

# The Branchline



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

[www.amra-wa-branch.asn.au](http://www.amra-wa-branch.asn.au)

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## *Frans' Fatidic*

Another new term at the helm of this great branch and I would like to welcome Dave Hunter and Robert Bell as new members of our Management Committee and also to thank all previous Committee persons who were willing to be re-elected. A list of Committee responsibilities is provided in this issue of *The Branchline*.

I look forward to an exciting year ahead with a new building having been approved by the City of Bayswater. However we are still waiting for the Lotteries Commission's response to our grant application. This brings to mind that the present storeroom is partly full of books that may not be much use to our Branch and I would like to have some input from members on what to do with them. I would also like to have some input regarding the space becoming vacant and the layout of the new storeroom. Any suggestions please contact Members of your Committee or me.

We will be going to Railfest, which will be on the Sunday 14 October, to see if we can sell some more items from the deceased estates. We have been asked to take a U-drive so I need some volunteers to run it please.

BRMA Convention is being held at our Clubrooms on Friday 19 and Sunday 21 October. We are still negotiating whether some of the layouts will be required to be in operation. Branch members may be required to help set up on the 19 and 21 and help with the barbeque on the Sunday.

Thanks to those members who volunteered to go to Albany, hope you had a great time and that it wasn't too cold.

Sunday 11 November is ModelRail, volunteers will be required, please see Trevor Burke if you can help.

We have been asked by Harvey Norman at Belmont to display our *Dymock* layout for all of November and December in their window at Belmont Shopping Centre. This will be a great advertisement for our Branch. Luckily we do not have to run it for those two months as I have been guaranteed by Bob Phelps that it will run by itself with the help of some trained store staff. Anyone living within reasonable distance of Belmont Forum Shopping Centre please let me have your phone

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numbers just in case someone is required to attend to the layout.

Frans Ponjee  
Branch President

## ModelRail

As reported in the last edition of *The Branchline*, ModelRail will be held on Sunday 11 November this year. While I will be coordinating the organisation of ModelRail, unfortunately I will not be able to be there on the day as I will be in New Zealand attending a family wedding that weekend.

Fortunately, however, other Committee members have kindly agreed to step in and help on the day and I am confident that it will be a great event for members and visitors alike.

Events like ModelRail do not run themselves and I again ask for members' assistance in helping with some of the tasks required on the day. Assistance is particularly required to help staff the refreshment stand and at the front door to welcome and hand out programmes to visitors. Blank rosters with half hour timeslots will be placed on the noticeboard in the clubrooms a few weeks prior to the event to allow you the opportunity to volunteer your services for these activities at a time that suits.

Please do not leave it to the usual small number of members who volunteer each year; if we all do a bit everyone will have the opportunity to enjoy the day. As an incentive, members who have volunteered to work on the day will be welcome to enjoy a free hot dog.

Thank you to the Layout Coordinators and their teams who have already been busy readying the layouts for ModelRail. This year members and visitors will be able to see our new N scale layout *Dymock* and note the considerable progress that has been made with *The Valentine Run* and *WesterN-Ridge* layouts. If you would like to help operate the Branch layouts at ModelRail please approach one of the Layout Coordinators who I am sure will welcome your assistance.

A number of members have also been busy working on their card structure models for the modelling competition and I am sure we will enjoy seeing the results of their creative and skilled work at ModelRail.

Please invite your family and friends to ModelRail 2012. The doors will be open to Members from 0900 to set up

with visitors being welcome from 1000 to 1600. Entry by gold coin donation.

Thank you to everyone who helps out with ModelRail in any way and I hope you have an enjoyable day.

Trevor Burke, ModelRail Coordinator

## **The Ted Thoday Encouragement Award for Clubman of the Year**

### **Trevor Burke**

Trevor was born in the Western Australian town of Derby. His father was the Postmaster of a small country town which meant contact with the railways. The Burke boys had, as most boys of their age, a small Hornby train set.

When his father was diagnosed with Parkinson's Disease, Trevor and his brother were asked to build a small model railway, as Dad thought that he might be able to use it as occupational therapy. Trevor's father passed away about four years ago and Trevor inherited the layout.

When Trevor retired from the City of Perth he was presented with a model locomotive as a retirement present.

Trevor joined our Association in January 2007 and quickly made his mark, getting involved in Branch activities almost immediately. He became, and still is, a member of our Branch's Management Committee.

Trevor has organised and coordinated ModelRail for the past two years and is the Coordinator for this year's event.

He is a true Aussie, modelling purely Australian railways, including the WAGR in S Scale. Despite this Trevor has been deeply involved in bringing *The Valentine Run* HO scale American layout up to Exhibition standard.

The future of our Association and its Western Australian Branch is in good hands with people of the calibre of Trevor among its members.

## **Model Railway Exhibition 2013**

The time has come for railway modellers and kindred groups to consider displaying their hobby at the Royal Showgrounds over the long weekend of 1st, 2nd and 3rd June 2013. The Expression of Interest forms for Model Railway Exhibition 2013 can be found in this issue of *The Branchline*.

As far as possible, in the interests of minimising costs, communications this year will be sent electronically but those without e-mail facility will still be included by normal mail. Any postal or e-mail address changed since the previous Exhibition need to be updated to Graham Bell at [agrohbell@bigpond.com](mailto:agrohbell@bigpond.com) as soon as possible. If you have several e-mail addresses, please indicate



your preferred mailing address.

If you no longer want to receive e-mail/mail from AMRA concerning the 2013 Model Railway Exhibition please advise or e-mail me and so your details can be removed from the list.

Finally, and importantly, I ask that you consider how you may be able to assist with the running of the Exhibition. Preparations, setting up, running and taking down the entire production becomes much less onerous if we have more hands assisting. Members who may not visit the Clubrooms too often will be made **most** welcome if they are able to offer their time at some stage over the first six days of next June.

Graham Bell  
Exhibition Manager

## Management Committee 2012–2013

<b>President</b>	Frans Ponjee
<b>Vice President</b>	Graham Bell
<b>Secretary</b>	Neill Philips
<b>Treasurer</b>	Craig Hartmann
<b>Committee Members</b>	Robert Bell
	Trevor Burke
	David Hunter
	Garry Pilmoor
	Tom Stokes

## Responsibilities

<b>Librarian</b>	Des Edwards
<b>Librarian Assistant</b>	

### Layout Supervisors

<i>Frans River Line</i> [N Scale ]	Steve Rayner
<i>Dymock</i> [N Scale]	Neill Phillips and Co.
<i>Durham Town</i> [N Scale U–drive]	David Edgell
<i>Dunwoodie</i> [HO Scale]	Bob Phelps and Co.
<i>WesternN–Ridge</i> [N Scale]	Neill Phillips, Steve Rayner and Terry Emmerson
<i>DSF &amp; V Railroad or Oh God</i> [HO]	Craig Hartmann and Alan Burrough
<i>Ossie Gully</i> [OO U–drive]	David Edgell
<i>Haltwhistle</i> [OO]	Tom Stokes
<i>Swan View</i> [S Scale]	Graham Watson
<i>Ansbach</i> [HO]	David Edgell
<i>Ebford Regis/Port Eb</i> [O]	Dennis Ling
Large Scale	Graham Bell
TT Scale	Frans Ponjee
<i>Goldfields Woodlines</i> [HO]	Rob Kay

### Other Responsibilities

Assets Registrar	David Hunter
Assistant Exhibition Manager	Ros Bell
Bereavement Assistance	Management Committee

Branch Registrar  
 Editor *The Branchline*  
 Events Coordinator  
 Exhibition Manager  
 House Officer [General]  
 House Officer [Maintenance]  
 Paddington Market  
 ModelRail Coordinator  
 Moojebing Market  
 Programme Coordinator  
 Stores Supervisor  
 Workshop and Tool Supervisor

Trevor Burke  
 Ted Thoday  
 Trevor Burke  
 Graham Bell  
 Graham Bell  
 Management Committee  
 Garry Pilmoor  
 Trevor Burke  
 Garry Pilmoor and Duty Officer  
 David Hunter  
 Management Committee  
 Tom Stokes

## From the Editorial Desk

***The Branchline* – December issue deadline.** Routine editorial material, articles, reports, programme items, etc., to me no later than 1500 Saturday 17 November

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 1 December and will include pre–exhibition material

Please note the intended dates for *The Branchline* publication for the early part of 2013:

	<b>Editorial deadline</b>	<b>Assembly, etc.</b>
February	Saturday 26 January	Saturday 9 February
April	Saturday 23 March	Saturday 6April – includes pre-exhibition material
June	Saturday 25 May – for routine material Sat 8 June – for exhibition reports exhibition reports and AGM	Saturday 22 June – will include material

**Please note Editor's new email address** – [mandtt@virginbroadband.com.au](mailto:mandtt@virginbroadband.com.au)

Ted Thoday

## Additional Playtime

Consideration is being given to having our Clubrooms open on another day during the week apart from Tuesday Daylighters Meeting, possibly a Thursday afternoon. If sufficient interest is shown then this is a possibility.

If you are interested please advise a Committee Member or email me [lhar2223@bigpond.net.au](mailto:lhar2223@bigpond.net.au)

Craig Hartmann

## Literary Lines

The re-numbering of the modelling books is slowly progressing with the identification and removal of duplicated titles now completed. This process has also been beneficial in freeing up space in an otherwise cramped section of our Library.

New library acquisitions – Many thanks to Niels Kroyer for donations of books.

**Library** - on Saturday afternoons the Library will be **open** for receiving and issuing books, magazines and videos **from 1400 to 1630 only**.

Des  
Branch Librarian

## Have Layout, Will Travel!!



Recently Mike Thomas arrived at our Clubrooms with his layout over his shoulder – the ultimate in portable layouts perhaps!!

The layout is to HO scale and is hinged across its centre line, the hinges being hidden by the over bridge, so that the two halves of the baseboard fold together face to face.



The various building are removable and have their own cardboard carrying box.

## Around the Layouts

**Haltwhistle.** Branch members will have noticed that the Signal and Telegraph dept have been very busy putting in coloured light signals on the line leading out of Cumwaite yard and ending at Haltwhistle Station. These signals are manually operated which gives the operator a chance to be a Signalman as well as a train driver.

The Health and Safety Department have told us that passengers at Cumwaite Station are forbidden to cross the line at the barrow crossing, so a contract was drawn up with the Bridge Dept to build a footbridge linking the up and down platforms – by the time you read this we hope to have it in place.

Tom Stokes  
Layout Supervisor

**The Valentine Run.** Although Valentine performed well at the Exhibition, there are still several tasks that need attention. These include the detailing of the loco servicing area, the installation of signalling [or something that looks like an automated system], memory walk-around DC controls for the branch line and the addition of an extra line at Kingman [the large yard area]. However, attracting consideration is the possibility of increasing the layout's length by four feet [122 cm].

The original maximum dimension specifications, as determined by the then Committee, were 28' by 8'. The Jim Kelly's chosen design was [as is now] 24' by 8'. Thus, should the Valentine group elect to formalise this proposal and it gained the current Committee's blessing, the layout would be no larger than the original criteria.

Such an increase would extend trackage at four stations - Needles [town at layout front], Kingman

[the yards at the layout rear], Topock [within the centre well] and at Valentine. Extra length at Needles would extend train viewing time and the addition to the yards would enable two trains to be stored on each track [or another three coaches to a certain New York Central passenger consist].

Of even greater value of such an extension would be the opportunity of point to point running from Topock to Valentine. Leaving Valentine, one's train would travel the descending curve, follow the outer line to Kingman, circle the layout again to arrive at Needles, then progress via the helix and the crossover to enter Topock. With an increase in yardage at Valentine and at Topock, this additional running option would greatly enhance the flexibility of layout usage.

Your scribe twice emailed the retailer seeking help for the misbehaving DC walk-around handpiece – to no avail. On the third email, to your scribe's name was added NMRA Division 4 Superintendent [his alter ego]. The response was immediate, the retailer kindly forwarding a replacement free of charge.

Our sparky has added a socket which, when connected, enables one DC controller [the left hand one] to control all tracks on the layout. In this mode, the other power packs are disengaged. Hastened to depart by impending club lockup, the layout was left in this mode. Perhaps mention of this to anyone prior to departure could have been made, but given layout users tend to be the more gifted modellers [ie. U.S. followers], this was probably unnecessary.

Craig Hartmann  
Alan Burrough  
Layout Coordinators

## Railfest

Railfest is on Sunday 14 October 2012 between 1000 and 1700 at the Railway Museum, 136 Railway Parade, Bassendean. Adults \$9, Concessions \$7, Children \$4 [under 4 yrs free]

- Modern trains on display – see them close up – trains which you won't see in Perth city thanks to Transwa and CBH.
- LEGO display – with Lego trains running
- Meet the authors – the authors of many WA railway books have agreed to be present – chat to the writer or have your book signed
- Swap meet stalls – books and model trains for sale
- Model Railway Club – with behind-the-scenes visits
- Guided tours – in and behind the museum
- Kids' activities, "spot the spider" hunt!
- Sausage sizzle, railway pies, afternoon tea in the buffet car
- Pre-read books, magazines, timetables, etc
- Video and visiting displays
- Historical displays, trains

## Around the SIGs

**British Railways Modellers Special Interest Group's** July meeting topic was BR Train Compositions and Operations. [Express and stopping passenger trains and express freight, mixed freight and block freight trains].

The Compiler of these Facilitation Notes has taken the liberty of expanding the title to include the words 'and operations' to that which was decided back in 2011, when the subjects for these meetings were decided, as it has been quite difficult to separate operation of trains from their formation [composition].

## **A Passenger Trains**

### **1 Express Passenger Trains –**

Detailed marshalling instructions were issued to shunting staff for each passenger train and a few examples are –

- a No train was to be made up to more than 500tons and not more than fifteen bogie vehicles.
- b Vehicles with a brake compartment were marshalled, as far as possible, with the brake end trailing in the case of the last vehicle or with the brake end leading in the case of the vehicle next to the locomotive. However, it was acceptable under extreme duress for the brake vehicle to be located second last in the train with the brake compartment leading. The fenced off corridor past the guard's compartment still allowed access for passengers to reach the seating sections of that carriage and of the end coach. The rule governing this was that the brake compartment should be no further than eight axles from the rear of the train.
- c First Class coaches were marshalled towards one end of the train, the London end if working away from the Capital.
- d Dining Cars were marshalled between the First Class and the Third Class coaches. On long express trains, such as the *Royal Scot* [which was really two trains run together – one for Glasgow and one for Edinburgh], there would be two Dining Cars. The most common catering vehicles were the Kitchen Dining Cars which came in First Class, Third Class and Composite forms. The Notes include the various combinations of Dining Cars used according to how many passengers needed to be fed and watered.
- e Short through portions to side destinations en route were marshalled at whatever end of the train was the most convenient for detaching at the junction station. For instance, if the locomotive had to be changed at the same place as the through portion coaches, then the coaches would be marshalled at the front of the train, whereas, if the junction where the through portion of coaches was to be detached was not a locomotive changeover point, then these coaches would be marshalled at the back of the train. The composition of through portions varied but there was always a brake coach in each portion.
- f Sleeping Cars were regarded as through coaches and were usually attached to a convenient overnight service for the bulk of the distance involved. However, there were exceptions. Composite Sleeping Cars were used when there was just a sole coach working through to a small side centre or where there was the need for only one Sleeping Car in the main train.
- g Travelling Post Office [TPO] vehicles were usually marshalled at the front of the train in order to avoid the risk of injury to any passenger leaning out of carriage window coming into contact with some of the Post Office's line side set-down or pick-up gear.

## **2 Medium Distance and Excursion Workings –**

Medium Distance services usually made use of short fixed sets of gangwayed stock, either

- Corridor Brake Third/Corridor Composite/Corridor Brake Third, or
- Corridor Third/Corridor Composite/Corridor Third/Corridor Brake Third

Sometimes two Corridor Composites or an odd Open Coach would find their way into these sets. Such three–or four–coach sets could also be used in pairs to provide an additional main line express train, often with a Kitchen Car inserted.

Excursion trains generally used gangwayed Open Coaches throughout, although sometimes the odd gangwayed Composite or Brake Composite might be included. Many excursion trains, however, used non–corridor stock, often without lavatory or refreshment facilities. It was usual to find older stock [pre–Nationalisation and even pre–Grouping] in these sets. It has to be remembered that in the era before accountants took control, such sets of older carriages were used only for the busiest of the summer months and would be left to occupy carriage sidings for the bulk of the year unused.

## **3 Suburban and Local Workings –**

Stopping suburban services were generally operated by sets of non–gangwayed coaches, many of a dubious age. Pre–Grouping, pre–Nationalisation and an increasing number of BR Mk.1s and sometimes even older gangway coaches were used. The composition of these trains depended on the area in which they were used. For example in the working–class areas then they were mainly Third Class whereas in the upper–crust areas then Composites and First–Class were included.

## **4 Non–Passenger Coaching Stock –**

This was a group of vehicles that did not carry fare–paying passengers but which, with certain qualifications, were able to run in passenger trains. Having said that, vehicles such as prize cattle vans and horseboxes that came within this category usually carried stockmen or grooms to look after the animals and it is understood that they did not travel without a fare being paid.

Non–passenger coaching stock included Aeroplane Vans, bogie Parcels Vans, Corpse Vans, Covered Combination Trucks [CCTs], Covered Milk Vans, Fish Vans and Open Fish Trucks, Fruit and Milk Vans, Insulated Milk Vans, Horseboxes, Insulated Sausage Vans, Luggage and Parcels Vans, Milk Tanks [including various underframes for conveying road tank trailers], Motor Car Vans, Open Carriage Trucks, Passenger Brake Vans, Post Office Carriages [TPOs plus sorting and stowage Vans], Prize [or special] Cattle Vans, Theatrical Scenery Trucks [both Covered and open] and Ventilated Insulated Meat Vans. There were special restrictions as to just where four–wheel and six–wheel vehicles could be marshalled.

## **B Freight Trains –**

### **1 Mixed Freight Trains –**

There were rules for the placement of various types of wagon in a normal [mixed] freight train, which might consist of wagons of various types and carrying a variety of commodities and/or empty wagons calling at individual stations to pick up or drop off wagons. These trains would work out from a marshalling yard, call at whatever stations were required and return to the same marshalling yard. Some of these rules were –

- a Gunpowder Vans were marshalled as near as possible to the middle of the train.

b Loaded Cattle Wagons and Banana Vans were marshalled next to the locomotive to minimise the jolting of the animals and for steam heating of the Banana Vans to assist the ripening of the fruit.

c Oil Tank Wagons for the carriage of Class A oils [those with a Flash Point below 73° Fahrenheit [22.7°C] and painted with a red band at waist level of the tank, **or** with the solebar painted red, required two barrier vehicles marshalled ahead and behind them if they were the first or last vehicle in the train and whether empty or loaded. [*Flash Point is that temperature at which oil vaporises to an extent that it forms a flammable mixture with air if ignited*].

Class B oils are those with a Flash Point above 73° Fahrenheit and Tank Wagons used for carrying these oils did not have any red banding on the tank or solebars and, whether empty or loaded, were marshalled anywhere in the train.

d. Vacuum braked and vacuum fitted vehicles were marshalled next to the locomotive and, as far as possible, remained coupled to the locomotive when shunting non-fitted vehicles at intermediate stations to avoid excessive breaking and re-establishing the vacuum.

e A match wagon [usually a single plank wagon, ie. a low wagon] was marshalled next to a bolster wagon carrying a load of round or baulk timber or steel sections or pipes which projected beyond the headstock of the bolster wagon. Similarly, a runner wagon was marshalled next to a 5-plank wagon carrying a load of sawn timber stacked on one end of the wagon and projecting beyond its headstock.

There were also strictly defined procedures for the loading, the fastening and [where necessary] the covering of open wagons and bolster wagons. These included round timbers [logs], baulk timber, pit wood [for coal mines], sawn small section timber, steel sections and pipes, scrap metal, long sagging items [such as steel rods, rails, etc.] wagon and carriage wheels, barrels, sacks, bales [of hay, wool, cotton, waste cloth, etc.], earthenware pipes, and acids etc., in earthenware containers.

There were also rules for the use and return of wagon sheets [tarpaulins], used to cover perishable loads, including some of the loads listed above.

## 2 Block Freight Trains –

These consisted of wagons, all of the same general type and all carrying **the same commodity** [such as coal, iron ore, petroleum products, cattle, fruit etc.] from its point of manufacture, extraction or collection to a marshalling yard for sorting. In reverse, they consisted of empty wagons, again all of the same general type being returned to the same or another point of manufacture or extraction or to a marshalling yard. In some cases, the whole block train might go on to a single destination where its entire contents would be discharged. For example, coal from a colliery to a power station, iron ore from a mine site or dockside to a steel mill, petroleum products from an oil refinery to an oil storage and distribution depot, etc. The reverse of these examples would also be classed a block train workings. Requirements B.1 [b], [c] and [e] listed above, also applied to such block trains.

## 3 Trip Workings –

These were trains consisting of wagons of various types and carrying a variety of commodities and/or empty wagons from one marshalling yard to another yard without calling at any intermediate stations to drop off wagons or pick up additional wagons. Requirements B.1 [a], [b], [c] and [e]

above applied to such trip workings.

#### 4 Express Freight Trains –

Trains made up of non-passenger coaching stock were not allowed to exceed 25 vehicles in the case of milk vehicles, parcels vehicles and horseboxes with passenger coaches. If a train was composed entirely of milk vehicles, parcels vehicles and horseboxes, 30 vehicles was the maximum. Unlike freight trains where the length was quoted without a brake van, the numbers given for Express Freight trains included any brake vans that might be part of the train.

#### C. Train Movement –

The first book of Bob Essery's trilogy concluded with a very good two page chapter on how **not** to run a model railway and it is worth including in the full set of Facilitation Notes, which are available on request, so that we can all be able to say "I'm not playing trains! I'm operating my layout of a part of British Railways correctly".

#### New Acquisitions –

**Ron Fryer** – was very impressed at last month's meeting with a book Ron Richards brought back from his UK visit, on the Liverpool Overhead Railway. So much so that Ron F went home and ordered a copy from Amazon Books to be delivered [Free postage UK deliveries] to his cousin in the UK and this was included in his luggage on his return to Perth this every evening at 1710! It was still in its packaging! Excellent book.

**Alan Porter** – showed a OO Bachmann early BR 13ton high-sided open wagon in BR Bauxite [38–326]. He then showed his latest collection of Ballast wagons consisting of a Hornby BR Green SHARK Ballast van, 2 x 40ton SEALION hopper wagons that he bought from Andrew Morling at the Exhibition, 4 x Heljan DOGFISH Ballast wagons [sold as a pack] from Hattons, and 3 x Hornby TROUT Hopper wagons [pack of three] from Hattons. He has made loads for all of them and they certainly look the part.

**Kelvin Davis** – is making a new OO layout and he showed some of the rolling stock that he will use. Two Hornby V Cement tankers [weathered]. A Corgi model of a 6ton Coles Argus Crane in yellow. These were followed by 2 x Bachmann 29ton VDA Sliding door box vans – one in Railfreight Bauxite and the other in Railfreight Red/Grey livery. He next showed us a Bachmann 35ton VBA Sliding door Box van in Bauxite followed by a Bachmann OCA Dropside open wagon in Railfreight Red. His final piece of rolling stock was a Hattons Track Cleaning bogie wagon [made by Dapol]. He then moved onto locomotives that he needed and showed us a Hornby Class 87 *Britannia* in Blue, a Heljan Class 86 *The Round Table* in *Anglia* colours, and finally a Bachmann Class 85 85026 in BR Blue.

**Ron Richards** – showed us his latest book *The Story of London's Underground* by John R. Day and John Reed, published by Capital Transport. Looks very interesting indeed.

#### Doing Things –

**Steve Rayner** – showed us a Playcraft Class 21 D/E locomotive North British [Toylike] that he has detailed and repainted, fitting new buffers, couplings etc., and has generally made it quite presentable and useful.

**Kelvin Davis** – showed a Genesis W/M kit of a Nuclear Flask bogie wagon that he has made up. He has also cast, in two part resin, enough parts to make further nuclear flask wagons.

**Ron Richards** – has spent his modelling time detailing a Signal Box for his layout.

**Great Western Railway Modellers Special Interest Group's** July meeting subject was the GWR's 2-4-0 locomotives.

### 1. 2-4-0 Tender Locomotives –

In the nineteenth century, the 2-4-0 wheel arrangement was favoured by many pre-Grouping railways for express passenger work, the leading pony truck giving a degree of stability to the four-coupled locomotives when entering a curve. The NER had 90, the NBR had 8, the GER had 100, the LNWR had 328 and the MR had a massive 355! However, a leading bogie was better than a pony truck for easing a locomotive into a curve and most, if not all, of the pre-Grouping railways had more examples of the 4-4-0 wheel arrangement than of the 2-4-0 type in their express locomotive studs.

The Midland, as well as having lots of 4-4-0s, remained very much in love with the 2-4-0s, building 160 of them **after** WW1! In due course, the increasing weight of passenger rolling stock and the increasing number of coaches in the express trains led most railways, except the Midland, to the 4-6-0 wheel arrangement where the increased weight of the locomotive [mainly due to the boilers becoming larger] was spread over six driving wheels, thereby giving better adhesion.

The GWR existed both before and after the 1923 Grouping and tender locomotives with the 2-4-0 wheel arrangement were far more prominent before 1923 than after. By 1923, the 2-4-0 had long been eclipsed as a GWR main line locomotive type and those that had survived were used mostly on secondary duties in the West Country and in Central and North Wales on the ex-Cambrian lines and on light duties in the London Division. The Notes give a complete listing of **all** standard gauge 2-4-0 tender locomotives on the GWR, both before and after 1923. The purely GWR locomotives fell into two groups –

- those with double frames [shown in **bold** type in the Notes]
- those with outside bearings to the leading axle only.

There were also eleven other 2-4-0 tender locomotives of assorted parentage that became GWR property as a result of the 1923 Grouping, and what happened to these locomotives is also explained in the Notes.

### 2 2-4-0 Tank Locomotives –

The GWR is usually identified with its small tank locomotives fitted with either pannier or saddle tanks, no doubt for greater accessibility to the motion of inside-cylinder locomotives. However, the pannier and saddle tank configurations raised the centre of gravity as well as increasing the free surface of the water they contained, thus giving a greater risk of instability as speed. Hence these designs did not, generally, extend to the locomotives intended primarily for passenger services and side tank locomotives were generally favoured for this work. However, in the Victorian era, the two GWR locomotive works at Swindon and Wolverhampton had different ideas on the type of side tank locomotives for secondary passenger and branch line work. Wolverhampton favoured the 0-4-2 wheel arrangement whilst Swindon favoured the 2-4-0 wheel arrangement with its superior stability when entering a curve and it turned out 140 **Metropolitan Tanks** with that wheel arrangement between 1869 and 1899.

What was a **Metropolitan Tank**? For the first twenty-five years of its existence the GWR showed little interest in the possibilities of local London traffic, as its Paddington terminus was too remote from the business district of The City. This changed when the GWR became a financial backer in

the early 1860s of the new Metropolitan Railway running underground from Bishop's Road [adjacent to Paddington] to Faringdon Street in The City. Initially, the GWR operated the service of four trains per hour with twenty-two broad gauge 2-4-0s equipped with condensing apparatus but with no protection for the crew, as it was feared that condensation of steam on glass would obstruct the view!

Within a year, a dispute arose between the Metropolitan Railway and the GWR regarding the frequency of the service. The GWR feared a loss of money from a more frequent service and the Metropolitan Railway at very short notice took over running the service on 4ft.8½in standard gauge track.

Eventually peace was resumed between the two companies and although the Metropolitan Railway continued to run its own trains, the GWR was permitted back but only on the standard gauge, so the broad gauge rail was lifted in 1869. By this time, London suburbia was expanding rapidly and the GWR realised the need for commuter services from Hammersmith, Victoria [via the West London Line], Ealing, Uxbridge, Slough, Windsor, Reading, High Wycombe and beyond [ many of which ran to The City via the Metropolitan Railway's line] as well as local services around Plymouth and Bristol.

*(Continued on page 16)*

## **DCC Special Interest Group**

The DCC SIG meeting scheduled for Wednesday 14 November at the Naval Base venue has been cancelled.

### **Monday Night Topics**

Further to my request for Monday night topics I have listed some that will be discussed over the next twelve months or so. Please attend these meetings as the presenter has put a lot of effort in to make each topic both informative and beneficial. Without your attendance no one benefits.

Please refer to the programme for item and date of presentation. These are not in any particular order

- Track laying [both hand laid and Flexitrack]
- Point making
- Coach/rolling stock modification
- Danish State Railways
- Scenery – How to build and methods you can use
- Weathering – different techniques; for example airbrushing
- Sandstone Train event
- Locomotive Hauling – testing, measuring, etc

These are some topics that will be discussed, others will be added as presenters become available

If you have a topic you would like added to this list please let a Committee Member know and they will pass it on.

Craig Hartmann

## 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.

## October

Friday	5	[1]	<b>N Scale Special Interest Group</b> meeting – <b>General Activities</b>
Saturday	6	[2]	<b>The Branchline assembly</b> <b>General Activities</b>
Monday	8	[3]	<b>S Scale Special Interest Group</b> meeting –a second MRWA night, with slides/video of MRWA
Tuesday	9	[4]	<b>Daylighters Group</b> – daytime meeting <b>North American Railroads Special Interest Group</b> meeting <b>Large Scale Special Interest Group</b> meeting
Wednesday	10	[5]	<b>DCC Special Interest Group</b> meeting – venue AMRA Clubrooms
Friday	12	[6]	<b>N Scale Special Interest Group</b> meeting <b>General Activities</b>
Saturday	13	[7]	<b>General Activities</b>
Tuesday	16	[8]	<b>Daylighters Group</b> – daytime meeting
Friday	19	[1]	<b>N Scale Special Interest Group</b> meeting <b>General Activities</b>

Saturday	20	[2]	<b>General Activities</b>
Tuesday	23	[3]	<b>Daylighters Group</b> – daytime meeting
Wednesday	24	[4]	<b>Great Western Railway Modellers Special Interest Group</b> meeting – GWR Passenger and Goods Train Formations
Friday	26	[5]	<b>N Scale Special Interest Group</b> meeting – <b>General Activities</b> <b>S Scale Running Night</b> - Informal train running night. Bring a train and run it on <i>Swan View</i> . Talk S Scale matters.
Saturday	27	[6]	<b>General Activities</b>
Tuesday	30	[7]	<b>Daylighters Group</b> – daytime meeting
Wednesday	31	[8]	<b>British Railways Modellers Special Interest Group</b> meeting – BR Non-passenger Stock [Rolling Stock]

## November

Friday	2	[1]	<b>N Scale Special Interest Group</b> meeting <b>General Activities</b>
Saturday	3	[2]	<b>General Activities</b>
Monday	5		<b>Danish State Railways</b> – a talk and video on this system – his should be very interesting as our presenter knows a thing or two about this system.
Tuesday	6	[3]	<b>Daylighters Group</b> – daytime meeting
Wednesday	7	[4]	<b>LNER Special Interest Group</b> meeting
Friday	9	[5]	<b>N Scale Special Interest Group</b> meeting <b>General Activities</b>
Saturday	10	[6]	<b>Prepare Clubrooms for ModelRail</b> <b>General Activities</b>
Sunday	11		<b>ModelRail</b> – see separate article on page 2
Monday	12	[7]	<b>S Scale Special Interest Group</b> – General Activities and train running on <i>Swan View</i> . Suggestions? Bring a train run and talk about it
Tuesday	13	[8]	<b>Daylighters Group</b> – daytime meeting <b>Large Scale Special Interest Group</b> meeting
Friday	16	[2]	<b>N Scale Special Interest Group</b> meeting <b>General Activities</b>
Saturday	17	[3]	<b>General Activities</b>
Tuesday	20	[4]	<b>Daylighters Group</b> – daytime meeting
Wednesday	21	[5]	<b>Great Western Railway Modellers Special Interest Group</b> meeting– GWR AEC-engined diesel railcars

Friday	23	[6]	<b>N Scale Special Interest Group</b> meeting – <b>General Activities</b> <b>S Scale Running Night</b> – train running night, bring a train and run it on <i>Swan View</i> .
Saturday	24	[7]	<b>General Activities</b>
Tuesday	27	[8]	<b>Daylighters Group</b> – daytime meeting
<b>December</b>			
Saturday	1	[1]	<b>The Branchline assembly</b> <b>General Activities</b>
Monday	3		<b>Sandstone Train Event</b> – a talk and video on this event
Tuesday	4	[2]	<b>Daylighters Group</b> – daytime meeting
Wednesday	5	[3]	<b>LMS and LNER Special Interest Groups</b> meeting – end of year Quiz/ Entertainment
Friday	7	[4]	<b>N Scale Special Interest Group</b> meeting – <b>General Activities</b>
Saturday	8	[5]	<b>General Activities</b>

*(Continued from page 13)*

To operate these services and its trains over the underground Metropolitan Railway, the GWR's 2–4–0 Metropolitan Tank locomotives were built at Swindon in nine lots between 1869 and 1899. They were sub-divided into three variants, Small, Medium and Large mainly, but not entirely, related to water capacity. The polysyllabic name Metropolitan Tank title was hardly likely to recommend itself to the staff and from a very early date, they were always referred to as **Metro Tanks**. A listing of all the nine Lot details plus the major differences between the Tanks, where they were allocated, their withdrawal dates and a list of available models is given in the Notes.

Finally, a list of references is given from where these notes were sourced and five pages of photographs are attached. A full set of Notes is available on request.

### **New Acquisitions –**

**Alan Porter** – showed us some new hopper wagons that he had purchased recently. What they are and just what he is doing to them will be revealed at next weeks BR Modellers SIG meeting.

**Ron Richards** – showed his new Bachmann OO model of a GWR City Class Locomotive *City of London* No. 3439, completely DCC fitted and sound chip – courtesy of Richard Johnson. Very nice.

**Doug Firth** – showed us five GWR Cattle wagons made up from Airfix kits, that he had purchased from Andrew Morling. They had been weathered and looked very effective.

### **Doing Things –**

**John Brenchley** – brought in his completed version of Tavistock Station in N scale. It truly is a

work of art! Some discussion ensued regards a slight bowing problem on the roof support wall. He received wise advice from the sages present on the matter – it's not a problem, don't worry about it. [This advice is available to all for free!] He next showed us a 2mm Association Nickel Silver kit of an 1888 GWR Brake Van, that he is assembling. Definitely a sadist!

**Roger Solly** – is working his way through O Gauge locomotives that were donated to our Branch. Estimated to be from the 1940s, they need to be overhauled and hopefully, returned to running condition, and this is what he is attempting to do.

**Ron Richards** – at present he is fixing the lighting on his layout. His next job is fixing the signal box to his layout.

**Doug Firth** – is at present, working on a small layout for the BRMA Convention.

**British Railways Modellers Special Interest Group's** August meeting topic was the BR Standard 9F 2-10-0 steam locomotives.

## **A Introduction –**

The original concept proposal for a heavy freight engine in the BR new standard range was for a 2-8-2 and to give it the boiler, cylinders and certain other details standard with the Class 7 main line 4 passenger 4-6-2s of the Britannia Class and to provide wheels large enough for Class C and Class D fast freights. This design was last on the priority list as there were plenty of ex-War Department 2-8-0s and 2-10-0s in the system, as well as the relatively young Stanier 8F 2-8-0s, but after the two classes of Pacifics and a variety of 4-6-0s, 2-6-0s and six-coupled tank engines had been produced, work on the preliminary heavy freight locomotive design was initiated early in 1951 and two major objections were raised.

Firstly, transfer of weight from the leading wheels to the trailer carrying wheels under drawbar pull would not increase the adhesion weight in service and, as the design was proposed for the haulage of mineral trains above 1000tons as well as for express fitted freights, maximum possible effective adhesion weight was essential.

Secondly, the majority of British freight trains, especially mineral trains, were still unbraked and so the most effective engine and tender braking power was another requisite. However, a satisfactory form of trailing truck brake was difficult to devise when vacuum and steam were the only powers considered and this meant that braking would be confined to the coupled wheels and to the variably laden tender.

At this stage the idea of a 2-10-0, which of necessity would have smaller driving wheels, came to the fore and was favoured by Robin Riddles, the Member for Mechanical and Electrical Engineering [C.M.E.] of the Railway Executive, largely because of satisfactory experience with the wartime Ministry of Supply 2-10-0s.

## **B Design of the 2-10-0s –**

Overall responsibility for the design of the 2-10-0s was vested in the Brighton Drawing Office, with Derby responsible for designing the wheels, axles, journals, springs, pony trucks etc, as well as the various tenders. Plain rectangular section coupling rods were fitted instead of fluted [as the early experience with the *Britannias* had shown fluted rods had been liable to bend and break] but the other rods of the single slide bar motion were fluted [all of which were identical to the *Britannias*]. The centre set of 5' 0" diameter coupled driving wheels were flangeless with slightly wider tyres, while the second and fourth sets of coupled wheels had thin flanges.

The cab was similar to that of the *Britannias* and extended back to the front of the tender with no drop plate. However, swirling draughts brought a high degree of discomfort to the crew, despite the fitting of flexible screens between the rear of the cab and the front of the tender, and a return was made to the traditional full-width drop plate hinged down from the front of the tender so as to rest on the rear of the cab floor.

251 locomotives were built in eleven batches between 1954 and 1960, 198 at Crewe and 53 at Swindon. The initial allocations were LMR – 100, ER – 85, NER – 10 and WR – 56.

Riding smoothly at speed they were equally at home on Class C or Class D fast fitted freights, on block trains of steel, oil, etc. or on unfitted mineral trains, usually coal [ eg. the fast running *Windcutters* or *Annesley Runners* on the former GCR line] and iron ore, anhydrite, etc.. They were also used in 1958 and 1959 on peak summer passenger services [but not in the winter due to not being fitted for steam heating of the carriages]. The WR used them extensively on Saturday extras to the West Country and on some expresses from South Wales.

The ER used them on expresses on the old Great Central main line and on the ECML, sometimes approaching 90mph [at which speed the driving wheels were rotating at 8 revs per second!], until their use on passenger services was discouraged after the 1959 summer. The LMR used them on North Wales holiday traffic and the SR used them on the S&DJR line over the Mendips from Bath Green Park to Bournemouth [the one exception to their non-use on passenger services elsewhere after 1959].

## C Design Variations –

During the construction period of seven years, there were several variations to the basic design as follows –

**1 Franco-Crosti boilers** – Ten locomotives [Nos. 92020–92029] were built with the Italian designed Crosti boiler [smaller diameter than the standard boiler] which had a boiler feed water pre-heater drum slung beneath it and a chimney on the right-hand side of the locomotive. There was a heavily lagged boiler feed water pipe from the pre-heater drum to a second clack valve on the right-hand side of the boiler. The smoke discharged from the side chimney caused much discomfort in the fireman's side of the cab and a smoke deflector plate was wrapped around the flat chimney after a year or so to solve the problem.

These locomotives were all allocated to the LMR Wellingborough shed for the heavy Midland coal traffic from Toton to Cricklewood. However, as the expected coal savings were not being obtained all were withdrawn in 1959 to be rebuilt [without change of boiler itself] in the period 1959–62 by removal of the pre-heater drum, enabling operation in the conventional manner with smoke discharge through the normal chimney. They were down-rated to 8F but there was still sufficient work to be found for them.

**2 Air Pumps** – The ten locomotives assigned to the Tyne Dock heavy iron ore trains [Nos. 92060–6 and 92097–9] were equipped with two steam driven air pumps to operate the side doors of the special vacuum braked 56ton tippler wagons which supplied the Consett ironworks. The Tyne Dock–Consett ore trains consisted of nine loaded hoppers which with brake van, weighed over 800tons and were always banked by a second 9F.

**3 Double Chimneys** – In 1956 theoretical calculations at Swindon were carried out on a number of pre-1948 and even pre-1923 designs and on some of the BR Standard classes. When extended to the 9Fs, they showed that there should be an improvement in the draughting if a double blast pipe and chimney were adopted.

No. 92178, then being built, was fitted experimentally with this gear, the test results convinced BR that future 9Fs should be similarly equipped. Some of the Western Regions 9F locomotives also received the gear when they passed through Swindon for overhaul. Neither the LMR or the ER chose to convert their allocations of single chimney 9Fs.

**4 Geisl Oblong Ejector** – With the aim of maximising smoke box vacuum with the minimum blast pipe back pressure, the Geisl oblong ejector, which had seven nozzles discharging the exhaust steam into an oblong shaped venturi and chimney, was tried in 1959–60 on No. 92250 which had been completed [with double chimney] at Crewe in December 1958. Again, the expected benefits of coal savings were not realised so the trial was abandoned but the equipment remained in situ on No. 92250 until it was withdrawn in December 1965.

**5 Berkely Mechanical Stoker** – The maximum potential steaming rate of the 9F far exceeded the rate at which coal could be shovelled into the firebox by the average fireman. One solution to this problem was to mechanise the firing, and rather than use the established American Standard mechanical stoker, the rather more obscure Berkely machine was chosen. It had a screw crusher/feeder in the base of the coal bunker which transferred the small lumps of coal by a screw to the firing face where the coal was distributed around the firebox by a number of steam jets.

Three 9Fs were quickly built [Nos. 92165/66/67] and assigned to Saltley for working the 212mile Water Orton to Carlisle fast Class C freights with up to 53 wagons behind the locomotive. They were not very successful as graded coal should have been used [despite the maker's claims otherwise] but this was not available on tap at Saltley and much manual labour was required to break up the lumps of coal before the locos could leave the shed. The result was that the screw often became blocked and the fireman had either to clamber into the bunker at great risk to life and limb, or manually fire the locomotive which was somewhat difficult as the firing hole was far too high. Also the screw broke much of the coal down to a dust which went straight through the firebox and boiler tubes unburned. The stokers were removed from the three locomotives in late 1962/early 1963 and they reverted to hand firing.

**6 Headlight** – When the ex-Midland/LMS 0–10–0 Lickey Incline banker No. 58100 was about to be retired in 1956, No. 92008 was trialled for a few days to see whether the 9F might be a suitable replacement. Newly built No. 92079 was posted to Bromsgrove and fitted out with the headlight from No. 58100 to facilitate buffering up at night when baking up the Lickey. It retained the headlight until replaced by No. 92223 and later by No. 92230.

## **D Tenders –**

There were two basic types of tender [with one type having four variants] and the type of tender coupled to the locomotives was determined by the initial Regional allocation and their intended service use. The tender types were Type 1B, Type 1C, Type 1F, Type 1G and Type 1K. More details of each type are given in the Notes.

## **E Other Differences –**

Various differences and changes occurred throughout the life of these locomotives to such things as smoke box access, smoke deflectors, ash pan raking out doors, sandbox fillers and mechanical lubricator drives. More details for each of these items are given in the full set of Notes.

## **F Liveries –**

All locomotives, except No.92220, were painted in unlined black with those built before 1956 carrying the first BR emblem [ferret on the wheel] and all built during 1956 and later carrying the

later BR emblem [lion holding a dartboard]. Those built before 1956 were given the later emblem when they passed through the Works after 1956. The one exception was No. 92220, the last steam locomotive built by BR [and the last steam locomotive built at Swindon]. No. 92220 was painted in the BR express passenger livery of Brunswick Green, lined in orange and black and it carried its *Evening Star* nameplates of its smoke deflectors in the same manner as the *Britannias*.

## **G Withdrawals –**

The Class was relatively short lived, the first ten withdrawals occurring in 1964, followed by 65 in 1965, 45 in 1966, 107 in 1967 and the last 18 in 1968. The Class became concentrated on the LMR as steam haulage was eliminated on the WR in January 1966 and on the ER in April 1966.

The average lifespan was nine years, about 20% of that normally expected of a steam locomotive. This was mainly brought about by the introduction of the 1955 Modernisation Plan.

There are nine locomotives of this Class preserved or awaiting preservation.

## **H Models –**

A comprehensive listing of models is given in the Notes and the Appendix.

## **I & J – References and Useful Articles –**

In these sections are listed all the references used for the Notes and also useful articles that are well worth reading.

A full set of the Facilitation Notes are available on request.

## **New Acquisitions –**

**Steve Rayner** – showed a P&D Marsh W/metal kit of an N Scale GWR 43xx Churchward Mogul body kit that he bought at the Donated Goods Sale held in our Clubrooms on Saturday 25 August. It requires a loco chassis, a tender chassis plus wheels, motor, etc.

**Alan Porter** – showed a OO Lima GUV BR[W] bogie wagon that he bought at the Sale. He also showed a 20ton wagon also from the Sale.

**Ron Richards** – showed two Mainline wagons that he bought at the Sale for \$5 each. Good Value! He also showed us a Dapol OO 7-plank wagon that he had recently received. His final showing was an Air Brush kit from Bunnings for \$19.95.

## **Doing Things –**

**Ron Richards** – is continuing to install lights on his layout.

**Great Western Railway Modellers Special Interest Group's** August meeting subject was the GWR Refrigerated Vans.

## **1 Preamble –**

An old adage is *All delphiniums are blue flowers but not all blue flowers are delphiniums* and so, similarly, . . . all GWR Refrigerated Vans were Meat Vans [MICAs] but not all GWR Meat Vans [MICAs] were Refrigerated Vans. What was the difference? –

- a GWR MICA was a Meat Van with full end-width hinged and hooded ventilators but without any form of refrigeration.
- a GWR MICA A was a refrigerated Meat Van without any ventilation facilities
- a GWR MICA B was a refrigerated Meat Van with full end-width hinged and hooded ventilators which could be closed off, thereby making a GWR MICA B equivalent to a GWR MICA A.

Why the difference? Well, until the latter half of the 19th Century live cattle were imported from the USA and Ireland, landing at Birkenhead [in the case of the GWR], allowed a period of recovery and then slaughtered. The resultant carcasses were then chilled [taking about ten hours] and despatched in ventilated vans to major centres, such as Smithfield [London], the transit time being seven hours. So from live animal to beef carcass at Smithfield was less than 24 hours and the condition of the meat had not suffered in this short time. Towards the end of the 19th Century improvements in mechanical refrigeration made it possible to import frozen mutton from Australia and New Zealand in specially built refrigerated ships. The advent of frozen carcasses required a colder rail-transport vehicle than a ventilated van and thus refrigerated vans were developed.

Refrigeration was by **Evaporation of water.** A ventilated van [No. 28567] was fitted out in 1874 with fine mesh grilles in its sides with layers of felt behind these grilles. The felt layers were kept moistened by water percolating through them from a tank in the roof of the van to a collection sump in the floor of the van and then into a tank beneath the floor. The collected water was then pumped from the bottom tank, as required, by a hand operated pump located at one end of the van, back into the top tank in the roof.

This was the *Acklom* patented method of refrigeration which used the latent heat of evaporation for its success. It works best in hot climates with relatively low humidity and its efficiency in the cool humid climate of Britain would be somewhat reduced. [*We, here in the Antipodes, know how well this principal worked with the Coolgardie Safe in WA keeping milk, butter and meat from going off.*]

A trial run of this vehicle with a load of slaughtered oxen was made from London to Aberdeen on the 19th October 1874 and returned to London on the 28th October 1874 where the meat was examined and 'found to be in excellent condition, fit for sale and none the worse for its journey'. [*The mind boggles – did the meat sit in this vehicle at Aberdeen for seven of the eight days without the benefit of air moving very fast past the moistened felt curtain?*]

- **normal ice with salt added.** This raised its melting point.
- **Dry ice.** [solid carbon dioxide.]

The *Acklom* system did not take off, presumably due to the climatic conditions not being at all kind to its principles and for much of the time that meat was carried in GWR refrigerated vans, the refrigerant was a mixture of normal ice and salt. Dry Ice came into fairly common use in the late 1920s/early 1930s.

## 2 The Diagram X Series MICAs –

All the MICA meat van variants were rated for 6tons carrying capacity and were generally fitted out internally with 60 hooks in the roof for carrying 180lb beef carcasses or 56lb mutton carcasses.

The MICA meat vans were regarded as freight vehicles and were painted grey with white lettering.

The MICA A and the MICA B meat vans were passenger rated vehicles and, being insulated, were painted white [sometimes the roofs too,] to reflect solar heat and were lettered in red. They

carried the appropriate code name and description of its type [eg. – MICA B, REFRIGERATOR MEAT VAN] or just the code name [eg. – MICA A ] but this style was abandoned during WW2 and the inscriptions were then simplified as follows –

- MICA became MEAT
- MICA A became INSUL–MEAT
- MICA B became VENT–INSUL–MEAT

In total, the GWR built 946 MICA vans to Diagrams X1, X2, X4, X5 and X7 to X10 between 1889 and 1930 and it also converted another 300 vehicles to temporary MICA service. Additionally it inherited thirteen meat vans from the South Wales Railway.

The details of the various Diagrams are as follows. Representatives of all of the X Diagrams [except Dia. X3 and X6] passed into British Railways at nationalisation in 1948.

**Diagram X1** – 110 MICA vans were built to this Diagram between 1889 and 1891.

**Diagram X2** – These were the first GWR vans built for chilled meat – 260 vehicles were built between 1897 and 1904, ten of them were un–refrigerated MICA vans, ten were MICA A vans and 240 were MICA B vans.

**Diagram X3** – This Diagram was allocated to the thirteen unventilated meat vans inherited from the South Wales Railway. All had been condemned by 1914.

**Diagram X4** – 210 vehicles were built between 1906 and 1910. 110 were MICA A format and 100 in MICA B format.

**Diagram X5** – 60 MICA B vans were built to this Diagram between 1910 and 1912.

**Diagram X6** – No new MICA vans were built during WW1 but there was a need for additional insulated vans which was met by converting 300 10ton Diagram V16 covered vans to MICA A vans by fitting meat hooks in the roof. Their service as MICA A vans was fairly short and from June 1921 they were either converted back to Diagram V16 covered vans or converted directly to Diag.YA Banana Vans.

**Diagram X7** – 100 MICA B vans were built to this Diagram between 1921 and 1923. In 1922 three of these vans were uprated from 6tons to 10tons for conveying ice from Slough to Paddington.

**Diagram X8** – A further 150 MICA B vans were built to this Diagram between 1923 and 1926.

**Diagram X9** – 54 MICA A vans were built to this Diagram between 1929 and 1930 and were the last GWR MICA vans built.

**Diagram X10** – Two experimental MICA A vans were built to this Diagram in 1927 and 1929 to assess the merit of dry ice refrigeration.

The differences between the Diagrams listed above are given in detail in the full version of the Notes.

Because so much meat traffic later went to the roads or was carried in GWR M type ventilated, E type insulated or FX type insulated dry ice refrigerated containers, many surplus GWR meat vans were converted in 1938 to TEVANS [Diagrams V31 and V32] for the carriage of tea and chocolate. From 1937 onwards, a programme was begun to convert from ice/salt mixture to dry ice as the

refrigerant.

The Notes now give two more Sections –

**3 Models** – A detailed listing is included in the full set of Notes.

**4 References** – A complete list of references used is given in the Notes.

Finally, there are several pages of photos showing various MICAs. A full set of these Facilitation Notes is available on request.

### **New Acquisitions –**

**John Maker** – his new mobile phone has a Woodlands Scenic programme in it called MODEL SCALER that will provide you with accurate conversions, etc.

**John Brenchley** – showed a pair of Parallel Action Flat Nose pliers 160mm, with smooth jaws from Eileen's Emporium, but at £29.00 I hope that he gets his money's worth. He also showed us three packs of phosphor bronze wire – 0.112mm, 0.193mm and 0.254mm.

### **Doing Things –**

**Ron Fryer** – showed his rebuild of a timber merchant's storage shed from Haltwhistle layout that some unknown person had flattened. Ron used a much harder timber than balsa that had originally been used. It is now much stronger and as soon as he has finished the concrete base on the layout he will re-install the shed.

**Doug Firth** – showed his new uncoupling method for the OO Universal coupling. Refer to the Xmas DVD in the November 2011 *Railway Modeller* for instructions. All you need are staples, superglue or solder and magnets. [Tip – Try cutting up one of those infernal fridge magnets that one gets bombarded with from property agents, there must be a use for them somewhere!]

**S Scale Special Interest Group.** Both the August and September 2012 meetings were interesting and successful evenings for AMRA members of the S Scale Group. Both meetings were well attended with 35 and 34 members and visitors respectively coming to our Clubrooms to hear the latest news, views and events for modellers of the WA scene in Sn3½ scale.

In August Graham Watson welcomed all those present, in particular John Miller and son Mitch. John was the guest speaker whose topic of *Weathering WAGR/MRWA vehicles* was much anticipated.

Members were reminded of the AGM to be held on the following Monday [20 August] and Graham expressed the hope that as many of those present would make an effort to attend. Sunday 14 October is a date to remember for Railfest at the Rail Heritage Museum.

Graham and Bill Gray reminded members who do not have cheque accounts and who wish to subscribe to the ASNM that payment can through either Bill or Graham. The forms are also available from Graham.

The topic for the August meeting was weathering railway wagons. John Miller gave an excellent presentation describing the techniques he uses to weather his models both in N and S scale.

John reminded us that all railway vehicles are dirty and, for him at least, this build-up of dirt and

grime needs to be represented on the models. Weathering also brings out the detail of the various parts of the models.

John advised that he uses acrylic paints exclusively and avoids lacquer-based paints. He warned of the health implications of continued use of lacquer-based paints. He paints his models initially with a flat base coat applied with an air brush. The weathering coat is a thin wash of the colours of the dust and grime peculiar to the area, such as the earth colours of the wheat-belt around Merredin, which is the location of his layout. John uses a 6:1 distilled water to acrylic paint mix with some water softener or detergent to reduce surface tension. The advantage of using acrylic paint as a weathering base is that it can be washed off if it is not the shade or colour desired.

Following the wash, John uses black and brown pastels as a dust to apply to the model using a brush. He uses a short bristled brush to apply the dust and then a long bristled brush to drag the dust down the model as the rain would do or upwards as road spray may do. Finally, and following the dusting stage, a final wash is applied using an appropriate thin colour compatible with the pastel dust, to seal the finish.

Air brushes are really compatible with acrylic paints but John recommends Windex to clean the airbrush after each use to ensure trouble free use next time. WD40 is also recommended to lubricate the needle of the air-brush.

John recommends a cheap air brush from Bunnings which sells at less than \$25. He has a second double action air brush from SuperCheap Autos which he purchased for \$35. He applies his paint at about 35psi. A cheap compressor from the auto shops is all that is required.

The members thanked John, in the usual way, for his very informative presentation.

Also at the August meeting, a number of members showed their recently completed modelling projects. **Neil Blinco**; an AYB coach, **Gary Gray** showed his QD4475 and a WA and WAR using RCA under-frames. **Doug Firth** showed a completed MRWA cattle wagon, **Ross Green** showed three nicely painted AY/AYB coaches and **Trevor Burke** showed a GA models TA livestock wagon. Obviously there is lots of modelling and kit-building going on within the group.

The topic for the September meeting was scheduled as a Bring and Show, in this case an example of your very first and last model, scratch built or kit built vehicles and/or structures.

Before the evening got under way Graham welcomed Peter Sansom from NSW who is an avid modeller of a range of locos on Australian railways in a variety of scales.

A large number of members entered into the spirit of the evening and 'dared' to show the first model they had ever built and compared it with one they built recently. Some brought more than two models so for reasons of space, the extra models have been edited from this report.

**Ray Cooper's** first scratch-built models were trees for his Yarloop Layout. His most recent model has been two magnificent water tanks which were also located at Yarloop. **Paul Tranter's** first model was a GC wagon and his last major project was an S class locomotive. **Jeremy Ludlow** initially assembled 4 DC vans and then 4 RCA kits. **Bill Gray** showed an NFA white metal kit and a small but highly detailed QR crane. **John Maker's** first project was a Z class shunter on a mainline chassis and his last was a Z shunter with a Bachmann Chassis. Both models required different decisions to be made about adapting the body and the chassis.

**John Livie** showed his G wagon with a lead floor insert and an Ns shunter's float.

**Kelvin Davis** showed his Jardee shunter as his first kit and his G class kit loco which required a lot more assembling skills. **Alan Penstone** showed a GC wagon built in 1990 and a Cement Hopper from Double G Models twenty years later. **Trevor Burke** showed an FD and VF van while **Greg Aitken** showed his scratch-built N wagon and a workers' van which he built while based in Melbourne. Greg has designed and built numerous kits of WAGR wagons under his own GA Models label but he did not include these in tonight's presentation.

**Murray Hartzler's** first ever scratch-built model was a WAGR V class locomotive which is not usually recommended as a first attempt. It is now almost 20 years old and has graced many an exhibition layout at the annual exhibition. His latest completed model is a GA Models DC van.

**Brian Norris** has been a prolific modeller of the WAGR in his time – a ZA guard's van built by modifying a Railwest ACL coach and a Z van was his first foray into modelling the WAGR in S scale. Though he did not bring it in, his WAGR Gilbert car modified from an S scale coach from the USA was probably his latest major project. **Neil Blinco** has acknowledged that many of the patterns for his coach kits were initially made by Brian and are now available to us all as kits.

**Gary Pilmoor** showed two scratch-built Q wagons as his very first wagons and his unique QY well wagon used for transporting transformers as his most recent and major scratch-built modelling project. **Stuart Mackay**, like Alan Penstone, showed a GC wagon he built in 1990 at the modelling workshops held by the S Scale Group and his MRWA Bm wagon kit he built as a basis for kits under the X-Class models label. **Neil Blinco** bravely but unashamedly showed some basic wagons he built as a 12 year old and his AYB coach for West Oz Models. They represent a remarkable progression and one which we all need to strive for if we are to become competent modellers.

**Graham Watson** showed an R wagon and an NFA which he scratch-built in North Eastern Timber long before we discovered the advantages [and disadvantages] of styrene card. **Lynton Englund** showed a brass, fully scratch-built model of a WAGR P class which he built over 30 years ago. His latest model was probably a WAGR Y class locomotive which many of us have acquired and assembled.

Once again, the August and September meetings were successful gatherings for the S Scale Group. Lots of things are happening so if you are at all interested, feel free to come to one of our meetings.

The S Scale Special Interest Group meets on the second Monday of every month at 2000 at the AMRA WA Branch Clubrooms in Moojebing St, Bayswater. New members and visitors are always welcome. Contact Graham Watson on 9250 1084 or Stuart Mackay on 9310 3858 for general information about the S Scale Group.

Contact persons for Special Interest Groups are:

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

## From the Scribe's Quill

**Meeting No 361 – August 2012.** The major items of business dealt with at this meeting were –

- Building approval for the extension for the clubrooms has been received from Bayswater City Council.
- Lotterywest has requested additional information on our grant application. A response has been sent by Ron Fryer. An answer is anticipated by mid-October.

**Meeting No 362 – September 2012.** This meeting was postponed until after the required submission date. Three months' worth next issue!!

The next few Committee meetings will be held on Thursday 27 September, 24 October and 22 November 2012. Branch members are welcome to attend. Meetings usually start at 1930 and complete about 2200.

### Computer Scam

It appears the scammers are having another round of the “we’ve detected a virus on your computer, for \$XXX, we can remove it”.

A novel way of dealing with this phone call was passed on to me recently. Wait until the scammer has gone through their full spiel, then say something along these lines –

“Really! That’s very interesting! Particularly as I **do not have a computer**”

The scammer will quickly hang up. Tee Hee!!

### Layout For Sale

HO/OO layout about twelve metres long by one metre deep. About a third painted, trees, grassed, tracked, bridged, etc. Fifty yards of track. Hundreds of dollars worth of grass, trees, points, bridges, paint, etc. etc. Six locomotives, about forty rolling stock items. have spent about \$3000.00 – best offer? Interested? Need more information? Please contact John Wilson on 08 9371 6913



## Membership Matters

After many years of great service as Registrar for the Branch, John Maker has decided to step down from the role. On behalf of all members thank you John for your dedication and hard work over the years.

By now most members will have renewed for 2012/2013 but if you have overlooked it please do so asap. You can renew online at the AMRA website but if you do not have web access and need a new form please contact me and I will print you a replacement.

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

Ian Bannister	Darlington	HO
Lee Taylor	Aveley	HO
Isaac Hamilton	Kiara	OO
Paul Hamilton	Kiara	OO

We welcome all our new members to visit our clubrooms and understand that for some people joining a new organisation and getting involved can be a little daunting. However, if you make yourself known to the Duty Officer at your first meeting you will be made most welcome, given a tour of our Branch's facilities and be introduced to other members. We have fantastic facilities that are the envy of other clubs including a comprehensive library and numerous layouts that provide the opportunity for any member to run their own trains at most meetings.

I also encourage members to come along to the evening meeting on the first Monday of each month – we always have a guest speaker who will present a very interesting railway/model railway topic.

As a person new to the hobby I have found these meetings to be an excellent source of information concerning the hobby and a great opportunity to meet and get to know other members. Check our Branch Programme for details of the topic for each meeting.

Trevor Burke  
Branch Registrar

## Historic Railway Films

Google LMS Crewe Workshop Railway videos. This will bring up an historic film about the manufacture of an LMS Pacific locomotive from casting cylinder blocks, cutting the frames, etc. etc. The YouTube clip was a promotional film made in the 1930s. But do **not** let the OH&S people see these . . . . .

There were several other clips of promotional films from the 1930s onwards. Not only are these about trains but they show what life was like in those days, fashion, vehicles, streetscapes, etc, etc.

## TRAINMAN

Andrew Morling has advised that he is no longer taking on any repair work, layout building, or decoder fitting. He still has large stocks of second hand trains and will continue trading.

Andrew can be contacted on 9337 7052.

## Caught on Nonni-cam – I C U P

Nonny tells me that the Nonnymouse family are slowly catching up with the others who use our Clubrooms – they now have a miniature digital camera, a *Nonni-cam*.

One of Nonny's off-spring, out for some practice, spotted a 'rude' scene on the *Dymock* layout. Signalman Bob's dog, Rufus, was watering the Dymock Signal Box fire hydrant, tut, tut, naughty, naughty.

Out came the *Nonni-cam*, unfortunately, as Nonny Junior is still trying to come to grips with his new gadget and the signalman's dog is known for chasing small four legged animals, he didn't quite get close enough, Rufus saw Junior and barked just as he took the photo, so it's a bit blurred but, as it is his first photograph, I promised Nonny it would be published to encourage Junior to try again.



Next time you are in our Clubrooms use your Mark One Eyeball and have a close look at this and the other excellent scenic effects the team have worked their magic on.

## The Ultimate Portable Layout

Steve Rayner showed off this miniature layout recently. It is of Japanese manufacture to T [1:450] scale, with model rolling stock of Japanese prototypes. The two outer coaches of the four-car set are powered, the motors, apparently, are those used in mobiles phones to operate the vibrating 'ring' tone. The motor magnets are so powerful that the track can be turned upside down with the train on the track.

The Steve's baseboard is about 300mm x 400mm. All you need is a spare laptop carry bag and you could take this to work, play with it on your desk without anyone knowing that you are playing trains at work!!!

The items shown in the photographs, plus a number of accessories cost around \$200.00 from Hobbies Plus – see their web site at [www.hobbiesplus.com.au](http://www.hobbiesplus.com.au) for the full range.

