

AUSTRALIAN

\$10.00
OCTOBER
2019

MODEL RAILWAY

MAGAZINE

Forest Creek



Modelling a Webb Caboose in HO Scale
Gallery: The Laird Crosshead Engines
In the Loop: Track
Reviews • Mailbag • AMRM News



Issue 338 Vol. 29 No.5

ISSN 0045-009X



9 770045 009009

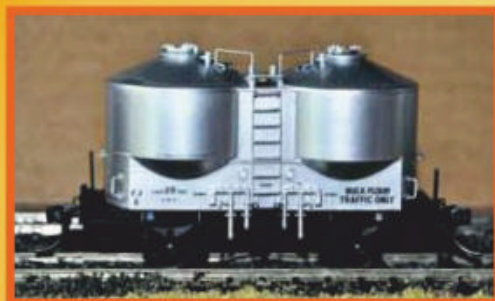
0 5 >



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

VR FJ Flour Hopper

IN STOCK!



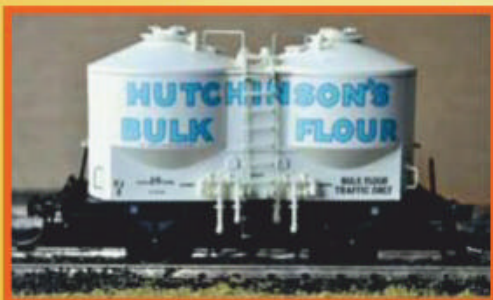
Silver



Riverina / Grant & Wilson



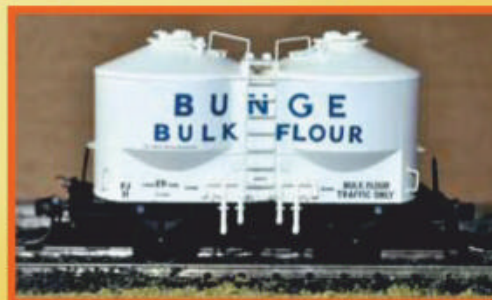
Water Wheel



Hutchinson's



Jackett's



Bunge

Pack A: 3 x Jackett's
Pack B: 3 x Jackett's
Pack C: 1 x Riverina/Grant & Wilson 2 x Silver

Pack D: 1 x Bunge 2 x Silver
Pack E: 1 x Hutchinsons 2 x Silver
Pack F: 1 x Water Wheel 2 x Silver

Price \$165.00 per 3 pack plus \$14.00 postage
2 packs or more postage at cost.



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

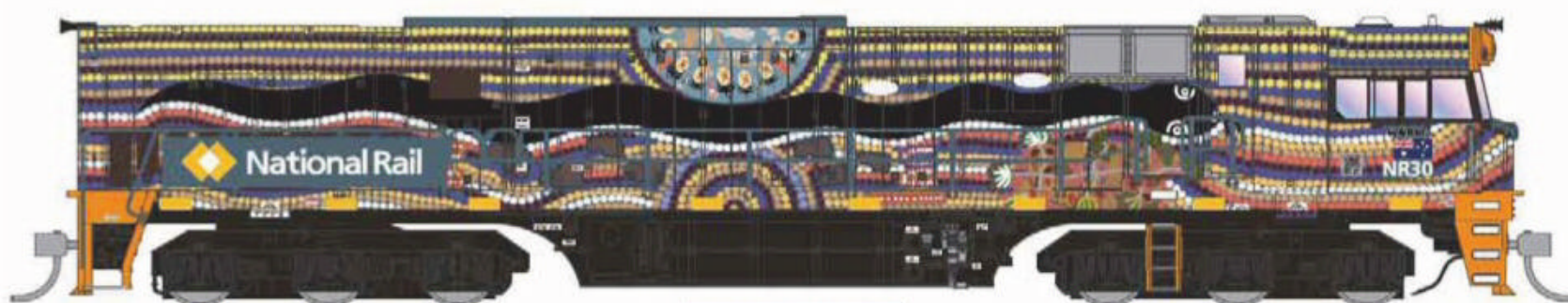
In late 1997 National Rail Corporation out-shopped two NR class locomotives bearing indigenous design based on the work by Alice Springs artist Bessie Liddle.

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.

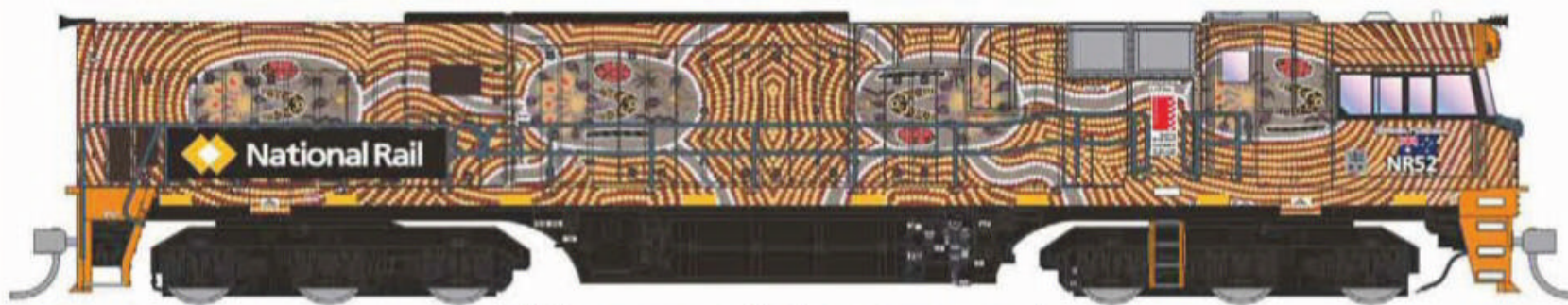
The second was launched in Alice Springs by Mark Vaile in December 1997, Kungara Mankurpa NR52, this design depicts the Star Dreaming story Seven Sisters. Decorated by Bessie, a dot painting showing the travels of the Seven Sisters and their pursuit by the Snake Man in Pitjantjatjara country.

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



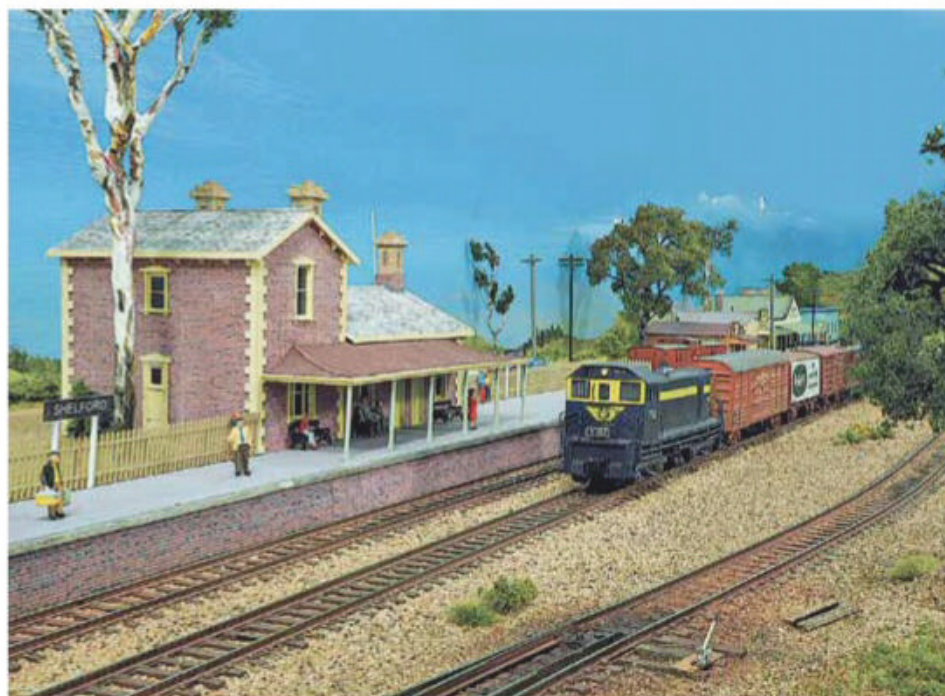
Editor: James McInerney

Issue 338 Vol.29 No.5

FEATURES

18 Forest Creek

Tony Scott describes his extensive N scale home layout based on diesel era VR practice.



31 Modelling a Webb Caboose in HO Scale

Gavin Thrum builds some classic SAR rolling stock.



40 Beyond the Fence: War Memorials

Graham Watson looks at an oft modelled subject.

42 Build Working Station Lights

Ian West scratch-builds working platform lights.

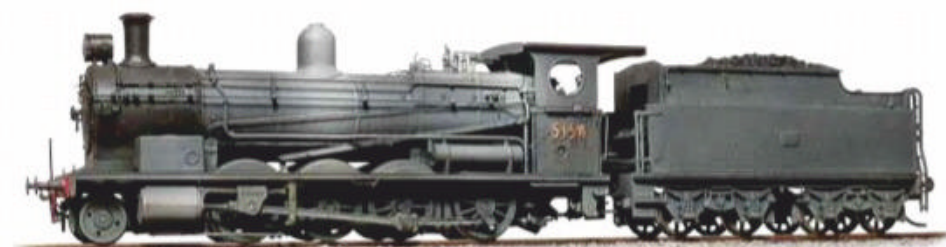


43 De-bugging your Layout

Jonathan Majer addresses the issue of protecting one's layout from invasive wildlife.

45 My Standard Goods Fleet Part 3: The Laird Crosshead Engines: 5154 and 5340

Ray Smith details further variations on his Standard Goods fleet.

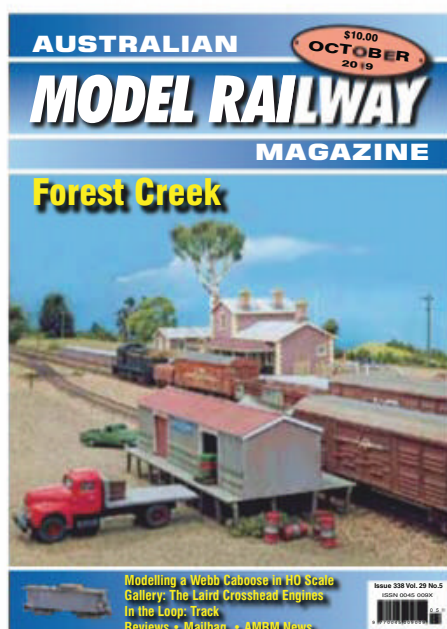


OTHER FEATURES

- 28 In the Loop: Track
- 30 Recycled Rollingstock: The EHO at Taralga

REGULARS

- 48 Reviews
- 52 Recent Releases
- 55 AMRM News
- 58 Diary
- 58 Mailbag
- 70 Advertisers' Index



ON THE COVER: Inbound traffic is being transferred to a carrier's truck at the goods shed while T373 stands in the loop with a down train at Shelford, an intermediate station on the branch line to Tarrengower on Tony Scott's N scale home layout, 'Forest Creek', which is described in this issue. Photo by John Dennis.



Modelling the Urban Scene

When the subject for a model railway arises, most of us look at the countryside where we can have express trains running at high speed, a long lash up of diesels hauling an interstate freighter, or even just a simple country branch line railmotor ambling through a bucolic scene. Very few of us look at the urban scene, such as that in the city suburbs or in the larger country cities where the railways serve the rural industries. In a recent discussion about model railways the question "When will we see models of the Sydney Metro?" arose. Before this topic could be dismissed with a "Why?", doubt set in and "Why not!" was considered.

My first connection with an urban model railway was in the 1970s, when a work associate displayed his model railway consisting of four Tri-ang Sydney suburban cars and a basic suburban scene. So modelling urban can be an economical option. There was more to this 'less is better' evaluation, but that is for another day. Since then there have been exhibition layouts that encompassed urban scenes (mostly just featuring passenger trains), but are we looking at a too narrow scene considering just passenger traffic?

The growth of industry in the country would not have been possible without railways. While many of us may have visited family or gone on holidays by passenger train, it was the goods trains that supplied the transport that allowed this country to grow. Along with the very large marshalling yards there was plenty of rail action in the suburbs, especially around the docks and in the industrial areas. We do not need to look too far back to when the noise of engines shunting at night was commonplace.

On the other side of the city there were many trains servicing the industries that were fed by the shipping in the harbour. That in itself is a mammoth task to model, but what of the side issues that made up this industry? Sydney had a huge double-deck goods shed that was in the middle of a large yard at Darling Harbour; what a model that would make! On the goods lines to the docks there were flour mills and wine bottling plants, all rail served. Construction of a model of such a large flour mill would be a challenge in itself, let alone all the traffic that passed through the sidings.

If we move the clock along a bit, the mid-diesel era in Melbourne had some wonderful modelling challenges, with many small rail-serviced yards. The challenge would not just be in the associated buildings, but also the containers that varied dramatically in that period; a time before anything outside the 8' x 8' x 20' (2.4m x 2.4m x 6m) ISO box was not unusual. Containers for trans-shipping horses were just one of many very interesting modelling challenges. And what about the road trucks delivering the containers? The vehicles in use before the road industry caught up with demand were often 'unusual', to say the least. Models of these items may not seem to be a 'core' rail model, but they are part of the railway scene and their inclusion creates atmosphere.

We must not forget that many of our cities relied upon the night time trains to supply our food. In Sydney, trip trains supplied meat to many locations throughout the suburbs. This scenario gives the modeller the opportunity to model the urban rail line with houses and road transport on one side of the tracks and detailed industrial and retail buildings on the other. A large city scene in any of our capital cities provides the opportunity to build one of our large, full block sandstone buildings with rail services, such as one of Brisbane's sugar mills.

Our model importers are now supplying us with many opportunities to model rail services to these areas. We have had the TNT monorail and are soon to get some Tangaras and Tait cars, adding to the many types of suburban passenger trains already available. Trams are now available via 3D printing, and these are wonderful to look at, so modelling urban has a good group of suppliers.

Another benefit of urban modelling is that it can be done in a very small space, if necessary, with plenty of enjoyment to be found in the challenges of creating the buildings and other aspects of the urban scene.

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
Robert (Bob) Gallagher OAM

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/y8oykqxx

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
December 2019	3.10.19	14.11.19
February 2020	28.11.19	17.1.20
April 2020	1.2.20	15.3.20
June 2020	5.4.20	17.5.20
August 2020	7.6.20	19.7.20
October 2020	7.8.20	18.9.20

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

Well I sure don't want to do that damned track cleanin' again. I did it last year!

Too right! Let's get all our Track Cleanin' Gear from All Aboard. Saves gettin' our clothes dirty.

Yeah, Track Kleen.

ALL ABOARD

est. 1975

- 1 Seuthe Track Kleen #108**
Fluid for track and locomotives. No damage to paint, electrics nor plastics. Leaves anti-corrosive film.
- 2 Noch Track Cleaner. HO: #60157; N #60158; TT #60159.** Clip pads to any 2-axle wagon. Tracks cleaned while train runs.
- 3 Roco Rubber.#10002.** Track rubber is excellent for cleaning rails of dirt and oil residue; all gauges.
- 4 Fleischmann Oil #6599**
Use on your rails to improve running. Great for all plastic and metal gears.

Mention this ad for a

FREE BOTTLE OF TRACK KLEEN

with any purchase over \$100

Offer ends 31/12/19. In-store and phone orders only

STARTER SETS for ALL BRANDS AND GAUGES

(Z, N, HO, OO, G, 1)

allaboardeexclusive.com.au

68-72 Old Hume Hwy, Braemar, NSW 2575 (02) 4871 2966

PO Box 388 Mittagong, NSW 2575 E: vic@allaboard.com.au

Open 9.30-4.30. Closed Sundays, Public Holidays

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

Track, Gear and Wheel Cleaning Time



AUSCISION®

The Leader in Australian Model Railways

HO SCALE



SOUTH AUSTRALIAN BL CLASS LOCOMOTIVE

Auscision Models is proud to announce to our customers the forthcoming production of the South Australian BL Class Locomotive. Our BL Class will be available in both Standard DC & DCC Sound versions. Sound versions will include a 21 pin ESU LokSound V5 decoder with Auscision Vandersound speaker enclosure with twin speakers and will have prototypical sound files. 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 \$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.

Visit our website for further details and features

NOW ACCEPTING ORDERS
Delivery expected 2020*



BL-1 BL26 Australian National - Grey Roof (Bob Hawke)



BL-2 BL28 Australian National - Green Roof



BL-4 BL29 National Rail - Arrows



BL-6 BL32 National Rail - Charcoal



BL-8 BL30 SteelLink



BL-10 BL28 Pacific National - Intermodal



BL-12 BL26 Pacific National - Rural & Bulk (Bob Hawke)



BL-13 BL27 Pacific National - Rural & Bulk

*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 SMART CONTROL light DIGITAL
STARTER SETS WITH TRACK,
RERAILER AND CONTROLS
FROM \$386**



MODEL KITS

specialists in model kits & accessories



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 pin DCC 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.

COMING
SOON

ModelOkits are pleased to announce
the production of the

NSWGR Z12 Class Locomotive



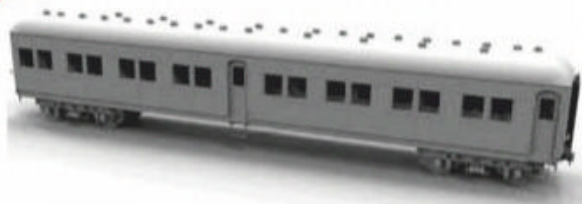
- RTR locomotives are fully built/running/tested, Includes number plates, decals, standard paint (black), working lights, 8 pin DCC interface (plug-in).
- Detail includes: slow running, real coal, detailed back head. Specific paint requests will incur additional charges.
- Minimum radius: 6'

Available in 2020

Prices to be confirmed

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 Qtr 4 - 2019
Price: \$425.00 each.

COMING
SOON

NSWGR RUB CARS

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

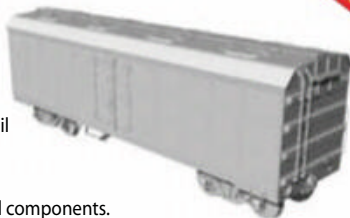
Kits available by
order only:
Late 2019/Early 2020
Prices: TBA

COMING
SOON

"TRC" WAGON KIT

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.

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

Visit us at www.modelokits.com Telephone: 0404 935 663 email: sales@modelokits.com



SAN MATEO LINE

Victorian Railways Somersault lattice Mast Semaphore Signal

Features operating red and green lens
with led which changes with the signal
arm movement

Fully assembled and Ready to place
Operating rod protrudes through base
enabling connection to servo motor.

\$140.00

San Mateo Line

PO Box 2205 Mildura 3502

Ph. 0428 236 055

Email sales@sanmateoline.com.au

www.sanmateoline.com.au

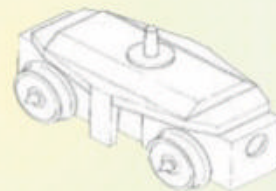
BLACK BEETLE Self Contained Drive Bogies powered
by Mashima 1220 or 1224 Motors
Custom Assembled \$95.00

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.



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 2020.

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

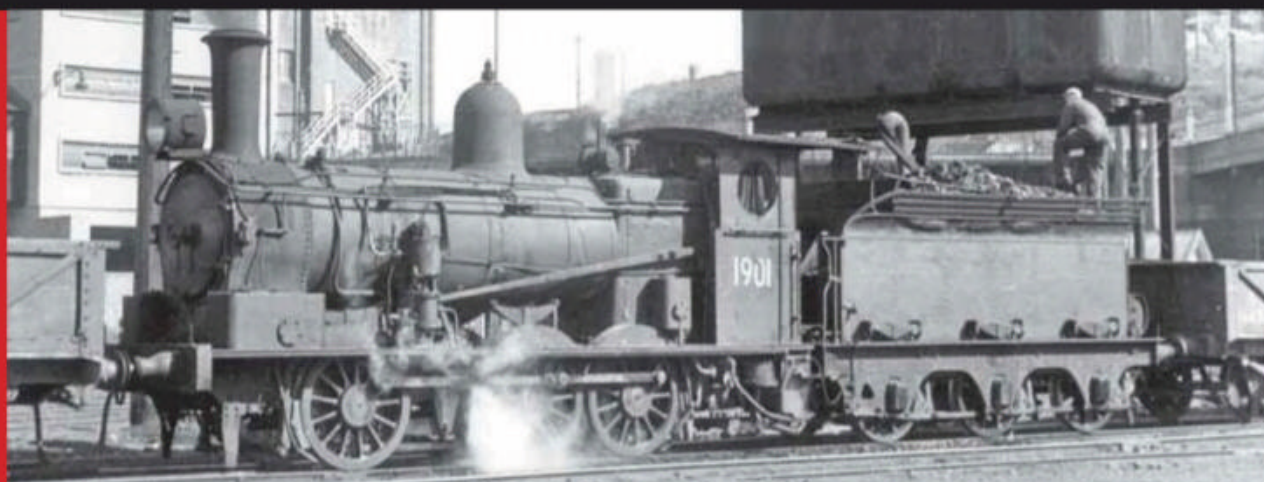
PRICE REDUCED!

*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.*

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



PLACE YOUR ORDER
EARLY TO ENSURE
CURRENT PRICING.
AS A PRICE RISE
IS IMMINENT DUE
TO CURRENCY
FLUCTUATIONS!

HG VANS

Single pack \$110.00

Unless otherwise stated

- 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 LOW
- HG-7. HG 5434. Van for Yass and large yards with no passenger compartment, post 1962 LOW
- HG-9. With two compartments unnumbered
- 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

Tulloch Double Decker Cars

2 Car Blue & White Trailers

STOCK CLEARANCE - WHILE STOCKS LAST!

\$225.00 per 2 car set

RRP \$320.00

NSWR PCX/PCC/NPCF CEMENT HOPPERS & NGNF WHEAT HOPPERS

FOUR PACK \$299.00

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
CR 57/EHO 1459 Indian Red	\$285.00

R Car SETS

Set 109 Tuscan & Russett 6 cars	\$900.00
Set 109 Indian Red 6 cars	\$900.00
Set 108 Tuscan and Russet 7 cars	\$1050.00
Set 108 Indian Red 7 cars	\$1050.00
Set 121 Tuscan and Russet 4 cars	\$600.00
Set 122 Tuscan and Russet 4 cars	\$600.00
Set 120 Indian Red 3 cars	\$450.00

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

NSWR BNX CAR CARRIER

TWIN PACK: \$150.00

FOUR PACK: \$300.00



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 Gin Single pack \$95.00

NOW AVAILABLE and listed on our website.

**RUB KITS/72'6" ROOFS
back in production**

EVELEIGH PRESS

is proud to present a new standard in railway history publishing with the release of

New South Wales Railways in Colour 1855–1957

**by Garry Saunders
with drawings by Greg Edwards**

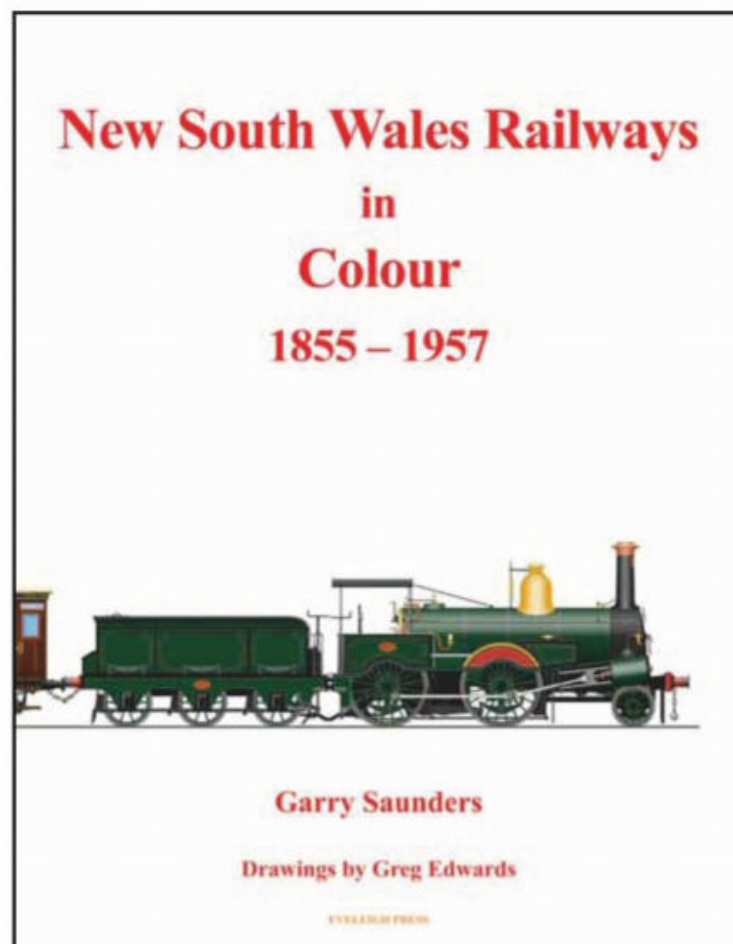
This book will take you on a journey through 100 years of the history of NSW Railways, from its beginnings in 1855 at the dawn of the steam era until 1957 when the legacy of the steam locomotive passed on to newer and more capable technologies.

Along the way we will look at over 320 items of rolling stock and briefly describe their place in the history of NSW Railways. Locomotives of all types (steam, electric, diesel-hydraulic and diesel-electric) will be discussed as will railmotors and rail cars, passenger carriages, goods wagons and support vehicles. Tramways, an integral part of the Railway administration for many years, including horse, steam, cable and electric trams, have also been briefly discussed.

As far as possible this journey will be brought to you in colour.

Following many years of research and analysis, the history that we have known from black and white images can be brought to life in the colours that people of the time would have instantly recognised.

The research has uncovered many original samples of paint colours taken from the fabric of NSW Railways historic



vehicles which have been analysed to unlock a wealth of information about the pigments, paints and colours that were actually used at different times during this hundred year period.

During the course of this research a great deal of new information has been uncovered, including NSW Railways documents describing the paints and the pigments used to make them, newspaper articles describing the liveries of the time, Parliamentary notes, long lost archives files and interviews with some of the men who were apprentices at the Eveleigh Carriage Paintshops in the early 1950s.

The results of this research have been used to create images of hundreds of items of rolling stock as they would have appeared, showing how their liveries evolved, influenced by the aspirations of the various personalities involved

in the development of the Railways, the fashions of the time, evolving paint technology, wartime and social change.

Illustrator for this book, Greg Edwards, has interpreted the data uncovered by this research to prepare more than 130 colour drawings to bring this black and white world to life.

NOW AVAILABLE

\$145.00 plus postage

SCR PUBLICATIONS
PO Box 345 Matraville 2036

Telephone: (02) 9311 2036

Fax: (02) 9661 4323

www.australianmodelrailways.com

ORIENT EXPRESS REPRODUCTIONS

AVAILABLE NOW!



SAR F Class Tank Loco - \$550.00

With DCC - \$595.00

With sound - \$700.00



M Vans

Twinpack - \$109.00



D Louvred Vans

Twinpack - \$109.00



SAR Centenary Cars

With lighting - \$138.00

Without lighting - \$109.00



OB Open Wagons

Twinpack - \$99.00

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!

POWERLINE

MODEL RAILWAYS OF AUSTRALIA

Powerline Models Pty Ltd

P.O Box 2100 Brighton, Vic 3186.

www.powerline.com.au powerline@powerline.com.au

Price listing: <http://www.powerline.com.au/pdfmenu/Pdlisting.pdf>
(All photos are samples from previous production runs)

V.R. S-Cars.
Due Sept.
2019



Victorian Railways T-Class. Series 3 (T4) Low Nose.
T370, T371, T381 & T383. Arriving in 2020, limited quantity

Upgraded & modified. MTC21 21 pin DCC socket, speaker fitted, metal couplers & blackened wheels



Victorian Z-Cars. AZ, BZ, ACZ. BCZ, BTN & BZN.

In V.R, V.R SOP, VICRAIL, V/Line, V/Line Passenger Corp and West Coast Railways liveries.

This first production run consists of 56 different units and is expected early 2020.

Z-Car order Forms: <http://www.powerline.com.au/pdfmenu/Pdspecials.pdf>

T-Class order Forms: <http://www.powerline.com.au/pdfmenu/Pdcomingsoon.pdf>

Email orders to: sales.powerline@powerline.com.au

For all news, updates, photos or information go to our website or FaceBook page.

<https://www.facebook.com/PowerlineModels>

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 39, Galston NSW 2159
www.idrmodels.com.au
idrmodels@gmail.com

IDR MODELS



- Features:
- Ready to Run
 - Blackened metal wheels
 - Plastic (ABS) Body
 - Heavy Metal Chassis
 - Brass flywheel
 - Factory Painted & Decorated
 - Separately applied metal parts
 - Sound ready or fitted
 - ESU Loksound V5*
 - Operating Headlights / Marker lights
 - Genuine Kadee Couplers
 - All wheel drive and pickup
 - DCC Ready and Fitted (21 Pin)
 - Built in Stay Alive

The VR W Class & NSWGR 7101 Class Diesel Hydraulic Locomotive
IDR Models is proud to announce the next model in the shunting locomotive series



W 243 Original Body



W 244 Rebuilt Body



W 244 Rebuilt Body



NSWGR 7101



IDR MODELS

PO BOX 39, Galston, NSW, 2159
www.idrmodels.com.au
idrmodels@gmail.com

ABN: 64 123 138 661



AUSCISION®

The Leader in Australian Model Railways

HO SCALE

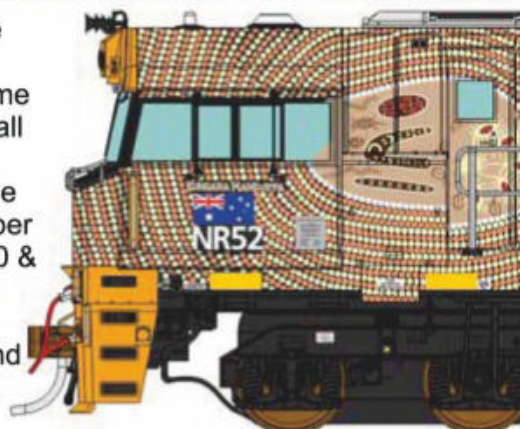
AUSTRALIAN NR CLASS LOCOMOTIVE

NR30 "WARMI"
NR52 "KUNGARA MANKURPA"

Did you think we would leave our customers without these two beautiful liveries? Auscision Models has been working with the Liddle family over the last 4 years to produce these two models in HO scale, and we are now proud to announce our highly detailed NR Class Locomotive in these two National Rail indigenous liveries. NR30 "Warmi" & NR52 "Kungara Mankurpa" came out in 1997 in liveries developed by Aboriginal artist Bessie Liddle. Each model will use high quality pad printing to represent all of the artist's painting, and the reproduction will match the quality of the painting & printing of all Auscision Models previous products. As this process is quite labour intensive & time consuming our factory has assigned production time at the end of the year to complete these complex models. The cost is also significantly higher than our standard models due to the sheer number of printing plates required to get the livery accurate on all the different body panels on the locomotive. We are expecting NR30 & NR52 to arrive around January 2020, shortly after our standard NR Class which are scheduled to arrive in December 2019.

Our NR Class will be available in both standard DC & DCC sound versions. Sound models will include a 21 pin ESU LokSound V5 decoder with Auscision Vandersound Classic speaker enclosure with twin speakers and will have prototypical sound files.

Limited numbers of each version are being produced so we advise ordering early to avoid missing out. Pre-order price will finish on 31st of December 2019. NR30 "Warmi" & NR52 "Kungara Mankurpa" are fully licenced by the artist's agent. **Warmi & Kungara Mankurpa © Bessie Liddle / Copyright Agency**



NOW ACCEPTING ORDERS
Delivery expected January 2020*

PRE-ORDER & SAVE \$\$\$

Save \$60.00 per locomotive when you pre-order directly with Auscision. Pre-order price will finish on the 31st of December 2019. Order early to avoid missing out. Limited numbers being produced.

Visit our website for prices & further details

Model Features:

- Most accurate & highly detailed NR Class on the market
- Ready-to-Run in HO Scale 1:87
- 5-Pole skew wound motor with twin brass flywheels
- All-wheel drive and power pickup
- Standard DC & DCC sound versions available
- Brass horns, etched mirrors & windscreen wipers
- See-through etched grilles
- Highly detailed bogies and underframe
- Operating LED headlight, marker lights, number box lights, ditch lights & fuel tank gauge light

- High quality pad printing for all of the decoration
- Livery is accurately reproduced in HO scale
- Detailed and painted cab interior with painted driver figures
- Over 300 separately factory fitted parts
- Heavy diecast chassis with plastic body, cab & walkways
- Scale size separately applied durable POM plastic handrails
- Blackened metal disc wheels (RP25-110)
- Metal knuckle couplers (scale size)
- Separately applied rubber sanding pipes

Sound Features:

- ESU LokSound V5 21 pin decoder
- Vandersound Classic speaker enclosure with twin speakers
- Prototypical sound files
- GE 7FDL-16 engine (start-up, idle, running notch-1 to 8 & shutdown), GE "Woop" compressor & GE traction motors
- Dynamic brakes
- Kockum Sonics 5 chime air horn (short & long)
- Steel bell
- Brake squealing & flange squeal
- Coupler (release & crash)

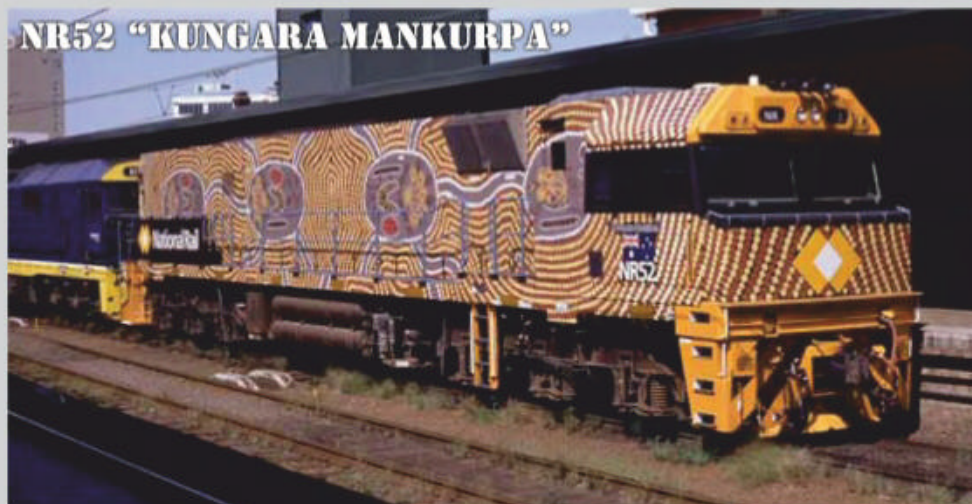
LOK SOUND
EST. 1999

NR30 "WARMI"



Please note: Photo showing early livery without nose dots. Model will be finished with nose dots.

NR52 "KUNGARA MANKURPA"



*Model details & delivery dates subject to change without notice



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

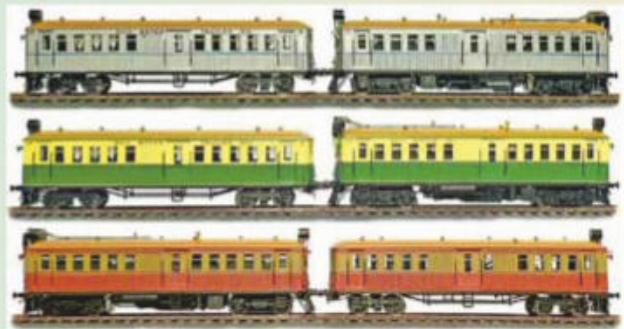
\$150.00 per car
add \$25.00 per car



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 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 RH FOUR WHEEL CEMENT HOPPER IN TWO VARIATIONS



Southern Portland
Cement
NSWGR

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 CHG 4-WHEEL BRAKE VAN BACK IN STOCK

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



THE NSWGR BCW BOGIE CATTLE WAGON

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



THE VR S BOGIE FLAT WAGON



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

Postage: Add
\$15.00 per delivery



EUREKA MODELS
"The Leaders in Sound"

EUREKA MODELS

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 2020



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

ETA 2020



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

EARLY 2020



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



ETA 2020

Photo: Graham Cotterall

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 2020

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 NEXT IN EUREKA'S 12 WHEELER SERIES

THE TAM SLEEPER IN INDIAN RED AND CANDY LIVERIES

THE MCS SITTING CAR IN INDIAN RED

After delivery price	\$150.00
----------------------	-----------------

ARRIVING MID SEPTEMBER

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 - Locos &
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 ****

**** NEXT ISSUE—NEW PRODUCT ANNOUNCEMENT! ****

FB FLAT WAGONS—\$136 FOR 2 PACK

Metal wheels - Scale knuckle couplers - ABS plastic chassis - Extra stanchions included



**SA CATTLE VANS—LOW STOCKS!
\$136 FOR 2 PACK
IN SOUTH AUSTRALIAN AN + ANR
COLOURS! SELLING FAST!**



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, Oz-
rail, 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.

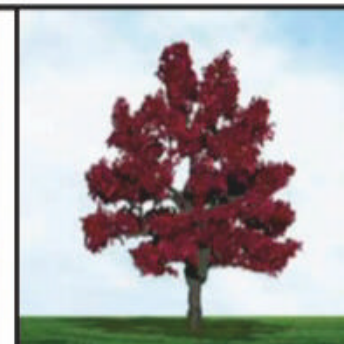
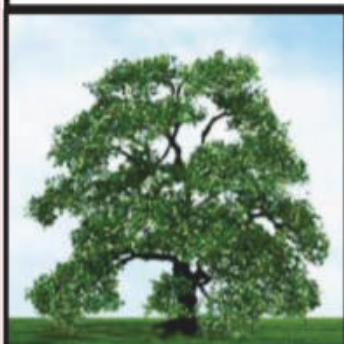
Lay-By Welcome - 10 Week Term.

**SAR C Archbar Bogies—(Grey) or High Speed
Bogies (Green & Gold or Oxide Red) ~ ABS Plastic
~ Air Hoses ~ Kadee Compatible Couplers**

ALL SCALE SCENICS—HUGE RANGE!

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

ASK US ABOUT WHOLESALE SUPPLY



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



SERIES 1 VICTORIAN G CLASS LOCOMOTIVE

Auscision Models is proud to announce to our customers the forthcoming production of the Victorian Series 1 G Class Locomotive. Our G Class will be available in both Standard DC & DCC Sound versions. Sound versions will include a 21 pin ESU LokSound V5 decoder with Auscision Vandersound speaker enclosure with twin speakers and will have prototypical sound files. 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 \$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.

Visit our website for further details and features

NOW ACCEPTING ORDERS

Delivery expected 2020*



G-1 G511 V/Line - as delivered



G-8 G513 SCT



G-3 G513 V/Line - 1990's



G-10 G513 SSR (Mike Moy)



G-5 G515 Freight Victoria



G-11 G514 SSR (Graham Cotterall)



G-6 G511 Freight Australia



G-12 G512 CFCLA

*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



◀ Y152 stands in the loop at Shelford with a short up train.

▶ An impressive 'lash up', comprising Commonwealth Railways GM28, an SAR 830 class and a VR 'flat-top' T class, rush through Forest Creek with a Melbourne-bound freight while the passenger train for Tarrengower waits for its connection in the back platform.



The stock yards at Shelford, made from stained stripwood and code 40 rail, will soon see some activity as the cattle wagons are loaded.



Forest Creek

*Tony Scott describes his latest N scale home layout, based on the VR in the 1970s.
Photos by John Dennis, unless otherwise credited.*

My previous layout, *Emu Creek*, occupied a 5m x 3m space in a purpose-built shed and was featured in AMRM Issue 316 (February 2016). It was my first serious layout and proved to be very satisfying in terms of size, track arrangement and scenery development. I was also very pleased that I was able to say, after about three years, that it was 'finished' (as much as a model railway can ever be regarded as having reached that stage).

However, in 2012 my wife and I decided we wanted to move closer to Melbourne to be in more regular contact with our families, so we chose to make our new home in Gisborne. Imagine my pleasure when we (jointly) settled on a property that just happened to have a 26m x 6m shed in the backyard! It was partially divided, the front to be used as a workshop and storage area, leaving me 11m of the shed to be used as I wished. In short order I built a wall at one end giving me a train room of 7.75m x 6m which I insulated and lined, and had a suspended ceiling installed with plenty of troffer lights I managed to buy cheaply on eBay. This was more like it!

Track Plan

The inspiration for *Emu Creek* had been the Maldon branch, which diverges from the Bendigo line at Castlemaine. For the new layout I wanted a long single track branch line as well as somewhere to run main line diesels, so it was a pretty easy decision to base it on the same scenario, but this time attempting to

model the real locations a little more accurately.

From there, the plan developed into a double track dog-bone main line passing through Castlemaine station with the Maldon line commencing from there and taking a fairly long route to a terminus, with a few passing loops along the way. The two ends of the 'dog-bone' consist of multiple track return loops where trains may be parked or made up.

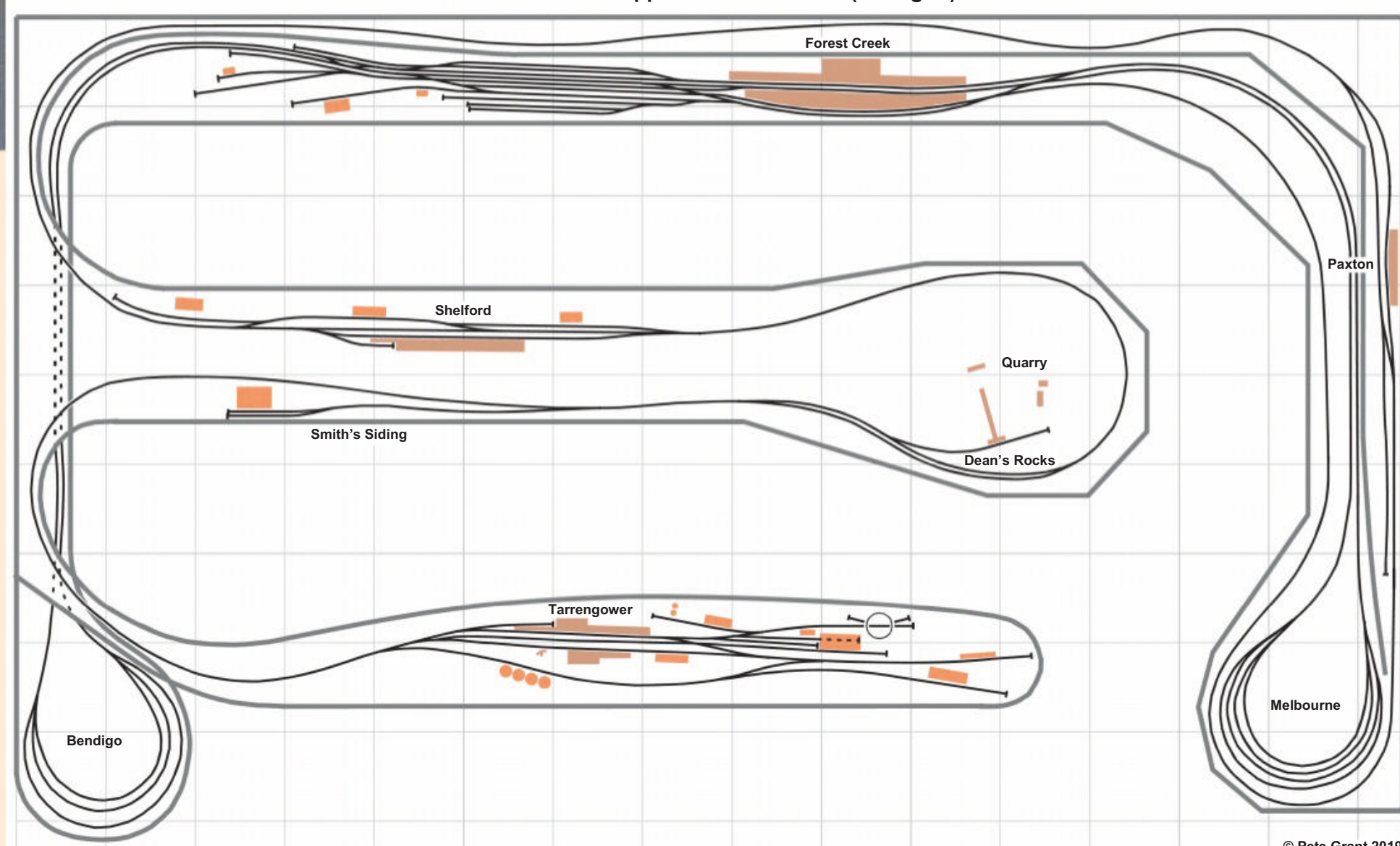
The main line runs on level benchwork attached to three walls, while the branch rises slowly to run above and behind it before negotiating one peninsula and terminating on a second, an arrangement inspired by Peter Knife's wonderful layout, *Minnipa* (described in AMRM Issue 296, October 2012).

The layout era is approximately 1978, just before freight wagon codes were changed to four letters. At this time Castlemaine station had an extensive yard with five double-ended sidings on each side of the main lines together with several other sidings. The total length of the station and yard from the up end crossovers to the down end of the head shunts was about 1.4km, or 8.7m in N scale, so it had to be pruned. The ten through sidings were reduced to five, supplemented by several other sidings and head shunts. Because the yard layout was no longer a true representation of Castlemaine, I named it Forest Creek, its old gold rush era name. This design all fits into an area 4.4m long by 400mm wide, which still allows room for sweeping curves on the main line at each end.

The branch is about 37m long representing nearly 6km in the



Forest Creek — approx. 7.75m x 4.65m (0.5m grid)



© Pete Grant 2019



▲ An overall view of the layout with owner and builder, Tony Scott, supervising operations at the terminus, Tarrengower.



◀ An old I wagon is the receptacle for scrap at the locomotive shed at Tarrengower.

At A Glance

Scale: N (1:160)

Prototype: Victorian Railways

Period: circa 1978

Layout Type: Junction-to-terminus branch line with 'dog-bone' continuous main line

Layout Size: 7.75m x 4m

Rail Height from floor: 1.12m - 1.29m

Baseboard: 70mm x 35mm pine legs and subframe supporting 42mm x 19mm pine frame, covered with 9mm MDF

Track: Peco code 55

Control: NCE DCC

Structures: Scratchbuilt, with some kits

Locomotives: Scratchbuilt bodies on proprietary chassis and r-t-r

Rolling stock: Scratchbuilt, kit and r-t-r

Builder: Tony Scott



A double-headed wheat train, having departed Tarrengower, toils upgrade around the superelevated curve through the swamp.

real world. After departing Forest Creek it climbs on a 1.5% (1 in 67) grade to Paxton which consists of a loop and one siding. A 1% (1 in 100) grade continues right along the back wall where the line runs over a low timber pile bridge (or trestle in any other state) over a broad valley then crosses over the main and descends rather sharply at 1.9% (1 in 53) into Shelford on the first peninsula. The name Shelford is a combination of Shelbourne, the terminus of a short line that used to run from Maldon, and Muckleford, the station halfway between Castlemaine and Maldon. Shelford has two loops, grain silos, stockyards, goods shed and a dock for the rail motor.

Further on is a long loop and a siding into a ballast quarry and loader, the latter based closely on a loader at the real Minnipa in South Australia. Next is a siding into the Emu Creek Cool Store, a structure that adorned my previous layout. Finally, after traversing some swampy ground, the terminus is reached. This started out being based loosely on Maldon, but has since grown a bit. Consequently, it wasn't called Maldon, but Tarrengower, the early name for the town. It consists of a goods shed, a silo track, a stockfeed shed, a petroleum depot, an engine shed, a turntable and a couple of storage sidings. Again, the loops and sidings are long enough to accommodate quite lengthy trains.

Benchwork

There is nothing special about the benchwork - 70mm x 35mm pine supports the superstructure of 42mm x 19mm pine spaced at about 300mm centres and covered by 9mm MDF. Both Forest Creek and Tarrengower were built as separate modules for ease of wiring before being attached to the substructure. Along the wall the support legs are angled back and attached to cleats screwed to the wall. The peninsulas have braced legs making them wobble free. The height of the baseboard at Forest Creek is 1.12m and on the peninsulas 1.29m.

Track design was done using XTrackCAD in order to make sure sufficient room was allowed for points, curves, clearances etc. The subframe was also modelled, ensuring that point controls would be in the clear – an admirable aim, but one that didn't always pan out...

Track

All of the track is Peco code 55, and all points are live frog and large radius (except for two or three in the return loops). Because of the size of the room, I decided at the design stage that I wanted large radius turnouts because of their more prototypical appearance. The radius of curves was also made as large as possible – those on the main line vary between 700mm and 1.0m (28"–40") and on the branch from 500mm to more than 1.0m, but mostly greater than 650mm (26").

All points in the Forest Creek yard are operated by motors, a mixture of Cobalt and Tortoise machines, as well as several servos. All other points are manually controlled by homemade wire-in-tube method which also activates a microswitch for frog power. There have been one or two issues with the motors and servos, but none with the manual control – a good recommendation for the KISS principle!

The main line and Forest Creek yard were laid on a roadbed of 3mm cork, but the branch line was laid directly on the baseboard producing a thinner ballast profile in keeping with the prototype.

Peco N scale points tend to look a bit toy-like due to the large amount of plastic moulded around the throw-bar area. I managed to get rid of a lot of it by careful use of a Dremel and substitution with wooden sleepers where necessary. This improved their appearance markedly, especially where extra-long sleepers were placed on which to mount point levers.

On this layout I wanted a turntable, but not being confident I could make one to the fine tolerances needed in N scale, I bought a Peco one and proceeded to heavily modify it. The Peco turntable scales out at 80' which is much larger than the 50' unit at Maldon, but that's all I had to work with. I retained the central pivot and the brass plunger power pickups and built up the main girders with their distinctive cross bracing from styrene. The rails are powered, but rotation is by manual means - no matter, there's not much call for it in the diesel era.

A feature of prototype track that is seldom modelled, even in the larger scales, is superelevation on curves. Eight strips of masking tape 5mm wide were laid one on top of the other along a line just inside the outer end of the sleepers, staggered by 25mm at each end to prevent too-rapid changes in elevation. The effect of the train leaning into the curve is exceptionally pleasing. After laying, all track was sprayed with Tamiya TS-1 Red-Brown to give the rail that rusty look.

I always lay ballast after doing the scenery – after all this is what happens in real life, and it saves getting paint, grass, etc., on the ballast. But I'll mention it here while we are talking about track. This time I used natural materials – crushed roadbase (bluestone) for the main line and sandy silt from drainage ditches near Maldon for the branch.

The material was sieved through a series of screens, the two finest being a plastic strainer (with a mesh size about the same as a tea strainer) and pantyhose. The material lying between these sizes averages a bit over a scale 2" so is very suitable for N scale ballast. (The fines passing through the pantyhose are great for gravel roads, footpaths, etc.)

The bluestone ballast looked really good when laid in place, but I was very disappointed to find it turned a very dark grey, almost black, after it was glued down with diluted PVA. That wasn't at all the colour I wanted. However, the sandy colour of the branch line ballast looks just like the real thing.

At stations and loco depots, where locos often sit for long periods, the ballast has been weathered with black powder and paint to simulate fuel and oil spills (and perhaps ash from the occasional visiting steamer). The same has been done around points.

Control

My existing NCE 5Amp radio control DCC system needed no further additions for *Forest Creek*. The only modification I have



On a small farm near the railway line between Smith's Siding and the quarry at Dean's Rocks, the mother sweeps the verandah while keeping an eye on her daughter and suitor chatting on the steps.



Y134 trundles the down branch passenger train past the swamp on the approach to Tarrengower.

made is to run it through JMRI so that when I have multiple operators, such as on club days, they can use their smartphones as throttles. Every section of track, whether it be flexible track, points etc., is fed directly from the bus. Consequently, I have never had any power problems.

Structures

Many of the structures from *Emu Creek* were salvaged and reused on *Forest Creek*. This included the two branch line stations, two goods sheds, two lots of grain silos, loco shed, cool store, feed store, 6t yard crane, ballast loader and conveyor. But there was a gaping space at Forest Creek, alias Castlemaine, so there was nothing for it but to construct the two buildings that make up the station complex – the main building on the up platform and the other on the island platform.

After sourcing various plans and drawings from fellow club members and taking a large number of photographs, I set to work to make close representations of the real buildings, mainly from styrene and a small amount of balsa. The project took about six months overall, but I am very happy with the result. However, I doubt I'll ever attempt anything so difficult again.

The signal box, constructed from plans and on-site measurements, uses Evergreen clapboard siding. The windows are distinctive and were 3-D printed from drawings done by fellow club member Luke Macwhirter. The deck of the balcony was made from scale timber and the handrail from 8Amp fuse wire.

Scenery

About 80% of the layout has been scenicked, but the remaining portion has languished for the last few years due to lack of enthusiasm. Hills and other raised topographic areas are made from extruded polystyrene, the pieces attached to each other and to the baseboard with hot glue. This was carved roughly to shape then gaps and joints were filled with a pre-mixed plaster compound. Sanding and detailed carving completed the surfaces.

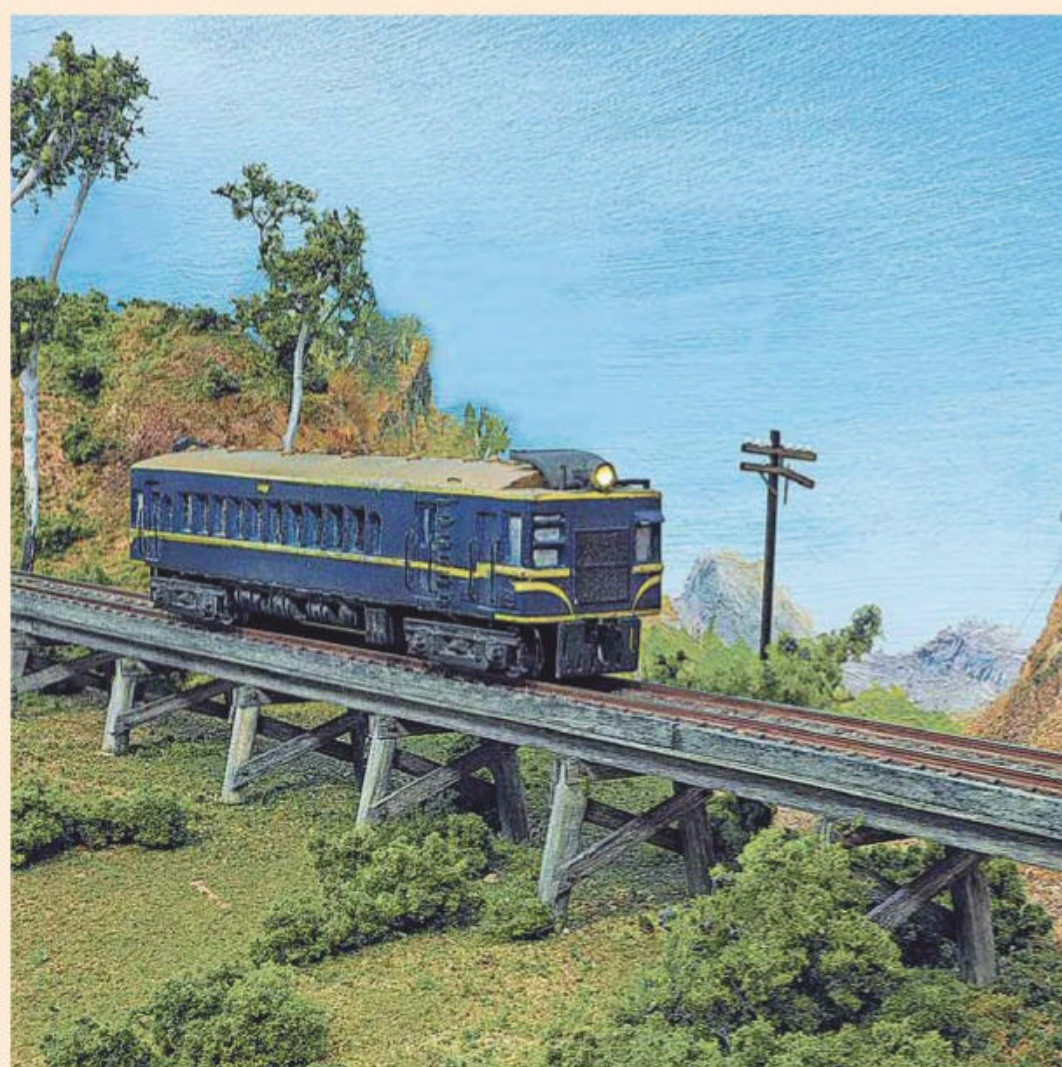
The backboards are 3mm MDF and extend only 200mm above the baseboard. Two such boards were glued back-to-back down the central peninsula, making a very rigid structure. The scenes are hand-painted in acrylics.

Cameo scenes are a draw-card for visitors and also make excellent photographic subjects. In search of inspiration on the



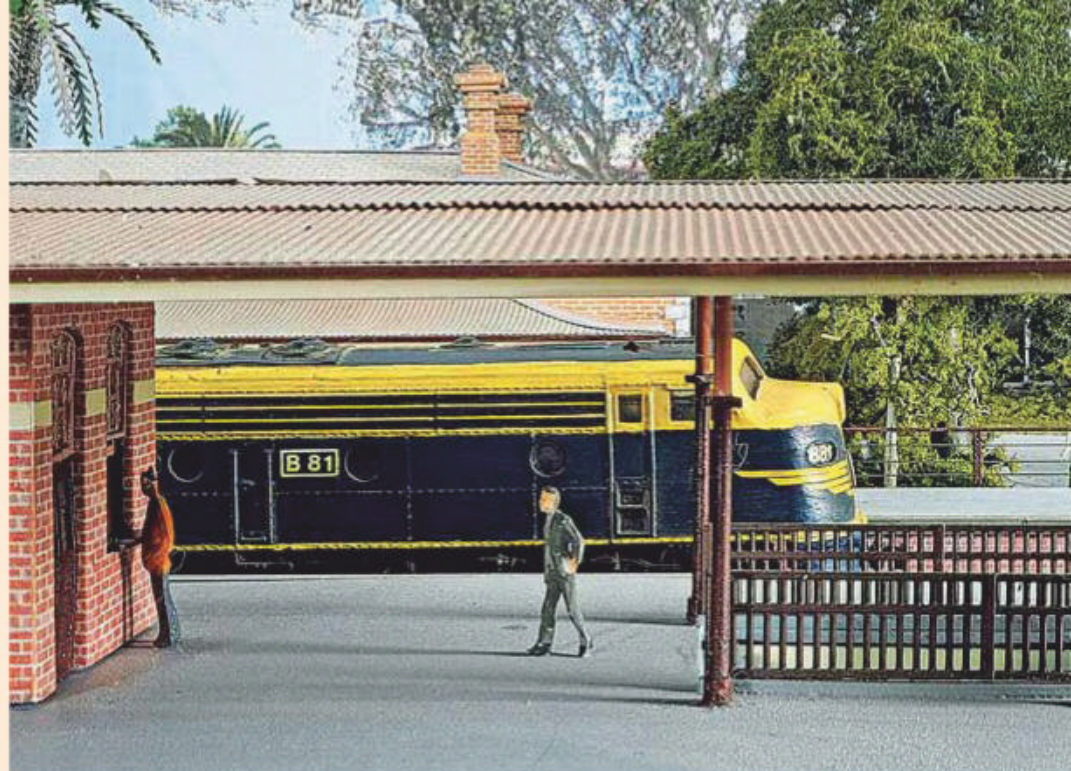
▲ Some prime beef awaits loading into the waiting M four-wheel and MM bogie cattle wagons at Shelford. The wagons are laser-cut kits from Spirit Design.

► The DERM rolls across the trestle with an up passenger service on the section above Forest Creek. The parallel telephone line could obviously do with some attention.





A low-nose T class hauls a goods train towards Bendigo after leaving Forest Creek. Various items of Way & Works equipment occupy the sidings in the foreground.



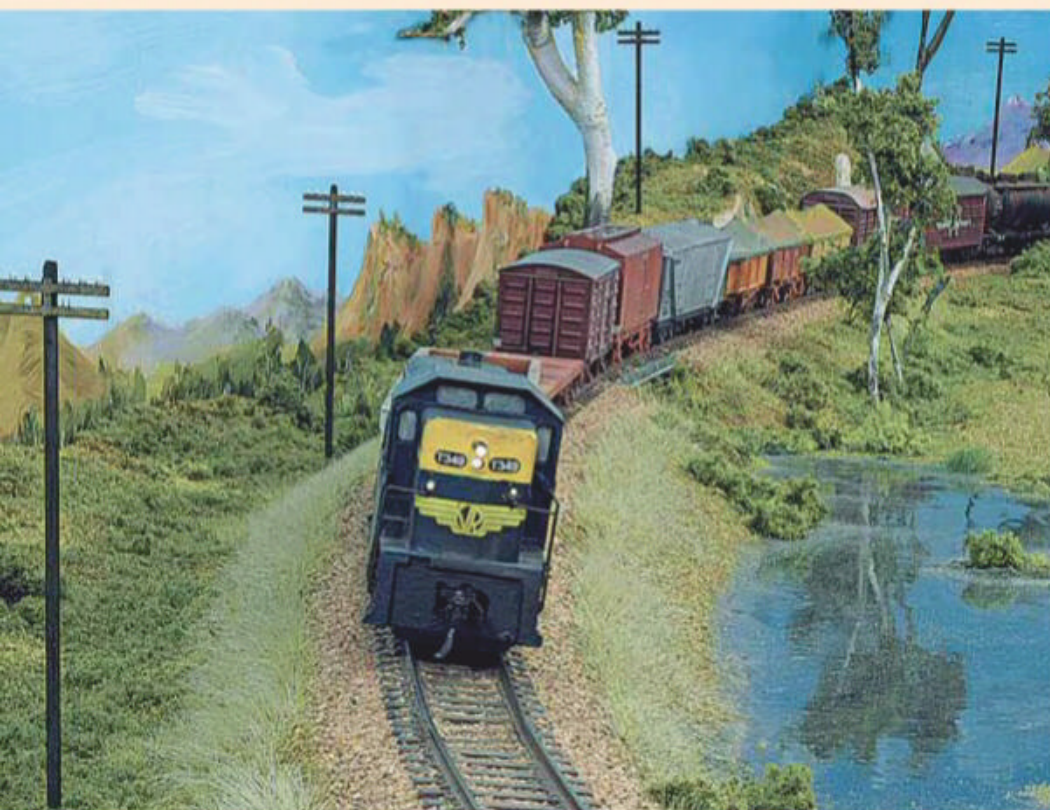
The passengers waiting on the platform at Forest Creek appear unperturbed by B81 rolling through the station with a Melbourne-bound train.

internet, I came across some photos of a swampy scene on an American HO layout that looked very authentic. The downgrade approach to Tarrengower station seemed the perfect location for such a scene, with the railway line raised on a curved embankment. The topographic undulations were made with only a modicum of planning then the hollows filled with Woodland Scenics' Realistic Water, slightly tinted.

I had a number of QR timber-sided open wagons for which I had made ballast loads previously. On *Emu Creek* I had the ballast brought from an off-layout quarry by road truck, but this time I wanted a quarry on the layout. The rock faces were made from plaster casts of Woodland Scenics' moulds, broken into pieces, cemented in place by hot glue, the cracks being filled with plaster. The rocks were painted with water-based washes and highlighted with oils. It's a bit on the small side, but I think it does the job.

Other cameo scenes on the layout are the Works depot, the picnic area at Forest Creek, a small farmhouse, the cool store siding, the petroleum depot, the grain silos, and the shops at Shelford.

Lineside details also help to add realism to a model railway layout, their effectiveness often being disproportionate to their small size. Forest Creek has benefitted from the use of railway signs, advertising signs, brass point levers and telephone poles



T349 leans into the superelevated curve on the embankment above the swamp as it nears the terminus at Tarrengower.

from Spirit Design, and 3D-printed point levers and telephone boxes from Luke Macwhirter. Curve boards, location boards, whistle boards and scotch blocks have been scratchbuilt and catch points modified from regular points.

Fences are everywhere in the country. Mine are made from Spirit Design laser cut four-hole posts through which I have threaded 0.2mm piano wire. Intermediate droppers are simply pieces of thicker wire glued on.

Trees are a mixture of various commercial models I have painted, as well as homemade efforts using twigs and Woodland Scenics Fine Leaf Foliage. The layout could do with a few hundred more, but what layout couldn't?

Motive Power

Way back in the late 1970s, when I was living in a small town in northwest Queensland, I got the model railway bug and began to construct N scale models of Victorian locos, using VR plans, AMRM and a small publication called *An Australian Diesel Locomotive Pocketbook* for guidance.

Due to the total absence of VR models in those days, I utilised American locomotives and rebuilt their shells and often their chassis too. Minitrix Fairbanks Morse switchers formed the basis of a T and a Y class loco, a Minitrix U28 became an X class and several of the ubiquitous E8s were turned into a B and an S class. (The conversions were written up in two articles for AMRM Issues 104 and 105, September/October and November/December 1980.) Their running characteristics were not all that great, and the bodies wouldn't satisfy too many modellers these days, but they still looked the part.

These same locos still grace the layout today, but their mechanisms have long since been replaced by those from modern models (although still American) such as MP15s and SD7s. Additionally, there are r-t-r Aust-N-Rail models of the low-nose T (on Kato NW2 mechs) and 'flat-top' Ts on Atlas VO-1000 mechs, as well as a DERM cast by Rob Popovski, riding on a Tomytec mechanism. To add variety, I wanted some South Australian broad gauge locomotives and now have a Gopher Models' 48 modified to a mustard pot SAR 830 class and a r-t-r GM in CR maroon and silver. Altogether there are 14 units on the roster, enough to allow some double-heading of longer trains.

Rolling Stock

As with locomotives, Victorian goods wagons in N scale were very rare in the early days, so scratchbuilding again was the order of the day, except for the urethane kits by Fybren Models of VLX louvre vans and ELX open wagons. Fortunately, many manufacturers have come to the rescue in more recent times with kits for a wide variety of models and I now have around 120 freight vehicles and guards' vans.



► X32 and B81 crash through the pointwork at the Bendigo end of Forest Creek yard with a lengthy passenger train.



I always liked the old-fashioned look of the wooden E and W passenger cars of the VR, but the only carriages previously available were *Spirit of Progress* air-conditioned car kits by Weico, featuring a pressed aluminium shell and white metal underframe and bogies. But about the time I returned seriously to the hobby, Spirit Design produced laser-cut kits of the clerestory wooden cars and I was very happy to be able to run a train of those iconic carriages.

I still enjoy scratchbuilding and like to produce lesser-known or unusual models. Among those I have built are a CE van, a C passenger guard's van, several Z vans, a workmen's sleeper and shower car, a BCPL carriage with guard's compartment, a QS 16-wheel special wagon with transformer load and a Pintsch gas wagon.

Weathering

When people first get into railway modelling, weathering is probably a fair way down their to-do list – there are plenty of other jobs that require more immediate action to get trains running. There is also the understandable reticence in the early

days to defacing a pristine factory paint job. Many modellers prefer to keep their rolling stock free from such adornment for good.

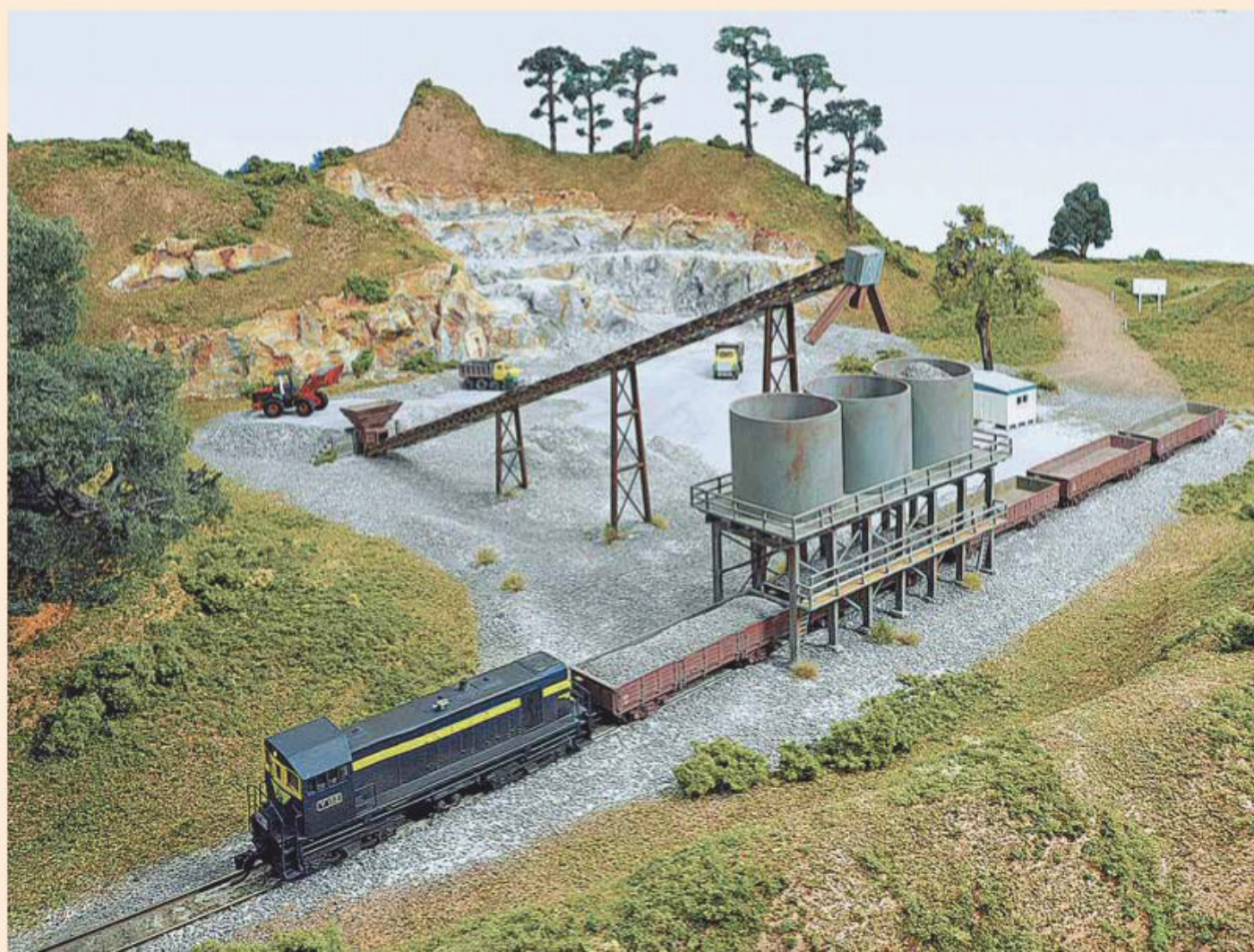
That was also my view until about ten years ago, but then almost overnight I realised that weathering of locos and wagons was an integral part of the quest for greater realism and I suddenly wanted all my vehicles weathered. Nowadays nothing goes on the track unless it has been so treated.

I generally use one of two techniques – application of pan pastels or weathering powders, or a light wash with acrylic paint, followed in either case by full strength oil paint to represent spots or streaks of rust, dirt, oil, etc.

Operations

It has taken many years for me to venture into operations, but it now seems like the logical reason for building a model railway in the first place. I have hosted a few sessions using a fairly standard car card and four-position waybill system, but not with timetables. Operators generally spend plenty of time making up trains at either end of the branch line, shunting at each station

Y152 shunts QR bogie open wagons under the loader at the quarry at Dean's Rocks.





◀ The busy yard at Tarrengower is momentarily disturbed by the departure of the DERM with an up passenger service.

along the line, and distributing the cars at the other end according to the waybill instructions.

Main line trains also run between Melbourne and Bendigo with various movements at the Forest Creek junction. I generally run passenger trains, including the DERM, at irregular intervals to cause a certain amount of discomfort to other drivers!

Every piece of rolling stock is designated by its number, which is something of a challenge in N scale, especially if I have been over-exuberant with weathering, but small magnifiers are a big help. Uncoupling is readily achieved with wooden kebab skewers. The only other problem some people have is setting the road through double and single compound points without causing short circuits. Some operators are fast learners - some are not! Despite the difficulties inherent in operating with car cards in N scale, trains always get to their destinations and everyone has a lot of fun.



▲ The off-register Pintsch gas wagon permanently occupies one of the sidings off the turntable at Tarrengower.



◀ Guard's van 30C stands in the dock at Tarrengower.

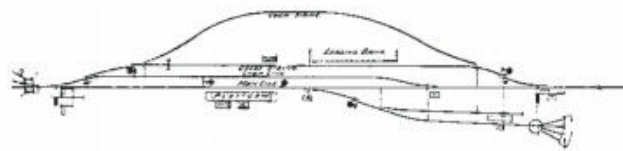


▲ Two images of a wheat train that has commenced loading in the grain siding at Tarrengower.

► Y134 and B81 lay over between trains in the locomotive sidings at Tarrengower.

▼ A view along the layout at Forest Creek, showing the impressive passenger facilities in the foreground and the extensive goods sidings further back. The line to Tarrengower passes along the wall to the right and has already climbed a considerable distance from its junction (just out of the picture at bottom left) with the main line at Forest Creek. Photo by the author.





IN THE LOOP

Track

Trevor Hodges discusses the importance of getting the basics of tracklaying right. Photo by the author.

If you've been involved in this hobby as long as I and, even if you have perused only half the number of model railway publications I have, you'll have read or heard all the same clichés about track that I have over many decades: track is a model too, track is always in front of us while the trains are only in view temporarily and track is the foundation of good running. In spite of the fact that I've heard these statements repeated numerous times over the years, it doesn't make them any less true. So why are they so often ignored by us modellers in the rush to get trains running?

I feel I can be forgiven for having track on my mind as I pondered a possible topic for this column of *In the Loop*. On the day our esteemed editor made contact to prompt me to write the column I'd spent about five hours crawling around under the storage sidings of Morpeth. A fairly large percentage of this time had been spent trying to locate a short circuit and lay some track up to a new turntable I'd purchased several years ago, but had only recently been able to install. It occurred to me that track laying and wiring is one of those universal tasks faced by railway modellers the world over: no matter the scale, gauge or prototype, if you're involved in railway modelling indoors then you will probably have spent some time hunched over plywood/chipboard/MDF, laying track (as your back implores you to take up a less body-torturing hobby) and crawled around under that same bit of plywood/chipboard/MDF, in semi darkness, dodging molten solder and attempting to get a piece of stranded electrical wire to stay where you %\$!@&^# well want it to stay! It also occurred to me that it doesn't really matter whether your track is hand built using strictly scale materials or a length of old, second hand flex track that still bears the remains of the ballast it was once covered in. It all needs to be laid reasonably flat, in gauge and be wired up to a source of power if anything is going to run on it.

I purchased my first piece of flex track on a Saturday morning, a couple of days after my tenth birthday, from a toy store that used to operate out of the Top Ryde shopping centre in the heart of 1970s suburban Sydney. I'd walked to the shopping centre with a friend and stood outside the store for some time before it opened. I was there to spend some money I'd been given for my birthday; it was burning a rather large hole in my pocket.

While the siren call of the slug guns (which used to fire small lead pellets known as 'slugs' that could easily take out a ten year old's eye) available for purchase across the other side of the shop was strong, I resisted that temptation and bought one length of HO/OO Peco flex track and some clips to attach wires coming from a power pack I already owned. After getting home I hooked the wires up to the flex track and marvelled as a loco glided back and forth along its 3' length. That was about as far as things went at the time. I didn't buy a second (or third) piece of track to allow my locomotive to more effectively stretch its legs and at some point I disposed of the locomotive.

In spite of this rather inauspicious beginning, I did learn some valuable lessons from this early experience, chief among these being the need for a dedicated space to run your trains and the need for a hard, flat surface to place your track on. My mother asking me to clear my trains from the dining room table before dinner and the fibres from the carpet wrapped around the axles of my locomotive provided the evidence that something needed to change. Having no space for a layout in HO/OO I decided that N

would better suit my needs, so I dabbled in this scale for a time, eventually building a small layout on a used, interior door. The track for this small layout was laid using the time-honoured method of driving small pins or brads through the sleepers of the track to hold it in place and hooking wires up to the rails using small clips I'd purchased at Hobbyco in the city.

The process I went through to lay that N gauge track all those years ago isn't greatly different from the process I have used recently to lay the O scale (32mm gauge, 1:43.5 scale) track on Morpeth. In both instances the track was the same brand. I laid it using small track pins driven through the plastic sleepers and connected it up using rail joiners sold by the company that made the track. These days I tend to restrict my use of commercial track to un-scenicked areas of the layout and hand lay the track on the modelled portion, but I won't claim the trains run any better on my hand laid track than they do on its commercial cousin. When I've done a good job of laying the track my trains glide over both hand laid and commercial track equally happily. When I haven't done such a good job the result is derailments no matter the type of track I've laid. So, if track laying hasn't changed all that much over the years, what has changed?

While I'm fairly certain unsupervised ten year-olds are no longer permitted to buy pellet rifles, perhaps the most significant change over the past few decades, impacting on the way we lay our track, is the technology surrounding the track, rather than the track itself, although there have certainly been incremental improvements and additions to the range of track available to us, especially in HO scale. The introduction of commercialised Digital Command Control in the mid-1990s is not in and of itself a feature of track laying. However, in most instances this technology uses the rails of our track to send and receive its digital signals, so the quality of our track laying impacts the way a DCC system operates on our layouts. If you use DCC, you'll be well aware that any break in contact between locomotive wheel and rail is a real problem for DCC decoders and especially for those equipped with sound. There are devices that can help alleviate these issues but, fundamentally, clean rail heads and well-laid track with good electrical continuity is the foundation of good running using DCC.

I run a dropper wire from every piece of track on my layout no matter how small and insignificant it is. Relying on point blades to provide electrical continuity on turnouts is one of the 'mistakes' most often made by those new to the hobby... and by those not so new too if the truth is to be told!

DCC isn't the only technology innovation to impact our track laying over the past couple of decades. The other technological advance that has had a real impact is the introduction of extruded foam products and their application as both a scenery and track base. The blue and pink foams used as a scenery base, most often seen in US magazines, has led to some really innovative and lightweight ways of creating scenery. However, quite a few leading modellers both here and overseas have demonstrated how this material can be used as a track base, as well as a base for scenery.

While it's demonstrably true that extruded foam products can be used as a sound and solid track base, the methods used to secure the track to this material have to alter to suit the product because its ability to hold track pins and screws is limited. The ways point motors and other under-layout devices are attached are

also impacted and this can be a little challenging for those of us still living with a timber-era mindset. The cost of the foam is still quite high relative to timber (I understand this is the case because the foam is still mostly imported), however this may change dramatically if a plant producing this material is built in this country. I'll be using foam as a scenery base on Morpeth, but I still use 12mm ply as a road bed. I'm comfortable with timber and I can get just about any type of it I need with a drive of less than 5km from home. My nearest foam supplier is a two-hour drive away.

Perhaps the most significant change in my hobby over the past five decades is the development and changes that have occurred to me as a modeller, rather than to the materials, trains and technology I employ. The track on the scenic portion of Morpeth was laid with hand-built components for no better reason than I prefer the way the hand laid track looks, compared to the commercial equivalent. For those who might be interested in such things, I used Micro Engineering code 125 and code 100 nickel silver rail, pinned to Mt Albert and Kappler sugar pine sleepers, using Micro Engineering small rail spikes.

That I built the track myself may have something to do with the more limited range of choices I have in the scale/gauge combination I work in. However, I hand-built the track on the scenic portion of *Trundlemore*, my last large HO layout (constructed in the 1990s), and used commercial track in the storage yard, so not much has changed in this regard. One small but important change to the way I lay commercial track is that I no longer drive the track pins into the centre of the sleepers as I work my way down the line. No matter how careful I am I never seem to be able to get the depth the pin needs to be driven in quite right. If I'm just a little too heavy handed it's quite easy to narrow the gauge of commercial flex track to the point where it affects running, especially if one is using a soft track underlay such as foam or cork. These days I drive two small pins through the sleepers I'm pinning (one about every 120mm or so) on the portions of the sleeper outside the rails. I find this prevents any chance of gauge narrowing and keeps the track where I want it.

The tools and techniques I employ to lay my track are pretty standard practice, however I have a couple of methods of my own I've developed over the years that I believe help achieve good results. Perhaps the first is to learn to trust what I've come to think of as my universal gauge, namely the tips of my fingers. After I lay a piece of track or a turnout I always run the tip of a finger over the joints between track sections. If I can feel a sharp spot or a projection it's guaranteed that the wheels of the trains will feel it too. Deal with it then and there with a small file or other abrasive tool before you move onto the next piece of track. You only need to remove the sharp spot, not cut into the rail head. Chances are you won't remember to come back and fix it later.

I find flush cutting pliers an indispensable tool in my track laying kit. However, these don't provide an absolutely perfect surface to butt up to the next bit of track. Take the time to swipe the end of the rail you've cut with a fine file before you place a rail joiner over the cut. It will result in a cleaner, smoother joint.

The author has practiced what he preaches in Morpeth's storage sidings.



It doesn't matter how small or large your layout is, you need to ensure the rail of your track has the ability to move back and forth along its length with changes in temperature. The standard suggestion is to leave a small gap between the sections of rail as you lay them to give the rail room to expand and contract. I find 2mm per 900mm length of track is more than sufficient and this is equally true whether the track is hand laid or commercial flex track. The need for rail gaps is especially needful in a relatively hot environment like we have in this country, where so many of our layouts are built in sheds where the temperature variation can be extreme. You ignore this piece of advice at your own risk and you needn't bother to ask me how I know!

Finally, perhaps my most important practice is to try, wherever possible, to allow the track I'm laying to be moved about and reconfigured in its early stages of laying and before the ballast goes down. Almost all track will need some adjusting over its early life as you bed it in and test trains over it. Fixing your track in position using a method that permits relatively easy adjustment is simply good practice; I don't use any glue to affix my track and if I'm using track pins I always try to leave the heads of these a little proud of the surface of the sleeper. My hand-made track is secured in sections with a few small wood screws that can readily be removed if necessary so that adjustments can be made to the position of the track.

Track is most definitely a model too and it does tend to be in view for far longer than the trains that run on it. However, perhaps it would pay to keep in mind that track laying for most of us is one of those intermittent hobby tasks that we only carry out occasionally. I've been laying commercial flex track this week, but I can't actually remember the last time I did this and who knows when, if ever, I'll be doing it again. Morpeth is supposed to be my 'last great project', so the chances are the track I'm laying this week will still be in place and hopefully still being used in twenty years' time. This idea should give us pause. It only takes me ten minutes or so to trim and lay a piece of flex track, but I'll be living with the results of the way I do this job for decades to come. It will pay dividends to all of us to stop and think about this as we approach the job of laying our track. A little care and attention to detail now should reward you with years of trouble-free running. There's no rush. Learn to enjoy even this part of the hobby, because that new locomotive you've just purchased will still be there to run on your freshly laid track tomorrow.



RECYCLED ROLLINGSTOCK

The EHO at Taralga

Leon Oberg describes a recycled passenger brake van, perfect for that small scenic vignette on a modern era layout. Photos by the author.



The preserved EHO1941 stands on its 2BB bogies at the Taralga Wildlife Park in May 2019. The patina on the body sides created by it being prepared for painting would be an interesting challenge for the modeller to reproduce.



Tracey Avery of the Taralga Wildlife Park stands inside the amazingly intact guard's compartment of the EHO. One hopes that as much of the 'in service' fittings can be preserved as possible when internal restoration and painting has been completed.

A paddock beside the quiet Taralga to Bannaby road is perhaps the most unlikely place one might find an EHO passenger brakevan sunning itself, a stone's throw away from penned pigs, colourful lyrebirds, camels, emus and a menagerie of other penned wildlife.

But there it stands, riding high on its set of 2BB bogies in an almost complete state, clearly illustrating the point that, today, one can find discarded railway rollingstock virtually anywhere enjoying useful retirement, albeit in a re-designated role. The owners, John Stafford and his wife Tracey Avery, acquired the relic, a 'high-elliptical roof' EHO, No.1941, from the ACT Model Railway Society (Canberra) in July 2015 to complement their Taralga Wildlife Park business.

Although then living in Bowral (NSW), the former Fairfax Media executives opted for the rural life, buying their pretty 25 acre hillside property that offers rolling green views towards the north-west late last decade, moving there permanently in 2014. Since then they have been devoted to their Wildlife Park concept.

Learning two EHOs were to be sold because the ACT Model Railway Society was moving to a new site in suburban Evatt (ACT), the couple negotiated a price on EHO1941, thinking it might make a nice children's birthday party/play room for their business. (The other van, EHO1987, went to a Canberra district property.) "We paid \$5000.00 for the van, but it cost us \$20,000.00 to get it here!", Mr Stafford said with a wry smile.

While the playroom idea has not yet eventuated, with internal cleaning still underway, he confirmed another idea was to turn one luggage area into a reptile enclosure while the other could become a nocturnal exhibit, subject to regulatory approval.

Eighty-seven EHO vans were built between 1909 and 1925, the earliest deliveries featuring square-ended Mansard roofs that matched the passenger rollingstock of the era. In 1911 new deliveries boasted a semi-elliptical roof line to again match revised carriage rooflines.

But with the introduction of high roofed canopy-ended main-line passenger cars, and clearly a departmental appreciation of aesthetics at play, ten vans, Nos 546, 550, 583, 668, 671, 691, 784, 1833, 1940 and 1941, built in 1913/14, were equipped with 'canopy-ended semi-elliptical roofs' which better matched the roofline of these newer vehicles. The couple's EHO was the last of this type of roof profile, nicknamed the 'loaf of bread' type, to enter service, in April 1914. Condemned in February 1981, it found its way into the collection of the Australian Railway Historical Society (ACT division), then it was sold to the Canberra Model Railway Club, who used it for storage/workshop space. It subsequently passed into the ownership of the ACT Model Railway Society as a storage 'shed'.

The author gratefully acknowledges the ready assistance of David Semczuk and Evan Rees, along with detail from the first volume of Eveleigh Press's *Coaching Stock of the NSW Railways* for help in clarifying aspects of this story. Ian Lindsay Models makes an HO scale kit of this version of the EHO, though the model is presented by the manufacturer in steam-era condition, rather than the rebuilt form of the vehicle described here.



Modelling a Webb Caboose in HO Scale

*Gavin Thrum scratchbuilds models of the classic SAR Webb-era 4300 series brake van/'caboose'.
Model photos by the author.*

Prototype

Preparation of this information was greatly assisted by information provided by Phil Curnow.

These American-styled 'caboose' brake vans were first introduced by the famous Commissioner of the South Australian Railways, W A Webb, in mid-1925. Twenty vans were introduced to service between 13 May and 26 June 1925, numbered 4352-4371. A further ten numbered 4372-4381 were placed in service between 19 July and 9 September, 1926. All had four bunks at one end. At the other end were a table and stools, food cupboards, cooking stoves and guard's desk. In the central cupola area were four elevated seats and underneath were clothes lockers.

These vans were commonly used on the longest runs to Serviceton and Terowie where 'relay working' was used. Two crews were assigned to each train and while one crew operated the train the other would rest in the van. Along with Westinghouse brake and coupler conversions to the other rolling stock, these changes sped the service up considerably.

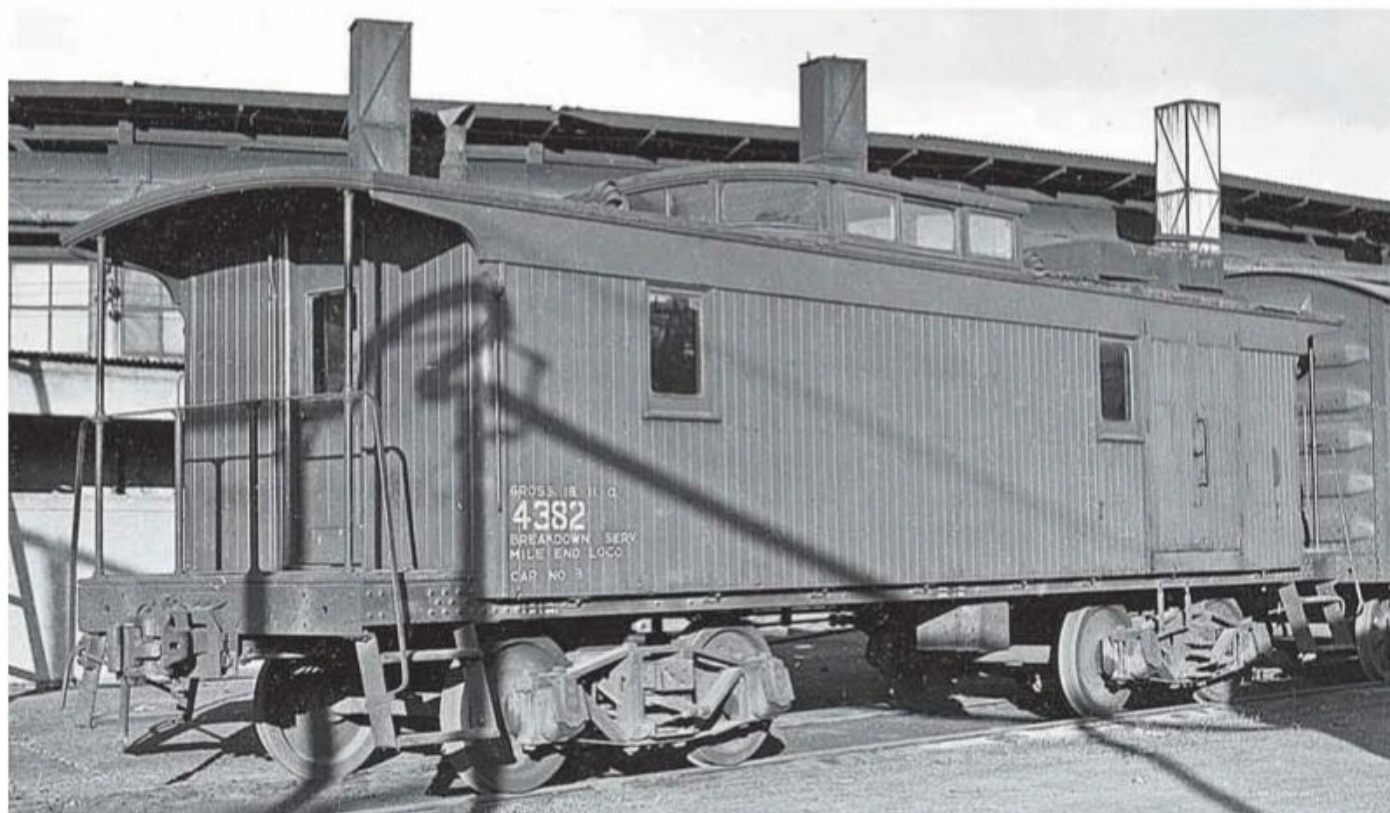
It was intended to have ten 'caboose' vans on the narrow gauge system also and construction work on these followed on from the ten of 1926. They were not completed and, instead, had their chassis strengthened before being placed on the broad gauge in 1928 as numbers 4382-4391. There were several differences from the other 30 vans. The bunks etc. were omitted and instead twin side loading doors were added in the old sleeping area.

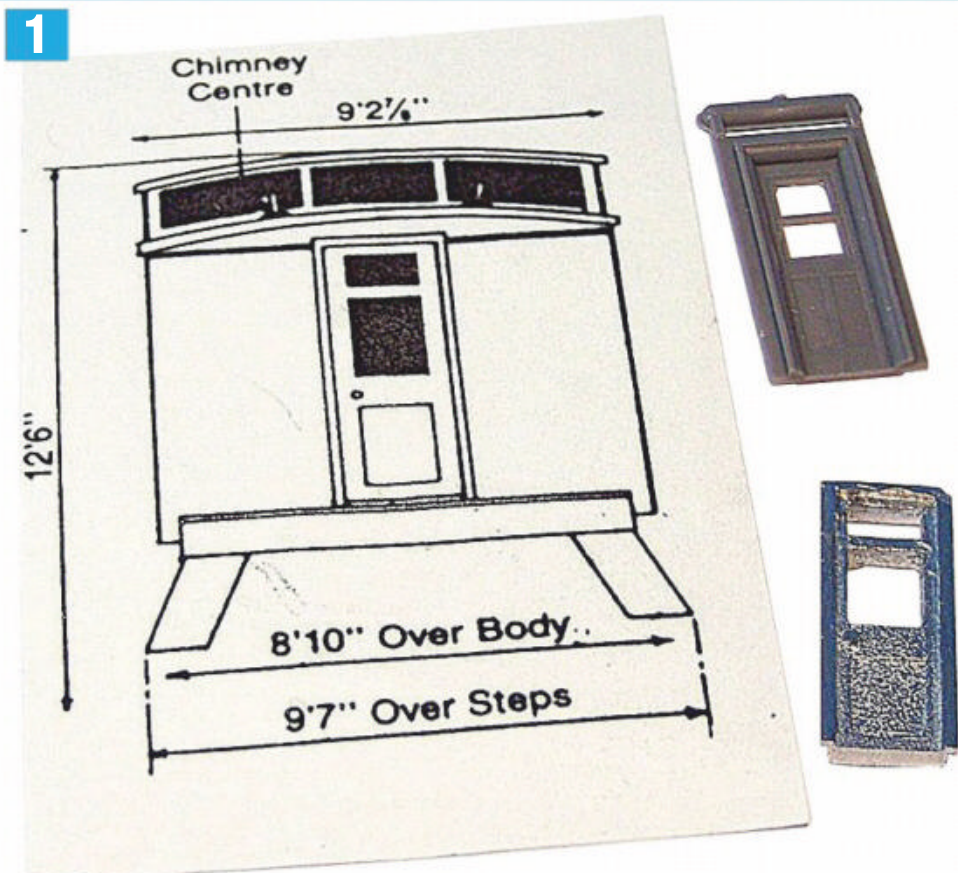
All forty vans were fitted with auto couplers, but also had three link transition chains and buffers to allow them to couple with the older hook-draw-gear vehicles. The buffers and transition chains were removed during the 1930s. They rode on 'archbar' bogies, fitted with leaf springs instead of the coil springs used on ordinary freight vehicles. Conversions of the vans for other uses began in 1932 when some became employees' sleeping

A version of this article appeared in the 2010 'Modelling the Railways of South Australia Convention' notes and is re-published with permission of the organisers –Editor



Two images of Webb-era cabooses in later life. The image above shows brake van No.4356 in use as an Employee's Sleeping Van in Adelaide yard on 20 June 1964. The image below shows No.4382 redeployed as an accident train vehicle at Mile End on 28 June 1953. Both photos are from the Ross Hurley collection.





▲ Looking at the plan there are a few options available to produce the guard's access door at each end. Grandt Line produces an injection moulded door assembly. These would be quite acceptable as they are, but one could cut out the door window crossbar and put in another one at the correct position. As I have manufactured many of these models over the years, I made a pattern and cast the doors in typeset lead. Of course, if you are only building one model then scratchbuilding the doors would be a viable alternative.

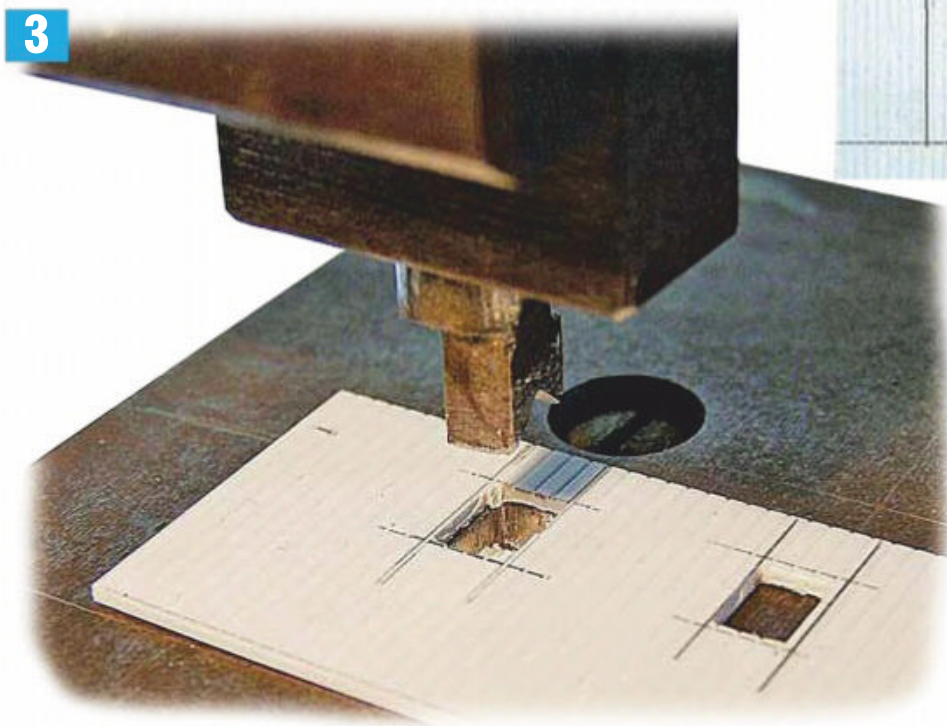
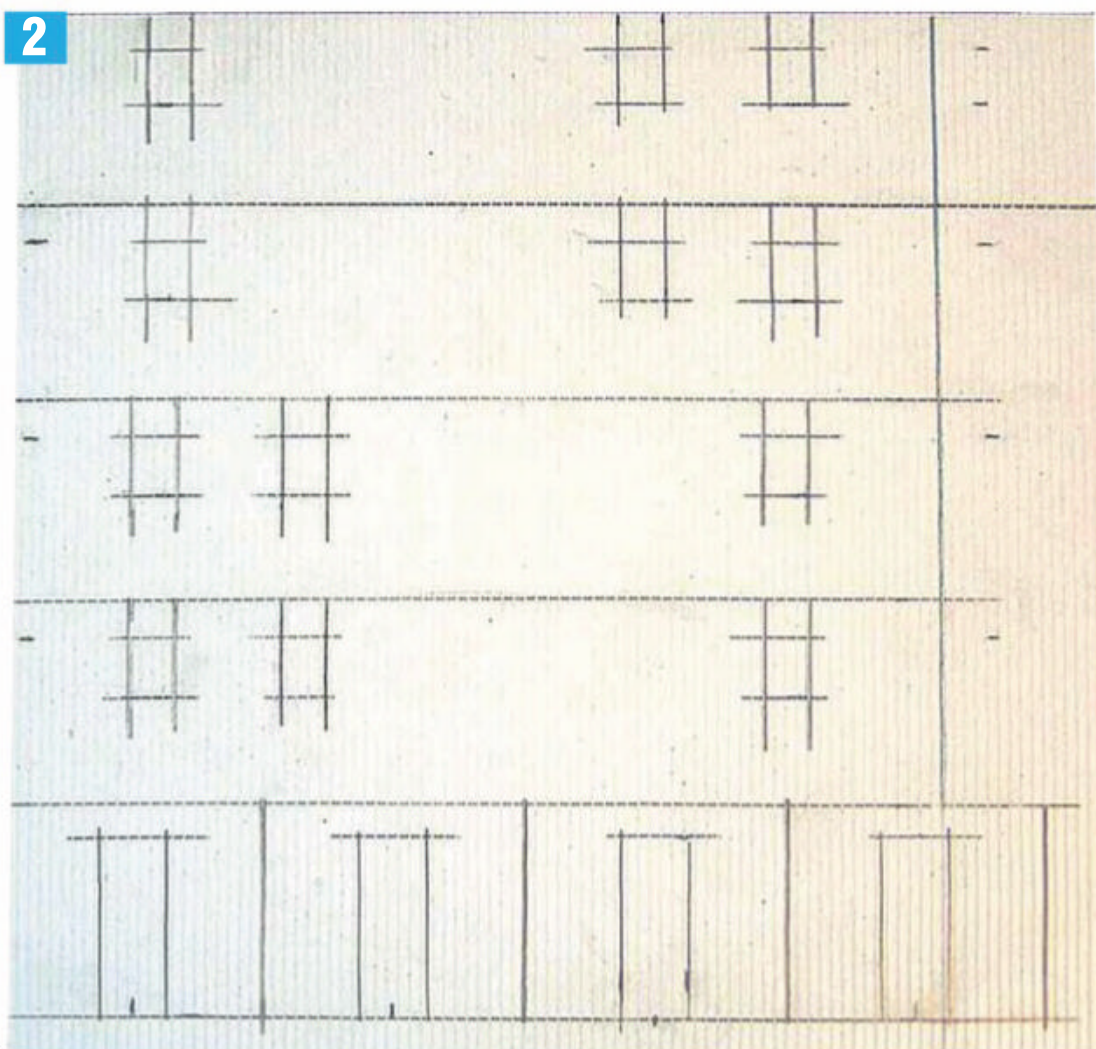
vans. In the following years other modifications were done, resulting in vans with two, three or four windows in each side.

The large flue for the heater with a 'Chinaman's hat' top was changed to the more standard 'T' shape. The side doors were removed from most of the ex-narrow gauge vans, although 4382 still had them when removed from the Mile End accident train in the mid-1970s. Diagonal bracing was applied to most of the vans in the early 1960s. The corners of the body were strengthened and the body length slightly increased. To allow the fitting of the bracing, the valance was removed over the end platforms. The roof vents remained the 'shell' type. The drawings show these variations more clearly.

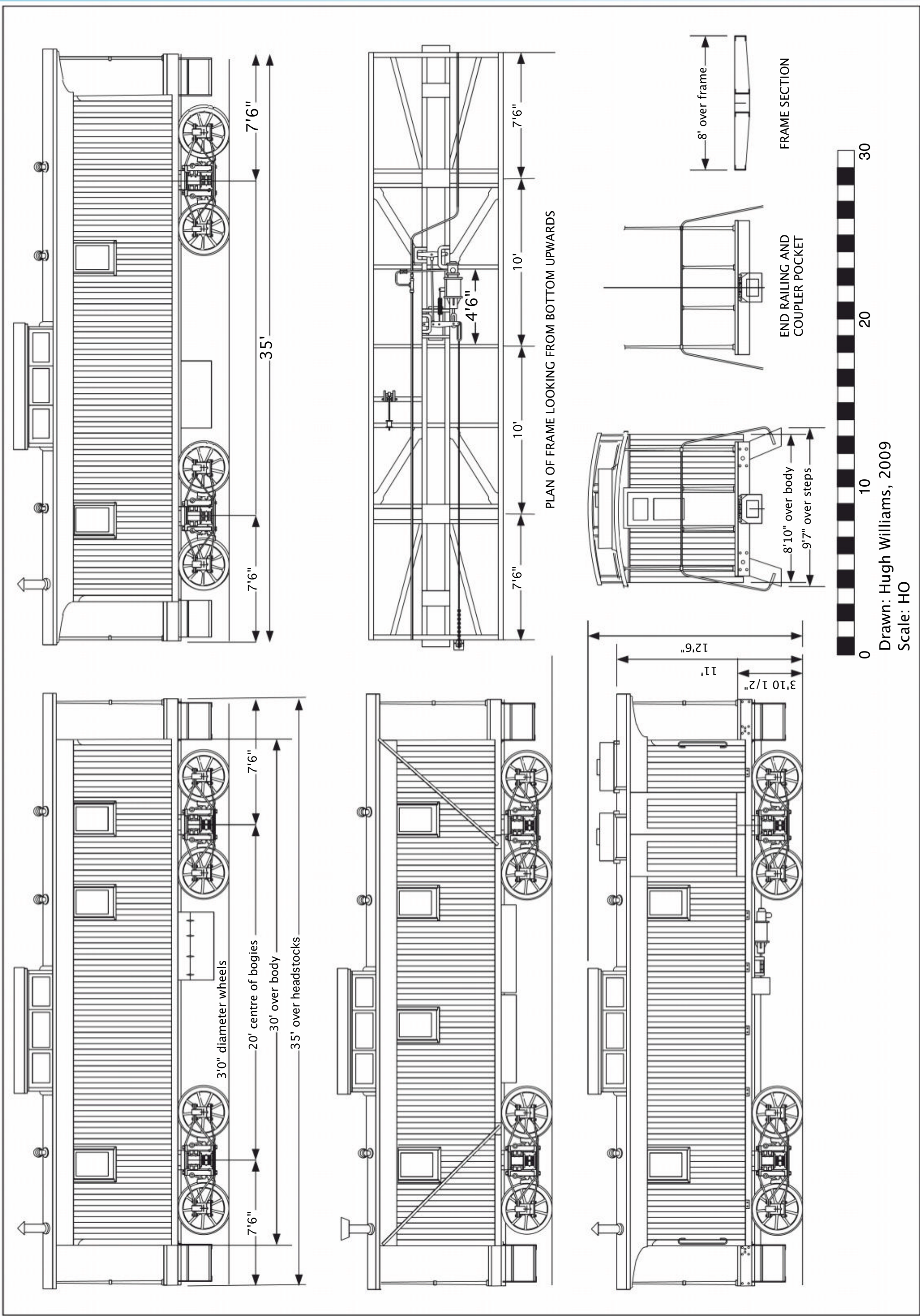
The last of these vans in use as brake vans were 4389 and 4390, which were both withdrawn in October 1963. At this time, thirteen 'caboose' vans were still in use as workers' cars of various types.

The colour scheme carried varied during their life. Early black and white photos are dark enough to suggest they were passenger car red/brown with white lettering, but by the 1960s they were dark grey with white lettering and the roof is believed to have been black. The workers' vans were also grey, but were being repainted bright orange with a black chassis at this time. More detail and photos of the prototype vans can be found in *Webb's Caboose - Historical Notes* by Phil Curnow in AMRM Issue 144 (June 1987).

► Mark out the sides and ends on a suitable 0.040" thick V-groove styrene sheet (Evergreen No.4050) and score using a sharp knife. When marking out the sides, remember to allow for the correct orientation of each side. The windows line up on both sides of the body. As can be seen in the photo, over-mark each straight line, as these over-marks are useful in cutting out the apertures themselves and lining up any window frame strips.



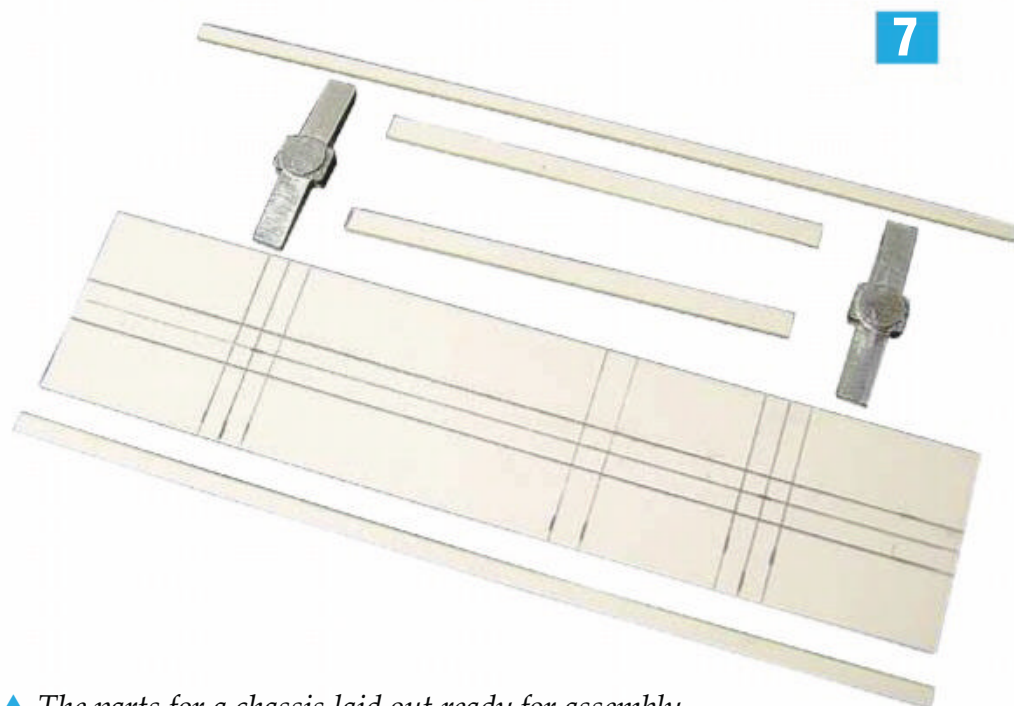
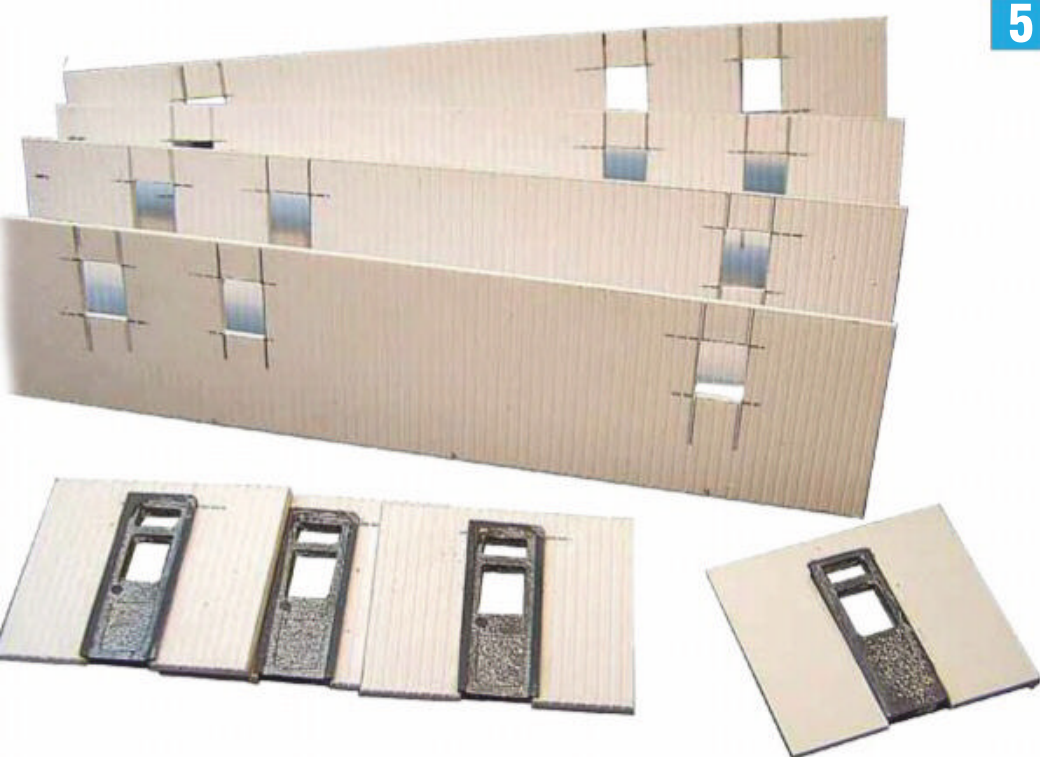
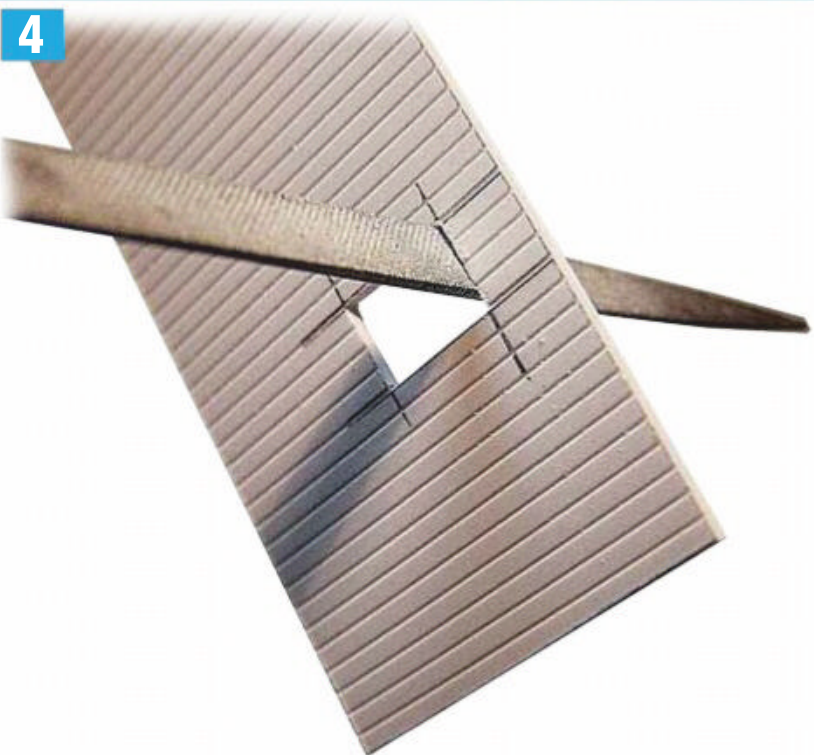
◀ The window apertures were cut out using a home-made die cutter. If you don't have such a device then a number of other techniques can be used. For small apertures, simply drill a hole then square out the hole using a sharp pointed knife and a fine square or triangular profile needle file. For larger apertures score the window outline with a sharp knife then rescore to pierce through and push out the waste. Ross Hurley also scores diagonal lines from each corner to its opposite corner, then pushes the resultant triangles out by pressing in the middle.



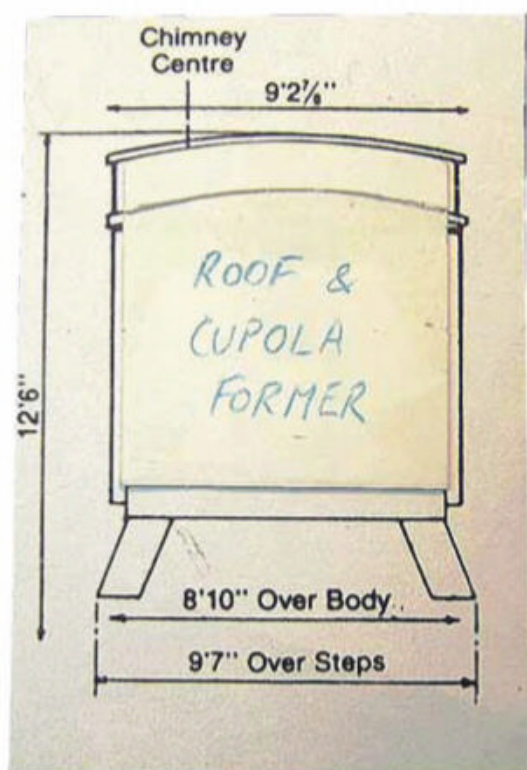
Drawn: Hugh Williams, 2009
Scale: HO

► Pay particular attention to keeping the final aperture within your marked lines and ensure each corner is clean and sharp. If, like I have done sometimes, you have taken a little too much material from one side of the aperture, then fixing in a small piece of strip in the area concerned with superglue will solve the dilemma. Refile the strip down to the required original markings. Clear any file burrs from the back of the apertures.

▼ Enough sides and ends constructed for two vans. The doors have been fitted to the ends, but the tops of the ends have not yet been profiled for the roofs. A note here regarding assembly of these vans, particularly necessary when gluing the different types of materials used in the construction of these models: I use almost exclusively a good quality superglue such as Selleys or Loctite, avoiding the cheaper brands such as those found in 'two dollar' shops. I find the higher the quality glue, the less 'fuming' it causes, particularly when gluing window trims or glazing.

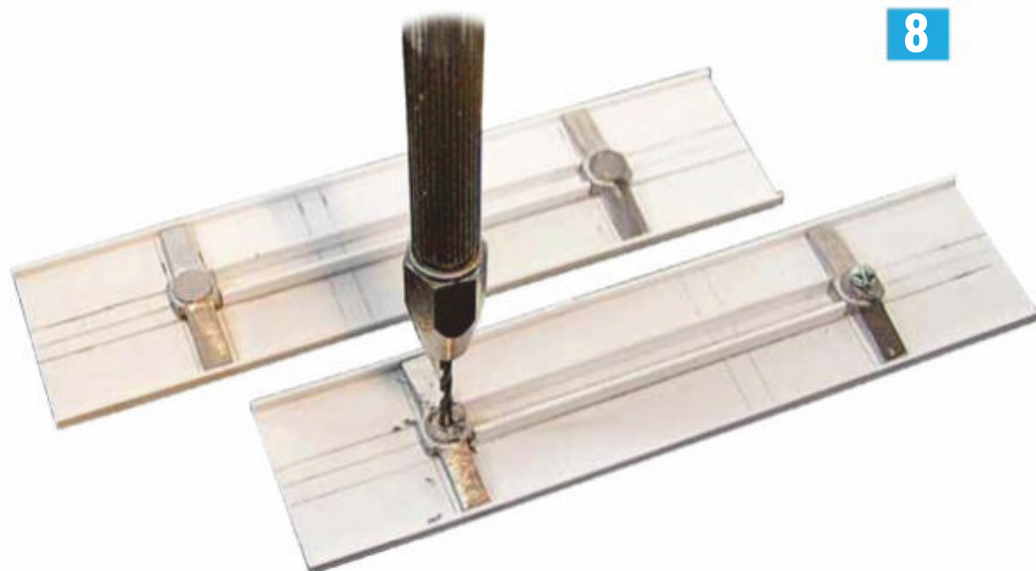


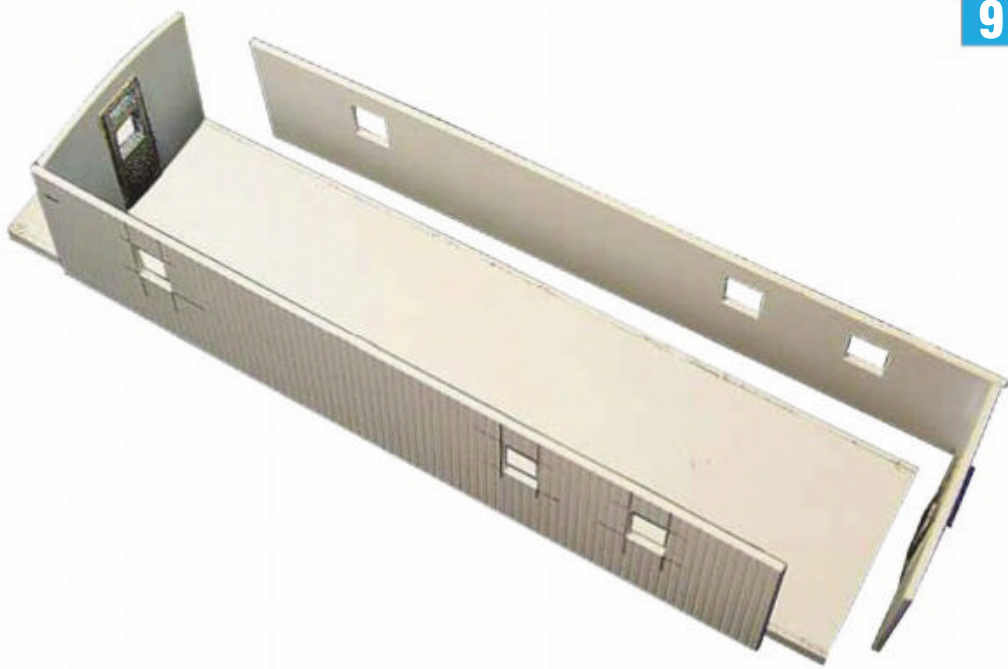
▲ The parts for a chassis laid out ready for assembly. The floor, side sills and centre chassis rails were cut from 0.040" styrene, while the bogie bolsters were home-cast whitemetal items. If you build a lot of vehicles, it can be worth the extra effort involved in casting common pieces, such as bogie bolsters. As the bogie bolster is essentially a cross-member built into the chassis with a protruding boss which rests on the bogie's central pressure bearing plate, they can be easily scratch-built by fashioning a suitable cross-member from styrene, say 0.060" thick, and then gluing on a 'boss' of the same thickness, 6mm x 6mm square in the centre of the cross-member. Make the side sills and floor plate the same length, allowing for the end sills to be added at each end to make up the total length, as per the plan.



▲ Create a former for profiling the ends, inner partitions and cupola glazing walls from 0.040" styrene. You may notice that on the drawing the body sides fall lower (approximately half-way down) on the chassis than the ends, which rest on top of the chassis, so allow for this when making the end walls. The sides of the ends will be slightly shorter in height than the sides, with the curve of the roof line extending above the side walls.

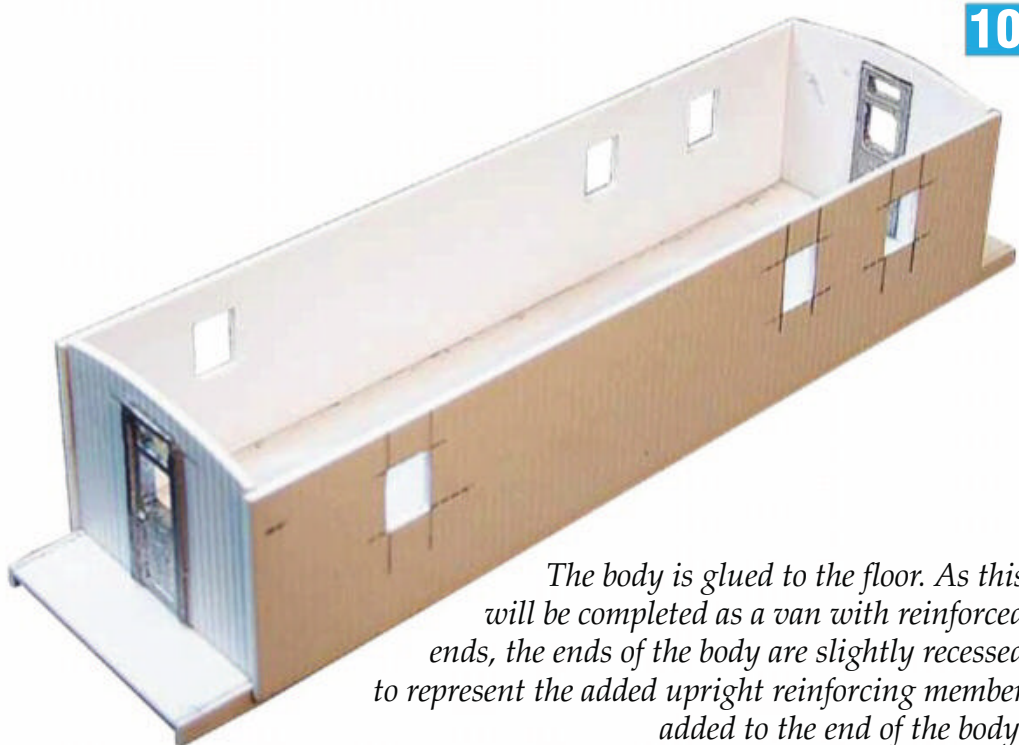
▼ Two brake van chassis under construction. The side sills were glued on first, then the bolsters were glued in and the centre rails trimmed to fit between them. When drilling the holes for the bogie securing screws in the bolsters, pay attention to keeping the drill square to the floor, so that when the bogie screws are tightened down in the holes the heads are square, giving even bogie movement in all directions. Then test mount the bogies, setting up the floor height so that the bottoms of the side sill rails are the same as the plan. Depending on what you have chosen to use for bolsters, a thin washer (or styrene packing) may be needed to obtain the correct height if too low, or the bolster may need filing down if it is too high.





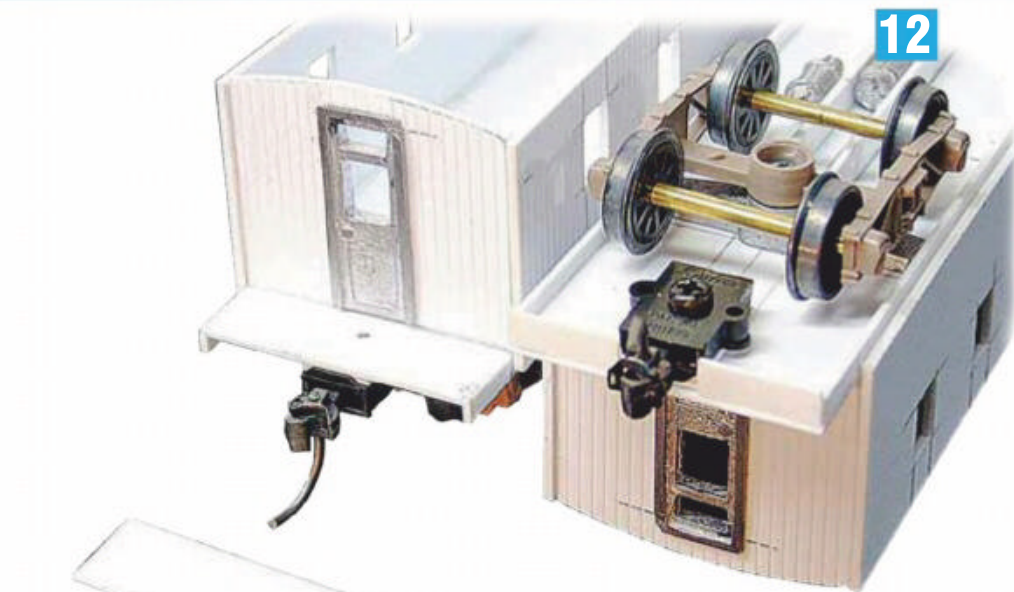
9

▲ The basic components of the model ready to assemble. One side and one end are glued together, making sure that the joint is a true Right Angle (90°), then the other side and end are likewise joined into an L shaped structure. Remember, the ends sit higher at the bottom of the body and, if you are modelling the later version body with reinforced ends with angled straps, the ends need to be inset slightly from the ends of the sides (see prototype photos). Glue one L shaped assembly to the chassis then, when that has dried, glue the other in place, making sure the body is square to the chassis and equidistant from the ends.



10

The body is glued to the floor. As this will be completed as a van with reinforced ends, the ends of the body are slightly recessed to represent the added upright reinforcing member added to the end of the body.



12

▲ With couplers mounted and tested, the end sill or buffer beam can be attached. The sill is made in two halves, trimmed to each side of the coupler box. A floor for the veranda end was made from scribed 0.020" styrene. This represents the ribbed-tread floor in front of the door.



13

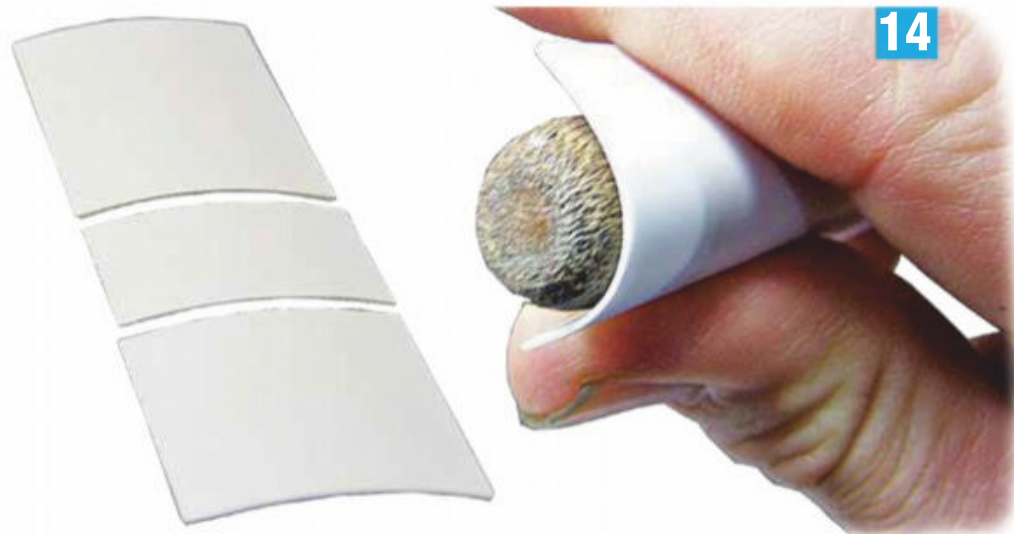
The next step is to make up some partitions to strengthen the body and use as a guide for setting up the cupola later on. Use the former made previously to assist in the correct roofline shape. There are lines marked on the outside of the body, taken off the plan, to show where the cupola glass is to be located. Transfer those lines to the inside of the body to aid in the setting of the partitions in the correct position. The right-hand body shows them installed. The top of the partitions should be flush with the sides.



11

◀ I chose to fit Kadee No.58 'scale head' couplers, but the common No.5 couplers would work just as well. I overcome the annoying trait with these couplers that, when installed as the manufacturer suggests, the coupler hangs down at a slight angle from its pivot inside the draft box, which can give less than desirable reliability during shunting operations using magnets or electromagnets. By placing a small strip of 0.010" styrene between the rear of the draft box and the floor, the drooping coupler effect is eliminated, thus giving a nice horizontal knuckle-to-knuckle operation for shunting. The coupler should still be mounted at the manufacturer's specified height, preferably using the Kadee height gauge. The trip pin should be adjusted so it just touches the plate on the gauge.

nated, thus giving a nice horizontal knuckle-to-knuckle operation for shunting. The coupler should still be mounted at the manufacturer's specified height, preferably using the Kadee height gauge. The trip pin should be adjusted so it just touches the plate on the gauge.



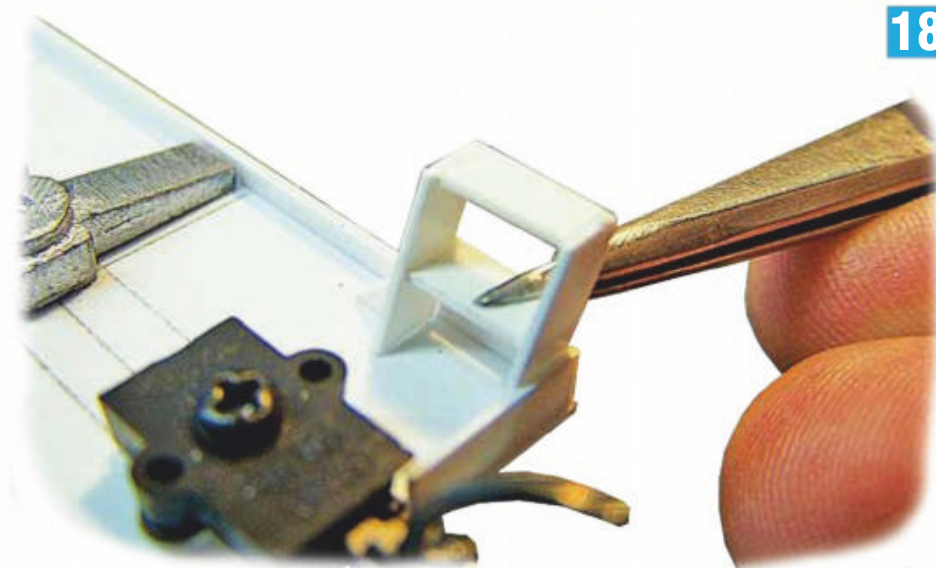
14

▲ The roof sections are now cut out, in this case from Evergreen 0.030" styrene sheet. Measure the sizes of the roof pieces, allowing 1mm overhang on both sides of the body. The cupola roof is the same width as the rest of the roof. The roof sections are bent around a former to create an arc in the roof pieces; the piece of 16mm diameter timber dowel shown here worked well for the curve needed for this roof. Bend the styrene around the former as tightly as possible then let it spring back. Do this a few times and there will soon be enough curvature as required for the model.



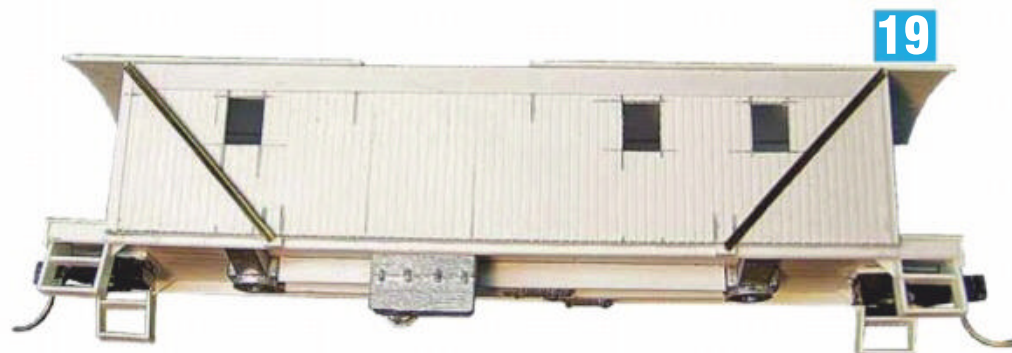
15

It was common practice in the steam era for roofs to be constructed from timber, made waterproof by stretching tough canvas over the roof and sealing it with a waterproof coating of a pitch or bitumen type. This can be replicated by stretching a tea bag over the styrene roof sections before attaching them to the body. I prefer the tea bags that have the folded top held together by a small staple and insist on the bags being used first, as I find the furriness on the surface of the unused bag annoying and the used bag also has small creases left in it which adds to the realism, not to mention the waste of good tea! I spread a thin layer of PVA glue (such as Aquadhere) over the entire surface of the styrene roof panel, then lay the teabag over the surface, ensuring there are no creases and then trim across the corners, as shown in the photo. Next I apply more PVA to cover the underside edges and fold the tea bag material over and around the edges, very gently, as the tea bag is very thin. Then, once the panels are completely dry, the outer roof panels are mounted flush with the central partition walls, making sure the 1mm overhang is evident equally around the top of the body.



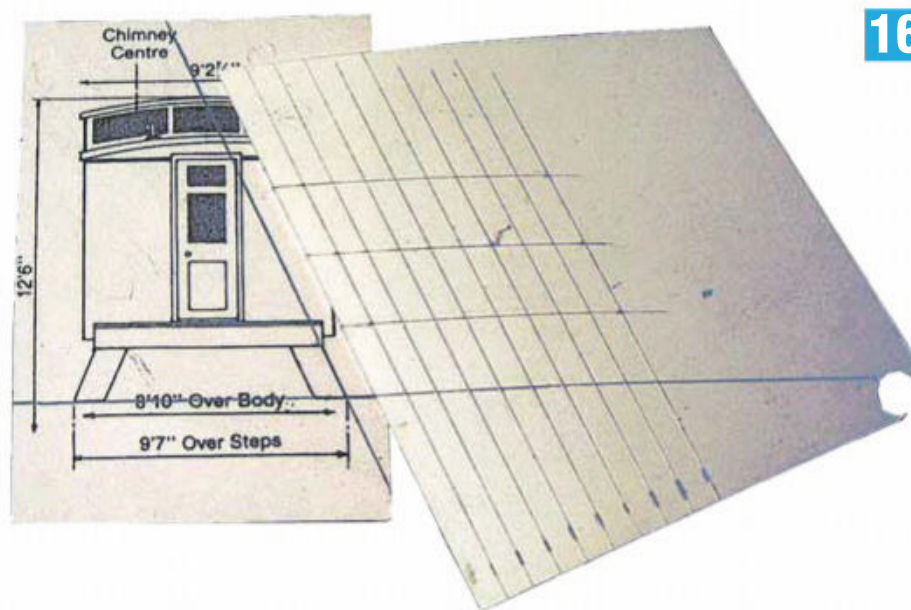
18

Cut out the step treads making sure they are all the same depth. Trim to length so they fit between the angled step frames. Use the plan to confirm where they sit in the frames and then glue. Strengthen all the joints with small dabs of superglue. Reinforcing the step joints is an important step to giving the model some strength and durability in this area.



19

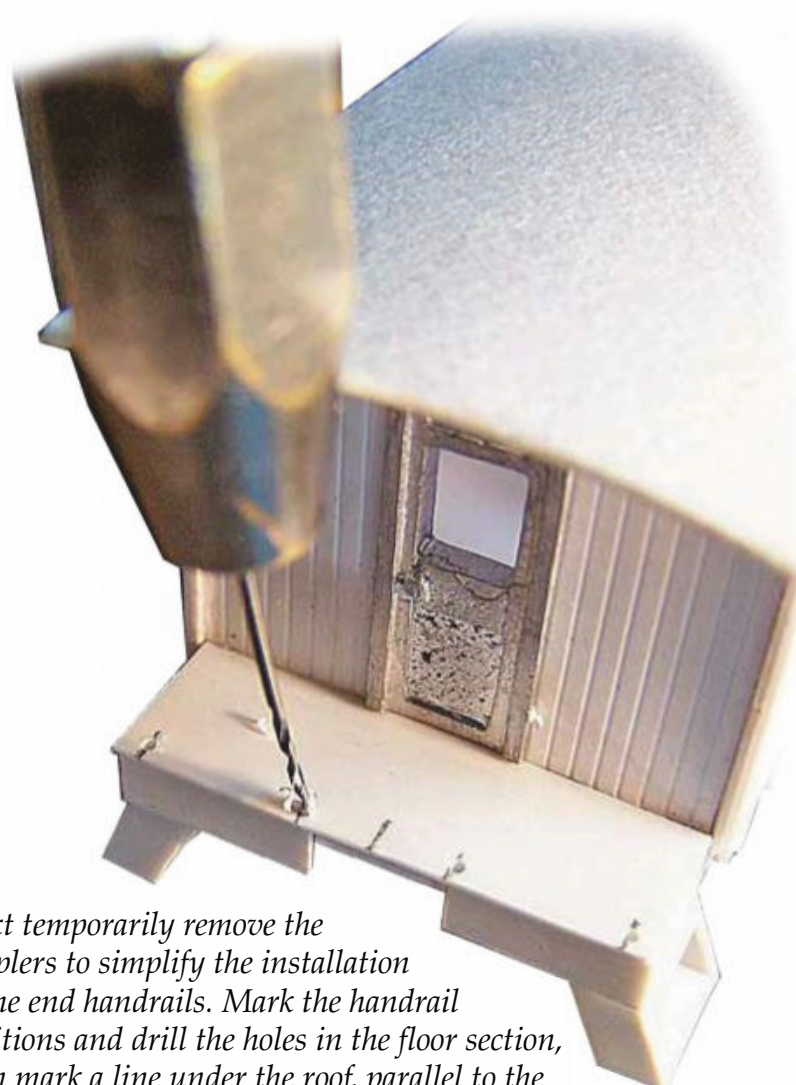
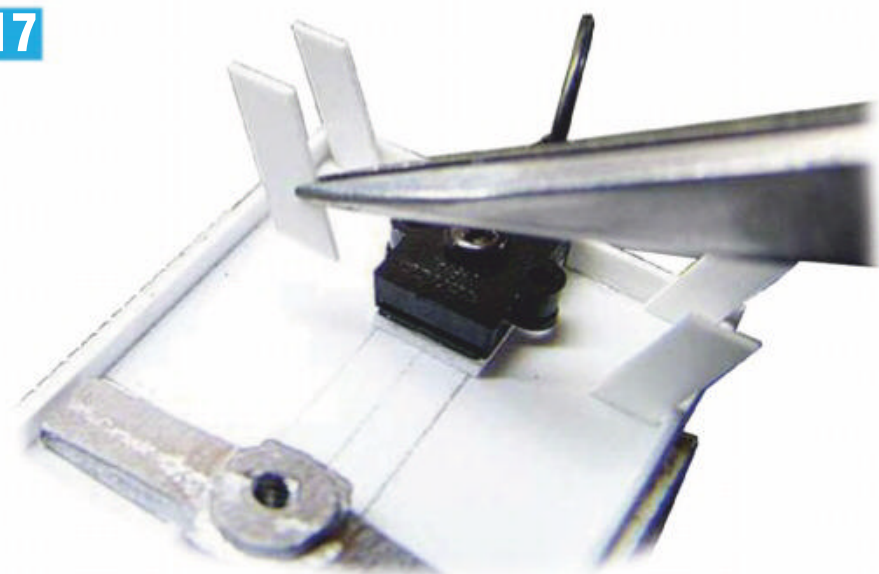
The vertical battens are then applied at each corner with 0.010" x 0.020" styrene strip. The upper fascia, cut from 0.010" sheet, can then be added. Underfloor detail, such as battery box, generator, air reservoir and brake cylinder are next, using the plan and photos for their positioning. Then install the angled corner braces to the body as per the drawing. The prototype braces were angle iron, so a 1.2mm x 1.2mm L angle strip should be used, in either brass or styrene. Plastruct make a suitable size angle in styrene. Don't use wood shapes, as they are too weak to use in this situation.



16

▲ The step assembly can be made easier with a technique that guarantees all the angled step frames are the same angle and length. Draw up a grid on some 0.020" styrene using the angle required from the plan, then score all the lines and snap the pieces out. If the initial marking out was accurate, all the pieces will be the same shape and size.

17

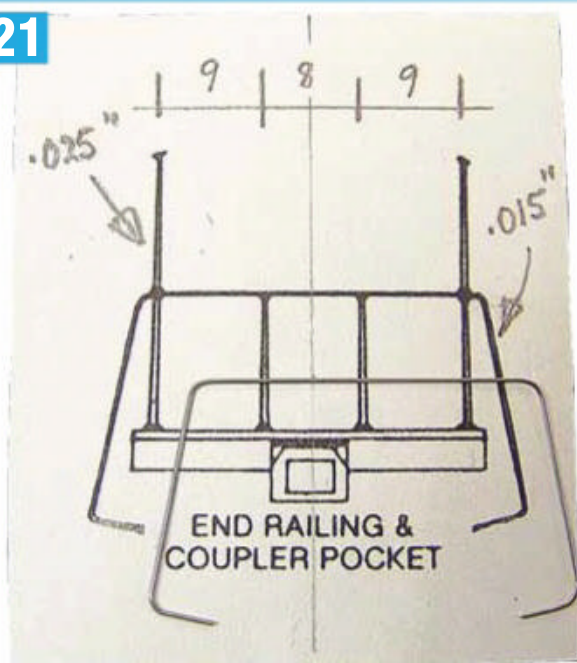


20

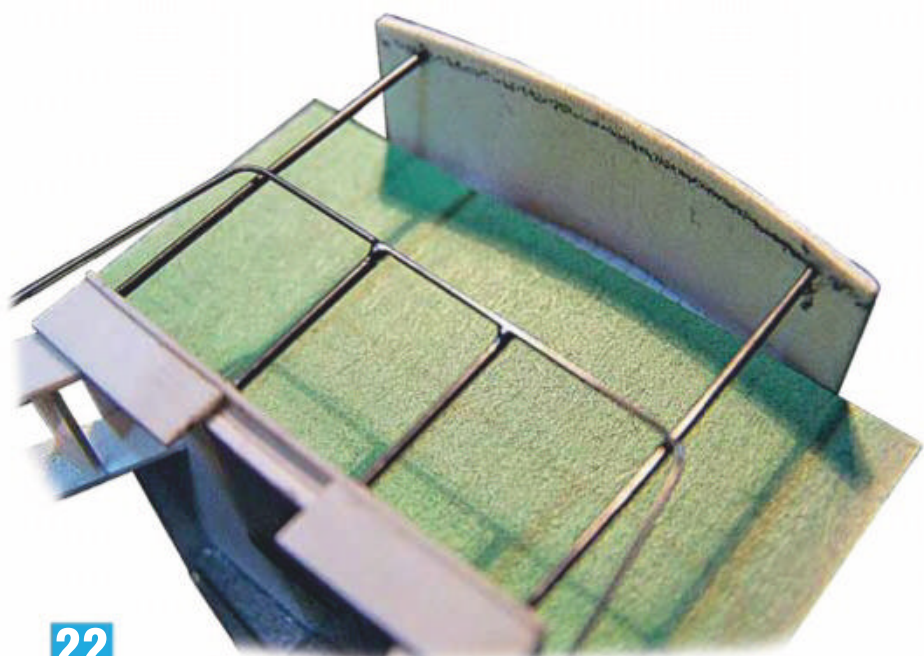
Next temporarily remove the couplers to simplify the installation of the end handrails. Mark the handrail positions and drill the holes in the floor section, then mark a line under the roof, parallel to the end of the roof so the vertical rails can be positioned squarely.

◀ After marking where the steps go under the floor, glue the step sides in position against the sill rail.

21



in the photo, using a small pair of round-nose pliers to set the small curved areas. Use a good hardened set of cutters for snipping the spring wire, as the average cutters will be damaged quickly. The vertical post rails were constructed from 0.025" spring steel wire, while the handrail was made from 0.015" spring steel wire.



22

▲ Glue the handrail ends to the outside of the steps. This action holds the rail secure for soldering. A piece of card should be placed under the handrails to absorb any flux spray while soldering (a small blob of Baker's Fluid flux speeds the soldering process with spring steel as spring steel does not flow solder easily like other solderable materials, so a liquid flux is needed to bond the steel with the solder). Phosphoric acid-based flux is popular for modelling, but don't use this on spring steel as it's essentially a rust converter and will put an oxide on the surface preventing successful soldering. Using a small tipped iron will get a good enough result. As long as the railings are in place ready to solder, and a small blob of flux is on the joint, then the tip of the iron with a small amount of solder can be just briefly touched on the joint. The solder will transfer to the joint very rapidly as the liquid flux boils off.

► After the grey body colour has dried, mask over the grey and spray the roof and undercarriage black. Touch up the grey around the body line, if necessary, then brush paint the end platform treads and the steps with black. Touch up the handrails with grey. Pre-paint styrene strips for the cupola window frames; 0.020" x 0.020" strip and 0.020" x 0.040" strips will be fine. Cut out cupola glazing walls using the former you made earlier, to the correct height as per the plan.

▲ Once the vertical post rails are glued in position, making sure that they are square, construct the rest of the end handrails using the drawing as a guide. Most modellers construct handrails from mild steel or brass, but I think these materials are lacking in durability, so I use K&S spring steel wire, which is available in most hobby shops. I bend up the handrail in one piece, as shown

23



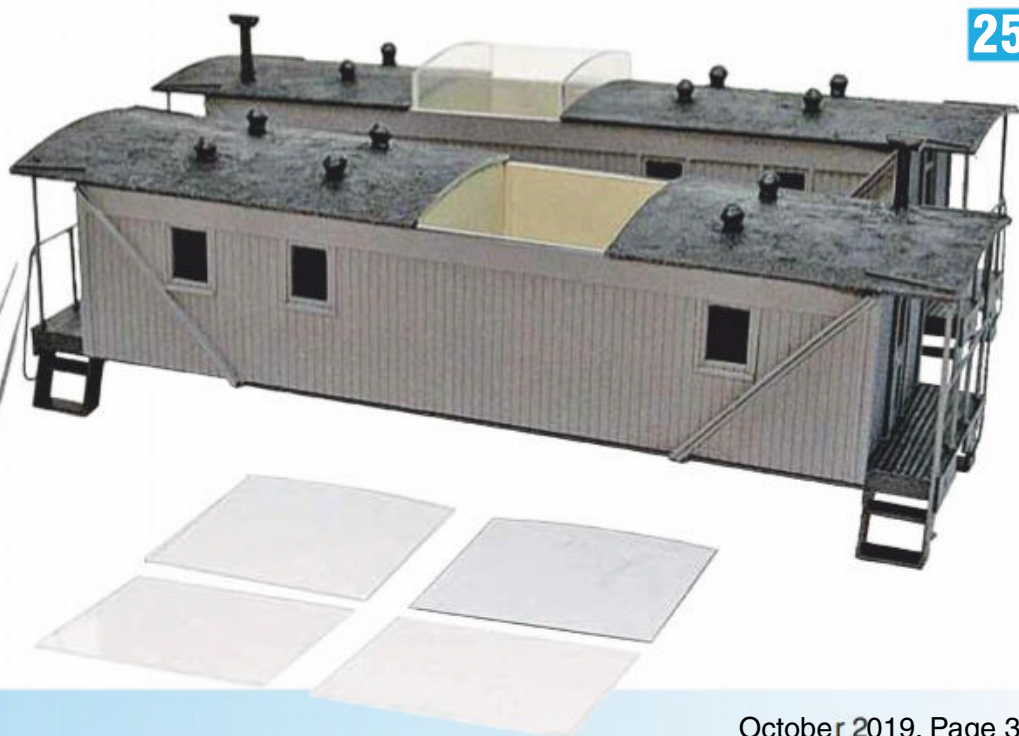
▲ Mark out and install the roof ventilators and smoke flue. Small gauge wire was used for the rain strips over the end verandas and cupola roof. Any material can be used for rain strips as long as the diameter doesn't exceed 0.015". The window sills and frames should also be added now, using strips of styrene.

24



▲ After the buffers were removed, there were holes left in the headstocks where the buffers used to be, so drill some 1mm holes at the position where the centre of the buffer would have been. The model should now be painted, before the cupola windows are added. Remove the wheels from the bogies and spray paint all items, except the wheels, with primer. Then, when dry, spray the body colour, in this case SAR dark wagon grey (Humbrol No.27 Sea Grey Matt).

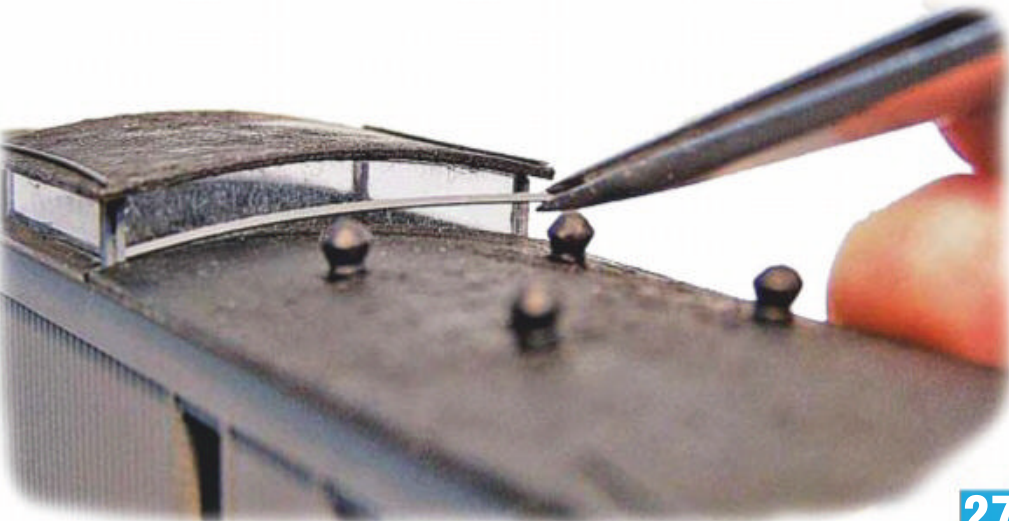
25





26

▲ Paint the inside walls of the guard's compartment cream, then install the glazing walls to form the cupola. One can detail the interior, but I chose not to as spectators would have to look very carefully to see anything through the cupola windows. Glue on the cupola roof section using Aquadhere or contact cement, ensuring that the overhang is equal on all sides.



27

▲ Assemble the cupola window framework using a small amount of superglue, using the pre-painted styrene strips from Step 25. Start with corners, then the upper and lower beads. Finish with window dividers spaced as per the plan, again secured using a smidgen of superglue.

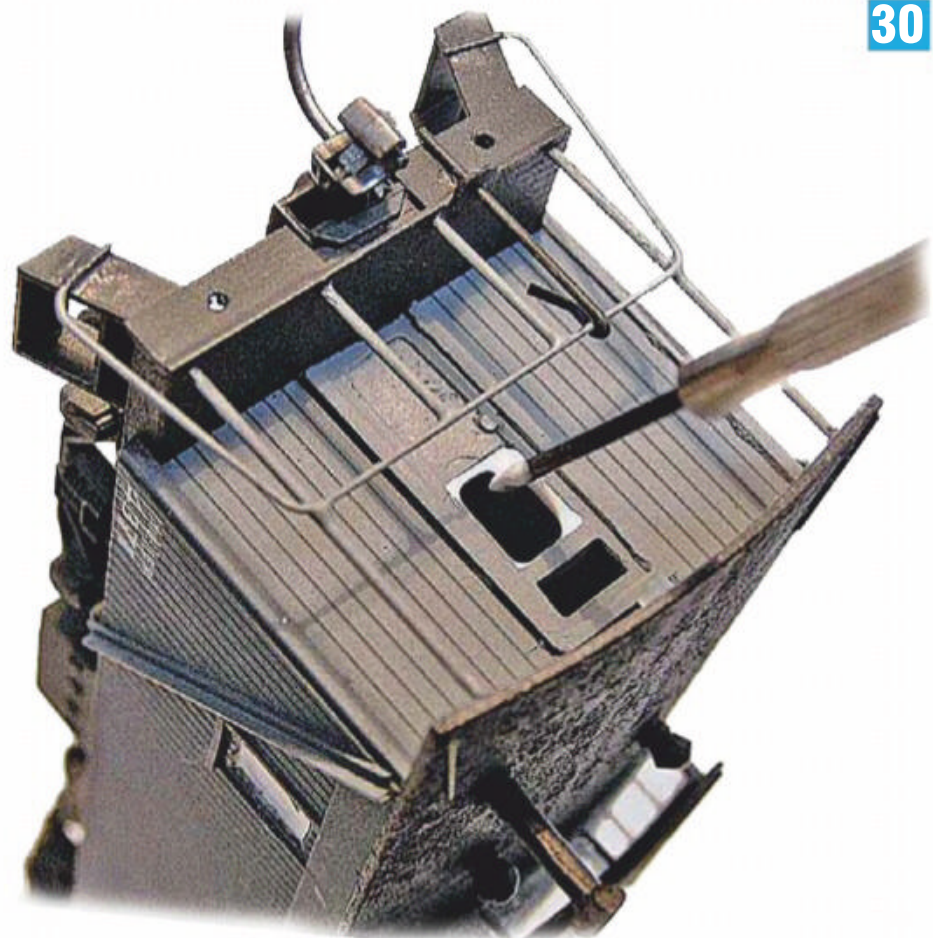


28



29

▲ Decalling is next. I used SEM Victorian Railways wooden passenger carriage numbers and some leftover BGB wagon decals for the tare and tonnage markings. I recommend applying the decals without using decal setting solution immediately. Wait until the decals have dried across the top of the grooves, then carefully slice through the decals along the grooves with a new/very sharp modelling knife, then apply the decal setting solution. The decals will nestle in to the grooves nicely. When the decals are completely dry the wheel tyres and the cupola window area should be masked, and the model sealed with thinned matt Estapol. When that is dry, weathering can be done, if required.



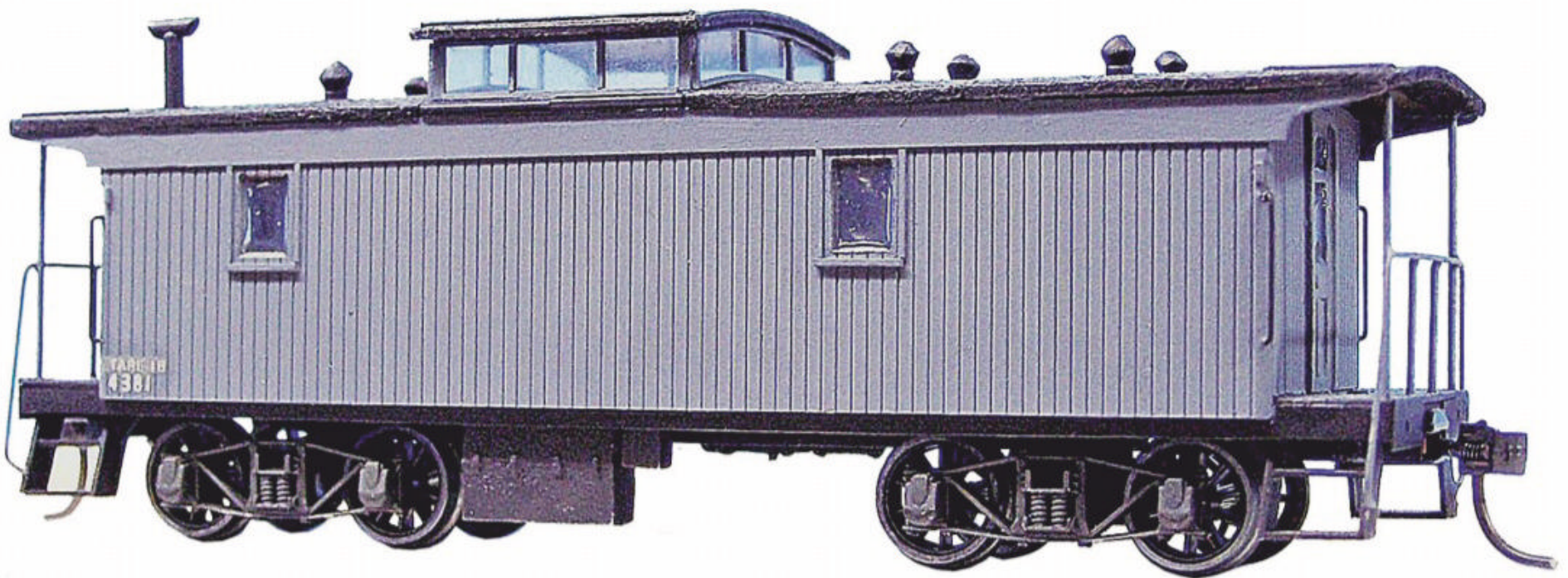
30

▲ Fitting the glazing. One can carefully cut out small squares of clear styrene to fit each window enclosure, but I prefer the quicker and easier method of forming each window with Kristal Klear. This product produces a thin plate of polyvinyl acetate, which dries to a clear, glossy finish. When filling the window, the trick to getting a glass plate that has very little distortion lies in leaving only a minimum amount of liquid behind when you have finished filling the window. Some practice is required, but the effect is time saving over other ways of glazing the windows. Immediately after applying the Kristal Klear, place the model so that the 'wet' window(s) dries with the outside surface facing down. This technique ensures the 'plate of glass' is as flush as possible to the outer surface of the body and stops any annoying concave surface forming in the plate.

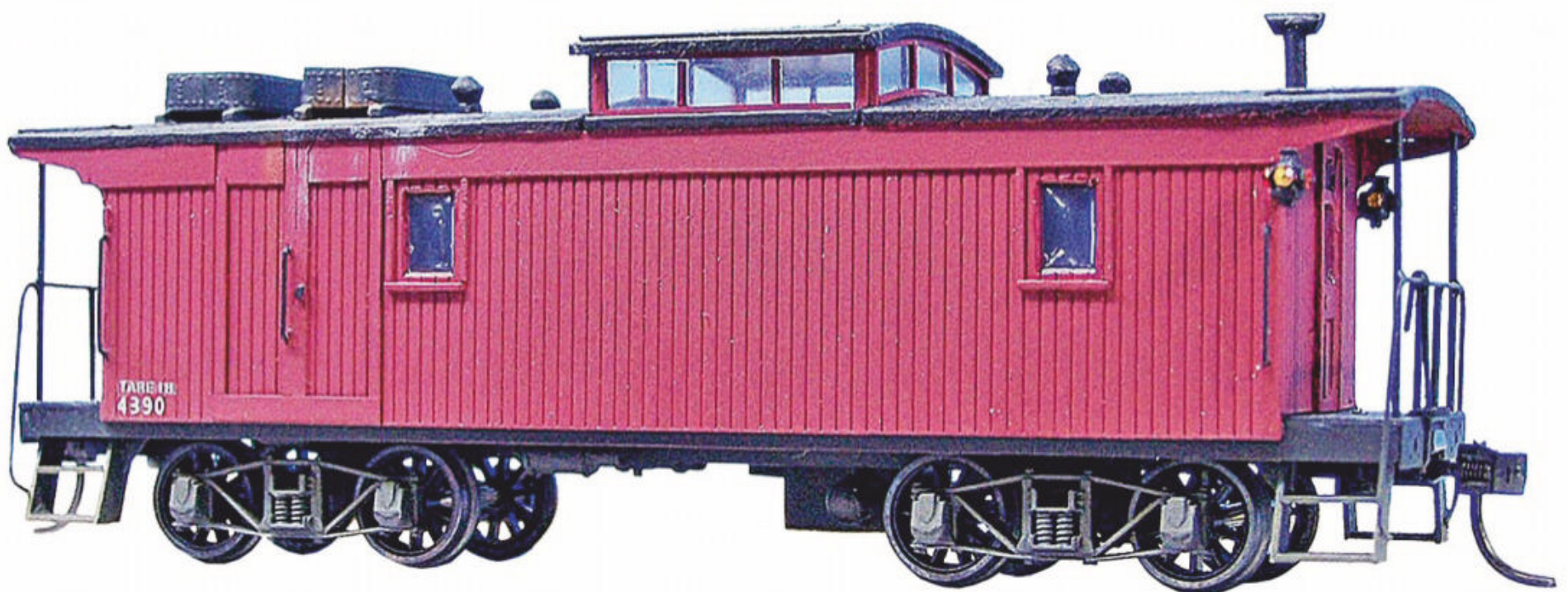
◀ The last item to be fabricated is the handbrake, fashioned from brass or copper wire to the shape shown in the photo. Make a small disc (2.5mm diameter/0.020" thick) from styrene and drill a small hole in the centre. Slip on the bottom of the handbrake shaft and place the handbrake into position over the top of the handrail. The handbrake is painted black. The plan doesn't show the outside handbrake so use this photo as reference for construction and assembly. The handbrake was only fitted to one end of the van.



The model of brake van 4352 is complete, detailed and ready for service. The end platform has been detailed with a couple of railway enthusiasts, savouring the glory of the last days of steam on the SAR broad gauge. This van represents the appearance of the van during the early 1960s, with the bracing and corner modifications that were made to most, but not all, of the vans.



A model of brake van 4381 in earlier 1950s condition, without the bracing added to the end of the body. This van was one of the second batch that entered service in 1926.



A model of brake van 4390, modelled in unmodified condition, without bracing and original last batch side doors. It has been detailed with SAR 'Adlake' marker lamps fitted with jewels. It was one of the last batch of vans that were originally destined for the narrow gauge, but were reworked before entering service and issued to the broad gauge. It carries the red/brown paint scheme for use on my accident train. The roof mounted water tanks appear to have been added to vans modified for accident train service, as per Ross Hurley's photo of the prototype 4382 elsewhere in this article.



▲ This monument was originally erected in the main street of Bassendean to commemorate those who served in the Great War and was then known as the West Guildford Soldiers' Memorial. It was moved to its current location in 2015. It is a granite obelisk mounted on a wide, square base and plinth. There are four marble faces on which the veterans' names are inscribed. Behind is the more recent Bassendean Memorial Wall and Reflection Pond, which commemorates those who served in conflicts in which Australia has been involved, other than the Great War (those names are on the original obelisk).

◀ This memorial, at Bayswater, was unveiled on Anzac Day, 1925, to commemorate those from the district who died in service or were killed in action during the Great War (WW1). A plaque commemorating those who lost their lives in subsequent conflicts was added to the memorial at a later date.



BEYOND THE FENCE

War Memorials

*Graham Watson gives a brief overview of some typical Australian war memorials, a prominent feature that can be found in many municipalities all over the country.
Photos by the author.*

Before the one hundredth anniversary of the signing of the Armistice on the 'eleventh of the eleventh' 1918, which ended the 'Great War' (as the First World War was known at the time) becomes a distant memory, it is worth focusing on how such conflicts are commemorated in towns all over Australia.

Many towns have a war memorial in a prominent place in their town, quite often in the main street, to commemorate the Great War. (The memorial halls, swimming pools, avenues etc., date from the aftermath of World War Two, though in many cases, the dead of WW2 and subsequent wars are recorded on the original memorial to the Great War.)

Such is the case of the memorials depicted in this feature, all in the eastern suburbs of Perth. Although they are all different in their own way, with different shapes, heights, etc., they all have some features in common. The first is the solid nature of their construction, designed to last the ages, with granite being the major building material. Secondly, all are variations of obelisks, some with embellishments such as horizontal ledges inserted part way up, a column, as in the case of Bayswater, or parallel-sided in the case of Maylands, and in the case of Guildford, guarded by a couple of 25-pdr field guns from the post WW2 period.

Further information on war memorials can be found on the website of Monument Australia at: www.monumentaustralia.org.au.



▲ The Guildford War Memorial obelisk (unveiled on 6 November 1920) was originally erected to commemorate those who served in the Great War, but now also has inscriptions commemorating veterans from the local area who served in subsequent wars and conflicts. The names are engraved on all four faces of the obelisk, as well as on the base. The memorial is situated in a park and includes a number of other items of a military and commemorative nature.

▼ A closer view of the Guildford obelisk, with the Memory Gates, also known as the Gunner's Gates, directly behind. These gates were installed in 1932 and commemorate the gunners and cavalrymen who trained at the nearby Guildford Camp during the Great War.



► Unveiled in May 1923, the Mundaring monument originally commemorated those who died in service or were killed in action in the Great War. As with most others, the names of those who fell in subsequent conflicts were added later. The granite obelisk stands on several granite plinths, with the main inscription on the north side engraved on polished granite highlighted with gold inlay (not visible in this image). The east, west and south sides carry marble plaques recording the names of the fallen. Fluted metal bollards stand at each corner with a chain connecting them to form an enclosure.



▲ The Inglewood memorial, originally erected to commemorate those local residents who served in the Great War but, as with many other memorials, now also carrying the names of local residents who served in subsequent conflicts.



▲ The Maylands War Memorial obelisk was unveiled in October 1921 to commemorate those local residents who died in service or were killed in action in the Great War. As with most others, it has had the names added of further local residents who served in subsequent conflicts. When originally dedicated, it bore the names of 106 men who did not return and highlighted the twelve most important battles of the Great War in which Australian troops took part.





Build Working Station Lights

*Ian West scratchbuilds working lights for his station platform.
Photos by the author.*

These ornate platform light fittings can still be seen on many suburban and country stations throughout the NSW rail system. I made my own because I wanted solid, working examples as the white metal options currently on the market tend to break easily and it is almost impossible to make them light successfully. I chose brass because of its solid construction and conductivity; however, a good level of soldering skills is required for this project.

Construction Sequence

Step 1: Cut tubing to size (Nos 1, 5, 7 and 8).

Step 2: Drill a 1mm hole on one side of the 60mm tube (No.1) 3mm from the top (this is to allow the connecting wire to pass through).

Step 3: Bend two pieces of the 0.7mm wire (No.3) around a 10mm piece of dowel (or something similar) to form two semi-circles with a diameter of 10mm.

Step 4: File one end of the semi-circular wires so that both pieces fit into the top of the tube approximately 1mm deep (this step is not necessary if making a single light post).

Step 5: Solder the wires into the top of the tube so that the arches are facing away from each other (take care not to solder the hole for the wire).

Step 6: Place the piece of heat shrink tubing (No.4) on the 1.7mm tubing and push all the way to the top. Hold close to a soldering iron and heat shrink. This forms an insulator for the power ring (No.5).

Step 7: Slide the power ring up the tube, over the heat-shrink tubing and glue into place.

Step 8: Take the LEDs and bend the anode wire (the longer wire) into the ornate scroll shape (No.6 of photo), cutting off any excess.

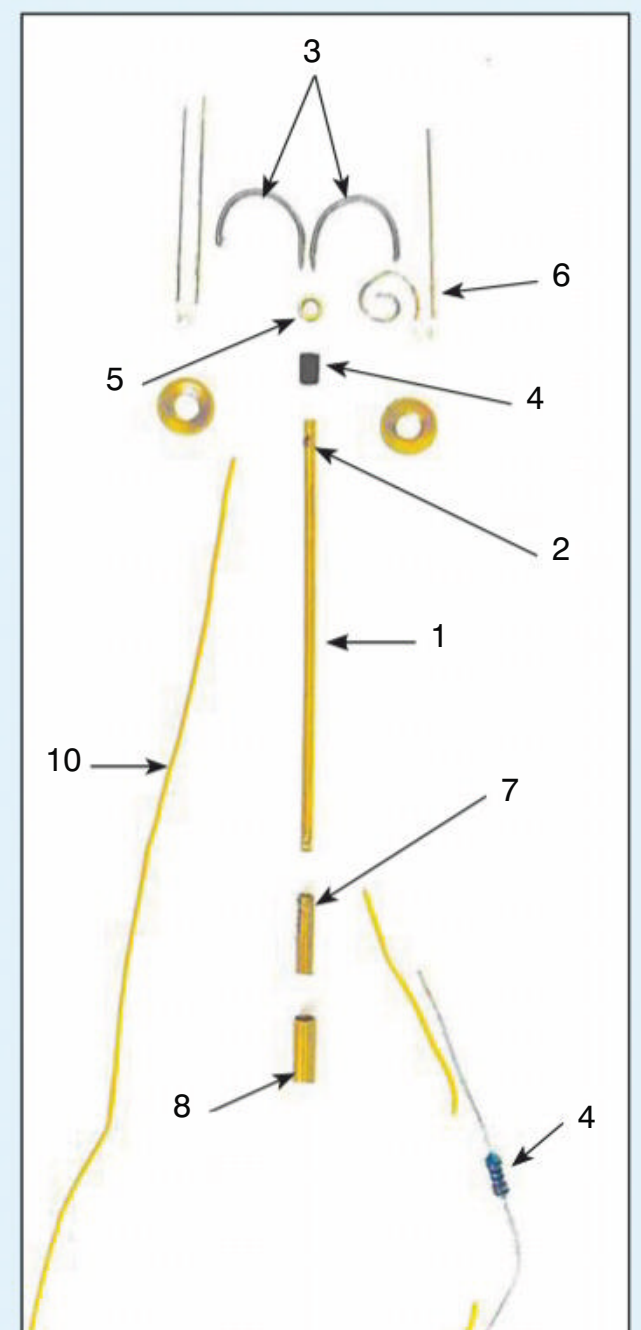
Step 9: Solder the cathode wire to the semi-circle wire close to the LED and snip off excess wire, but do not discard the off-cut. File the cut wire to blend it making sure that the anode scroll wire does not touch the 0.7mm arch above it. Repeat for the other side.

Step 10: Take the discarded wire from the LED and bend a small horseshoe shape on the end to fit in between the power ring and the scroll you have made. Carefully solder into place, cut off excess and file to blend. Repeat for the other side.

Step 11: Make two more horseshoe shapes on the end of the wire and solder to the top of the arch of the 0.7mm wire to make fancy top scrolls as per prototype.

Step 12: Make the lamp base by placing the 2.2mm (No.7) and 3.18mm (No.8) lengths of tubing onto the tube and solder or glue into place about 10mm from the bottom of the tube. This allows for mounting into the platform.

Step 13: Run the fine insulated wire



The components of a working platform light, laid out prior to assembly. The numbers correspond to items mentioned in the text.

Materials Required

	Material	Cut Size	Supplier
1	1.7mm K&S brass tube	60mm	Hobby shop
2	1mm drilled hole		
3	0.7mm brass wire	2 x 40mm	Hobby shop
4	Heat shrink tube	3mm	Jaycar
5	3.18mm K&S brass tube	1mm	Hobby shop
6	3mm x 10 lumens white LED		Jaycar
7	2.2mm K&S brass tube	10mm	Hobby shop
8	3.18mm K&S brass tube	8mm	Hobby shop
9	1000-ohm resistor		Jaycar
10	Fine power lead	Depending on requirement	Hobby shop
11	3mm brass washer		Bunnings/Hardware store

(No.10) through the 1mm hole near the top of the post and out through the bottom of the tube (I found stripping the insulation off about 70mm first made it easier to pull through). Strip the end near the top and solder onto the power ring (No.5).

Step 14: Solder another length of wire (cut to your required length) and solder to the base of the pole. *Do not apply power to the wires at this stage!*

Step 15: Solder the 1000-ohm resistor (No.9) in series with one of these wires and insulate with shrink tubing. **WARNING:** *Never apply power without this resistor in place as you will instantly destroy the LEDs.*

Step 16: Check to make sure that there is no short circuiting on the lamps – caused by the arch and the scroll touching each other.

Step 17: To make lampshades, take washers (No.11) and place on a block of timber. Hold a large punch to the centre of the washer and tap gently to make a saucer shape. Glue in place on the LEDs.

Step 18: Apply 12V DC power: positive to anode, negative to cathode and the light should work!

Step 19: Paint with a primer and colour of your choice (masking the LEDs first). I apply a thinned down coat of Tamiya Clear Orange X-26 to the bulbs to give a more realistic incandescent light colour.

Step 20: Install on your platform! 



The completed light fitting, ready for painting and installation on the layout.

'De-bugging' Your Layout

Jonathan Majer offers some solutions to a common problem.

Photos by the author.

Unless you have one of those compact wall/shelf layouts, most of us have to use garages, lofts, or purpose-built outbuildings in which to construct our dream layouts. Although this can give us adequate space, it can present its own set of problems – intruders from the natural environment. These layout spaces are generally not totally sealed by double-skinned walls or fly screens and the pads on which they may be built are often not pre-treated against termites. In addition to this, most of these spaces do not have the controlled environments that the main house usually affords, sometimes resulting in dust, adverse moisture levels and large fluctuations in temperature.

We then fill these spaces with layouts and workshop areas with numerous nooks and crannies, ideal spaces for unwanted pests to occupy. The infrastructure also consists of a considerable amount of palatable organic material, including the card and paper from which some buildings are constructed, powdered plant material as components of surface texturing products, lichen as imitation foliage and, of course, the pine framing that is almost universally used on layouts. This pine is seldom treated against termites and, even if it is, the cut ends of legs may expose the untreated core of the wood sections.

My own layout is built in a walk-in loft, which has allowed me to see first-hand some of the problems with intruders that can be encountered. I will now outline some of these and make suggestions on how they can be avoided.

Some of my buildings are constructed from card and brick paper. Very soon after completion I noticed elongated, shallow pits or wide scratches appearing in some of the brick paper, card buildings and back-scene paper. The culprit turned out to be silverfish, also known as bristletails. These are primitive, wingless insects that are around a centimeter in length, torpedo-shaped, silvery in appearance and have three long bristles on the tip of their abdomen. They can feed on paper, card, some glues and are able to digest cellulose, the main component of papers and cards.

Having painted over the ugly scars that these animals had inflicted, I resolved the problem by spraying the

paper backdrop and buildings with a contact insecticide. You must use a long residual-time insecticide designed for cockroaches and other crawling insects; don't use one of those rapid knockdown insecticides designed for killing mosquitoes and flies, as these break down very quickly.

If your layout is in the unfortunate location where it is subject to moisture and growth of mould, it may also be invaded by booklice and/or springtails, both of which can feed on fungi and mould. The animals are unrelated to each other, but both are less than a millimetre in length and usually are wingless. I haven't had any problems with either of these, as my loft is a dry environment. However, if present they could be found in high numbers and could impact on the aesthetics and running of the layout.

On one occasion, I noticed one of the small buildings on my layout moving in front of my eyes. After checking that I was not having a hallucinogenic episode,

I found that a large American cockroach had taken up residence inside the structure. I now have cockroach baits spread around the loft and replace them at regular intervals, a move that has resolved this problem.

Spiders can also be a problem, with a number of species benefitting from the abundance of hiding places and structures on which to construct webbing. This would detract from the appearance of the layout and could interfere with the movement of rolling stock. Spiders might be more of an issue in poorly-screened layout rooms, where flies and other prey could enter and provide resources for these predators. I have not had problems with spiders, but good screening and regular cleaning would assist with the prevention of this sort of problem.

A number of species of ants are commonly found in dwellings and these could also be a problem, but only if there is palatable material on your layout. If you are in the habit of eating biscuits while leaning over the layout then expect ants! If the layout is clean then there is



I found that a large American cockroach had taken up residence inside the structure. I now have cockroach baits spread around the loft and replace them at regular intervals, a move that has resolved this problem.





A section of the backscene behind the goods yard on the author's layout, the 'Paterson-Keating Lines', showing some minor damage caused by insects. The layout was featured in AMRM Issue 333 (December 2018).



unlikely to be a problem. An exception to this is in areas where there are high numbers of invasive ants, such as Argentine ants, big-headed ants or fire ants. I have heard of fire ants being attracted to warmth and forming sub-nests in boxes containing electrical switches or other such installations, resulting in short-circuiting. So, if there are ants in your railway room, pay special attention to the controllers! Fortunately, most house ants are not so numerous, so any infestations can usually be resolved with a proprietary household ant bait.

Turning to something larger, I once had the distressing experience of finding half of my trains derailed and the layout sprinkled with centimeter-long black pellets. Yes, a rat had somehow entered the roof of the house and wrought havoc throughout the layout – open fronted buildings and tunnels seemed to be of particular interest to Roddy. The rat spent most of its time in the garden, so strategic placement of baits outside of the house soon removed Roddy from the scene. I now maintain rat- and mouse-baiting stations throughout the railway room and no longer have this problem.



I would suggest that the most serious threat to the layout is termites. The pine that is used by most constructors is highly vulnerable to termite attack. Even treated timber is vulnerable if it is sawn into parts, since the treatment chemical only protects the outer surface of the timber, not the newly exposed core. The likelihood of attack is exacerbated by the fact that the pad on which the layout room may sit is probably not treated with a

layer of insecticide or poured over a stainless steel mesh barrier prior to construction.

Unless you live in Queensland, most Australian termites nest in the soil, so an effective barrier between the ground and the railway room should prevent the problem. Unfortunately, some areas of Queensland and northern New South Wales have the introduced West Indian dry wood termites, which can establish nests in wood that is out of contact with the ground. If that is a problem then professional help must immediately be called upon; fumigation will probably be required.



Elsewhere, a few simple steps can be taken to avoid ground nesters from attacking your infrastructure. Firstly, try to have the base of the room treated prior to construction of the building. If that has not been done, consider having a barrier around the room retrospectively treated. Termites can enter through cracks in concrete floors, so pay particular attention to these. If the layout sits on wooden legs, place metal plates or tobacco tins under the leg to form an impenetrable barrier to termites. If the layout is attached to the wall, look carefully at the points of contact as termites can move from the ground up beams in the wall and gain access to your layout.

Care should also be exercised in placing wooden furniture on the floor, possibly by placing metal trays between the item and the floor. Since ground-nesting termites can only gain access to your layout from the ground level, regular inspection of all wood, card and paper sitting on the ground should be performed. Any brown, soil-like material would provide

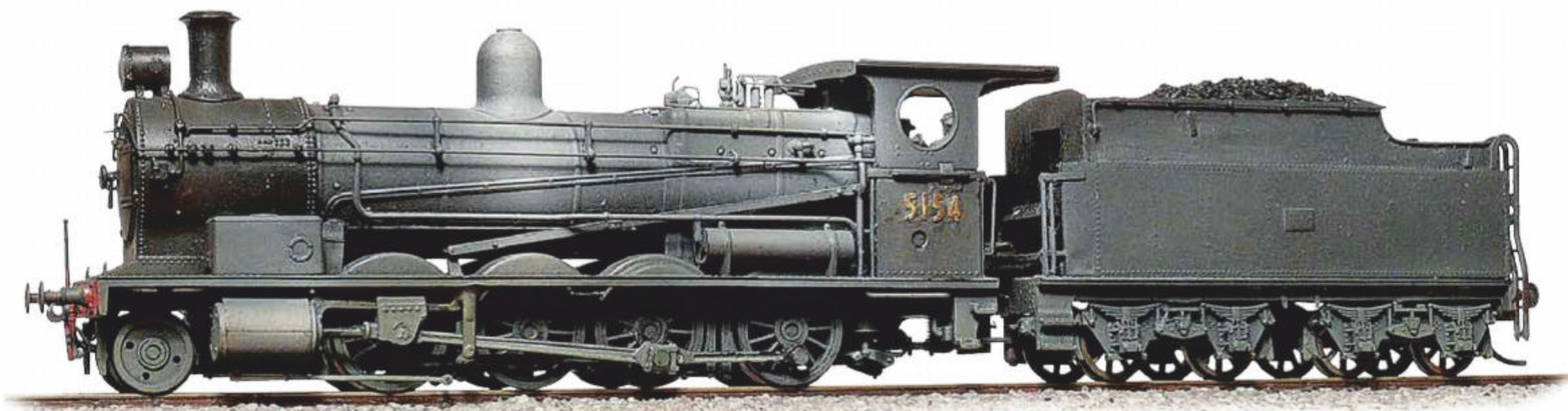
evidence that termites are in the process of attacking your layout, meaning that professional assistance should immediately be sought.

Finally, protection from dust ensures better running of your layout. One technique I use is to cover the layout with a thin plastic painter's drop sheet when I am away for extended periods. It can be difficult to remove as it may snag on trees, telegraph poles, etc., but it is certainly worth it if the layout is to be left unused for extended periods. It also lessens the possibility of spiders and other bugs getting access to your layout.

These are the main problems from pests that are likely to be encountered on your layout. There may be other types that could be an issue from time to time, and regular attention to this ongoing threat should be given high priority. As a broad approach to protecting your asset, you could place depots of protective granules at strategic places around your layout and also where your books and magazines are kept. Mothballs have commonly been used but this is not a good idea as the para-dichlorobenzene and/or naphthalene used in these items is dangerous to human health.

A safer option is to use a camphor-based agent, which is a natural product derived from the Camphor Laurel tree. Remember though, that all of these pesticides, baits and repellants are potentially dangerous, so exercise caution if young children and/or pets have access to your railway room. With all of these suggestions in mind, you should have years of trouble-free running, free from unwanted pests.





My Standard Goods Fleet

Part 3: The Laird Crosshead Engines: 5154 and 5340

*Ray Smith describes two more locomotives that make up his fleet of NSWGR Standard Goods locomotives.
Photos as credited.*

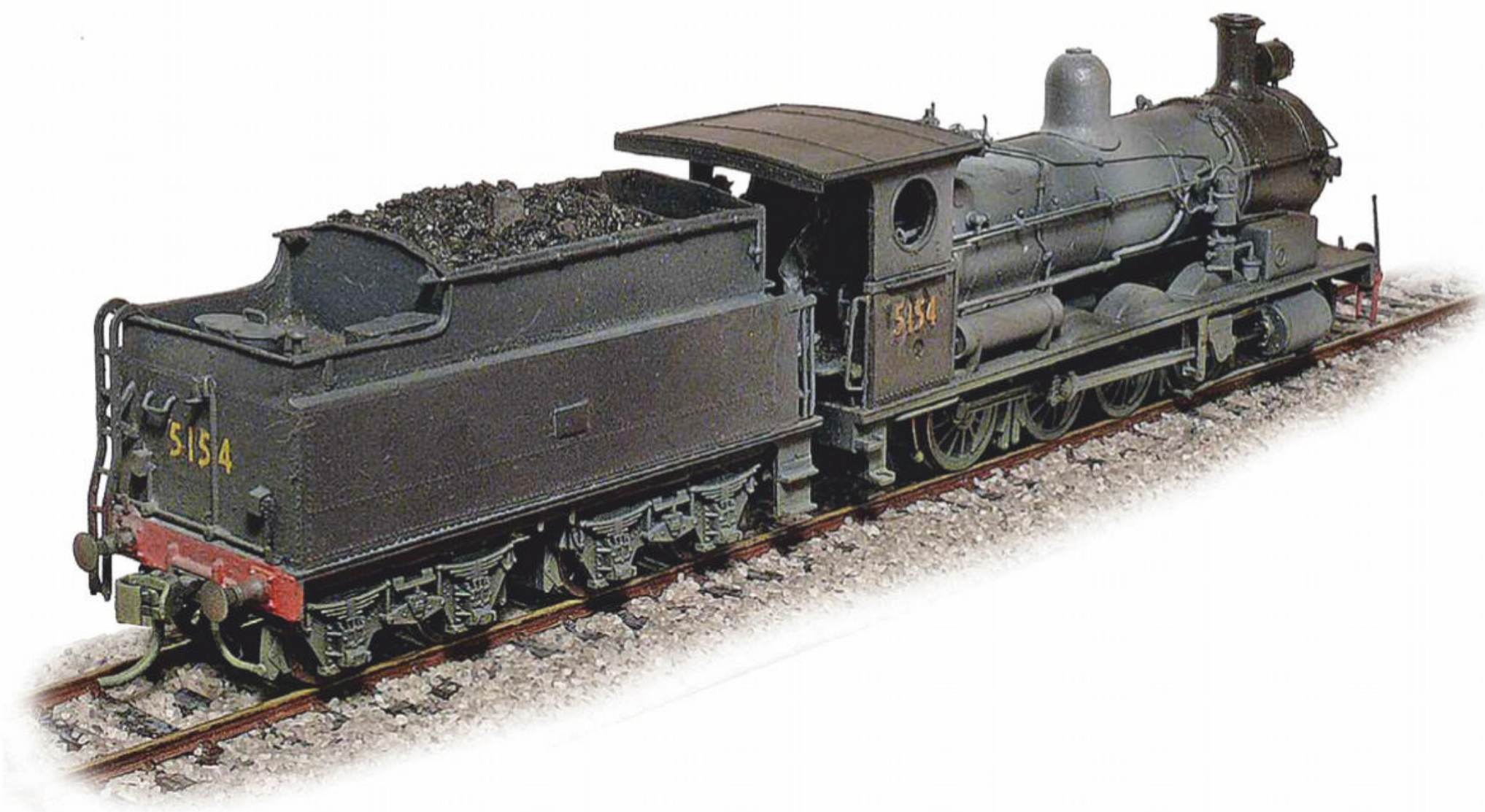
5154

The idea of converting the 'Alligator' crosshead (standard on the Eureka 50 class) to a Laird crosshead came about towards the end of the construction of the 55 class. When I was searching around for a number for my 55 class, I came across a photo on Weston Langford's website (www.westonlangford.com) of 5154 descending the horseshoe curve at Locks-

ley. The Laird crosshead was quite prominent, along with the 'Morts Dock' (3650 gallon turret) tender trailing behind. "That would be a unique loco to have." I thought. So, when the 55 was completed, I thought "Well, I don't need another loco, so why not convert one of my existing goods engines for this project?"

I had a stock standard 50 class that I had numbered 5118. The standard 3650

gallon tender it came with would be easy to convert to a 'Morts Dock' turret tender. AMRM Issue 153 (December 1988) had a plan and an article about this type of tender (NSWR Tenders 4 – 3650 Gallon Turret Tender by Phil Collins). The procedure seemed simple enough, just remove the body of the Eureka tender, carefully remove any useful detail parts, and make a new tender body from styrene to fit on



the existing tender chassis. That Laird crosshead was going to be a different matter though...

I thought it would need to be made from scratch, or somehow the standard Alligator crosshead could be modified. But fate had other ideas... While rummaging around in the garage, I found a defunct Frateschi 'Consolidation' 2-8-0 steam locomotive (based on a Brazilian prototype) with... yep, you guessed it, a Laird crosshead! I carefully removed the crossheads, connecting rods and the slide bar bracket from the donor chassis.

A quick check against the Data Sheet drawing revealed the crosshead was just a little oversize. As well, the slide bar bracket was made from one piece of metal, bent, shaped and connected from one side of the loco to the other – shades of the electrical short circuit problem I had with the 55 class! But seeing the crosshead itself is made from plastic, it shouldn't be a problem. At the same time, I wanted to use the connecting rod from the 50 class, which meant that I would need to use the small screw that connected the connecting rod to the alligator crosshead on the Eureka loco.

After removing the plastic pin from the donor crosshead (which allowed the connecting rod and crosshead to pivot), I now had a 3mm diameter hole in the crossheads. The screw that allowed the Eureka connecting rod and crosshead to pivot was only 1.5mm diameter... "Another problem to be solved!" I gasped. But, shortly after, it occurred to me that seeing that I would not be needing the Eureka Alligator crosshead, why don't I cut and file it to fit the 3mm hole in the Laird crosshead? So simple, but so fiddly!

I carefully shaped, cut, filed, swore and cursed it to a roughly 3mm diameter round piece to fit snugly into the Frateschi crosshead. But I had to be care-

ful; one false move and this thing could go flying off into wild blue yonder to land in what is known around here as the 'Grey Carpet Monster' and it would be gone forever (I've lost so many parts that way!) After the new piece fitted tightly into the crosshead (and the smallest drop of super glue used to make sure it stayed there) I then screwed the connecting rod to the Laird crosshead and then did the same thing on the other side.

Next, the original slide bar bracket and slide bar guides that were on the Eureka chassis were carefully removed and the groove in the chassis was filled with a piece of strip styrene. The new bracket had little tabs that fitted into the holes in the original Frateschi cylinders; these were filed to fit into the equivalent holes in the Eureka cylinders. The new (Frateschi) bracket was bent to fit in place on the Eureka chassis, sited where the original Eureka bracket was.

Two lengths of brass strip were bent into a 'U' shape and one was soldered onto the end of the bracket on each side. They were looped around to fit between the coupling rod and connecting rods, as per the Data Sheet drawing, making sure that they made no contact with the rods. If both sides made contact at the same time, it would create a short circuit (shades of the 55 class again!) The crosshead-connecting rod assembly was then test-fitted onto the chassis to check for any tightness (some adjustment was needed). After plugging in the tender to the chassis, the chassis was then placed on the 'test rollers' and power was connected. After several minutes of testing in each direction, no problems were detected, so the hard work was now done.

From this point onward it was all just 'cosmetic' work. The only changes I made to the loco body were to replace the standard chimney and dome with the 3D

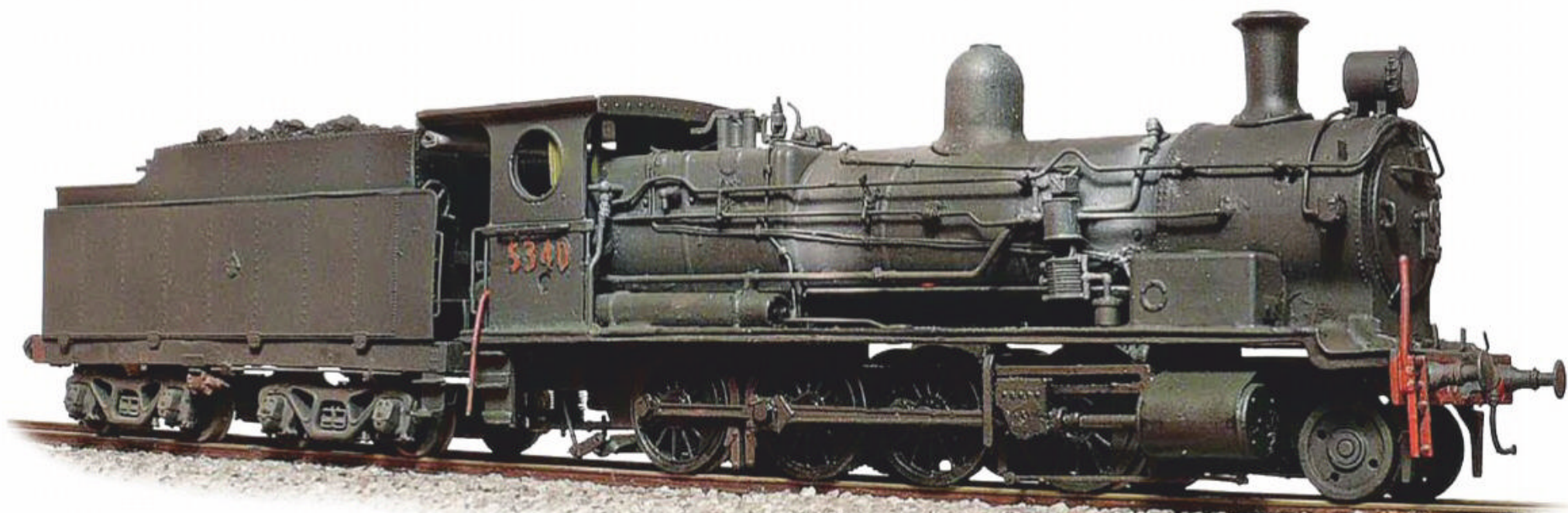
printed versions obtained from Ray Pilgrim's Shapeways shop, plus adding some of the missing lamp irons using brass strip.

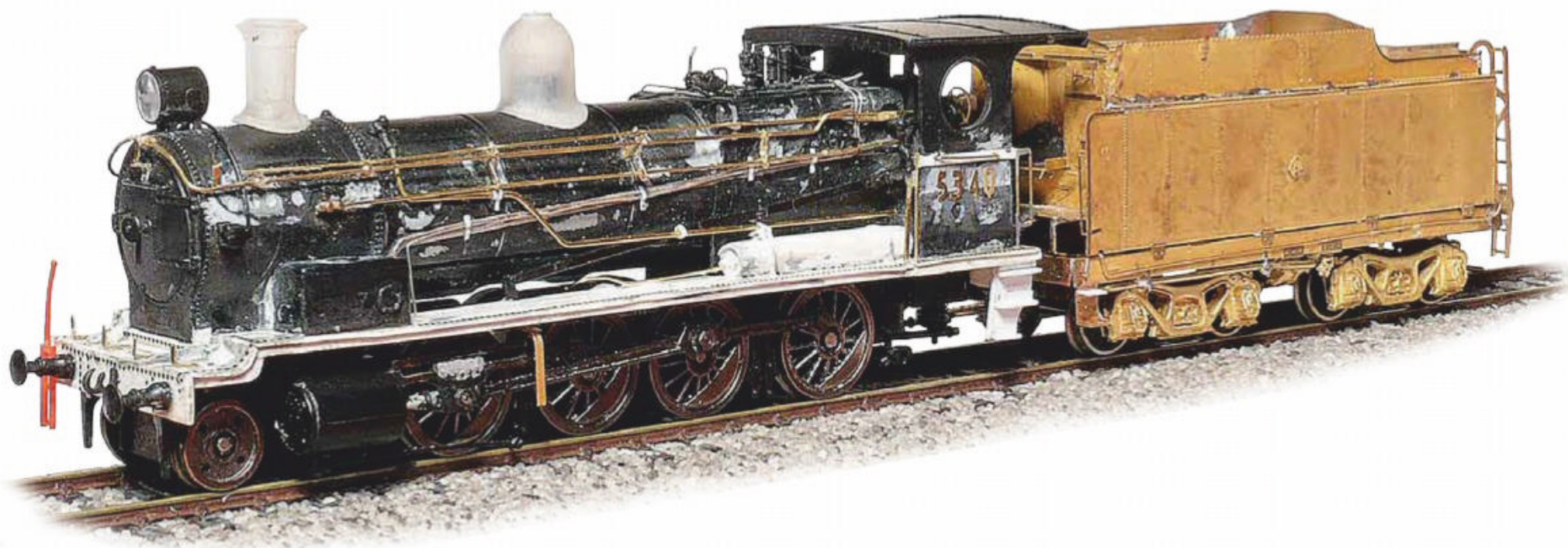
The tender was next. The original body was removed and all usable parts stripped: ladder, marker lights, toolbox, water hatch, etc. The new body was marked out on 0.040" styrene sheet, cut out and assembled, then detailed using the parts stripped from the original Eureka tender body. Archer rivet decals purchased from Casula Hobbies were applied, where appropriate, to the tender sides. AM Models provided the brass numbers for the cab sides.

The model was then primed, painted and weathered. The brass cab side numbers were 'shined up' with fine grit sandpaper, the tender was coaled and a Kerroby crew rostered on the footplate. There we have it, a Laird crosshead-fitted 50 class trailing a 'Morts Dock' 3650 gallon turret tender... something I'm pretty 'chuffed' about!

5340

I purchased a Eureka 50 class locomotive from Ron's 'seconds' collection (but no tender, as none were available at the time) to be used as a spare in case of emergency. A little later I purchased a copy of the Train Hobby Publications book: *New South Wales Government Railways 53-Class 2-8-0 Standard Goods Locomotive*. While thumbing through the pages, I noticed that a good number of the 53 class also had Laird crossheads and I quite liked that photo of 5340 at Orange on p.44... "Mmm... after the success of 5154, a third 53 would give me a different variation" I thought. All I needed was another defunct Frateschi 2-8-0... So I waited for a few months, then one appeared on eBay and was quickly snapped up. I then ordered another Andlan Commonwealth





The alterations made to the Eureka 50 class to produce a Laird crosshead-fitted 5340, prior to painting.

5000 gallon turret tender kit, plus a new chimney and dome from Ray Pilgrim's Shapeways shop.

While trawling through my books I came across something unusual. I found a photo in *Byways of Steam* 16 of 5340 fitted with specially balanced driving wheels and an Alligator crosshead in 1960, then found more photos of 5340 in other publications showing the loco fitted with a Laird crosshead in 1964. So, the loco had a major overhaul and was fitted with a Laird crosshead some time between 1960 and 1964, as was quite common with 50 and 53 class locomotives at the time. It wasn't in service very long with the Laird crosshead as it was withdrawn in 1965.

The Eureka 50 class was disassembled and, there being no tender with the circuit board inside available, I had to do a bit of rewiring with some 4-pin plugs. Currently I run my locos on DC but, should I decide to go over to DCC, I arranged things so it would be easy to cut a couple of wires and wire in a DCC chip.

The Andlan tender kit and the defunct Frateschi loco arrived on the same day, but I started construction with the loco chassis first. I prefer to get the hard bits done first, seeing that they're the most

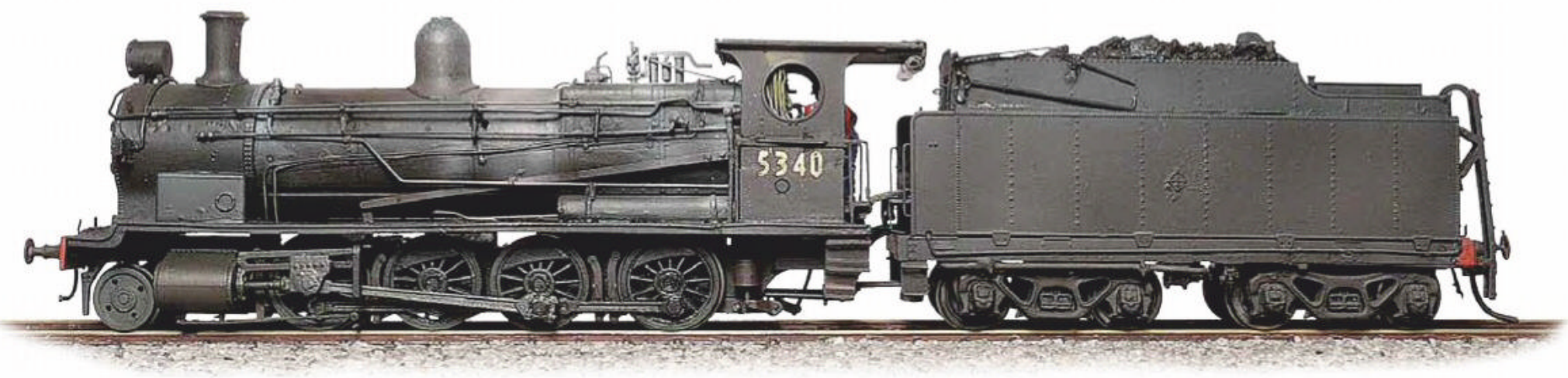
important and essential to the success of the project. Get them done right and the rest is easy. With the chassis I followed the same path as I did with 5154, so there's no need to repeat it again here (see above). The body was done the same way as 5369 and 5412 as described in my earlier article [*My Standard Goods Fleet Part 1. The D53 Class AMRM Issue 335, April 2019 – Editor*], but with a slight difference. The handrail stanchions were made by soldering two pieces of brass in a 'Y' shape and then drilled 0.5mm to allow the handrail and other plumbing to pass through. This gives a much better-looking job than on my other two 53 class locomotives.

The Andlan tender was constructed with the rectangular hole below the footplate to allow for the wiring from the tender to the engine. When the tender was finished, I then connected the plug from the tender to the engine and placed the engine on test rollers. After some adjustments the electrical and mechanical side of the project were complete.

After painting I started the weathering process, but this time I used acrylic paints and weathering powders instead of enamels. I was very impressed by how

this turned out and since writing the text of this article I have redone the weathering on all of my engines! AM Models provided the brass numbers, Kerroby Models the crew and crushed real coal was glued into the tender bunker. And that's it; I now have a trio of 53 class engines, but all different!

When I started modelling the NSWGR 40-odd years ago, there wasn't much in the way of r-t-r models. If you *really* wanted a certain model (in my case, a 53 class) you had to scratchbuild, kit-bash or wait until a brass model came along. The brass was definitely out in those days due to the price, so a kit-bash or a scratchbuilt version was the way to go back then. I have built a number of kit-bashed versions of 53 class locos over the years. The detail on the early ones was laughable, but my skills improved on each one and now my latest, 5340, is the best one I have ever built. I'm very happy how all of my Standard Goods engines have turned out (even the early ones) and it has been an enjoyable, satisfying experience learning how to build better and better models. But then again, that's what the hobby is all about, isn't it? ▴



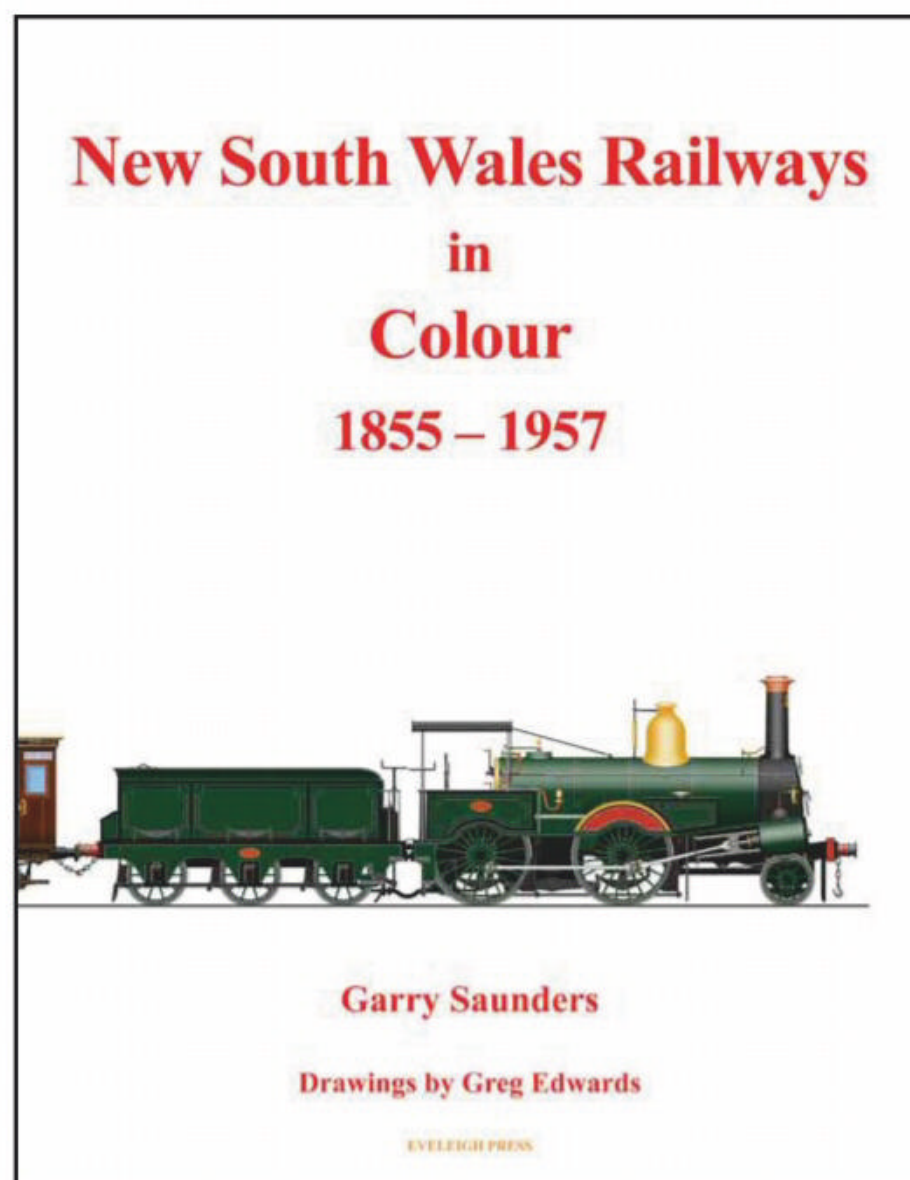
***New South Wales Railways in Colour 1855–1957* by Garry Saunders with drawings by Greg Edwards. Published by Eveleigh Press, PO Box 345, Matraville 2036. Ph: 02 9311 2036. Website: www.australianmodelrailways.com. Price: \$145.00 (plus P&P).**

Hot on the heels of Ian Dunn's *Goods Wagons of the NSW Railways 1855–1905* comes another seminal publication from Eveleigh Press. This sizeable tome, by Garry Saunders, raises the bar even further and is destined to be regarded as one of the most meticulously researched books yet seen on an Australian railway subject. Although the main topic is the many liveries from the various administrations of NSW railways 1855–1957, there is an abundance of rare historic photographs and fascinating side tracks into many other aspects of NSW railway history.

This comprehensively detailed, lavishly illustrated and weighty tome sets out to become a definitive record of a subject that has fomented endless debate, sometimes unrestrained, among the cognoscenti for decades: the variations in liveries of NSW locomotives and rolling stock. A stumbling block in the examination of this subject has been the paucity of colour photographs pre-World War Two. This deficiency has been addressed by giving full rein to the artistic skills of noted illustrator, Greg Edwards, better known for his black and white line drawings of locomotives and rolling stock, retailed under his Data Sheets label. In this volume, Greg has been granted licence to explore the full colour palette.

To achieve accuracy, the author has painstakingly obtained many original samples from the fabric of historic NSW rolling stock and these have been scientifically examined for their pigments, colour shades and paint brands. By carefully wielding a scalpel, earlier fragments of paint have been obtained and examined under a microscope. As well, countless archival documents have been trawled through. Particularly useful were the NSW Railways Stores Lists in the NSW Government Gazette from 1859 on, where bulk colour pigment orders were tabled.

New South Wales is the setting for the first government railway in the British Empire. Thus, it was inevitable that imported engineers from the mother country would determine the early decision making. Firstly, James



McConnell drew on his experience of materials and liveries connected to English carriage builders Wright and Sons, with a link to the great Isambard Kingdom Brunel.

Brunswick green was the colour selected for the first group of locomotives and the author was given permission to obtain a tiny sample from an original layer found on No.1 in the Powerhouse Museum.

Information is provided about the two separately-developing systems based on Sydney and Newcastle. Variations in the presentation of First, Second and Third class carriages are featured. Subjects like heraldry and monograms are illustrated in colour, as well as examples of the artwork of Phil Belbin.

There are early drawings of Sydney yard and countless rare photographs, such as a priceless 1878 picture of Liverpool station, along with other rare views of original buildings, the likes of the first Sydney station, Newcastle, Parramatta, Blacktown, Honeysuckle etc., sparking discussion of their paint schemes.

The Whitton years are lavishly described and illustrated, with great detail pertaining to locomotive choices and their liveries. In 1865, under John Whitton, the seminal

Manchester firm Beyer Peacock produced the first of what was to become a great fleet of successful designs for the NSW railways.

From the early 1860s, carriage presentation began to shift from clear varnish to paint. Early choices were crimson lake with gold lining for First class, verdigris green for Second class (Third class had a relatively short existence).

Greg Edwards' colour illustrations of early locomotives are highlights. The depictions of the American goods engines, for instance, the Baldwins that influenced the later Standard Goods classes, may inspire more modellers to represent this period, rarely seen apart from the excellent *Eskbank* layout exhibited several years ago. Also from that period, the Midelton locomotives are seen at their best in colour illustrations, and not to forget his State carriages in their original and rebuilt form which, remarkably, saw out their twilight years on the Werris Creek-Tamworth school train!

Every step in passenger stock evolution is examined in full colour, from radial cars, the big American sleeping cars, Ashbury, Cleminson, Redfern, Express Lavatory ('dog-box'), Pullmans, through to the

ubiquitous 'American' end-platform cars. Not forgotten are the multitudes of brake, mail and hearse vans, travelling circus rolling stock, as well as all manner of goods wagons, all rendered in colour.

The author does not restrict his attention to trains; trams of all kinds – cable, steam and electric – are discussed and also lavishly illustrated by Greg Edwards.

Continuing from the late nineteenth century, the important William Thow period is appraised, his ground-breaking P and T classes, then EE Lucy's NN and 36 classes, Harold Young's 57 and 38 classes, the colourful liveries of these pre-eminent engineers' passenger engines being well documented. The early 1950s saw the last of new steam types and then the era of the smartly-attired new diesels and electrics.

The author makes a good case for the most likely appearance of the varnished stock of the twelve-wheel passenger car era. Greg Edwards' definitive colour rendition of varnished cedar will hopefully settle differences of opinion that simmered for years. The contemporaneous special sets for the *Northern Commercial Limited*, *Caves Express* and *South Coast Daylight*, in their reds, blues and greens, with cream bands, are given the full treatment, along with the Tuscan and russet years, which were followed from 1955 by the more restrained all over Indian red colour schemes.

The full gamut of railmotor types and liveries is described and likewise illustrated in colour, as are suburban electrics and the early all-steel loco-hauled cars. Even the colours of uniforms, decorative crests, lettering and colour charts, along with the evolution of painting processes at Eveleigh Carriage Works is described.

To summarise, apart from its general, industrial and social history aspects, this volume will be an invaluable guide to restorers of prototype locomotives and rolling stock, as well as model builders (a lot of models are going to have to be repainted if historical accuracy is important to their owners!) The clarity of the text and the quality of the illustrations in these 424 pages have set a new high-water mark in excellence that will be a daunting task for future authors (and publishers) to emulate.

Chris Sim

Southern Rail HO scale QR 2300 class EMD Diesel-electric Locomotive, ready-to-run in HO scale by Southern Rail Models, PO Box 427, Salamander Bay 2317. Ph: 0418 282 564. Website: www.southernrailmodels.com.au. Price: \$369.00 (DC-no sound); \$489.00 (DCC-sound); plus P&P.

Prototype

Steam is King, right? So it was in America, until the Electro-Motive Division of General Motors launched the F-unit diesel-electric locomotive around 1940. In 15 years, US steam was finished. By 1951, GM alone had built 10000 diesel locos, 25000 by 1964.

In Australia, except for NSW 42' rail motors, *Silver City Comet* and the like, new steam was still being bought, until a handful of NSW 40 class Alcos arrived in the early 1950s. That really started something. Alco engineers, having previously trained staff in their operation, supervised assembly of the first few on the pier and soon after, these handsome engines were hard at work hauling overnight interstate freight, twelve hours faster than steam, speeding the *Flyer* on 38 class schedules, hauling the Royal Train... and they were soon joined by beautiful F unit-styled GM bulldog-nosed locomotives in NSW, Victoria and on the Trans Australian line.

GM diesels, in particular, have always proven to be reliable, efficient, durable and adaptable, being continually updated and improved when other manufacturers have followed steam into the weeds, including the pioneer, Alco.

Full-size diesels have changed over the years from the stylish F unit-based cab units to today's functional 'collection of boxes on a flat wagon', with an airbase control tower for a cab. The QR GM, subject of this review, is a case in point. Starting in 1969 as the Clyde-built 1550 series with EMD 645 engine, initially for coal trains, they were rebuilt in 1997 as the 2300 series with turbocharger (replacing the Roots blower), air conditioning, upgraded electronics and Maxi-cab. The locomotives have been a part of the southern (heavy track) QR scene for almost 50 years and where replaced by electric traction etc., some have been transferred to Western Australian subsidiary, ARG, while



others have been sold internationally into South Africa.

How to model such equipment? No worries, you can buy it. Australian developers and Chinese manufacturers have combined to mass-produce models that the best scratchbuilder would be hard pressed to match. Near perfect, no less.

Model

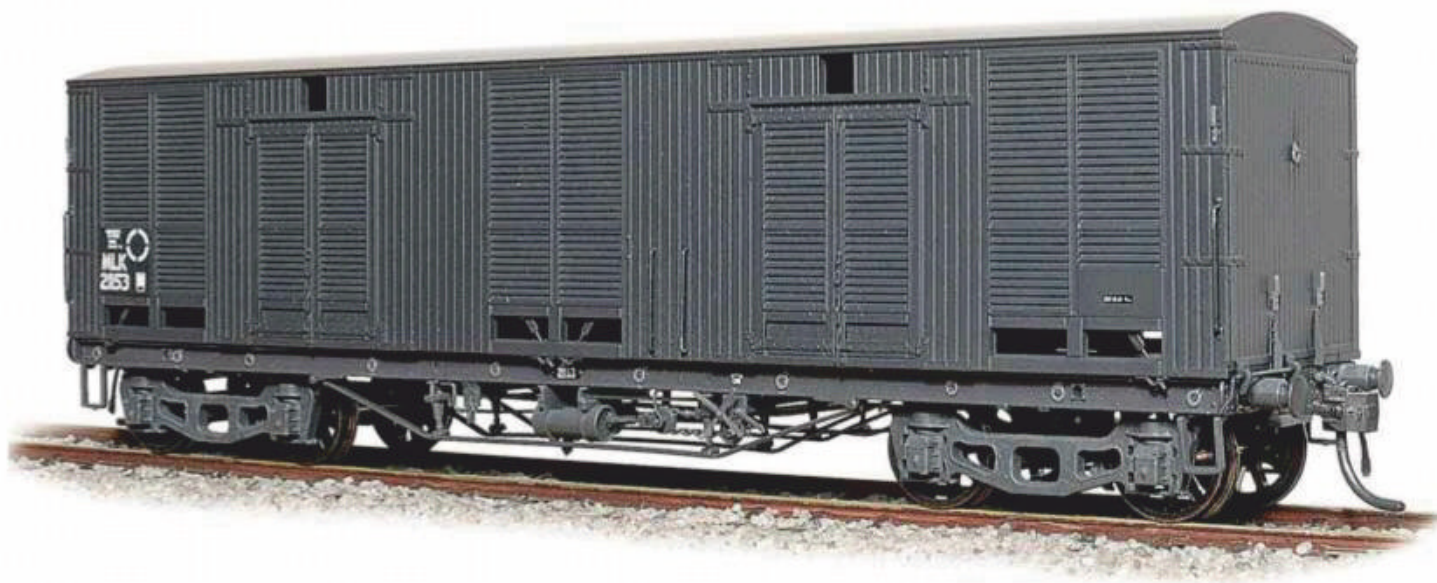
Southern Rail's 2300 class GM diesel comes in a quality box, foam-lined and post office-proof packaging. There is a comprehensive, explicit, user manual and exploded parts drawings showing just how many variations can occur over a long service life. The sample supplied (QR 2309) is standard

gauge (4'8½", 1435mm, 16.5mm HO scale), though a 'Cape' gauge (3'6", 1067mm, 12mm HO scale) version (with narrower bogie casting) is available, which is of course popular in the home state of Queensland. Sources mention that some 2300 class have operated "on QR standard gauge" though I could not find if the sample, 2309, was one of them. It doesn't matter to most modellers, as 16.5mm gauge is somewhat more common on layouts than 12mm. After all, UK modellers aren't fazed by running 4mm scale models on 16.5mm track, which works out as

4'1½" gauge (seven scale inches too narrow).

The model has great fidelity and looks just like the real thing, a rare quality in many models in the 'old days'. The body sits well on the frame and it is a spare-no-effort, multi-part assembly, not just one casting. Each cooling fan assembly has five parts, including etched grills, and there are many factory-assembled tiny items such as lift rings, sand pipes, rear view mirrors, screen wipers, GPS antenna, brake lines, etc.





NSWGR MLV/MLK Milk Tank-fitted Louvred Vans and E Flat Wagons by Casula Hobbies, 62 Moore St, Liverpool 2170. Ph: 02 9602 8640. Website: www.casulahobbies.com.au. Prices in text.

The latest run of HO scale, r-t-r NSWGR models from Casula Hobbies consists of three vehicle types, related to each other by being mounted on a common underframe. This was the 40' steel truss rod-supported underframe that first appeared under bogie E flat wagons around 1910 and

The good packing ensures that the handrails arrive straight. The paint and lettering are uniform and excellent. The many body stencils can be read with magnification. End beams are superb, with full hose, MU, coupler release and pilot detail. Couplers appear to be Kadee No.58/158 near-scale heads, hence something less to replace. A driver adorns the cab, Driver-only (DO) style. Lighting is realistic, the Loksound DCC decoder functions well and the manual contains tweaking details for different horns, etc. The locomotive operates well on the track, it hauls a good load and satisfies the crew. What more could one ask of Southern Rail?

This model, its presentation and the level of supporting information accompanying it is an indication of the maturity of the Australian model train industry. It reflects great credit on Southern Rail and its associates for the execution and delivery of this project.

Bill Cooper

***Where there's smoke Part 1 Scotland to the Cape* created by Malcolm Holdsworth, published by CADECO. Distributed by PEMS, PO Box 7124, Kariong 2250. Mob: 0411 139 312. Website: wheretheressmoke.com.au. Price: \$80.00 posted in Australia (\$110.00 posted overseas).**

The team (with the addition of a few friends from overseas) that brought us that magnificent trilogy covering NSWGR steam: *Northern Exposures*, *Lenses South* and *Shooting the West*, have spread their wings worldwide (again) and produced the first in a planned two-volume set covering the last years of world steam.

This 160 page full-colour volume starts in Great Britain in the 1960s and gradually works its way south and east, capturing the last steam to be found in Western Europe, Central Europe, the Middle East and Africa. Most images were captured during the 1970s, but there are some from the 1960s, as well as from the 1980s and 1990s from those countries, such as South Africa, that didn't rush headlong into dieselisation and electrification.

The format follows that established in the previous NSW books; an introduction to the region covered, followed by superbly photographed and reproduced images of steam at work in regular service. The introductory pages to each region include a most useful map showing the lines covered in each country, which definitely

helps to put things in context.

Most of the photos are well-composed 'standard three-quarter' record shots, but there is a fair sprinkling of the more artistic 'trains in the landscape' style images pioneered by the likes of Colin Gifford in the UK. Reproduction of the images is universally excellent and consistent, particularly impressive given the age of some of the original slides.

Highlights for me include the photograph on p.15 showing an overall view of Ventnor on the Isle of Wight in 1966, a classic example of the picturesque British branch line terminus, and illustrating quite clearly why the terminus to fiddle yard layout is so popular with British modellers.

Another image that caught my eye was that on p.18 of a pair of 19th century-built locomotives shunting in Portugal in 1964. One of my favourites was that on p.135, showing a station scene in the middle of the scrub on a narrow gauge (750mm) line in Mozambique, with lots of people milling about a very quaint American-built 2-8-0 and its train.

The captions are informative and interesting, not only describing the basics of the subject, but also providing other details that help put the images into perspective, such as the descriptions of the many run-ins the photographers had with the authorities in former Communist Central European and strife-torn Middle Eastern and African countries!

What is not to like about this book? Beautiful photos, informative captions and exotic locales with lots of very photogenic steam! The only drawback for me is no Australian content (and therefore nothing that will further assist me to build more realistic NSWGR models, ah well...) The closest it comes is on p.95, with two shots of a Turkish Mikado of the 46201 class, which was a descendant of the USATC S200 class which also produced the NSWGR 59 class, and on p.106 with two Sudanese locomotives that were definitely related to the TGR's M class 'Pacifics' and H class 'Mountains', though the contrast between Sudan's desert and Tasmania's lush greenery could not be more marked.

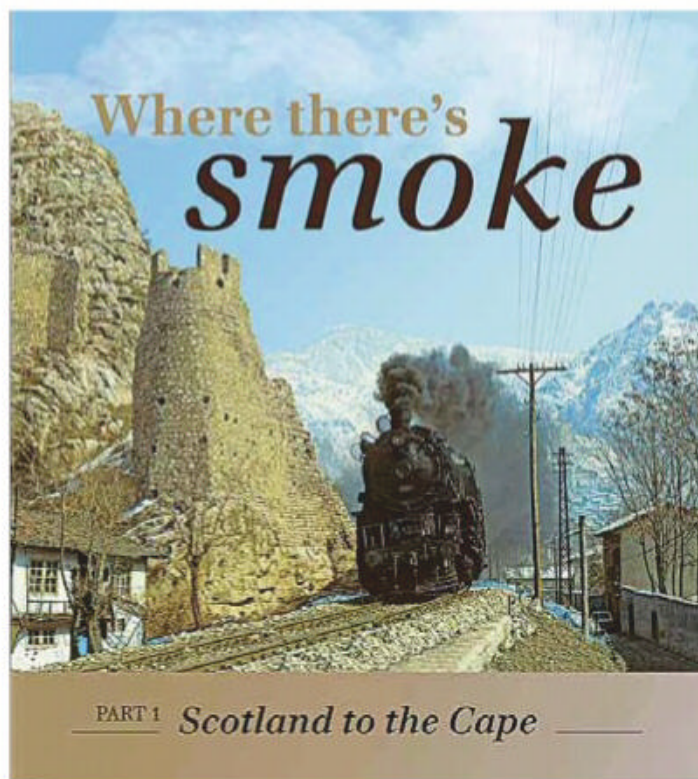
However, I am reliably informed that the second volume will include an Australian chapter so, in the meantime, I am just going to have to enjoy a lot of magnificent photos of steam locomotives in some very interesting and attractive surrounds. If you are a broad-minded steam enthusiast, then this is definitely a book worth having on one's bookshelves.

James McInerney

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



became quite widespread, particularly under MLV louvered vans, right up to the early 1980s.

The vehicles modelled are the MLV/MLK semi-louvered van (\$180.00 for a twin-pack), descended from the BCV closed van, constructed in 1918 for the conveyance of bulk wheat; the E bogie flat wagon (\$160.00 per twin-pack) and the bogie water gin (\$95.00 single-pack), a semi-circular water tank mounted on an E bogie flat wagon. Only the MLV/MLK and the E flat wagon are fully covered in this review as, at the time samples were received for review, the water gin had sold out and no samples were available (further supplies have arrived since then and the model is once more available for purchase from Casula Hobbies).

Prototype

I'm not very familiar with the service history of the E flat wagon, other than that they entered service around 1910, as mentioned above, and were a fairly common flat wagon on the system right up to the early 1960s. The 1963 edition of the *Carrying Capacity of Goods Wagons* shows 32 BE wagons (as the bolstered version modelled was coded by then) and 46 unbolstered E wagons still in service, though it is unclear if all of these were in revenue service as general flat wagons (the water gins retained their E/BE wagon codes and numbers for the underframes, while the tanks were given an L number and others were used on various departmental duties).

They disappeared fairly quickly in the 1960s though, as the 1969 edition of the wagon book lists only five BE and five E wagons as available for service. Of the two E wagons received for review, 21024 is shown as still in service as an E wagon in the 1963 wagon book, while 21075 is shown as not in service. Vehicle 21024 was not listed in the 1969 edition, so was presumably out of service by that time.

The MLV/MLK semi-louvered milk tank wagon had a very interesting history that was thoroughly covered by Ian Dunn in his article *The BCV A Much Modified Van* in AMRM Issue 293 (April 2012). The vans are modelled in the form they took from the 1940s, when the already twice-rebuilt vehicles (then



coded MLV and used for fast perishable traffic along with the other bogie louvered vans of the period) were further modified with removable ends to allow the fitting of tanks for the conveyance of bulk milk. The MLV versions are variously advertised by Casula as 'general' or 'goods' vans, but are, in fact, bulk milk vans, as indicated by the ends modelled (they had a vertical panel of louvers in the ends and did not have the open panels in the sides when in use as louvered goods vans prior to conversion to milk vans). Despite their being fitted with bulk milk tanks in the

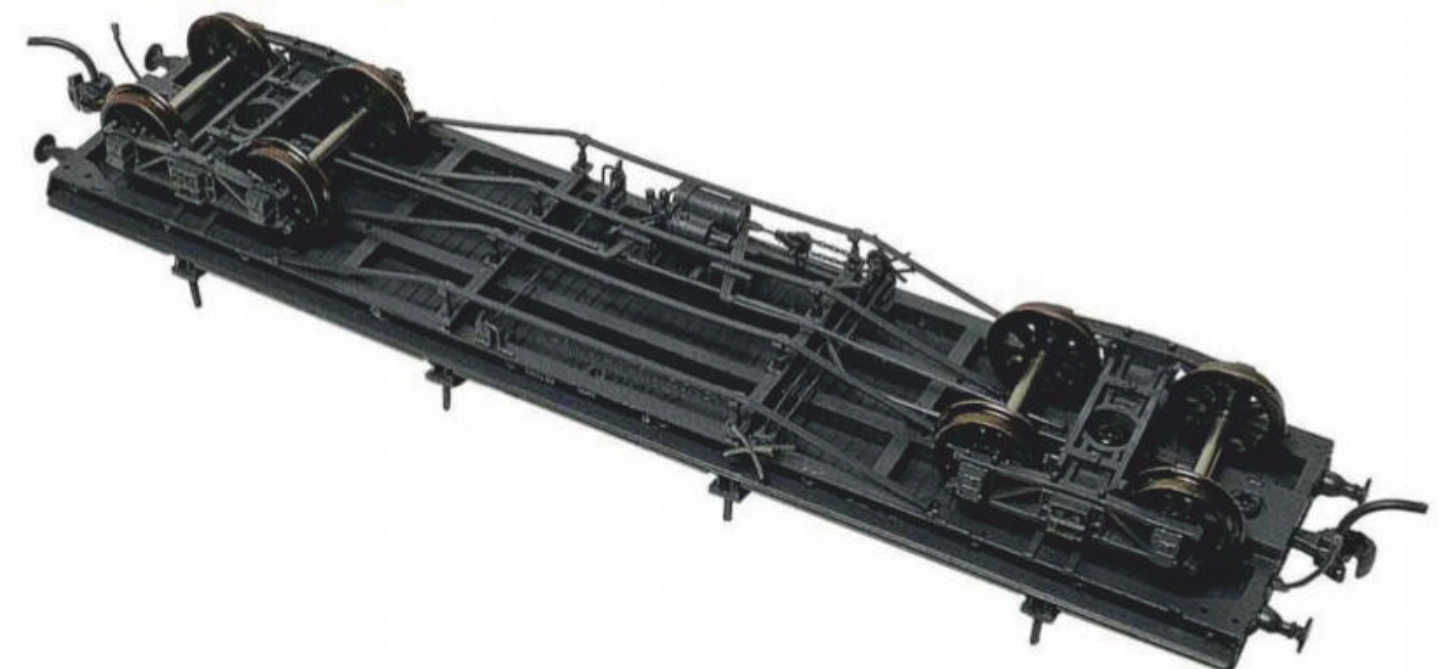
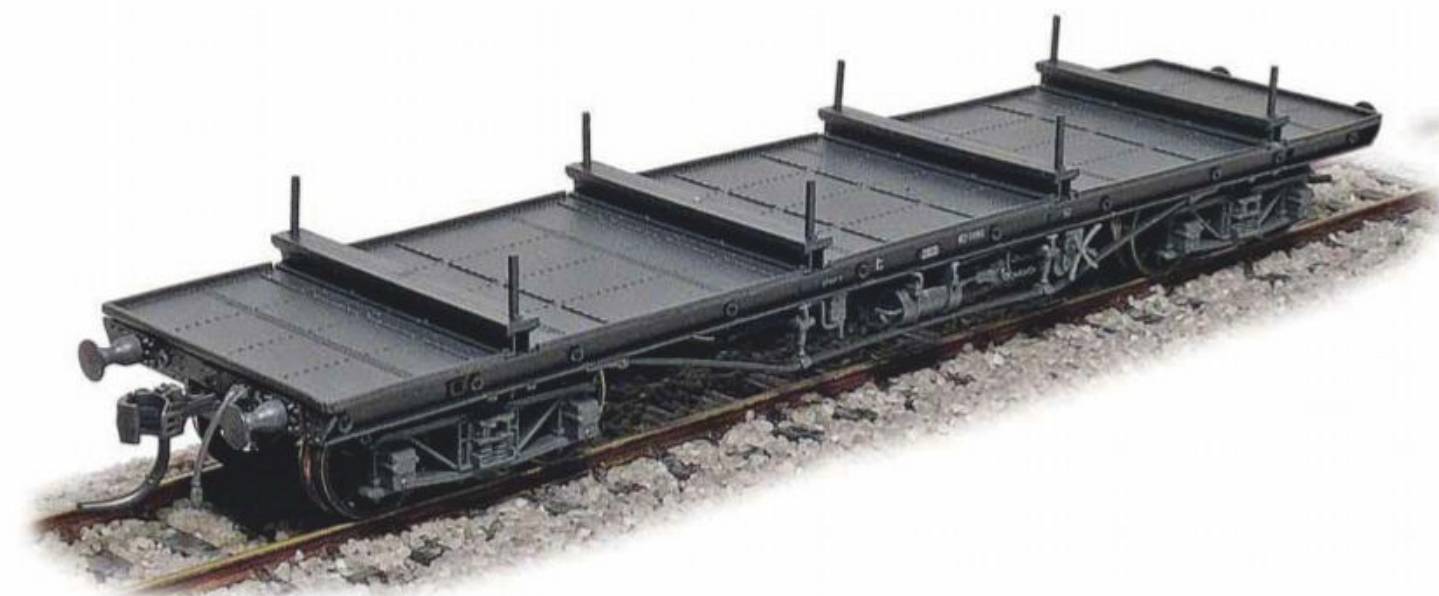
1940s, the vans retained the MLV coding until 1965, when they were recoded MLK to more easily differentiate them from the 'standard' louvered goods vans. Some remained in bulk milk traffic until the early 1980s. Of the vehicles provided for review (MLV21182 and MLK21153) both are listed as in traffic in both the 1963 (as MLV) and 1969 (as MLK) editions of the wagon books.

Models

These latest models from Casula Hobbies are exactly what we have come to expect from this

manufacturer: well-made, accurately dimensioned and finely detailed representations of the prototype.

The models conform in all dimensions to published drawings of the prototypes, plus the detailing is extensive, accurate and well-secured to the model. The bodies are painted a more than acceptable representation of newly-applied NSWGR gunmetal grey (the underframes may be self-coloured plastic rather than painted but, if they are, it is very hard to tell; I'm still not sure after much close examination). The decals are clear and



Reviews

sharp, accurately placed and correct for the model portrayed.

Straight out of the box, the models are ready to place on the layout and use, though there are two Westinghouse brake pipes, packaged separately in a small, clear, plastic clip lock bag, that can be added by the purchaser if they so wish. The brake hoses are made from what appears to be some sort of slippery plastic (perhaps Delrin) and must be glued in place with a small dab of superglue (solvent won't hold them). All the wheelsets (NMRA RP25-88 profile) were in gauge, though a couple of the uncoupling pins needed a slight adjustment to clear the height gauge.

All three (E wagon, MLV/MLK milk van and bogie water gin) are mounted on a very fine model of the E wagon underframe though, in common with the prototypes, there are subtle differences, depending on which bogies are mounted. The E and bogie water gin ride on standard NSWGR bar-frame bogies and have the anchor points for the truss rods pointing out, as originally constructed, while the MLV/MLK has the anchor points for the truss rods pointing in, as modified to accommodate the higher speed bogies mounted under those vehicles. Very impressive!

The headstocks of the underframes are also well-detailed with the mounting castings for the hook drawgear originally fitted (and retained by the E flat and bogie water gins) depicted, though there

is no hook modelled. For 'early days' modellers who want hook drawgear, it would be a relatively simple task to remove the knuckle coupler and substitute a working hook.

The MLV/MLK vans were fitted with knuckle couplers for most of their service and the coupler release levers have indeed been modelled, but the headstock retains the hook drawgear casting, rather than a depiction of the more complicated casting fitted to accommodate the knuckle couplers. It really does say something about the quality of research and execution of these models when one realises that this was the only thing I could find that wasn't 100% correct!

As an aside, I noticed on both of my milk van models that the uncoupling lever handles were pointing up, rather than down as they should. Whether this was an assembly error at the factory, or due to movement while the models

were in transit, I don't know, but it is a very simple thing to move them down to their correct position.

There was also a little bit of moulding flash on top of the bolster of the flat wagon. If this bothers you, then a couple of strokes of a file or modelling knife will remove it.

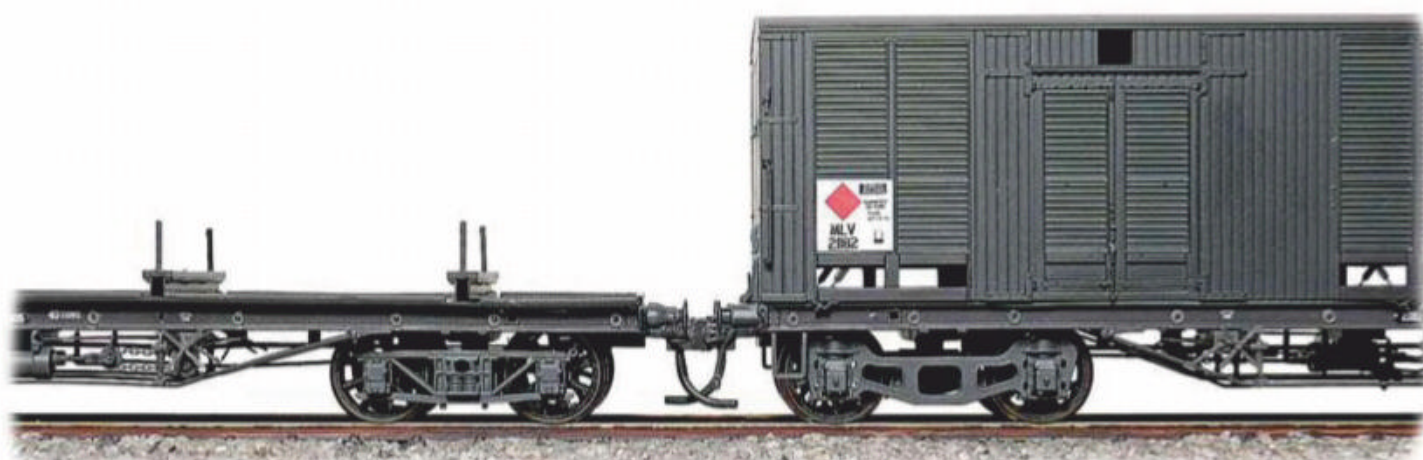
Placed on the layout, the models looked absolutely magnificent. Even without weathering, the quality of the mouldings and the tone of the paintwork blended in very well with all the fully-weathered rolling stock on my layout. They ran very well on my sometimes quite dodgy trackwork, which consists of a mixture of scratchbuilt code 55 and proprietary Peco code 75 plain track and points, as well as some Tillig code 83 points. No problems were experienced in ordinary running or during shunting operations.

Usefully, Casula Hobbies have made the bar frame and 2BJ bogies (\$19.95 per pair) from these mod-

els available separately. Considering the many vehicle types that used these bogies, this should make a lot of people very happy (including me!) There are also a limited number of unassembled and unpainted models available, packaged as kits of parts with bogies, but no couplers or decals (MLV/MLK/water gin \$59.00; E flat wagon \$45.00). This will be very useful for those of us who wish to update older models that ran on E wagon underframes or modify these vehicles to other variations of the types.

I am more than happy with the dimensional accuracy, level of detail and quality of the finish of these models. Once more, Casula Hobbies have produced an excellent product for the NSW modeller that should satisfy even the most fastidious modeller.

James McInerney

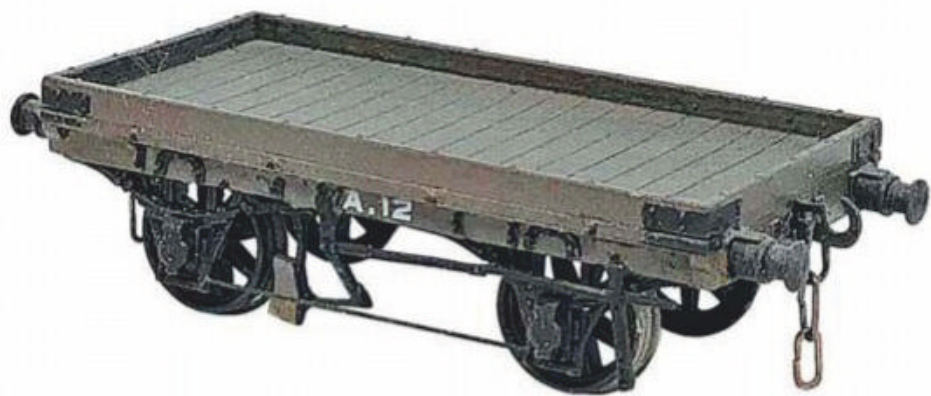


A comparison of the E flat and MLV van, highlighting the different bogies, the different orientation of the truss rod anchor points and the different buffer types, which accurately reflect the prototypes.

RECENT RELEASES



Model O Kits have received supplies of the r-t-r version of their O scale NSWGR 13 class steam locomotive kit. Along with 1301 in green there are also lined black versions available. Contact Model O Kits for locomotive numbers available.



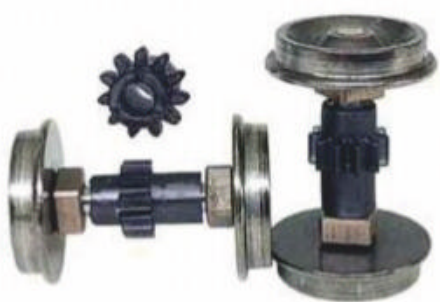
Redfern Works (Joseph Spinella) has released a number of HO scale urethane and brass kits for the NSWGR 1855-1930 modelling period. Currently available via the Redfern Works website (see ad in the Hobby Services Directory section of this magazine) are the 1855 A flat wagon and the 1858 D wagon (modelled on D10, the first D wagon built for the NSW system), with the 1879 gunpowder van expected to be available by the time you read this. The kits are cast from 3D printed masters and ride on Far North Hobbies side frames, buffers and brake gear (provided in kit) and include decals. Initially produced for attendees at the 'Modelling the Early Days of the NSW Railways Workshop', they are now being made available to a wider audience. Also available from the website are 3D printed models of the NSWGR 1855 1st class and 3rd class saloons, as well as some componentry and decals. Kits for the 1855 B open wagon and the 1855 Wright-built 2nd class carriages are in preparation with release in early 2020 anticipated.



Walker Models/Model Train Buildings have added to their N scale range of Australian laser-cut timber building kits with the Royal Hotel, dual shops and Neath signal box kits illustrated here.



InFront Models have released HO scale 'Black Gears', designed to replace the axle-mounted gears on certain runs of Trainorama diesel locomotives that are known to split. The replacement gears are made from Engineering-grade plastic. The easy-to-install gears feature a spacer inside that sets the wheel back-to-backs at 14.5mm, with wider gear teeth for a more positive contact with the existing gear train and a thicker and longer collar for a better hold of the stub axles. Each pack contains twelve gear sets, enough to replace all the gears in two locomotives.

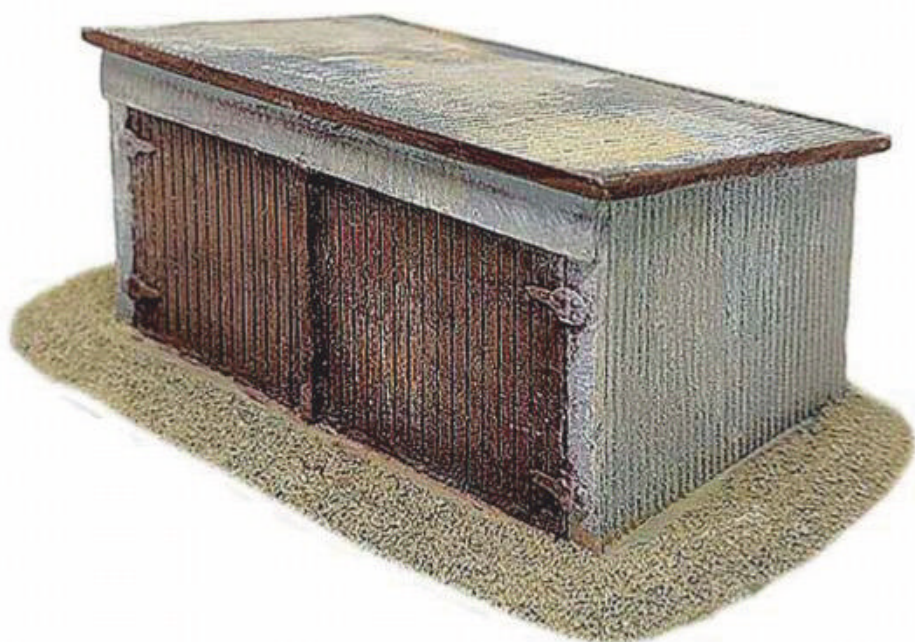


Walker Models/Model Train Buildings have released an HO scale laser-cut timber kit for the brick version of the NSWGR 'large' A5 station building.

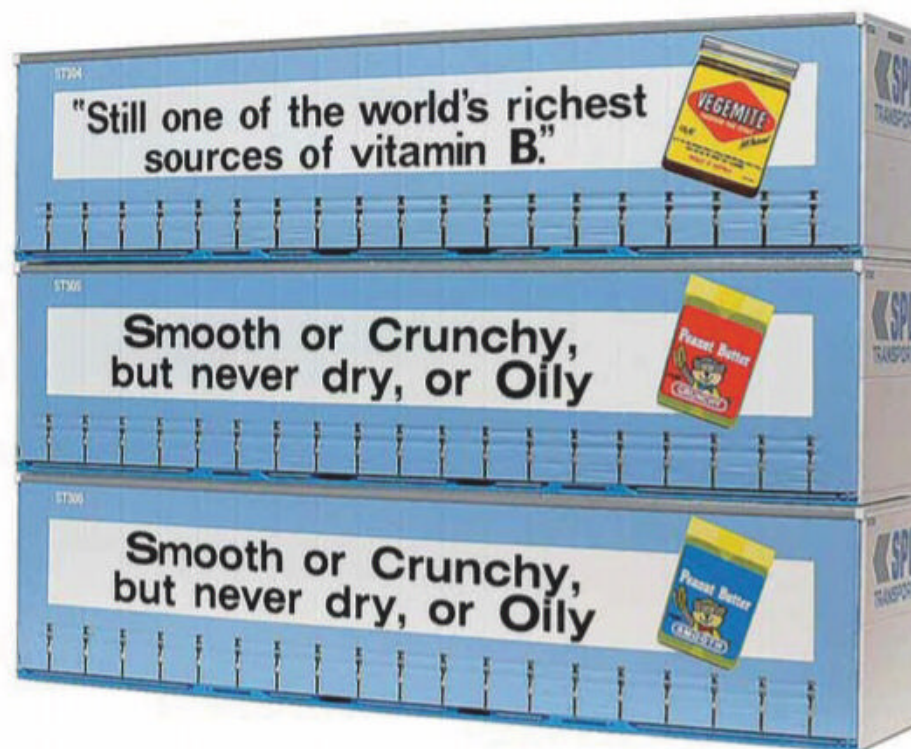


Stephen Johnson Models, as mentioned in the News section of the last

issue, now have available a typical barracks box, as used by engine-men and guards in the steam and early diesel eras. The boxes are available in two-packs in HO scale and as single items in O scale and can be obtained direct from the Stephen Johnson Models stand as selected exhibitions or by mail order from the Stephen Johnson Models website.



Lyndon's Trains has released a number of new HO scale kits of VR prototypes, including the 50' weatherboard goods shed and trackside tool shed illustrated here. Also available are new workmen's sleeper vans, one based on a late 19th century four-wheel passenger carriage, another on the early ABC end-platform passenger carriage and, lastly, a workmen's sleeper that rode on a pair of VR early period 4' wheelbase bogies.



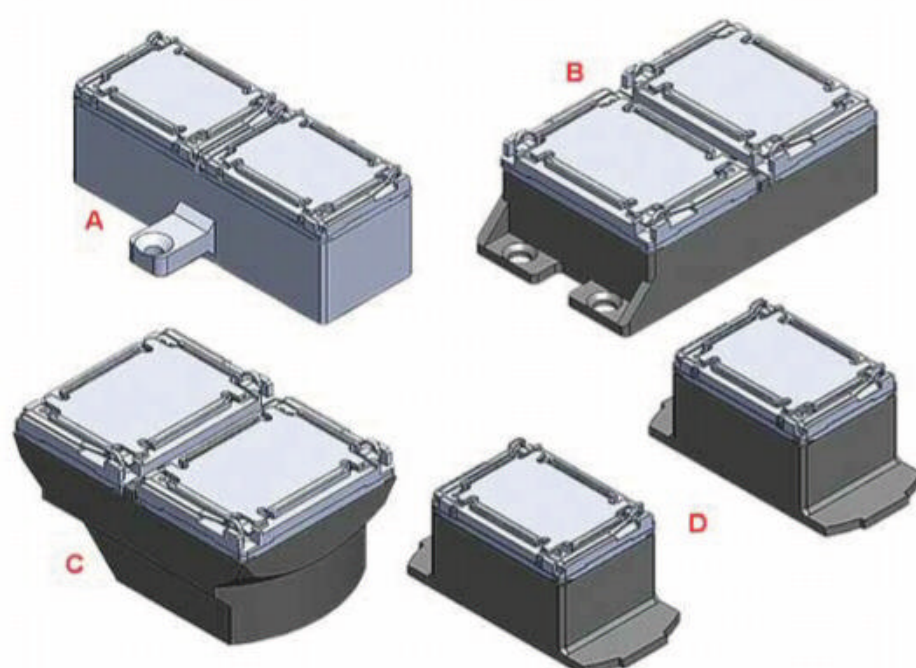
On Track Models have released another run of their HO scale, ready-to-use 40' (12.2m) curtain-sided containers with some new and very colourful colour schemes.



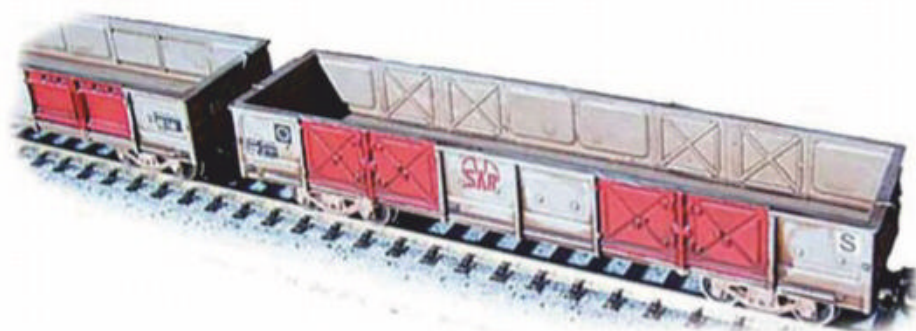


InFront Models have also released HO scale 3D printed replacement steps for suitable Victorian, South Australian and Western Australian wagons. Featuring see-through mesh steps and side/back kick-plates (where fitted) as part of the design, the plastic is also durable enough to flex a small amount without breaking. Each pack contains twenty steps, enough to detail ten wagons.

DCCSound has remastered a large number of sound projects to suit ESU's new LokSound 5 series decoders. For example, the VR T class is now available with three variations to suit T320 through to T411 (8-567C, 8-567CR and 8-645E prime movers). Likewise, the Y class sound scheme is available with sounds loaded to suit either the 6-567 or 6-645 prime mover. A brand-new recording and sound project for the V/Line A class (recorded from A66) has also been released. Good sound schemes need good speakers, so DCCSound has developed a line of premium speakers. These are suitable for many locomotive types, from N through to O scale and beyond. Multiple configuration speaker drivers and custom-manufactured enclosures are also available. Examples (engineering drawings shown) include drop-in replacements for the Auscision 442/80 (A) and X class (B) models, as well as Trainorama's 44/930 (C) and GM/42/S class (D). All speakers are matched to suit the impedance of LokSound decoders for maximum sound quality and volume and come pre-wired with official ESU fine wire.



Lyndon's Trains, in conjunction with BadgerBits, have released more N scale kits for the VR J series hopper wagons and SAR OB open wagons (available with either pressed metal or fabricated steel doors).



AMRM News

Communications and the NBN

As the country moves over to the NBN (National Broadband Network) it usually means a change to your email address. To help AMRM keep our records up to date it would be appreciated if subscribers/authors/advertisers etc. would notify the office (preferably by email!) if they receive a new email address after connection to the NBN.

New South Wales Railways in Colour

Eveleigh Press's latest work, *New South Wales Railways in Colour 1855-1957* (see review elsewhere in this issue), is one of which we are justifiably very proud. This is the first major work to cover every aspect of the colours of the NSW railways and tramways, a hugely important aspect to any modeller, and the work put in by all involved has been exemplary.

While the contribution of the

author, Garry Saunders, and the illustrator, Greg Edwards, is obvious and pivotal, we would like to acknowledge the amazing 'behind the scenes' work put in by the book's editor, Ian Dunn. Ian's contribution was not just in the expected arena of editing the text and book design, but he has done an incredible job preparing and enhancing the images, many of which were nowhere near the sharpness and clarity apparent in the book when the original photographs first appeared on his desk. We are more than pleased to have Ian's world-class image manipulation skills available to Eveleigh Press.

Hobby One on the Move

Queensland's Hobby One has moved from their previous location in the Brisbane southern suburb of Macgregor to a new location a little further south at Shop 4, 124 Kingston Road, Underwood 4119.

The shop's phone numbers, email addresses and PO Box address remain the same.

New Products

HO Scale

Auscision have released their r-t-r NSW 85 class Co-Co and 8650 'Tri-Bogie' (Bo-Bo-Bo) electric locomotive in both standard DC and DCC/sound-fitted versions. Some of the more popular versions of the 85 class have sold out already.

Broad Gauge Models report that production of the replacement parts for the 500B kit is slightly behind schedule, but they should be available for distribution by the time you read this (or shortly after). The parts will be dispatched as soon as they become available.

Expected to be released at the Macedon Ranges Model Railway Club and Cottage Industry Consortium's ARMMEX 2019 at the Masonic Hall, West Kyneton, on

21-22 September is a timber and card laser-cut kit for a two-bedroom VR Departmental Residence (DR). Kits for the three- and four-bedroom versions are in preparation for release at a future date. Also new at ARMMEX 2019 will be a kit for the PN RRIY well-wagon, of which there are three prototype examples in use. The kit uses mouldings from the existing RQZY kit, along with machined acrylic extra parts, plus decals, which include all three numbers used by the prototypes. The etched brass VR ZF guard's van kits will also be available at ARMMEX.

Cane Trains, the brand name used by Lyndon's Trains for their HO n30 range of Queensland sugar cane tramway models, are working on a new diesel locomotive body kit based on a generic version of the locomotives produced by EM Baldwin, which will leave plenty of scope for the purchaser to modify to their own specification if desired.



Factory-painted samples of Eureka Models' HO scale r-t-r NSWGR TAM sleeping and MCS sitting cars. The MCS will also be available in the 1980s era 'candy' colours.

The kit will also be provided with a suitable mechanism to provide power. A new wagon kit is expected to be released in September 2019.

Comrailmodels now have available a complete set of 3D printed CR Comeng coaches, along with 3D printed WAGR WF wagons, AU coach and parts for a WAGR G class steam locomotive (as Latitude 32 Models). Contact Comrailmodels/Latitude 32 Models via their Facebook pages for availability.

Eureka Models were advised near the end of August by their Chinese factory that the NSW 72'6" TAM sleeping and MCS composite sitting cars had been despatched. Depending on shipping schedules and customs clearance times, the models may be available by the time you read this, but in any case, they should be available for purchase at the AMRA (NSW) October long weekend exhibition at Homebush. The factory also advised that the re-run of the NSW 38 class 4-6-2 steam locomotives was nearing completion and should arrive in Australia around Christmas 2019.

Eureka has also taken delivery of their share of the VR S bogie flat, E bogie open and SAR O bogie open wagons being produced under the Phoenix Models label. As this item was being prepared the models were being distributed to those who had pre-ordered. Eureka

asks that anyone who has not yet received their order by the time this issue appears to contact them direct.

Ixion Model Railways have announced that their next r-t-r Australian locomotive will be the Victorian Railways J class 2-8-0. The locomotive will be available in either coal-burning or oil-burning versions, with tender type and locomotive numbers as appropriate. All up, there will be twelve different numbers available. The boiler, footplate and chassis will be cast in metal, with the rest of the major components of the locomotive made from injection-moulded plastic which, along with the 40:1 gearing, should provide plenty of power and weight for adhesion.

The model will be fitted with genuine Kadee couplers, feature sprung buffers, metal coupling rods and will pick up current from all driving and tender wheels. It has been designed to traverse a minimum radius of 600mm (2') and will come DCC/sound-ready with a factory-fitted 21-pin socket. Interestingly, Ixion have specified that only 750 of each version will be produced, giving an unexpected insight into the minimum number of locomotives that can be produced in a run and still be financially viable. Release of the production run is expected in the first quarter of 2020, assuming that the current unrest in Hong Kong does not affect production and shipping.

Factory-provided photos of some of the first parts produced can be seen elsewhere in these pages, with the first complete and working sample expected to have arrived in the country by the time you read this.

Mechanical Branch Models have stocks available for sale of their NSWGR 5000, 10000, 20000 and 40000 gallon overhead locomotive water tanks. In development are the single- and double-tier 10000 and 20000 four-panel tanks on a shorter stand. When the parts for these models are completed, it will also enable release of the tanks with concrete footings, such as exist(ed) at Wirrinya and Lake Cargelligo, to proceed.

Other products in development, with release planned for the AMRA (NSW) October long weekend exhibition at Homebush, include a portable cash box and decals for same, along with decals for the previously released portable dog boxes, and detailing parts for 32 and 36 class locomotives, which will include nameplates as fitted to some members of both classes during the 1930s/1940s.

Phoenix Reproductions, as mentioned in the Eureka item, have released their VR E bogie open, SAR O bogie open and VR S bogie flat wagons. The proprietors advise that they sold very well at the AMRA (Vic) Caulfield exhibition in August and they feel they may have underestimated demand for the VR versions! Therefore, a re-run (with a new floor) will proceed in 2020. The VR D³ class 4-6-0 steam engine is on schedule to arrive in the first quarter of 2020 and it will be followed in the third quarter of the year by the much-delayed VR K class 2-8-0 steam locomotive, originally commissioned by Eureka Models, which, as with the VR S and E/SAR O wagons, will be available through both Phoenix Reproductions and Eureka Models. Once the K class has cleared the factory the NSWGR D53 class 2-8-0s (and the re-run of the D50 class) will be put into production.

Powerline Models were expecting the second run of their r-t-r VR S type air-conditioned carriages in VR blue and yellow to arrive in the 13-21 September 2019 time period. The run was delayed due to a paint issue on the production line that has been fixed, but which did

cause an inevitable delay in delivery.

The next 'cab off the rank' will be the updated and improved r-t-r VR 'series 3' T class diesel locomotive, for which orders are now being taken. The changes include the fitting of a MTC21 21-pin circuit board and a speaker, new pick-ups on all the wheels, metal knuckle couplers and blackened wheels. The first run, in VR blue and yellow, is due in late 2019/early 2020.

The VR Z series air-conditioned carriage project is continuing in a satisfactory manner. Samples have been sighted and corrections are being made, as Powerline intends that all 28 different versions will be as perfect as they can make them. Pre-orders are now being accepted with the first deliveries expected in 2020.

SDS Models advise that the all-new, completely retooled, r-t-r NR class Co-Co diesel locomotive is now in production and some deliveries are expected just prior to the AMRA (NSW) October long weekend exhibition at Homebush. The 'Indigenous' pair (NR30 and NR52) will be available from mid-to late-October, as the very complicated paint scheme has taken longer to finalise than expected. The NSW 81 class Co-Co diesel will be the next locomotive to be delivered after the NR, with factory-painted running samples expected to be available for viewing at the Homebush exhibition with the first deliveries of the production run arriving shortly thereafter.

A re-run of the VR GY four-wheel open wagons is expected in mid-October (shortly after the exhibition) and the first of the VR OT four-wheel Rail Tank Cars are due in December. A comprehensive retooling of the ex-Austrains VR PL series of passenger carriages is underway and the first factory samples should arrive in time to be displayed at the Homebush exhibition.

Planned for a 2020 release are updated versions of the ex-Austrains (as AustrainsNEO) NSW LHO and LHY passenger brake vans, a smooth-sided version of the KP mail van and the LHG 50' goods brake vans (including GH01800, which was converted in 1967 for use on the *Kosciusko Snow Express*). A re-run of the SAR SO/SOC wagon is also planned for 2020.

Trainorama expect the first deliveries of the new versions of their r-t-r NSW 44 class to arrive in October 2019 (unfortunately, not early enough in the month to release at the AMRA (NSW) October long weekend exhibition), followed by the SAR/ANR 930 class in November with the upgraded NSW 47 and 49 class diesel locomotives scheduled for delivery during the first quarter of 2020.

Trainorama mention in the information provided for this issue that delays caused by the discovery that the tools recovered from the previous factory had been damaged by improper storage have been overcome with careful repair and some remaking of damaged moulds at the new factory, but that this has resulted in longer lead times for delivery of the models than had originally been envisaged. The political situation in Hong Kong is not expected to delay delivery of the 44 and 930 class locomotives, as the models are being dispatched from the Shenzhen container port of Yantian in southern China.

The preliminaries for the re-run of the NSW 47 and 49 class diesel locomotives have been completed, with improvements being made to the on-board electronics, motor and gearing to reflect advances made in the decade since these models were originally produced. Pre-order forms are now available on the Bob's Models and Hobbies website for both the 47 and 49 class locomotives which, as mentioned above, are expected to arrive in the first quarter of 2020.

O Scale

Model O Kits are to proceed with production of their planned NSWGR 12 class 4-4-0 locomotive kit. The kit will be able to be ordered with either a C class six-wheel tender or the Baldwin bogie tender removed from scrapped L class locomotives, as fitted to some of the class.

Model O Kits have released details of their next O scale wagon project, the bogie E flat wagon and bogie water gin. Illustrated is an incomplete CAD image of the bogie water gin. The kits will consist of brass etches and laser-cut 'timber' parts, and will include scale timber, styrene profiles, whitmetal/brass castings and 3D printed components to complete the detailing of the kits.

Delivery of the kits is expected to occur in 2020 and, as usual, an r-t-r option will be available at an appropriately higher price.

The NSWGR FS and BS steel compartment carriage kits are expected to be available by the time you read this.

N Scale

Comrailmodels now have available 3D printed kits for the CR Z brake van, along with the related VR ZL and YZ brake vans. The models can be obtained from Paul Grundy's online shop on the i.materialise 3D printing site.

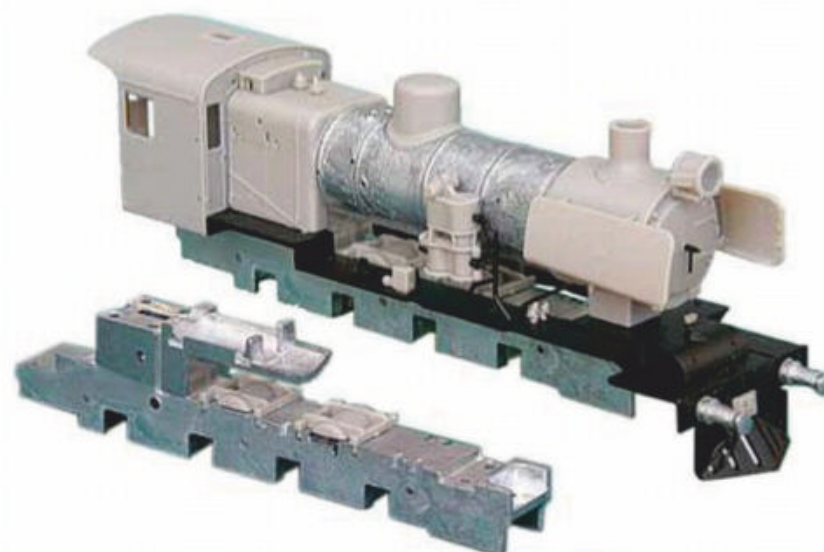
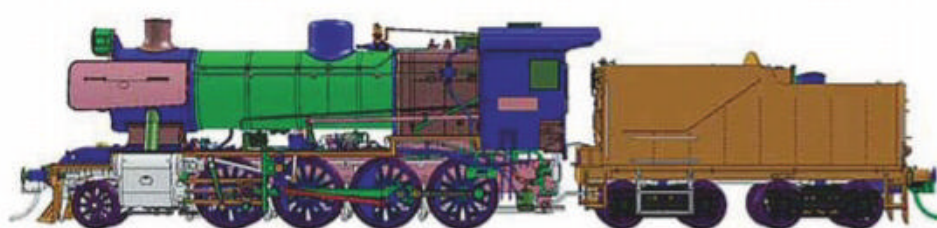
Lyndons Trains, in conjunction with BadgerBits, expect to be able to release ex-Australian National DL and EL locomotive body kits before the end of 2019.

Publications

Eveleigh Press expect to release their next work, David Jehan's *Hudson Brothers*, the first volume of a series covering the Clyde Engineering empire, later in 2019.

The book covers the history of Clyde Engineering precursor, Hudson Brothers, who were originally located at Redfern, in sight of Central Station. The company constructed a considerable number of the passenger and goods wagon fleet operated by the NSWGR in the late 19th and the first half of the 20th centuries, as well as contributing to the erection of many of Sydney's great buildings of the time. Also in preparation is the next volume of the *Byways of Steam* series.

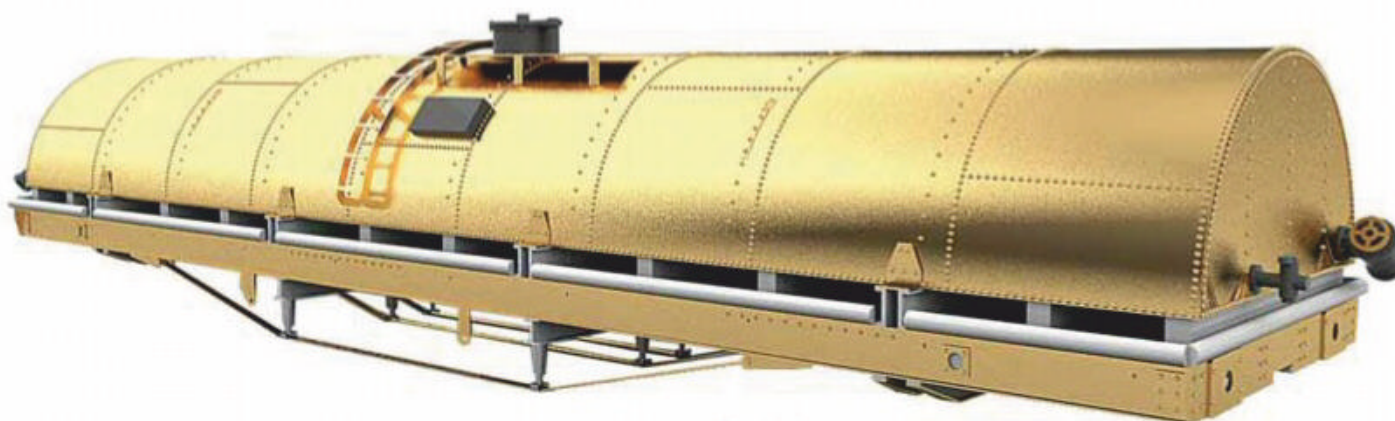
*Compiled by
James McInerney*



A drawing and the first factory sample parts of the Ixion HO scale r-t-r VR J class 2-8-0 steam locomotive.



The Scale Modellers Supply has added a range of colours covering the main Australian tramways to their already extensive range of paints. Retailled in 30ml bottles, this specially matched acrylic paint can be sprayed straight from the bottle. Thinning/clean-up is with lacquer thinner.



Sydney's First Model Railway Exhibition?

I have just purchased the latest edition of AMRM [Issue 337, August 2019–Editor], and was pleasantly surprised to see my letter regarding Sydney's first model railway exhibition printed in the *Mailbag* section. Upon reading it, I saw that there is an error in the last sentence, which states that the advertisement appeared in the SMH on Thursday 15 June 1948, when in fact it was Thursday 15 June 1848, as is clear from the reproduced advertisement.

Keith King
Hazelbrook 2779

AMRM has a good team of proof-readers who do an excellent job of keeping errors in the text to a minimum but, no matter how hard one tries, occasionally something slips through... At least this proofreading error isn't as embarrassing as the time we inadvertently renamed the magazine by leaving the word "Magazine" off the cover or the time we misspelt the name of one of our major advertisers, also on the cover!—Editor

Camden Comment

Firstly, congratulations to Bob on his being awarded the Order of Australia.

Secondly, Bob's *Comment* in AMRM Issue 337 (August 2019), *One Doesn't Have to Model it Personally...*, brought back childhood memories of the Campbelltown-Camden branch. Back in the early 1950s, one could buy a child's return fare ticket for a shilling. This could take you to Otford, Penrith, Richmond and Cowan, plus Campbelltown and Camden. In addition, bus and tram fares were a penny each way.

These outer area destinations were reached by steam-hauled trains, generally by a 30 class 4-6-4 tank, connecting at Liverpool, Parramatta or Hornsby with the suburban electric trains from the inner suburban areas. The Illawarra connection was generally by regular CPH rail motors south of Sutherland to Waterfall, though Otford services were much less frequent. I would travel alone on these excursions, even though I was only still in primary school.

So my eventful day would commence with two shillings of my hard-earned pocket money jingling in my pocket. A penny would be spent on a tram ticket from Coogee to Central, then electric train from

Central to Liverpool and a 30 class tank with 'American' type end-platform cars to Campbelltown. Across on the up side platform, in the dock, were double-headed 20 class tanks with about five or six empty open wagons and a CCA composite/guard end-platform car at the rear.

At Narellan the coal trucks would be detached, along with one of the 20 class locomotives, then the remainder of the train would proceed to Camden, sometimes with an empty louvered van for milk attached. On departure from Narellan (on the up) there was this rather unique level crossing warning apparatus on the Hume Highway crossing. It consisted of two contra-rotating arms with clappers on the ends of both arms. These would strike a bell twice on each rotation. Most fascinating to hear and watch!

Bob then mentioned having a milkshake at the Rotolactor at Menangle. I never got there, but there was a milk bar near the station at Camden that made the best milkshakes – far better than the ones I could purchase in the metropolitan area. The milkshakes cost sixpence at the time (inflation during the early days of the Korean war increased the cost of a milkshake from threepence to

sixpence and then a shilling in quick order).

Then it was back to the station to catch the return. Quite often the 20 class had a louvered milk van attached, originating from the dairy right at the station. At Narellan loaded coal wagons would be attached. Kenny Hill between Narellan and Campbelltown was a very difficult climb for the 20 class in both directions, but particularly in the down direction from Campbelltown.

If I had the timing right, I could connect at Campbelltown with what I later learned was called the 'Milk Pots' [*Possibly No.32 Express Goods—Editor*]. This train was a mixed with an ancient 'dog-box' carriage for the one or two passengers on offer, plus some louvered milk vans, which always had that odour of stale milk about them. This same 'Milk Pots' train cleared the milk traffic off the Camden branch line and also from the milk depot on the western side of Campbelltown. The attraction of this train was that it ran express back to Sydney Terminal, hauled by a 32 class. It arrived around 3pm and then it was back to Eddy Avenue and the tram back to Coogee, still with fourpence in my pocket!

While I never experienced it

Diary

SCMRA ACTIVITIES

For all activities contact Eastern Division representative
Graham Windmill on (02) 9626 0351.

- 5-7 October SCMRA/AMRM stand at the Sydney Model Railway Exhibition at Sydney Showground, Homebush Exhibition Hall 5. Parking in car park 6. If you can assist give your name to Graham Windmill 9626 0351
- 9 November Open Day by SCMRA and EMRCI at Epping Creative Centre, 26 Stanley Rd, Epping. 10.00am to 4.00pm. Layout operation. Scenery clinic at 11.00am.
Free sausage sizzle lunch. Details from Trevor Moore 9876 3522.
- 8 December Family Christmas BBQ and visit to railway attraction. Tramway Museum Loftus. Contact Graham Windmill 9626 0351 with numbers by 3 December.

2020

- 11 January Open Day by SCMRA and EMRCI at Epping Creative Centre, 26 Stanley Rd, Epping. 10am to 4.00pm. Layout operation. Getting Started clinic at 11.00am. Free sausage sizzle lunch. Details from Trevor Moore 9876 3522.

EXHIBITIONS & EXPOS

KYNETON – VIC. September 21-22, 2019. Macedon Ranges MRC and Cottage Industry Consortium present the 5th annual expo of cottage industry manufacturers. Masonic Hall, Yaldwin Street West, Kyneton. 10am-5pm (Sat), Sept 10.00am-4.00pm (Sun). Flat entry fee \$5.00.

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

BURWOOD – NSW. October 12-13, 2019. TT scale layout plus train films, Burwood Uniting Church, Burwood Road (between station and Westfield). 10.00am-5.00pm (Sat & Sun). Gold coin donation. Peter 0458 043 985.

SHEPPARTON – VIC. October 19-20, 2019. Shepparton Model Rail Exhibition, GV Rail Club Inc. McIntosh Centre, Shepparton Showgrounds 9.00am-5.30pm (Sat), 10.00am-4.00pm (Sun). Adults \$10, Children \$4, Family \$20. Ross 0407 845 247. <https://www.gvraclub.com>

SUNBURY – VIC. October 19-20, 2019. Sunbury Model Railway Club, 36th Annual Exhibition, St Annes Church Hall, Riddell Road Sunbury. 10.00am-5.00pm (Sat), 10.00am-

4.00pm (Sun). Adults \$10.00 child \$4.00. pensioner \$7.00 family \$20.00.

WAGGA WAGGA – NSW. November 2-3, 2019. Wagga Wagga Model Railroaders Inc are holding their 20th annual Model Train & Hobby Exhibition at the Wagga Wagga Showgrounds, Kyeamba Smith Hall, Bourke St. 9.00am-5.00pm (Sat) 9.00am-4.00pm (Sun). Adults \$10, Senior \$8, Child \$5, Family \$25, Children under 5 yrs free. Dave Edger 0418446337. rotoreggie@bigpond.com

SALISBURY DOWNS – SA. November 7-10, 2019. South Australian N Gauge Society display. Hollywood Plaza Shopping Centre, Winzor Street & Spains Road, Salisbury Downs. 10.00am-9.00pm (Thu), 9.00am-5.00pm (Fri & Sat), 11.00am-3.00pm (Sun). secretary2@sangs.asn.au or <http://www.sangs.asn.au/> Find us on Facebook.

MILANG – SA. November 23-24, 2019. Model Railway Show at the Milang Institute and Railway Museum, an hour south of Adelaide. Entry adults \$10, accompanied children free. 10.00am-4.00pm (Sat & Sun). 0414 232 060 or www.milangrailway.org.au

SEMINARS & CONVENTIONS

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. Registration \$325. <http://convention2019.nscale.org.au/>

OPEN DAYS

GOLD COAST – QLD. September, 22 2019. Gold Coast Model Railway Club Open Day with Buy & Sell. 18 Kendor St, Arundel. 10.00am-4.00pm.

BRENDALE – QLD. November 3, 2019. Buy and Sell, Open Day to be held at the Railway Modellers Club, Buckley Park, Terrence Road, Brendale. 10.00am-1.00pm (Sun).

EPPING – NSW. November 9, 2019. SCMRA and EMRCI at Epping Creative Centre, 26 Stanley Road, Epping. 10.00am-3.30pm (Sat). Layout operation (HO). Scenery Clinic at 11.00am. Trevor Moore 9876 3522.

SALE DAYS

CALOUNDRA – QLD. October 12, 2019. The Sunshine Coast Model Rail Club Sale and Display Day at Uniting Church Hall, 56C Queen Street, Caloundra, from 8.30am till 1.00pm (Sat). (07) 5479 0339 or (07) 5491 9213.

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

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

EPPING – NSW. November 30, 2019. Model Railway Market Day organised by Epping Model Railway Club. 10.00am-1.00pm. Epping Creative Centre, 26 Stanley Road, Epping. Mike 0408 817 554 to book a table or contact@eppingmodelrailway.org.au



Bill Dive's N scale NSWGR models, constructed around 50 years ago, as mentioned in Bill's letter adjacent.

myself, one of the benefits of visiting the Rotolactor (as mentioned by Bob in his *Comment*), sited behind Menangle station, was doing so while the 'Picton Milk Pots' [A different train from No.32 mentioned above—Editor] shunted the siding to the dairy, situated on a long siding off the up line. Quite regularly, the loaded milk vans were picked up from the dairy siding by the simple expedient of backing the entire train, passenger cars and all, into the dairy siding and attaching the milk vans behind the passenger carriages and brake van.

Roger Lloyd
Viewbank 3084

Looking Back: NSWGR N Scale

With the continued interest in NSWGR N scale, particularly with the increasing commercial support now provided by the likes of Gopher Models/BadgerBits, etc., I thought that this photo of N scale models from 50 years ago may be of interest. The 36 class steam locomotive was scratchbuilt on a Sekisui 2-6-0 chassis, with the Sekisui motor in the tender. The refrigerator car is an MRC Models timber kit, dating from 1968, fitted with homemade bogies. The MHO van is made from shellacked Bristol Board, riding on Con-Cor bogies. N scale NSWGR could certainly be done 50 years ago, if one had the skills, but it certainly is a lot more accessible these days with all the r-t-r models (and kits) available now.

Bill Dive
Burradoo 2576

Good Layouts

I recently had separate conversations with two modelling friends who were both bemoaning the quality of layouts on display at a couple of different exhibitions we'd visited. My response to this moaning was generally along the lines of: 'if you aren't happy with the quality of the exhibition layouts on the scene, then one way to fix it would be to build an exhibition layout of your own.'

If you dig down a little into what my friends were saying, it wasn't that there wasn't anything of worth at the shows we'd attended, but rather that there wasn't much on display that was of the same scale

or prototype that they work in. While I can empathise with these sentiments, in my opinion it doesn't change the fundamental truth of my response to them. We really can be a very 'glass half-full' type of crowd in this hobby at times, can't we?

Putting my money where my mouth is I thought I'd write and mention how outstanding I felt the featured layouts were in the two most recent issues of AMRM (Issues 336 and 337, June and August 2019). Both Grant Dodd's *Wellingong* and Simon Handby's *Fingal* are both real credits to their builders. I feel these layouts comfortably stand among the best layouts ever featured in the magazine and as an added bonus both were accompanied by informative, interesting articles and of course some great photographs.

These layout owners confirm my opinion that Australia has modellers the equal of any from elsewhere around the world.

Trevor Hodges
Nunderi 2484

Recycling Rollingstock

I have read with interest the series of articles by Leon Oberg on recycled rolling stock that have appeared in recent issues of the AMRM. The latest one prompted me to enclose the attached photo of another former MBC bogie closed van that has long not seen any use, but is standing on the goods siding, adjacent to the loop, opposite the neatly restored station building at Premer, on the Binnaway to Werris Creek cross-country line in north-western NSW.

Just how long the van has been there is anyone's guess; however,

considering its external condition I would say that it has been left there and forgotten about for many years. The photo was taken during a trip up north on 22 May 2018. I thought that this may also be of interest to your readers.

Garry Kahler
Moss Vale 2577

Hollywood Foundry

Geoff Baxter's decision to close Hollywood Foundry, as announced in AMRM Issue 337 (August 2019), leaves an enormous hole in the availability of drives for railway models, both locally and internationally. To make matters worse, this comes on top of the closure of Mashima and North West Short Line. As with so many Australian enterprises, Geoff has punched well above his weight and made a substantial contribution to model railways, both here and overseas, with his innovative and varied drives, from powered (and unpowered) bogies to very compact arrangements like the Gozunder. Thanks, Geoff, for your fantastic efforts.

Are there any younger modellers with a suitable background who can 'fill the gap' left by the closure of Hollywood (or the others, for that matter)?

Stephen Buck
Roseville 2069

Bob Gallagher OAM

Congratulations to Bob on his OAM, which I heard about recently at the ARHS at Alexandria. Bob is a modest man and I am glad other people have got up and put in a nomination. It is a fine recognition of his selfless work over many years. Not just model trains (one should not forget his contri-

bution to writing about and preserving the history of the real railways too), but more for his encouragement and support of what the hobby can do for people, giving their talents, skills and interests an opportunity to develop, connecting people and making friends. A living embodiment of the 'men's shed' at its best, perhaps. His contributions have given me (and I'm sure many others) a great deal of pleasure and I would not be surprised to hear that he has saved quite a few people from 'the Black Dog' and other ills as well.

Richard Mathews
West Ryde 2114

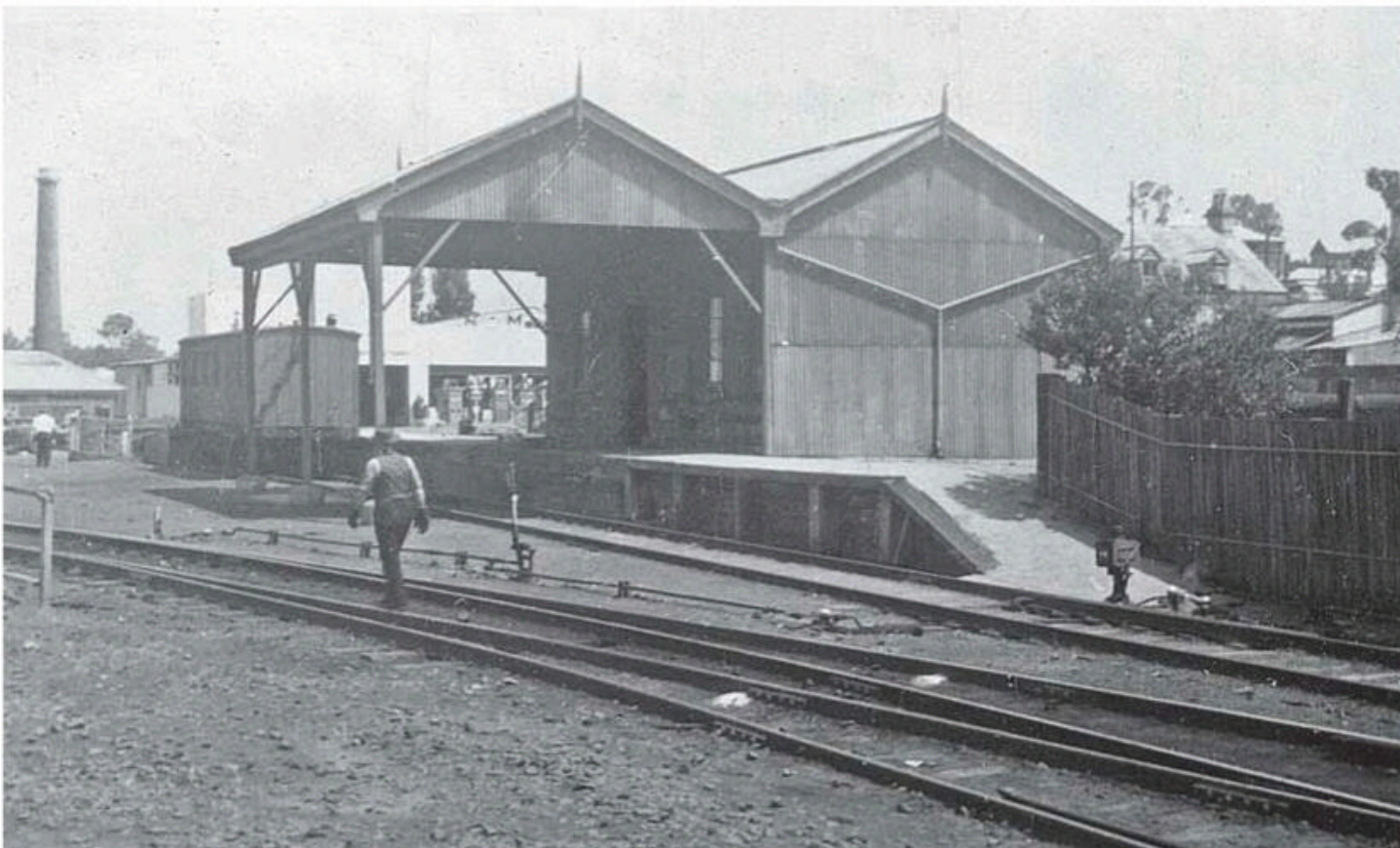
It was with great pleasure that I read in AMRM Issue 337 (August 2019) of Bob Gallagher's well-deserved OAM award, recognising his long service in promoting the modelling of Australian railways.

It was also very interesting to read Bob's *Comment* in the same issue telling how he was inspired to model Australian railways by his discovery of the Camden branch line. I first made contact with Bob when he advertised in AMRM in the mid-1970s for a photograph of Camden goods shed. In the late 1940s/early 1950s I had visited Camden and its railway several times and was able to provide Bob with a reasonable photograph of this goods shed (see nearby image), dated 3 January 1952 and he, in return, provided me with a drawing of it.

Forty-five or so years later, my small *Camjong* line is not yet completed and one of the empty spaces on it is the site for that goods shed! Progress on modelling is stalled



The abandoned MBC at Premer on 22 May 2018, mentioned in Garry Kahler's adjacent letter.



The image of Camden goods shed, captured on 3 January 1952 by Michael Gourlay, referred to in Michael's letter adjacent.

while I complete an article for AMRM on the building of my model of the Nepean River railway and road bridges at Camden. Hopefully, both these projects will be finished before I am!

Thank you, Bob, along with all the other things you have done for the hobby, for your encouraging, informative and at times challenging *Comments* in AMRM over many years.

Michael Gourlay
The Gap 4061

NSWGR Sand Towers

I would like to comment regarding Bill Cooper's review of the Southern Rail sand tower in AMRM Issue 336 (June 2019), along with some, hopefully relevant, information regarding the sanding of both steam and diesel locomotives.

Sanding was a vital ingredient for all types of locomotives. In many ways it was not an easy task, especially in small depots and out-stations, such as at the end of branch lines, where very rudimentary facilities were found. These often comprised a square metal bin tipped on its side and fitted to a stand, with a metal slide at the bottom, allowing sufficient clearance from the ground to allow a bucket to be placed under it and filled.

When full, the bucket was not light. Often, they were squashed in to form a spout for tipping the sand into the locomotive sand boxes. On 30T types, that meant having to lift them onto the footplate and then up to the box positioned against the smokebox. Even medium sized depots, such as Binnaway, had such a rudimentary facility. Within a

depot it was the responsibility of the labourers, or shed fireman and his mate, to fill the bins and keep the areas clean and clear of waste sand (in some locations the buckets were kept under lock and key owing to souvenir hunters desiring them).

Even larger depots, such as Orange and Dubbo, which had the large Harmon-type coal stages, used a ground-type sanding facility. However, some depots with Harmon coal stages, such as Casino, had a round overhead sanding facility of the type that Southern Rail has made. Taree on the North Coast line also had the same type of overhead sanding tower, but the coaling was by coal grabs.

Of the major depots around the state Junee, Goulburn, Enfield, Parkes, Broadmeadow, Port Waratah, Werris Creek, along with the Demondrille facility, had sanding facilities attached to the coal stage structure. Sand was delivered and unloaded from wagons by the coal stage operators/fuelmen, usually by hand. The sand was put through a drying process before it was put into the bins. Locomotives ran through these sanding facilities, which straddled the track, having platforms at a standard height to allow the fuelmen to sand the locomotives.

The introduction of the 57 class 4-8-2 locomotives, then the 38, 58, and 59 classes, which all had sand boxes on top of the boilers, as well as the 40 class diesels, which had top-loading sand boxes on each end of the body, meant an overhead sanding facility was needed. On the larger coal stages

a new opening was made, with either a canvas or leather hose connected to the underneath of the sand bin. When sand was needed the fuelman would have to go atop the boiler (usually a ladder was on hand so they could climb up, open the sand box lid and put the hose in), then a slide was pulled to allow the sand to gravitate into the box. A hitching point was also often found in these locations, to hang the hose out of the way. Later, though, shorter and more rigid hoses were fitted.

As steam locomotives, particularly the 'Big Engines', were prone to slipping on heavy grades, a lot of sand was used. Other adverse conditions, such as a build-up of umbrella grass on the track, could cause many engines, including diesels, to go into violent wheel spins. For diesels this could be catastrophic if not arrested, as it could cause big damage to the traction motors.

A fairly good photo of the large coal stage sanding equipment can be found in the late Ron Preston's excellent *Standards in Steam The 50 Class* on p.67, showing 5132 being sanded at Goulburn depot. It also illustrates how the fuelmen had to be very careful at all times of day and night, having to also deal with windy and wet conditions in performing such a mundane task. That particular photo has on show (just visible) at the rear of the stand behind the fuelman, a rounded end to a wide mouthed open sanding funnel. This piece of equipment was needed to assist with the sanding of locomotives of the 35 and 36 classes that had sand box lids

between the footplates and smokebox.

Often a shorter hose was available in some locations, but using the sanding funnel was simpler. One placed the neck into the sand box, the sanding funnel had a flattened section attached that the sanding hose was pushed on to allowing the sand to run down into the box. They were made locally, using condemned shovels [*fireman's shovels came in three sizes. For long or 'deep sea' working new (full-sized) shovels were used. Once worn and the blade tips cracked, the affected area was cut off and these were used for shorter distance trains, such as trip trains in the Metropolitan areas. When those shovels were worn down, they were further cut down in blade length and only used on shunting engines. Once they wore to unusability, they were either put in scrap bins, or found other uses, such as sanding funnels.*] with the handles removed and the blade cut along the back where the wooden handle was rivetted in place. A short metal pipe, either fully round or cut in half, was then welded to the blade, making for a lot less sand being wasted.

In steam days, railwaymen in every area were very much masters of innovation, using whatever items they could lay their hands on to make the job a bit easier. These sanding funnels were also found at depots frequented by the Garratts, owing to the lowness of the sand boxes on those engines. The sand box lids were pulled off and the sanding funnels inserted.

The photo also shows two sides of the engine sanding arrangements; on the right side two men, likely the shed fireman and driver, are holding the flexible hose straight for a faster flow. On the other side one worker is struggling to bend the bottom of the hose to get it into the front sand box of the loco, hav-

MAILBAG

Australian MODEL RAILWAY Magazine welcomes letters on any pertinent model railway subject for inclusion in Mailbag. Letters should be sent to Mailbag, SCR Publications, PO Box 345, Matraville 2036, emailed to amr-magzn@tpg.com.au or faxed to (02) 9661 4323. All Mailbag contributions must include the writer's name, address and phone number to permit verification. Contributions without this information will not be considered for publication.

Editor

ing to straddle the platform and the top of the sand box. He is balancing on a shovel blade, used to direct the sand into the sand box; it must have been a struggle, as there is waste sand on the top of the sand box.

As for the overhead steel sanding towers, the work was similar, but most of those had five separate sand hoses attached (in later years). This type of tower (as reviewed) was found at Cootamundra, Eveleigh, Taree, Casino, Lithgow and Bathurst (I am not totally sure, but I believe there could have been one at Grafton as well). These were the primary depots on the North Coast Line and, with the introduction of the 59 class with their top-mounted sand box and their tendency to slip, they used a lot of sand and these facilities made sanding these locomotives a lot easier for the shed staff.

On these sand towers, there was the single hose that dropped down. In later years on the one at Eveleigh there was a harder hose with metal rings attached to open and close the hose. The outer ring was pushed back as the hose was inserted into the sand boxes to allow the sand to flow; this became very much the norm on all other hoses in places such as Delec, Broadmeadow and the like, including some of the coal stages.

With diesels, due to their different classes and body shapes, problems were encountered as both long and short hoses were needed, along with redesigned hand sanding funnels, as mentioned above. For example, the 45 and 49 class locomotives had their sand box lids on the front of the engines, rather than the sides. Also, on the later-modified 45 and 48 classes, the sand boxes were narrower and required longer hoses, while other classes of varying widths needed shorter hoses.

In Bill's review, he mentions decanters. These were available in

some locations and Binnaway was one, as the sand bin was near the platform and the decanter was locked up when the station was closed (see above for the obvious reason!) However, those decanters were generally only used in the areas where 46 class electrics were used, as they had sand boxes on the bogies. The two primary locations for the use of decanters were on the electric side of the fuel point at Delec, the Lithgow electric stabling sidings and Gosford.

When full of sand the decanters were quite heavy and with the more protective OH&S these days, I doubt that they would be seen as a one-man lift/carry option to sand the lower sand boxes that appear to be fitted on to the bogies of the modern-era diesel locomotives.

For those modelling the NSWGR steam era, the Southern Rail model is a really great addition for the modeller who has a depot, whether large or small, or somewhere in between, on their layout. I have one to go on my (currently being rebuilt) layout. As it does not take up much space, it is very useful, providing another prominent feature in the modeller's (usually cramped) locomotive depot.

Col Hussey
Raworth 2321



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

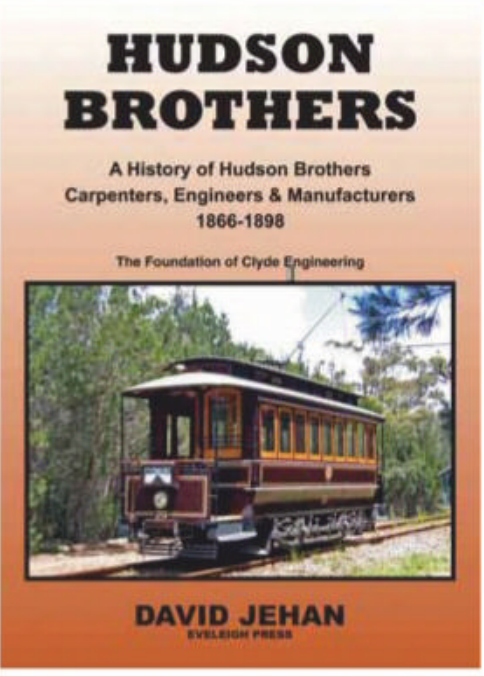
COMING SOON!

HUDSON

BROTHERS

By DAVID JEHAN

\$75.00



HUDSON BROTHERS
A History of Hudson Brothers
Carpenters, Engineers & Manufacturers
1866-1898
The Foundation of Clyde Engineering

DAVID JEHAN
EVELEIGH PRESS

2020 MODEL RAILWAY CLUB LISTING

The annual model railway club listing will be published on our website in January 2020. All submissions must be received before 31 December 2019 and must be made by an official of the club. Send details including club name and address, phone number (if available), secretary or contact person, meeting days and times, specialty and website and email details to:

Club Listing – AMRM
PO Box 345, Matraville 2036
Email: amrmagzn@tpg.com.au
Be on time or else your club will MISS OUT!



PIKO  **Models 'N More** 

PIKO SmartControl

The Digital Future of Model Train Control is Here.

CASH CARD PAYPAL

0412 556689

modelsnmore.com.au

Checkout our website:-

Ring for Details

2019 SYDNEY MODEL RAILWAY EXHIBITION

NEW LOCATION

Hall 5 Southee Pavilion
Sydney Showground

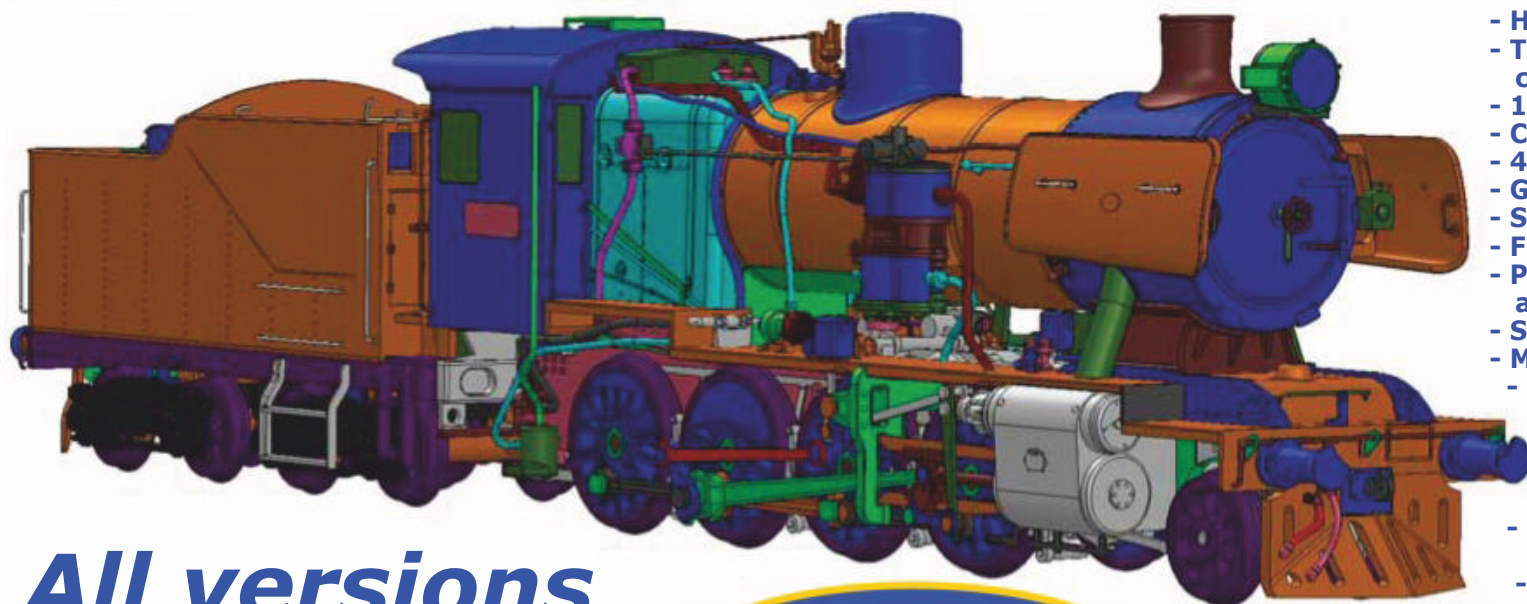
OCTOBER 5TH - 7TH
Saturday & Sunday
9am - 5pm
Monday 9am - 4pm

TICKETS

Adult - \$18
Children - \$10
Concession - \$12
Family - \$45 (2A + 2C)
Multiday - \$35

www.modeltrainshow.com.au Tickets available online from July 1st

Available 1st Quarter 2020 - The VR J Class



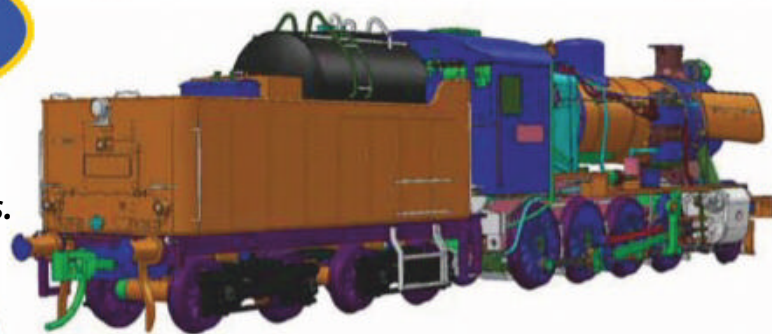
- HO Scale 1:87
- Two tender versions: coal and oil burner.
- 12 numbers.
- Cast metal boiler & chassis.
- 40:1 gearing.
- Genuine Kadee couplers.
- Sprung buffers.
- Full cab glazing.
- Pickup from all drivers and tender wheels.
- Scale metal coupling rods.
- Min. radius 24"/600mm.
- DCC and sound ready, with 21-pin socket.
- Livery: satin black with red lining and red smoke deflectors.
- Etched fire irons supplied with coal burner version.
- 750 of each version only.

All versions
\$595.00

at model shops & exhibitions.

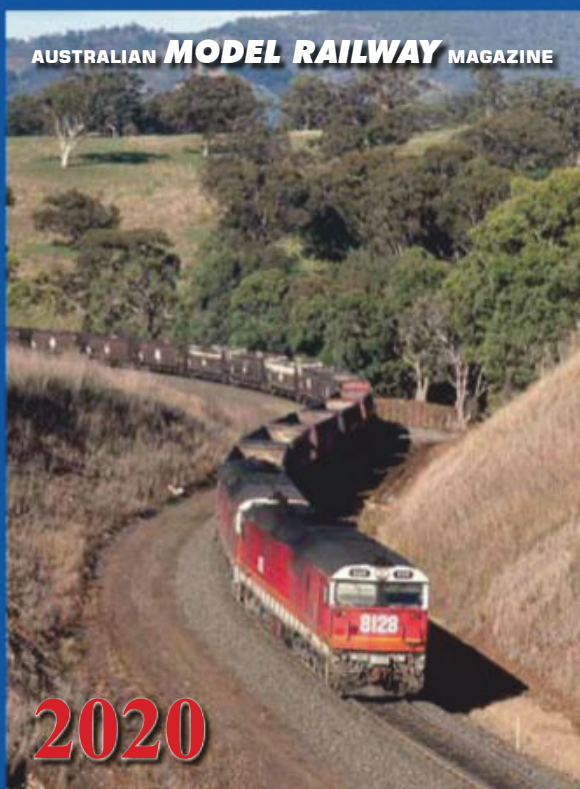
Online from the Ixion website, add \$20.00 P&P.

Also still available: The NSW 32 Class - see website for available versions.



Check our Facebook page for photos and regular updates!

Two Calendars in One – Twice the Value The 2020 AMRM Calendar



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 Llanely 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 Boolaroo; Hammersley Iron coal train hauled by 4044/4049/4036 between Galah and Gecko.

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 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 B18½ 915 approaching Ipswich; TGR H2 on the turntable at Hobart depot; 3532 and 5912 double-head a goods train between Dora Creek and Awaba.

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
No.335 - June 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

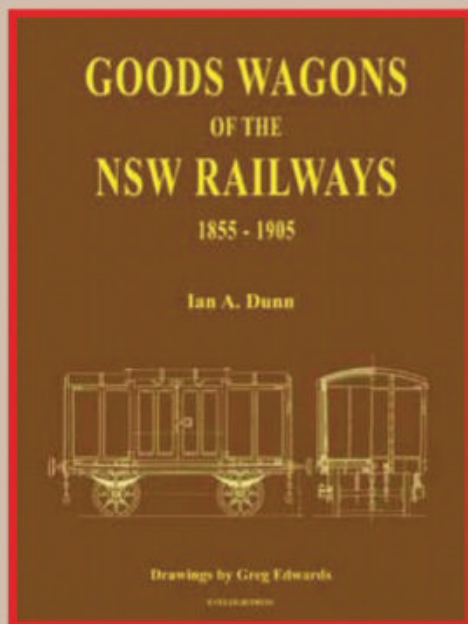
PO Box 345 MATRAVILLE 2036

Cheque, money order or credit card accepted

Orders can also be made online on our website

www.australianmodelrailways.com

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



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

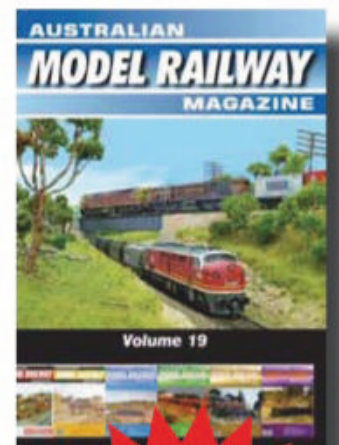
Telephone: (02) 9311 2036

Fax: (02) 9661 4323

www.australianmodelrailways.com

Are You Missing Copies of AMRM?

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



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 \$99.85

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 Membership 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



The ARHS NSW Bookshop
Central Station Grand Concourse
www.arhsnsw.com.au

For the largest & best world wide selection of quality railway books, magazines, diagrams, maps, art & videos.

Mon- Fri 9.30am to 5.30pm / Sat. 10am to 4pm
Contact: (02) 9699 4595
Email: sales@arhsnsw.com.au

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

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: SDS 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 AUSCISON 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



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](https://www.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

We do: orders, back orders, holds, lay bys, mail orders, phone orders, service and advice.

We accept: Eftpos, Visa, Mastercard, money orders or cash.

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.)

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.

FOR SALE PRIVATE

CUPBOARD DOOR opening sale. Some much loved and slightly used as well as some never used steam and diesel locomotives and rail motors are looking for new homes. Brands include Bergs, Mansfield, Trax and McBees. Models include DERM, 38s, AD60, 57, 48 classes and Eureka HUB set. For list (02) 9524 1808 (ask for Es) or email sand1808@hotmail.com

ADVERTISING DEADLINE

December 2019 Issue

Advertising deadline is:
8 October 2019

The October 2019 issue should be available at the normal outlets around 19 November 2019.

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

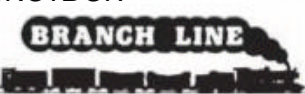
PO Box 345, Matraville NSW 2036

Telephone: (02) 9311 2036. Fax:

(02) 9661 4323

www.australianmodelrailways.com

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

VICTORIA - CROYDON  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.	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 – 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 - ENFIELD  Your Model Railway Specialist Bankcard/Visa/Mastercard/Eftpos Accepted MAIL ORDER WELCOME OPEN TUESDAY TO SUNDAY EXCEPT PUBLIC HOLIDAYS SHOP 4/449 MAIN NORTH ROAD ENFIELD S.A. 5085 Phone:(08) 8349 7464 brian@junctionmodels.com.au www.junctionmodels.com.au	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 – 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

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 <i>Plans for the finest layouts</i>
 REDFERN WORKS HO scale kits for pre-1900 NSWGR <i>using 3D print, urethane & brass castings/etches</i> 1855 A, 1858 D (10) & 1878 gunpowder goods wagons 1st & 3rd 1855 Sydney Railway Company Cars 16 Green St., Kogarah, 2217 0432 882 593 https://redfernworks.com.au/	 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	
 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	Gwydir Valley Models  ▶ EasyDCC Command Control ▶ FastTracks Point Jigs ▶ TCS & Soundtraxx Decoders ▶ IRDOT Infrared Detectors Ph: 02 6732 5711 www.gwydirvalleymodels.com	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)
 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	B-T Models Trucks and Buses (1:76 OO and 1:148 N Scale) Artitec Fine Scale Accessories (1:87 HO and 1:160 N scale) Brekina HO Vehicles, NEO, Schuco Oxford Diecast, Aussie Road Ragers Classic MetalWorks, Busch Also selling: Scenery items, Books and Model Kits Club enquiries welcome. Please email for full catalogue or download off our web page. Roving Wolf Pty Ltd PO Box 1310 Blackburn North VIC 3130 wolfstoreau@gmail.com www.rwhobby.vpweb.com.au  RW HOBBY ONLY MODELS, COLLECTIBLES & SCENERY  BREKINA MODELLSPIELWAREN GMBH B-T Models Artitec

**Your customers can't buy your product if they don't know it exists...
Advertise in AMRM!**



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

Phone
(03) 5422 6127
Mobile
0427 047 411



VR D¹, D², D³ Kit

All brass and white metal kit. 4 Versions.
Dd, D¹, D² or D³.

We are in the process of manufacturing
new boiler masters and once completed will
have all new white metal tooling made.

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.

BGM Flux is now available from us or Casula Hobbies,
Kerroby Models or Ian McIntyre in Wagga Wagga.
SAR 620 – 2020

Email: b_chester@bigpond.com Also on Facebook

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 THREE

- 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



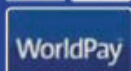
Fan assisted
cooling

<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



**DECODER
WIZ**

THE SOUND WIZARD OF MODEL RAILWAYS

Sound File Producer of NSW Locomotives

Sound Files will become available for outright sale, or
single decoder install. Initially for ESU LokSound V5 &
Digitrax format, late 2019. Contact Rick for outright
sales or further information.

New Videos of popular locomotives are coming to the
Website/Facebook e.g. Berg's brass 35 Class with QS
Industries Sound, Hornby British HST using Hornby
TTS decoders, On Track Models 82 Class;
PLUS proper speaker [install tutorial](#) & more

Sound/Motor decoders etc., are still for sale, checkout
the prices, there are still some Bargains left on the
'[Bargains Page](#)' & MORE are coming.

We still provide professional decoder installation
services, **See the website for pricing.**

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 66 960 438 419.

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.

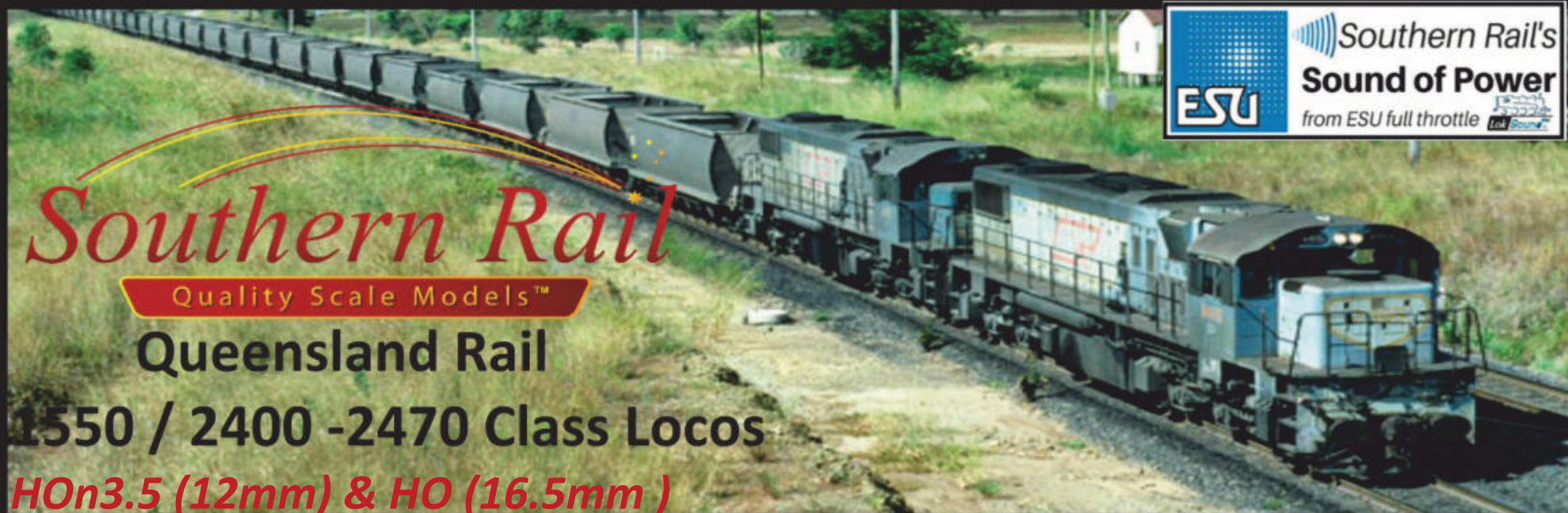
The model now incorporates a newly designed main circuit
board by ESU, and factory fitted speakers.

And for the first time we are offering a
Factory Fitted Sound Option with the recently released
ESU Loksound 5 board.

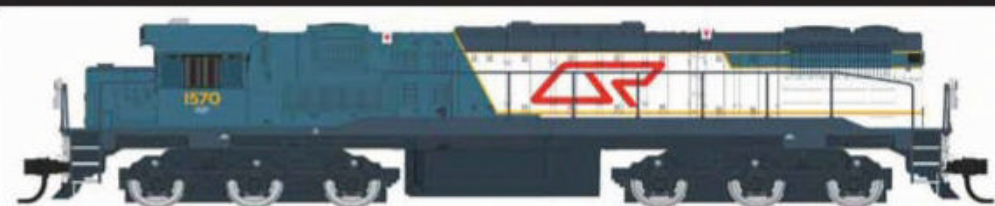
On Track Models is pleased bring you this highly detailed and
desirable locomotive in HO Scale.

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: ontrackmodels@gmail.com Web: www.ontrackmodels.com.au



Queensland Rail
1550 / 2400 -2470 Class Locos
HOn3.5 (12mm) & HO (16.5mm)
Available in Australia late September 2019



HO TRACKSIDE *WITH SOUTHERN RAIL*



TS6 - LOCO REFUELLING STATION



TS8 - STOCK RACE



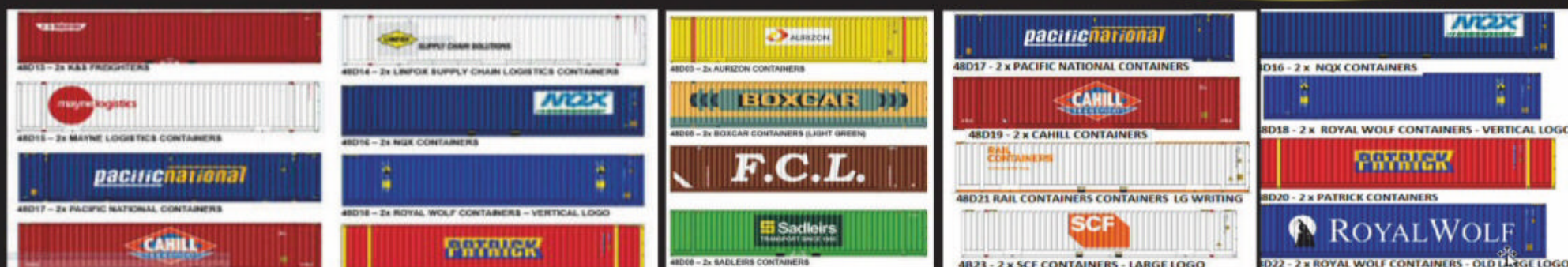
TS7 - SANDING TOWER



TS5 - CEMENT WORKS

48' Domestic Containers

AVAILABLE NOW



www.southernrailmodels.com.au



2nd Run V/LOCITY DMU sets

CubeContainers



IN STOCK



C35 BLOCK GRAIN TRAIN HOPPERS

ADVERTISING INDEX

All Aboard Modellbahn	6	Eureka Models	14, 15	Ozrail Model Trains	16
AMRA - NSW	62	Eveleigh Press	10, 61, 64, 66, 70	Pamak	8
Auscision	7, 13, 17	IDR Models	12	Powerline	12
Austrains	2	Ixion Model Railways	63	San Mateo Line	8
Australian Model Craft Co	72	Kadee Quality Products	61	Steam Era Models	8
Australian Model Engineer	8	Models 'N More	61	SCR Publications	63, 64, 65
Berg's Hobbies	6	Model O Kits	8	SDS Models	3
Broad Gauge Models	68	Morley Controllers	68	Southern Rail	69
Casula Hobbies	9	On Track Models	68	Train World	71
Decoder Wiz	68	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 \$11 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)	☐	\$	New South Wales Railways in Colour		
AMRM on DVD, Volume 19 (\$25.00 including postage)	☐	\$	1855-1955 (\$145.00 plus postage) <i>NEW</i>	☐	\$
Australian Trains:			Conquering the Blue Mountains (\$50.00 plus postage)	☐	\$
Newcastle Express (\$22.00 including postage)	☐	\$	Day of the Goods Train (\$60.00 plus postage)	☐	\$
Central West Express (\$22.00 including postage)	☐	\$	Essays in Steam (\$15.00 plus postage)	☐	\$
Southern Highlands Express (\$22.00 including postage)	☐	\$	Gerald Dee (\$60.00 plus postage)	☐	\$
Diesel Spectrum:			Goods Wagons of the New South Wales Railways 1855-1905		
Victoria – Blue & Gold Era (\$12.00 including postage)	☐	\$	(\$110.00 plus postage)	☐	\$
NSW – Reverse Livery (\$12.00 including postage)	☐	\$	Green Diesels – 40 and 41 Classes (\$30.00 plus postage)	☐	\$
Qld – The Blue and White Era (\$12.00 including postage)	☐	\$	History of the SAR, Volume 5 (\$70.00 plus postage)	☐	\$
NSW – Candy Livery (\$12.00 including postage)	☐	\$	History of the SAR, Volume 6 (\$70.00 plus postage)	☐	\$
Private Operators – Part 1 (\$12.00 including postage)	☐	\$	Iron Work Horses (\$54.00 plus postage)	☐	\$
Australian Diesel Scene: 3 (\$25.00 plus postage)	☐	\$	Kicked Out Like A Dog –		
Australian Diesel Scene: 4 (\$25.00 plus postage)	☐	\$	The Turbulent Career of Thomas Midelton (\$40.00 plus postage)	☐	\$
Australian Diesel Scene: 5 (\$25.00 plus postage)	☐	\$	O.B. Bolton's Engine Portraits (\$45.00 plus postage)	☐	\$
Australian Diesel Scene: 3, 4 and 5 (\$75.00 including postage)	☐	\$	Ray Love's Days of Steam (\$50.00 plus postage)	☐	\$
Byways of Steam: 8 (\$27.00 plus postage)	☐	\$	Shale & Shays (\$78.00 plus postage)	☐	\$
Byways of Steam: 9 (\$27.00 plus postage)	☐	\$	South Australian Steam Memories (\$65.00 plus postage)	☐	\$
Byways of Steam: 10 (\$30.00 plus postage)	☐	\$	South Maitland Railways (\$30.00 plus postage)	☐	\$
Byways of Steam: 11 (\$33.00 plus postage)	☐	\$	Spring, Spark & Steam (\$60.00 plus postage)	☐	\$
Byways of Steam: 12 (\$33.00 plus postage)	☐	\$	Standards in Steam: 53 & 55 Class Soft cover (\$50.00 plus postage)	☐	\$
Byways of Steam: 13 (\$38.00 plus postage)	☐	\$	Steam Across the Border (\$28.00 plus postage)	☐	\$
Byways of Steam: 14 (\$34.00 plus postage)	☐	\$	Sydney Suburban Steam (\$30.00 plus \$7.20 postage)	☐	\$
Byways of Steam: 15 (\$35.00 plus postage)	☐	\$	The Steam Tram in Australia & New Zealand (\$70.00 plus postage)	☐	\$
Byways of Steam: 16 (\$38.00 plus postage)	☐	\$	Time of the Passenger Train – 1st Division (\$60.00 plus postage)	☐	\$
Byways of Steam: 17 (\$38.00 plus postage)	☐	\$	Time of the Passenger Train – 2nd Division (\$60.00 plus postage)	☐	\$
Byways of Steam: 18 (\$40.00 plus postage)	☐	\$	Time of the Passenger Train – 3rd Division (\$60.00 plus postage)	☐	\$
Byways of Steam: 19 (\$38.00 plus postage)	☐	\$	Tulloch (\$85.00 plus postage)	☐	\$
Byways of Steam: 20 (\$40.00 plus postage)	☐	\$	AMRM Binders (\$16.00 plus postage)	☐	\$
Byways of Steam: 21 (\$40.00 plus postage)	☐	\$	Plus Postage		\$
Byways of Steam: 22 (\$40.00 plus postage)	☐	\$	Total		\$

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



TRAIN WORLD PTY LTD



Victorian S-Cars in store and available now.

VR, Blue and Yellow, SOP, Standard Gauge.

PC-410A	1 VFX,	PC-410B	2 VFX
PC-411A	1 VFS,	PC-411B	2 VFS



Vic Rail (Tea Cup)- (1981-1983)

PC-441B	9 BS	(Economy).	\$150ea
PC-442A	10 BRS	(Snack Bar).	\$150ea
PCCP-4	210 BS/3 BS/224 BRS-		(\$450)



V/Line-Tangerine (1984-1986)

PC-450A	210 AS	(First).	\$150ea
PC-452A	10 BRS	(Snack Bar).	\$150ea
PCCP-5	212 BS /214 BS /226 BRS -		(\$450)



V/Line Passenger Corporation (1995-2006(July))

PC-475A	215 BS.	\$150ea
PC-475B	216 BS.	\$150ea
PCCP-8	217 BS/218 BS/219 BS -	(\$450)



V/Line-Tangerine (1986-1995)

PC-455A	213 BS	(Economy).	\$150ea
PC-456A	223 BRS	(Snack Bar).	\$150ea

Victorian Railways S-Cars, V.R. Broad Gauge, arriving soon.



VSX/VSF/VLEX/VLEY/VLNX Louvre vans-\$49.95



BWH/NGBA-Cov Hopper. BCH/NHDA Hoppers-\$59.95

Victorian T Class & H Class in stock (T3,T4 &T5)



\$295.00ea



\$295.00ea



SCT-Logistics, LOCOS & ROLLINGSTOCK, in stock



\$370.00ea



\$370.00ea



\$65.00ea



\$65.00ea



\$55.00ea



\$55.00ea

290 Bay Street, Brighton, Victoria 3186. Phone: (03) 9596-6342 or Fax : (03) 9596-3917

OPEN 7 DAYS, 360 Days per Year (closed New Years Day, Good Friday, ANZAC Day, Christmas Day and BoxingDay)

Monday to Thurs 10am-6pm, Friday 10am-9pm, Saturday 9am-5pm, Sunday & Public Hols 11am-4pm

trainworld@trainworld.com.au