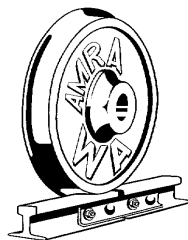


The Branchline



The newsletter of the Australian Model Railway Association Inc.
Western Australian Branch Inc.

www.amra-wa-branch.asn.au

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Frans' Fatidic

It is with great sadness that we have to report the passing of two of our members, Rex Vellender and Wern Dunwoodie, both exquisite modellers. Some of their work can be seen in the display cupboard and on the *WesterN-Ridge* layout. Both were kind and gentle gentlemen and will be sadly missed.

Our condolences have been passed to the respective families. Both funeral services were attended by Branch members.

The ground work for the building extension is slowly going ahead, thanks go to Ron Fryer for taking on such a difficult task.

A vote of thanks goes to Ron Keen for donating a complete N Gauge layout, which needs scenic work done on it [any volunteers?], it will be a very good layout to take to shows and Exhibitions. Also thanks to Bart Schreuders for donating model railway items for us to make use of.

There is also a model railway layout [oldish] that maybe of interest to someone for a small donation.

As the Model Railway Exhibition is getting closer please consider volunteering to help at the Exhibition – see the various Exhibition articles in this issue for further details.

In another part of this issue of *The Branchline* I have set out a comparison between the organisation and rules for AMRA's Sydney Exhibition and our Exhibitions – some interesting and thought provoking ideas which we may consider using in future exhibitions – [see *page 31. Ed.*]

Frans Ponjee
Branch President.

**Australian Model Railway
Association Western Australian
Branch [Inc.]**
PO Box 60
MAYLANDS 6931

Clubrooms

24 Moojebing Street
BAYSWATER 6053
Phone 9377 3456

President

Frans Ponjee – 9490 3636
e-mail – rosieandfrans@netspace.net.au

Vice President

Graham Bell – 9295 4461
email – agrhbell@bigpond.com

Secretary

Neill Phillips – 9243 4664
email – c-nphillips@bigpond.com

Treasurer

Craig Hartmann – 9377 4849
email – lhar2223@bigpond.net.au

Committee

Trevor Burke – 9398 4330
email – trevorburke@bigpond.com

Niels Kroyer – 9315 9635
email – njtskroyer@westnet.com.au

John Maker – 0417 941 553
email – jonmaker@westnet.com.au

Garry Pilmoor – 9296 7070
email – garrypilmoor@bigpond.com

Tom Stokes – 9275 4508
email – david.stokes3@optusnet.com.au

Editor

Ted Thoday – 9310 6316
email – mandtt@three.com.au

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Exhibition Manager's Report

Enclosed in this issue are the normal forms for members to volunteer to assist with the many tasks that need to be done, please help your Branch by volunteering – even a small amount of time is better than none.

This year both the Robinson and Silver Jubilee Pavilions will be used with the entrance and exit being at the Silver Jubilee Pavilion. Staff amenities will be in the link between the two pavilions and also upstairs in the Silver Jubilee Pavilion.

Opening times this year will Saturday and Sunday 0930 to 1630 and Monday 0930 to 1600, setting up will be on Thursday and Friday from 0800 to 2000.

A floor plan will be on show from the first week in May.

We are negotiating with the caterers regarding lunch deals for Exhibitors, will keep you posted on this.

We have 18 Retailers 14 Clubs and Kindred Societies and 22 private but we may have two or three more layouts coming in, most of the private layouts are new this year.

We will be using the AMC display boxes which need to be cleaned and made ready for the Exhibition – have we got any volunteers.

We also need to look at barricading and other items that need to go to the Exhibition so, from the middle of April, we will need volunteers Tuesdays and Saturdays to help with the sorting out of the Exhibition items.

There will be a meeting for those involved in the Exhibition on Thursday 3 May at 1930 sharp.

The Electrician will be in our Clubrooms on Saturday 5 May and Saturday 12 May between 1330 and 1630 to tag mains powered electrical items, cost will be \$3 per item.

Frans Ponjee
Exhibition Manager

Vale Rex Vellender

[1927–2012]

It is with great sadness that we note the passing of Rex Vellender [Member No. 4021]. Rex was born in

Winchcombe, Gloucestershire and came to Western Australia as an infant. His parents took up a Group Settlement lot near Margaret River. The Group Settlement venture was not successful for many reasons and the family eventually settled at Armadale. Rex was almost 13 when WWII broke out. He worked as a postman and linesman with the PMG during the war but enlisted in the Australian army when he turned 18 in February, 1945. Rex served overseas with the Australian Army in the occupation of Japan following WWII.

Following his military service Rex trained as a carpenter – he used his skills building houses including two of his own family homes at Lathlain and Mandurah. Later on Rex worked for a number of years with Cullity Timbers at their factory near the former Lathlain railway station on the south suburban Railway. Rex retired from Cullity's in the 1980s and enjoyed a well deserved retirement.

Rex has been a member of the AMRA and its WA Branch for over twenty years and his particular interest was in the modelling of the 3'6" gauge railways of Western Australia in S scale.

Prior to joining the S Scale Group Rex was a skilled model boat and plane builder who worked in Balsa as much as we railway modellers use styrene, brass, white-metal, plastic and urethane. Rex became a member of the S Scale Special Interest Group when it was established in 1989. He built a fine model of an ADE Governor class DE railcar and an ADT trailer and was one of the first members to assemble a Railwest Models brass and white metal G class kit during the 1990s. Rex also assembled a Z class shunter and a range of Railwest wagon kits and an ACL coach.

Rex used his skills with wood to make many York train boxes, at cost, for a number of members of the S Scale group. Rex was interested and knowledgeable in many different types of wood. He built a very nice display cabinet for one of our members [at cost] in Polonia, a type of straight grained, soft, blonde-wood which stains and varnishes extremely well. Rex was always willing to try new things.

When the major modifications were made to the *Swan View* layout in 2002, which involved the dual track returns and 10-road fiddle yard, Rex lent his carpentry expertise and leadership to produce the structural base-boards and curved sky-boards for the project. He also worked on completing the *Boyanup* layout.

Instead of being a drain on the funds of our Branch the S Scale Group decided to make personal donations and hold a raffle to offset the cost of the renovations to *Swan View*. The first prize was a very nice York Box which was built and donated by Rex. The donations by Group members and the raffle raised over \$200 which helped finance a bigger and better *Swan View*. Honorary Life Member Simon Mead is the proud owner of that York Box. So it is with thanks to members like Rex that the Branch has a fine, award winning *Swan View* layout for all Branch members to enjoy.

Before age and ill health began to catch up on Rex he always gave his time generously to our Branch particularly at the annual Model Railway Exhibitions and to the Bennet Brook Railway narrow gauge railway at Whiteman Park.

Thanks Rex for your friendship and help. You will be missed, not only as a husband to Eilidh, father to Kay and Lyn and as a grandfather and great grandfather, but also as an unselfish and valued member of AMRA's Western Australian Branch.

[Editor's Note. *Stuart Mackay and Graham Watson provided this Valediction – thank you both.*]

Vale Wernham [Wern] Dunwoodie

Wern left us in the early hours of Sunday 18 March after a short fight with cancer.

I first met Wern about ten years ago when the construction of the N Scale layout *WesterN-Ridge* started, he dressed all the pine and built all the frames for the base of the layout.

Ian Wood called a meeting of the N Scalers to ask for volunteers to construct various section, Wern and I ended up with the engine servicing facilities project. We were meant to have two separate modules but Wern thought a better idea would be to bolt the modules together. Bolting was not good enough so he spread a large amount of glue on the two frames, stating that they would now be together for all time!!

Wern was an expert at building difficult modules from scratch. The bridge on *WesterN-Ridge* is a fine example of his skill. This was constructed of N and HO scale track, using a photograph of a bridge on the Tom Price line – a Branch member was heard to comment, “I know this structure as I worked on it!” Another member, an engineer, said that from an engineering point of view the bridge ‘worked’.

Wern and I attended N Scale Conferences in Brisbane and Adelaide and, at the latter, he entered the model in a competition and won an Honourable Mention.

His other skills lay in electronics. A number of these projects can be seen on the layout – these include a welder in the workshops, flashing lights and bells on a crossing, scratch built working oil pumps [nodding donkeys], lights in N scale cars and a crash scene with flashing lights on the various emergency vehicles plus a number of other projects, too many to list.

You only had to ask Wern about a problem, he would not only tell you how to fix it but most times would take it home and fix it himself.

One of my prized possessions is an N scale guard on my station, waving a red lantern – how he built this defies comprehension.

Over lunch on many Tuesday meetings Wern would always contribute some words of wisdom, like the time we were discussing horse racing – Wern had, at one time, been a jockey. “Never bet on a horse race!! The owners don’t know who will win, neither do the trainers or horses, just ask the jockeys”.

Wern’s legacy will be with us as long as *WesterN-Ridge* is in operation, with the *Wern Dunwoodie Bridge* a lasting monument to his modelling skills.

He was a good friend to all and will be sorely missed.

Happy Modelling, Mate.

[Editor’s Note. Bob Phelps provided this Valediction – thank you.]

Important Notice – 1

Electrical Equipment Safety Checks

Strict safety regulations require all electrical equipment and power cables to be tested and tagged for the Exhibition.

This year it is up to each Exhibitor to make sure their items are properly tagged – an out of date safety tag means the equipment **cannot** be used at the Exhibition – ***don't say you were not told!!***

An electrician [Eric Thomas] will be in our Clubrooms to test and tag all electrical equipment on Saturdays 5 and 12 May 2012 between 1330 and 1630. The cost will be \$3.00 per item payable on the day.

Important Notice – 2 Roster Forms, etc.

The Exhibition will be staged in the Robinson and Silver Jubilee Pavilions at the Showgrounds, over the Foundation Day long weekend – Saturday 2 June, Sunday 3 June and Monday 4 June.

Included with this issue of *The Branchline* is a Roster Form, some hand bills and a poster. **Note** – if you receive your copy of *The Branchline* electronically the Roster Form, handbills and poster will also be sent to you electronically as printable .pdf files. Please print these off, complete and return the Roster Form, print several pages of handbills and cut each sheet into four handbills and distribute locally as requested below – if you need more handbills they will be available in our Clubrooms.

I am asking you all to put your name forward with the times you know will fit in with your other commitments. If everyone is able to take one or more slots over the three days this will make it a more even and enjoyable weekend for everyone involved in this year's Exhibition.

Please return the form by **Saturday 28 April 2012** to either me at our Clubrooms, the address is on the form, or email to rosieandfrans@netspace.net.au

We will be running a media campaign again this year but it will be very helpful if everyone can distribute handbills at work, at church, at your other clubs, in your neighbourhood mail boxes [unless they state they do not want junk mail], to your friends and maybe even to the local schools and library.

We will be running raffles each day and tickets can be purchased at the Exhibition daily.

We need your help, please

Most Saturdays in May will be taken up with preparing for the Exhibition so please turn up as normal and do the various jobs that you are asked to do.

If we all work together we can ensure this Exhibition is as successful as last year's – but it is going to take the combined effort of **all** members to make this happen. I know you will not let us down.

Saturday	28 April	Check and count barricading parts.
Tuesday	3 May	Exhibitors meeting starting at 1930 please attend
Saturday	5 May	Electrician available 1330 to 1630
		Check ticket booths, Advice Centre, etc.
Saturday	12 May	Continue preparations
		Electrician available 1330 to 1630
Saturday	19 May	Continue preparations
Saturday	26 May	Stow loose items in transport containers.
Thursday	31 May	0730 loading at our Clubrooms then off loading at the

		Showgrounds and setting up.
Friday	1 June	0830 to 2000 set-up
Saturday	2 June	Model Railway Exhibition – open to the public – 0930 to 1630
Sunday	3 June	Model Railway Exhibition – open to the public – 0930 to 1630
Monday	4 June	Model Railway Exhibition – open to the public – 0930 to 1600 followed by take down
Tuesday	5 June	0730 load equipment at the Showgrounds and off load at our Clubrooms and put away.

Important Notice – 3 Identification Badges

All exhibitors both AMRA and non-AMRA, will be issued with special Identification Badges that **must** be worn at **all times whilst on duty**, including when entering or leaving the Pavilion.

Any exhibitor not wearing their Identification Badge will be required to pay the appropriate entry fee – **no exceptions.**

The Exhibition is open **Saturday/Sunday** from **0930 to 1630** and **Monday 0930 to 1600** AMRA staff are requested to be at the Pavilion at least thirty minutes before their duty begins – **0900 for 0930** start.

Correction

It would appear that your Editor and proof reader have had a Senior's Moment or two and as a result the Issue Numbers have skipped a beat or two. The correct Issue Numbers are –

June 2011	205
August 2011	206
October 2011	207
December 2011	208
February 2012	209

Monday Night Topics

The first Monday of each month is generally a night for topics of interest to members. The idea is to provide information and share techniques/tricks with other members [be they new to the hobby or experienced modellers].

Recently the program for these nights has been de-railed. If this part of the program cannot be re-railed it may have to be abandoned as a non-viable exercise. Presently we are using a system that is not beneficial to our membership, what we would like to do is to re-rail the program for the First Monday of each month by providing members with topics/how to clinics that are beneficial to members and to encourage more to attend these meetings. If we are unable to do this then the First Monday of the month item on the programme will be sent to the scrap yard.

Is there another time that would be better? ie. Saturday afternoon?

As a last ditch effort to re-rail the program, if you have any ideas/suggestions on what could be presented and who could present the topic [talk to them before nominating them] or if you are willing to present a topic yourself please email me at lhar2223@bigpond.net.au

Any topic will be considered but these need to be topics that are **railway based** – trains, rolling stock, scenery, tools, even bring and show or Slide presentations, etc. For example prototype information, how to make/programme/modify, tree making, kit building, etc.

If you have an ideas but feel you are unable to present them yourself another way is to provide notes on the topic.

Please think about this as it has been beneficial over the years – it would be a shame to lose a resource for members

If you want to discuss this please feel free to approach any Committee member or you can usually catch me in our clubrooms on a Saturday.

Craig Hartmann

From the Editorial Desk

The Branchline – June issue deadline. Routine editorial material, articles, reports, programme items, etc., to me no later than 1500 Saturday 26 May – for routine material – 1500 Saturday 9 June – for exhibition reports.

However, if your material is ready earlier please let me have it early; it helps spread the work load, particularly if your article is handwritten or typed hard copy requiring retyping.

Collation, etc., will be on Saturday 23 June and will include exhibition reports and AGM material

Please note the intended dates for *The Branchline* publication for the remainder of 2012:

	Editorial deadline	Assembly, etc.
August	Saturday 28 July	Saturday 11 August
October	Saturday 22 September	Saturday 6 October – will include AGM Minutes
December	Saturday 17 November	Saturday 1 December

Ted Thoday

Literary Lines

The cataloguing of our Library stock continues. Over 1600 prototype books have now been catalogued and renumbered. Just under 600 modelling books have been added to the database but are yet to be renumbered and around 500 DVDs and videos have been catalogued. Hopefully the modelling books will be renumbered within the next few weeks.

We continue to receive donations of books, magazines, DVDs, etc., Many thanks to the following for their donations –

Alan Burrough, Dennis Ling, Stephen Cooke, Ron Keen and Terry Emmerson

New library acquisitions. Listed below are a few of the newer additions, [not necessarily from the donors listed above].

KAA066	<i>British Steam Locomotives</i>	M. De Cert
KAD058	<i>Lost Railways of Herefordshire & Worcestershire</i>	L. Oppitz

KAD059	<i>Steam Railways</i>	C. Hamilton Ellis
KAD051	<i>Explore Britain's Steam Railways</i>	A .Lambert, C. Awdry
KBA040	<i>Great Western steam through the Cotswolds</i>	C. L. Williams

Unfortunately we are unable to acknowledge a number of other donors as, despite our frequent pleas, they forgot to leave their name with their donation.

Our Library is open on Saturday afternoons from 1400 to 1630 for the receiving and issuing of books, magazines and videos. But come in and browse at any time.

Chris and Des
Branch Librarians

Motorised Bogies

Mike Thomas has provided this snippet of useful information.

It was true that Ivatt's G-C 10000 was delivered in 1947 thus wore LMS initials. 10001 delivered only months after [1948] thus bore the Lion/wheel monogram.

Mike has been re-motoring some of his rail cars, which had indifferent motors/gear trains. He has ordered and received from USA beautiful little power bogies, the so called Stanton Drive. Various wheel bases and wheel/flange sizes. If anybody is interested, they can go to www.nwsl.com or to sales@osorail.com. Fairly cheap too with the Aussie dollar at its present level.

[Editor's note. I invited to Mike to tell us more about the Stanton Drive – see below – thanks Mike.]

The Stanton Drive

A miniaturised 16.5mm gauge power bogie

Some years ago, I was given two Jouef SNCF rail cars. Nice models and quite accurate to prototype, however, the drive mechanism was so awful in all respects, that I refused to run them.

Periodically, I would take them out of their boxes, gaze at them, wondering how to improve matters, then through lack of inspiration, replace them in their boxes.

Some months ago I remembered an article, that provided a solution, in an old SNCF Society magazine [1993]. I found the article and there was the answer I was looking for. The author, a Canadian, described beautiful power bogies made to order by an American firm and these he had fitted to the same models that I had, with spectacular results. I searched the Net and to my surprise the firm, NorthWest Short Line of Montana, is very much still in business. I found what I wanted in their catalogue and soon acquired a Stanton Drive bogie.

The power bogie [truck in USA parlance] is a sealed unit about the size of a small match box. It has a powerful motor [?Japanese] with worm and spur drives and is quiet. Some members were able to try my railcar, fitted with it, on *Haltwhistle* and were impressed with its quietness and uncanny slow movement over point-work. It is DCC ready, wires in place for the decoder, or ordinary DC supply as you wish. Instructions are clear. It is easy to solder connecting wires from a trailing bogie to add more pick-ups. Mounting the bogie as you can see from the photographs, is simple, although detailed instructions are given.

The heart of the machine is the PCB which forms the base plate. It contains the inner wiring, holds the pick-up wires, and has a self-resetting fuse to protect the motor from overheating, as well as an

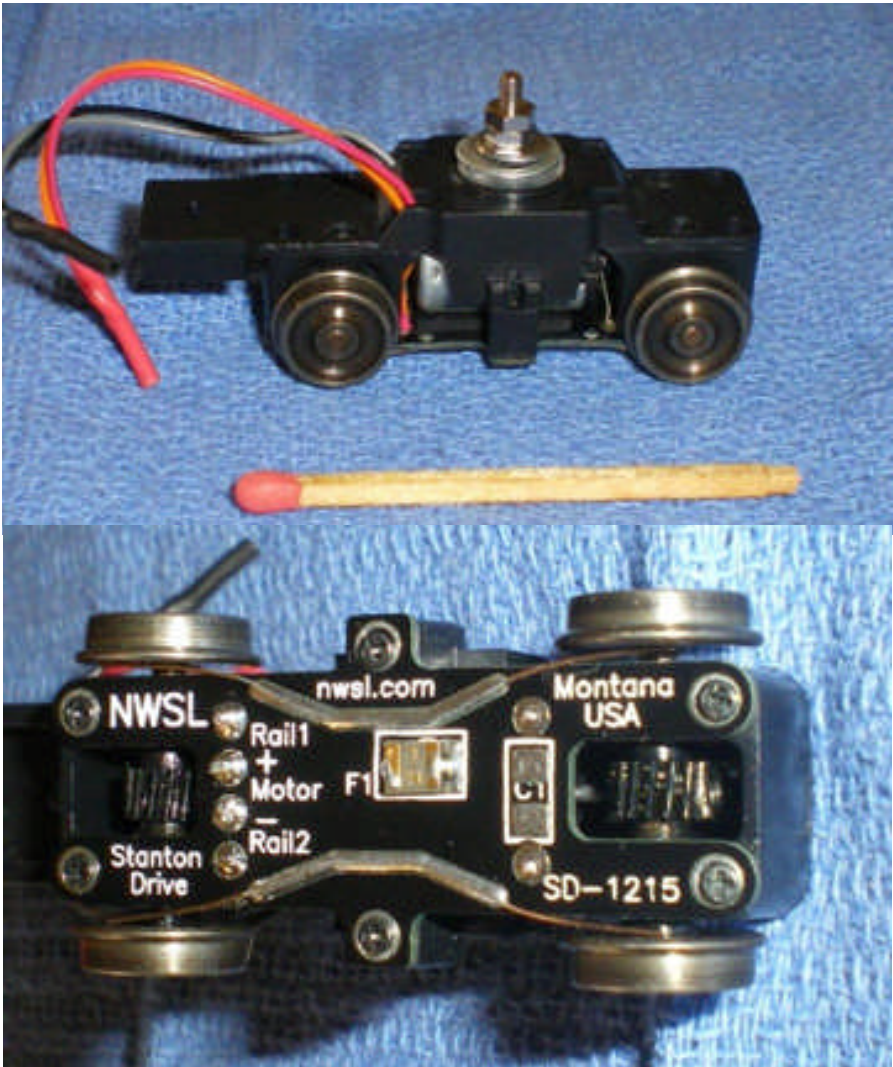
optional capacitor mount for DCC users. The bogie is compact and very solid.

Normally, one would cut off the side frames of the original bogie and super glue them onto the side bearings of the Stanton drive, to restore the look of the model.

The Neil Stanton's design is clever, It allows for three prototype wheel-base dimensions, [7'6", 8'0, 8'6"] with different wheel sizes.

It cost me US\$100.00 landed, in February, the actual cost will vary depending on exchange rate movements. NorthWest Shortlines web site is www.nwsl.com or email to sales@osorail.com.

Mike Thomas



Around the Layouts

WesterN-Ridge. Wern Dunwoodie passed away on Sunday 18 March but he has left a lasting legacy on our layout. The Dunwoodie bridge, the nodding donkeys and many of the lighted vignettes are all Wern's work. Bob Phelps was able to report to Wern that his last project – more lighted cars – had been installed before he passed away.



The Dunwoodie bridge – see the *WesterN-Ridge* page of our web site for more photographs of this beautiful model

Progress on other aspects of *WesterN-Ridge* has been good. Bob Phelps and Peter Webb made significant progress in sorting out the branch terminus electrically and making certain that point motors on the branch were working correctly.

Other members have been under the layout repairing so-called ‘wiring repairs’ that introduced significantly more problems than they solved in the port area and on the branch line! Peter Webb and Terry Emmerson have been busy repairing the baseboard join between the main layout and the port module.

Finally, at its last meeting, our Management Committee formally abolished the Layout Coordinator position, instead implementing the ‘committee of three’ approach that most active N Scale SIG members decided was the way ahead for layout work. The Gang of Three is Steve Rayner, Terry Emmerson and Neill Phillips. So before you implement improvements to *WesterN-Ridge*, please talk to the Coordinators before undoing or improving other people's work.

The Valentine Run. Scenic on the D, V & S Railroad progresses in leaps and bounds, as each week Gary, Trevor and Alex extend the area of coverage. Some modules have been detached and relocated to facilitate ease of access, and these too are showing the signs of increased vegetation. Under the patient guidance of Gary, the crew are now demonstrating talents that have previously lain dormant.

Valentine has acquired a new station courtesy of Craig; new in the sense of recently constructed but appropriately weathered to suit the locale – and to match the local populace. Needles has now evolved into its final set out, after city planners Alan H and Craig played multiple games of town building checkers to arrive at a scenically appealing town plan. With the addition of some roads, footpaths, vehicles, people and urban clutter, this city will become a feature on the layout.

The industrial area is still the subject of continuing discussion. Perhaps one more industry is needed in front of the background buildings to enhance the area's visual appeal. I understand the industrial area managers [who also moonlight as city planners] would welcome another medium to large industry of differing design to those currently installed on the layout.

We're looking forward to running trains on the scened and reassembled layout, as it's been so long that some of us have forgotten why we're here. Our layout sparky has every confidence that, once reconnected, the layout will function perfectly – but has located a place of suitable concealment should circumstances so require. Therefore, until such time as the layout is running smoothly, depression of the drill press causing bit penetration below the work bench is strongly discouraged.

Craig Hartmann
Alan Burrough
Layout Coordinators

EM Gauge Society Manual Sheet 9.1.1. [10] 3 Link Couplings

The seven and a half pages of this Sheet looks at the prototype 3 link and Instantaner couplings, the construction and use of the miniature, model versions in pictures, text and diagrams.

A copy of this Sheet is now in our Branch's Library copy of the EMGS Manual.

Membership Types

Someone said that the membership of every organisation is made up of four bones –

1. **Wishbones** who spend all their time wishing someone else will do all the work.
2. **Jawbones** who spend all their time talking but very little else.
3. **Knucklebones** who knock everything that anybody else tries to do
4. **Backbones** who get under the load and do all the work!!!

Hopefully you are the No. 4 type as we will need plenty of these to set-up and staff our Exhibition.

Around the SIGs

British Railway Special Interest Group – The subject for the January meeting was the BR Class 55 Diesel Electric Locomotives – The Deltics.

1 The Prototype Demonstration Locomotive

The prototype Deltic locomotive was a privately sponsored design, neither ordered nor conceived by British Railways. Although it ran on BR tracks for six years, it was never BR property, nor did it carry a running number, being referred to simply by its name, DELTIC.

The English Electric Company had great hopes for an export locomotive and they gave it a distinctly North American appearance with a huge headlight in each of the nose ends and a bright livery of light blue, with cream speed whickers in the nose ends, elongated side panel and name and silver bogie frames and fuel and water tanks. As things transpired it never went abroad and it seems the headlights were never used!

The locomotive was powered by two Napier Deltic D18-25 opposed piston, two stroke, diesel engines, running at 1,500rpm and each producing 1,650hp at their output shafts. This diesel engine when running at 2,000rpm in RAF air-sea rescue launches and Royal Navy motor torpedo boats could produce 2,400hp but with the penalty of piston ring renewal every 1,000hours. The engine had six banks of three cylinders, each cylinder have two opposed pistons and each bank of cylinders arranged in the form of an equilateral triangle, the same form as the fourth letter of the ancient Greek alphabet and known as Delta – hence Deltic.

The opposed piston technology saved the weight of two cylinder heads in each bank – the eighteen cylinders were therefore the equivalent of a normal 36-cylinder engine. This weight saving, together with the extensive use of aluminium alloys, enabled the weight of the locomotive to be kept at 106 tons and capable of being carried on two six-wheel bogies, considerably less than the 138 tons of the later 2,500hp Peak Class 1Co-Co1 locomotives. Not only did the Deltic weigh 32 tons less, it also produced 800hp more!

Trial running for English Electric commenced in October 1955 with overnight freight trains between Liverpool and London with occasional passenger trains on the same route. In mid-1956 it ran several trials on the Settle and Carlisle line before it began, in October 1956, regular passenger workings between Liverpool and London. With the BR[LMR] keen on electrification of the WCML and lukewarm towards the English Electric privately sponsored project, the future of the Deltic concept obviously lay elsewhere.

BR[ER] management saw in it the potential to replace 55 of its ex-LNER 4-6-2 steam locomotives by 23 Deltics – an order was placed on English Electric in 1958 for delivery of only twenty-two locomotives, to commence in 1960. Accordingly BR moved the prototype to the East Coast route in 1959, where it was found to be out-of-gauge for some platforms at Kings Cross. After these and a few other minor faults were remedied, it was able to demonstrate its amazing capabilities in a series of test runs on the East Coast main line and in Scotland. Eventually settled in at Finsbury Park depot it was then used on the same turns as the Gresley, Thompson and Peppercorn 4-6-2s to Scotland, Hull, York and Newcastle-upon-Tyne until the delivery of the first production locomotive in February 1961, one year later than had been planned.

After running over 400,000miles on the LMR and ER, it was returned to the English Electric Co., in March 1961, restored to pristine condition and moved to the Science Museum in London. Subsequently it was transferred to the National Railway Museum at York.

2 The Production Locomotives

The twenty-two locomotives ordered in 1958 were delivered between February 1961 and May 1962. They differed from the prototype in several ways, primarily as follows –

- i. They were longer – 69ft.6in. over buffers compared with 67ft.9in. of Deltic.
- ii. The laminated springs on the bogies were replaced by coil springs as per Class 37

locomotives.

- iii. There was a general clean-up of the body lines to give a neater less cluttered appearance. The large headlight was omitted. On Nos.D9000 to D9018, the air horns on each end were mounted below the buffers but Nos.D9019 to D9021 had them mounted on the roof. Various handrails were fitted to improve crew access to the front of the locomotive.
- iv. The livery was Brunswick Green body with a light green [Sherwood Green] skirt, white cab-side front window surrounds and a Medium Grey roof.
- v. The locomotives were numbered D9000 to D9021 and all were named. Eight after racehorses, assigned to Finsbury Park depot, eight after Scottish Regiments, assigned to Haymarket depot and six after English Regiments, assigned to Gateshead depot.

Some of the further detail variations that occurred after being commissioned are as follows –

- i. Change to overall blue livery with the arrows of indecision emblem from Autumn 1966 to Autumn 1969.
- ii. After the end of steam traction in 1968, the D prefix was dropped.
- iii. In late 1973/early 1974 the complete class was renumbered in the 55XXX series.
- iv. In 1966/67, additional louvres were installed in the body sides, just above the nameplates, to improve ventilation of the battery compartment.
- v. During 1967/68 all the class were fitted with air braking facilities, with the associated hose connections on the nose ends.
- vi. During 1970/71 all the class were fitted with ETH [electric train heating] with it associated front-end cables.

The Deltics were fast and impressive machines but they were costly to purchase and expensive to maintain. They were also non-standard and when the Class 43 High Speed Trains were introduced on the ECML from 1978, their days were numbered. They were relegated to secondary and stopping services and they were even photographed working freight trains! Withdrawal from service was completed by the end of 1981. Six of the class have been preserved, although all are not as yet operational.

3 Models

The notes then give a comprehensive listing of models that have been or still are available in the various scales.

4 Useful References

A list of references is then given to assist those modellers who require to know more.

Ron Fryer – showed his new model from Hornby R2785 Railroad edition, OO BR Class 9F 2–10–0 *Evening Star* in BR green. At £56 it is a steal! Now, with the motor in the actual locomotive, it pulls like the proverbial bull! His next showing was of two books:–

- *Mallard* by Don Hale [published by Aurum Press]
- *British Steam Engines* by several authors [published by Igloo Books]

Ron Richards – showed us the Hornby R6367 Railroad edition, OO Pack of three EWS Coal Wagons. He also showed us three books –

- *The Call of Steam* by Robert Adley [published by Blandford Press]

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- *The Railway Magazine Miscellany. 1897–1919* [edited by Henry Maxwell, published by Allen & Unwin]
- *Excerpts from The Railway Magazines* of those years.

Alan Porter – first showed us a book – *The Book of the BR Standard Class 5 4–6–0s* by Ian Sixsmith [published by Irwell Press]

His next item was a 37–075N OO Bachmann pack of 3 Northern Co–op Private owner wagons [produced exclusively for the NRM]

Kelvin Davis – showed us the new OO cosmetic centenary poles, etc. from Dapol followed by –

- B501–A Dapol OO model of a BR Cattle wagon.
- R4521 Hornby OO BR Gresley Suburban Lavatory Composite coach in Maroon
- ? Hornby OO BR Gresley Suburban Third Class Coach in Maroon
- A wagon storage box from Cheltenham Model Centre, UK. At £5 each in kit form.

Great Western Railway Modellers Special Interest Group – The subject for the January meeting was Other Companies Vehicles running on the GWR.

1 Introduction –

After the abandonment of the broad gauge, the whole of the GWR system became compatible with the standard gauge of the other railways of England, Scotland and Wales. From then onwards, there was no hindrance to through working of rolling stock from the other companies lines to those of the GWR, thereby removing the need for trans–shipment of passengers and goods as had been necessary when there was a gauge difference.

2 Locomotives –

Apart from the need to learn the road of another company's route, it was very rare for a foreign locomotive to appear on GWR metals. One well–known example was the Exeter to Plymouth route. The GWR's route was subject to interruption by high tides and heavy seas breaking over the sea wall en route to Dawlish, whereas the SR's route went inland over much of Dartmoor and was subject to difficulties when there was a heavy snowfall in a harsh winter. In these circumstances, it made sense for the GWR enginemen to know the SR's route and conversely the SR's enginemen to know the GWR's route, thus ensuring both services could be maintained.

On the rare occasions when a foreign locomotive might venture onto GWR metals in a one–off situation such as the Royal Train or the Funeral Train of a notable personage [eg. Sir Winston Churchill] a GWR footplate–man who knew the route would travel in the cab of the foreigner to oversee the driver.

In general operations there would be a change from the foreign locomotive and its crew to a GWR locomotive and crew at those junctions where the two companies systems met.

3 Coaching Stock –

Apart from those described above, complete cross–country trains of foreign coaching stock were not all that common [nor, it must be said, all that rare!] on GWR metals. There was a working from Bradford, through Leeds, Sheffield, Derby, Birmingham and Bristol Temple Meads [*The Devonian*] with the change from an LMS locomotive to a GWR locomotive taking place at Bristol Temple Meads to take the train onto Paignton. So, yes in the summer, it was possible to see a rake of LMS

coaches being hauled by a GWR locomotive to the south–west seaside resorts – or the reverse heading for Bristol Temple Meads, prior to changing to a LMS locomotive to head back to the delights of the Yorkshire mill towns!

There were occasions where a single foreign coach [a through coach] might be picked up at a junction where two companies systems met finally being added to a train of GWR coaching stock hauled by a GWR locomotive. A good example of this was the Aberdeen to Penzance summer working through coach – it was detached and re–attached at Edinburgh Waverley, then at York, and again at Swindon. It took 21hrs 25min. for the 794–mile journey from Aberdeen to Penzance, and average speed of 37mph! Hope it was a corridor coach!

4 Freight Stock –

After the broad gauge was abandoned and before the Great War [WW1], through running of freight vehicles to and from the GWR system was feasible but each company tended to treasure its own wagons and vans. They recognised that it was better to allow a shipment of goods to be carried in the same vehicle from its source to destination than to have to trans–ship the goods at the border. However, the vehicle had to be returned to the owning company asap [or maybe faster!] – this deadline was five days after completion of its discharge otherwise a fine could be imposed through the Railway Clearing House. For example a L&NWR van carrying goods to Penzance would have to be returned to its home metals [probably Wolverhampton] within five days. Very occasionally a suitable load for delivery in L&NWR territory might be found but usually the van would travel back to its home ground EMPTY! This, then, was the scene on the GWR until 1916. It is estimated that before 1914 empty wagon mileage comprised about 33% of total wagon mileage.

This all changed in 1916. Facing the economic pressures of the Great War, the Government encouraged [more likely forced] common user agreements to be struck between various pre–Grouping companies. Under these agreements, the nominated wagons of all the participating companies could be used by any one of the companies as if they were all actually owned by that company. The benefits, brought about by the pressures of WW1, were seen as worthwhile and these war–time agreements continued after WW1 and further common user agreements were entered into by the pre–Grouping companies and later by the Big Four. By a system of daily records taken by the Railway Clearing House checkers of common user vehicles passing from one company to another, each company had its own share of the pool conserved by means of a twice–weekly balance – a penalty of three shillings per day was incurred by a company retaining more than its share of the pool.

As a consequence of the common use of unfitted merchandise wagons and unfitted covered vans, empty wagon mileage was reduced from 33% in 1914 to 16% in 1924.

So, a bucolic GWR branch line of the 1920s and 1930s should **not**, as some GWR enthusiasts think, be served **entirely** by GWR branded vehicles. To model the GWR freight wagon scene, we will have to know quite a lot about the open merchandise wagons and the mineral wagons of the other Groups as these comprise over 70% of the wagons that might appear in the **average** goods yard of the GWR.

The Notes then give livery details of the LMS, LNER and the SR in some detail.

5 Brake Vans –

Like the locomotives, other companies brake vans rarely ventured onto GWR metals. When a freight train from one of the other companies moved onto GWR metals both the locomotive and the brake van were removed to be replaced by a GWR locomotive and brake van and a GWR goods

Where we meet and when

All meetings are held in the Branch's Clubrooms at 24 Moojebing Street, BAYSWATER [opposite Paddington Street]. The Clubrooms are open as follows for programmed meetings:-

Evening meetings	–	Monday to Friday from 2000 to 2230
Daytime meetings	–	Tuesday from 1000 to 1500
	–	Saturday from 1330 to 1700

Members are invited to make a gold coin donation at each meeting to cover some of the general operating expenses of the Clubrooms and this entitles members to free hot drinks and a biscuit or two. Cool drinks are available at a modest price.

Programme

Note 1. The numbers in brackets alongside the day name indicate the housekeeping duty to be completed **before** the meeting activity starts.

Note 2. The meeting on the first Monday of each month will start at 2000 with a short briefing by one or more Management Committee Members on recent resolutions by the Management Committee plus planning for future events – community displays and exhibitions for example. This will be followed by the opportunity for Branch members to show recent model purchases and to notify other members of forthcoming railway/model railway events. The programmed Guest Speaker/Topic will start promptly at 2030.

Note 3. Information regarding contact persons, etc. for Special Interest Groups is given in the **Around the SIGs** article.

April

Monday	2	Topic Meeting – topic to be advised
Tuesday	3 [4]	Daylighters Group – daytime meeting
Wednesday	4 [5]	LMS Special Interest Group meeting –
Friday	6	Good Friday - Public Holiday - No Meeting
Saturday	7 [6]	The Branchline assembly – includes pre-Exhibition material General Activities
Monday	9 [7]	Easter Monday Public Holiday S Scale Special Interest Group meeting – Modelling hints, bring and show, Exhibition update and train running on <i>Swan View</i> .
Tuesday	10 [8]	Daylighters Group – daytime meeting Large Scale Special Interest Group meeting
Wednesday	11 [1]	DCC Special Interest Group meeting – venue AMRA clubrooms
Friday	13 [2]	N Scale Special Interest Group meeting – General Activities

Saturday	14	[3]	General Activities
Tuesday	17	[4]	Daylighters Group – daytime meeting
Wednesday	18	[5]	Great Western Railway Modellers Special Interest Group meeting – GWR 0-4-2T locomotives
Friday	20	[6]	N Scale Special Interest Group meeting – General Activities
Saturday	21	[7]	General Activities
Tuesday	24	[8]	Daylighters Group – daytime meeting
Wednesday	25	[1]	ANZAC Day - Public Holiday British Railways Special Interest Group meeting – BR Locomotive head codes steam and diesel
Friday	27	[2]	N Scale Special Interest Group meeting – General Activities S Scale Special Interest Group running night. Bring a train and run it on <i>Swan View</i> .
Saturday	28	[3]	Exhibition equipment checks General Activities

May

Tuesday	1	[4]	Daylighters Group – daytime meeting
Wednesday	2	[5]	LNER Special Interest Group meeting –
Friday	4	[6]	N Scale Special Interest Group meeting – General Activities
Saturday	5	[7]	Exhibition equipment checks Electrician available 1330 to 1630 for cable testing and tagging General Activities
Monday	7		Topic Meeting – topic to be advised
Tuesday	8	[1]	Daylighters Group – daytime meeting Large Scale Special Interest Group meeting
Wednesday	9		DCC Special Interest Group meeting – venue Naval Base
Friday	11	[2]	N Scale Special Interest Group meeting – General Activities
Saturday	12	[3]	Exhibition equipment checks Electrician available 1330 to 1630 for cable testing and tagging General Activities
Monday	14	[4]	S Scale Special Interest Group meeting - Exhibition up-date. Bring and show your current modelling project, not necessarily finished
Tuesday	15	[5]	Daylighters Group – daytime meeting

Friday	18	[6]	N Scale Special Interest Group meeting – General Activities
Saturday	19	[7]	Exhibition equipment checks General Activities
Tuesday	22	[8]	Daylighters Group – daytime meeting
Wednesday	23	[1]	Great Western Railway Modellers Special Interest Group meeting – GWR Minks
Friday	25	[2]	N Scale Special Interest Group meeting – General Activities S Scale Special Interest Group running night. Bring a train and run it on <i>Swan View</i> .
Saturday	26	[3]	Exhibition equipment checks Stow loose items in transport containers General Activities
Tuesday	29	[4]	Daylighters Group – daytime meeting
Wednesday	30	[5]	British Railways Special Interest Group meeting – BR Class 30, 31 Diesel Electric Locomotives
Thursday	31		0730 load Exhibition equipment at our Clubrooms then off loading at the Showgrounds and setting up.

June

Friday	1		Exhibition set-up 0830 to 2000
Saturday	2		Model Railway Exhibition – open to the public – 0930 to 1630
Sunday	3		Model Railway Exhibition – open to the public – 0930 to 1630
Monday	4		Model Railway Exhibition – open to the public – 0930 to 1600 followed by take down
Tuesday	5		0730 load equipment at the Showgrounds and off load at our Clubrooms and put away .
Friday	8		N Scale Special Interest Group meeting – General Activities
Saturday	9		General tidy-up of Clubrooms and General Activities
Monday	11	[6]	S Scale Special Interest Group meeting – Exhibition de-brief. Bring and show and train running on <i>Swan View</i> .
Tuesday	12	[7]	Daylighters Group – daytime meeting Large Scale Special Interest Group meeting
Wednesday	13	[8]	DCC Special Interest Group meeting – venue AMRA WA Clubrooms
Friday	15	[1]	N Scale Special Interest Group meeting – General Activities
Saturday	16	[2]	General Activities

Tuesday	19	[3]	Daylighters Group – daytime meeting
Wednesday	20	[4]	Great Western Railway Modellers Special Interest Group meeting – GWR Road Vehicles and Aircraft
Friday	22	[5]	N Scale Special Interest Group meeting – General Activities S Scale Running Night - informal train running night. Bring a train and run it on <i>Swan View</i> .
Saturday	23	[6]	The Branchline assembly – includes exhibition reports and AGM material General Activities
Tuesday	26	[7]	Daylighters Group – daytime meeting Large Scale Special Interest Group meeting
Wednesday	27	[8]	British Railways Special Interest Group meeting = BR 16 Ton mineral wagons
Friday	29	[1]	N Scale Special Interest Group meeting – General Activities
Saturday	30	[2]	General Activities

(Continued from page 15)

guard would take charge of the train.

New Acquisitions –

Ron Fryer – showed the Oxford Diecast OO model made especially for the 2011 Great Dorset Steam Fair after which it was released generally. It is a model of Quo Vadis probably the most famous Showman's steam engine of all time, which was built by Burrells. He next showed us two books –

- *Lost Railway Journeys* by Paul Atterbury [published by David & Charles]
- *The Power of the Kings* by Laurence Waters [published by OPC]

He finally showed us a 50+page spare parts catalogue from East Kent Models. It comes in three parts –

- Tri–ang, Tri–ang Hornby and Hornby spares made in Margate, UK.
- Hornby spares made in China
- Spares for Bachmann, Vi–Trains, Lima. Dapol and others [Romford wheels and parts, Flushglaze, Springside and HMRS Transfers].

Ron Richards – showed a small box that cost him \$3. Very handy size for small wagons, kits etc.

Steve Rayner – showed his new OO set that he bought for his birthday/Christmas present, a Hornby Duchy Set [7036 *Taunton Castle* in BR green and three Mk1 coaches.

Doug Firth – showed us a Cararama OO model of an Austin Healey 100/6 Cabriolet, a Bachmann

GWR 20-ton Toad Brake Van and a Ratio kit of a GWR Toad Brake Van.

Doing Things –

Ron Richards – has been detailing two GWR Railcars, adding screw-link couplings, weathering etc.

John Brenchley – in keeping with the theme for the evening showed a selection of non-GWR wagons all from 2mm Scale Association kits. These completed kits feature plastic bodies and etched nickel silver chassis –

- GER cattle wagon in LNER livery
- SR cattle wagon – diagram 1529
- SR 8-plank open wagon – diagram 1398

He next showed us four more wagons in various stages of completion –

- LNWR dia. 88 van – an all nickel silver etched kit which was awaiting painting in LMS livery
- MR 5-plank open wagon to dia. 299 – plastic body on an etched chassis awaiting painting in LMS livery,
- MR 3-plank open wagon to dia. 305
- LMS 5-plank to dia. 1666 – plastic bodies that had not been started yet.

Alan Porter – showed us some of the milk tank wagons he is upgrading.

Doug Firth – is converting all his stock [GWR and Sn3½ etc] to Spratt & Winkle couplings [or screw-link couplings for coaches].

S Scale Special Interest Group's February meeting was very well attended by 31 AMRA members who were treated to topics and activities which were interesting and informative to those who take an active interest in the modelling of the WAGR and MRWA in S scale.

The formal part of the meeting began at 2030. Graham Watson spoke briefly of the sad passing of member Rex Vellender and the funeral which took place on Friday 3 February and was attended by a number of AMRA members who were old friends of Rex.

Rex was a very good modeller of the WAGR in S scale despite coming to the hobby late in life after being a successful modeller of boats and planes. It is possible that his S scale collection will be preserved intact for members to appreciate. An Obituary and acknowledgement of Rex's long and rewarding life can be found elsewhere in this edition of *The Branchline*.

It was proposed that the first S scale workshop for 2012 be held at AMRA WA Branch's Clubrooms on Sunday 18 March between 1000 and 1500. All members are invited with the only stipulation that it be a modelling day and not a talkfest.

Members are advised to bring a project or a kit where they have at least opened the package, as well as the tools and bits they need to work on getting the job done.

Murray Hartzer advised that, in the absence of any other offer, he is willing to exhibit *Parkerville* as the S scale layout at this year's Exhibition – thanks Murray. There will also be a Modelling Desk, a Railwest exhibit and a United Modellers exhibit, hopefully all situated in the same precinct as in

previous exhibitions.

Graham informed members of a small run of 20 Y class loco kits which may soon come available to members but that problems have been occurring with some of the castings done in a batch of Barnes' Ezycast. Discussion ensued regarding the problems of sweating urethane castings, possible causes and matters relating to storage and painting. It is advisable not to leave castings for too long in sealed plastic bags but to remove, assemble and paint them ASAP as was intended. Unpainted urethane castings left in sealed plastic bags may deteriorate over time.

Six members brought along some general items to show others what they have been doing.

Rob Clark showed his first ADF Wildflower class name-boards and sought expressions of interest from those who have a Wildflower set.

Murray Rowe also showed a labour-saving and time-saving decal sheet with complete letters and numbers for the various classes of GE and GS wagons he has been modelling, anyone interested should talk to Murray.

Doug Firth showed the goods shed he has been modelling in Manilla card. The shed is similar to the one at Harvey and there were quite a few of this type on the system. Doug also showed his kit-built models of a WAGR U class locomotive and a MRWA Bm covered wagons of which fifteen were built.

Alan Penstone showed his Railwest S class loco and a steel girder bridge he has built for his layout.

John Bajkowski showed the group a number of samples of grain carried from CBH bins to the various ports on the system. The samples included wheat which John informed us was not tarped until 15 March [the Ides of March]. All other grains, known as course grains were and are always covered and include oats, barley, lupins, malt barley and chick peas. A very interesting short talk, thanks JB.

Finally **Neil Blinco** showed a finished AZ, his recently completed G class kit, his X class Models U class kit and a completed AY with all the windows finished and glazed. Neil has also been working on a way of casting sides of the AZ which minimise the problem of removing the windows after casting, and prior to assembly.

The Topic for the evening was guard's vans of the WAGR/MR in S scale. Nine members showed 27 guard's vans of various types, some scratch-built, others assembled from Railwest kits.

Neil Blinco demonstrated that not all guard's vans were Z vans with his showing of an AYF suburban coach with a guard's compartment. He also showed a scratch-built Z van, a Railwest models kit of a ZJ express guard's van, a ZB from a GA Models kit and Z9 which Neil may release as a kit.

Doug Firth showed an example of a Railwest Z van multi-piece kit and an example of a ZJ with a roof made from card.

Alan Penstone showed his scratch-built example of Z156.

Ray Cooper showed three brown Z vans all from Railwest kits. Two were from multi-piece kits and one was from a one-piece urethane casting.

Paul Tranter showed five examples of Sn3½ Guard's vans, two from the Commonwealth Railways, known more as relay cars. Paul also showed a ZJ with end doors as used on the Australind, a Z van from a 6-piece kit by Adrian Gunzberg and a van from a kit by Railwest Models.

Murray Hartzler showed a single Z van from a Railwest multi-piece kit which was awarded best model of a WA prototype at a ModelRail event.

Kelvin Davis showed his Railwest Z van numbered 630 with a simulated canvas roof and a partly completed AD coach which will run on his class 24 layout of the Upper Darling Range Railway which Kelvin is currently researching.

Stuart Mackay showed six of his Z vans. The first was a scratch-built Z9 which is preserved and in the ownership of the HVR, Z42 which was made from brass and had a clerestory roof, Z512 from a one piece kit from Railwest Models, a scratch-built Z107 and both 4-wheel ZF's, 440 and 441, one green from a Railwest kit and one scratch-built and painted brown.

Graham Watson showed us three examples of Z vans of a number of vans he has in his collection. The first was ZJ 239 with a cool storage compartment, a brass Z van with a clerestory roof and Z148.

Thirty nine members attended the March meeting. Graham Watson reminded members of the modelling workshop on Sunday 18 March starting at 1000 at the AMRA WA Branch clubrooms.

A number of items of a general nature were brought and shown.

Doug Firth and **Kieran Wright** both showed their finished models of the MRWA Bm car kit from X-class Models. Kieran painted his blue-grey including the roof. He then weathered his Bm with weathering chalks. Doug reported that he recently spoke to Barry Peacock who worked for the MR and he said to the best of his recollection, MR vans were not painted tan on the roof as were WAGR wagons but they were probably a shade of the blue [possibly Humbrol No. 96] but weathered by the elements and the soot from locomotive; in other words a shade darker than the sides such, as No. 67 or a similar colour as Doug has used. Kieran concurred with his very weathered charcoal roof.

Graham drew the attention of those at the meeting to the late Rex Vellender's collection of S scale models. They are currently being housed in a glass cabinet in the conference room. Graham also advised that the WAGR Y class kit is soon to be released.

The meeting was billed as a slide night. Graham Watson again invited well-known WA railway historian Jeff Austin, our guest of honour, to show us a range of slides he has taken over the years. Jeff has a remarkable memory and he demonstrated this by identifying the location and the features of railway places of interest in approximately 100 featured slides, many of which dated back to steam days of the early 1970s.

Jeff's carefully selected group of slides featured station and railway buildings and infrastructure rather than locomotives, carriages or wagons, though many vehicles could be seen on many of the slides. Jeff showed that not all signals were tall, not all sheds were identical but that there was a consistency in the design and pattern of the buildings which could be seen all over the system.

Jeff commented on this standardised nature of the WAGR structures which meant that they were familiar items on the system regardless of the location, whether it be Dumbleyung, Goomalling or Wongan Hills. Sadly much of the railway infrastructure is gone but thanks to people like Jeff we have an extensive record of the way the railway looked in the middle of the twentieth century.

In a piece of late news – the first modelling workshop – seventeen members assembled kits or scratch-built models. It was an enjoyable day with lots of cooperation and discussion. Many ideas and tools were exchanged.



Some of the happy modellers exchanging ideas, etc.
during the modelling workshop

A brief but informative talk was given by Graham Watson on the location and fitting of under-floor detail on WAGR wagons and vans. Another workshop will possibly be held later in the year. Perhaps the best feature of these workshops is the opportunity to gain advice on the location and assembly of detailing parts, on-the-spot, so to speak, as all the attendees had a range of experience of modelling in this scale.

The S Scale Special Interest Group is a very active group of AMRA modellers which meets on the second Monday of every month at 2000 in the AMRA clubrooms in Moojebing St, Bayswater – visitors are always welcome. Contacts: Graham Watson on 9250 1084 or Stuart Mackay on 08 9310 3858 for information about the S Scale Group.

British Railway Special Interest Group – the subject for the February meeting was BR Powder Handling Wagons.

It should be noted that owing to computer problems Alan could not produce the notes that he intended. Therefore these notes are, in fact, the February 2003 Notes regurgitated.

1 What Is A Powder?

We know that a powder is a material with a very fine particle size, either occurring naturally or produced by mechanical, chemical or other man-made means.

Pulverised coal for use in power station boilers typically has a particle diameter of about 0.003 inches. A lump of coal weighing one pound has a volume of about 22 cubic inches and a surface area of about 48 square inches. When pulverised to powder form, one pound of coal is transformed into about 1,000,000,000 particles with a total surface area of about 50,000 square inches. The increased surface area allows for much quicker combustion when mixed with about 10 pounds of air.

One thing which is common to all powders is that they flow less well, if at all, when wetted by water so their common feature is that they are transported and stored under cover. For the railways, under cover means in a van [or, less satisfactorily, under a tarpaulin sheet] for powders packaged in bags or boxes, and in a covered hopper wagon with bottom discharge for bulk powders.

Bulk handling of powders was not a common feature of pre-WWII life and transport of packaged powders in covered vans was adequate. After WWII, the efficiencies to be gained by bulk handling of materials, including powders, came to be realised and this was about concurrent with the nationalisation of the railways into British Railways.

2 L Type Containers

The first BR effort at handling bulk powders were the 4-ton capacity L Type containers, of which 6,368 were built between 1951 and 1961. Designed to carry lime or cement, they were loaded through a top hatch and as the bottom consisted of two hinged doors the contents just fell out when the doors were opened.

Tri-ang Railways produced quite good models of these L Type containers in 1963 as a load for their R340 Three Containers Wagon in OO, the container wagon being itself less good with an incorrect wheelbase and a solid instead of a skeletal floor.

3 Presflo Hopper Wagons

Conventional hopper wagons with relatively small hopper doors did not allow fine grained powders like cement to empty out completely, so the first BR bulk powder wagons, introduced in 1954, were the 20-ton Presflo covered hoppers where discharge of the powder to a road vehicle in a goods yard was assisted by air supplied from a mobile compressor. Including the prototype 1,921 Presflos were built between 1955 and 1961 [the last 100 being rated at 22-tons capacity]. In addition Associated Portland Cement had over 200 identical Presflos built for their own exclusive use. Airfix introduced their bright yellow plastic OO kit for the Blue Circle Presflo cement wagon in 1960 for 2/0d [10p]. It is still available as a Dapol kit [C040] now costing around £5. Wrenn also produced several models of Presflos and they now sell for around £20 in good condition.

4 Prestwin Hopper Wagons

To overcome the hold-up of the powdered material, particularly cement, in the right-angled corners of the Presflo, the circular and conical shaped twin hopper Prestwin based on continental practice was developed, 31 being built in 1960. A further 100 were built in 1961 but they were 2ft longer in both wheelbase and frame length. As the demand for cement dropped off in the 1970s, the Prestwins were then used mainly on sand and alumina traffic from Burntisland to Fort William.

Forty similar twin hopper wagons were built in 1960 with a 23ton capacity for calcium carbide traffic but these were gravity discharge wagons not having all the air piping that the air assisted discharge Prestwins had.

Airfix produced a OO plastic kit [still available as Dapol C043] and Hornby Dublo produced a RTR

model [Cat. No. 4658] in 1962. After Hornby Dublo's demise the model appeared in the Hornby Railways 1978 catalogue as R125 but soon after Wrenn took over the tooling and continued to produce the model as W4658. In 1980, Hornby introduced OO RTR model [R723] which looks rather like the earlier Hornby Dublo, Wrenn and Hornby [R125] models.

5 Bulk Grain Hopper Conversions

Ten vacuum piped bulk grain hopper wagons built in 1959 were modified for air assisted discharge. These wagons were used for crushed limestone traffic.

6 CEMFLOW Bulk Powder Wagons

These air assisted discharge wagons carried horizontal, cylindrical hoppers with a square discharge vent enabling only discharge into a receiver between the tracks and below rail level. Two batches, totalling 285 wagons, in 1961/62 and 1964/66 for bulk cement traffic travelling from Kent to Uddingston, near Glasgow using the ECML. Unfortunately they were unstable at speed and a derailment near Thirsk, which led to the destruction of the diesel prototype DP2 on an approaching train, led to their relegation to local duties, mainly around Derbyshire.

Hornby produced a OO RTR model [R564] in 1966 with a grey body and in 1972 with a yellow body. Unfortunately, Hornby used a standard underframe which was not at all like the real thing and with the solebar plate outside of the solebar, these wagons were too wide.

7 Depressed Centre Bulk Powder Wagons

Metropolitan Cammell took a lead role in the redesign of the LA type wagons [Cemflow], lowering the centre of gravity by adopting a chevron shaped container with a depressed centre, with air assisted bottom discharge through a chute, and with an improved suspension, these proved very successful. The design was also adopted for use in twin form on bogie underframes, these wagons being built in 1969.

Hornby have produced OO RTR models of the depressed centre 4-wheel wagons in 1997 [R6026 and R6027]. Lima produced, in OO, a RTR model of the PCA depressed centre Presflo Tank Wagon in six different liveries. They have also produced a model of the bogie twin depressed centre wagons in two liveries.

8 Other Four Wheel Bulk Powder Designs

Following the problems with the Cemflow wagons, other builders came up with different designs. Some of these looked remarkably like oil tank wagons, except that the bottom discharge chute is prominent. These are –

- The 36 wagons built by Installation MC in 1972/3 for Tunnel Cement.
- The 60 Tip-air wagons [with a piston at one end to tilt the tank] which were owned by Railease and hired to ICI.
- The 20 ALGECO of Swedish origin and built by Interconsult in 1965.
- The 62 Powderjet wagons of French design.
- The 25 Charles Roberts wagons built in 1973 which were owned by Procor and leased to Rugby Cement to replace BR Presflos.
- The 18 wagons leased by Proctor & Gamble for their tripolyphosphate traffic, and there were others.

Many of these looked very much like the 4-wheel tank wagons of the same period and it would not be all that difficult to modify one to a 4-wheel bulk powder wagon of the 1970/80s – any of Hornby's R032, R119, R148, R218 or R6001.

There were also a few French twin hopper wagons used on the Continent which were transferred to Britain in 1986 where they were cut down to bring them within the UK loading gauge. There are some HO models of such twin wagons that might be suitable as a starting point for modelling one of these.

9 Bogie Bulk Powder Wagons

Apart from the bogie depressed centre wagons, there were other bogie cement wagons which also looked like the tank wagons of the era, eg. the 36 wagons built by Standard wagon in 1982.

10 Covered Hopper Wagons

Certain finely ground materials can be satisfactorily discharged from hopper wagons by gravity, especially if the entire bottom of the hopper can be opened in the same way as the L type containers. These are in many cases still regarded as powders and can be spoiled if allowed to be exposed to water. However, consideration of these is probably beyond the parameters which were intended for BR Powder Handling Wagons.

New Acquisitions –

Kelvin Davis – showed a BR[M] Suburban non-corridor 57ft OO model of a coach. He asked us to guess who made it. It cost Kelvin \$10!!! What a bargain! He eventually told us that they were made by Dapol and **no** glue is required to assemble the kits. What is more, there are three different coaches –

- C95C – Composite Brake – Midland
- C96C – Stanier 57ft Brake Coach – BR [He assembled it in five minutes as we watched]
- C97C – Stanier 57ft non-corridor Composite – LMS

He also showed a Bachmann OO model of a 2-car DMU Set [Derby Lightweight] with half yellow ends.

Trevor Batchelor – showed us a secondhand book that he bought for \$5. *The Story of British Railways* by Barrington Tatford [published by Sampson Low, Marston & Co 1945]

Steve Rayner – brought along two N Gauge Society models of the 25-ton Queen Mary Brake Vans [1 x SR and 1 x BR], made for the Society by Graham Farish.

Ron Richards – showed us two items of rolling stock –

- Dapol OO Class 22 Diesel Electric locomotive in BR green [He actually bought two]
- Bachmann OO 16-ton BR Steel Mineral Wagon [of which he bought four!]

Doing Things – nobody appears to be doing anything that they could bring and show us.

Great Western Railway Modellers Special Interest Group – the subject for the February meeting was GWR Viaducts.

According to various dictionaries the difference between a bridge and a viaduct is –

- a. a bridge is a *structure carrying a road or path across a stream, a ravine, a road etc.*
- b. a viaduct is a *bridge-like structure carrying a railway or road across a valley or a dip.*

So, having sorted that out, let's look at the GWR's viaducts – but which ones? The *Atlas of the GWR 1947* by R.A. Cooke lists some 384 viaducts in the GWR in 1947. A copy of that list is included in the Notes.

The Great Western Railway's viaducts fell into three groups –

- those constructed of timber on stone piers or timber trestles on piles
- those constructed of bricks, masonry or concrete
- those constructed of iron or steel, possibly with brick or stone piers.

Those constructed of bricks, masonry or concrete constituted the majority, with iron or steel taking second place due to them being more expensive materials with which to build in the first instance.

By 1947 timber viaducts had almost completely disappeared, although the crossing of the Afon Mawddach at Barmouth was still a structure in use with timber piers [or piles] as was evidenced by the attack on them by the marine teredo worm in the 1980s.

The GWR Timber Viaducts –

These are usually identified with Isambard Kingdom Brunel [1806–1859] who was a civil engineer *par excellence* and are usually associated with his position as Engineer for both the Cornwall Railway and the West Cornwall Railway. But Brunel had pioneered the use of timber before then – on nine viaducts on the Swindon–Gloucester line in 1842, on five large viaducts on the [then atmospheric] South Devon Railway west of Newton Abbot in 1846, on some viaducts on Italian railways in 1847, on three viaducts at Chepstow, Newport and Landore on the South Wales Railway in 1848 and on the Vale of Neath Railway.

In the late 1840s/early 1850s most railway engineers were making considerable use of cast iron beams in bridges and viaducts but Brunel was the exception. He did not trust the material as a beam and used it only rarely.

With Brunel's historical background and an appreciation of the topography of the countryside through which the various lines ran, it is easy to see why Brunel produced eight different designs for the thirty-four timber viaducts on the Cornwall Railway's 53 mile main line from Plymouth to Truro, eight on the 11 mile Falmouth Branch and nine on the West Cornwall Railway's 27 mile main line from Truro to Penzance – 51 viaducts over a distance of 91 miles or one every 1.8 miles, with a total length of 5.83 miles – viaducts constituted one–sixteenth of the length of the lines!

The different designs are described on page 6 of the Notes where it can be seen that six of the eight designs were of the classic Brunel fan type.

The Notes then give a detailed account of the types of timber used, where it was obtained from, the different standard sizes that it was sawn and just what those sizes were used for and the two methods of preserving the timbers. Outline sketches of the eight types of viaduct are shown on page 7 of the Notes along with further information.

The GWR Masonry Viaducts –

Probably the masonry viaducts built by the GWR did not differ all that much from those built for other railways, apart from the types of stone used. There is a good selection of photographs of GWR masonry viaducts in Reference B [*A Pictorial Record of Great Western Architecture* by A. Vaughan OPC 1977]. In Reference A there are a number of photographs of Brunel timber viaducts either being converted or on completion. [*Brunel's Cornish Viaducts* by John Binding A.T.P. 1993]

The GWR Iron and Steel Viaducts –

The most notable ferrous viaduct in the Great Western Railway's system was that crossing the Ebbw Vale at Crumlin on the Newport, Abergavenny & Hereford Railway's Quakers Yard branch. Built in 1857, it was 193ft. 6in. high and 1,650ft. in length, it was the highest and longest ferrous viaduct in Britain.

Models –

Apart from that built by Roger Solly on our Branch's Ebford Regis layout, possibly the most famous model of a Brunellian timber viaduct is that in the Dartmoor Scene built by the late Guy Williams and which is an attraction at the Pendon Museum. A photograph of this model is included in the Notes.

A full set of the Notes is available on request. They contain far more information than these summarised notes. Thanks once again to Alan for providing the very interesting Notes.

New Acquisitions –

John Brenchley – showed us a new book [actually a reprint of an original OPC book] now published by Noodle Books – *An Illustrated History of LMS wagons – Vol.1* by R.J. Essery.

Ron Richards – showed us a Bachmann OO 3000 Class 2–8–0 locomotive R.O.D 3031 in GWR green. He next showed us a Make-a-Scene of In the Night Garden, in which there is a train[?] called Ninky–Nonk and other assorted figures. He assures us that it is compulsive viewing for all Grandparents with a two year old grandchild [ABC Channel 22 at 1830 weeknights]. You view at your own risk – **you have been warned!!!**.

Roger Solly – showed two books –

- *Thomas Telford* by L.T.C. Rolt [published by The History Press]
- *Victorian Engineering* by L.T.C. Rolt [published by The History Press]

Ron Fryer – showed us two more OO Showman's Traction Engines from Corgi –

- The White Rose of York Corgi No. DG125017,
- Winston Churchill Corgi No. DG125019

Apparently there are five models in the set, all based on traction engines built by Burrells. Hmmm, another three to go!

Doing Things –

John Brenchley – showed us an N Scale etched nickel–silver kit from the 2mm Scale Association

of a Midland Railway van dia. 357. It forms a most beautiful model but it requires a great deal of patience to make it. The sides and ends have several fine overlays that require soldering. John's work is truly exquisite.

Contact persons for Special Interest Groups are:

British Railways	Gordon Bramwell	0432 871 197
Digital Command Control	Tom Stokes	9275 4508
Great Western Railway Modellers	Roger Solly	9444 7812
Large Scale	Graham Bell	9295 4461
LNER	Steve Rayner	9379 1147
LMS Modellers	Alan Porter	9330 1848
N Scale	Neill Phillips	9403 0924
North American Railroads	Peter Scarfe	9359 2281
S Scale	Stuart Mackay	9310 3858

From the Scribe's Quill

Meeting No 355 – February 2012. The major items of business dealt with at this meeting were -

- The Treasurer advised the tax account for 31 Dec 11 has been settled. AMRA WA Branch now has the Exhibition Account in a Business On-Line Saver account which paid over \$100 interest in the first ten days of investment – a significant improvement over our previous arrangements.
- John Maker advised that our Branch had received new Membership Application forms from Federal. He also advised that new fees would apply, Joining Fee would now be \$40 and the Annual Fee, \$35.
- Ron Fryer advised that our response to the draft lease had been posted on 27 January. The City of Bayswater will now have the lease document drafted by their solicitor for signature in due course. Ron had also discussed the FESA issue with Bayswater staff and new plans were drafted for FESA by John White. These plans were submitted 15 February. The Committee passed a vote of thanks to John for his assistance.

Meeting No 356 – March 2012. The major items of business dealt with at this meeting were –

- At the start of this meeting, the President invited Graham Watson to address the Committee. Graham advised that Rex Vellender was a long time member of the Sn31/2 group and that his collection of WAGR models had been donated, intact, to AMRA WA Branch for safe keeping by Mrs Vellender. Graham suggested that the collection be displayed near *Swan View*, in a Branch cabinet that could stand some refurbishment. This refurbishment could conceivably be funded from the sale of boxes made by Rex to transport his collection. The Committee agreed to this proposal.
- After some discussion of progress on the *WesterN–Ridge* layout, the Committee decided that the *WesterN–Ridge* Layout Coordinator position should be formally replaced by a management team comprising Terry Emerson, Steve Rayner and Neill Phillips, with a simple majority determining the outcome of any issue arising. This decision reflected the wishes of the N Scale SIG passed to the Committee informally by a majority of its active members.

- *Dymock* is a new N Scale layout that was donated to AMRA WA Branch by Ron Keen. The Committee determined that the track layout as received from Ron was not to be changed and that scenery to reflect the Dymock area should be added in due course.
- The Exhibition Manager advised that both halls at RAS had been hired to house the number of exhibits for the Exhibition. TV advertising this year will be on Channel 9 and its associated stations. The general arrangements are well under control.
- Ron Fryer advised that he had been savaged by six-legged vermin in the carpet. He produced three quotes for carpet cleaning and the Committee agreed to the lowest quote of \$120 to have the carpet in the Meeting Room cleaned while Ron still had skin on his legs! FESA has finally passed the planned extension and the necessary paperwork will be forwarded to the City of Bayswater on 23 March. The grant submission needs some supporting paperwork and will be forwarded as soon as that paperwork is located.

The next few Committee meetings will be held on Thursday 19 April, 24 May and 21 June. Branch members are welcome to attend. Meetings usually start at 1930 and complete about 2200.

Membership Matters

Please note that the Federal Committee has increased the fees for membership as of the 1 March. The reason is because of the increased costs as mentioned in the Federal President's report in the Jan/ Feb 2012 *Journal*. "The Annual Balance Sheet presented by our Treasurer, Brian Tyson, shows an operating loss of \$3361.33, this is due to the increased cost of the now coloured issues of *Journal* and some of the costs involved in our 60th Anniversary celebration."

Since the last issue of *The Branchline* we welcome the following who have joined or rejoined our Association.

Christopher Rinsma,	Gooseberry Hill	1 and G
Sean Dunlop,	Forrestfield	N
Alan Meldrum,	Como	HO/OO
Ted Williams,	Guildford	
Jaqueline Measure,	Dalkeith	
Tyson Mc Lean,	Dalkeith,	
William Mc Lean,	Dalkeith	

Please make yourself known to the Duty Officer at your first few meetings. I encourage you to ask questions as there are many aspects to our Branch. Time at our Clubrooms is never wasted.

John Maker
Membership Registrar

Comparison between our Exhibition and Sydney Exhibition

Here are some things to ponder on just how other states run their Exhibition.

Sydney Commercial Rates
\$55.00 per m²
Either 2m or 3 m in depth

Perth Commercial Rates
\$22.00 per m²
Up to 4m² in depth

Semi-commercial/Kindred organisations

Max area 4m² for display purposes only,
if selling \$85.00, also \$30 m² for additional space

Screens and tables provided by the exhibitor

Barriers: all exhibits have their own crowd
control system

All free

Apart from Retail others free

Mostly supplied by AMRA WA Branch

Stand signs: Each non-commercial stand is to display details of their exhibit [scale, era, prototype and any relevant information of the layout] including the name of the person, club or association in a form easily read by viewers.

Commercial Exhibits: Stands should be completely self-contained so that they do not require any crowd barriers and be of **presentable appearance**, if tables are used their front and sides should be covered to near floor level.

Layouts: Layouts are to have a suitable covering below the viewing area to near floor level.

Exhibitors: Should endeavour to supply screens or back drops to their layouts and dividers between adjacent stands.

Note: Sydney only allows one day of eleven hours setting up, where Perth gives two full days. Maybe we can learn from other Exhibitions how they have stricter guidelines than our own.

Frans Ponjee
Exhibition Manager

Train Mountain Railroad Museum

The Museum [<http://trainmountain.org>] is a non-profit organization dedicated to the preservation of our railroad heritage. It is located in Southern Oregon on over 2000 acres of Ponderosa Pine forest in Klamath County, the home of Crater Lake National Park.

Train Mountain currently has 69,900 feet [13¼ miles] of 7½" gauge mainline track and 133,250 feet [25¼ miles] of total trackage, which includes yards, sidings, and connector tracks. In the 2004 Guinness World Records Train Mountain is recognized as the Longest Miniature Hobby Railroad.

Model Train Enthusiast Required

Tom Rohr, Casting Associate Producer for Shine Australia, is working on a TV show and is trying to find a 18–30 year old male model train enthusiast who is very intelligent and a little bit geeky.

If any member is interested in getting involved or finding out more about this request please contact Tom via email at Tom.Rohr@shineaustralia.com

Stolen Locomotive Models

Kevin Bradney's home was broken into earlier this year and several model locomotives were stolen

- Lloyds / DJH AD 60 class loco [dual motored] numbered 6029
- Lloyds / DJH NSWGR C36 class numbered 3642 [hand painted lining]
- Scratchbuilt NSW X200 shunter fitted to a Tenshodo spud numbered X212 [with

steel weights glued underneath]

- Austrains NR class in Indian Pacific colours numbered NR25
- Auscision Models EL class in AN colours numbered EL55
- Athern SD7 in Westrail colours [as a K class] [no box included]

If anyone has any information regarding the whereabouts of any of these models or finds them being advertised for sale on Ebay, Gumtree, Quokka, etc. please contact Crime Stoppers on 1800 333 000 or Kevin via email at locoman3830@optusnet.com.au

For Sale

Model Railway layout [English theme] approx 2.4m x 1.4m. Including a quantity on rolling stock, three locos and scenery items. Price \$500, ono.



Contact John Maker at jonmaker@westnet.com.au for more details and photos.