of 2020.

Samples have been received and approved of the updated ex-Eureka VR E/SAR O open wagon, VR S flat wagon and OT/TW rail tank cars. These vehicles are now in production with arrival expected in July/August 2019 in time for release at the AMRA (Vic)

Caulfield exhibition. The VR E/SAR O open wagons have been considerably revised from the original Eureka design; there are now five specific variations of them being produced. There will be the original fully-rivetted designs as delivered to the VR and the SAR in the 1920s, the smooth-sided, post war rebuilds of the E wagon with HY-style ends and two variations of the welded-body SAR O wagons. All variations will have fully-detailed interiors.

Added to the OT/TW rail tank car run is a two-pack featuring the Koppers-liveried, tar-carrying, bogie-exchange version that ran between BHP Newcastle and Melbourne on the standard gauge. More broad gauge OT/TW two-packs will also be available.

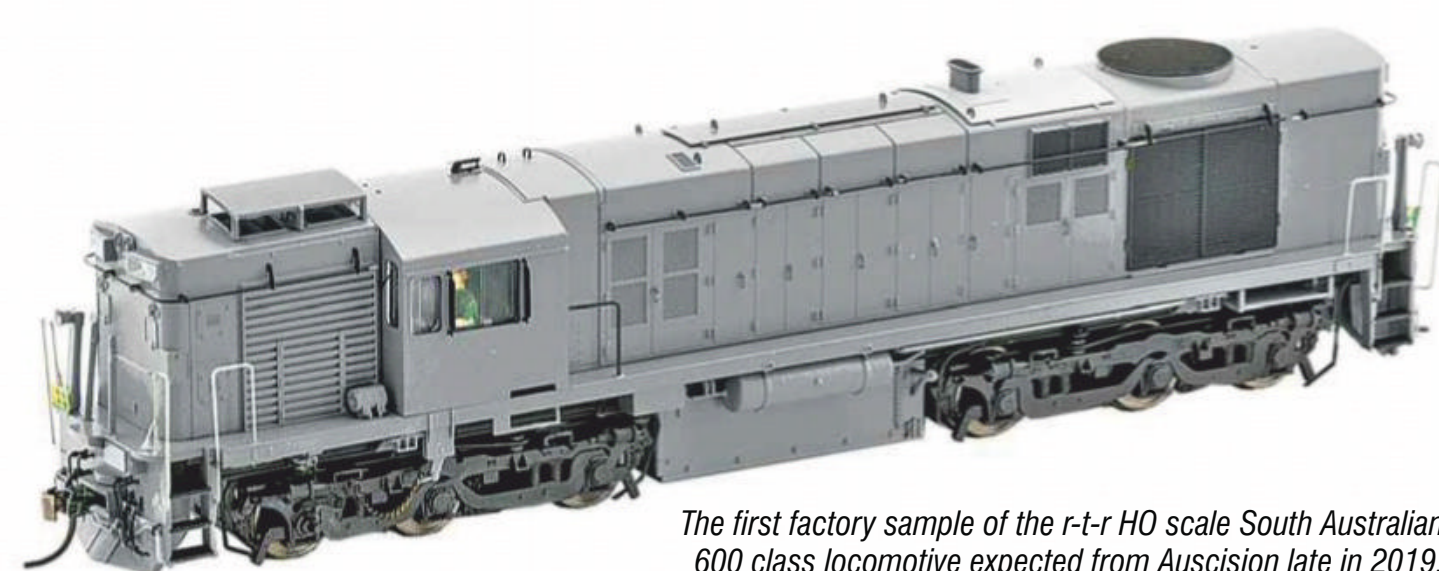
SDS Models have released their NSW ICX 45' container flat range, along with the latest batch of AustrainsNeo NSW four-wheel S wagons. This batch of S wagons includes the wooden-bodied versions, as well as those used on the Ashfield wire train and a huge variety of early and late period 'traffic' wagons, along with a substantial number of colourful Way & Works and other 'special use' wagons.

SDS have announced that they are re-releasing the ex-Austrains (under the AustrainsNeo brand) VR BPL/APL/BCPL passenger cars and that these carriages have undergone a similar upgrade to the NSW end-platform cars. The updated vehicles are expected to arrive in Australia during the fourth quarter of 2019.

Development of the upgraded ex-Austrains NSW 81 class continues. At the time this item was prepared the ESU motherboards had been received and were being tested. Assuming all is well with these, production should commence to allow delivery late in 2019.

Future releases of the NR class Co-Co diesel locomotives will be under the SDS label, rather than the previous AustrainsNeo as, after 17 years of faithful service, the original Austrains tooling is being completely upgraded. The only carry-overs from the Austrains model will be the diecast chassis and the gearboxes; everything else is being upgraded to current standards.

The first of the new models to be delivered will be the two 'Indigenous' NR locomotives, NR30 *Warmi* and NR52 *Kungara*



The first factory sample of the r-t-r HO scale South Australian 600 class locomotive expected from Auscision late in 2019.

Mankurpa, expected to arrive in June 2019. Only 660 models in total of these locomotives will be produced in this extremely limited run. These will be followed in July/August by more of the all-new models in all the 'popular' colour schemes, such as the two *The Ghan* and four *Indian Pacific* colour schemes, as well as the *Southern Spirit* and PN four- and five-star schemes. Limited numbers of the older National Rail schemes will also be available.

Trainorama report that during the manufacturing process for their r-t-r NSW 44 class/SAR 930 class Co-Co diesel locomotives, minor damage to some of the smaller dies was found and had to be repaired before production could be completed. Unfortunately, this has pushed the delivery date of these locomotives back and the 44 class is now expected to arrive towards the end of July 2019, with the 930 class expected shortly after in mid-August, hopefully in time for release at the AMRA (Vic) Caulfield exhibition.

O Scale Broad Gauge Models advise that their On30 kit for the Baldwin-built 2-4-0 *Little Yarra*, that ran on Victoria's 3' gauge Powelltown Tramway, is back in production and should be available again soon.

Signals Branch have added a num-

ber of items to their 3D printed range of NSWGR items available from the Shapeways 3D printing website. Along with the 18' three-arm shunting signal post and signal ladder mentioned in the *Recent Releases* section there is a set of NSWGR shunting signal arms, including siding, shunt ahead, wrong road and calling on, available in White Versatile Plastic. A chimney and dome for the 30 class steam locomotive (suitable for both 30 class tank and 30T class tender versions) is available in Fine Detail Plastic.

N Scale

Comrailmodels has released 3D printed models of the Commonwealth Railways HRD/AVEY and the HRE/AVEY relay vans. Also available the GMX/

AOMX open wagons and the R class flat wagon, along with the original *The Ghan* consist, NHBR, NABP/NBP, NABPA, NABPB, NRC/NIA, ND, NAR, NRP and NSS passenger carriages, plus the NGG car carrying wagon and the NLA and NVB mail and stores wagons. The models are available through Paul Grundy's online shop on the i.materialise 3D printing website.

Publications

Train Hobby are expecting to release the first book in their new Ted Payne 'mini-series' in May 2019. Entitled *The Steam Era • Victoria* this 80 page, hard cover book will feature 70 of Ted's magnificent full-colour images of Victorian steam.

Compiled by James McInerney



Trainbuilder are planning a limited re-run of some of their sold-out r-t-r HO scale Victorian Railways steam locomotives. Expected to become available again (in limited numbers) late in 2019 are the J class 2-8-0 in both coal and oil, K class 2-8-0 with rivetted tender, N class 2-8-2 (including SAR 750 class version) and the A² class 4-6-0 with Boxpok driving wheels (including A² 986 as preserved). See the *Trainbuilder* website for full details and order forms.



Vale Peter Ford 1950 – 2019

It is with a heavy heart we record the death of Far North Hobbies' Peter Ford, who passed away on 19 February 2019 after a sudden heart attack. Peter Ford cast a large shadow over the Australian model railway scene in the pre-Chinese manufacturing days and his enthusiastic personality made him a friend of all he met.

Peter was a country boy from Parkes (NSW) who excelled at sport, but struggled with academia. He won a mechanical apprenticeship with the NSWGR and trained mostly in country depots. Unfortunately, his beloved steam had almost disappeared from the railways, but this did not curtail his interest or his ability to learn. Before leaving the railways he had been working as Relief District Manager, at times working out of Werris Creek.

Newly married, Peter and his wife Sonia left NSW for Far North Queensland where Peter worked

on vessels in the tourist industry before becoming a marine engineer on a tug boat, a career he maintained for decades. Upon retirement from the sea Peter became a Pacific National train driver working out of Mackay to locations such as Townsville and Rockhampton. During this period he was also the manager of the local Pacific National terminal, a task for which he had to reach a high level of industrial management diligence.

Peter maintained an interest in the railways for all of his life. This commenced in western NSW with his association with the group that was to become the Lachlan Valley Railway, assisting Roy Miles with 5367, the restored Standard Goods 2-8-0, as it hauled tourist specials around the state. Peter helped preserve a pay bus, FP 11, (now at the Cooma Monaro Railway) which he later replicated in model form.

The move to Mackay may have taken Peter away from his first love, but steam preservation was in his blood and he was part of the driving force that saw the Mackay Heritage Railway formed and the preservation of the Queensland Railway BB18½ No.1037. Peter used his skills to cajole local businesses to donate goods and services which he and his band of workers used to develop a small parcel of land at Mackay Outer Harbour that formed 'the site' for the disassembly and restoration of 1037. Just prior to the time of his death, the group had to move from the harbour to a new site at Paget. To assist with levelling the site a small bulldozer was acquired with Peter spending many hours levelling the land for the new track and buildings.

Peter was always on hand to help any group that needed it and often attended auctions to help groups or others acquire a spare part or two. It was at one of these auctions that Peter's hand was up when the hammer dropped and he found himself the owner of the Hunslet locomotive *Seaforth*, a diminutive 0-4-2 tank engine that originally worked at Kalamia Mill, and then Pleystowe Mill. Hunslet builder's No.1026 of 1910 still sits in the backyard of his Mackay home.

Peter's involvement with the preserved railway scene also included working with Association of Tourist Railways Queensland (ATRQ) preparing codes of practice for boilers and safety issues.



Peter admiring a model of a NSWGR A class 0-6-0 locomotive, a gift on his fiftieth birthday.

However, on real railway issues, it could be said that Peter achieved fame, but no fortune, when he became involved with the cane tramway steam engine used in the filming of the blockbuster movie *Australia*. A planned short period of preparing and driving the engine turned into many weeks and Peter was quite happy dropping the word that he had evening drinks with Nicole and Hugh (Kidman and Jackman)! After many hours of driving the engine around the film set the most we saw of Peter in the movie was a passing glimpse of the back of his head.

Peter was an extremely gifted engineer and his knowledge of industrial processes and materials was almost second to none, and he used these skills for the benefit of the model railway hobby.

Upon reaching Mackay Peter sought out the local model railway club and showed keenness to join.

"This bloke seems to know a thing or two" was a statement by club president, Doug Head, who was keen for him to become a member. Peter's interest was the NSWGR and while he favoured HO scale he was always tempted by the obscure. In the mid-1980s, Peter, and his wife Sonia, began Far North Hobbies, working from a small flat with two young children underfoot. The first 'workbench' was a board put across the sink to make a good casting surface.

Peter had become a supplier of kits, initially using Araldite epoxy resin, but later using the then new urethane casting materials. He was a gifted patternmaker, as accurate as the best in the country, but faster than most. He could complete the masters for a simple four-wheel open wagon in a night or two. Watching him make the patterns was an experience in itself. Despite the accuracy of his work, he rarely referenced the ruler as he developed the parts that assembled into intricate patterns. On some of the NSWGR 1860 goods rolling stock this included the intricate and decorative spring hangers.

His casting process was quite different from others at the time, Peter preferring to use sunny, rainless days; he sun-cured all the castings. His claim that he got better mould life and had better control of the shrinkage was very hard to challenge. The problem was that, living in Mackay, there were not a lot of rainless days when he was off duty from working the tug boat. When on duty he had to be ready for call out at any time so production casting was not possible in this time.

During his two plus decades of casting, Peter perfected the one-piece body casting process. Many others had tried, but Peter achieved very thin-sided castings, however his process was very slow (not commercially viable) so much of his one-piece production was eventually moved to CMA in England. Initially working on patterns for the Lloyds Model Railway range, Peter challenged the thickness of the coach sides of the models then being produced, believing that a thinner product was desired and possible. To improve his patterns he picked up the phone one night and introduced himself to David Buttress, the proprietor of CMA. (David was a modeller, but not of railways, who turned his hobby into a very successful business. The business is now run by his son, providing casting and prototyping

services, including 3D rendering, for industry. The one-piece urethane casting section is now a separate business.)

David gave Peter the parameters of the process, pointing out the problems with wall thicknesses. Peter challenged David's limitations to the point where an open wagon with sides under 0.5mm is now possible. Injection moulding has problems maintaining such thin walls. On the one time that David and Peter met, it was an entertaining experience watching the two of them parry to and fro on how to push the process further and produce a better product. The following day Peter was overjoyed to see some of his work in the CMA product display case. Many model railway hobbyists, both locally and overseas, have benefitted from this interaction between Peter and David.

Far North Hobbies commenced with kits for Queensland Railways prototypes in HO $\frac{3}{4}$ scale and later ventured into the NSWGR HO scale scene. A late-comer to the resin kit scene, output was small and was released through outlets such as Tamworth Hobbies, Northside Hobbies and later Casula Hobbies. The QLX was one of the first QR models, with the AC State Car, Sydney steam tram motor and the pay buses among the first NSWGR models. He later went on to produce diesel locomotive kits including the AIS diesel shunter, the QR 2170 class and the SAR 800 class. For the Lloyd's Model Railways 'Milky Bar' range he prepared the patterns for the NSW *Xplorer* and *Endeavour* rail cars, the 600/700 railcars, the DEB set and a BRC. With a few friends he also arranged for a production run of an English-produced kit for the QR Walkers DH.

Peter's patternmaking and engineering skills were used by Rails North Hobbies for some of their bogie range. Peter also produced the initial patterns and engineering for the ready-to-run AR Kits 45 class locomotive and the TNT monorail set that was produced by Rodney James, the owner of Rails North Models.

Peter's greatest contribution was arguably to the pre-1900 NSW modelling scene, produced under the Far North Hobbies banner, but affectionately called *Old Buggers*. Peter turned up at the second *Modelling the Early Days of the NSW Railways Workshop* with an HO scale model of MV16, a grey bodied van with highlighted black steelwork, white roof and the wording *MEAT VAN 16* on the side. Peter produced patterns for over 55 different kits; thousands of kits later the last kits of this range are currently being delivered, 25 years after the first specific kit appeared.

I had the wonderful opportunity of meeting Peter in the mid-1980s; he became a close family friend, adored by my growing family. I soon met his wife Sonia and daughters Rachel, Rebecca, Patricia and Katrina and was quickly welcomed by them all. Each seems to have Peter's love of life, something each will no doubt treasure for the remainder of their lives. The engineering advice Peter gave to me helped my interests and my job and no doubt helped the readers of this magazine.

Peter Ford, a larger than life character, cast a huge shadow on the Australian model railway hobby, a shadow which benefitted all. A sad, all too sudden, loss.

Bob Gallagher

Vale

Bob Dunn

16 August 1927 – 18 February 2019

Bob was born in Kew and commenced his working life as a carpentry apprentice with the Victorian Railways in 1944. He spent his entire career with the VR, his final role being Works Inspector for the metropolitan area, retiring in 1986.

Bob brought his considerable knowledge of the VR to his hobby of railway modelling and was a true pioneer in the Victorian model railway scene, scratchbuilding his first HO scale models of Victorian Railways prototype in 1961. The motivation was to build a few models for his eldest son, Philip, then three years old. He was further influenced by seeing the Victorian Railways display of TT scale models and subsequently joined the Victorian Model Railway Society.

Bob's exploits were reported in the September 1965 VR Newsletter, at which time he had built more than 30 goods wagons, nine *Spirit of Progress* passenger cars, a pair of S class diesels and a 280hp Walker rail motor. An R class steam locomotive was under construction at that time. The passenger cars were described in some detail in an article *How to Build Streamlined Passenger Cars* in AMRM Issue 19 (March/April 1966).

The car bodies were made from $\frac{1}{16}$ " Perspex sheet wrapped over a wooden former, after first heating the Perspex sheet in the oven. Underbody details were fabricated from such materials as plastic knitting needles, scraps of Perspex, small nails and pieces of wire. The only commercial parts in each car were the 'Tenshodo' streamlined bogies and the couplers. S class diesels were carefully formed from brass sheet, while the goods wagons were mostly made from tinplate salvaged from fruit and jam tins.

I first encountered Bob at an AMRA exhibition held at Camberwell Civic Centre in about 1970. I would have been eleven at the time and Bob was standing at the corner of a layout where various models of VR prototype were operating. I was struck that the models of GY wagons looked like real GY wagons, not at all like the Tri-ang four wheel open wagons I was more familiar with! Also gracing this layout were models of a DERM and trailer, also entirely scratchbuilt.

Fast forward to 1976 and I was a first year Mech. Eng. student at Swinburne, where I met Bob's son Philip. In fairly short order I travelled to the Dunn household and made Bob's acquaintance. He quickly became a great friend and a mentor to me. Bob was only too happy to share with me the techniques he used to scratchbuild his models of VR prototype. I am sure I am not alone in that respect, but I should add that along with the vast store



Photo courtesy Philip Dunn.

of knowledge and experience was true humility.

Bob was never one to expound upon his methods and techniques as being vastly superior; they were simply what had worked for him and would possibly work for me as well. Bob helped to lift my vision, to realise that it was possible to build a model steam locomotive with just wheels, gears, motor and a handful of detail castings as the only commercial items. If the model was to be scratchbuilt, then it might as well be of a local prototype.

Looking back over the 40+ years that I knew him, there is one word that always comes to mind in describing Bob and that is "generous". With Bob there were no 'trade secrets' and he was only too pleased to share information and resources in his possession. With Bob's guidance, making Silastic rubber moulds and casting parts in printer's type was one technique quickly added to my repertoire. Outline drawings from Bob's VR diagrams book as well as 'F' plans of VR bridges and buildings were also made available to me.

With Bob's knowledge and experience it was only natural that he should be a founding director of the original Broad Gauge Models. Bob played a key role in this partnership as the first injection-moulded kits of VR rolling stock were produced, a range of hand-made brass locomotives were imported from Samhongsan in Korea and several brass and white metal locomotive kits were imported from DJH in UK.

My experiences with Bob are typical of all who knew him and I am sure there are many other modellers, members of both AMRA and VMRS, who have benefitted from Bob's vast store of knowledge, both prototype and model. We are all greatly indebted to Bob, for his considerable contribution to the 'local prototype' model railway scene in Victoria.

David Foulkes

Vale Neville Clarence Murray 1936–2019



It is with deep regret that we advise of the sudden death of Neville (Nev) Murray on 29 January 2019, aged 82 years. Born in Newcastle NSW in 1936 where he was schooled before moving to Sydney, Neville trained as a radar technician for the Department of Civil Aviation. Married in Sydney to Marcia, they had three children, Glenn, Carol and Paul.

Neville became interested in model railways in those early years and joined the Australian Model Railway Association (AMRA), then located at Rockdale in Sydney. At one point he became the President of AMRA and when there was a need for a formal meeting, he found it difficult to encourage the younger members to join in, as they just wanted to run their trains. As many of those 'youngsters' are now running AMRA and some have even become prominent outside AMRA [a certain magazine editor, for example...], it looks like Nev's endeavours may have paid off!

Later, Nev gave up the city life and purchased a farm at Cherry Tree Hill near Inverell. He also worked as an electronics technician for the local radio station 2NZ. It was about this time (1985) that I was made aware of his presence in the area and encouraged him to become involved in a small model railway exhibition that I was organising.

Following this event, there was a push to form the then Inverell and District Model Railway Club. At the first steering committee meeting Nev was the one who said "Okay I'll take the minutes". We still have those handwritten minutes... Later on, down the track Nev served as a committee member, as well as the editor of the club's newsletter *Catchpoints*, for some years.

The club expanded and changed its name to what is now the New

England Model Railway Club, a club that now caters for 75 members. During the ensuing years the club organised five exhibitions in Inverell and four in Armidale. Every time Nev was there to lend a hand setting up and manning the door. Nev's wife, Marcia was also there in the kitchen helping to feed all the exhibitors. Sadly, Marcia pre-deceased Nev 13 months ago.

As a railway modeller, Nev was very talented. He was always keen to build something for other members; a model of the Armidale goods shed comes to mind, built for club president, Geoff Yeomans. Railway gates became a specialty and we still can see his craftsmanship on the club layout *Swan Vale*. I also have a set of his gates for my layout. He was always willing to share his ideas with other modelers, offering tips and techniques to all of us when we were looking for various modelling ideas.

Neville had two layouts under construction, one of Guyra (NSW Northern Tablelands) and a Denver & Rio Grande Western layout in HOn3.

Neville was also passionate about his faith and was an active member in his local church.

Those of us who knew Neville personally have suffered a great loss, losing a close friend, while modellers in Australia have lost an artisan of extraordinary talent. Nev always had a smile on his face and enjoyed a good sense of humour. He will be sadly missed.

Neville is survived by his three children, plus grandchildren and great grandchildren.

Warren Herbert

DIARY

EXHIBITIONS & EXPOS

RICHMOND VALE – NSW. May 18-19, 2019. Model Exhibition at Richmond Vale Railway Museum, 262 Leggetts Drive. 9.30am-4.00pm (Sat & Sun). Adults \$16, Concession \$11, Children 6- 16 \$7.50. Under 6 free. www.richmondvalerailwaymuseum.org

STANHOPE GARDENS – NSW. May 18-19, 2019. Hills Model Railway Society (HMRS) Exhibition. Blacktown Leisure Centre, Cnr Sentry Drive and Stanhope Parkway, Stanhope Gardens. 9.00am-5.00pm (Sat), 9.00am-4.00pm (Sun). Adults \$12, Children \$6, Senior \$8, Family \$25. Secretary 0421 603 240. www.hmrs.org.au

ADELAIDE – SA. June 8-10, 2019. Adelaide Model Railway Exhibition. Cardigan Street, Angle Park (behind the OTR). 9.30am-5.00pm (Sat & Sun), 9.30am-4.00pm (Mon). Adults \$15.00, Concession \$12.00, Children \$7.00, Family \$32.00 (2 adults and 4 children). Rodney Bates president@sangs.asn.au www.modelrailwayshow.org.au/

GLEN WAVERLEY – VIC. June 8-10, 2019. Waverley Model Railway Club Annual Exhibition, Brandon Park Community Centre, 649 Ferntree Gully Rd, Glen Waverley. 10.00am-6.00pm (Sat) 10.00am-5.00pm (Sun) 10.00am-4.00pm (Mon). Adults \$12, Children \$6, Family \$30. exhibitions@waverleymrc.org.au

MOE – VIC. June 8- 10, 2019. Latrobe Valley Model Railway Assoc Exhibition, Kernot Hall Moe. 10.00am-5.00pm (Sat & Sun), 9.00am-

4.00pm (Mon). Adult \$10, Child \$5, Family \$25. **ROSEHILL – NSW.** June 8-10, 2019. Epping Model Railway Exhibition, Rosehill Gardens Grand Pavilion, off Grand Avenue, Rosehill. 9.00am-5.00pm (Sat & Sun), 9.00am-4.00pm (Mon). Adults \$15, senior \$11, child \$8, family \$40. Prepaid tickets will be available from April. David Dalzell 0423 362 324. www.eppingmodelrailway.org.au

GOLD COAST – QLD. June 29-30, 2019. Miniature Trains on the Coast, Model Train and Hobby Show. Carrara Indoor Sports Complex, Nerang-Broadbeach Road, Carrara. 9.00am-3.00pm (Sat & Sun). Adults \$10.00, Concession \$8.00, Student (5-18 years) \$7.00, Family \$25.00. Show Manager Craig Thistlethwaite 0408 887 766.

STAWELL – VIC. July 13-14, 2019. Grampian Model Railroaders Inc Exhibition. SES Hall Sloane St, Stawell. 9.00am-5.00pm (Sat), 9.30am-4.00pm (Sun). Stuart 0438 545 233. www.gmrinc.org.au

CANBERRA – ACT. August 3-4, 2019. 47th Model Railway & Scale Model Exhibition at Malkara Special School, Wisdom Street, Garran, ACT. 9.30am-5.00pm (Sat), 9.30am-4.00pm (Sun). Organised by ACT Model Railway Society Inc and Malkara Special School P&C Inc. Gavan Bennett 0401 308 926. gavanbennett@iinet.net.au

STRATHPINE – QLD. August 10-11, 2019. The Pine Rivers Model Train and Hobby Exhibition. Strathpine Community Centre, 199 Gympie Road, Strathpine. 9.00am-4.00pm (Sat), 9.00am-4.00pm (Sun). Enter off Mecklem St. show.coordinator@rmcq.org.au **THORNLEIGH – NSW.** August 10-11, 2019. Thornleigh Model Railway Exhibition. Thornleigh Community Centre, Cnr Phyllis and Central Avenues, Thornleigh. Adults \$10,

Seniors \$8, Kids \$5 and Family \$25. Peter 0407 007 899

CAULFIELD – VIC. August 24-25, 2019. Caulfield Racecourse, Station Street, Caulfield. Melway Map 68 Ref E1. 9am-5pm (Sat), 9am-4pm (Sun). Clubrooms (03) 9885 7034. amravic.exhibition@amra-vic.org.au

SYDNEY – NSW. October 5-7, 2019. The Sydney Model Railway Exhibition at Hall 5, Southee Pavilion Sydney Showground, Sydney Olympic Park. 9.00am-5.00pm (Sat & Sun), 9.00am-4.00pm (Monday). \$18 Adults, \$10 Children, \$12 Concessions, \$45 Family, \$35 Multi Day Pass. (02) 9153 5901. exhibition@amransw.asn.au

WARRNAMBOOL – VIC. January 11-12, 2020. Warrnambool Model Railway Exhibition, St. Joseph's Primary School Hall, Botanic Road, Warrnambool. 10am-5pm (Sat) 10am-4pm (Sun). 0448 605 211. lbamford@anson.com.au

OPEN DAYS

BRENDALE – QLD. May, 19 and November, 3 2019. Buy and sell, open day at the Railway Modellers Club, Buckley Park, Terrence Road, Brendale. 10.00am-1.00pm (Sun).

BRISBANE – QLD. September 8, 2019. At our Clubrooms, rear of Holland Park Sports and Community Club, 49 Abbotsleigh St, Holland Park. 9.00am-2.00pm (Sun). 0439 435 366. sec_upmrc@bigpond.com

SALE DAY

BRISBANE – QLD. October 19, 2019. AMRA Qld. Inc. 20a Murphy Road (Dunsford Street lights) Zillmere. 9.00am-1.00pm (Sat). Layouts running, President Bruce Meiklejohn 0433 440 031. amraqld1@gmail.com

BRISBANE – QLD. November 19, 2019. Buy and sell night. Union Pacific Model Railroad Club clubrooms, rear of Holland Park Sports and Community Club, 49 Abbotsleigh St, Holland Park. Registrations from 6.00pm, Sale commences 8.00pm (Tues). 0439 435 366. sec_upmrc@bigpond.com

SEMINARS & CONVENTIONS

LOFTUS – NSW. May 18, 2019. Modelling the Railways of NSW Convention: 36. Loftus TAFE. Registrations essential.

info@mrns.org.au. www.mrns.org.au **ADELAIDE – SA.** September 7, 2019. Modelling the Railways of South Australia 24, at the Flinders Medical Centre lecture theatres, Bedford Park. 8.30am registration. 9.00am-5.00pm (Sat). Registration forms: MRSAC, PO Box 356, Parkholm SA 5043; www.mrsac.com; or selected hobby shops. email at convention@mrsac.com

CANBERRA – ACT. October 10-13, 2019. N Scale Conventions Australia Ltd, Ibis Styles Hotel, Narrabundah, ACT. The 16th convention will have presentations on many aspects of the hobby. Early bird registration \$295 (ends 31 May 2019); full registration \$325. <http://convention2019.nscale.org.au/>

FESTIVAL DAY

GOULBURN – NSW. May 25-26, 2019. The Goulburn Loco Roundhouse Preservation Society Inc. (GLRPS) in conjunction with the Goulburn Mulwaree Council and NSW Trains are organizing a celebration for the anniversary of the arrival of the railway into Goulburn. 10.00am-4.00pm (Sat & Sun). Terence Carpenter, Secretary GLRPS, (02) 4822 1210. glrps12@optusnet.com.au

RECYCLED ROLLINGSTOCK

The MBC Vans at the Golf Club

Leon Oberg describes yet another scenic use for your redundant or time-worn miniature rolling stock. Photos by the author.

For almost 40 years, two vintage ex-NSWGR timber-bodied MBC insulated vans have served the Tully Park Early Birds Golf Club at North Goulburn.

In the late 1970s, a meeting of members learned of the need for improved shedding and security to store a growing number of tractors, commercial mowers, fuels, sundry expensive machinery and equipment. Since many members were railwaymen who knew redundant rail freight vehicles were about to be scrapped in Goulburn, a plan was hatched.

Firstly, permission from the Tully Park Reserve Honorary Trust had to be secured. In turn, authority had to be received from the reserve's administrator (NSW Department of Lands). The then golf club captain, who was a senior man in the railway's diesel locomotive servicing section at Goulburn locomotive depot, sourced two timber-bodied MBC vans that had been stored in the railway yards for eventual scrapping. Another club member ran a crane business which, coincidentally, had continuing contracts to scrap rollingstock on behalf of the Public Transport Commission.

Carol Scott, who was a member of the Trust at the time, told this author that 'special permission' had to be sought through the NSW Department of Lands to bring the vehicle bodies to the site because that department classed them as 'buildings'.

Taking this author on an inspection of



The right-angled arrangement of the two MBC vans lends itself very well to filling up a corner of the layout with an interesting scene. One could even model the Tully Park Early Birds Golf Club captain, Russell Schmitt, about to set off on a round of golf!

the vans early this year (2018), the club's present volunteer captain, Russell Schmitt, warned that while they had been a valuable acquisition, time had finally caught up with them.

"They are simply rotting away, the victims of four decades of sometimes heavy rain along with some snow dumps, with little chance of the moisture adequately drying under the steadily growing canopy of giant pine trees," Mr Schmitt said. While some roof sections were now peeling, exposing their steel internal framing, the timber flooring has partially rotted and current management were about to replace the MBC bodies with steel containers.

Although there was no identification visible, the vans had been delivered to Tully Park less their high speed 2AE bogies (the scrap firm, under its ongoing contracts, had to return all bogies to the PTC) and most other key metal parts, such as buffers, brake rodding and auto couplers, the firm retained.

Any period of the post-traffic history of these vehicles would lend itself to an interesting mini-scene on a layout, from standing in an obscure siding awaiting their fate, through transport and installation on the site and their long years as storage facilities, slowly deteriorating in the Goulburn weather, to eventual final demolition and replacement. The most recent state, as depicted in the photos accompanying this text, would make a delightful cameo of decay to show off the modeller's skills!

Mailbag

Kudos to Casula

I have been a modeller since the age of 14 and I am now in my 75th year. Recently, I bought some of the new HO scale, r-t-r MLK milk vans from Casula Hobbies. Full marks to Joe and his staff for an excellent model. In all my years of modelling this product is one of the best I have ever purchased.

Keep up the good work Joe and the team.

*Don Haywood
Narrabri 2390*

More on PMG Mail Boxes

I found Phil Jeffery's article [*Beyond the Fence: PMG Phone and Mail Boxes, AMRM Issue 334, February 2019 – Editor*] interesting, although he only covered the 'broad gauge' states of Victoria and South Australia.

What has been overlooked on this subject is that the history of the Post Office in Australia dates from well before Federation in 1901 and that the 'colonial' states had their own designs and suppliers of pillar boxes or, more correctly titled, 'Letter Receivers'. In New South Wales this dates from at least the establishment of the Colonial Post and Telegraph Departments in the 1830s.

I draw your readers' attention to a 'colonial style' Heritage Posting Box series of models, marketed by Australia Post in 1995. These were

MAILBAG continues on page 60



The other side of the vans shows much potential for the superdetailer with the deteriorating roof, particularly on the left-hand van, and other details such as the corrugated iron covering damage to the side panel and the many 'bits and pieces' lying around.

EVELEIGH PRESS

is proud to announce
a new 424 page book by noted
NSWR colour authorities

*Garry Saunders
& Greg Edwards*
entitled

NSW RAILWAYS IN COLOUR 1855-1957

Availability July/August from
SCR PUBLICATIONS



large scale (my guess about 1/2" to foot [1:24 scale], representing two South Australian types and at least one other from NSW. These can occasionally be found second-hand on such as eBay.

Another type widely used in NSW, of which a few still survive in use; e.g. Wellington, Goulburn (behind the motor registry), Tamworth and Bombala (the ones I am familiar with, there may be more). These 'Letter Receivers' were designed not so that children had to bunk up on their elder siblings to reach the posting slot, but so a horseback rider did not have to dismount to do the same task!

'Bubb's Victoria Foundry', located in inner Sydney at 575 George St., supplied many of these receivers in early colonial days from 1855 to 1889; Bubb's maker's plates are still affixed to those I know of, along with another foundry whose name escapes me at present. Other foundries also built them to the same or similar patterns. My most startling discovery about 'Bubb Boxes' was the New Zealand rural town of Thames,

which not only had its own substantial foundry, building locomotives for the NZGR, but also has a 'Bubb Receiver' in the main street, still in use today! There is another one at the Fairymead Rail Transport Museum in Christchurch, on the South Island.

I have images of some of the 'Letter Receivers' I have come across on my Flickr pages: <https://tinyurl.com/y6x3ugbf>.

Frank M Mitchell
Mittagong 2575

People and Post Boxes

I appreciate Michael Hunt's letter in AMRM Issue 335 (April 2019) regarding my Goulburn/Crookwell layout (AMRM Issue 334, February 2019). Thanks for the compliment, Michael and yes, it is difficult preparing and placing figures on a layout. That final step of putting action figures on a static scene and getting them to stay put is often left to the last 5% of a 95% completed layout!

I wonder whether Michael has seen the Greater Portland layout from the South Australian N scale

team, as exhibited at the 2016 Sandown exhibition. A rock band concert is in full swing with what must be hundreds, if not thousands, of patrons in the audience. The sublime to the ridiculous?

As for Bill Pearce's letter in the same edition, about finding no communication facilities on most model railways, I agree in general, but I point him to the telephone and post box on the corner outside the station master's house at Crookwell [Top photo, p.20, AMRM Issue 334, February 2019 – Editor]. You may need a magnifying glass, but they are there!

Chris Fehlberg
Frankston 3199

Scale in Advertisements

I have been a reader of AMRM now for many a long year and have always found it an excellent publication.

Most of my prolonged modelling career has been confined to one particular scale and gauge, but recently, more as a challenging diversion, I decided to construct an N scale layout. As you can imagine, this

required a lot of fresh research into what is available and who sells it.

This is where AMRM comes into the picture. When studying the February 2019 edition I became aware that most of the pages advertising locomotives and rolling-stock do not appear to specify the scale/gauge. Looking carefully at sixteen individual adverts, I could only find three that indicate the scale/gauge (two mention HO, one specifies OO).

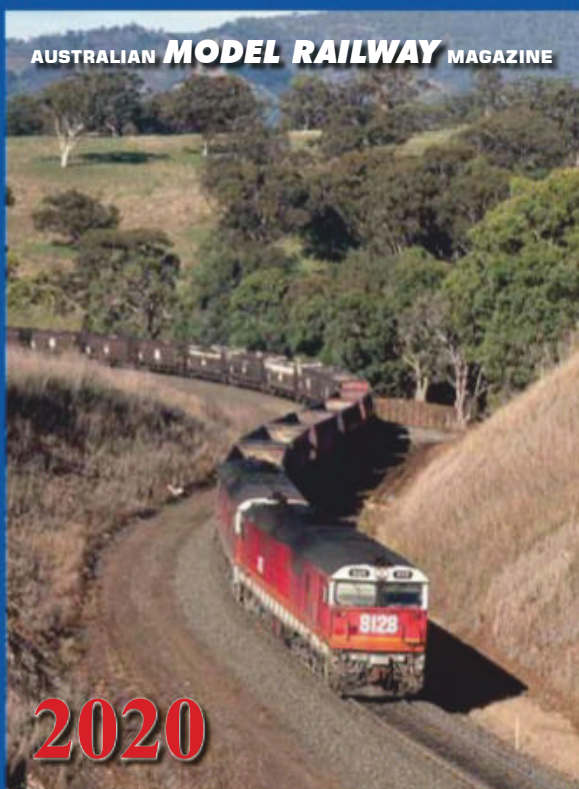
I found this most frustrating and time consuming. I am sure that if I were to trawl all the websites involved, I would find out the necessary information, but surely from the marketing point of view this should not be required. I have the impression that the advertisers presume that "everyone knows...", but this is simply not the case.

Obviously AMRM cannot force advertisers to specify the scale/gauge involved, but a quiet word in their ear might achieve benefits for them, AMRM and the hobby in general!

David Mitchell
Gordon 2906

Two Calendars in One – Twice the Value

The 2020 AMRM Calendar



26 Colour Photos
Simply flip for
your favourite

\$20.00

From your local hobby shop or
usual supplier or **\$25.00** posted
direct from

SCR PUBLICATIONS

PO Box 345 Matraville NSW 2036

Telephone 9311 2036. Fax 9661 4323

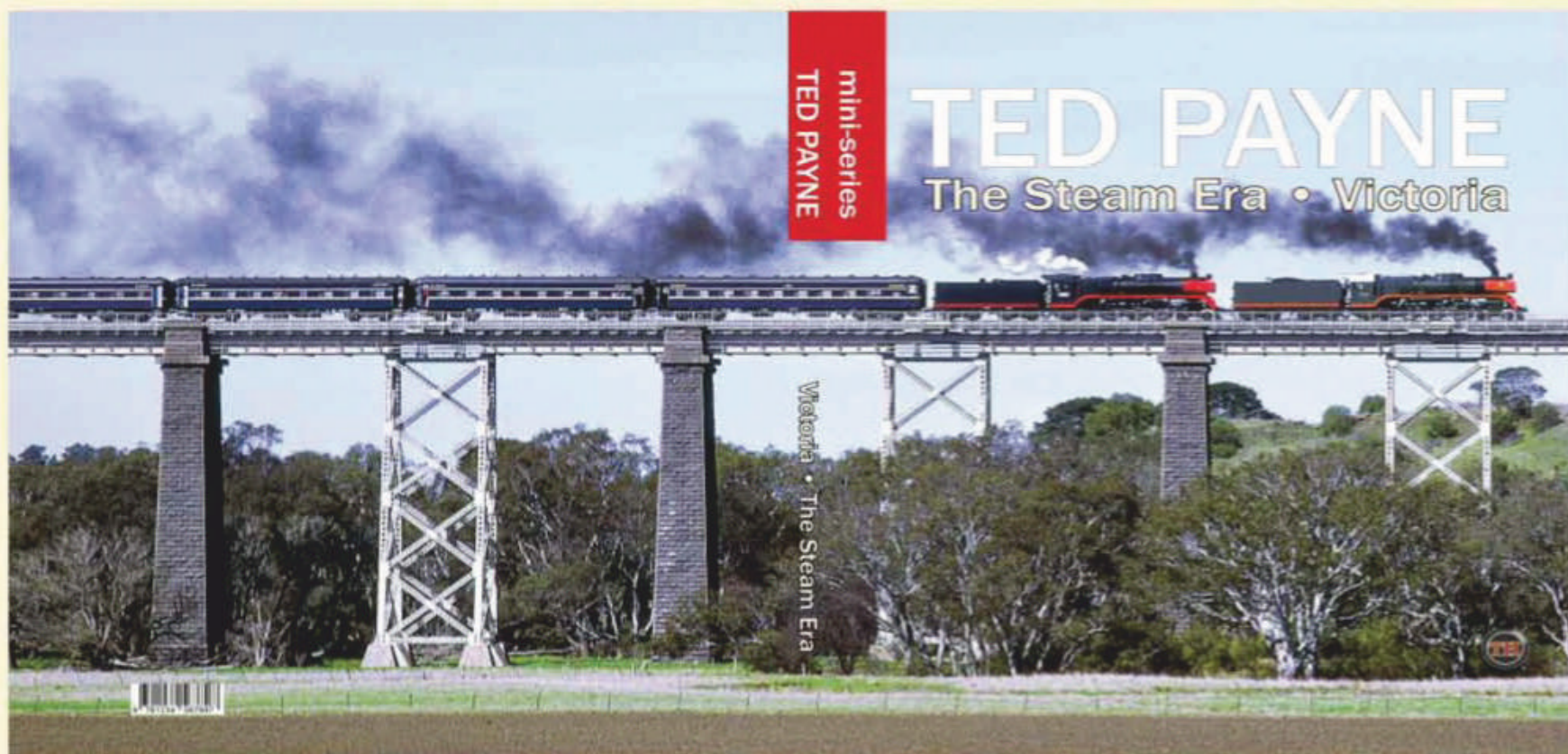
www.australianmodelrailways.com

TRADE ENQUIRIES WELCOME



The cover of the diesel calendar features 8128 and 8131 climbing the Liverpool Range near Pangela. Inside FreightLink service from Adelaide to Darwin hauled by FQ04/ALF18; El Zorro grain train at Llanelli hauled by S303/B47/T357/Y415; SAR 846/844 on the Victor Harbor line; QR 2600 class locomotives 2601, 2609, 2177 and 2612 on Collinsville coal train; VR diesel T367 and Hudson steam engine R706 emerging from the Elphinstone tunnel; TGR Y3 departing Hobart with the Tasman Limited; WAGR A1512 hauls the Australind through Claisebrook; Austrac Redy Power 4814/4836 hauling a freight through Gunning; ANR 900 class 907/906 through North Adelaide; NSW 40 class between Gosford and Narara; NT73 stands in the yard at Booleroo; Hammersley Iron coal train hauled by 4044/4049/4036 between Galah and Gecko.

The cover of the steam calendar features WA engine S542 Bakewell standing beside the coaling tower at Collie. Inside 3001T on the Mudgee Mail at Binnaway; VR J539 at Glenorchy on a goods; QR C17-817 at Esk; SAR Mikado 700 approaching Victor Harbor; NSW 3229 on a mixed to Crookwell; WA V1209 Mikado on the turntable at Collie; VR Hudson R748 at Cressy; SAR Garratt 400 at Gladstone; 3658 on Brisbane Express crossing the Hunter River at Singleton; QR B18 915 approaching Ipswich; TGR H2 on the turntable at Hobart depot; 3532 and 5912 double-head a goods train between Dora Creek and Awaba.



TED PAYNE - *mini-series* The Steam Era • Victoria

TRAIN HOBBY PUBLICATIONS

AVAILABLE FROM GOOD HOBBY SHOPS AND SOME RETAIL OUTLETS OR DIRECT FROM TRAIN HOBBY PUBLICATIONS

PRICES AND PUBLICATION DATES SUBJECT TO CHANGE WITHOUT NOTICE. CONTACT TRAIN HOBBY PUBLICATIONS PTY LTD FOR FULL DETAILS OF DELIVERY AND POSTAGE CHARGES. AVAILABILITY OF ALL ITEMS IS LIMITED AND OFFERED WHILE STOCKS LAST.

NEW

DUE MAY 2019

THE FIRST IN A NEW SERIES

80 pages, hard cover, 70 full colour photos

RRP \$52

Train Hobby Publications Pty Ltd LPO Box 2345 Hawthorn 3122 Australia P: +61 (0)418 397796 E: th_pub@hotmail.com

Great Train Show



**GRAND PAVILION
ROSEHILL GARDENS**
James Ruse Drive, Rosehill, NSW
Parking off Grand Avenue

8, 9, 10 June 2019

Sat, Sun 9.00am - 5.00pm

Mon 9.00am - 4.00pm

Adult \$15 Senior \$11

Child \$8 Family \$40

Prepaid tickets available - see website

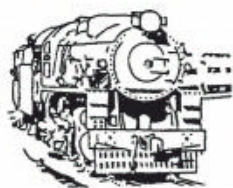
Abundant Free Parking or Entry from Rosehill Rail Station

Huge variety of model railway layouts and trade stands

Second Hand Stall call Mike 0408 817 554 or secondhand@eppingmodelrailway.org.au

Sponsored by Auscision Models, Austrains, SDS Models, AMRM, Southern Rail Models

Details at www.eppingmodelrailway.org.au



MODELLING THE RAILWAYS OF SOUTH AUSTRALIA CONVENTION

Saturday, 7 September 2019

Lecture Theatre
Flinders Medical Centre
Bedford Park

The following talks are planned:*

- 900 class diesel
- SAR passenger cars
- Renmark on the Murray
- Modelling a preserved railway
- Grain Silos
- Riding the Narrow Gauge Ghan
- with additional articles in the notes on locos, wagons and more...

* Last minute changes may be necessary.

Displays of these and other topics will also be on hand, lunch and comprehensive notes on all presentations will be provided as usual.

Registration forms are available from:

- www.mrsac.com
- Hobby shops
- SAR Convention, PO Box 356, Parkholme SA 5043
- or email at convention@mrsac.com

Forms will be posted to previous attendees in May.

*Sponsored by the
Australian Model Railway Magazine*

**When
you
attend,
tell
them
you
saw it in
AMRM!**



VICTORIAN MODEL RAILWAY SOCIETY Prototype Modellers Forum

Note
earlier
date for
2019

**Sunday,
1 September 2019**

**Thornbury High School,
Dundas St., Thornbury.**

Full details and registration forms available from:

- The VMRS stand at the Waverley Model Railway Club Exhibition on the Queen's Birthday long weekend, 8 -10 June 2019.
- On the web at <http://www.vrms.net/>
- By request from PMF 2019, 37 Williamson Road, Mont Albert North, Vic, 3129.

Sponsored by the Australian Model Railway Magazine

Eveleigh Press is proud to announce the
release of

MARK LANGDON'S

SHALE & SHAYS

The Fight for Shale Oil from the Wolgan Valley

*A fresh look at life working
in the shale oil industry in
the Wolgan Valley*

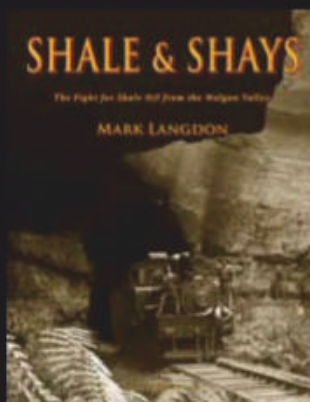
Mark Langdon, an upper Blue Mountains resident and trained historian, presents a fresh look at the exhilarating shale-oil mining days of 1906-1932 in the Wolgan Valley in New South Wales. Researched from existing company and government documentation and newspaper reports of the day, the book begins with the story of the Commonwealth Oil Corporation's inception, financed and run from the London offices, continues through the building of the works at Newnes and the railway to Newnes Junction, and rounds out with the final days in the 1930s, when the fate of Newnes resided in the hands of the Commonwealth Government and National Oil Pty Ltd. The work includes the decline of the C.O.C. and John Fell's becoming the owner. The problems faced are covered in detail, as is the life of the miners and residents living in the valley. Special attention has been given to the railway – locomotives and rolling stock – including exhaustive research detailing the building and use of the railway that carried the precious shale and oil to the main N.S.W.G.R. Western Line at Newnes Junction and then on to Torbane in the west and to the Sydney export seaboard. Each vehicle type built specifically for and purchased by the COC is covered, with a history and photos and a scale drawing of each vehicle type included. The work is rounded out with superb maps and a Phil Belbin painting.

The book is 279 x 215mm portrait, of 300 pages in size and includes three- and four-page fold-outs and gate-folds to best display the many pictorial images sourced. While most images are black and white, a number of available colour images have been used. Some of these images had been hand-coloured by the original photographer.

Shale & Shays is \$78.00 plus post and handling (\$11.00)

SCR PUBLICATIONS

PO Box 345, Matraville 2036
Phone 9311 2036. Fax: 9661 4323
www.australianmodelrailways.com



THE 2019 WORKSHOP ON MODELLING THE EARLY DAYS OF THE NSW RAILWAYS

will be held on

**Saturday, 27 July 2019
at Dence Park Creative Centre
26 Stanley Road, Epping**

Write for details. Regular attendees will be notified
by post or email.

Details of the programme to follow.

SCR PUBLICATIONS

PO Box 345, Matraville 2016

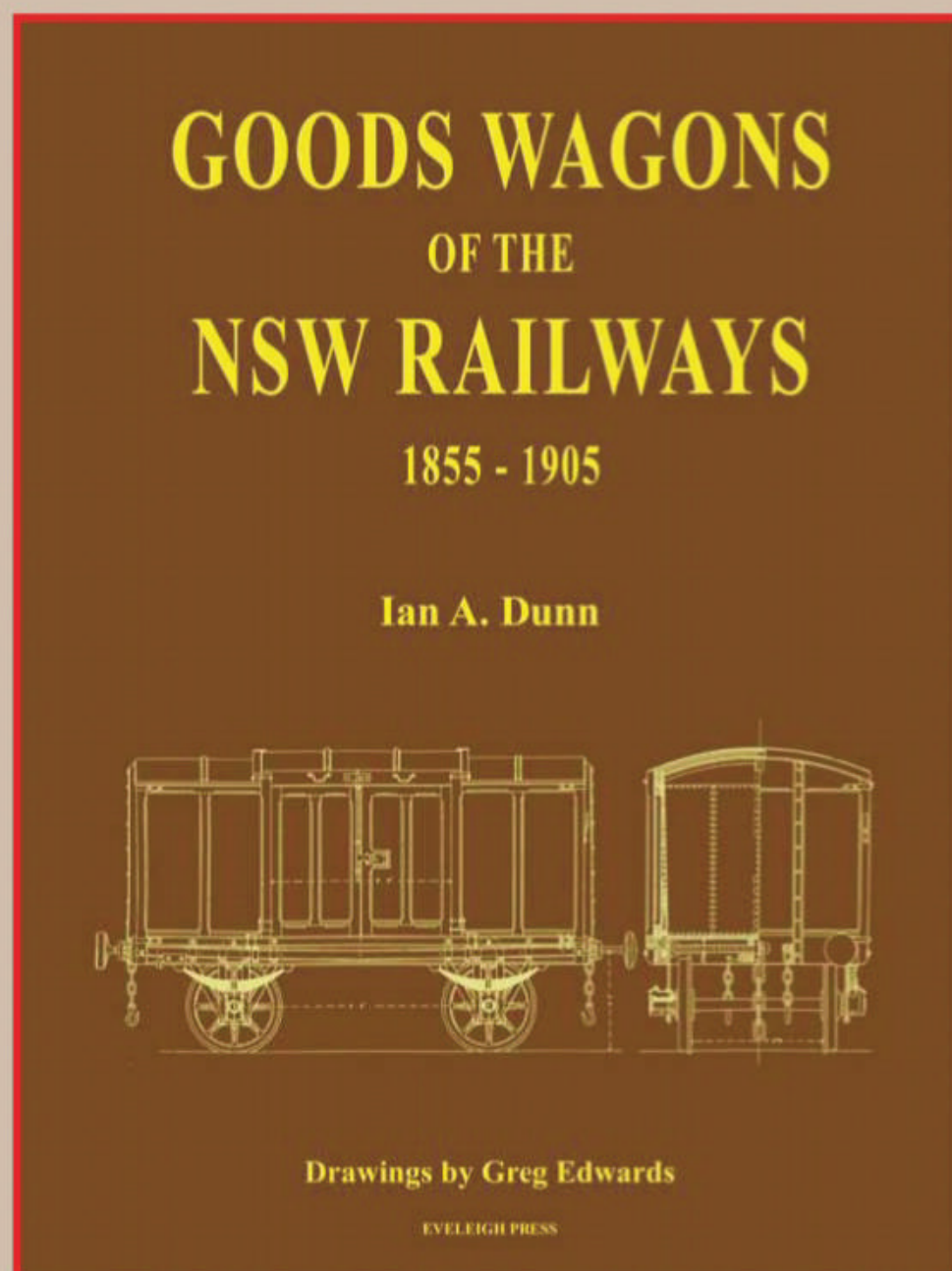
Phone: (02) 9311 2036. Fax: (02) 9661 4323

Email: @amrmagzn@tpg.com.au

www.australianmodelrailways.com

*Eveleigh Press are proud
to announce the pending
arrival of a mammoth production*

*It's here
at last!*



Continuing its series on the rolling stock which has served the railways of New South Wales, Eveleigh Press now presents ***Goods Wagons of the NSW Railways 1855-1905***, a 368 page volume which charts the growth of the NSWGR's wagon fleet over its first half century, from just 52 wagons at its inception to over 11,000 assorted vehicles in 1905. These varied from the humble A and E flat wagons and D open wagons of several types to exotica such as the "Tiffany's Summer and Winter Car" of 1881, refrigerator cars which floated around Sydney Harbour, wagons with underframe made up of gas pipe and imports from the USA made in dubious circumstances. Service vehicles are included, such as water tanks, gas reservoirs, breakdown cranes and workmen's vans. Wagons construction, engineering and paint schemes are given a chapter, and the various braking systems receive another. The personalities who directed the development of the system are outlined, shedding light on some curious episodes. There is a chapter on each type of wagon or van, photographs of each, generally illustrating a number of variations, and 85 superb scale drawings (at HO scale) of each type and most sub-variants, by master draughtsman Greg Edwards. This book supplies most of the answers for those seeking to understand the development of the NSWGR and its goods wagon fleet in the 19th century.

NOW AVAILABLE
\$110.00 plus \$10.00 postage in Australia

SCR PUBLICATIONS
PO Box 345 Matraville 2036

Telephone: (02) 9311 2036

Fax: (02) 9661 4323

www.australianmodelrailways.com

BACK ISSUES

No.208 - February 1998
No.209 - April 1998
No.210 - June 1998
No.211 - August 1998
No.212 - October 1998
No.213 - December 1998
The above issues are priced at \$5.50 a copy, plus postage.

No.220 - February 2000
No.222 - June 2000
The above issues are priced at \$5.90 a copy, plus postage.

No.223 - August 2000
No.225 - December 2000
No.227 - April 2001
The above issues are priced at \$6.50 a copy, plus postage.

No.229 - August 2001
No.230 - October 2001
No.231 - December 2001
No.232 - February 2002
No.233 - April 2002
No.234 - June 2002
The above issues are priced at \$7.00 a copy, plus postage.

No.241 - August 2003
No.242 - October 2003
No.243 - December 2003
No.244 - February 2004
No.245 - April 2004
No.246 - June 2004
The above issues are priced at \$7.50 a copy, plus postage.

No.253 - August 2005
No.255 - December 2005
No.257 - April 2006
No.259 - August 2006
No.261 - December 2006
No.263 - April 2007
No.265 - August 2007
No.267 - December 2007
No.269 - April 2008
No.271 - August 2008
The above issues are priced at \$8.00 a copy, plus postage.

No.214 - February 1999
No.215 - April 1999
No.216 - June 1999
No.217 - August 1999
No.218 - October 1999
No.219 - December 1999
No.221 - April 2000
No.224 - October 2000
No.226 - February 2001
No.228 - June 2001
No.235 - August 2002
No.236 - October 2002
No.237 - December 2002
No.238 - February 2003
No.239 - April 2003
No.240 - June 2003
No.247 - August 2004
No.248 - October 2004
No.249 - December 2004
No.250 - February 2005
No.251 - April 2005
No.252 - June 2005
No.254 - October 2005
No.256 - February 2006
No.258 - June 2006
No.260 - October 2006
No.262 - February 2007
No.264 - June 2007
No.266 - October 2007
No.268 - February 2008
No.270 - June 2008
No.272 - October 2008

No.273 - December 2008
No.275 - April 2009
No.277 - August 2009
No.279 - December 2009
No.281 - April 2010
No.283 - August 2010
No.285 - December 2010
The above issues are priced at \$8.50 a copy, plus postage.

No.286 - February 2011
No.288 - June 2011
No.290 - October 2011
No.292 - February 2012
No.294 - June 2012
No.296 - October 2012
The above issues are priced at \$9.00 a copy, plus postage.

No.298 - February 2013
No.300 - June 2013
No.302 - October 2013
No.304 - February 2014
No.306 - June 2014
No.308 - October 2014
The above issues are priced at \$9.50 a copy, plus postage.

No.310 - February 2015
No.312 - June 2015
No.314 - October 2015
No.316 - February 2016
No.318 - June 2016
No.320 - October 2016
No.322 - February 2017
No.324 - June 2017
No.326 - October 2017
No.328 - February 2018
No.330 - June 2018
No.332 - October 2018
No.334 - February 2019
The above issues are priced at \$10.00 a copy, plus postage.

No.274 - February 2009
No.276 - June 2009
No.278 - October 2009
No.280 - February 2010
No.282 - June 2010
No.284 - October 2010

POSTAGE:

Australia: \$3.00 (250g); \$5.00 (500g)
Overseas:
New Zealand: \$5.50 (250g); \$11.00 (500g).
Asia/Pacific: \$6.00 (250g); \$12.00 (500g).
Rest of World: \$9.00 (250g); \$18.00 (500g)

Larger parcels – by surface mail

No. of Copies	Base rate for 2-3 copies	Plus for each additional 4 copies
New South Wales	7.70	0.30
Victoria, South Australia, Queensland	10.10	0.85
Tasmania & Western Australia	11.20	2.00
Northern Territory	12.70	2.80
Overseas	Rates on application	

Please list issues required on a sheet of paper separate from any other matter, complete with printed postage instructions (i.e. name and address). Please allow at least 21 days for the delivery of goods.

Post your order and payment to:

SCR PUBLICATIONS

PO Box 345 MATRAVILLE 2036

Cheque, money order or credit card accepted

Orders can also be made online on our website

www.australianmodelrailways.com

EVELEIGH PRESS

proudly presents

THE STEAM TRAM IN AUSTRALIA & NEW ZEALAND



Eveleigh Press, Australian MODEL RAILWAY Magazine's associate publisher, is releasing a book covering the steam trams that worked in Australasia. As the cities in the British Colonies of Australia and New Zealand grew in the 19th century, there was a need for public transportation: people in outlying suburbs needed to get to work more quickly than walking. Horse-drawn omnibuses were introduced by private operators but the need was for something more expansive. Overseas, in Britain and America tramways were quite widespread by the 1860s and it was only a matter of time before this transport mode was extended to the colonies. In Sydney, the first tram, horse drawn, connected Circular Quay on the harbour with the railway station at Redfern in 1861. Although this was dismantled five years later, the die had been cast, tramways being the answer the city fathers were seeking. Although quite a few systems commenced with horse-drawn vehicles, steam-hauled 'motors' as the steam tram locomotives were to be known, became common at the front of a tram. This book is not a history of the various systems in the two countries but a coverage of the various motors that were found in service until the systems were electrified or shut down in favour of buses. Where known, every type of steam motor is shown in photographic or illustrative form, in some cases also showing the modifications applied. Photos have been drawn from many sources and restored trams are shown in colour. Most systems are accompanied by a map. In the 1950s, the author took on the task of restoring the then last motor in steam in Sydney. The story, which includes the commencement of steam locomotive preservation in NSW, is described. Coverage includes specification forms from Baldwin and some work cards of the steam motors in Newcastle.

A4 in size, 184 pages with a coloured dust jacket

THE STEAM TRAM IN AUSTRALIA & NEW ZEALAND retails for **\$70.00.**

SCR PUBLICATIONS

PO Box 345 MATRAVILLE 2036

Telephone: 9311 2036. Fax: 9661 4323

www.australianmodelrailways.com

TRADE ENQUIRIES WELCOME

Are You Missing Copies of AMRM?

Volumes 1 to 19 of AMRM are now available on DVD to complete your collection



VOLUME 19 AVAILABLE NOW!

Each issue is searchable and the disk contains an index to Articles and Authors.

A copy of MagIndex for issues 1-100 is also included.

The files are in PDF format and articles can be printed for easy reading.

A copy of Adobe Reader is also provided on the DVD.

UP TO 2 DVDs ORDERED TOGETHER \$25.00 EACH

3 OR MORE DVDs ORDERED TOGETHER \$23.00 EACH POSTED

SCR PUBLICATIONS

PO Box 345, Matraville 2036. Phone 9311 2036

www.australianmodelrailways.com

AUSTRALIAN MODEL RAILWAY MAGAZINE

The best in Australian railway modelling
direct to your screen



Why you should subscribe?

It really does make sense. We know it is sometimes difficult to find AMRM at the newsagent or hobby shop. We are working to improve that, but a subscription makes it so much easier to ensure that you never miss a copy. Your copy of the *Australian Model Railway Magazine* can be delivered to your mailbox and now also **direct to your screen!**

Yes, your favourite magazine is now also available online, the same subscription rate applies to either the print or digital copy, but the best choice is to select both, which only adds \$9.95 to the normal subscription price.

Overseas subscribers who select only the digital version will now pay the same as Australian subscribers, ie no additional postage costs.

SUBSCRIPTION RATES

Australian Subscribers

One Year (6 issues) Print **or** Digital \$60.00
One Year (6 issues) Print **and** Digital \$69.95
Two years (12 issues) Print **or** Digital \$115.00
Two years (12 issues) Print **and** Digital \$135.00
Three years (18 issues) Print **or** Digital \$170.00
Three years (18 issues) Print **and** Digital \$199.85

Overseas Subscribers

Asia-Pacific

One Year (6 issues) Print **only** \$90.00
One Year (6 issues) Digital **only** \$60.00
One Year (6 issues) Print **and** Digital \$99.95

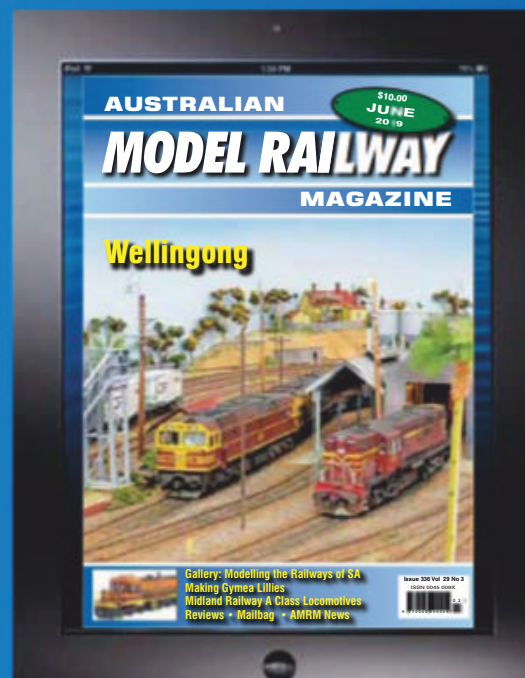
Rest of the world

One Year (6 issues) Print **only** \$110.00
One Year (6 issues) Digital **only** \$60.00
One Year (6 issues) Print **and** Digital \$119.95

**All overseas print copies are sent by airmail.
Please highlight or circle the option required.**



The digital version using Zinio Reader can be viewed on PC and Apple computers, iPad and Android tablets.



Order Form (Feel free to copy to preserve your magazine)

Name.....

Address.....

Postcode.....

Phone.....

Email

Please start/continue my subscription from Issue

I enclose a cheque/money order payable to SCR Publications,
PO Box 345 Matraville NSW 2036 for \$..... or charge
\$..... to my Visa/MasterCard

Expiry ____/____/____

Current Subscription No.

Name on card

Signature.....

You can also subscribe online at www.australianmodelrailways.com

HOBBY SHOP DIRECTORY

N.S.W. - GOSFORD



OPEN 7 DAYS

Your 'Central Coast' model railway supply centre.

Good stocks of track and scenery materials always held.

Shops 3 & 4
4 Brooks Avenue
Wyoming (off Pacific Highway) www.gosfordhobbies.com.au
Phone: 4329 2066
Fax: 4329 2077

N.S.W. - REDFERN



The ARHSnsw Bookshop

For the largest & best world-wide selection of quality railway books, magazines & DVDs. Mail, phone & internet orders welcome.

Mon-Fri 10.00am to 5.00pm - Sat 9.00am to 4.00pm

Ph: (02) 9699 4595 Fax: (02) 9699 1714

E: sales@arhsnsw.com.au W: www.arhsnsw.com.au
Bookshop & Rail Resource Centre - 67 Renwick St, Redfern NSW 2016

N.S.W. - OAK FLATS



The Rail Hobbies

Trains • Boats • Planes • Cars

75 Central Avenue

OAK FLATS 2529

Telephone/Fax: 4256 0188



Open 6 days, 10-4
Closed Sunday
Sales and Service
68-72 Old Hume
Highway, Braemar,
Nth Mittagong 2575
Ph: 02 4871 2966
Fax: 02 4872 1183



40 years in the model railway business!

Shop online: www.allaboardexclusive.com.au

YOUR SPECIALIST MODEL RAILWAY SHOP
No cars, planes. Only trains!

N.S.W. - PENDLE HILL

**WOODPECKER
MODEL RAILWAYS**

www.woodpeckermodelrailways.com.au

Shop 8/7 Joyce Street, PENDLE HILL 2145

Open Tuesday - Friday 10am - 5.30pm

Saturday 9am - 2pm

Phone (02) 9636 3855 Fax (02) 9631 4204

N.S.W. - SEVEN HILLS



We stock over 6000 Australian Outline Model Railway Products

Australian Modeller

Unit 68/45 Powers Road

SEVEN HILLS NSW 2147

Phone: (02) 9620-9035

Fax: (02) 9620-6695

Open every Saturday 10am - 4pm

Come and visit our brand new Sydney showroom. We carry all major brands including: SD5 Models, Austrains, Eureka Models, Trainorama, On Track Models, Bendigo Rail Models, Powerline, Southern Rail Models & Auscision. Huge range of scenery, track, scratch building materials, DCC systems & decoders available both in store & online. Visit our online store for full product listing with images of every single product we sell.

Website: www.australianmodeller.com.au

Email: information@australianmodeller.com.au



Australian Modeller is part of the AUSTRACON GROUP

N.S.W. - NORTH COAST

THE TRAINMAN SHOP

SHOP 46 TOORMINA POST OFFICE

TOORMINA GARDENS SHOPPING CENTRE

0439 566 391

REPAIRS, SERVICE & MODEL TRAIN DISPLAY

1 Palm Trees Drive, Boambee

N.S.W. - HORNSBY

MICRO MODELS

HOBBYLAND

The Hobby Specialist



147 Pacific Highway, Hornsby

Telephone: (02) 9476 2588

Facsimile: (02) 9987 0239

Mon-Fri 9am-5pm. Thurs 9am-7pm

Sat 9am-4pm. Sun closed

micromodels@bigpond.com www.hobbylandaustralia.com.au

VICTORIA - CROYDON

BRANCH LINE

Suppliers of Fine Model Railway and Constructive Hobby Equipment

490 Dorset Road, Croydon 3136

Ph: (03) 9723 1211

Fax: (03) 9723 5432 Website: www.branchline.com.au

Email: trains@branchline.com.au

Hours: Mon.-Fri. 10am-6pm, Sat. 9am-5pm

Phone, Fax, Mail & Credit Card Orders Welcome.

N.S.W. - NEWCASTLE

VIC BARNES CYCLE & MODEL TRAIN CENTRE

Trading since 1949

Stocking OO, HO & N in Australian, US, British & Japanese outline, scenic items & much more. We buy S/Hand trains.

MAIL ORDER

213 Lambton Rd. New Lambton, 2305

Phone (02) 49521886

VISA - MASTERCARD - AMEX

email: barneshobbies@bigpond.com

www.barneshobbies.com.au

MARKET PLACE

COMMERCIAL: \$7.00 per line, minimum of \$21.00. Continuous or Advance insertions not guaranteed.

PRIVATE: 55 cents per word - name, address and phone number free. Minimum \$5.50 per insertion.

Continuous insertions not guaranteed.

All monies must accompany copy, which must be written clearly on paper or emailed to

amrmagzn@tpg.com.au. Phone insertions not accepted.

Send all copy and payment to SCR Publications, PO Box 345, MATRAVILLE, 2036. All copy must be received by advertising deadline for the issue required. (Advertising Deadlines listed on page 5.)

**FOR SALE
COMMERCIAL**

STATIONMASTER Products now only sold direct to you at lower prices without middle man mark-ups. 08 9375 3256 WST.

PRIVATE

HO SALE locos, 44, 442, 80, C.L., X, T, 48, 47 & 49 classes. Call Barry 0488 741 201.

AMRM INDEXES

Indexes for Volumes 13-28 are available at a cost of a \$1.00 stamp per single order or 2 x \$1.00 stamps for multiple indexes. To obtain these, send the stamp/stamps and a stamped self addressed 95mm x 225mm envelope (for a single index) or larger 230mm x 320mm envelope stamped \$3.00 for multiple indexes to

PO Box 345, Matraville, 2036
with a request detailing the indexes required.

Australian Trains

Australian Trains is a series of A5 picture books of iconic Australian passenger trains of a bygone era.

Books so far in the series are:

◆ NEWCASTLE EXPRESS ◆ INDIAN PACIFIC

◆ SPIRIT OF PROGRESS ◆ CENTRAL WEST EXPRESS

◆ SOUTHERN HIGHLANDS EXPRESS

Each book is \$20.00 or \$22.00 posted

SCR PUBLICATIONS

PO Box 345, Matraville NSW 2036

Telephone: (02) 9311 2036. Fax: (02) 9661 4323

www.australianmodelrailways.com

ADVERTISING DEADLINE

August 2019 Issue

Advertising deadline is:

6 June 2019

The August 2019 issue should be available at the normal outlets around 18 July 2019.

**When you buy,
tell them you
saw it in
AMRM!**

 TRAIN WORLD PTY LTD 290 Bay St, Brighton, Victoria 3186 Ph: (03) 9596 6342 or Fax: (03) 9596 3917 internetsales.tw@trainworld.com.au www.trainworld.com.au facebook.com/trainworld OPEN 7 DAYS, 360 Days per year Monday to Thurs 10am - 6pm Friday 10am - 9pm Sat 9am - 5pm Sunday & Public Holidays 11am - 4pm <i>We do: orders, back orders, holds, lay bys, mail orders, phone orders, service and advice.</i> <i>We accept: Eftpos, Visa, Mastercard, money orders or cash.</i>	QUEENSLAND – STAFFORD  HOBBYRAMA EVERYTHING IN MODEL TRAINS, - ALL SCALES BEGINNERS OR EXPERTS, CONSULT US FIRST FREE PARKING - OPEN 7 DAYS PH 07 3352 3333 FAX 07 3352 3300 MAIL ORDERS – All major Credit Cards & EFTPOS welcome Cnr Stafford Rd & Shand St, Stafford 4053	QUEENSLAND – HERVEY BAY M&K MODEL RAILWAYS For all model trains and accessories. All gauges and leading brands, sales, repairs and manufacture of indoor and garden railways. Mail Orders Welcome Mail Orders: 50 Old Maryborough Rd, Pialba 4655 Phone: (07) 4124 1979 Fax: (07) 4124 3623 Email: mkrail@bigpond.net.au
SOUTH AUSTRALIA – UNLEY  2 King William Road, Unley SA 5061 Trading Hours: Mon-Fri 10am-6pm Sat 10am-4pm Ph: (08) 8271 7861 Fax: (08) 8373 1961 Web: www.orientexpressmodels.com.au Email: sales@orientexpressmodels.com.au	QUEENSLAND – TINGALPA QUALITY PRE-LOVED MODEL TRAINS Licd. Queensland 2nd Hand Model Train Dealer Model Trains & Accessories – All Types of Makes WE BUY & SELL, EXCHANGE, REPAIRS TAKEN. ALWAYS BUYING YOUR USED UNWANTED STOCK. OPEN EVERY SATURDAY 7AM - 12 NOON OR BY APPOINTMENT. 9 WASHINGTON AVENUE, TINGALPA 4173 (Just off the Gateway Motorway) PHONE: (07) 3901 2027 FOR ALL YOUR ENQUIRIES	QUEENSLAND – MACGREGOR  Unit 7, 544 Kessels Road MACGREGOR 4109 Queensland's best range of model railways. Mail orders welcome. www.hobbyone.com.au Phone: (07) 3343 8655 Fax: (07) 3343 8355
SOUTH AUSTRALIA - ENFIELD  Your Model Railway Specialist Bankcard/Visa/Mastercard/Eftpos Accepted MAIL ORDER WELCOME OPEN TUESDAY TO SUNDAY EXCEPT PUBLIC HOLIDAYS SHOP 5/449 MAIN NORTH ROAD ENFIELD S.A. 5085 Phone:(08) 8349 7464 Fax:(08) 8349 7463 www.junctionmodels.com.au	QUEENSLAND – BEAUDESERT J. & J. HOBBIES <i>Established 1974</i> Specialising in American HO and N scale models. 15 SELWYN STREET, BEAUDESERT QLD 4285 Showroom by appointment Phone (07) 5541 3221 www.jjhobbiesonline.com	QUEENSLAND – MT GRAVATT EAST AUSTRAL MODEL CRAFT A Large Range of HO and N Scale in Stock MAIL ORDER WELCOME 15 Fairland Street, MT GRAVATT EAST 4122 Phone (07) 3849 2655. Fax (07) 3849 8664

HOBBY SERVICES DIRECTORY

DATA SHEETS Highly detailed drawings to HO scale with photographs and information describing NSWGR locomotives and Lineside Data Sheets, drawings and information describing NSWGR buildings and structures. New sheets produced regularly. 12 WHALAN PLACE, KALEEN, ACT 2617 Email: datashet@grapevine.com.au Website: http://members.iinet.net.au/~datashet_vdsl/	SAN MATEO LINE Searchlight Signals for VR and SAR in HO and N. Colour Light Signals for QR and NSW in HO. Upper Quadrants for VR and SAR in HO. VR somersault lattice mast semaphores. HO kit only Etched brass kits with LEDs or fully assembled and painted models, made to order . Available from hobby shops or San Mateo Line, PO Box 2205, Mildura 3502 www.sanmateoline.com.au sales@sanmateoline .com.au Ph. 0428 236 055 	Track Planning Services <i>A Layout Design service ... With your needs in mind!</i> We create rail designs: freelance or specific regions in all States Plans and Lists of Materials for All Gauges www.trackplanningservices.com.au info@trackplanningservices.com.au 0427 400 755
 SIGNS OF ALL KINDS <i>"The decal people"</i> We offer a Custom Decal Service FREE QUOTES Printers & Designers of Quality Decals for all Scales & Models Email: signsof1@bigpond.com Phone: (08)8280 9117	 TRACKRITE FLEXIBLE TRACK UNDERLAY THE track underlay for HO/OO, HOm and N Gauge flex track. Available in various profiles to suit your layout needs. Designed and manufactured in Australia from long life XLPE. Ask your local Hobby Supplier for TRACKRITE Flexible Track Underlay or contact us for more details J & K Hobbies PO Box 28 Albury NSW 2640 Ph: 02 6041 4098; Fax 02 6023 2824; E-mail: jkhobbie@dragnet.com.au	Plans for the finest layouts EZI KITS Now producing quality NSWGR "early days" loco. kits (HO), including the Class 1, M40, A93, B55, B205, T14, D334, D261, J522, J131 and Z16. All kits are complete with motor, gearbox, wheels, etc. Email bj48@grapevine.com.au or phone 02 6254 2526 (6pm-9pm)
 Mechanical Branch Models Ordinary items for the extraordinary modeller Parts and kits for the steam-era NSWGR Signals - structures - rolling stock - figures Visit our online store at www.mechanicalbranchmodels.com.au PO Box 38 Beecroft NSW 2119	Gwydir Valley Models ► EasyDCC Command Control ► FastTracks Point Jigs ► TCS & Soundtraxx Decoders ► IRDOT Infrared Detectors Ph: 02 6732 5711 www.gwydirvalleymodels.com 	B-T Models Trucks and Buses (1:76 OO and 1:148 N Scale) Trident Military resin kits (1:87 HO Scale) Artitec Fine Scale Accessories (1:87 HO and 1:160 N scale) Brekina HO Vehicles Oxford Diecast, Aussie Road Ragers Also selling: T-Shirts and Model Kits Trade and Club enquiries welcome. Please email for full catalogue. Roving Wolf Pty Ltd PO Box 1310 Blackburn North VIC 3130 wolfstoreau@gmail.com www.wolfstore.com.au  WOLF STORE SCALE MODELS, COLLECTIBLES & GIFTING trident BREKINA MODELLSPIELWAREN GMBH Artitec B-T Models
 Sunworks makes STATIONMASTER • PWM AC / DC input 6Amp Single Track CENTER OFF controllers • Twin or Single SCR AC input High current DC output controllers • IR under-track detectors with timers for Location Stops and crossing or points protection or DCC / CTC block separation Email sunworks.info@aol.com or call me at the bench in Morley Western Australia on 08 93752356 for details	 Quality Laser Cut Australian Buildings O, HO & N Scale Buildings & Scenery Custom Buildings Are Our Speciality 0400736488 stuart@modeltrainbuildings.com.au www.modeltrainbuildings.com.au	

IDR MODELS



Available now in HO scale NSWGR 70 Class

\$290 + Postage

NSW X200 Railtractor

\$180 + Postage

Available direct from **IDR Models** or selected retailers
Visit www.idrmodels.com.au for more information

IDR MODELS

ABN: 64 123 138 661

PO BOX 430, Hornsby, NSW, 1630

www.idrmodels.com.au

idrmodels@gmail.com

BYWAYS OF STEAM 32

This mammoth 232 page volume returns to the normal coverage of steam depots, locomotives and steam locomotive drivers.

- **Steam Locomotive Depots in NSW:** Wallerawang, Mudgee, Eskbank, Dunedoo and Coolah. In these essays, rail historian Ray Love covers the steam locomotive depot scene after the crossing of the Blue Mountains with the completion of the great Zig Zag into Lithgow. Commencing with the first depot opened, Wallerawang, Ray describes the history of the construction of the depot, the building of the infrastructure and the steam operations up until the time of closure.
- **Kenneth Thomas Groves.** Ken joined the Railways in 1943 and rose through the ranks of a steam engine crewman until he was a driver capable of handling the mighty 38, 57, 58 and AD60 classes. Stephen Halgren briefly describes Ken's career illustrating his work with photographs from Ken's collection.
- **An Eye for an 'I'.** Most rail historians have a favourite locomotive and author Ian Wallace unashamedly favours the Dübs-built, NSW I class, the 2-6-2 saddle tank engines, reclassified as the 26 class in 1924. Ian has dug deep in many photographic collections to cover this 20 strong class that saw sterling service in NSW.
- **Out Of Goulburn.** In 1954, a 24-year old Keith Brown commenced work on the NSW Railways at Goulburn depot. From his 'My Railway Life' story, the essay covers the many tasks performed in a large railway locomotive depot in the post WWII period, when steam was still king.

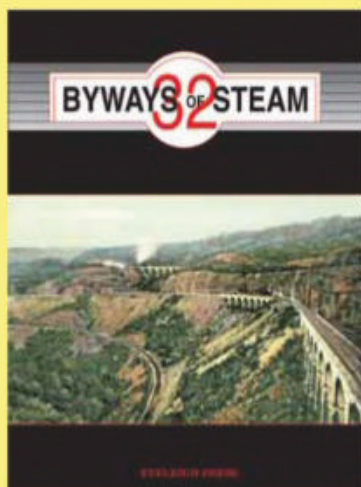
BYWAYS OF STEAM 32 is **\$50.00** from your local stockists or mail order, plus postage, from

SCR PUBLICATIONS

PO Box 345 MATRAVILLE 2036

Telephone: 9311 2036. Fax: 9661 4323

www.australianmodelrailways.com TRADE ENQUIRIES WELCOME





DECODER WIZ

THE SOUND WIZARD OF MODEL RAILWAYS

Decoder Wiz Records Sounds of Australian Locomotives

Sound Files will become available to purchase initially for ESU LokSound V4 & V5 sound decoders during the 3rd or 4th quarter of 2019. The website is in the process of being adjusted to accommodate sound file pricings.

Keep Checking the website's '**Locos for Sale**' page and general model railway info on the Facebook page. **Sound / Motor decoders** etc., are still available, checkout the prices, there still are some Bargains left on the 'Bargains' page.

PLEASE Visit the website before asking for quotes regarding Decoder Installations.

For more information Contact Rick:
Monday to Friday 9am-5pm (excluding public holidays)
Ph. **02-4957-3703** or **0418-260-553**.
Email. sales@decoderwiz.com.au

Visit: www.decoderwiz.com.au

Decoder Wiz - ABN 65 960 438 419.

On Track Models

82 Class Diesel Electric Locomotives

Available Now



Available in both the original Freight Rail and new Pacific National colour schemes, these locomotives have worked within every mainland state of Australia.

These models have new and upgraded tooling including new air hoses unique to each version, new molded MU cables, Dynamic Blower Housing, and a new speaker enclosure.

The model now incorporates a newly designed main circuit board by ESU, and factory fitted speakers.

And for the first time we are offering a Factory Fitted Sound Option with the recently released ESU Loksound 5 board.

On Track Models is pleased bring you this highly detailed and desirable locomotive in HO Scale.

DC Version \$330.00 DCC Sound Version \$450.00

Available from: *On Track Models Pty Limited*
Postal Address: P.O.Box 15, EMU PLAINS NSW 2750 Ph: 0438 380 130
e-mail: sales@ontrackmodels.com.au Web: www.ontrackmodels.com.au

Southern Rail

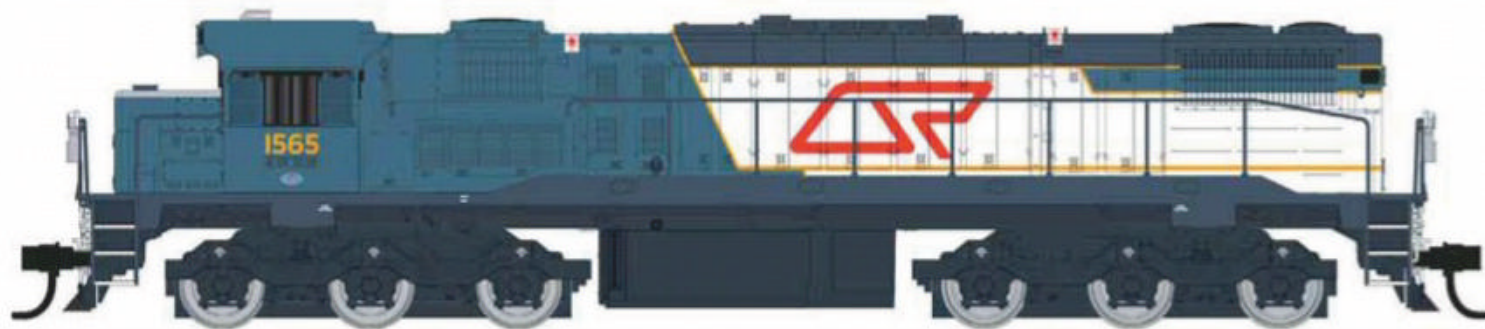
Quality Scale Models™

Queensland Rail
1550 / 2400-2470 Class Locos
HON 3.5 (12mm) & HO (16.5mm)

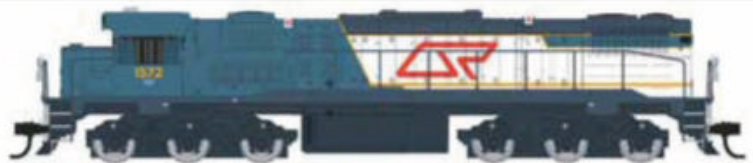
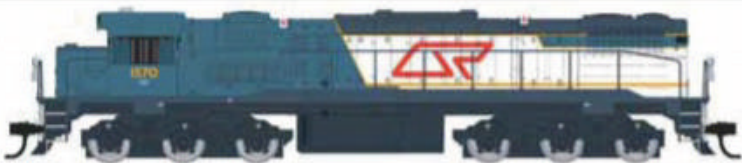


PHOTO COURTESY CHRIS NUTHALL

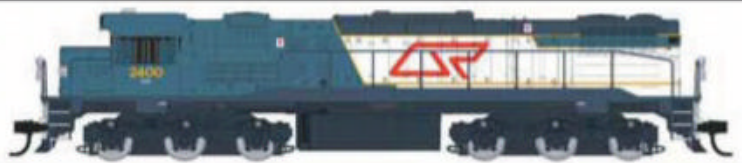
www.southernrailmodels.com.au



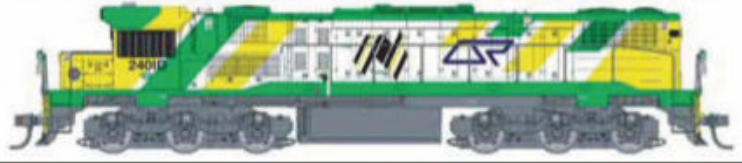
OVER 20
MODELS TO
CHOOSE



1550
Class
Locos



2400
Class
Locos



ALSO AVAILABLE
FROM:

CASULA HOBBIES



ADVERTISING INDEX

All Aboard Modellbahn	6	Eveleigh Press	62, 63, 64, 68, 70	Ozrail Model Trains	16
Auscision	7, 13, 17	Great Train Show	61	Pamak	8
Austrains	2	Ixion Model Railways	10	Powerline	12
Australian Model Craft Co	72	IDR Models	68	SCR Publications	60, 64, 65
Australian Model Engineer	8	Kadee Quality Products	12	SDS Models	3
Berg's Hobbies	6	Model O Kits	8	Southern Rail	69
Broad Gauge Models	10	Modelling Railways of SA	62	Steam Era Models	8
Casula Hobbies	9	Models 'N More	12	Train Hobby Publications	61
Decoder Wiz	68	Morley Controllers	10	Train World	71
Early Days of the NSW Railways Workshop	68	On Track Models	62	Victorian Model Railway Society Forum	62
Eureka Models	14, 15	Orient Express Wholesalers	11		

COMPETITION AND CONSUMER ACT 2010

The above act contains strict regulation on advertising. It is not possible for this company to ensure that advertisements which are published in this magazine comply with the Act and the responsibility must therefore be on the person, company or advertising agency submitting the advertisement for publication. In case of doubt, consult your legal adviser.

SCR Publications
PO Box 345, Matraville 2036

Eveleigh Press Publications

If your local hobby shop does not stock Eveleigh Press books, then order direct from SCR Publications.

Unless specifically stated in the price, items posted incur a packaging and postage rate of \$10 plus \$1 for each additional item up to a maximum of \$15.00 and must be added to the order total.

2020 AMRM Calendar (\$25.00 including postage)	☐	\$	.	Byways of Steam: 23 (\$38.00 plus postage)	☐	\$	.
38 – 2016 Reprint (\$70.00 plus postage)	☐	\$	.	Byways of Steam: 24 (\$40.00 plus postage)	☐	\$	.
44 – The World Down Under (\$65.00 plus postage)	☐	\$	.	Byways of Steam: 25 (\$40.00 plus postage)	☐	\$	.
46 – Portrait of a Classic (\$70.00 plus postage)	☐	\$	.	Byways of Steam: 26 (\$40.00 plus postage)	☐	\$	.
Alco DL541: NSW 45 & SAR 600 Classes (\$30.00 plus postage)	☐	\$	.	Byways of Steam: 27 (\$45.00 plus postage)	☐	\$	.
AMRM on DVD, Volume 1 (\$25.00 including postage)	☐	\$	.	Byways of Steam: 28 (\$45.00 plus postage)	☐	\$	.
AMRM on DVD, Volume 2 (\$25.00 including postage)	☐	\$	.	Byways of Steam: 29 (\$45.00 plus postage)	☐	\$	.
AMRM on DVD, Volume 3 (\$25.00 including postage)	☐	\$	.	Byways of Steam: 30 (\$45.00 plus postage)	☐	\$	.
AMRM on DVD, Volume 4 (\$25.00 including postage)	☐	\$	.	Byways of Steam: 31 (\$50.00 plus postage)	☐	\$	.
AMRM on DVD, Volume 5 (\$25.00 including postage)	☐	\$	.	Byways of Steam: 32 (\$50.00 plus postage)	☐	\$	.
AMRM on DVD, Volume 6 (\$25.00 including postage)	☐	\$	.	Byways of Steam: Encore (\$35.00 plus postage)	☐	\$	.
AMRM on DVD, Volume 7 (\$25.00 including postage)	☐	\$	.	The Fourth Byways Collection (\$100.00 plus postage)	☐	\$	.
AMRM on DVD, Volume 8 (\$25.00 including postage)	☐	\$	.	The Fifth Byways Collection (\$100.00 plus postage)	☐	\$	.
AMRM on DVD, Volume 9 (\$25.00 including postage)	☐	\$	.	The Sixth Byways Collection (\$115.00 plus postage)	☐	\$	.
AMRM on DVD, Volume 10 (\$25.00 including postage)	☐	\$	.	The Seventh Byways Collection (\$115.00 plus postage)	☐	\$	.
AMRM on DVD, Volume 11 (\$25.00 including postage)	☐	\$	.	The Eighth Byways Collection (\$115.00 plus postage)	☐	\$	.
AMRM on DVD, Volume 12 (\$25.00 including postage)	☐	\$	.	The Ninth Byways Collection (\$115.00 plus postage)	☐	\$	.
AMRM on DVD, Volume 13 (\$25.00 including postage)	☐	\$	.	Clydes Among the Cane: Fiji's Sugar R'way (\$20.00 plus postage)	☐	\$	.
AMRM on DVD, Volume 14 (\$25.00 including postage)	☐	\$	.	Coaching Stock of the NSW Railways 1 (\$100.00 plus postage)	☐	\$	.
AMRM on DVD, Volume 15 (\$25.00 including postage)	☐	\$	.	Coaching Stock of the NSW Railways 2 (\$120.00 plus postage)	☐	\$	.
AMRM on DVD, Volume 16 (\$25.00 including postage)	☐	\$	.	Coaching Stock of the NSW Railways 3 (\$110.00 plus postage)	☐	\$	.
AMRM on DVD, Volume 17 (\$25.00 including postage)	☐	\$	.	Coaching Stock of the NSW Railways 1-3 (\$300.00 plus postage)	☐	\$	.
AMRM on DVD, Volume 18 (\$25.00 including postage)	☐	\$	.	Conquering the Blue Mountains (\$50.00 plus postage)	☐	\$	.
AMRM on DVD, Volume 19 (\$25.00 including postage)	☐	\$	.	Day of the Goods Train (\$60.00 plus postage)	☐	\$	.
Australian Trains:				Essays in Steam (\$15.00 plus postage)	☐	\$	.
Newcastle Express (\$22.00 including postage)	☐	\$	.	Gerald Dee (\$60.00 plus postage)	☐	\$	.
Central West Express (\$22.00 including postage)	☐	\$	.	Goods Wagons of the New South Wales Railways 1855-1905 NEW (\$110.00 plus postage)	☐	\$	.
Southern Highlands Express (\$22.00 including postage)	☐	\$	.	Green Diesels – 40 and 41 Classes (\$30.00 plus postage)	☐	\$	.
Diesel Spectrum:				History of the SAR, Volume 5 (\$70.00 plus postage)	☐	\$	.
Victoria – Blue & Gold Era (\$12.00 including postage)	☐	\$	.	History of the SAR, Volume 6 (\$70.00 plus postage)	☐	\$	.
NSW – Reverse Livery (\$12.00 including postage)	☐	\$	.	Iron Work Horses (\$54.00 plus postage)	☐	\$	.
Qld – The Blue and White Era (\$12.00 including postage)	☐	\$	.	Kicked Out Like A Dog –			
NSW – Candy Livery (\$12.00 including postage)	☐	\$	.	The Turbulent Career of Thomas Midelton (\$40.00 plus postage)	☐	\$	.
Private Operators – Part 1 (\$12.00 including postage)	☐	\$	.	O.B. Bolton's Engine Portraits (\$45.00 plus postage)	☐	\$	.
Australian Diesel Scene: 3 (\$25.00 plus postage)	☐	\$	.	Ray Love's Days of Steam (\$50.00 plus postage)	☐	\$	.
Australian Diesel Scene: 4 (\$25.00 plus postage)	☐	\$	.	Shale & Shays (\$78.00 plus postage)	☐	\$	.
Australian Diesel Scene: 5 (\$25.00 plus postage)	☐	\$	.	South Australian Steam Memories (\$65.00 plus postage)	☐	\$	.
Australian Diesel Scene: 3, 4 and 5 (\$75.00 including postage)	☐	\$	.	South Maitland Railways (\$30.00 plus postage)	☐	\$	.
Byways of Steam: 8 (\$27.00 plus postage)	☐	\$	.	Spring, Spark & Steam (\$60.00 plus postage)	☐	\$	.
Byways of Steam: 9 (\$27.00 plus postage)	☐	\$	.	Standards in Steam: 53 & 55 Class Soft cover (\$50.00 plus postage)	☐	\$	.
Byways of Steam: 10 (\$30.00 plus postage)	☐	\$	.	Steam Across the Border (\$28.00 plus postage)	☐	\$	.
Byways of Steam: 11 (\$33.00 plus postage)	☐	\$	.	Sydney Suburban Steam (\$30.00 plus \$7.20 postage)	☐	\$	.
Byways of Steam: 12 (\$33.00 plus postage)	☐	\$	.	The Steam Tram in Australia & New Zealand (\$70.00 plus postage)	☐	\$	.
Byways of Steam: 13 (\$38.00 plus postage)	☐	\$	.	Time of the Passenger Train – 1st Division (\$60.00 plus postage)	☐	\$	.
Byways of Steam: 14 (\$34.00 plus postage)	☐	\$	.	Time of the Passenger Train – 2nd Division (\$60.00 plus postage)	☐	\$	.
Byways of Steam: 15 (\$35.00 plus postage)	☐	\$	.	Time of the Passenger Train – 3rd Division (\$60.00 plus postage)	☐	\$	.
Byways of Steam: 16 (\$38.00 plus postage)	☐	\$	.	Tulloch (\$85.00 plus postage)	☐	\$	.
Byways of Steam: 17 (\$38.00 plus postage)	☐	\$	.	AMRM Binders (\$16.00 plus postage)	☐	\$	.
Byways of Steam: 18 (\$40.00 plus postage)	☐	\$	.				
Byways of Steam: 19 (\$38.00 plus postage)	☐	\$	.	Plus Postage		\$	.
Byways of Steam: 20 (\$40.00 plus postage)	☐	\$	.	Total		\$	.
Byways of Steam: 21 (\$40.00 plus postage)	☐	\$	.				
Byways of Steam: 22 (\$40.00 plus postage)	☐	\$	.				

Cheque, Money Order or Card Payment only. Cheques payable to SCR Publications. Allow at least ten working days for return of order.

SCR PUBLICATIONS

PO Box 345, MATRAVILLE 2036 • Phone (02) 9311 2036 Fax (02) 9661 4323

Name
Street.....
Suburb Postcode.....
Phone.....

Card Number ☐Mastercard ☐Visa

Expiry date...../..... Signature.....

BOOKS CAN ALSO BE ORDERED ON LINE AT www.australianmodelrailways.com



Victorian Railways S-Cars, Order Form

VR, Blue and Yellow, SOP, Standard Gauge.

PC-410A	1 VFX
PC-410B	2 VFX
PC-411A	1 VFS
PC-411B	2 VFS

**We have the last
stocks of these, so only
whilst stock last.**

Limited in store
Limited in store
Limited in store
Limited in store

SRRP

\$150.00 each
\$150.00 each
\$150.00 each
\$150.00 each

Quantity

Quantity X Price

Sub-Total

Vic Rail (Tea Cup)-Tangerine with silver ribbons (1981-1983)

PC-441B	9 BS (Economy)
PC-442A	10 BRS (Snack Bar)
PCCP-4	210 BS/3 BS/224 BRS

In Store Now
In Store Now
In Store Now

SRRP

\$150.00 each
\$150.00 each
\$450.00 each

Quantity

Quantity X Price

Sub-Total

V/Line-Tangerine with silver ribbons

(1984-1986)

PC-450A	210 AS (First)
PC-452A	10 BRS (Snack Bar)
PCCP-5	212 BS /214 BS /226 BRS

In Store Now
In Store Now
In Store Now

SRRP

\$150.00 each
\$150.00 each
\$450.00 each

Quantity

Quantity X Price

Sub-Total

V/Line-Tangerine with green and white stripes

(1986-1995)

PC-455A	213 BS (Economy)
PC-456A	223 BRS (Snack Bar)

In Store Now
In Store Now

SRRP

\$150.00 each
\$150.00 each

Quantity

Quantity X Price

Sub-Total

Westcoast Railways (WCR)(19th Sept 1993 - 31st Aug 2004)

PC-495A	205 BS (Economy)
PC-495B	212 BS (Economy)
PC-496A	222 BRS (Snack Bar)

SOLD OUT
SOLD OUT
In Store Now

SRRP

150.00 each

Quantity

--	--

Quantity X Price

Sub-Total

V/Line Passenger Corporation (maroon, blue with white)

(1995-2006(July))

PC-475A	215 BS
PC-475B	216 BS
PCCP-8	217 BS/218 BS/219 BS

In Store Now
In Store Now
In Store Now

SRRP

\$150.00 each
\$150.00 each
\$450.00 each

Quantity

Quantity X Price

Sub-Total

Powerline Models H0 'S' Cars arriving in May 2019. Order on-line, Mail order or collect in-store.

Victorian Railways (VR) (blue and yellow)-Art Deco (BG)

PC-403A	6 AS	FIRST
PC-403B	7 AS	FIRST
PC-403C	8 AS	FIRST
PC-408A	9 AS	FIRST
PC-408E	15 AS	FIRST
PC-408F	16 AS	FIRST

Mid May 2019
Mid May 2019
Mid May 2019
Mid May 2019
Mid May 2019
Mid May 2019

Retail Price

\$160.00 each
\$160.00 each
\$160.00 each
\$160.00 each
\$160.00 each
\$160.00 each

Quantity

Quantity X Price

Sub-Total

Victorian Railways (VR) (blue and yellow)-Art Deco (BG)

PC-404A	5 BS	SECOND
PC-404B	6 BS	SECOND
PC-404C	7 BS	SECOND
PC-406A	8 BS	SECOND
PC-406B	9 BS	SECOND
PC-406C	10 BS	SECOND
PC-406D	11 BS	SECOND
PC-406E	12 BS	SECOND

Mid May 2019
Mid May 2019
Mid May 2019
Mid May 2019
Mid May 2019
Mid May 2019
Mid May 2019
Mid May 2019

Retail Price

\$160.00 each
\$160.00 each
\$160.00 each
\$160.00 each
\$160.00 each
\$160.00 each
\$160.00 each
\$160.00 each

Quantity

Quantity X Price

Sub-Total

Victorian Railways (VR) (blue and yellow)-Sans Serif(BG)

PC-420D	10 AS	FIRST
PC-420E	11 AS	FIRST
PC-420F	14 AS	FIRST

Mid May 2019
Mid May 2019
Mid May 2019

Retail Price

\$160.00 each
\$160.00 each
\$160.00 each

Quantity

Quantity X Price

Sub-Total

Victorian Railways (VR) (blue and yellow)-Sans Serif(BG)

PC-421D	7 BS	SECOND
PC-421E	8 BS	SECOND
PC-421C	15 BS	ECONOMY

Mid May 2019
Mid May 2019
Mid May 2019

Retail Price

\$160.00 each
\$160.00 each
\$160.00 each

Quantity

Quantity X Price

Sub-Total

Name: _____ Mobile No. _____

Address: _____

Suburb/Town: _____ State _____ Postcode _____

Email _____ Date _____

Totals

Postage

TOTAL DUE

Payments via Credit Card, Direct Deposit, Cheque or Money Order. **Shipping at cost.** Phone or Email for details

290 Bay St, Brighton, Victoria, 3186. Ph: (03) 9596-6342 Email: internetsales.tw@trainworld.com.au