

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

As you are aware the Annual General Meeting will be held on Monday 20 August at 2000 at our Clubrooms.

If you would like to know how our Branch is doing please attend the AGM, when all will be revealed. An exciting year is ahead.

I would like to thank the outgoing Management Committee members for all their assistance and dedication during the year.

If any members feel they can do a better job, then they need to put their nominations in right now. Hope to see you at the AGM.

Frans Ponjee
Branch President

A Note from your Vice President

The Australian Model Railway Association is a fellowship of people with a common interest in modelling railways and includes almost every possible aspect of the hobby.

Our Clubrooms should be a place where everyone attending feels respected in a non-threatening atmosphere of friendship. Our membership includes men, women and children and our collective behaviour, mutual respect and language should take into account that mix. We all have our personal foibles and should recognise the same in others.

Let us all keep our language in check, consider the feelings, sensibilities, gender and ages of others in the membership. We have such diversity of nationalities, capabilities and knowledge that our Branch should be an enjoyable experience for us all for years to come.

Graham Bell
Vice President

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ModelRail

Our Management Committee has set Sunday 11 November as the date for this years ModelRail so please put this date in your diaries.

The event is a fantastic opportunity for us to showcase the model railway/railroading hobby, our various Branch layouts and activities and the excellent modelling skills of our members to the public. It is also a great opportunity to catch up with fellow members and for newer members to experience what our Branch and its clubrooms have to offer.

ModelRail will take the format of an open day. It is hoped that all of our Branch's layouts will be in operation and I am confident that members who have not been to our clubrooms for a while will enjoy seeing the progress that has been made on the layouts that are still under construction.

Your support will make ModelRail a great day for Branch members and the public alike. There are opportunities to assist in preparing and running the Branch layouts, staffing the door to welcome visitors, assisting with the hot dogs and drinks stand and in preparing our clubrooms before and after the event.

Set aside 0900 to 1700 on Sunday 11 November for ModelRail and remember to tell your family, friends and work colleagues that ModelRail will be open to the public between 1000 and 1600.

Trevor Burke
ModelRail Coordinator

Vale Bill Pidgeon

Bill Pidgeon died suddenly in a Cottesloe restaurant on 13 April. He was a relatively new boy at AMRA WA, having joined in July 2003, about three years after he had retired at seventy years of age. "Seventy!", I hear you say. "How can that be? Most of us are being encouraged or forced to retire in our 50s?". Well, Bill had been a Judge of the Supreme Court of Western Australia and at the time of his [compulsory] retirement he was the longest serving Judge in Australia.

Soon after joining AMRA he offered his German inspired HO *Ansbach Branch* layout to our Branch and the Committee of the day accepted it. Now it wasn't just a case of a couple of members going to Bill's home and picking it up 'holus bolus', putting it on a trailer and

bringing it out to the Clubrooms for speedy re-use. No! it was about three metres by three metres in size and incorporated a double track main line leading to a branch line terminus at a higher level, a locomotive depot, a [mostly visible spiral] and a large plaster mountain below which there were hidden sidings served by moving frog points [*Formoway* or some other brand from the 1950s] and it had been built into a room at Bill's home!!

So, Bill cut it up into manageable pieces himself and then as a very regular worker in the Daylighters Group [which meets at the Clubrooms every Tuesday] he spent many months, if not years, putting it all together again – a bit like Humpty Dumpty! In this, he was assisted by Dave Edgell, among others, and Dave continues to work on restoring some of the mysteries of Bill's electrical work.

Bill was an unassuming man and he did not come to any of the other activities in our Branch's programme other than as a Tuesday Daylighter. If you did not know a bit about Bill, you would never have guessed that he had held such a high status in Perth's legal fraternity. In fact, he was the next highest Judge of the Supreme Court after the Chief Justice.

When the Governor of Western Australia is out of the State on business or on holiday, the Chief Justice is appointed Acting Governor and in these circumstances it was usual for Bill Pidgeon to be appointed Acting Chief Justice.

How did I know Bill? He was only a month or two older than me and, between 1948 and 1952, we both went to the University of Western Australia – Bill was pursuing a Law Degree and I was doing a Science Degree based on Chemistry. In those days at UWA, the law students were housed in the old 'tin sheds' that had been the first buildings at UWA when it was first established in Irwin Street in 1912 and these had been brought down to the Crawley campus in 1927. On the other hand, we who were doing a Science Degree luxuriated in a glorious, masonry built, Spanish style building akin to the architecture of Winthrop Hall and which overlooked the 'tin sheds'.

There was many a time that Bill and I had lunch together on the lawns and he would moan and groan about the heat of the 'tin sheds' in summer and their chill in the winter, while I could gloat about the heat capacity and the consequent more or less constant temperature of the Chemistry and Physics building! It was during these lunch breaks that I learned of Bill's railway interests, both the full size things and the modelling of them.

After graduation and taking up Articles, Bill was admitted to the Bar in 1953 at the age of 23 and he went into practice in Bunbury with Slee Anderson from 1956 and soon became a partner. There was a story told by one of Bill's legal buddies at his Memorial Service in St. George's Cathedral that he once represented a group of farmers suing the Western Australian Government Railways over a farmland fire supposedly caused by sparks from a passing WAGR steam locomotive. WAGR disputed this and it was agreed that a practical demonstration of the non-spark throwing properties of WAGR locomotives would be shown by a trial at an appointed farmland place and time. At the appointed place and close to the appointed time there was no sign of Bill [the legal representative of the plaintiff] and the steam locomotive with its train was fast approaching – where is Bill?

Someone with sharp eyesight said "There he is – he's driving the steam locomotive!." From a lay-person's point of view, I would not have thought this action would have helped Bill's client's case.

However, it does show Bill's love of trains and his love of model railways as evidenced by his extensive home layout which he was proud to show off to his legal colleagues after dinner at home.

In 1970, Bill was made one of the three founding Judges of the newly formed District Court and in 1977 he was made Chief Judge of the District Court. In 1980, he was an acting Judge of the

Supreme Court and in 1982 he was made a Judge of that Court. His thirty-one years as a Judge was the longest of any judge in Australia.

Our paths used to cross at each annual AMRA WA Model Railway Exhibition when I would have a chat to him and say “Bill, when are you going to retire? I did at fifty-five years of age! Come on in – the water’s lovely!” But he didn’t – he hung on until he was seventy, the age at which judges must retire.

What a wonderful man! Unassuming and ‘ordinary’! Generous to a ‘T’! Although most of us knew him for only a few years, he will be long remembered every time we look at and operate the *Ansbach Branch*.

Farewell, good friend.

Alan Porter

From the Editorial Desk

The Branchline – October issue deadline. Routine editorial material, articles, reports, programme items, etc., to me no later than 1500 Saturday 22 September.

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 6 October and will include will include AGM Minutes

Please note the intended dates for *The Branchline* publication for the remainder of 2012 and early 2013:

	Editorial deadline	Assembly, etc.
December	Saturday 17 November	Saturday 1 December
February	Saturday 26 January	Saturday 9 February
April	Saturday 23 March	Saturday 6 April – 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

Ted Thoday

Around the Layouts

Haltwhistle. The layout is still very busy, you have to line up on a Saturday afternoon in order to put your train on a track, that is if there is one to spare.

Haltwhistle is the layout which will go to the 2013 Model Railway Exhibition, so we have to get it in good working order long before then so that we can train our team on the way a railway is run.

Tom Stokes
Layout Supervisor

The Valentine Run. There’s nothing like a deadline to inspire action and the approaching June

Exhibition was the motivation to transform *The Valentine Run* from a wooden, rail and wire structure into a vibrant and picturesque depiction of a south western U.S. railroad. Our thanks go to all who participated for their fine endeavours. While it was a team effort, special commendations go to specialty leaders Garry [vegetation and painting], Trevor [ballasting and rail maintenance], Craig [town planning and structures] and Alan Higgs [point wiring].

We were especially pleased with the layout's performance at the Exhibition. Trains ran well in all directions to the delight of large crowds of surrounding patrons and it was most rewarding to listen to the many favourable comments offered. Again, thank you to the team who manned the layout throughout the three days. You were very professional in the operation of the layout, the interaction with the public and advice given was of a high standard and your co-operation and humour made the long hours of attendance a pleasure to share with you.

Although we are recovering from deadline modelling, work continues on the layout. Inhabitants of one of the Needles apartment building were concerned to hear their building was to be shifted, albeit several HO feet, to facilitate the passing of larger locomotives and their consists. Appeals to City Planner Hartmann have been rejected. We are assured that, while he owns the aforesaid locos, this did not influence his decision much. Similar concerns regarding the relocation of the town station were forestalled by his department undertaking this work in the early hours of the morning, and prior to informing residents.

We are currently installing a memory DC system, where multiple socket locations will eventually enable control of one's loco adjacent to the scene of the action. However, the system appears to have interesting effects on more modern motors, such as reversing their direction while the loco is in motion. We would appreciate some guidance from anyone who has installed a similar system – with or without locos performing a mechanical waltz.

Craig Hartmann
Alan Burrough
Layout Coordinators

Special Sale

This is for MEMBERS only.

On Saturday 25 August there will be a sale of items which our Branch has received from deceased estates. There will be both N and HO/OO gauge items available.

The sale will take place between 1400 and 1600, viewing will be from 1330 onwards, payment will be cash or cheque only.

Literary Lines

New library acquisitions. Many thanks to Ron Chatterton and Geoff Roberts for donations of books and magazines.

New arrivals on our book shelves.

- KAA060 *The British Railcar AEC to HST* by R M Tufnell
- KAA061 *Silhouettes of the Big Four* by R J Blenkinsop
- KAA062 *Reflections of the Big Four* by R J Blenkinsop

The 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.

Des
Branch Librarian

A Bloke with a Shovel

Dave Tierney reminds us that Tuesday 3 July was 'Mallard Day', the anniversary of the day, in 1938 when LNER locomotive *Mallard* obtained the world record for steam traction.

Dave suggests that the day should be renamed 'Tom Bray Day'. Tom was the fireman on *Mallard* on that momentous day in 1938.

The work of the fireman is often forgotten but without A Bloke with a Shovel, wielding it with the same dexterity as Paganini wielded his bow, a steam engine was nothing but a hunk of cold metal going nowhere!!!!

In an earlier part of his life Dave was a bloke with a shovel – his book is in our Library.

A Modelling Challenge!!

The challenge is to replicate the railway scene is this video clip -

http://www.flixy.com/train-plowing-through-deep-snow-in-new-zealand.htm?utm_source=flixy.com&utm_medium=newsletter&utm_term=video%20of%20the%20day&utm_campaign=website

Around the SIGs

Great Western Railway Modellers Special Interest Group's subject for the May meeting was the GWR's Standard Gauge Covered Wagons – MINKS.

The Facilitation Notes were provided by John Brenchley. He offered to do them seeing that he was working on models of the MINKS. Alan Porter, our normal Note provider, only too readily agreed.

The term MINK came into being with the introduction of the Company's Telegraphic Code Book in the early 1890s. It was used to signify any covered goods wagon ie. Van. Later, in the 1909 and subsequent editions of the Code Book, the letters B, C, D, F, and G were added to refer to vehicles of 21ft and over in length. The term MINK was kept to signify vehicles less than 21ft in length that were unventilated without a vacuum brake. The letter A was added to refer to these shorter [standard length] vehicles which had provision for ventilation – these could be either with or without vacuum brakes.

Iron Minks –

The first 50 iron covered goods wagons were built in 1856. They were not to the iron mink design that became familiar later and appear to have been built with a variety of lengths, widths and heights. No complete drawings or photographs have been found of these vehicles in their original condition. Most lasted for about 50years, being condemned between 1903 and 1911. For the next thirty years, the GWR reverted to wooden bodied vehicles. The first vehicles close to the standard iron mink design were built in 1887. 102 were built with a length of 16' 6" and a wheelbase of 9' 6" and were rated at 8tons. They had single brake blocks on the two wheels of one side with a lever

at the right hand end.

From 1888 to 1901, a further 4783 covered goods vehicles were built to the slightly shorter length of 16' 0" with a wheelbase of 9' 0". They were originally rated to carry 8tons but from mid-1894 new vehicles were rated at 9tons and from 1904 this was increased to 10tons if fitted with oil axle boxes.

After 1901, the GWR reverted to construction of wooden bodied vehicles. The reason is thought to be economics as by 1901 the cost has escalated to £100 each as compared to the £89 for a wooden bodied diagram V5 van in 1904. Variations took place between 1897 and the early 1930s to axle boxes, ventilators, brakes and doors.

Non GWR Iron Minks –

As well as those built at Swindon, the GWR also inherited over 1000 iron MINKS from the various Welsh railway companies that the GWR absorbed. Some of these were very similar to the GWR vehicles; others varied in terms of size, brake gear, buffers etc.

30ton Bogie Iron Mink – [MINK F – Dia. V1] –

Before leaving the subject of iron built vehicles, mention should be made of the 30ton bogie vehicles, eight of which were built between 1904 and 1911. These were 36ft long and vacuum brakes applied to all eight wheels. They were a main line vehicle and most lasted until the early 1950s.

Wooden Bodied Minks – early outside wooden framed vehicles –

Between the first 1856 iron vans and the advent of the standard iron minks, the GWR built wooden bodied vans, firstly on wooden underframes, then on iron underframes. Photographs show them to be built with wooden outside framework. Dimensions may have varied but one drawing shows them to be 15' 6" long with a 9' 0" wheelbase. A lever operated brakes on both wheels on one side only.

The Modern Minks –

When the wagon diagram book was introduced in about 1905, the letter V was used for the Company's covered goods wagons. The modern MINKS built from 1902 onwards with metal stanchions and diagonals had many variations which are now listed in the notes. Also listed are various examples, in photos and details, of each diagram number. These are followed by the lettering information for the various MINKS, models currently available and the references used for these notes.

Many thanks John for an excellent set of notes and photographs, these are available on request.

New Acquisitions –

Alan Porter – showed us the new Hornby GWR Horsebox with special emphasis on the detail under the vehicle. He next showed three OO scale PO wagons by Bachmann –

- an 8plank open wagon JAMES & EMANUEL Ltd
- a 5-plk steel-floored wagon JAMES DUXFORD & Son,
- a 7-plk wagon with coke rails EXETER GAS COMPANY.

He also bought two Dapol Composite LMS Coaches and two Dapol CKD kits of LMS 3rd/Brake

Coaches that just clip together. His final item was a Comet Overlay for a 50ft District Inspector's Saloon LMS/BR. [*Actually the Saloon was 50ft not the Dist. Inspector!*]

Roger Solly – told us of a website that he had acquired of an O gauge layout, it is www.monksbaymodelrailway.co.uk.

Doug Firth – showed us a OO Siphon G [GWR], a Lima Horsebox [GWR], a book *Modelling the GWR* by Chris Ellis and the HMRS book on *All About GWR Iron Minks*.

Doing Things –

Doug Firth – showed us a Mainline Collett 0–6–0 tender locomotive that he has resprayed from black to green using a spray can of Mister Hobby IJA Green at \$10.95 from Stanbridges. It looks really good.

Great Western Railway Modellers Special Interest Group's subject for the June meeting was GWR Road Vehicles and Aircraft.

Road Vehicles –

The Great Western Railway's road vehicles can be divided into Horse Drawn Vehicles and Mechanically Propelled Vehicles, with Trailers occupying common ground. Each of these will be looked at separately.

1. A General Outline of Livery Developments –

The painting and lettering of the GWR's road vehicles followed the practice of the carriage shops rather than that of the locomotive department.

a. Carts and horse-drawn vehicles –

The body, underframes and wheels of carts and horse-drawn vans were brown and carried the legend *Great Western Railway* in 5in. letters along one of the planks that formed the side of the body. The lettering was in yellow or gold and the initial letters of the Company title were slightly higher at the tops than the remainder of the letters. By 1900, the name of the station where they were based and used for dedicated parcels traffic, had been added to the side of the vehicles. There was no strictly defined place for the fleet number and examples are as common with it at the front as at the back. Where there was a canvas cover or hood, this was painted black and the lettering on it was in plain white block letters and in addition to *Great Western Railway*, various other legends were carried such as *Express Parcels Service*, *Passenger Train Parcels* and *Parcels Delivery*. About 1900, in common with the rail freight stock, use was made of the 25in. letters G.W.R. [including the three full stops].

Cream colour made its appearance on horse-drawn road-freight stock in the middle to the late 1930s. On flat lorries and the longer ones with side planks it took the form of a narrow panel of one plank depth on which the words *Great Western Railway* were written in brown with the fleet number and the tare in italic script. About this time too the Shirt Button monogram made its appearance on horse-drawn road vehicles. It was apparently confined to the covered parcels vans that had cream upper sides and grey roofs, the letters of the device were in brown. A panel was provided on the sides of these vans where posters could be stuck. When new these panels were grey and the practice of extended writing on the canvas sides fell into disuse.

b Mechanised vehicles –

The first departure from horse-drawn vehicles were two Milnes Daimler Wagonette omnibuses acquired in 1903 and put into service between Helston and The Lizard as a much cheaper alternative to the GWR building an extension from Helston. These vehicles had four-cylinder 16hp petrol engines and petrol was cheap – [2d. per Imperial gallon!] Closely following these vehicles were two Wolseley motor lorries with flat trays but with provision to attach body sides. The Company name was painted crudely in block letter format along the side of the flat tray. The painting was plain brown with no attempt at lining.

In 1905 the first mechanised parcels vans appeared. 1906 saw the introduction of the fleet number of the mechanised lorry or van on a plate at the front of the body side. In 1919 the GWR bought eleven electrically propelled vans painted in crimson lake with the Garter Crest on the cab sides.

From 1922 the upper sides of vans were solidly built instead of canvas and were cream, following the trend of the rail passenger stock. Lorries also adopted the brown and cream livery although not applied to all motor vehicles. The ubiquitous Shirt Button monogram appeared on road vehicles, as on everything else Great Western, on lorries it was on the body sides in addition to the lettering on the cream panel. It took the place of the G.W.R. on the sides of vans and at the front of the cabs in place of the cast plates which were removed.

Trailers and semi-articulated trailers were painted like flat-bodied lorries, these vehicles were the only ones that carried their telegraphic code, *DYAK*, on the sides.

The livery of the first two omnibuses followed that of the early lorries. Painting was all-over brown with no indication of ownership. In 1904 when the Company realised that it was in the omnibus business for the long haul, a more elaborate painting scheme was adopted. When double-deckers were introduced in 1905 in the Slough area, they were the first to carry the Company title in the form of *G.W.R.* along the lower body sides. There were some particularly elaborately finished buses in the Cornwall area. In 1908, in common with the railway rolling stock, the buses reverted to all brown but the bonnets and the Cornish bodies continued to be lined and the lettering was unchanged. It is uncertain whether the buses changed in 1913, like the carriages, from brown to crimson lake. In 1923, the buses again became chocolate and cream. This livery basically lasted until 1933 when the GWR buses were passed over to private bus companies and the GWR's omnibus services ceased to exist.

Although the GWR, like all major railways, arranged its own cartage services to and from its stations, very little evidence exists from the early days and there is a strong suspicion that before about 1890 these services were either contracted out or were run by agents. The earliest authenticated illustrations of Company owned road vehicles are photographs from 1890.

The facilitation notes continue with a more detailed look at each of the following sections –

- Horse-drawn vehicles
- Mechanical omnibuses
- Mechanical cartage vehicles
- Tractors
- Railhead schemes
- References

c. Aircraft –

In 1929, the Big Four obtained Parliamentary powers to operate air services. An announcement by the GWR of its intention to commence an air service on 12 April 1933 was the first step taken by

any of the Big Four to exercise those powers. The service was arranged to operate between the municipal aerodromes at Cardiff, Roborough [for Plymouth] and Halden [for Exeter, Teignmouth and Torquay]. The route was extremely suitable for the experiment as the plane could cross the Bristol Channel, performing the journey in about 50 minutes whereas the train took nearly four hours via Severn Tunnel and Bristol. The twice-daily service gave direct connection between a densely populated industrial area and one of the most popular coastal holiday coasts in the Country. It was operated in conjunction with Imperial Airways Ltd who supplied a three-engined *Westland Wessex* plane together with pilot and necessary ground staff. The plane was painted appropriately in the railway coaching stock colours and the interior was similar to that of a standard first-class railway carriage. The terminal services were performed by the GWR staff by means of motor omnibuses and the passengers were given the additional facility of having their heavy baggage collected, conveyed by rail and delivered at destination without any extra charge.

On 22 May 1934 the service was extended to Birmingham with one flight each way daily, including Sundays. Shortly before this [March 1934], the Big Four formed a partnership with Imperial Airways to form Railway Air Services [RAS], a domestic airline operating routes entirely within the UK, but linking up with Imperial's overseas services. The RAS's main operating and maintenance base was at London's Croydon Airport. This partnership included the GWR and it would appear that the GWR's pioneering effort was aborted, the routes being operated by a fleet of RAS de Havilland biplanes. The RAS trunk service [London-Birmingham-Manchester/Liverpool-Belfast-Glasgow] commenced on 20 August 1934, once daily in each direction, using the Airline's newly delivered *DH86 Express* biplanes. Other aircraft used at this time were the *DH84 Dragon* [1934-1939] and the *DH87 Dragon Rapide*[1935-1947].

In 1939 the control of civil aircraft was restricted and part of the RAS fleet was placed under government control. RAS resumed peacetime flights in early 1946 using their newly acquired *Avro Ansons* and ex-RAF *Douglas DC3 Dakotas*. A number of ex-Luftwaffe *Junkers JU52* tri-motor aircraft were also used during 1946/47 before retirement and scrapping.

In August 1946, the British Government formed the British European Airways Corporation [BEA], a state-owned airline which was given a monopoly of all scheduled air services within the UK and to continental Europe. From the beginning of August 1946 RAS operated all its services on behalf of BEA until it ceased operations on 31 January 1947. BEA then acquired the RAS aircraft, its staff and its routes.

The Notes then give the Model information along with the references used for these aircraft notes.

New Acquisitions –

Alan Porter – showed us two models of Lima SEALIONS that he bought from Andrew Morling at the Exhibition. They are almost nigh on as perfectly correct as the originals. He next showed a Hornby OO R6455 20T BR Engineer's Green SHARK Ballast Van and three Hornby OO R6512 TROUT Ballast Hoppers. All the Hornby items were from Hattons.

Doing Things –

Ron Fryer – told us that he is repairing Mainline MACAW B Bogie wagons. He will bring them in to show us, hopefully next month.

Alan Porter – explained to us that at the Exhibition, he was demonstrating how he makes loads for his wagons using his patent method of magnets, and he showed us the results.

John Brenchley – showed us his finished N Scale model of a Meat van that he had partly built

and showed to us at the last meeting.

S Scale Special Interest Group's June meeting came, as usual, just one week after the Model Railway Exhibition. The meeting was well attended with 31 members and visitors coming to our Clubrooms to hear the latest news, views and events for modellers of the WA scene. The evening was billed as a general **Bring and Show**.

Graham Watson rang the bell at 2030 for the formal part of the evening and welcomed visitors including Bob Balaam who is a friend and colleague of Joe Moir who has finally encouraged Bob to join AMRA and the S Scale group.

Graham reported that 21,000 visitors attended the Exhibition which was 7,000 more than the previous record and almost 10,000 more than the long term average. On behalf of all the members present Graham thanked our Management Committee and particularly Frans Ponjee and the Exhibition team for all their hard work in making the Exhibition such a resounding success.

Murray Hartzler reported that he was pleased with the running of his *Parkerville* layout at the Exhibition and thanked all those who helped make it a success. The layout won the trophy for the best model of a railway – it has won trophies at each of the three or four times it has been exhibited. It is probably the last time it will be exhibited to the public as the layout will be retired to Murray's layout room at his home in Swan View, which overlooks the former Eastern Railway.

Graham Watson reminded members of the S scale workshop in our Clubrooms at 1000 on Sunday 15 July. Railfest should be another event to mark in our diaries on Sunday 14 October at the Railway Museum. The Rail Heritage WA website now has 7507 photos on it and can all be accessed entirely free of charge. It is a boon to modellers of the WAGR/MRWA.

The results of the ongoing Sn3½ loco survey were also announced as follows. Steam locos – 231, Diesel locos – 110, Railcars – 32, Grand total 373. This is 42 vehicles more than the 2009 survey result. The figures represent locos owned by present and past members or associates of the SIG that are assembled, painted and run-able on a layout. All would agree that it is a terrific result. Thanks to Graham Watson for keeping us all informed.

Bill Gray reported that the Winter Edition of the ASNM magazine will be a little late this month but will be full of interesting articles as usual.

Peter Edwards was the first to show the progress he is making on his G&L Models Y class locomotive kit. The kit was only released a month or so ago and Peter has wasted no time in putting it together. He reported that it went together very well.

Stuart Mackay also showed his assembled and unpainted Y class kit and placed it alongside the scratch-built model that he built almost twenty years ago. Both the new kit and the earlier model were dimensionally identical with only slight variations in detail. Stuart said this was reassuring from a modeller's point of view, confirming that the two different methods of construction resulted in very similar outcomes.

Neil Blinco gave a very interesting and informative talk on the use of the liquid Crystal Clear [available from several of Perth's hobby shops] and its alternatives as a form of glazing on the windows of his coaches. Neil gave a demonstration of the application of the liquid, which is applied and worked into the window spaces using a tooth pick. An alternative liquid is available from Micro Mark [details of which can be found on the web]. Both products have their advantages and it is up to the preference of the individual modeller as to which they should use. The demonstration promoted a lot of discussion and interest and, dare one say, hopefully a bit more business for one or

two of our local hobby shops.

Kieran Wright reported on a catalogue he recently acquired from Precision Scale Models of Montana USA. They can also be Googled on the Web. Kieran reported that they have a range of detailing items suitable for our needs and their website is well worth a visit.

Murray Hartzler showed some clear louvre glass he recently purchased which is very useful as a flat, cutting and assembly surface for model construction and assembly.

The Group's July meeting was well attended by 32 members which is fast becoming the long term average attendance figure. Members were in for a surprise viewing of some interesting and exquisite models and a surprise announcement and viewing of a new kit from Graham Watson.

Apologies were received from absent friends, Lynton Englund who has the flu, Greg Aitken who was also unwell and Gary Pilmoor who had work commitments.

Graham Watson started the meeting in his usual way and extended a warm welcome to all the members present and in particular to an old friend, Allen Howe and his two sons, Colin and Ashley and daughter Allison Watt. Graham reminded members of our Branch AGM which is coming up in August.

Trevor Burke reported on the progress of the extensions to our Clubrooms, which are still well and truly on the agenda from the Branch's point of view. Building approvals take a little longer.

Stuart Mackay reported that he has had a good response to his Sn3½ modelling book and has sold one third of the number printed since its release at the Exhibition in early June. Copies were still available from Stuart or can be ordered by email from his address at mackays@inet.net.au. Stuart hopes to release a second volume in a year or two depending on the overall success of Volume 1.

Bill Gray informed the membership that the winter edition of the ASNM magazine was finished and had been sent to the printer. Hopefully we should have it in our mailboxes by the end of July or early in August at the latest.

Graham then asked Stuart to introduce the next item which concerned the **S scale Models of Allen Howe**. Allen has been a long time member of the Group since the 1990s and became a very fine modeller of the WAGR during his retirement. Stuart welcomed Allen and his family and thanked them for coming along on such a cold night. Stuart explained that Allen's daughter, Allison, had approached the Group to assist Allen with the painting of four coaches and three scratch-built D class locomotives which Allen had finished but had never got round to painting since he entered the retirement home at Ritcher Lodge. Lynton Englund offered to paint the locos and Stuart offered to paint the coaches. The models were outstanding examples of Allen's work and both Stuart and Lynton were only too pleased to finish the models. The models were displayed to the members and then placed on *Swan View* for a photographic session. Members were treated to some of the best models made by any member of the group. They included a D, DM and a DD class tank locomotive, 2 PM locomotives, 2 P class locomotives, an Australian Standard Garrett and four coaches classes AU, AW, AS and AT.

Neil Blinco followed up on his talk from last month's meeting by showing the results of using Crystal Clear on the windows of his AY and AYB suburban coaches following the successful application of it on his AYL country lounge car.

Doug Firth showed his ZB guard's van and the windows he had glazed, with varied results, using



**The AU, AW, AS and AT coaches
scratch-built by Allen Howe**

**One of Allen Howe's scratch-
built brass locos.**

A Bill Gray photograph.



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 program 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.

August

Friday	10	[1]	N Scale Special Interest Group meeting – General Activities
Saturday	11	[2]	<i>The Branchline</i> assembly General Activities
Monday	13	[3]	S Scale Special Interest Group – Air brushing your models. A talk and demonstration by one of the best, John Miller
Tuesday	14	[4]	Daylighters Group – daytime meeting Large Scale Special Interest Group meeting
Friday	17	[5]	N Scale Special Interest Group meeting – General Activities
Saturday	18	[6]	General Activities
Monday	20		Annual General Meeting – see enclosed supplement
Tuesday	21	[7]	Daylighters Group – daytime meeting
Wednesday	22	[8]	Great Western Railway Modellers Special Interest Group meeting – GWR refrigerated vans

Friday	24	[1]	N Scale Special Interest Group meeting – General Activities S Scale Special Interest Group – bring and run a train on <i>Swan View</i> layout
Saturday	25	[2]	Members Only Special Sale – see article on page 5 General Activities
Tuesday	28	[3]	Daylighters Group – daytime meeting
Wednesday	29	[4]	British Railways Special Interest Group meeting – BR Standard 9F locomotives
Friday	31	[5]	N Scale Special Interest Group meeting – General Activities

September

Saturday	1	[6]	General Activities
Monday	3		Scenery Techniques – Our Presenter will discuss the scenery techniques used on DSF&V layout and how these can be used on any layout.
Tuesday	4	[7]	Daylighters Group – daytime meeting
Wednesday	5	[8]	LNER Special Interest Group meeting
Friday	7	[1]	N Scale Special Interest Group meeting – General Activities
Saturday	8	[2]	General Activities
Monday	10	[3]	S Scale Special Interest Group – Bring and show your very first and last model, scratch built or kit built vehicles and/or structures and train running on <i>Swan View</i>
Tuesday	11	[4]	Daylighters Group – daytime meeting Large Scale Special Interest Group meeting
Wednesday	12		DCC Special Interest Group meeting – venue Naval Base
Friday	14	[5]	N Scale Special Interest Group meeting – General Activities
Saturday	15	[6]	General Activities
Tuesday	18	[7]	Daylighters Group – daytime meeting
Wednesday	19	[8]	Great Western Railway Modellers Special Interest Group meeting – Bring, Run and Tell about a GWR Train
Friday	21	[1]	N Scale Special Interest Group meeting – General Activities
Saturday	22	[2]	General Activities
Tuesday	25	[3]	Daylighters Group – daytime meeting

Wednesday	26	[4]	British Railways Special Interest Group meeting – Bring, Run and Tell About a BR Train
Friday	28	[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> . Talk all matters S Scale.
Saturday	29	[6]	General Activities
October			
Monday	1		Basic Electric s – Our Presenter will discuss the basic electrical wiring techniques and a comparison between DC and DCC wiring. Queen's Birthday - Public Holiday
Tuesday	2	[7]	Daylighters Group – daytime meeting
Wednesday	3	[8]	LMS Special Interest Group meeting –
Friday	5	[1]	N Scale Special Interest Group meeting – General Activities
Saturday	6	[2]	The Branchline assembly General Activities
Monday	8	[3]	S Scale Special Interest Group meeting – a second MRWA night, with slides/video of MRWA
Tuesday	9	[4]	Daylighters Group – daytime meeting North American Railroads Special Interest Group meeting Large Scale Special Interest Group meeting
Wednesday	10	[5]	DCC Special Interest Group meeting – venue AMRA Clubrooms
Friday	12	[6]	N Scale Special Interest Group meeting General Activities
Saturday	13	[7]	General Activities

(Continued from page 12)

Crystal Clear .

Phil Knife showed his very nice little scratch–built model of the WAGR R class 4–4–2 locomotive No. 174 which is now located at the Rail Heritage Museum. Phil described how he built it and how he overcame the problem of weight distribution by using the time–honoured method of applying lead shot under the loco. Phil is off to Denham for an extended term of pastoral duties. We hope he gets time to do plenty of modelling and is able to keep in contact with his modelling friends and colleagues.

Stuart Mackay showed a model of one of his VF van kits only to show that it now incorporated a styrene roof. The roof was shaped using the heated pipe method described and advocated by Murray Rowe and Neil Blinco at the April meeting. Stuart said the method worked well using a vacuum cleaner pipe. He found that three applications of boiling water is probably needed to get a smooth, permanent curve before the insulation tape is removed.

The topic for the July meeting was road vehicles suitable for an S scale layout. Due to the over-running of time only a few members brought out models which they thought might be of interest.

Gary Gray showed a flat bed truck he had heavily modified and nicely repainted from a vehicle he purchased at the Exhibition for \$5.

Peter Shurman showed a range of cars as did **Neil Blinco**.

Before the close of the meeting **Graham Watson** made a surprise announcement of a kit he has only recently produced of a MRWA CA cattle wagon. The recent revival of interest in all matters MRWA led to the discussion that there were no MRWA sheep or cattle wagons in the repertoire of kits available to the group. Graham responded to the challenge by making a nice and easy-to-assemble kit of the diminutive CA wagon in blue/grey livery which will grace any train or siding. Thanks Graham, the kit is a welcome addition to the range of kits available to members of the SIG.

What a terrific evening it was for all the members and visitors who braced themselves against the cold night air to come out to catch up with old friends and to see what is happening in the local model railway scene.

As a piece of late news, a dozen or so of us met on Sunday 15 July at the clubrooms between 10.00 and 15.00 hours in what was the second S scale modeller's workshop of the year. We all put a kit together with the help and advice of other members in what was a convivial and cooperative atmosphere. Thanks to Graham Watson and Trevor Burke for organizing the event. These workshops provide the opportunity to gain advice and help with the assembly of a kit that would probably have sat on the modelling desk that little bit longer.

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.

British Railway Modellers Special Interest Group's May meeting topic was the BR Classes 30 and 31 Diesel Electric Locomotives.

1 – Background –

The 1955 Modernisation Plan produced by the British Transport Commission [BTC] proposed the replacement of the steam locomotives then being operated by British Railways, by electric and diesel locomotives and by electric and diesel multiple units.

The Plan envisaged a requirement for some 2,500 diesel locomotives in due course and, although these were readily available from the USA manufacturers, it was decided, for a number of reasons, to Buy British! Thus it was decided to place orders for 171 diesel locomotives with several British locomotive manufacturing companies, allowing them some degree of free rein with their ideas and equipment. The types proposed in the pilot scheme were –

- Type A – 800 to 1,000hp for freight traffic
- Type B – 1,000 to 1,250hp for mixed traffic
- Type C – 2,000 and above for heavy duties

Note that no class was specifically termed for express passenger traffic. The specifications for the Type B locomotives were quite broad. English Electric was given an order for ten Type B diesel

locomotives [later Class 23s], Brush Traction was given an order for twenty Type B diesel locomotives [later Class 30s], North British was given an order for sixteen Type B diesel locomotives [later ten Class 21s and six Class 22s], Metropolitan Vickers was given an order for ten Type B diesel locomotives [later Class 28s], Birmingham Railway Carriage and Wagon was given an order for twenty Type B diesel locomotives [later Class 26s] and BR Derby Works was given an order for twenty Type B diesel locomotives [later Class 24s].

2 – BR Class 30 Diesel Electric Locomotives –

Brush Traction of Loughborough obtained their order for twenty Type B diesel locomotives in 1955. The locomotives weighed 105.3tons and, with an axle loading of 26.3tons, were therefore far too heavy to be carried on two four-wheel bogies, the specifications stated that the maximum axle loading be 18.75tons! Consequently, they had two six-wheel bogies and were powered by Brush TM73-68 traction motors on each outer axle of each bogie, the central axle of each bogie remained unpowered, an A1A-A1A wheel arrangement.

Construction of the first locomotive, D5500, commenced in February 1957 and it emerged from the Works in September 1957. Delivery of two locomotives per month was achieved and the last locomotive, D5519, was completed in August 1958. The twenty locomotives were allocated to various depots in the Great Eastern Section of the Eastern Region and they rapidly replaced steam traction on the principal expresses out of Liverpool Street. All were painted in BR Locomotive Green with two grey bands, a wide one at solebar level and a narrower one halfway up the body side, and a mid-grey roof.

The BTC was delighted with these new locomotives and a repeat order for forty locomotives [D5520-D5559] was placed on Brush Traction in July 1958. After D5541 was built, BTC decided to change the train identification display from the four-position disc system to the four-character head code system displayed in a roof-mounted box. Subsequent orders were placed on Brush Traction as follows –

- December 1958 Twenty locomotives [D5560–D5579]
- April 1959 Seventy-five locomotives [D5580–D5654]
- August 1959 Twenty-five locomotives [D5655–D5679]
- January 1960 Forty-six locomotives [D5680–D5699] and [D5800–D5825]
- Unrecorded date Thirty-seven locomotives [D5826–D5862]

Thus making a total of 263 locomotives. Due to concerns from track-workers about the visibility of the new green diesel locomotives which were said to blend into the background, Nos. D5578 and D5579 were delivered in experimental colours as a trial to see if they would prove to be more visible than the standard green colour. D5578 was in the Electric Blue and D5579 in Golden Ochre. They were painted in BR Locomotive Green about 1962 when it was decided that all diesel locomotive classes would have a yellow half front, this was changed to a full yellow front in 1964.

Reliverying in the overall BR Corporate Blue livery with the arrows of indecision commenced in 1966 and was complete by 1974. One of the failings of the Class 30 locomotives was that of being under-powered. BR tried increasing the horsepower and therefore engine speed of the various Mirrlees JVS12T engines in use and then increasing them yet further. Therefore there were four different groups of these A1A–A1A locomotives –

- fitted with Mirrlees 1,250hp engines
- fitted with Mirrlees 1,365hp engines

- fitted with Mirrlees 1,600hp engines, and
- No.5835, fitted with a Mirrlees 2,000hp engine.

However, in 1964 when some of the original Mirrlees JVS12T diesel engines were being given heavy general overhauls, some serious problems were identified, mainly involving fatigue of engine housing, crankcase and cylinder columns. It was suggested that these faults were caused by the uprating of the JVS12T engine causing excessive stresses. The still-operational Mirrlees diesel engines were down-rated back to 1,250hp and the 2,000hp D5835 was down-rated to 1,600hp.

Faced with the fact that to repair the complete fleet of diesel engines would be time consuming and a very costly undertaking with the prospect of a serious potential drop in availability, BR came up with a fall-back plan. After considering the technical issues and a trial of an English Electric 12SVT diesel engine of 1,470hp in D5677 in mid-1964, a major re-engineering scheme was authorised and an initial order for fifty E.E.12SVT engines was ordered to replace faulty Mirrlees engines. A further order for another fifty E.E.12SVT engines followed in December 1965 and a further 112 were ordered in April 1966. Twenty more E.E.12SVT engines were purloined from the planned fitment programme of the same engines into the Metrovick Co-Bos [Class 28]. The final thirty E.E.12SVT engines came in 1969. By the end of that year the whole fleet of 263 Class 30 locomotives had been re-engined.

[Note – It seems that Mirrlees were able to refurbish the faulty diesel engines which had been returned [sold back??] to them and operating at an even lower horse-power rating than originally used by BR, they were in instant success in the British trawler fleet some of which were re-equipping from older type diesels and even reciprocating steam engines!]

Thus it was that in 1973 when the TOPS scheme was introduced we said goodbye to the Class 30s and welcomed in the

3 – BR Class 31 Diesel Electric Locomotives –

Why a different TOPS number was needed is a bit of a mystery!. The only significant difference between the two Classes externally was that Class 30s had a single exhaust port in the roof, whereas the Class 31s had the twin exhaust ports in their roofs. Initially the Class continues to bear their D5xxx running numbers which were shorn of their D prefix after 1968 with the demise of steam traction [boo-hoo!]. With the adoption of the TOPS scheme, the whole fleet of 263 locomotives were renumbered into the 31xxx series in 1973. The locomotives Nos.D5501–5517 became Nos.31001–31017, D5519 became 31019 and D5500 became 31018. The missing D5518 became 31101. The remaining 244 locomotives [including D5518] were sub-divided into . . .

Class 31/1 – Standard locomotives, originally equipped with vacuum braking and steam heating equipment.

Class 31/4 – Locomotives fitted with air-braking facilities and with Electric Train Heating supply equipment.

Class 31/5 – Some of the Class 31/4s which were not used for passenger train haulage had their ETH removed but leaving the air-braking.

Class 31/9 – Nos.31298 and 31326 were transferred to the Derby Test Centre for use on test trains.

4 – UTILISATION –

During the 1960s, the Brush Type 2s were used exclusively on the Eastern Region [East Anglia, the southern end of the ECML and around Sheffield and in Lincolnshire.] but by the early 1970s their allocations were more widespread. With electrification of the ECML and the main routes in East Anglia there was a gradual drift of the Class to the London Midland and Western Regions.

5 – MODELS –

The Brush Type 2s must surely be one of the most prolific of models and the list provided covers 2, 3, and 4mm/ft scales.

6 – REFERENCES –

Finally, the comprehensive list of references used for these notes is given. Some photographs are also provided. A full and more detailed set of notes is available on request.

New Acquisitions –

Steve Rayner – showed a OO Hornby BR Schools Class 4–4–0 locomotive No.30901 *WINCHESTER* that he bought because it looked lonely sitting on Stanbridges shop shelf. I ask you.....!!!!

Alan Porter – has been buying books. As he says “he had a rush of blood to his head!” The books he showed us are –

- *Civil Engineers Wagons Vol.1.[Brit. Rlys 1948-1967]* by David Larkin published by Kestrel Railway Books
- *The Rise & Fall of British Railways – Branch & Minor Lines* by John Vaughan published by Haynes Publishing
- *The Rise & Fall of British Railways – Goods & Freight* by John Vaughan published by Haynes Publishing
- *Railway Breakdown Cranes – Steam Breakdown Cranes. Vol.1.* by Peter Tatlow published by Noodle Books

Doing Things –

Steve Rayner – is sorting his photos from his recent trips [railway photos that is!]

Alan Porter – showed the latest CKD kits from Dapol of LMS suburban coaches [refer for more detail to May GWR report]. Excellent coaches for a very cheap price! £8 per kit!!

British Railway Modellers Special Interest Group's June meeting subject was the BR 16ton Steel Mineral Wagon.

1 – Introduction –

Between 1950 and 1959, 239,673 steel mineral wagons were built by/for British Railways. The total cost of this massive construction venture was, it is said, to have been greater than the cost of all the diesel locomotives proposed under the 1955 Modernisation Plan. Why were so many built? In a few words – **they were desperately needed!**

When formed in 1948, BR inherited 1,279,543 wagons and containers from the Big Four companies, as well as 544,694 mineral wagons. These had previously been mostly privately owned but had been requisitioned by the Government at the outbreak of WW11 in 1939.

After the War, the Labour Party won the 1945 General Election with a commitment to nationalise the railways, the coalmines and the electricity industries and, as a consequence, these previously privately owned wagons were retained by the Government, with the previous owners finally being paid out in 1948.

The vast majority were wooden bodied with a capacity between 8 and 12 tons, and many had wooden underframes with grease lubricated axle boxes. They had received little maintenance during the War years, and most of them were clapped-out and the immediate reaction of BR was to repair those that had a reasonable life expectancy, pass on to the National Coal Board those wagons that were still capable of some work at slow speed and to scrap those wagons which had neither a reasonable life expectancy or could not be run safely on BR metals. It was in this context that the BR 16-ton steel mineral wagon was spawned.

2 – Steel Mineral Wagons Inherited by BR –

The species had not been entirely absent prior to 1948. The Butterley Company and Charles Roberts & Co, – both wagon builders – had produced steel bodied 12ton mineral wagons during the 1930s as a more economic alternative to the standard 12ton wooden bodied mineral wagon, some private owners had taken delivery of these. During WW11, the slope-sided Charles Roberts & Co. 12ton design was redesigned for a load of 14tons, late upgraded to 16tons. It was adopted by the Ministry of War Transport as a suitable design and 8,750 wagons were authorised by the MofWT for building by twelve different wagon builders for use on the railways to replace those damaged beyond repair in collisions and air raids. They were later to become **BR Dia. 1/100**.

The MofWT also authorised a further 1,000 straight-sided 16ton steel mineral wagons from Hurst Nelson, these were later to become **BR Dia. 1/101**.

Following the example of the MofWT, the LMSR and the LNER both built straight-sided 16ton steel mineral wagons after WW11 but before Nationalisation – 2,600 welded ones to LMS Dia.2106 and 2109, whilst the LNER had 7,200 riveted ones to LNER Dia.188, built by outside contractors.

It can be seen therefore, that there was a pressing need for wagons in the immediate post-wars years to replace those privately owned wagons that were beyond salvation. The private owners were not willing to make any investment in new stock – they had still not been compensated for their requisitioned wagons. It was left to the MofWT to fill the gap!

This was done by authorising the construction of over 50,000 new 16ton steel mineral wagons over five years. Of these –

- 1,500 were the Charles Roberts & Co. slope-sided design [**BR Dia.1/100**]
- 11,500 were to the LMS Dia.2109, but with LNER pressed steel side doors. [**BR Dia.1/102**]
- 1,500 were to the LNER Dia.188. [**BR Dia.1/103**]

The Railway Executive, formed at the outbreak of WW11, advised the MofWT to standardise on Dia.1/102 and Dia.1/103 designs. The Charles Roberts slope-sided design was deemed unsuitable and no further wagons were built – Charles Roberts went off in a huff!

Accordingly, a further 17,500 wagons to the BR Dia.1/102 and 1/103 were ordered by the MofWT in 1946 for 1947 delivery. A few of the Dia.1/102 wagons were modified with flap doors on top of the side doors, these became **BR Dia. 1/104**. The remaining 20,000 plus wagons were ordered in January 1947 but were not delivered until 1948/9 and were mostly to BR Dia.1/104 and the new **BR Dia.1/105**, these being the BR Dia.1/103 but with the flap doors above the side doors.

Also, there were 2,800 wagons to LMS Dia.2134 authorised in 1947 but built by BR in 1949, which were based on the previous LMS Dia.2109 but with top flap doors like the very similar BR Dia.1/104 – these became **BR Dia.1/106**.

Finally there were the SNCF wagons – 7,000 of these had been built by Metro-Cammell during 1945–46 to assist in the rehabilitation of the French railways system after WW11.

They had a body of SNCF design [with cupboard style doors] but with standard RCH underframes. These, along with 3,000 newly built wagons, to what were to become the BR Dia.1/100 & 1/101, were shipped to France in 1946, thought never to be seen again! By 1950, the SNCF considered them dispensable and BR, desperate for steel mineral wagons from almost any source, bought all 7,000 wagons with the cupboard style doors, and these were repatriated later that year for refurbishment, 6,982 entered revenue service as **BR Dia.1/112**. In the same year 1,987 BR Dia.1/100 wagons supplied earlier to France, were also repatriated and 1,964 entered revenue service without a change in Dia. number.

Additionally, 308 of the BR Dia.1/101 supplied to France in 1945/6, were also repatriated in 1950 and 305 of them entered revenue service reclassified as **BR Dia.1/113** [*Clear as mud!*] The BR Dia.1/112 were not popular with railway, colliery or shipping staff and they went out of BR service during the mid 1960s. Many were sold off to the NCB and 300 were sold to British Titan Products for carrying ilmenite [iron ore] to its Grimsby works where they lasted until 1975, some then being sold to the NCB for internal use at collieries.

The Charles Roberts & Co. slope-sided wagons [BR Dia. 1/100], the Hurst Nelson straight-sided wagons [BR Dia.1/101] and the ex-LNER design wagons were all condemned about 1960.

The LNER designed wagons [BR Dia.1/102], the LNER Dia.188 wagons [BR Dia.1/103], the top flap door variants BR Dia.1/104 and Dia.1/105 and the ex-LMS Dia.2106 and 2109 wagons were all withdrawn by 1972. Many went into Departmental use as spoil carriers and many were also sold to the NCB for internal use at collieries. Some were sold for internal use in private factories and some were even overhauled by Richard Thomas and Baldwins for use on the main line as steel carriers and for soda ash.

In summary, a total of just under 77,000 16-ton steel mineral wagons designed by others were inherited by BR in 1948 and soon thereafter.

3 – The BR Story –

The Ideal Stocks Committee was set up by the Railway Executive in Feb.1948 to “*report with regard to possible traffics in 1950 on the types and numbers of locomotives, carriages and wagons required under conditions of unified control to cater efficiently for anticipated traffics and to yield the maximum reduction of costs, to consider these ideals in relation to actual stocks and to make recommendations as to how the ideal . . . may be achieved . . . blah! blah! blah! . . . etc., etc., etc.*” [Shades of Sir Humphrey Appleby!]

For the carriage of minerals [mainly coal] they concluded that a 24½-ton wagon was to be preferred but . . . *meanwhile, until terminals and other conditions permit . . . the 16-ton wagon . . . should be built* and that all grease lubricated wagons should be eliminated in six years – all 253,000 of them. The size of the task was massive and two new designs were issued – **BR Dia.1/108** for wagons of welded construction and **BR Dia.1/109** for wagons of rivetted construction. Neither of these Diagrams featured bottom doors but otherwise they were identical to BR Dia.1/104 and 1/105 respectively. The omission of bottom doors meant that Morton brakes could be fitted and this obviously improved the braking system.

BR Dia.1/111 was also issued at this time for wagons identical to BR Dia.1/106 but without bottom doors and to be built in BR Workshops. Construction of BR Dia.1/108 was on a massive scale, usually associated with the motor industry, and a new company, Pressed Steel, produced 70,000 steel mineral wagons over seven years [an average of 192 a week or 27 a day assuming a seven day week!]. Between 1951 and 1959, sixteen different companies and three BR Works built 197,818 of these 16-ton steel mineral wagons.

A batch of 100 wagons, built at BR Shildon Works, with aluminium bodies were classed **BR Dia. 1/116**. They were much lighter than the steel-bodied wagons but, not surprisingly, they were not as robust as the steel wagons. Midway through the building task, the Railway Executive adopted its 1955 Modernisation Plan in which all freight trains were to be equipped with continuous [i.e. vacuum, at that time] brakes. The organisation etc., took time and it wasn't until 1956 that the first vacuum fitted mineral wagons began to appear, painted BR Bauxite **BR Dia.1/114**.

The final **BR Dia.1/117** introduced in 1955 to cover some slightly larger vacuum fitted mineral wagons – one sixteenth of an inch wider, giving an increase from 648 cu.ft to 649 cu.ft. [??].

The following sections give more details about the 16-ton mineral wagons –

Section 4 – Repairs and Rebuilds

Section 5 – Usage and Brandings

Section 6 – Liveries

Section 7 – Models

Section 8 – References

There then follows several pages of Drawings and photographs of the various Diagrams.

New Acquisitions –

Steve Rayner – showed us an N scale G/Farish [Bachmann] BR Class 4MT 2–6–0 locomotive No.76069 in Black that he bought at the recent Exhibition. He next item was also N scale, a Graham Farish/Bachmann] BR Class 03 Diesel Shunter in Green with wasp stripes, that he bought at Stanbridges.

John Maker – showed us three Bachmann OO locomotives –

- BR Class 03 Diesel Shunter in Blue No.03162,
- BR Jubilee Class 4–6–0 No.45587 *BARODA* in Green with a Fowler tender, and
- BR Jubilee Class 4–6–0 No.45659 *DRAKE* in Green with a Stanier tender.

Alan Porter – showed us the Ballast Hopper wagons that he bought from Andrew Morling at the Exhibition and also those that he bought recently from Hattons. The full details of these wagons has already been reported in the GWR SIG Notes for June] and that can be found in this issue of *The Branchline* also.] He next showed us an absolutely beautiful OO model by Heljan of the English Electric DP2 prototype Diesel Electric locomotive in BR Green.

Ron Richards – brought in a number of items that he had acquired on his recent trip to the UK, for us to peruse. First there were three books –

- *Steam Works* by Derek Huntriss published by BCA
- *The Liverpool Overhead Railway* part of the Best Selling ECHO Nostalgia Series ISBN 978–1–906802–72–1 [£4.99]

- *Southern Railway Reflections – The Southern Electric Story* by Michael H.C. Baker published by Silver Link Publishing.

He also showed us the Railex 2012 Exhibition Guide that he attended with our friend Peter Sapte.

His last item was a replica of a GWR sign. But is it a genuine sign???

Doing Things –

Alan Porter – showed us the results of his work on the BRMA Stand at the Exhibition. He has re-made the ballast loads for the Ballast Hopper wagons that he bought at the Exhibition and from Hattons. They are easily removed with the aid of a little magnet and the underside of the loads are colour coded according to the manufacturer of the wagons, thus he knows that whatever the load it will fit the wagons of that particular manufacturer.

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 359 – June 2012. The major items of business dealt with at this meeting were –

- The Exhibition was very successful with a lot of good feedback coming in, even from Eastern States exhibitors. There were no major problems apart from handling the numbers wanting entry into the exhibition. Many points have been recorded for consideration by the incoming Exhibition Manager for 2013. Graham Bell has agreed to accept the position, with considerable help from the outgoing Manager.
- ModelRail 2012 will be held on 11 November 2012. A revised modelling competition will be conducted as outlined in the June issue of *The Branchline*. Contest entrants will be provided with a card building kit and left to develop a display as they see fit.
- Comments had finally been obtained from Ashfield Smash Repairs regarding the proposed extension and forwarded to the City of Bayswater. A grant submission has been forwarded to Lotterywest. Responses are still awaited.
- Many proposals for expenditure have been received by the Management Committee. An early priority for the incoming Committee, after the AGM, will be to develop a prioritised list of improvements to the Club premises.

Meeting No 360 – July 2012. The major items of business dealt with at this meeting were –

- Final figures for the Exhibition were presented by the Treasurer, who also proposed an operating budget and Exhibitor payments. The figures are available on the Noticeboard, in the July minutes, for interested members.

The next few Committee meetings will be held on Thursday 23 August, 20 September and 24 October 2012. Branch members are welcome to attend. Meetings usually start at 1930 and complete about 2200.

There Are Still Some Real Engineers In The World

A V-12 diesel engine that fits in the palm of your hand. Watch it all the way through as he machines, assembles and runs this little engine...

This is not CNC technology; this guy made everything at home on his lathe and drill press. Took 1220 hours [a year and a half?] to make the 261 pieces. Note the end-loaded crankshaft into the block [like an Offy], 12 individual cylinder heads, **tiny** rods and pistons, dual under-head cams with pushrods to rockers in the heads.

Even if you're not an engineer, you'll appreciate this! <http://www.wimp.com/tiniestengine/>

Membership Matters

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

Michael Thomas	COMO	HO
Howard Osborne	WEMBLEY	
James Robertson	INGLEWOOD	
Richard Savage	LEEMING	OO
Ryan Vivers	TRIGG	HO
Kevin West	Karridale	N & O
John Hogan	Ellenbrook	N

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

Rural Australian Computer Terminology

LOG ON	Adding wood to make the barbie hotter.
LOG OFF	Not adding any more wood to the barbie.
MONITOR	Keeping an eye on the barbie.
DOWNLOAD	Getting the firewood off the Ute.
HARD DRIVE	Making the trip back home without any cold tinnies.
KEYBOARD	Where you hang the Ute keys.
WINDOW	What you shut when the weather's cold.
SCREEN	What you shut in the mozzie season.
BYTE	What mozzies do.
MEGABYTE	What Townsville mozzies do.
CHIP	A bar snack.
MICROCHIP	What's left in the bag after you've eaten the chips.
MODEM	What you did to the lawns.
LAPTOP	Where the cat sleeps.
SOFTWARE	Plastic knives and forks you get at Red Rooster.
HARDWARE	Stainless steel knives & forks - from K-Mart.

MOUSE	The small rodent that eats the grain in the shed.
MAINFRAME	What holds the shed up.
WEB	What spiders make.
WEBSITE	Usually in the shed or under the veranda.
SEARCH ENGINE	What you do when the Ute won't go.
CURSOR	What you say when the Ute won't go.
YAHOO	What you say when the Ute does go.
UPGRADE	A steep hill.
SERVER:	The person at the pub who brings out the counter lunch.
MAIL SERVER	The bloke at the pub who brings out the counter lunch.
USER	The neighbour who keeps borrowing things.
NETWORK	What you do when you need to repair the fishing net.
INTERNET	Where you want the fish to go.
NETSCAPE	What the fish do when they discover the hole in the net
ONLINE	Where you hang the washing.
OFFLINE:	Where the washing ends up when the pegs aren't strong enough.

Accident at WesterN-Ridge

Emergency services were recently called to a single vehicle accident in an isolated area on Bob's Mountain Road. The driver suffered some non-life threatening injuries and was taken by ambulance to The Ridge Hospital. Police are investigating the cause of the accident.



The photograph, courtesy WAAMRA Helicopter News Team, shows the scene with emergency services vehicles in attendance.

Layout Planning – the art of the possible

This is a potted version of Rod Tonkin's talk on Monday 2 July.

With a little planning you can build a satisfying home layout to represent your favourite prototype in the space you have available. Most of us already have a favourite prototype and have chosen the scale they prefer to work in. Based on these preferences it's a matter of selecting the rolling stock you want to operate and the type of curve radii you prefer or can accommodate in the space the layout will occupy.

Your rolling stock choice will decide the curve radii on your layout. The largest item of rolling stock you plan to operate determines your minimum curve radius. The type of curve radius you choose affects the train length on your layout and consequently the size of your stations and staging yards. Your curve radius choices are prototype minimum, AMRA Standards, reasonable and bare minimum.

If you are modelling BR in the TOPS era the largest items of rolling stock in operation were the 1-Co-Co-1 diesels. Of these oddities my favourite is the English Electric built Class 40. My 4mm scale OO gauge Class 40 model measures 275mm over the buffers. The prototype could negotiate a four and a half chain curve, in 4mm scale around 1,200mm radius.

AMRA recommends a curve radius of three times the overall length of the model, in this case 825mm radius. I've found from experience a curve radius of twice the overall length of the model in this case a radius of 550mm is a reasonable balance between appearance and reliable curve negotiation.

Hornby's Railroad Range instruction leaflet for the Class 40 model recommends using as a minimum their number two curves of 438mm radius – my model agrees with this recommendation.

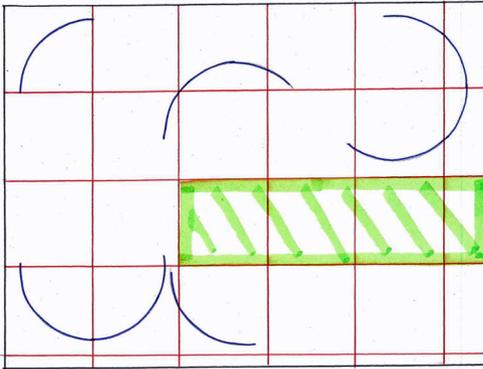
From experience a train as long as three quarters of a circle of your minimum radius curve will operate reliably. In 4mm scale OO gauge this works out as a seven coach train behind a Class 40, so even on the minimum practical operating radius you can operate decent length trains.

Once you've selected the minimum curve radius for your layout you can start planning in earnest.

A useful layout planning tool is the Track Planning Square [TPS]. The TPS contains a ninety degree curve of your minimum curve radius plus the next largest curve plus the clearance to the outside of the outer curve. The TPS provides a short-hand method of determining the possibilities of your layout space. For instance a balloon loop requires a space two squares wide by three squares long.

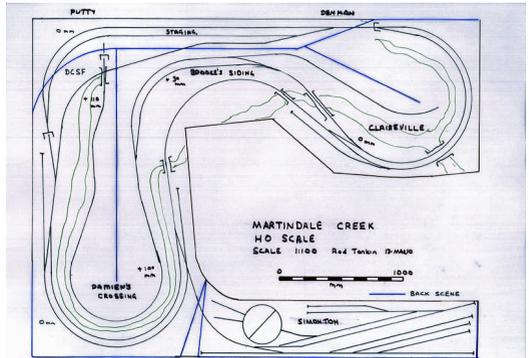
To use the track planning square simply divide up your layout space into squares. For initial planning in OO or HO allow a square width for access ways and a square width for operational reach from access ways. Using this approach you can trial track arrangements without major drafting efforts.

The sketches show a layout space in track planning squares and the track plan of the layout built from a design based on the TPS approach.



Layout space laid out in Track Planning Squares

Track plan from a design based on the track planning squares approach



Overall length largest vehicle mm	Curve radius mm		Square dimension mm	Reliable train length		
				Length mm	Number of Mk1 coaches	Number of squares
275.00	Prototype minimum	1,200.00	1,290.00	5,700.00	20.00	4.00
275.00	AMRA Standard	825.00	920.00	3,900.00	14.00	4.00
275.00	Reasonable	550.00	660.00	2,600.00	9.00	4.00
275.00	Minimum practical	438.00	550.00	2,100.00	7.00	4.00