Modelling Inspiration

RMweb Showcase
November 2011

Free railway modelling pdf e-mag

Wow!

A month ago I was a bit nervy over how MI would perform, be received and whether it was 'worth the effort'. The first issue brought a fairly universal note of approval, sometimes from surprising sources and aside from one day when downloads of the hi-res version put the server in a straitjacket it seems the technical performance was OK. What has surprised me is the number of downloads of the e-mag. I'd anticipated around 2 - 2,500 downloads based on a monthly readership of the site of over 20,000 but the usage far exceeded that with in excess of 13,000 unique user downloads up to the point of writing this column. I hope with the scope and quality of content in this and forthcoming issues that we can further build on that initial interest and acceptance.

This issue sees even more pages and content and it could easily have been another twenty pages at least but it does mean that some good stuff is already in the bag for next month and beyond with a lttle teaser of that on the last page. Already this has meant that I'm able to bring a bit of a theme to an issue as opposed to all of the articles being completely unrelated and there are several threads that hang together through different articles.

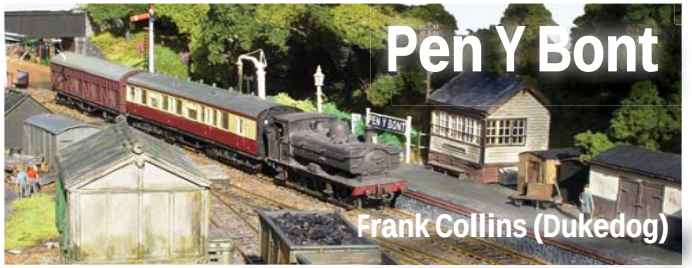
A large debt of gratitude is once again owed to the contributors and subjects of this issue for their time and courtesies.

Andy

Front cover: The smell of smoke and coal drifts across New Haden's yard on a damp autumn morning. For once the smoke isn't photo-shopped and was a source of amusement to those present and a by-product of me trying to give up 'the weed'!

The clickable index page

Layout features



Modelling features

Standard Eight
Redgate Models tackles a 'might have been'.

Decorating and weathering a PO wagon
Buckjumper gives a detailed approach which transcends scales.

A Stationmaster's garden
Tim Hale explains what goes into a rural vegetable plot.

Improving Hornby's Gresleys
Coachmann's silk purse.

Improving a Heljan 33/0
Butchery + bits to make a better Crompton.

Buffer beam detailing
P.C.M. gives a practical approach to detailing.

Comparing DCC systems
Ian Morton sees if RMweb users can pick a system that suits everyone.

Prototype features

North Staffordshire colliery buildings
Foxfield and New Haden Collieries.

Lincoln coal yard
Inspirational images of a 60's coal yard.

Salisbury & Dorset Railway
Tim Hale tells the line's history.

Canock Chase Military Railway
Walking a line for Remembrance.

Competitions

October photography competition

Win a limited edition Bachmann Jinty
Combining coal and creativity.

Bits Box

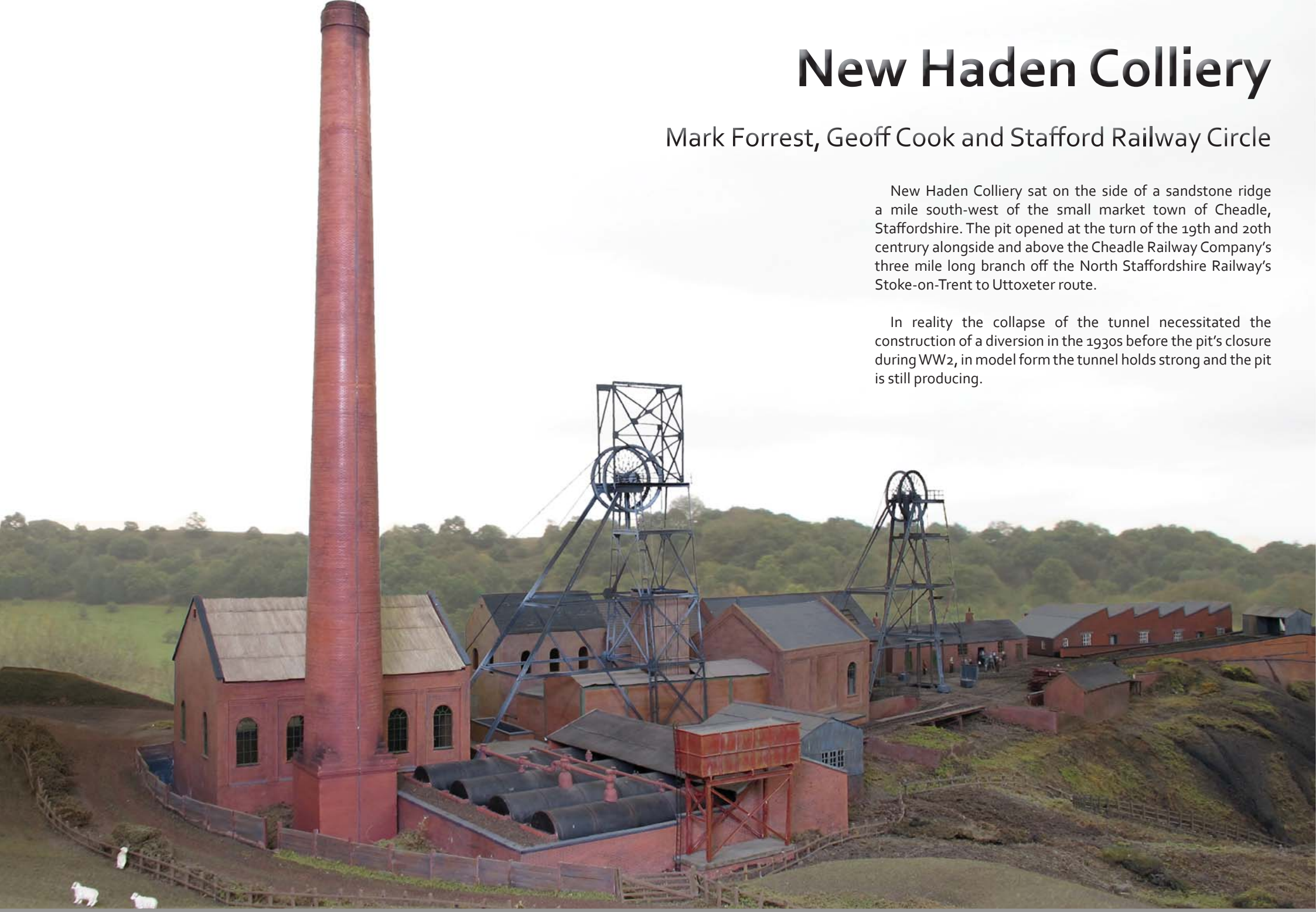
Bachmann Collectors' Club.
Steve Davies interview.

New Haden Colliery

Mark Forrest, Geoff Cook and Stafford Railway Circle

New Haden Colliery sat on the side of a sandstone ridge a mile south-west of the small market town of Cheadle, Staffordshire. The pit opened at the turn of the 19th and 20th centrury alongside and above the Cheadle Railway Company's three mile long branch off the North Staffordshire Railway's Stoke-on-Trent to Uttoxeter route.

In reality the collapse of the tunnel necessitated the construction of a diversion in the 1930s before the pit's closure during WW2, in model form the tunnel holds strong and the pit is still producing.



Some fifteen years ago the Stafford Railway Circle (SRC) was looking for greater accuracy and finer scale modelling. Some members turned to 'O' guage, some to O- 16.5 and some to a prototype EM project in the shape of New Haden Colliery.

The Real Thing

Coal mining near Cheadle (Staffordshire) dates from the middle of the 19th century. The specific history of the New Haden Colliery is incredibly complex and involves numerous companies, bankruptcies, legal battles, botched engineering and is the subject of a book by Allen C. Baker (The Cheadle Collieries and their Railways, 1986). Two of the more unusual aspects are worth mentioning as they will later be related to the way we have modelled the location and its operation.

First, it was the mining company that built the three and a bit mile Cresswell to Cheadle branchline serving the colliery. Their knowledge of railway construction can be summarised by looking at the 977-yard long tunnel to the south of the colliery. It contained gradients of up to 1 in 43 and its restricted diameter posed a real risk of asphyxiation for crews on hard working loaded trains. In November 1918 a 400ft section of tunnel roof collapsed, closing the line for a month. By 1933 the LMS had taken the costly measure of building a diversion around the troublesome tunnel and directly into Cheadle station. This effectively left the colliery served by a kickback siding from Cheadle. In return, the colliery was tied into an agreement with the LMS to export at least 250,000 tons of coal by train each year.

Second, the local geology and high water table resulted in New Haden being inefficient in comparison to other collieries in the Stoke area. Despite significant expenditure on modernisation in the 1930's, annual coal production only exceeded the level agreed with the LMS for nine years. Perversely, efforts to increase productivity by reaching a more profitable coal seam resulted in the workings being inundated by water to an unmanageable level. The end came swiftly in 1943, when the Fuel Ministry closed the colliery to help the war effort by transferring the thousand or so men and boys to more productive pits such as Florence and Hem Heath in the Stoke area.

A Bit of Reading

Is modelling a prototype a good thing to do? Analysing photos, counting bricks, scratch building windows and calculating hundreds of levels and measurements are all daunting tasks. However, the planning results in a more natural scene than can normally achieved using imagination alone. Luckily, during our research period, we came across the Allen C. Baker book, which includes much indispensable information about the real New Haden. Another windfall was that one of the businesses on the former colliery site was able to provide us with large plans of the colliery prior to its clearance and re-use as an industrial estate.

Armed with this little lot we realised that a true scale model would not fit in the room allocated by the club. Compression of the prototype was therefore called for but this was applied selectively, with some areas shortened (exchange sidings and screen roads) and others left true scale (fitting shops area and the complex buildings around the pit head near the rail tunnel). The other main item changed to keep the layout within the 3'6" wide boards was that the Cresswell to Cheadle line, which in reality continued on a steady right hand curve upon leaving the tunnel, was curved back onto the board. That was the X and Y dimensions sorted, so onto Z (the up and down).

An early visit to the site showed that the colliery was built into and onto a hillside. The loan of some surveying equipment enabled us to plot on a plan the relative heights of the few original buildings and features remaining. Additionally, Stafford'shire's Record Library held war time aerial photographs of the location. These were especially useful as they were taken in stereoscopic pairs which, with suitable equipment, enabled them to be viewed in full 3D. The effect of watching an item, such as a tall 100' chimney, leap out of the photo towards you is outstanding.

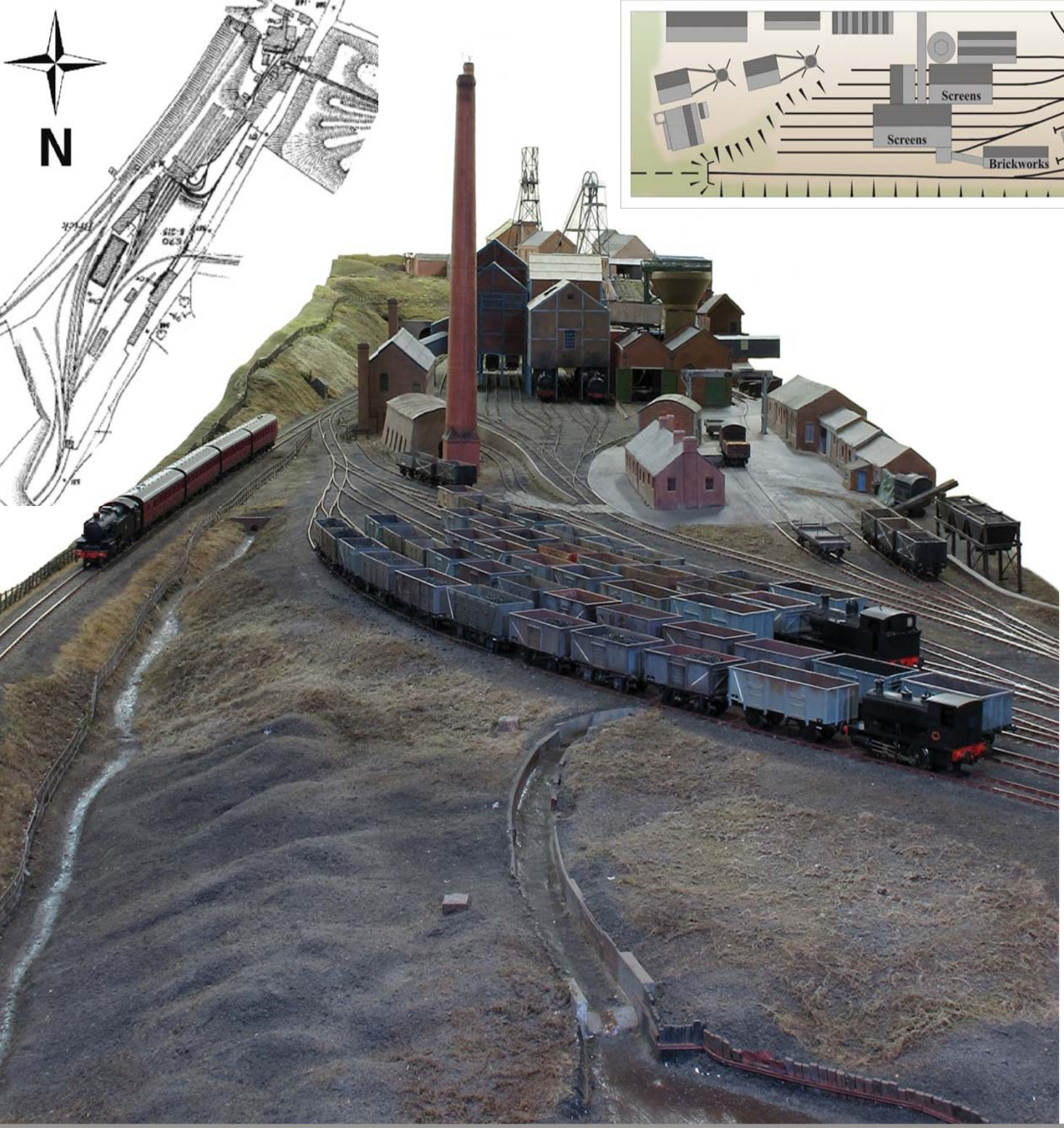
The final stage was meshing the X, Y and Z information together so that we got something that worked, i.e. the pit head buildings were at a level above the tunnel not in it! This was not easy, especially with the selective compression used, but the aim was to capture the overall feel of the location. This we feel has been achieved as the model has withstood the scrutiny of ex-employees.

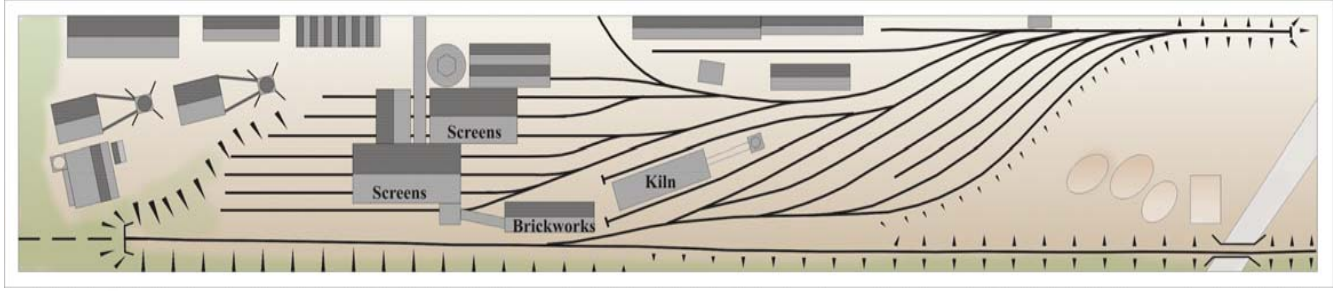
Building Bookcases

The graded nature of the prototype plus the significant variation in scenery heights meant that an open baseboard construction was adopted. We were eager to get our project started and therefore the main boards were completed before we'd worked out the various level differences. This wouldn't cause any problems would it? After all we knew the available space, and that the boards would be higher at the tunnel end than the embankment towards Cheadle. The reality was that we had 4 boards, each 5' x 3'6", on which various bits of wood had either to be added or removed to give the final track and fascia heights. The moral of the story is to think and plan before you cut and build.

1/2" plywood was used for the main framework which, when assembled, resembled a bookshelf. This similarity was not lost on some club members and, in the early days, it was common to find a selection of books placed on the 'shelves' if ever the boards were stored vertically. Horizontal surfaces were only added where required, i.e. under the trackwork and buildings, and these were arranged at the various levels and gradients calculated during planning. The New Haden group's growing reputation for robust construction was cemented for good by the use of some very large bolts (>M20) and steel backing plates to join the boards together. The two fiddle yard boards are of similar construction but with a MDF top. This gives a better surface to allow smooth sliding of the fiddle yard stock cartridges.

The cartridges in the fiddle yard are made out of aluminium angle. These were mounted (using araldite) on 6mm MDF and gauged to track width. There are two lengths, one for the longest loco and one for 4 coaches. Electrical contact is made through brass pins soldered to a brass plate, which was bolted horizontally into the comer of the aluminium angle. All ends are treated, some being male, and some being female. The units then just push together like a plug into a socket. This means there are no loose leads or clips, everything is self-contained. A strip of thick plastic down the middle acts as a check rail, to aid re-railing and prevent de-railing.





Stafford Railway Circle's 22' 4" x 3' 6" (scenic size) EM layout is set in the 1950s depicting the interchange sidings for the colliery alongside the single-line branch as it heads down from the tunnel on its run to Cheadle's terminus station.

Arriving empty trains come down the bank, passing the colliery and run around at Cheadle station before returning up the branch to reverse into the interchange sidings. Thereafter the wagons are fed to and from the coal screens for loading by the colliery's own locos. Loaded trains are collected from the interchange sidings and immediately face an uphill departure into the tunnel.

The branch sees a twice-daily passenger service extended from a Potteries loop service. In addition to the colliery the foremost chimney in the image (left) is that of the brickworks which can be seen behind the base of the chimney. This has its own traffic flows along with sand trains from the nearby quarries.

The layout is operated with a fiddle yard at each end representing the Cresswell and Cheadle ends of the line. It is unusual to find a layout depicting the waste areas of mining with its bleak landscape around the settling ponds.

New Haden Colliery has similarities of building style to that of Foxfield Colliery a few miles away and a number of the structures still exist amongst the industrial units although it is difficult to now imagine the railway in that environment.

This overall view is taken from the area usually occupied by the Cheadle fiddle yard, looking towards the colliery and on towards Creswell where the branch joined the North Staffordshire Railway's Stoke on Trent to Uttoxeter line.

The proximity of New Haden Colliery to the tunnel is apparent here.

When the tunnel was built the Cheadle Railway Company did not acquire the mining rights for the land beneath the tunnel. Subsequent mining activity soon led to subsidence and numerous tunnel collapses throughout the life of the tunnel. Several sections had to be patched up over the years but in November 1918, a partial collapse caused the line to be closed for almost a month. While repairs were underway, the coal traffic was important enough to justify wagons being exchanged between locomotives while inside the tunnel, repairs being carried out by men working on a timber platform with just enough room for the wagons to pass underneath.

As disruption and maintenance continued the LMS opened a diversionary route to Cheadle in 1930, closing the line through the tunnel. This necessitate the reversal of trains at Cheadle to reach the colliery.

Modeller's licence allows us to ignore these facts and run the layout as though the line had remained open, with through passenger, goods and sand trains passing the colliery en route to and from Cheadle. Which all helps to keep operators and exhibition punters entertained.

Traffic included NSR passenger services, pick up goods from the station at Cheadle and the brick works at New Haden, coal trains and in later decades, trains of sand tipplers up to its closure in 1986. The branch was operated as one engine in steam, which means that at Cresswell the driver, would collect the staff from the signal box unlocking the points to the branch and no further trains would be allowed onto the branch until that train and the staff returned to Cresswell. This means that the branch had no signals or signal boxes and all points were operated by hand or ground frame.

Endless Sleepers

The majority of locos and rolling stock were not available RTR and therefore would have to be kit built. Using proprietary trackwork just didn't seem to give the right flow and feel of an industrial complex and so we'd decided to build the track ourselves. With everything being built from scratch, the opportunity was there to try one of the more accurate gauges. The EM Gauge Society offered us novices the most complete assistance possible in the form of their extensive manual. So EM it was.

What followed were many months of 'slave labour', dying batches of wooden sleepers, inserting brass rivets into every fifth sleeper, laying each one out at the correct spacing along the desired line, sliding plastic chairs onto the rail and then soldering rails onto the rivets. But oh no, it didn't end there! Next came the laborious task of grinding down the soldered joints on every fifth sleeper and then glueing cosmetic chairs over the joint. We've not even mentioned the tasks of painting the rails and ballasting the branchline. Was it all a joy to do? Well no; but looking at the end result (and after some psychiatric help) we feel it was worth it.

Those Wires

All power for New Haden comes from a self contained power pack, which sits on the floor and ensures that the mains voltages are kept away from the layout. Four identical transformers provide the layout with three 15v AC supplies for the controllers and three separate DC supplies, 10v for point motors, 24v for electro-magnets and 12v for electronics and LED display on the control panel. The wiring on each board is self-contained and is linked directly to the control panel by plug-in multicore cable. There's no daisy chain wiring between the boards; this system allows you to power up the boards individually to help with fault finding and testing.

The track on the layout is divided into individual sections which, using three-way toggle switches, can be driven by two different controllers or turned off; the status of the section is indicated by coloured LEDs on the control panel track plan. The control panel also contains push-buttons to operate the electro-magnetic coils for the uncouplers and point motor switches for the six points that are not operated by the two lever frames. Three Modelex hand-held controllers are used, two control the locos in the colliery yard and one controlling the locomotives on the branch line with some overlap at the colliery entrance.

Large Erections

All the numerous buildings are scratchbuilt to suit the dimensions found on the plans, remaining buildings and photographs. Where no photographs of buildings existed and only ground-level dimensions were known, we based the design on similar mining buildings in North Staffordshire. Making windows from plastic strip is a thankless task, and the finished job is never worthy of your efforts. After a while we learnt to plan ahead and use proprietary plastic and brass windows and adjust the window aperture to suit. Of all the many structures, two pairs stand out. First, the two headsticks, both of which have been skilfully soldered up from brass section by two club members. Second, the two massive chimneys located at the brickworks and Lancashire boilers. These dwarf the other buildings on the layout and have a turned wooden core with brick detailing.

Moving Coal

A mainline loco delivers empty wagons to the exchange yard. The colliery locos then sort the rake, take small numbers for filling under the screens, return them full to the exchange yard and make up outgoing trains. These are collected by a mainline loco. An important feature was therefore the filling of the wagons without the use of the 'great hand in the sky'. Some sort of storage hopper was required that included a mechanism that could deliver the correct amounts for 12, 16 and 21 Tonne wagons. A recurring theme for some of the dubious efforts to achieve this was the use of a vacuum cleaner either sucking or blowing the coal. But our hours of fun were spoilt by coming up with a relatively simple mechanism.

A hopper with a hole in the bottom has a circular plate suspended a small distance below it by a shaft. When the hopper is charged with coal it then falls through the hole and on to the circular plate and piles up, blocking said hole. The clever bit is that a motor is used to spin the shaft, which then turns the plate. Hey, presto coal flies off the quickly spinning plate and is replaced by more from the hopper above until the motor is stopped. Those paying attention will probably wonder where all the flying coal goes. The spinning plate is surrounded by vertical sheeting, which the coal hits and then falls, via a funnel, into the wagon below. The time the plate spends spinning is proportional to the amount of coal discharged.

In operational terms, two aspects of the real colliery have been altered. First, it has been assumed that the tunnel was stabilised and continued to be used after the real closure and diversion on 26 November 1933. This enables us to run passenger stock and freights along the front of the layout to and from Cheadle, adding interest when the colliery is shunted. Second, the colliery managed to overcome the underground flooding problems and remained operational after 6 June 1943 and well into BR steam days. The simple reason for this was that the period matched the mainline locos we had available and that we all liked BR 16T wagons!

A Few Wagons More

The locomotives operating on the branch line to Cheadle and servicing New Haden Colliery were all stabled at Stoke shed, 5D. In the 1950s the shed allocation was dominated by 2-6-4 tanks and 4F 0-6-0s. This allocation is reflected in our stud which includes a Fairburn tank (42234), a Stanier tank (42440) and a Fowler 4F (43915). These are built from a mixture of Alan Gibson and detailed DJH kits, with chassis widened to suit EM gauge and powered by Portescap motors. The driving wheels on the tanks are beam compensated but the chassis springing on the 4F resulted in the ride height being too high. This loco therefore currently runs with a semi rigid chassis pending further refinement.

The colliery locos are a mixture of industrial tanks, including a Hunslett 0-6-0 (Impetus), Peckett 0-6-0 (Mercian) and Andrew Barclay 0-4-0 (DJH). Wagons are the most noticeable stock on the layout and the real New Haden had the storage capacity for over 300. Thankfully our compressed version meant that we only had to build half that number from a variety of Parkside, Slaters and Cambrian kits. Initially the first batches were built compensated but for the shorter wheelbase wagons this has proven unnecessary. Not fitting compensation saves much time and money. All stock is in the process of being weathered to reflect the grubby nature of coal traffic.

The exchange sidings with big Barclay 0-6-0 collecting empties and the Barclay 0-4-0 hiding behind a BR brake van while a Peckett 0-6-0 collects an empty LMS double bolster in the background. The building at the rear is the weighbridge office, in the foreground is the 'mainline' to Cheadle.

The Barclay 0-6-0 is a High Level kit, built as designed with beam compensation to all wheels, power comes from an open frame motor and scratch built 80:1 gearbox, wheels are 8-spoke from Alan Gibson, pick ups are of a sprung plunger type to each wheel rim, body is fitted with 8mm dia large sprung buffers.

Hilly Bits

'Polystyrene glued within the open top boards, cut to shape, plastered and then covered with scenic materials' - that's the scenic bit done isn't it? Well no, but as this method has been described numerous times before, we'll concentrate on the thoughts behind the scenery. We'd recommend spending time considering the scenery, in the same manner that you would when building or detailing a structure or item of rolling stock. This doesn't mean going out to count and measure blades of grass. What it does mean is deciding where in the country your layout is to be set and some good old research in books and magazines looking at the detail in the space beyond the railway. Better still visit, make notes, take photographs and generally get the feel of the location. This can include the type of materials used, the style / relationship of buildings, the form of the landscape and the typical vegetation.

For the New Haden project we visited the Cheadle area and what little remains of its coalfields and it appeared that we would have to model three main types of landscape:

- The land used by the colliery with its mass of sidings, buildings and general spread of industrial muck and pollution. The bias here was to be towards the grey, brown and black end of the spectrum but with Mother Nature reclaiming the odd corner with scrappy vegetation. The colliery was actually built into and on the side of a hill, the shape of which altered well beyond its natural state as the colliery expanded and looked for places to tip waste
- The land within the fencing of the branchline railway, which emerged from the doomed tunnel into a deep cutting and then descending into Cheadle on an embankment. Remains on site showed that both the cutting and embankment slopes were fairly steep and photos showed that that there was a good covering of fairly scrubby vegetation covering both
- Adjacent landowners/farmers. These areas along the ends and front of the layout serve to show the levels of the landscape before the railway and colliery arrived and rearranged things. Although very much in the minority on the layout, the farmlands' more cared for and managed appearance helps serve as a counterpoint to the unkemptness of the colliery and brings in a bit of colour.

Scenic Cack

A solution had to be found to replicate the mass of drab colliery waste that covered such large areas of the layout. Following experimentation the final recipe for the solution is as follows. Put a couple of cups of sharp sand in an old mixing pot, add a spoon full of brown or black Cementone cement colouring and add enough water to dampen the mix. Stir thoroughly until the sand takes the colour but be patient. What you'll be left with is a pot of damp, 'dirty' sand - it's not much use like this - so spread it thinly over some cardboard and leave to dry. Once dry, chop and cut the mix thoroughly with something like an old credit card to separate the lumps.

The best way of using this material is to mix and store batches of various shades of black and brown. Use this colour pallet to mix up a range of composite colours - for instance a black with hints of different browns, with perhaps a pinch of green scenic scatter to add some life. These mixes can then be applied in the same way as normal scatters using a dilute PVA mix (with a drop of washing up liquid). A few notes to remember - the effects can be altered by using different types/ grades of sand; the cement colouring although expensive will last a life time, so buy only a small tub of black and brown and don't forget it can also be used to colour stuff such as the base plaster coat and finally it should be noted that the sand-based mix is heavier than scenic powders and will add to the weight of your layout.

When it all goes wrong!

A common misconception appears to be that large exhibition layouts are just created by experts without trial or tribulation. Well; I can assure you this is not true. In the case of this layout, a mother of all times was had with the large scenic area containing the settling lagoons. Imagine the scene, polystyrene carved, plaster set, scenic sand scattered, detailing items finished. Only the water remained to do and, with 6 months to the exhibition, no problem with time.

That was the case until we got bored of applying the varnish layer by layer and decided to apply a single centimetre thick 'layer'. After a number of months this still remained a bit on the fluid side under the 'crust'. OK; so scrape it all out and on to the next great idea of using clear casting resin, which is ideal for thicker applications, if you remember to seal the void first with a non-porous paint that is. In our case the resin soaked through the plaster layer and dissolved vast areas of polystyrene underneath. So; let's scrape out all the dissolved polystyrene goo and use expanding gap-filling spray foam to fill the void found under the scenery. Fine; but this stuff does exactly what it says on the tin and after application continued to grow into all sorts of places for hours afterwards. With only a few weeks now remaining to the show, and having tamed the spray foam, it was back to buying a tin of quick drying varnish and applying a coat a day until the eve of the show.

And finally

It's fair to say that the group under-estimated the amount of time needed to build this layout. In particular undertaking the research, constructing the track and the numerous buildings took substantially longer than thought. Indeed the construction of the layout has seen many of the group leave education, get married and have kids! The membership of the group has been fluid over the years and we'd particularly like to thank those members that have kept the layout progressing whilst others have taken breaks and worked on different projects.

Well that's all folks. If you'd like to see more of this and other club projects then come and join us at the SRC's annual exhibition at the Stafford County Showground on 4/5 February.

End credits

Many SRC members who are also RMweb members have been involved with this project over the years.

Geoff Cook	
Mark Forrest	
Andy Banks	(wagonbasher)
John Wardle	(oldgringo)
Nigel Brazier	(Avonside1563)
Chris Tooth	(2manyspams) - former SRC member
Damian Ross	(indomitable026) - former SRC member

Specific credit is also due to Fred Shilton for his work on the headsticks.

The drivers of the Peckett and Hunslet saddle tanks prepare to extract some loaded wagons from beneath the screens. The loading mechanisms in these drop a measured amount of coal into the waiting wagons at the press of a button.

The Peckett 0-6-0 (left) is a Wychbury Loco Works kit, built with a rigid rear axle with the front and middle axles having beam compensation, fitted with Romford 10-spoke wheels, power is from open frame motor and a Mainly Trains 80:1 gearbox, pickups are phosphur-bronze wipers to each wheel rim.

The 3F 'Jinty' is running back from Cheadle with a brake van to collect the first loaded coal train of the day. In the lane below the bridge a NBC low loader makes its way back to base having delivered an excavator to the pit.

With a couple of internal user wagons in tow, the Barclay 0-4-0 prepares to move over to the weighbridge seen in the background. In the foreground runs a channel and a pipeline (underground) carrying water used to wash the coal down to a series of settling pools.

The Barclay 0-4-0 is a DJH kit, with the cast in name plates removed from the sides of the tank and fitted with large head sprung buffers, the chassis was widened out to 15mm external, with the rear axle running in fixed bearings driven by a scratch built 80:1 gearbox with open frame motor, the motor sits vertically in the firebox area of the cab, the front axle bearings are fitted in square tube so that the axle can pivot on a centre pivot giving some compensation to improve running, pickups to all wheels are by sprung plunger running on the back off the wheel rims. The wheels are the original Romfords as supplied with the kit, at the time of construction there were no wheels to suit the prototype available, now 8-spoke wheels to suit are produced by Alan Gibson Workshop and a wheel change is due to be done in the future

Having left the problematic tunnel behind, a Fairburn tank works the branch passenger service towards Cheadle passing the loading screens of the colliery

New Haden Colliery can be seen at the forthcoming events:

Spalding	12/13	November 2011
Stafford	04/05	February 2012

The days of the ex-PO mineral wagons are numbered, being superseded by the steel 16t and 21t minerals.

The big Barclay prepares to push a brace of 21t mineral wagons under the screens. The screens building is based on those at Dilhorne Colliery as we have been unable to locate photos of the actual buildings. However as aerial photos of the colliery in the 1940s show the buildings had been demolished, this led the group to the conclusion that these were of steel girder construction and had been dismantled as part of the war effort. In our alternative reality the pit has remained open and survived the war years.

D5030, the first mainline diesel-electric loco to be built at Crewe, finds herself bound for Cheadle hauling sand empties, maybe it's a running in turn before being despatched to her first home depot at March.

The sand wagons are Red Panda bodies on Parkside underframes, with cast whitemetal brakes and buffers from ABS (construction was detailed in Mark Forrest's blog entry here), the Type 2 is re-gauged Bachmann.

Inspiration - North Staffordshire colliery buildings

Considering the importance of coal and its relationship with the railways from their inception through to the current day it seems collieries are proportionally under-represented in the hobby. Evidently there's often an acknowledgement of coal as freight within workings or facilities within a small station but it does take some minerals to tackle any colliery workings.

Featuring a colliery needn't be large in scope and an excellent example of a small rural colliery in model form is Kim and Jerry Clifford's 2mm scale 'Highbury Colliery' set in the North Somerset coalfields.

As mentioned in the New Haden Colliery layout several pit-head buildings remain both at New Haden and at Foxfield Colliery at Dilhorne which is situated at one end of the preserved Foxfield Railway. Here we take a look at some of the detail of such buildings as reference material for the modeller wishing to tackle a small colliery.

The main headsticks frame at Foxfield Colliery is concrete-framed and standing approximately 20 metres in height. The brick shed is bult within the frame and provides an upper level for loading empty tubs into the lift frames for lowering down to the seams up to 300 metres below ground.

At the ground floor level of the headsticks shown on the previous page the top of the shaft is seen and the gap where the tubs would be lowered and raised.

The tubs would be pushed from the top of the shaft along the inset trackwork out into the yard.

The smaller headsticks stand around 12 metres in height and is assembled from cast concrete sections.

Looking upwards from the base of the head the holes for the cables to the winding wheels can be seen

At the ground floor level of the head the top of the shaft would see tubs lowered and raised.

The screen building at Foxfield formed the basis of the main building on the New Haden Colliery layout adapted to suit the real track-plan.

The winding house at Foxfield with its diamond-shaped roof tiles. The square aperture on the gable-end was for the cable to the headger's winding wheels.

New Haden

If you were to stand by the three internal user wagons on the right hand sand of the front-cover photo of this issue of MI this is the 'now' view from the same location showing the stores buildings.

From the same position this picture looks up to the former loco shed and the conical concrete water-storage reservoir.

The winding house at New Haden is considerably larger than that at Foxfield and still in use as part of a vehicle business. This is the building seen behind the chimney at the left hand side of the image on Page 3 of this issue.

Stafford Railway Circle

Annual Model Railway Exhibition

Saturday 4 February 2012
Sunday 5 February 2012
10am - 5pm both days

at Stafford County Showground
(Prestwood, Argyle and Sandylands Suites)

Situated 3 miles to the east of the town on the A518 towards Uttoxeter.
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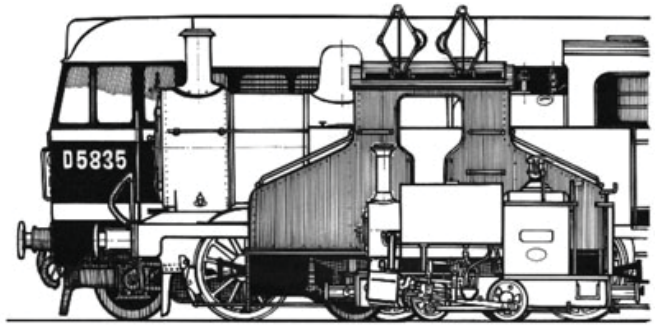

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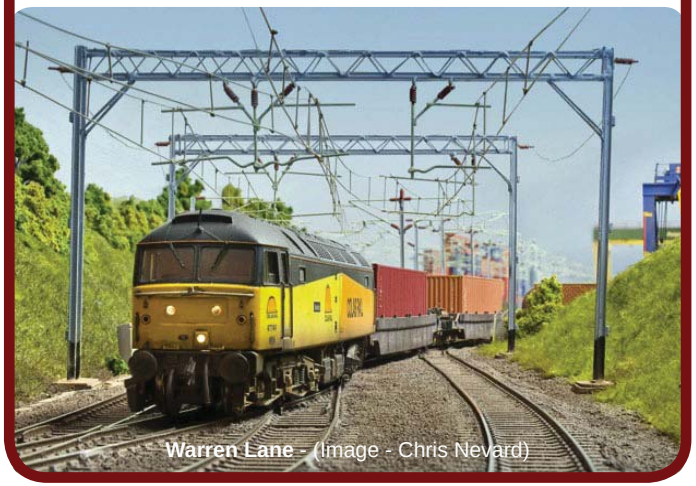

Warren Lane - (Image - Chris Nevard)

Standard Eight

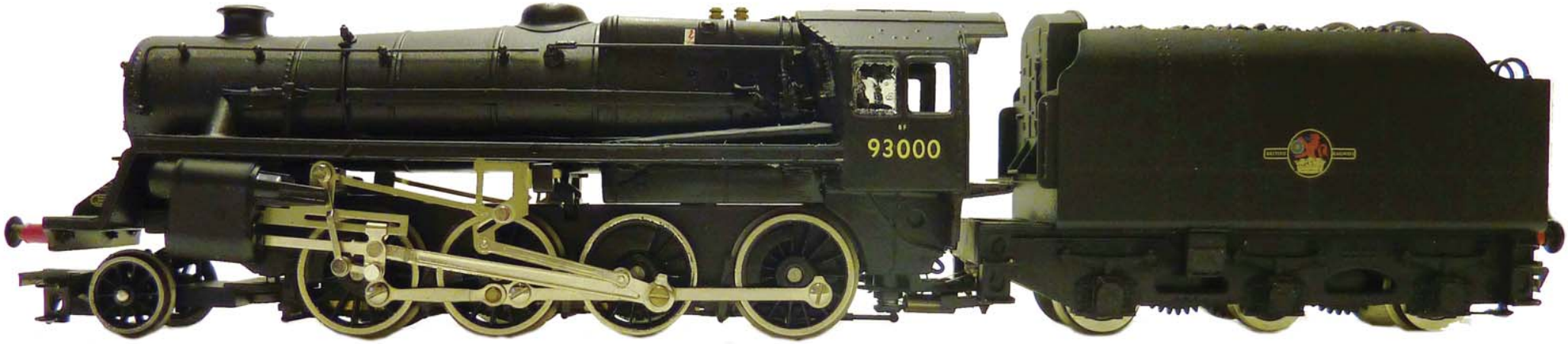
Ian Mellors - Redgate Models

The inspiration for this project initially came from an article in a heritage railway magazine featuring items from the National Railway Museum "Search Engine" project. Amongst the gems was a drawing from 1953 showing a proposed BR Standard class 8 heavy freight engine. Some months before I had seen a model in Railway Modeller of what was described as "Stanier's Ghost" – a Black Four 4-4-0. Putting all this together with my curiosity about the gaps in the BR Standard numbering sequence started me thinking about building the class 8 2-8-0.

As I have a stable of early Hornby 9Fs any project had to be based on early Hornby underpinnings. With this in mind drawings were compared and a decision was made to base the loco on a Hornby Stanier 8F chassis and boiler with a BR Standard cab and tender. This was compromise number one – the 8F boiler is a little short compared to the drawing. In fact a standard 5 boiler would be a perfect match but the prospect of trying to get my hands on a Bachmann bodyshell was considered too difficult.

Once I had gone this far there was no going back and a phone call to Barrie Marsh at Modelspares (now sadly retired) lead to the following Hornby parts arriving at my door:

- Complete Chinese made BR1C tender drive
- Britannia bodyshell
- Margate Stanier 8F rolling chassis (including bogie, wheel-sets and coupling rods)
- Stanier 8F bodyshell
- Margate 9F cylinders and motion set with 8F rear motion bracket.



The first thing to tackle was the chassis. I set about packing the 9F cylinder block to the correct height and angle above the chassis with layers of plasticard. Once this was done the motion was set up using the 8F rear bracket installed the wrong way round. A little filing of the link assembly mountings saw them slip into the support bracket and I was pleased to find that it all fitted perfectly. A spare sprung drawbar was rigged up to the rear of the chassis, tender coupled up and it was whizzing round the test track.

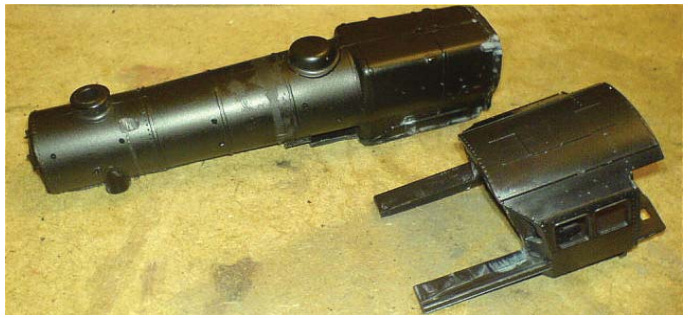
As the loco was going to be DCC controlled I fitted what was supposed to be a temporary R8215 Hornby DCC Decoder to the tender drive. This immediately highlighted that the current pickup from the two tender wheels was insufficient for good DCC running. Another call, this time to East Kent Models, delivered a loco drive chassis bottom with pickups on all drive wheels together with a spare parts pack including the brake rigging. This needed rewiring as the loco drive chassis has the common chassis return on the opposite side to the Margate design and a small amount of the plastic needed to be removed to account for the fatter Margate wheel bearings. Coupling the loco to the tender with a double contact drawbar ensured that there were no more issues with the loco stopping over points etc.

At this point I turned to the bodyshell and the second compromise. The original drawing showed a stepped running plate rather like a Horwich Crab which would have certainly been distinctive had it ever made it from the drawing board. It must be stressed at this time that all I was working from was a drawing published in a magazine and my two questions:

•Straight running plate as all other BR Standards or stepped as per drawing?

•Smoke deflectors or not?

The replies helped me to decide that had Riddles' team ever made the beast it would have had a straight running plate and without deflectors. Out came the mini drill and cutting disc. The boiler was cut from the 8F shell and the buffer beam/running plate and cab from the Britannia shell. In both cases care was taken to cut well away from the intended separation to ensure none of the desired material was lost. The Britannia running plate was cut approximately 30mm in front of the cab and a section removed so that the smokebox and its saddle lined up correctly.



The boiler was cleaned up and all Stanier fittings removed. Next it was mated to the cab/running plate assembly. This process took a long time to ensure that it sat correctly on the chassis. Plasticard packers were added under the cab and firebox to ensure everything was level. When I was finally happy the three components were bonded together using a liquid polystyrene cement and gaps filled with model filler. A coat of grey acrylic primer was applied to ensure that what looked smooth was actually smooth.

All the BR Standard fittings came from a Comet Models 9F detailing kit. Many hours were spent with burnt fingers assembling the tiny components, not helped by the fact that I had to fit 9F components in what was effectively a class 5 arrangement. After all that detail I could not fit chunky Hornby handrails so turned brass handrail knobs and brass wire completed the job. Items such as the reverser rod and regulator were made up from wire and a cocktail stick. At this point the chassis and bodyshell were reunited for a test and it became clear that the Stanier front bogie wheels were too big. I needed 12mm, but no Hornby version was available – the 9F ones were undersize and would not fit the 8F bogie. A hunt in my spares box revealed an unknown wagon wheelset with the right sized wheels. These were fitted with 8BA washers to pack them out as they were much thinner than the stock Hornby ones.

Finishing proved easy - as this was to be a freight locomotive unlined black was the order of the day. Like most modellers I use acrylic car spray paint where possible and this loco was no exception. But what to do about the number? Initially I had thought of filling the gap between the Austerity 2-8-0/2-10-0s and the 9Fs and using 91000. However on reading Cox's excellent book "British Railways Standard Steam Locomotives" it became clear that a 2-8-2 class 8 locomotive had been envisaged before it became the 9F. It was more likely that this design would have been allocated the 91xxx series. I decided to go with 93000 as this would leave the way clear for me to do the 2-8-2 later!

An order was placed with Guilplates for the smokebox number, shed, build and tender plates and only on receiving them did I discover that my deductions had been correct. Derry's book "The Book of the BR Standards:2" details a build plan for five class 8F 2-8-0 locomotives in the 1956 build plan – numbered 93000-4.

Plates were attached with superglue and numbers using HMRS pressfix transfers. A couple of coats of satin varnish over the bodyshell and tender body completed bodywork. Keen-eyed observers will note that the build plates are a little unusual in stating "Built Mansfield 2007". It also carries a 16C shed plate for my home town.

The chassis was stripped down and all unnecessary holes, slots etc filled with chemical metal filler and sanded flat. Several coats of satin black car spray were applied and the whole loco reassembled.

Follow Ian Mellors as Redgate Models on RMweb here

If I were to do this loco again I would probably go down the route of using a Bachmann class 5 body with a modified Comet 8F chassis however I am very pleased with the result.

The loco has since been modifed with an older fleichmann derived "silver seal" tender drive unit replacing the 5 pole Chinese built unit which proved too unreliable over code 75 pointwork.

The following suppliers and authors' help was invaluable in supplying parts and information:

Modelspares
East Kent Models
Gareth at Guilplates
Comet Models
HMRS
British Railways Standard Steam locomotives – E. S. Cox, Ian Allen ISBN
The Book of the BR Standards:2 – Richard Derry, Irwell Press ISBN 1903266-32-7

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Decorating and weathering a Private Owner

Buckjumper - Adrian Marks

Slater's Charles Roberts RCH 1907 open wagon kit - 1:32

The kit is a well-executed exercise in multi-media; the body is a very high quality resin casting, mastered, I understand, by a professional military modeller; etched brass frets for the axleguards and some of the brake gear; brass turnings for the buffer housings; steel buffers and coupling links; injection moulded sprues for two types of axlebox, brake blocks, leaf springs, buffer packing rings and the end door hinge; some very nice nickel silver castings for the coupling hooks, rounded off with an assortment of nuts, springs, microstrip, brass wire, and screws.

My intention here is not to describe a blow-by-blow account of building the kit as the instructions are more than adequate in this respect and following them carefully will produce a nice model. Instead I'll take you through a few upgrades I made, plus some guidance on the painting, transfers and weathering which will go towards producing a wagon which is a bit special.

A few additions

I cleaned all the parts of any casting flash - what little there was - and removed the cusp from the etched components with fine files and fine grade wet & dry paper. All the metal parts (wheels, buffers, couplings, axleguards and brake components) were chemically blackened before construction. I wasn't too impressed with the plastic end door hinge as it should fit snugly between the nuts on the wagon sides, but came up short. Not a problem - I usually discard plastic rod from kits as I find it warps faster then the Enterprise, so instead cut some brass rod and brass strip to fashion a new hinge which was duly blackened and glued into place.

I chose the Ellis axleboxes which require a little surgery, so I followed the instructions which adequately explained the simple operation, and then fitted together the various parts of the springing mechanism. Rather than embossing the rivets on the axleguard retaining strip I drilled out the half-etched holes and fitted some pins, the heads of which I turned down in my mini-drill with a file. If I were to build another of these wagons now I'd send an order off to Scale Hardware instead.

The Slater's wheels were machined to ScaleOne32 standards for me by Simon Dunkley, and with them fitted I tackled the brakes. In fitting the parts together, it was immediately obvious that there was a visually unacceptable gap between brake blocks and wheels due to the clearance of the non-prototypical specifications of the Gauge 1 Fine standard wheels as supplied. I separated the brake push rods from the tumbler, discarding it and fashioning a new one from brass tube, before soldering the rods back into the correct position. Only one set of brakes was fitted for the period modelled, with the lever towards the fixed end (I got it wrong first time...some pro, huh!), and I left out the wooden infill between the push rods which was a later addition. The V-hangers were drilled out where the rivets were to go and again used turned pins glued into place. Using a piece of green Rizla paper as a gasket between the nut and brake lever, I superglued the nut in place and after a few seconds of bated breath tore it away. Bingo - the brake lever could now be moved from the 'off' position when running, to 'on' in the fully pinned down position when shoved up some lonely siding (where the model has spent, and will no doubt continue to spend, much of its life).

Turning to the body, the only addition I needed to make was some 10 x 80 thou iron capping from Evergreen strip on top of the planks - an odd omission from the body moulding, but one soon fixed. The corners at the fixed end were trimmed to incorporate the 45 degree joints as per the prototype.

Decorating.

With all that nice crisp detail, and especially the extraordinarily subtle grain on the planking, I wanted the paint layers to be as thin as possible, so I masked the blackened metal off (the chemical process obviates the need to prime), and puffed the thinnest haze of oxide primer I could over the body and plastic parts. If the wagon was to be almost any other colour I probably wouldn't have bothered, but the translucent nature of red paint really requires a proper base coat.

For the interior, I brushed eight or so very thin washes of enamel using Humbrol natural wood (110), light grey (64) and black (33), slowly building up the opacity. This was followed by many sessions of drybrushing using these same colours, and when properly dry and hardened, I drybrushed gunmetal (53) which accentuates the grain and imparts the appearance of aged, untreated wood. If you brush gunmetal (53) over any other grey paint before the base colour is dry, you'll get a nasty greenish mess of a colour, and won't be a happy bunny, so it's worth being patient. The internal ironwork was picked out in a rusty brown/gunmetal/black (133/53/33) brew with some weathering powders carefully scrubbed on, followed by some very fine sieved coal dust fixed in place with matt varnish - not a lot, as these wagons would usually have been swept clean at the end of each run.

Masking the interior off, I mixed up some Precision Red Oxide, thinning it more than usual, and made several light passes over the body, allowing it to dry in between each pass, building up the opacity until I was satisfied it had fully covered - but only just.

A good wheeze, but not for the faint-hearted, is to use cellulose thinners in the enamel paint as it flashes off very quickly leaving just the thin pigment, but you need to be somewhat ambidextrous as you also have to hold a hairdryer (set to warm) in your weaker hand to help speed up the process. Most modellers will tell you that cellulose over enamels is a great big no-no, and for good reason too; it's a fine line between success and disaster and you've got to work really quickly or the underlying paint will craze and you'll end up stripping it all off and starting again. It's a good technique to have in your armoury, but if you want to have a go, please try it on something unimportant and more than once... in fact lots of times until you're happy (or bored!) with it. A very thin waft of Ronseal gloss varnish thinned 4:1 with white spirit sealed the paint, preparing the surface for the transfers. Meanwhile I drifted a couple of thin mists of gloss black over the running gear. I don't always begin weathering a wagon from ex-works condition, but this was one of those times I felt that course of action was appropriate.

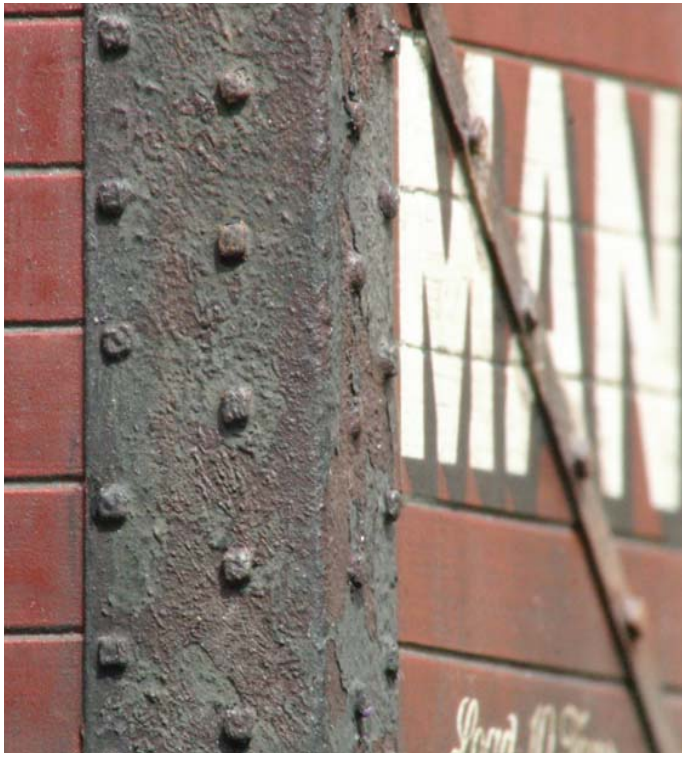
Transfers

There are two occasions when it is permissible for a grown man to cry; firstly when you're present at the birth of your children, and secondly when faced with the horrors that are Slater's transfers for 1/32 private owner wagons. I followed the instructions to the letter (boom boom!), but as the transfer slid into position I realised all was not right; the transfer film is far too thick, and despite sloshing on Transfix like there was no tomorrow, it refused to bed down over all my nice crisp ironwork, and looked like a badly cling-wrapped sandwich.

Blimey. What to do? I poured on more water to stop the film drying out while I sat deep in thought. I fitted a brand new blade to my Swann Morton, and began to hack away at the film, cutting hard up against the ironwork, peeling the unwanted transfer from the raised areas. The remaining film ruckled, folded over on itself, and ripped rather than cut. Blimey. Again. I feared the worst, but after 30 minutes of muttering and mild panic I finally emerged the victor, only to have to rejoin the battle for the second side. This time I cut the transfer into the correct shapes for fitting between the ironwork before immersing them in water and applying, and it was much easier - a bit of a doddle in fact, and once dry I used a ooooo brush loaded first with white to carry the lettering over the ironwork, then adding the black shading. Before long all was well with the world again, though I remain a little unimpressed with the registration between the black and white inks on the film. Another quick waft of Ronseal sealed the transfer (I don't always do this, but there was no way I was going to chance them lifting off) and I walked away from it for 72 hours.

The Long Haul

The exterior ironwork was carefully stippled with talc mixed with satin brown, black and gunmetal (Humbrol 133/33/53) to give a rusty appearance, and when dry, Maskol was applied around bolts and down the edges, over which I painted gloss black. The running gear then received a waft of a satin brown/black, and once dry, several thinned mixes of leather (62) and black (33) were drifted over the whole model. This was removed from the planks with downward strokes of a cotton bud moistened with enamel thinners about half an hour after each application of paint, until the required patina had been built up. The Maskol was then plucked off with my trusty pair of eyebrow tweezers, leaving the impression of rusty, flaking ironwork. The next stage requires much patience. I mixed up some white (34), leather (62) and Metalcote gunmetal (27004) which was drybrushed in a downward motion over every upper metal edge from the running gear to bolt heads, giving false highlights to the metalwork. Once dry, a similar mix, but without the white, was drybrushed in an upward direction on lower edges creating false shadows all over the model. Once this was dry I did the same over the woodwork with a hint of the red base colour mixed in. This alone can take several hours to complete as it is very important the effect is one of complete subtlety. Overdo it, and the model becomes a caricature and is probably appropriate in the over-emphasised features of fantasy wargame modelling, but is an unwanted effect in railway modelling. If it all goes wrong then remedial action involves either the airbrushed leather/black mix, or a deft hand with the cotton bud and thinners.



Coda

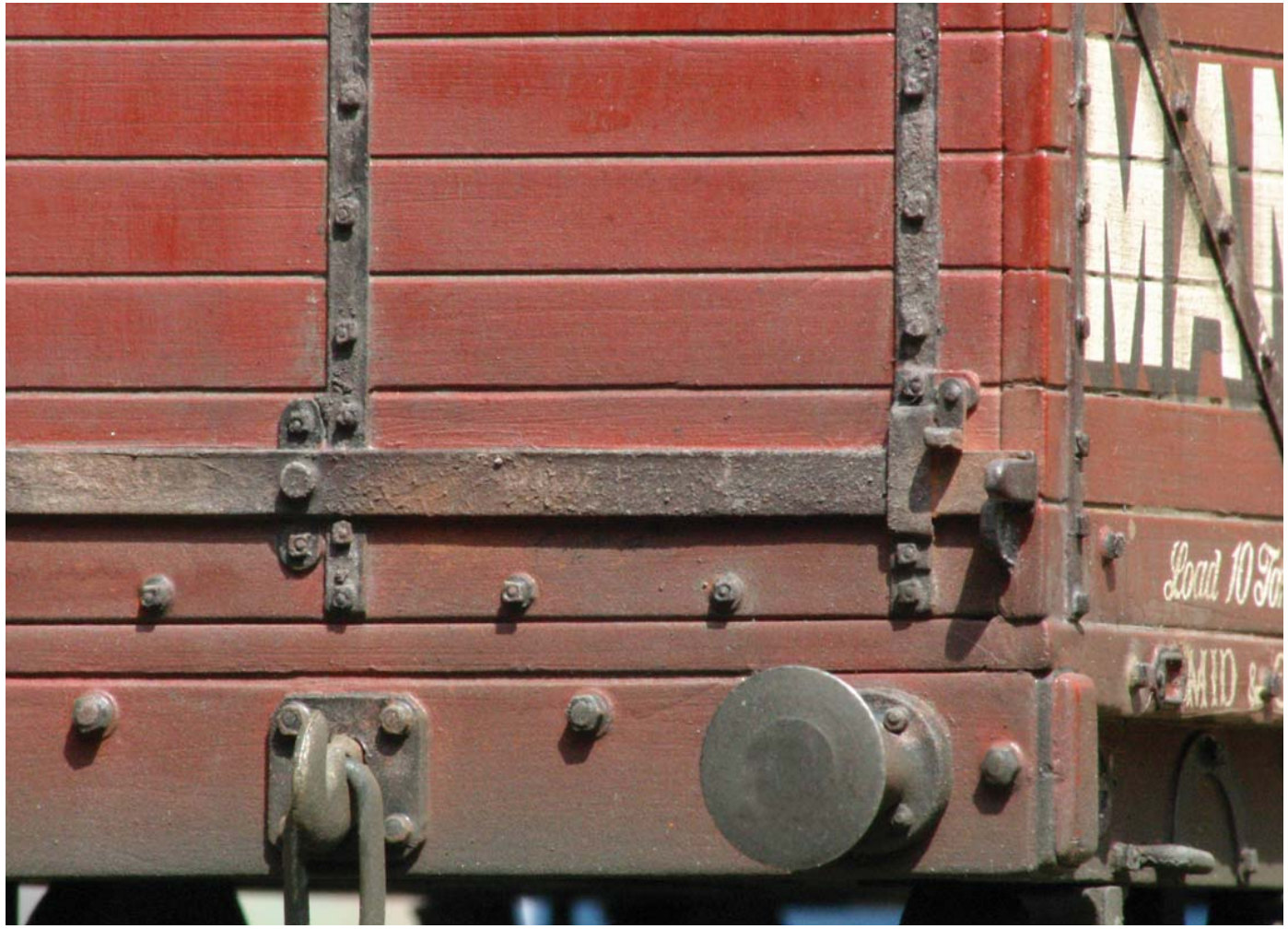
Any oil or grease smears can be replicated with a thin mix of Metalcote gunmetal (27004) and light grey (64). Remember that subtlety wins the day, as finally small, individual grains of weathering powders are pushed, forced and scrubbed into nooks and crannies to lift or deaden various areas around the model.

To round it all off I weighted the wagon (blotting out the lovely planking and bottom doors) with liquid lead to approx 350g – there's nothing like having a bit of mass and momentum to your stock!

As part of a concerted push to tell the world about ScaleOne32, I wrote an article for BRM in the autumn of 2006, and concurrently Simon asked if he could use a few of the photos for his article in MRJ. Time passed and I forgot all about it; I had assumed the scale/gauge combination and the nature of the article was perhaps too much of a curveball for mass-market consumption, when out of the blue I received an email which began, "I enjoyed your article in this month's BRM…" A quick trip to Smiffs and there it was, in the January 2010 issue, four pages, and virtually unedited too.

Stranger things have happened, and twelve months later, one did. An envelope franked in Bourne fell onto the mat and the letter inside began, "Congratulations, you have won…" For once I was utterly speechless (and that's rare!). The circumstances which had stopped me from modelling for most of the previous 15 months meant that I was unable to don the complimentary nosebag at Doncaster and collect the gong in person, instead leaving it to our long-suffering postie who staggered down the drive with it a couple of months later, and, with a suspicious eye, casually enquired if it was a real bullhead chair this time.

It was, of course, an absolute honour to receive the award, though I have to admit I'm not usually into the competitive side of the hobby, and although the wagon has caused much comment since, at the time of writing it's over five years old, and I hope my skills have improved since then.

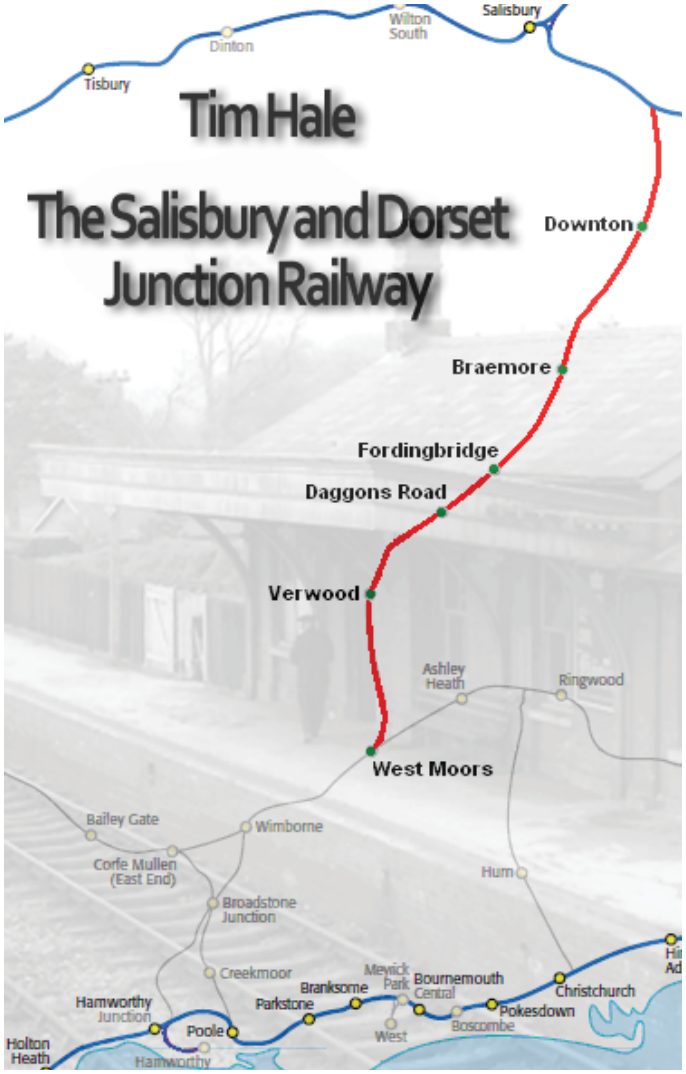


Follow Adrian Marks on his Basilica Fields blog

Inspiration - Lincoln coal yard

http://www.flickr.com/photos/davidwf2009/

David Ford's flickr album contains many inspirational images but I wanted to draw attention to these images of Lincoln's coal yard in 1969. They obviously demonstrate the amount of space taken by a large town or small city's coal yard; it's certainly more than a couple of coal staithes! It's also unusual to see wagons being tipped utilising the end doors of standard 16T mineral wagons. The images feature the rotatable conveyor fed by conveyor from the pit beneath the tipplier mechanism in front of the control cabin. The residue permeates any ballast to give a virtually flat surface between the rails.The concrete block walls divide the coal into grades and between merchants. Looking beyond the coal yard are the rows of terraced houses largely bereft of television aerials, replacement windows and telephone poles and cables.



Off the time table and onto the calendar

The Salisbury & Dorset Junction Railway was a railway that ran through the counties of Wiltshire, Hampshire and Dorset from 1866 until its closure in 1964. Working from the down bay platform at Salisbury Fisherton Street, trains left the Salisbury to Southampton line at the remote Alderbury Junction. Here there was a signal box, some railway cottages and two platforms on the main line for staff use only. The line ambled south through rural surroundings to meet the Southampton and Dorchester Railway at West Moors. Trains continued through Wimborne to Poole and Bournemouth West. Initial hopes of cross country traffic faded and the line carried sparse local produce and passengers until closing, as part of the Beeching closures, to all traffic on 4 May 1964. The track was lifted the following year.

Local railway developments

A desire to link Salisbury (and beyond Salisbury, Bristol and the Midlands) with the Dorset coast led to two lines being proposed in the mid-1840s, both using a route from Salisbury to Wimborne via Downton and Fordingbridge. The first was the Salisbury & Dorsetshire Railway, announced in 1844, which would have run to Weymouth through Wimborne, Bere Regis and Dorchester. The second, dating from a year later, would have terminated at Poole.

Neither of these lines was built, however over the next 15 years the railway network in the area did develop. To the south the Southampton & Dorchester Railway opened in 1847, being absorbed by the London & South Western Railway in 1848. LSWR trains began running from Dorchester into Weymouth, over the GWR line (which had been built to mixed gauge), in 1857.

To the north the first line to Salisbury was the 1847 LSWR line from Southampton and the Great Western had reached Salisbury in 1856. A direct line from Salisbury to London began operating in 1854 and the Salisbury & Yeovil Railway (including its extension to Exeter) opened in 1860.

Therefore from the end of 1860 there existed two LSWR-operated east-west mainlines; from London and Southampton to Dorchester and Weymouth and from London to Exeter via Salisbury and Yeovil; and the idea of linking them on a north-south route through Fordingbridge was revived. In addition the Great Western line to Chippenham provided a link to the north. This was broad gauge but would be converted to standard gauge in 1872. There was also a desire for a line south to Poole and Bournemouth from the Southampton & Dorchester Railway. When that line had been constructed a route had been chosen that bypassed Poole and Bournemouth, instead taking a route through Ringwood and Wimborne. In the 1840s these were deemed to be more important settlements and this route also avoided Poole Harbour. However by the late 1850s Poole, Bournemouth and Christchurch had all grown rapidly and required a direct rail connection. Poole was served by a branch line that terminated across the entrance to Holes Bay at Hamworthy, but this was deemed far from satisfactory. A number of different lines from Wimborne or Broadstone to Poole had been proposed but by the 1860s had come to nothing. Meanwhile in the east construction had started on the Ringwood, Christchurch & Bournemouth Railway in 1860. This was a line from the Southampton & Dorchester line at Ringwood south down the Avon valley to Christchurch, where it would turn west and run to Bournemouth. A strong desire to be connected to the railway network from the population of towns such as Fordingbridge and Downton also existed. A meeting was held in Salisbury on 20 October 1860 to discuss the latest scheme. This was chaired by the Seventh Earl of Shaftesbury, who lived at Cranborne near Verwood

Further developments

The Salisbury & Dorset continued to propose extensions south to provide better links with Poole and/or Bournemouth. In 1878 a bill was placed before Parliament for a 'Bournemouth Direct Railway'. This included provision for the GWR to be involved in operating the line. This alarmed the LSWR and, despite the bill coming to nothing, they were keen to protect their territory from their great commercial rival. On 31 May 1882 members of the Salisbury & Dorset board met with LSWR directors to discuss amalgamation. This was completed on 20 August 1883. In 1893 the LSWR completed a direct line from Brockenhurst, in the New Forest, through Christchurch, Bournemouth and Poole, to Hamworthy Junction. This had been built piecemeal over the previous 30 years and relegated the original route of the Southampton & Dorchester between Brockenhurst and Hamworthy to branch line/diversionary route status. As part of this development a line had opened in 1872 from Broadstone to Poole and this allowed trains to run directly from Salisbury to Poole and Bournemouth

The proposed route

The line would take a route from Alderbury Junction, to the south east of Salisbury on the Southampton line, through Downton and Fordingbridge, to West Moors, located to the east of Wimborne.

Here a spur would connect to the Southampton & Dorchester line. Meanwhile the line would continue south splitting into two branches. The first would run to a junction with the Ringwood, Christchurch & Bournemouth Railway, the second would take a direct route to Poole. Financial problems led to the removal of the southern branches and when 'The Salisbury, Poole & Dorset Junction Railway Bill' received Royal Assent on 16 July 1861 it was for the Alderbury-West Moors section only

Decline and Closure

When the Railways Act came into force on 1 January 1923 the Salisbury a& Dorset line, along with the rest of the LSWR, became part of the Southern Railway. Then, with nationalisation in 1948 it became part of British Railways Southern Region. Following publication of the Reshaping of British Railways report by Richard Beeching in March 1963 British Railways announced formal proposals to close the line in early summer 1963, claiming it was losing £100 per mile per week. Salisbury MP John Morrison supported the proposal and Salisbury City Council initially decided not to object to the ending of passenger services; however there was much local opposition to the closure. Those objecting included Poole Borough Council, Wimborne & Cranborne Rural District Council, several Parish Councils, the Viscount Cranborne Estates and the National Union of Agricultural & Allied Workers. On 3 March 1964 it was announced that the closure of the line had been approved by Ernest Marples, the Minister of Transport. The proposed date of the closure was 4 May 1964 Also closed on that day was the original route of the Southampton & Dorchester line from Brockenhurst to Broadstone; the section from Brockenhurst to Ringwood completely and the section from Ringwood to Broadstone to passengers only. As 4 May was a Monday, and the line no longer had Sunday services the last trains were on Saturday 2 May.

The line described

The line was 18 miles and 41 chains from Alderbury Junction to West Moors Junction and was single track for its entire length with passing loops at some stations. The highest point of the line was just south of Whaddon between Alderbury Junction and Downton, the lowest was at West Moors station. The steepest gradients were two stretches at 1 in 75. The first was south of Whaddon as it descended from the highest point of the line; the second was as the line descended from Cranborne Common between Daggons Road and Verwood. West Moors to Alderbury Junction was the up direction, the opposite was the down direction.

From Salisbury the Southampton line climbs out of the Avon valley until it reaches the site of Alderbury Junction. Here the Salisbury & Dorset line curved off to the right. It crossed the A36 Salisbury to Southampton road close to Whaddon. It reached its first summit, and the highest point of the line, shortly after before running south along the west side of the Avon valley high above the river. The line passed through Downton tunnel before starting to descend to the valley floor, passing through Downton station as it did so. Once it reached the bottom it crossed the Avon and into Hampshire. The line then ran parallel to the river along its western bank between it and the A338 Salisbury to Ringwood road continuing through Breamore station before running under the A338 at Burgate. Turning south west it began to climb out of the Avon valley, skirting the north and west of Fordingbridge and passing through Fordingbridge station. The line crossed into Dorset, passed through Daggons Road station and along the northern edge of Cranborne Common. Reaching its second summit, it turned south and entered the Crane valley before descending to Verwood station. Crossing the River Crane south of Verwood it ran south to West Moors along the edge of the Dorset heath. At West Moors the line turned west to meet the east – west Southampton & Dorchester Railway.

Stations along the route

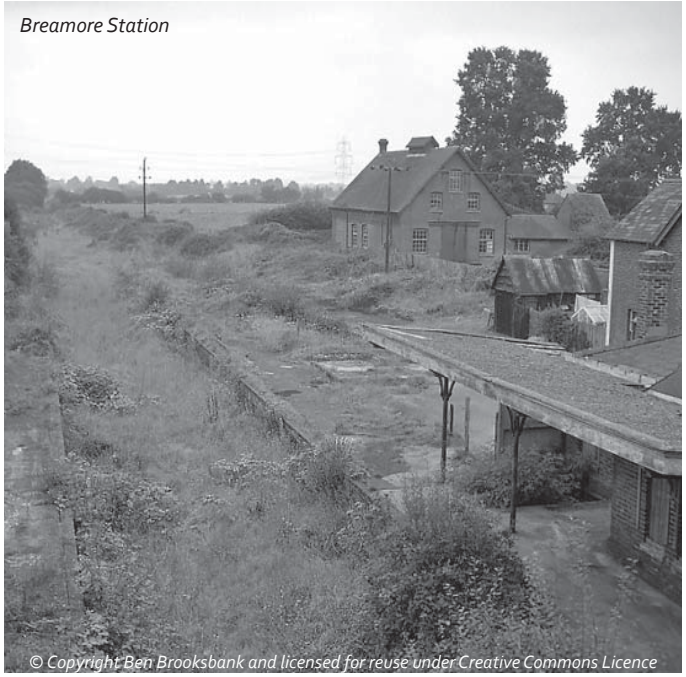
The line had five dedicated intermediate stations plus West Moors station at the junction with the Southampton & Dorchester line. All of the intermediate stations except Daggons Road were built with passing loops and two platforms. The station buildings were all brick but were not of a standard design. Apart from Daggons Road and West Moors all signal boxes were LSWR Type 1 boxes.

Alderbury Junction was about half a mile from the village of Alderbury. Originally the West Moors line diverged as a double line, becoming single a short distance down the line. The layout was rearranged in 1943 to become a single trailing lead from the down (i.e. Salisbury direction) main line with crossover. An LSWR type 4 signal box was located in the apex of the junction. On the main line, to the west of the junction were Alderbury staff platforms. These were originally built to allow transfer between West Moors and Southampton trains, but this appears to have stopped by 1881. After this the platforms were used for the families of railway staff, to pick up and drop off permanent way staff and in emergencies such as the failure of a train. Downton tunnel was to the north of Downton, on the descent from Whaddon to Breamore and was a small bore tunnel 107 yards long, now filled in.

Downton Station

Downton was 3 miles and 70 chains from Alderbury Junction and was located to the north of the eastern end of Downton High Street, the line crossing the road by way of a bridge. The station consisted of a passing loop with up and down platforms plus goods sidings. The main station building was a single storey pitched roof structure with mono-pitch canopy and was located on the up (north bound) platform. The signal box was a LSWR Type 1 box and was at the southern end of the down platform. The signal box was reduced to a ground frame when the station ceased to be a block post on 1 December 1922. A steel girder footbridge was installed in 1902; this was the first of its type on the LSWR. The station master's house was to the south east of the station, close to the signal box. Goods traffic was served with a cattle loading dock on the up side accessed by a lead to the north of the station and a small number of sidings for other goods, also on the up side, and served by a lead to the south of the station. After the station ceased to be a block post the down loop was converted to a siding with catch points installed at both ends. The station site today is a residential development with only the station master's house extant.

Breamore, 6 miles and 67 chains from Alderbury Junction, was located close to the centre of the village; to its south east on the road from Breamore to Woodgreen and Hale. This crossed the line via an overbridge just to the north of the station. It consisted of a passing loop with two platforms, a cattle loading dock, accessed by a lead close to the southern end of the up platform, and a single siding. The station building was located on the up platform and was a brick twin-gabled single storey with mono-pitch canopy. Also on the up platform, in front of the station building, was a 13 lever frame which replaced the original Type 1 signal box on 29 July 1930. The original box was located at the south end of the down platform. At the opposite end of the down platform was a timber waiting shelter. In the yard there was a small dairy creamery and the station master's house was located across the station yard behind the main station building. Both the station building and station master's house are extant; the former was restored in the late 2000s.


Breamore Station

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Burgate, 8 miles from Alderbury Junction was the location of a Ministry of Supply Buffer Store built during World War Two. It was also where the line crossed the A338. The road overbridge was removed by Hampshire County Council during the Fordingbridge road improvement scheme.

Fordingbridge is the largest station on the line, with passing loop, two platforms, goods shed and several sidings. It was located 9 miles and 36 chains from Alderbury Junction about three quarters of a mile west of the town on the B3078. The road crossed the line via an over-bridge to the north east of the station. The main station building was a substantial two storey brick building with hipped roof and platform canopy and was located on the down platform. Beyond the southern end of the down platform was the Type 1 signal box. On the up platform opposite were a brick waiting room and a small wooden office and across the road from the station was the Railway Hotel, now called the Augustus John after a famous local resident. The goods yard had five sidings, all connected to the line via a trailing connection into the down loop. One siding ran into a loading dock while another went into the brick goods shed which was equipped with a 30cwt capacity crane. In the yard were a 5cwt capacity crane and a number of concrete cattle cake sheds.

Fordingbridge Station

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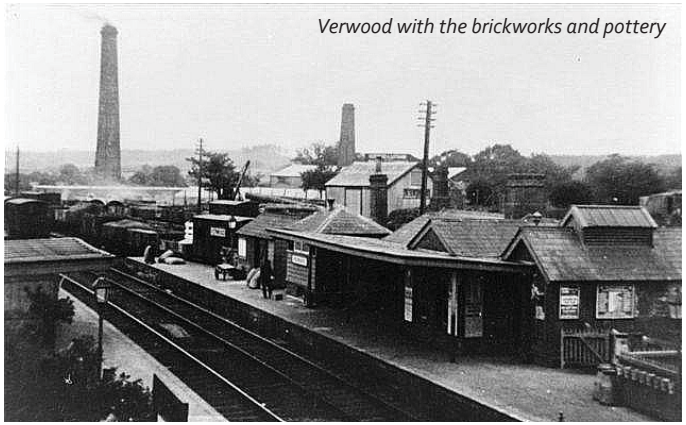
Daggons Road station was located on the Alderholt to Cranborne road, just to the west of Alderholt and 11 miles and 21 chains from Alderbury Junction. Its odd name was acquired from a local farm, the LSWR having decided that Alderholt could cause confusion with Aldershot, the only other notable feature was Charing Cross. The road crossed the line by an overbridge to the south west of the station. The station consisted of a single platform on the up side, with three sidings and loading dock. One of these, on the down side, was extended and converted into a passing loop in May 1904, but the station was never used as a block post. The station building, which included the station master's house, was a two storey double-gabled brick building with single storey extensions but no canopy. The signal box was a non-standard ground level box with a pointed roof and was located alongside the down loop, opposite the main station building. It was reduced to a ground frame in August 1903. There were two sidings on the up side, one serving a loading dock and one serving the neighbouring brick works. The down siding, converted to passing loop in 1904, served cattle pens and had level access for lorries. The main station building is now a private residence, part of a larger residential development. Behind the station, sidings served a small brickworks and a pottery.


Verwood with the brickworks and pottery

Verwood was 14 miles and 38 chains from Alderbury Junction, some way to the west of the village on the B3081. This road crossed the line on an overbridge just to the north of the station. The station consisted of a passing loop with two platforms plus goods facilities. The main station building was a single storey, double-gabled brick building, with platform canopy, on the up platform. Next to it was the LSWR Type 1 signal box and beyond that a parcels store. On the down platform was a timber shelter. In the station yard was the Albion Hotel. The goods yard was at the southern end of the up platform and consisted of a number of sidings, some serving the nearby brickworks.

A single siding ran between the cattle loading dock and the up platform. Verwood was the only station, other than Fordingbridge, to be equipped with a loading crane. This was used each week to load a container which was dispatched from a local furniture factory to Waring and Gillows. The Albion Hotel (now the Albion Inn) and the road bridge are the only remaining structures with the road being re-routed across the station site.

West Moors Station

West Moors, 18 miles and 41 chains from Alderbury Junction was on the Southampton & Dorchester railway, just to the west of the junction with the Salisbury and Dorset line. The station was close to the centre of West Moors on Station Road, which crossed the Southampton & Dorchester line west of the station via a level crossing. The Southampton & Dorchester line was double track and the station had two platforms, loading dock and a number of sidings. The main station building was on the east bound up platform and was a two storey building without a canopy. Next to the station building was a store and beyond that a concrete footbridge. This was installed in 1902 by the Concrete Construction Company. At the end of the up platform, next to the road so it could operate the crossing, was an LSWR Type 3c signal box. On the other side of the road was a two storey gatekeeper's house. On the down platform was a waiting shelter. There were two goods yards. The first was accessed from the Salisbury line and included a loading bay at the east end of the up platform. The second was on the down side, on the other side of station road and included a loading dock.

Traffic on the line

The local traffic was bucolic in its nature; during the 1940s and 1950s the area was put to wheat production, and agricultural traffic was always a priority, with Crane Valley watercress being popular as were strawberries and other soft fruit. Today the Avon Valley is a shadow of its former self with commuter housing and horses a priority for the local landowners.

Diversionary traffic on the line was heavier than might be expected. The 'Pines Express' would use the line when the 'other' S&D was unable to provide a path - on one occasion with Light Pacific 'Lapford' running out of coal as it entered Daggons Road with a down Pines - and more than once a York-Bournemouth train was routed through.

Other traffic included newspaper trains and pigeon specials (Fordingbridge was a favourite site for release). In addition, there was a large grain warehouse owned by Dukes who eventually took over the station yard after closure. One of the problems endured by the line was a constant shortage of stock; this was exacerbated in the 1950s with the wholesale withdrawal of pre-grouping coaching stock and desperate measures were necessary. Salisbury received an articulated SECR railmotor P+P Isle of Sheppey set after its withdrawal from the Portland branch. This was employed on workmen's specials from Idmiston to Salisbury as well as the Salisbury & Dorset, and a well known photograph shows it entering Fordingbridge with a Salisbury-Bournemouth West local behind a T9.

Most, if not all of the motive power on local services for the line was the responsibility of Salisbury shed. Suitable locos are: T9, SR Moguls, 700,, Q, and Q1 classes,, Bulleid Light Pacifics and, in the final years, both BR 4MTs. Curiously I have no photos of tank locos working the line although until 1959 Salisbury's carriage pilot, a non-auto fitted M7 was rostered on a Sunday-only service. Other locos were permitted but never officially used - V class 4-4-0s but not SR 4-6-0s. Wartime traffic is a mystery due to the strict security restrictions but presumably LNER ambulance trains and their charges would have traversed the line.

At the start of the 1950s, the line was almost the exclusive preserve of ex-LSWR motive power, Salisbury L12, S11, T9 and 700 classes. By 1952 there were six passenger trains each way on weekdays; the first was the 03:52 Salisbury-Weymouth which included a newspaper van 01:25 ex-Waterloo, and during the 1952 timetable longer distance trains started to use the line New Milton-Swansea, but by 1953 a Bournemouth West-Cardiff service was hauled by U class 31622 as far as Salisbury while on the same day a New Milton-Swansea train was in charge of BR 4MT 76016.

In 1958, the last M7 duty on the line was performed by 30673 but this was a Sunday only service and by 1959 this ceased as an economy measure.

It was not unusual to see double-heading on the branch, a particular example being the 07:42 Bournemouth Central-Salisbury but this was only for pathing purposes, the normal train being two coaches. However, this particular service also saw the use of ex-SECR L Class 31771 on 21 March 1952, this loco having been transferred from Ashford to Eastleigh. In 1959, more ex-SECR locos displaced by the electrification of the Kent coast started to move westward - E1 Class 31497 became a regular performer on the 07:15 Salisbury- Bournemouth West. Other ex-SECR locos include N class 31835 from Exmouth Junction, transferred to Salisbury in 1964.

The line was able to accept Bulleid Light Pacifics but not any larger locomotives, the following are recorded:

- 34106 Lydford - 16/09/56 on a excursion to Weymouth with both Pullman and BR coaches
- 34052 Lord Dowding - 14/12/58 Salisbury-Bournemouth West
- 34107 Blandford Forum - 14/03/58 Bournemouth Central-Salisbury
- 34051 Winston Churchill - 15/06/59 - Salisbury-Wimborne cattle train
- 34091 Weymouth -02/05/64 last day of services

T9 30404 on a Salisbury train, taken from the ferro-concrete footbridge at West Moors.

Beaminster Road Stationmaster's garden

Tim Hale

As located on the layout, the stationmaster's house straddles a baseboard joint. Rather than re-position the building a left-field solution is to make both the house and garden as a removable unit which has the additional bonus of being available for display at events.

The base is a tray of balsa and ply, this allows the Anderson shelter to be correctly buried for half its depth and for a nice base for the vegetable garden. The house is designed to be removable from the base and is located by hardwood strips which the house 'plugs' onto - the joint between house and base will be hidden by static grass.

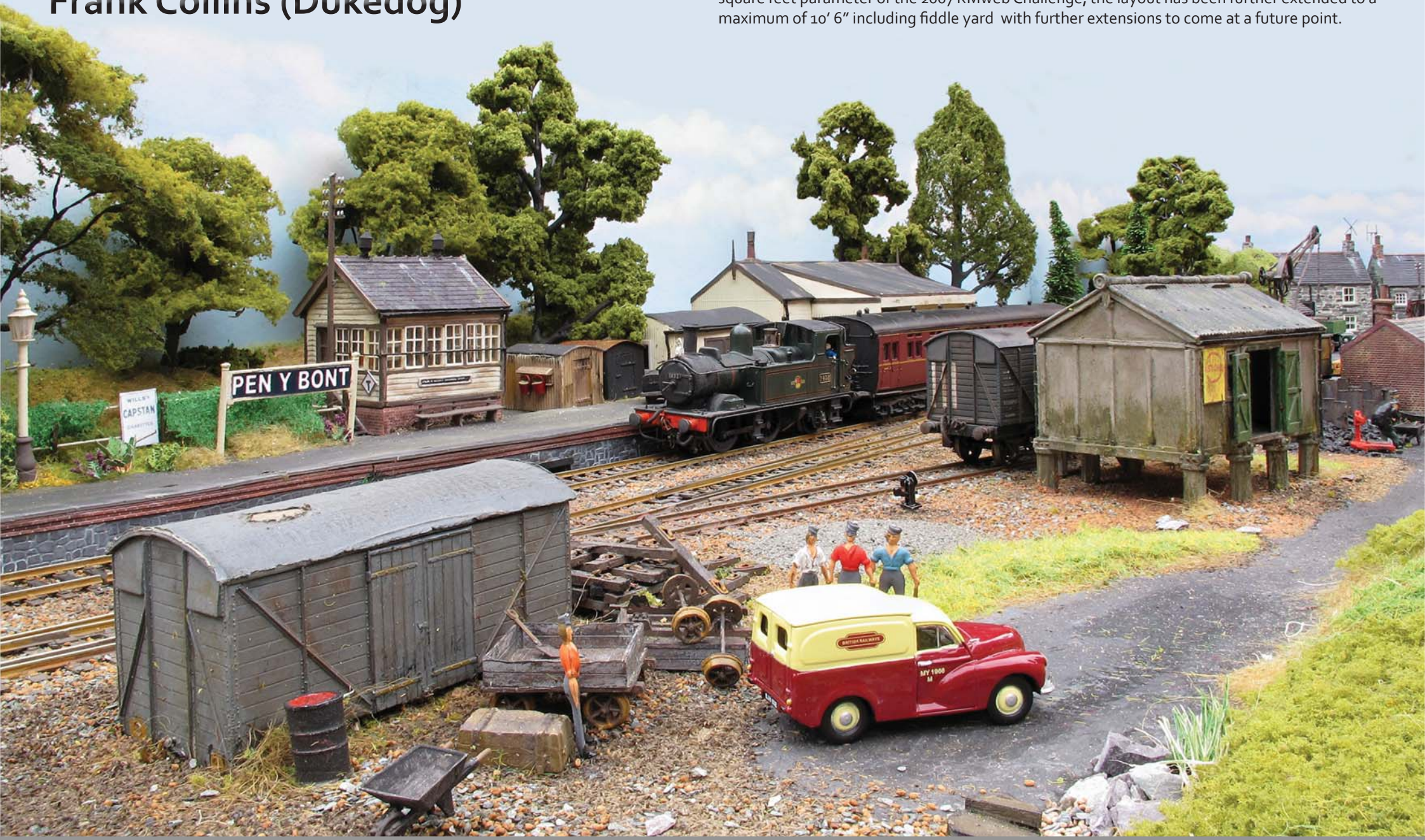
A few chooks for pest control, the usual garden detritus and a broom outside the shelter for keeping it tidy. I think that I will call it a day.

The Stationmaster's garden is starting to look a little 'greener', the soil is the contents of Clipper brand tea bags (organic, of course) and the fine crops of rhubarb and onions are pre-cut printed paper from Noch. The remaining vegetable beds need filling and a washing line planted in the garden; unfortunately, the Anderson Shelter is almost hidden.

Pen Y Bont

Frank Collins (Dukedog)

Pen Y Bont lies in the Tanat Valley just short of Llangynog at the end of the branch from Oswestry, deep in former Cambrian Railways' territory. Frank's model depicts a curtailed branch as an alternative to the prototype's closure to passenger traffic from 1952. The layout of the station and buildings reflects Aberaeron in former Cardiganshire. Initially constructed to the six square feet parameter of the 2007 RMweb Challenge, the layout has been further extended to a maximum of 10' 6" including fiddle yard with further extensions to come at a future point.



14XX Tank 1432 and auto trailer are waiting to depart Pen Y Bont on the return working to Oswestry.

The foreground shows the small permanent way depot with some permanent way gang members receiving instructions from the ganger foreman in his new van.

The grounded van was a Ratio kit that "went wrong" so the chassis was removed and the body used here. I have tried to simulate a ripped canvas roof on the van using masking tape as canvas and a suitable hole showing the planked roof underneath.

The view from the roof tops of the cottages across the road from the yard in Station Road.

This picture shows the very simple track plan, just a single track line with run round loop, the other set of points of the loop being "off stage" beyond the bridge. A single siding off the loop completes the layout. The track plan was taken from the station layout that existed at Aberaeron near Aberystwtyth. I intended to build Aberaeron but decided that to do it justice the size of the layout would be too big, so I cut it down and dropped off two sidings to end up with Pen Y Bont. I was also inspired by the layout Abergwynant built some time ago by Neil Rushby.

5774 bringing in its single coach and Siphon H van. Presumably it is empty and to be loaded with local farm produce during the day and collected later that evening for return to Oswestry and beyond.

The signal box is again another Ratio kit, much modified and slightly altered from the way Ratio intended it to be built. This was salvaged from my previous layout, Llaffan.

The trees on the layout are a mixture of home made wire type, C&L plastic armature with Woodland Scenic clumping, some sea moss and Woodland Scenics' ready made items.

PEN Y BONT

A view along Station Road, Pen Y Bont.

This section of the layout is purely scenic with no track on this small board. I wanted to give the railway a sense of purpose or a need for the railway's presence. A lot of great layouts are spoiled by having no sense of purpose and this is what I wanted to avoid. The garage scene was salvaged from my previous layout as were a few other items. The backscene was always intended as a temporary measure as it isjust simple Peco sky sheets. In the end it's still there and I doubt if it will change now. One thing I did do was to try and make the road disappear into the distance to create an impression of greater depth, an idea I picked up from a post on RMWeb some time ago. I went out with my camera to a rural location in Shropshire and took a few pictures of country lanes with similar coloured road surface to what I had. By careful processing and resizing on the PC I was able to print a section the right size to glue to the back scene, blended in with a bit of artists' acrylic paint and with the edges of the pasted picture hidden behind some trees I'm quite pleased with the result. The street lights were inspired by some made for Brewhouse Quay by Chris Nevard and are working lamps; the bulbs are somewhat over scale but when viewed from a reasonable distance it doesn't look too bad. I could have used LEDs but in my opinion nothing simulates tungsten filament lighting like a tungsten filament lamp!

BOVRIL
SERVED HOT
SIEMENS-EDISWAN

A general view of the yard from over the garage fence.

The burnt-out brake van dominates the foreground. Also seen is the rough metalled roadway leading to the coal office, provender store and permanent way dept. The scratchbuilt crane can also be seen along with the end loading dock.

Burning brakes!

The burnt-out brake van was inspired by Neil Ripley who featured one like this on his layouts.

Built from a Dapol (ex-Airfix) kit, although most of the kit wasn't needed! The ash and remains inside are just that - ash! I used some burnt matchsticks to represent burned timbers and the contents of an ashtray to represent ash, stuck down with PVA glue. The rest is just a paint job, nothing special, just a bit of dry-brushing and dirty washes.

The coal staithes.

Here we see the coal drops belonging to H. Wyatt, the local coal merchant. Made from wooden coffee stirring sticks and painted to look something like old sleepers. A tad over scale maybe but they serve the purpose well. Real coal, broken into small lumps, fills the bins alongside which is a weigh scale again scratchbuilt from plasticard and a bit of brass wire. The 16-ton mineral wagons are RTR Bachmann items with less than drastic weathering and painting, again real coal is used for the loads. The wagon on the right has had a "plated over" repair done and painted a light rust colour.

Bright sunlight shines on the smokebox door of Collett goods 2240 as it sets about propelling 16T mineral wagons into the coal siding.

The weather-sheet tarpaulin that stretches across the gap from cab roof to tender to protect the crew from foul weather can be seen folded across the cab roof of the engine. A simple piece of high-tack masking tape and dry-brushing made thi weather sheet.

25
BEWARE
OF
TRAINS

J. EVANS

A general view taken from above the road bridge which forms the scenic break.

Ivatt class 2MT stands at the platform having run round its two coach train ready to set off back to Chester via Oswestry and Gobowen. BR Standard 3 tank 82019 pauses between shunting wagons. The precast concrete provender store is one of the few building kits used on the layout, a weathered Ratio kit. Again the very simple track plan can be seen, all track is Peco code 75 and I have used the largest radius points (72") all painted and weathered to disguise their origin a little bit. Judging by some comments received it seems to have worked to some extent.

A close up of Standard Class 3 tank 82019 stood in the loading block siding.

Like all of my motive power it's a RTR item by Bachmann. I never run stuff "out of the box" though, preferring to make my own mark on stock first, either by some weathering adding real coal, adding screw couplings and so on. 82019 is no exception. Out of the box it's a Southern region loco. I had to 'Westernise' it a bit by adding things like the top-of-boiler grab rail and removing the unwanted lamp irons from the smokebox door.

The Bachmann Conflat A in the same picture has had Roxey turn buckles and chain fitted to make the appearance of the model more convincing.

A low level shot of the well-worn platform and buildings.

The main station building is scratchbuilt from Plasticard and is based on the one that was built at Aberaeron, as was the lock- up goods store. Slater's plasticard are the main materials used. Not having any scale drawings to go by meant I had to draw up some of my own. I used photographs from books and the internet and scaled the main dimensions from the height of doors etc. The platform edging stones have been laid in an uneven manner deliberately to try and capture the general run down feeling of an ex-GWR BLT in the 1960s and not the clichéd chocolate box BLT one normally sees in magazines and exhibitions.

25
BEWARE
OF
TRAINS

57xx 5774 brings in another 2 coach passenger train, probably the school special bringing local children back from school at Porth y Waen on the Tanat Valley line.

The 57xx is another Bachmann model, well-weathered to represent the hard life it had on this branch. Also in this scene is the scratchbuilt loading gauge that replaces the plastic Ratio kit built item that got damaged during the photo shoot for Model Rail two years ago. It is now removable so should not get damaged when track cleaning. The permanent way hut is another kit, this time a Wills item salvaged from my old layout Llaffan.

A view of Station Road from the goods yard.

The weighbridge is another scratchbuilt item to the same dimensions as the coal office and was also scratchbuilt from Slater's plasticard. The row of cottages opposite the entrance along with the shop and pub (out of shot here) are also scratchbuilt items with Wills' products being the basic material here. I made the curtains for the windows from Rizla cigarette papers suitably painted before gluing inside the window openings. Period TV aerials complete the scene.

An Ivatt 2-6-2T awaits the signal to drop to set off with a short parcels train.

The signal is the only working signal on the layout and is made from a Ratio GWR square post signal kit. The signal is operated via a simple solenoid and bell-crank located under the baseboard. The oil lamp by the running in board is worth a mention; it's scratchbuilt with a grain of wheat bulb inside the lantern and will work when switched on at the panel. The Siphon H is also worth comment and is a hybrid of Airfix body, Lima chassis and Dave Smith bogies and underframe parts. It wasn't until I had done all this work that I found out from a more informed member of RMWeb that the original Lima underframe was correct for a certain diagram and all I needed to do was change the bogies!

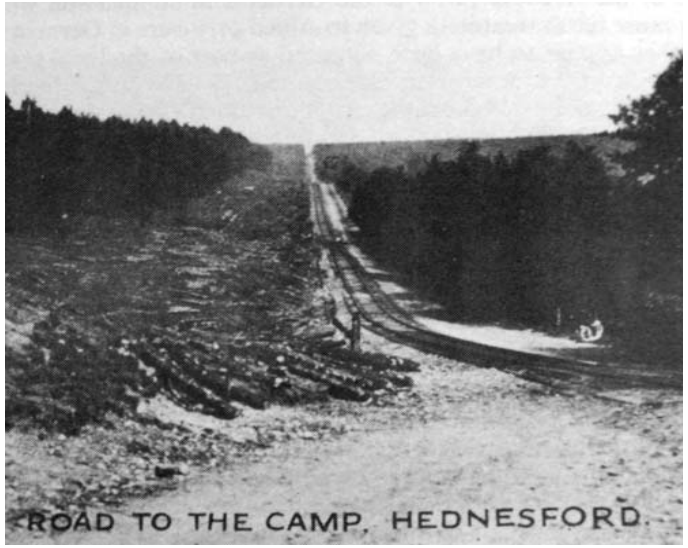
Cannock Chase Military Railway

Before the outbreak of The Great War Britain had sufficient barracks for 175,000 men; by the end of 1914 over 1,000,000 men had enlisted with a substantial number of recruits accommodated in tents, village halls and industrial buildings. This gave rise to an urgent need for training facilities and accommodation before the troops could be moved to the front.

Cannock Chase, a large area of open heathland sitting between Cannock, Stafford and Rugeley had been previously used on an occasional basis for military exercises and its potential was known to the War Office. A large area of non-agricultural land with transport links to its edges was ideal and there were even plans to relocate Woolwich Arsenal to this remote but accessible location.

In December 1914 the Earl of Lichfield, who then owned most of the Chase made land available to the War Office for as long as may be needed. The Chase along with other areas then saw rapid construction of facilities so that by the middle of 1915 850,000 troops could be accommodated. The shallow valleyed plateau of the Chase stood a couple of hundred feet above the surrounding inhabited and farmed areas; providing a water supply and an efficient means of transporting building materials and ongoing supplies were the immediate challenges, with the planned railway providing the latter.

The West Cannock Colliery Company was contracted to provide a standard-gauge railway. Their No. Five pit opened at the edge of Hednesford in 1914 with sidings alongside the LNWR Walsall to Rugeley line, and it is from here that construction started, initially heading straight up Birches Valley onto the Chase.



It was quickly realised that the incline from the colliery to the summit was, in part, too steep rising 100 feet in its last half mile of the ascent with its steepest gradient being 1 in 15 for just under half a mile. This necessitated a diversion below the steepest part of the incline which substantially added to the direct distance between the sidings and the armament store.

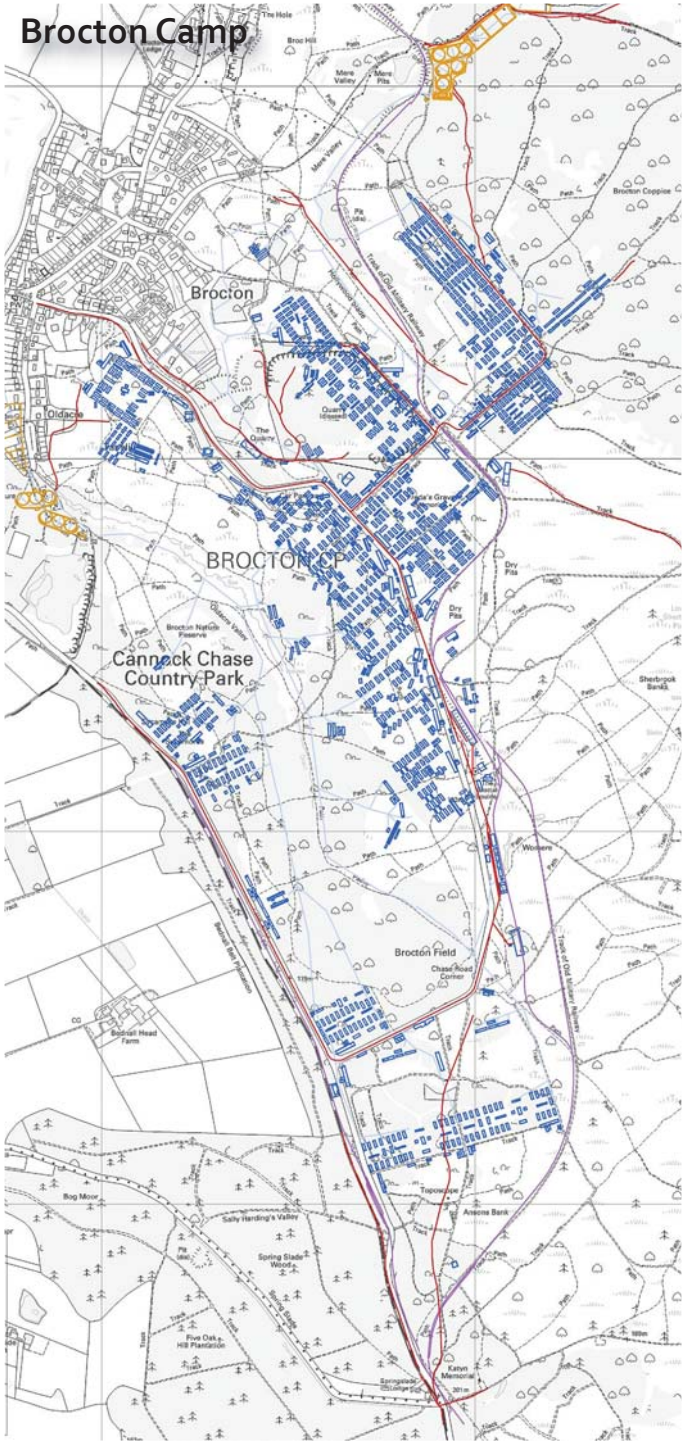
At the same time construction started from the north of the Chase at Milford, adjacent to the Trent Valley line of the main LNWR route just west of Shugborough Tunnel. I had always accepted locally produced schematic drawings which illustrated the railway heading across Milford Common from land adjacent to the Barley Mow inn but this was disproved whilst researching document at Staffordshire's County Record Office. A portion of land, 1.75 acres in size, immediately to the west of The Red House on the north side of the common was rented from Captain William Swynnerton Byrd Levett for 18/6 a month. Captain Levett had demanded that a concession to operate a refreshment room from the SW corner of the land be given which was duly granted.

It should be noted that the Earl of Lichfield freely permitted use of his lands on the Chase whereas Captain Levett, a retired army captain and husband of a Justice of the Peace and owner of numerous residential and land properties around the village was not entirely satisfied with his remuneration from the War Office and made continual demands via his land agent to increase the rent. A handwritten note on the reverse of a letter advises his land agent that he wanted £21 per annum. The War Office politely but steadfastly refused his demands and felt obliged to question how much income he was getting for the rental of the refreshment rooms which the War Office felt they were really paying for anyway. The War Office gave notice on the land towards the tail end of 1917 as the demands grew more insistent; how much of this is influenced by Captain Levett's son's death in action in France in March 1917 is not recorded.

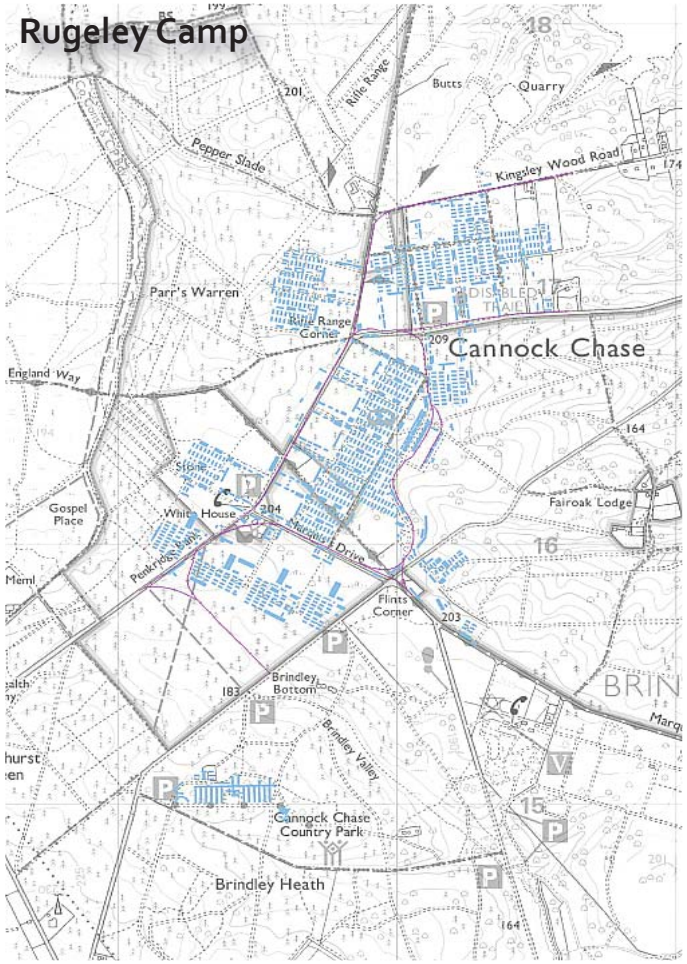
Two distinct camps were created, Brocton Camp and Rugeley Camp, which accommodated around 40,000 troops in total at their peak, a figure which is comparable to the populations of Stafford or Cannock at that time. The two camps were formed of around 2,000 - 2,500 timber huts and the camps were supported by shops, halls, churches, theatre and cinema. Troops were known to frequent local hostelries which would seem to have brought a boom for such businesses. Some troops however felt that they were taking advantage of this in their pricing and a tale is recorded of the landlord of the Barley Mow being threatened with hanging on the common over his practises.

Typical wooden huts are shown alongside the road and railway route in the vicinity of the White House

Brocton Camp

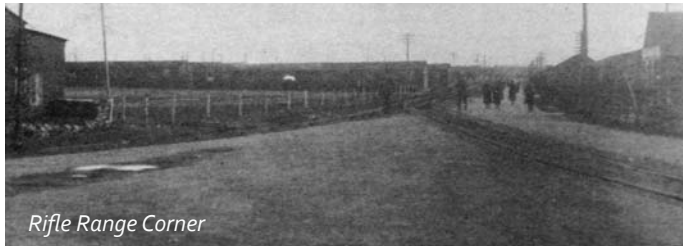


Rugeley Camp



The two maps above illustrate the extent of the camps. The railway is marked by the purple line and can be seen to follow or have given rise to roads and paths that are still in evidence.

An adapted aerial image of the Chase showing the full network of lines and how they're linked can be found here.


Rifle Range Corner

What remains?

After leaving Milford Common and running alongside the road to Brocton for 400 yards the railway turns and heads up to Coppice Hill through a clear and accessible cutting known locally as *The Cutting* or *German Cutting*. The half mile long cutting has a gradient of almost 1 in 20 and would have been a gruelling climb for the engines, not that the rest of the climb to Coppice Hill would have been much easier with sharp curves and an average gradient of 1 in 30. As the railway was built by navvies employed by the colliery the cutting certainly wasn't built by German prisoners of war but it's likely the railway may have been maintained by them or merely a reference to the railway serving the POW cenclosure within Brocton Camp.

At the top of the cutting the railway crossed an embankment which divided Mere Pit and the camp's sewage works which were off to the left of the path shown in the image below.

Coppice Hill was the site of the German POW camp. The New Zealand Rifle Brigade had been a part of the successful attack on the Messines Ridge ahead of the battle at Ypres. The German stronghold on the ridge was literally undermined and packed with explosives. Following an artillery barrage the explosives were detonated and over 10,000 German soldiers lost their lives. Nineteen craters were blown into the ridge, the explosions being the loudest man-made explosions to that point in history being heard as far away as Downing Street and Dublin.

Such knowledge became invaluable and the NZ Rifles filled a dual role of training recruits in attack strategies but also guarding prisoners from that and other battles. The NZ Rifles seem to have been held in high regard locally and were known as the 'Dinks' (as in fair dinkum). The POWs found a degree of local acceptance too, securing employment on local farms although none were to work in the local coal mines as conventions decreed POWs could not be given such dangerous occupations.

The NZ Rifles constructed a training aid in the form of a concrete relief map of the Messines Ridge which remained, albeit poorly maintained until after the Second World War. We worked out the position of the model and found angulated concreted sections beneath the grass and gorse which could be some remains of a small but interesting piece of local history. More easily found is the grave of *Freda*, the NZ Rifles dalmatian mascot.

Moving onwards from Coppic Hill to the location known as the Glacial Boulder due to the erratic boulder from southern Scotland brought down in the last Ice Age it is possible to see the remains of foundations of the loco shed and power station a few hundred yards to the north.

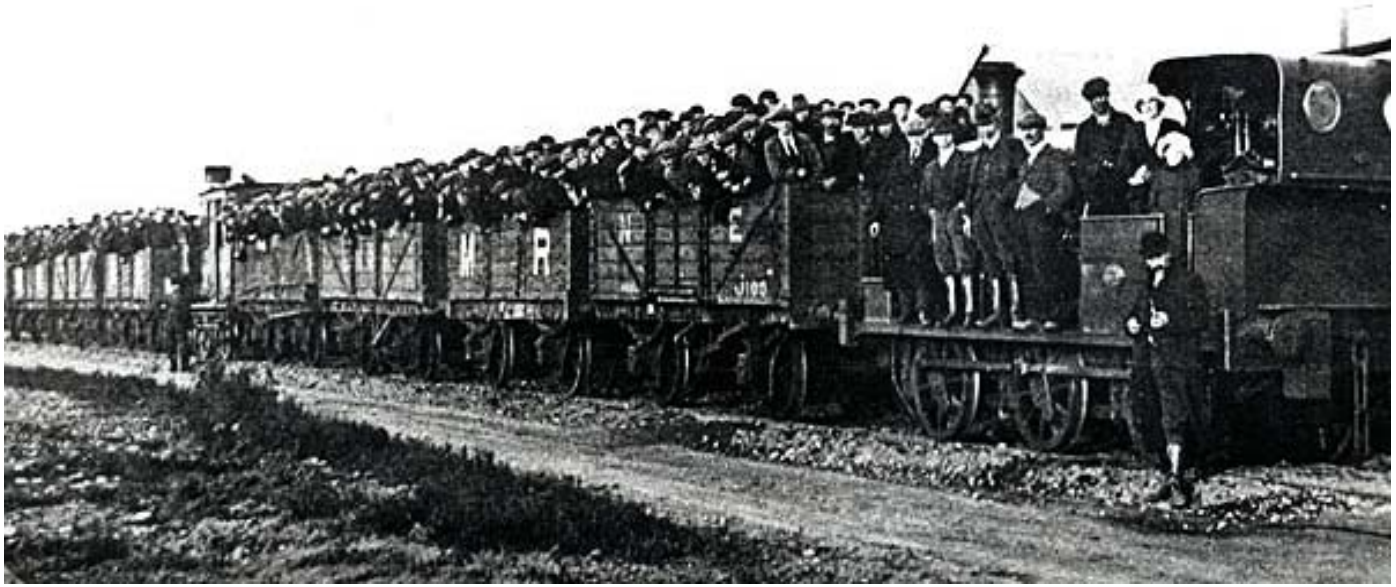
The boulder is mounted on a plinth which in turn rests on the foundations for the water tower shown in the picture below. The position of the legs and the bolt holes can still clearly be seen.

This area of the Chase with its open views over heather and long grasses with a big sky above, is probably that which is closest to the appearance of the Chase at the time of the camp, rather than the more heavily forested areas, and certainly merits its designation as an Area of Outstanding Natural Beauty.

The railway split into two parallel routes at this point, the lower of which served the supply centre of the camp with its coal storage and blacksmiths. The remains of the coal storage area and the concrete supports for a coal loading hopper can be seen at Chase Road Corner.

The routes shown on the aerial map linked to on the previous page can easily be walked or mountain-biked with only very short sections requiring a brief diversion. The remains may not be earth-shattering but the walk along a route that lasted a mere 3 years and fell out of use over 90 years ago in a beautiful area is not to be dismissed.

The Chase sees a lot of leisure usage now and the remains of the armament store can be found forming part of the Tackeroo Touring Caravan Site. This store would have been a supply point for the extensive rifle training that took place on the ranges here with both the armament store and the rifle range being served by the railway.



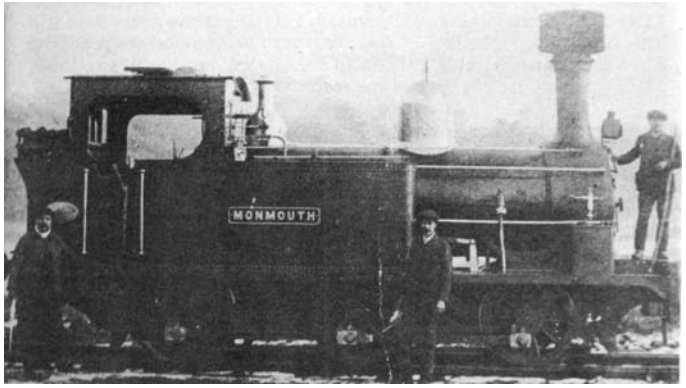
The railway was principally worked by three locos, provided by the West Cannock Colliery Company as part of their contract:

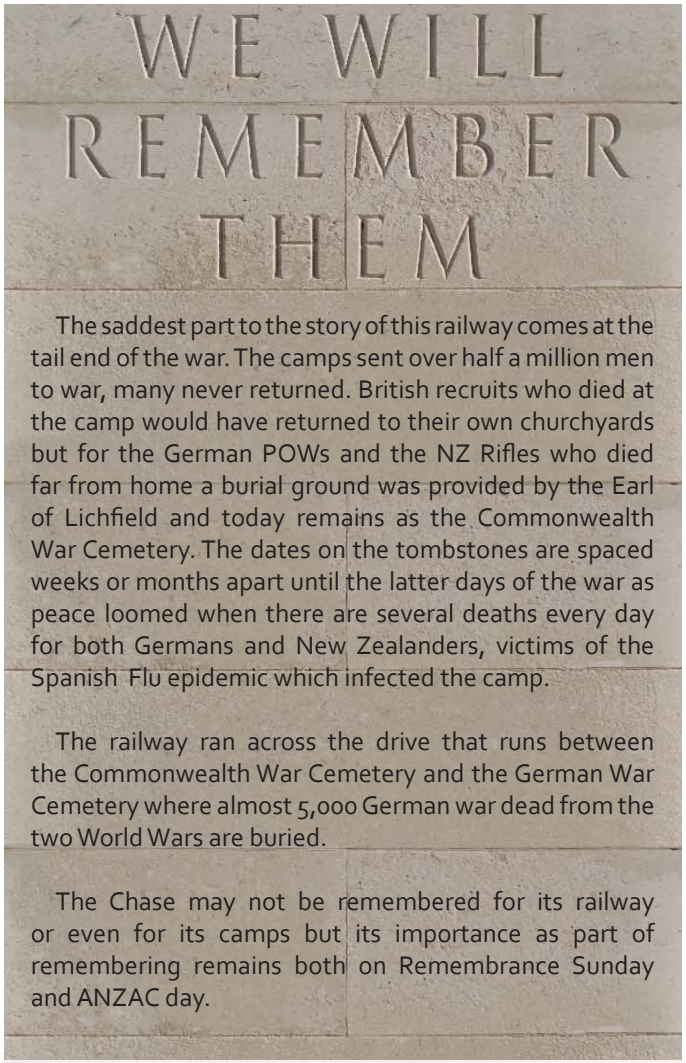
Messenger - Manning Wardle 0-6-0ST 166/1865
Monmouth - Hunslet 0-6-0T 397/1886
War Dept. No. 92 - Avonside 0-6-0 ST 1742/1916

Other locos recorded as having worked the railway are named as *Stafford* and *Blackcock*.

Neither the troops nor prisoners were afforded the luxury of travelling the railway but a healthy number of workers or navvies can be seen in the picture above. In front, *Messenger* has four open wagons full of men; with *Monmouth* with its spark arrester on the chimney is shown with another four wagons behind it.

Images of the railway working during wartime are very few aside from the view below taken at the junction of lines on Penkridge Bank west of the White House.





The saddest part to the story of this railway comes at the tail end of the war. The camps sent over half a million men to war, many never returned. British recruits who died at the camp would have returned to their own churchyards but for the German POWs and the NZ Rifles who died far from home a burial ground was provided by the Earl of Lichfield and today remains as the Commonwealth War Cemetery. The dates on the tombstones are spaced weeks or months apart until the latter days of the war as peace loomed when there are several deaths every day for both Germans and New Zealanders, victims of the Spanish Flu epidemic which infected the camp.

The railway ran across the drive that runs between the Commonwealth War Cemetery and the German War Cemetery where almost 5,000 German war dead from the two World Wars are buried.

The Chase may not be remembered for its railway or even for its camps but its importance as part of remembering remains both on Remembrance Sunday and ANZAC day.

Collectors Clubs may be perceived as being the sole domain of collectors but the recent issue of the Network SouthEast 2EPB certainly drew the attention of the wider modelling community so I wanted to find out a bit more about the Bachmann Collectors' Club and talked to Dennis Lovett, Bachmann Europe's Public Relations Manager who is a driving force behind the scenes.

Dennis Lovett takes control of a single car DMU on the Ecclesbourne Valley Railway under the careful eye of the Traction Inspector during the BCC trackside event earlier this year. Both Derby Lightweight single units were allocated to Bletchley for use on services to Buckingham and Banbury and were regularly driven by his father, a Bletchley footplateman for 50 years.

When did the Collectors' Club start?

It was started in 1997 by an outside company. It was brought in house in 2000 and has continued to be operated from Barwell since. It operates with two full time members of staff who administer the club. The Collectors' Club team is supported by the Public Relations Manager who edits the quarterly magazine (around 60 pages per issue). We are not the first manufacturer to have a Collectors' Club - perhaps the most famous of all the manufacturers' sponsored organisations was the old Hornby Railway Company (Meccano) which began operations in 1928 and was very popular before World War 2. It closed with the demise of the old Liverpool-produced products in the 1960s. Members received a badge and a certificate, and activities were reported in Meccano Magazine, which was available through the newsagents on general release.

What was the rationale behind the club?

Like other manufacturer supported organisations, the club was set up to support the brand (in our case Bachmann) and to accommodate a growing band of collectors and modellers. The quarterly magazine enables us to provide information in more depth than we can through other media. For example we commission in-depth articles on a steam locomotive and modern traction in each issue which is written by an acknowledged expert in the field. We also show how to use many of the products we distribute such as Woodland Scenics to enhance layouts. We also cover developments in the ranges of our sister companies Bachmann America, Bachmann China and Liliput.

We aim to be different to the main model railway publications, and encourage people to use the items they have collected. We have, through the building of a Scottish branch line terminus, shown them how to research and plan a project. We are now building it and reporting each issue on how we are progressing! In addition to receiving the magazine, members also receive the annual catalogue for their chosen scale, an exclusive Collectors' Club wagon in N or OO scales, and a quality calendar - plus the opportunity to buy exclusive limited edition models.

The result is that in addition to supplying a lot of information we have also established a very comprehensive archive.

How many members are there currently?

Around 8,000.

Why do people join the club?

There are a number of reasons but the main one is that they are users or collectors of Bachmann items. Some join to buy a limited edition model but mainly it is because they have picked up one of the magazines, perhaps at an exhibition or through a friend. Feedback is positive and we are delighted that we have a good number of members who have been with us since the beginning and we hope they will be for many years to come.

Is it solely aimed at collectors?

We aim to cater for both those who collect models and modellers too. Train collectors tend to concentrate on specific marques and to collect some famous names demands deep pockets to grow a collection. As it is now over 20 years since the first Branchline models made their impact on British railway modelling they are now attracting the attention of collectors in their own right. The batch system of production has ensured that there is always a demand for items no longer in the current Bachmann catalogue.

Has the economic climate impacted upon the Collectors' Club in any way?

Only that the limited edition models take a little longer to sell out than they did a couple of years back.

How do you decide what Collectors' Club editions to produce?

We look for something that it is not mainstream. For more modern items this is a livery that is not going to make the main catalogue but for which there is likely to be a limited demand. For example the Class 03 shunter was produced in the very distinctive WA&GN livery as 03179 'Clive'. We produced the Fairburn tank in the Caledonian blue livery that the preserved example carried for 10 years. This was the one model guaranteed to make your career flash before your eyes – looking at 504 sitting in the warehouse was a worry. Three weeks later the warehouse space was empty!

Left - WAGN Class 03 'Clive' 31-360K
Below - Private Owner wagon set 37-075K6

Blue pannier tanks and orange Jinties have also figured in our recent releases. You can't get less mainstream than that! Researching these liveries and finding the photographs to prove it is a challenge in its own right.

Preserved examples such as 92203 'Black Prince' and 46441 in BR maroon livery have featured, and again we had enthusiastic support from the respective owners.

Where we can we go out of our way to find out about the prototype, and write up the story by interviewing those involved. We also produce a special certificate for each release and where possible get certificates signed. The Class 416 2EPB was released to coincide with the 25th Anniversary of Network SouthEast earlier this year and as part of the celebrations the two former Managing Directors personally signed every certificate for us. We know that members appreciate our efforts to go the extra mile.

It's not just about locomotives however. We have a lot of wagon collectors and the annual membership wagon follows the theme of wagon manufacturers or repairers liveries. These were mobile advertisements in their day and when you see all 14 produced so far on display they make a nice collection in their own right. We also produced a set of three private owner wagons each year – one to represent England, Scotland and Wales. Some of these were "graphically challenging" and unlikely to be produced mainstream due to the complex livery and graphics involved. These have again proved popular with early examples now fetching premium prices.

We have also produced a number of vans in fictional advertising livery of the various ranges produced or distributed by Bachmann. We have done ten so far in the series.

Modern wagons are not forgotten either. We have produced Transrail and Loadhaul vans in advertising liveries with another modern wagon due to be announced shortly.

What do you see in the future for the club?

We have continued to improve the package to club members year on year and this has enabled us to maintain the membership base. When all the elements of the membership package are added together then the £20 annual fee is an attractive option.

We set out to be the best of all the manufacturers' sponsored clubs in what we offer to our members. Next year is our 15th anniversary and we aim to raise the profile even further.

As the years pass then interest in Bachmann products from both collectors and modellers continues to grow as new items are continually added to those produced already.

We recognise this by ensuring that every product is recorded in Ramsay's British Model Trains Catalogue and by sponsoring the annual exhibition of the Train Collectors' Society. It is important that we fly the flag for the modern model railway industry alongside those distinctive names of the past. Our club slogan "Tomorrow's Collectables Today" sums up what we are all about, for today's trains are built to be run and enjoyed by current generations. They will only become true collectables as time marches on.

For further information about the Bachmann Collectors' Club please visit www.bachmann-collectorsclub.co.uk

Bachmann Collectors' Club Magazine

There may be a perception that such a magazine is solely a marketing tool to hook the reader. Sure; it keeps members up to date with the progress on Bachmann and Farish's forthcoming new products and confirms releases but it's actually a lot more than that with regular features of a wider interest to modellers. As an example the current issue of the magazine contains diverse content from model railways before 1914, an overview of the Class 33 by Pip Dunn, a in-depth look at the creation and scope of Regional Railways, Gavin Morrison exploring the history of 4MT 4-6-0s, Peter Marriott on Swiss FLIRTs, a look behind the scenes at Hatton's, overhauled timetables on the East Coast, the Spa Valley Railway, Glasgow's transport museum, Arriva Train Wales in addition to news and product information. Peter Marriott and Dennis Lovett continue their series on modelling Kirriemuir which has taken us right from the research stage and is now reaching its scenic stages.

The 64-page magazine is well illustrated with quality library images and is printed on good quality glossy paper and certainly justifies a good portion of the annual membership cost. The magazine comes out four times a year, not necessarily or precisely quarterly as it's often timed to give members an update on key dates such as Bachmann's new product announcements in March and the display of latest items at their July traders' event.

Win a Bachmann Collectors' Club Jinty

The Bachmann Collectors' Club produced 504 Jinty 3Fs in the livery worn at William Pepper's yard at NCB Crigglestone (British Oak) near Wakefield. After withdrawal the Crewe South engine went on to serve until at least 1969 in industrial use. 47445 is currently undergoing restoration at the Midland Railway - Butterley.

Entrants wishould complete a three-dimensional illustration (not just a track plan!) of a potential layout or diorama suitable for this loco. Make the drawing inspirational in its potential for being turned into model form. The illustration can be hand-drawn or painted or in any digital format.

Entries should be emailed to info@rmweb.co.uk titled 'Jinty comp' by 25th November 2012 and the best entry will win the loco and see their drawing published in the next issue!

David Haarhaus, Bachmann's Sales and Marketing Director presents Ian Crampton with one of the limited edition Jinties in recognition of the restoration work of 47445 in front of its recently completed bunker.

RMweb Marketplace

The new trading & auction site for railway modellers

www.rmweb.co.uk/marketplace

- Over 500 active buyers and sellers
- Auctions and 'Buy-it-now'
- No sale, no fee!
- Lower fees than eBay
- More photos
- More control over your auctions
- No joining fees
- Tailored to the needs of modellers

RMweb Marketplace

Steve Davies MBE NRM Director

Midland Compound No. 1000 is the third of the NRM's exclusive editions produced by Bachmann and is available at www.nrmshop.co.uk

Following the launch of the National Railway Museum's Midland Compound model I took the opportunity to discuss further with the museum's Director, Steve Davies, the subject of exclusive editions and his own interests.

Steve joined as Director at the beginning of 2010 and was previously Director of the Museum of Science and Industry in Manchester following an army career during which time he established Sierra Leone's national railway museum, recruiting and paying staff himself to launch the project to preserve the country's 2'6" narrow gauge railway history. Steve's genuine passion for all things railway clearly shows and is matched with a dynamism to develop the National Railway Museum to meet the future.

As the National Railway Museum has commissioned a third exclusive edition of a loco in the museum's collection I assume that the previous models of the prototype 'Deltic' and 'City of Truro' have been commercially beneficial to the museum?

They have indeed and not just commercially beneficial but beneficial to our reputation. Unsurprisingly we do not want to have too many exclusive models produced otherwise we will ruin the exclusivity which is part of the appeal. There is no doubt that the National Railway Museum has benefitted from the sheer quality of this venture and we do aspire to repeat the process.

There has been an interval of a couple of years between each of the exclusive editions so far interspersed with livery editions of existing models. Is this a specific business plan?

It's a combination of not wanting to over-expose the brand and flood the market therefore removing peoples' potential excitement toward what the National Railway Museum and Bachmann are going to do next. Although I am not an expert in this area it does take a while to develop the models and tool them up for mass production. There is an interesting parallel here with building the real thing because it seems from design to production of a model locomotive takes just as long as it did to build the real thing all those years ago.

Assuming the Compound is similarly successful would you reasonably foresee future commissioned models?

Indeed and not surprisingly I am subject to measures that ensure industrial espionage does not give the game away! The museum is happy to continue down this route and wants to and in some respects in what we are doing in modelling the locomotives as they currently are and found in the National Collection, not necessarily as they appeared fifty years ago we find that this model series has a role in cultural outreach. It allows the public, in miniature, to get up close to the National Collection and we are delighted if people derive pleasure in seeing the models run on their systems so it's a win-win and we will continue down this route from time to time.

I'm sure many people would wish to see certain locomotives from the collection appear at some time; leaving aside commercial practicalities of whatever may actually come next what engine would you personally love to see produced in model form?

It's an interesting point that you make. Should the National Railway Museum promote a vote and canvass prospective clients as to what they would like to see or is maintaining strict secrecy and therefore optimising surprise the best way to go about this? With the caveat that none of this has been pre-ordained in any way so I speak with my Director's hat on and that of a railway enthusiast. I would like to see a BR Standard Class 4MT, 76084, which operated from Lower Darwen shed where my grandfather was a driver with early BR crest; that would be a great buy for me!

I believe that you are returning to the model railway hobby too. What has inspired you to do so?

My interest in model railways has been re-awakened; I used to have quite a lot of Hornby OO models in the late seventies and early eighties and I used to drag boxes of this around the world with as a young officer and I don't think the quartermaster was overly impressed with the sheer volume of model railway bits I expected to cart around the world at his expense, nevertheless it was tolerated. The enthusiasm at that time died a slow and natural death but, after I came to the NRM, I was invited to

open the Manchester MRS exhibition in 2010 and I suddenly woke up to the fact there is a major role in the interpretation of railway history. It's only with a model that you can obtain contextual perfection in a way that preserved railways and the National Railway Museum cannot do.

I realised the sheer quality of these products now compared to the quite crude machines I remember owning 30 years ago and the fire in my belly started to flicker again and I am in the early stages of planning what to buy.

What era will I model? Late fifties to early sixties, British Railways in the North-West as I'm from Darwen in Lancashire and I have very clear and vivid memories of steam in Lancashire in the sixties. It's sobering to reflect that I may possibly be the last director of the museum to actually remember working steam on British Railways; I suspect my successor, whoever that may be, may not have that memory so I occupy an interesting bridge between the past, present and future in my appointment.

The locos would look pretty grim and run-down interspersed with engines that have been especially bulled-up for enthusiast events in 1968. I don't think we were fully conscious of dieselisation at that time although Class 37s and 40s were present as I looked over bridges. In fact I have vivid memories of a light steam loco going through Darwen station; as a young boy I waved to the fireman who stuck two fingers up at me. I'd never seen that gesture before and went home and did it to my mother and got a slap round the chops. At that time I wasn't conscious that steam was being supplanted by diesel as I wasn't an enthusiast who accepted he had 'the incurable disease' at that time. It was only around 1970/1 that the gene kicked in, if I had been an enthusiast at the end of steam I would have been chasing around trying to capture it. For me steam was there and when I woke up to my hobby it had all gone and I had serious regrets that I hadn't taken full advantage of that time. I think all enthusiasts of that time are all full of regrets that they didn't go there or take photographs if I had been at that place. Diesels would feature on my layout though as they are synonymous with the late fifties onwards in the North-West.

I am fascinated by models which represent the awful co-existence of steam engines and diesels on the same steam sheds, when modernisation happened it was going to be done a commercially viable pace but the rush to dieselisation resulted in diesel locos being delivered ahead of the pace which infrastructure could be developed to support it. As a consequence steam and diesels shared the same sheds and the two were not technically and technologically happy bed-fellows as I recall.

You have mentioned about the potential importance of model railways to record history; could you expand on how you believe models can do that?

There is a notion when we come to interpret railways that we focus on the ribbons of steel and the stock that travels on it but the railway operated on a much broader canvas and it was the whole industrial, or otherwise, scenery around it. The fact is that this country in the forties and fifties was quite a dirty place with a thin patina of coal dust caking everywhere. My memories of Darwen are that it was a mucky place where everybody had coal chimneys with domestic and industrial life contributing to the general fog that would settle over an industrial town. We find it very difficult to interpret that and therefore a really well-built model in which the railway is an important feature with significant care and attention taken to ensure historical accuracy of the hinterland around that railway gives a real sense of the railway's place in the past.

I do recognise that many model railway enthusiasts simply want to have a vaguely generic railway on which they can run a whole variety of stock but I think there are some layouts that we would all agree go that extra mile in terms of faithful replication of the past. At a model railway show you can tend to see the really good ones because the crowds are deepest and thickest around them. Everybody recognises that there's something quite special there. I saw one layout representative of southern England in the weeks leading up to D-Day in 1944, an extraordinarily accurate representation of the railways and the military build-up at that time. The way the military came to dominate that landscape but had to co-exist with the civilian population that could not be evacuated is brilliantly captured in that model, Rowlands Castle including the Spitfire and the sound of the Merlin engine roaring over; it is quite magical. I could have stood all day and looked at it and found detail I'd previously missed; it's a supreme example of the modelmaker's art and tells a very important story too.

'Rowlands Castle' by Pete Goss illustrates the impact of D-Day preparations on a Hampshire village in 1944.

Would it be possible to include any such models within the museums?

We do have model events within the museums with half-term seeing a centrepiece Gauge 1 Society layout; the smell of methylated spirit dominated my childhood too with the obligatory Mamod engines along with the fond memories of lighting the meths and I am sure that memory will come floating back through the ether for a lot of people. It's interesting to reflect that a 12-year old boy could go into a chemist and ask for meths, these days you're viewed as an addict!

We aspire to hold model events in a mini model railway exhibition manner within our museums in the future too but we have our own 'O' gauge layout and that is a challenge to maintain to keep it operating well. Therefore maintaining more layouts here would be a challenge with the resources available, we do have two new layouts in the shop for commercial purposes and the constant running of those does demand constant attention to ensure they're in full working order. Therefore we don't aspire to add to our own portfolio of in-house layouts so we are concentrating on such exhibitions helping to tell the stories of the railway and modelling.

What resources are available within the museums that could help modellers and how do they gain access to any material?

The National Railway Museum has a quite spectacular and fabulous collection of images and material with over a million photographs, although a small proportion of these images are so far available to the public digitally a significant number of them are available in hard copy at the museum, we are working at the moment to ensure that the photographic collection gets greater exposure and is more readily accessible. I am delighted to report we're taking that forward.

For the assiduous modeller detail is everything and we have a huge store of technical drawings which are available through our Search Engine facility. We charge a reproduction fee only and if there is something obscure you wish to research you should get in touch with our Search Engine whose details are available on the National Railway Museum website and we can have those technical drawings awaiting your inspection on arrival. Equally people do turn up and ask for material on a speculative basis and we do everything within our power, resource permitting, to seek and bring out that material. The great things is that we do have full public access and handling and if a modeller finds a particular drawing that they are interested in then they can place an order for a copy.

We are a font of all knowledge and an example of how extensive the collection is the A1 Trust building of 'Tornado' where over 90% of the drawings needed to build it from scratch were in the museum. If there had been no drawings at all it would have been a interesting challenge. They're also considering building a P2 2-8-2 fitted with rotary valve gear and we have most of the drawings to help that happen too. So we have a phenomenal array of technical drawings and they are as relevant to the small-scale modeller as to the 12" to the foot engineer.

Have you ever seen any modelling which has been derived from research that has been carried out at the museum?

Not consciously, but now my interest in modelling has been re-awakened I've no doubt I'll be looking to see if there's any National Railway Museum DNA in anyone's layout. In our Advisory Board we have some extremely enthusiastic railway modellers. The Board is chaired by Sir Howard Newby who is the Vice-Chancellor of Liverpool University and Howard an amazingly accomplished modeller and one of our shop's best customers and he may or may not have drawn on the museum's resources to accomplish what he does. Another Advisory Board member, Brian Greenwood, who also chairs the Locomotion Board at Shildon is at the forefront of improving the model railway commercial offer at Shildon and is another amazing railway modeller. The Advisory Board has so many members with an interesting in modelling it is unusual but is also indicative of the way they bring their enthusiasm to their hobby to the greater benefit of the National Railway Museum.

What challenges now face you and the museums?

In broad terms we operate in straitened economic times and it's no secret that nationally funded museums have recently had to absorb a reduction in its grant and aid but we have absorbed that reduction intelligently and hasn't dampened our enthusiasm for taking forward ambitious and exciting new projects. The biggest thing on my plate at the moment is the potential development in our South Yard of a major operational railway experience. If the plans come to fruition we would see a brand new turntable and half-roundhouse being erected to provide a base for mainline operations and our own internal railway operation allowing the public to get close up to the action.

There are many other redevelopments going on, for example our Station Hall will be further developed to give a genuine mainline terminus experience. High in my priorities at the moment is developing a suite of simulators so the public get the chance to experience driving a train and we are looking at a steam driving simulator modelled on a machine that's currently operating in Tokyo which is quite mind-blowingly, extraordinarily realistic. An experienced steam driver tried this and was totally immersed in after two minutes so we can vouch for its quality!

I'm delighted to report that visitor numbers are 11% up on target at York and 20% up on target at Shildon but we don't rest on our laurels and our objective is to ensure that the National Collection which our visitors of course own is fully accessible, exciting and is interpreted in a way that conveys to the public the responsibility for this country both developing railways and gifting them to the rest of the world.

76084

British Railways Standard 4 2-6-0 steam locomotive number 76084 was fortunate to be bought by Woodham Brothers Scrapyard in 1967. Fortunate because she wasn't cut up although she did lose parts to other preservation projects.

In 1997 the 76084 Locomotive Company Limited was formed after the purchase of the locomotive from the estate of a recently deceased fellow steam enthusiast. 76084 was moved to Ian Storey's Works near Morpeth, Northumberland where she is being restored to main line running condition. The restoration is being funded by the raising of capital through the issue of shares hence you can 'share' in the experience. It is intended she will have a home base somewhere in the North of England as she spent her working life in this region.

76084 is expected to steam again in 2012 with continued support from existing and new shareholders.

Further information can be found at www.standard4.com

Standard 4MT 76084 is being restored by 76084 Loco Co. Ltd and is due to steam again in 2012, 45 years after it was scrapped.

October competition

Last month in the model railway photography article included a guide to using image stacking software to increase the depth of field in images with the opportunity to win a Dapol 121 'N' Gauge Class 121 Bubble Car.

Kris - 45xx at Avonwick (2mm)

There is nothing which gives away the scale and Kris has achieved a real-world hazy daylight scene whilst leaving a soft-focus on the wooded backsecene which resulted in probably the most realistic entry. The composition would have been improved by keeping the dominant scale-height tree ou of the foreground.

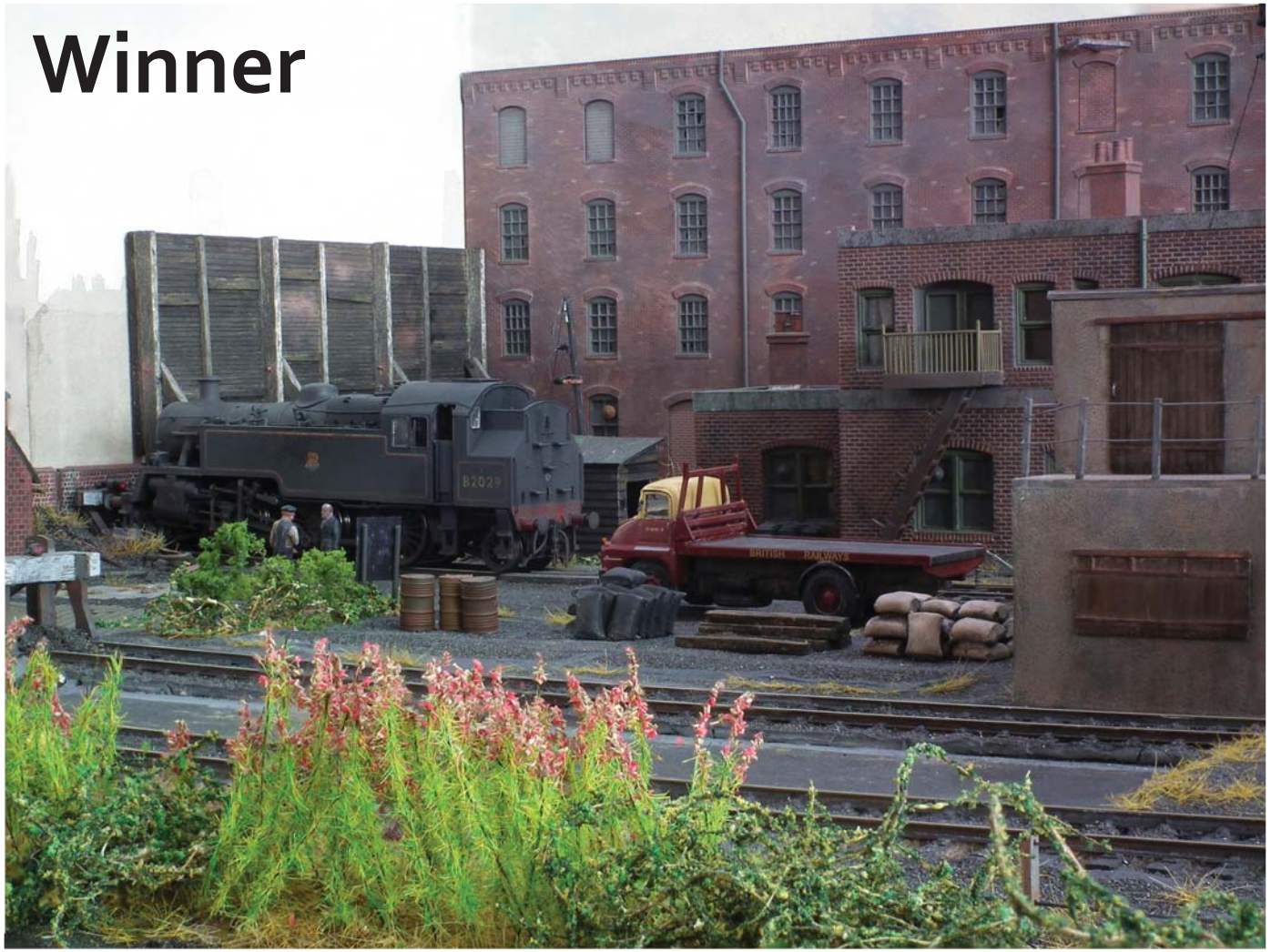
McRuss - Class 26 and 27 on Isle of Skye (2mm)

Markus has tackled the inherent depth of field issue in 2mm scale and achieved good depth of field from the near foreground through to the second loco. Including more shots in the range of images taken to include images where further detail could be improved on the first and second coaches would strengthen the image.

Sandhills - Peak

Jon's simple but effective shot was compiled from five images in CombineZP and converted to black and white in Photoshop. The detail of the loco is pin-sharp from the front buffers through to the grass bank behind including the brick wall backdrop. A further shot focussing on the speed sign may have been beneficial as that dominant foreground element is slightly out of focus.

I feel this entry looked the most life-like undoubtedly assisted by the work-stained appearance of the loco and the low viewpoint.



Cactustrain - 82xxx on Byworth shed

From the very well-modelled rosebay willow-herb in the foreground through to the broken glass in the building's window a good level of sharpness has been achieved throughout. The composition has the feel of an ordinary view into the back-end of a shed.

There is a vibrancy of colour in the foreground receeding to a lightly haziness the further any item is from the camera's viewpoint

The image may not actually feel the most 'realistic' of the entries but nonethless is a very well executed image of the model.

I have chosen this image as the winner on a balance of technical competence, composition and the high level of interest within the picture.

Well done Michael, the Dapol 121 will be on its way to you shortly!

See more of Cactustrain's Byworth images here.

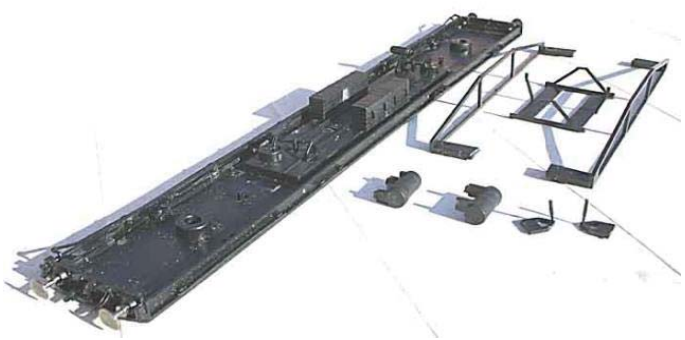
Re-working Hornby's Gresley coaches - Coachmann

The LNER Gresley coaches were a welcome development from Hornby in late 2004. But for reasons unknown the models had barely any tumblehome below the waist, the beading in the lower half of the coach was slightly incorrect, and the solebars were too wide apart. On the plus side, the detailing and teak finish was superb by any standards. This article shows you how some of the better features can be retained and with the use of other readily-available products give a far better product.

Workaround dealing first with the chassis…

Taking these coaches apart is easy. Just push the clear plastic lugs to one side (located under the bogies) and prize the chassis out of the body. The interior moulding then drops away. Lift bogies at the coupling end and their lugs should come out of the bolsters. The trussrod moulding is in one peice and was lifted from the underframe with a screwdriver.

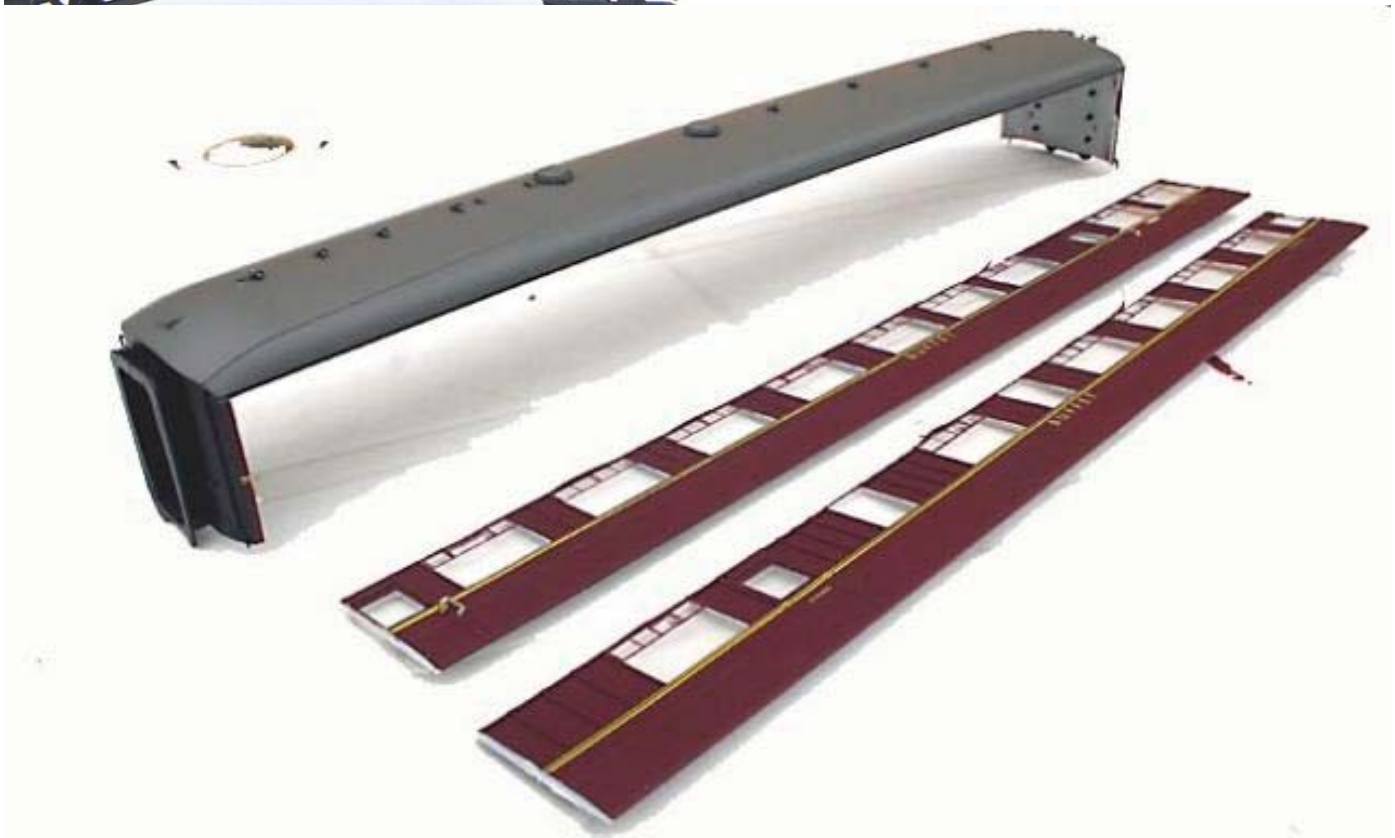
The next job involved removing the solebars from the floor. This was done with a craft knife and an X-acto saw. The plastic is soft and easy to work with.



Further material was removed from the floor until the solbars could be respaced 31mm apart.

The truss-rod moulding was dismantled so each side could be glued to the inside faces of the solebars. The cross-members were then narrowed to fit in between. The V-hangers, cylinders and dynamo were then glued back in position.

Two final modification were found necessary; that of fitting 3.5mm wide etched brass stepboards. The Hornby ones had all-but dissapeared under the coach when I set the solebars closer together. The other modification involved putting 20thou spacers between the bogies and the coach floor to raise the ride-height slightly.



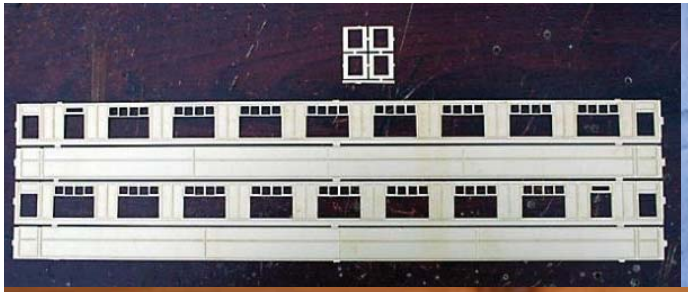
Replacing Hornby coach sides with Etched brass sides.

The next improvement involves replacing the Hornby plastic coach sides with etched brass sides. A very good domed roof, coach ends and chassis are definite advantages over building all-metal kits. Once you go down this route, the world is your oyster, as I quickly found out!

Removing the Hornby sides couldn't be easier. Make light cuts against a metal straight edge held just below the gutter then cut steadily deeper. When most of the way through, make vertical saw cuts at the end. At this point the sides will fold back and snap off.

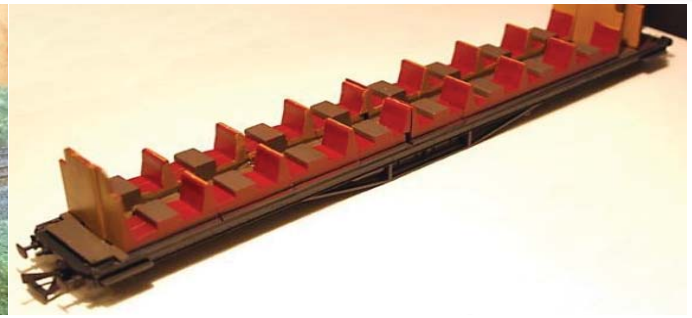
Next move is to remove all the roof detail and fit new torpodo vents.
(I use MJT vents from Dart Castings)

The ends were re-profiled to the correct Gresley shape working from a scale drawing.



These were the etchings as received from Comet Models. The lower half had to be soldered to the upper half (instructions are included with the sides). Then the etched door handles were added, again from Dart Castings.

Evostick glue was applied to the top edge of the sides and underneath the roof gutter, the two are then brought together after 10 minutes. Loctite was used to secure the sides to the ends.



A Bachmann BR Mk.I coach was purchased cheaply just for its open interior. This was adapted to suit the Gresley coach and glued to the chassis and painted.

The body is placed back on the chassis just to check the fit of everything prior to dismantling and painting.

D186 Open Third Gresley finished in carmine & cream livery.

Improving Heljan's 33/0

Before the announcement that Rail Exclusive were to commission the first 'accurate 33/0 I looked to overcome the shortcomigs of the initial release of Helan's Crompton. As released the model failed to capture the front end look of the prototype with incorrect curvature to the edge of the roof profile which was reflected in the transition from the roof side curvature through to the front roof edge. The initial release was also unsuitable to be used in earlier guises with its later exhaust configuration and roof clips.

Heljan overcame a lot of these issues in the subsequent 33/1 and 33/2 models but had never re-visited the 33/0 and more importantly the early life of the prototype through to approximately 1967. At that time, and surely at future points, the 33 could be obtained at a fraction of its RRP and with its excellent chassis and drive mechanism represents a good value project.

Early models of the 33 suffered from dirt attraction and collection on its wheels so the bogie sides were removed (a simple push-fit) along with the base-plate. The wheels were removed from the axles and replaced with Bachmann wheels from their Mk1 coach axles resulting in a significant improvement in current collection. Heljan did rectify this later issues and spare wheelsets are available from Howes Models.

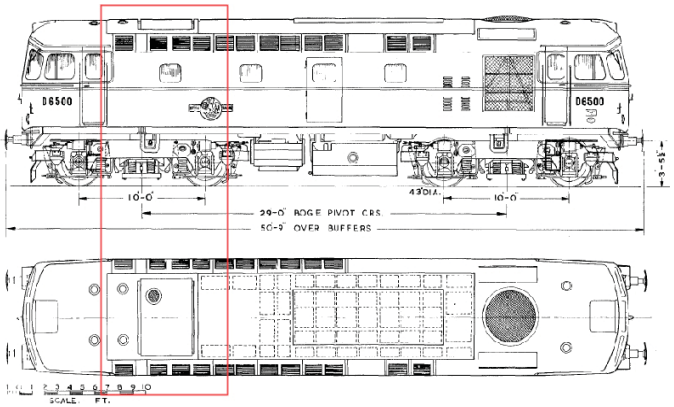
As supplied the fuel tanks protrude from the chassis, unclip the fuel tanks and remove 2mm from each side ofthe centre section and re-assemble.

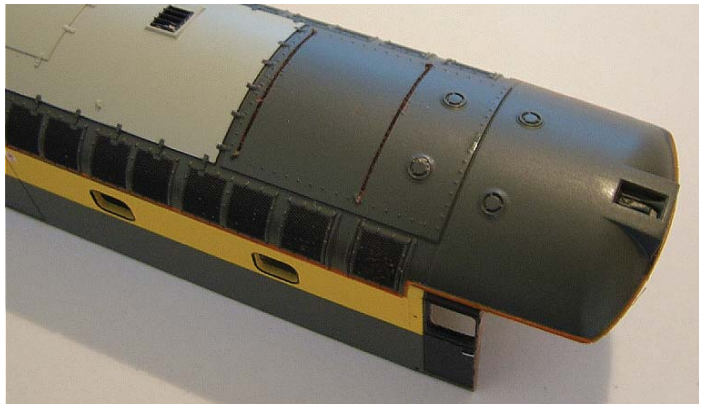
So; take one Heljan Class 33/1 and obtain a spare 33/0 body to get the cab fronts.

Stage 1 - Hacking the body.

The cabs were cut away from the 33/0 with the cut being made just above the moulding line as shown on the far left. Cut gently and often rather than too deep in any one pass buand a reasonably neat line can be achieved by working freehand around the moulding for the rainstrip above the windows.

Repeat the same process with the 33/1 shell but this time cut beneath the rainstrip moulding. Keep test fitting the 33/0 cab to the 33/1 body and filing back the rainstrip on the 33/0 cab until a neat fit is achieved.





Stage 2 - Reverting to the earlier roof style.

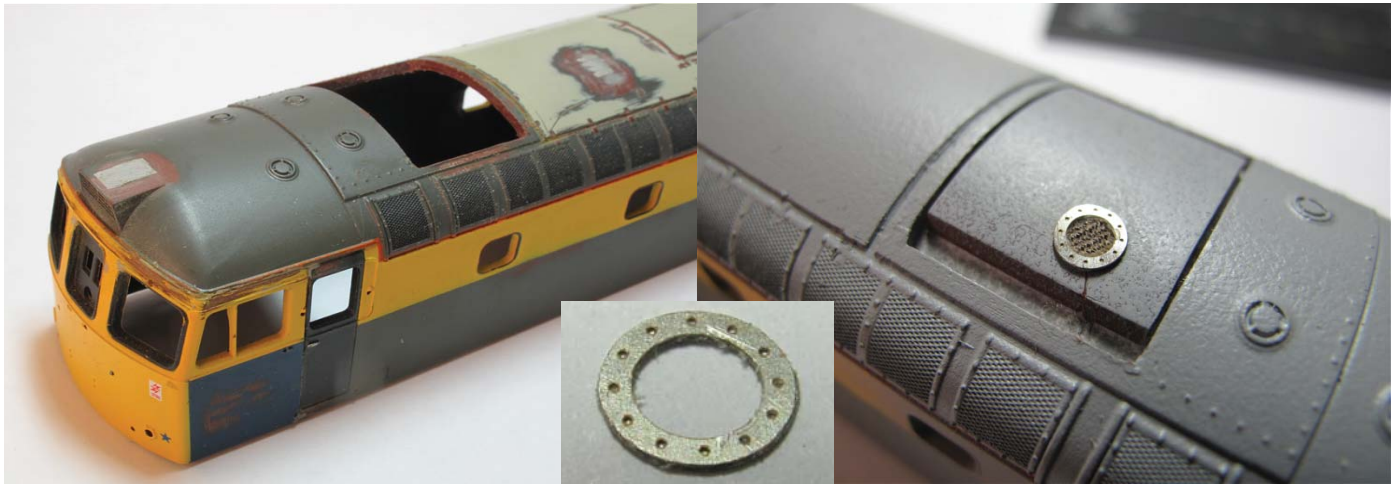
Moving onto the roof it was relatively easy to determine the position of the old exhaust from the drawing below.

Handily on the roof of the 33/1 are four little pimples (plate bolts or lifting eyes?) that appear to mark the position of the earlier exhaust so it becomes a case of joining those dots with a small saw.

Once the panel is cut out the opening is tidied with a file, the removed section is filed back by around 2mm at each side and a vertical face prepared on each side. A plasticard liner is created inside the body for the reduced exhaust panel to be glued upon.

The clamps/brackets are removed from the roof by a shaving action with the knife, paring from varying directions produces a reasonable result but any irregularities are removed by using a small file very softly over them. The newer style exhaust grille is also removed by shaving and filing prior to filling.

The body and cab can now be brought back together. Once you're totally happy they can be bonded the superglue.



The cavity around the roof horns was filled along with the later vent.

I used the early 24 circular exhaust port (centre picture) from the Brassmasters 24/25 detailing etch which is spot on for the given dimensions; the wife may also find a very small hole in one of her nylons to form the grille.

The body was primed in Halfords white, painted with Railmatch acrylics and weathered with an airbrush and Tamiya weathering packs. The exhaust assembly is painted a silver-grey with tarnishing. The centre of the roof panel is painted as an approximation of dirty fibreglass. The warning panels and white lining were all masked with Tamiya masking tape before painting.

The completed bodyshell is returned to the chassis, this 33/0 is sound equipped with a Howes decoder and speaker and the body is fitted so that the speaker now sits beneath the exhaust port rather than the fan grille.

I look forward to repeating this process on a further 33/0 with the forthcoming Shawplan Extreme Etchings for the roof fan and side grilles along with laser cut glazing.

An alternative improvement to Heljan's 33/0 - Peter Mantle

When Heljan's Crompton arrived in the shops I was eager to see what they had come up with. My first impressions from seeing pictures in the railway press were very good apart from a few problems with the roof and the narrow window pillars made me think twice about buying one. I did wait for a while to see if Heljan would do anything to improve things but as they didn't I decided to buy one and have a go at improving the roof myself.

I removed the body and other detail bits like the windscreen wipers and cab windows. I also removed the cab interiors and side windows. The roof fan grille was also easily removed and I painted the molded roof fan and replaced the grille. The roof was next; I used fine wet and dry and concentrated on the point where the curve of the roof changes. About 15 minutes just sanding the three sides, above the cab sides made a difference. Both cabs had a coat of Black mixed with a little Brown paint, as I remember them most 33s seemed to have fairly black cab roofs. I have a few pictures of ex-works 33s, which show this painted blue, but I do have a picture of 33019 at Eastleigh in ex-works condition and it appears to have a black painted cab roof. I was now a lot happier with the roof not only had the sanding improved things but I think the matt paint had helped.

The cab windows didn't seem to be the best fit so I filed around the edges and refitted them with a spot of glue. The cab side windows are a good fit so all I did here was to paint the silver window bars yellow, as most 33s seem to have this. I chose to re-number it as 33010 because I wanted a low numbered Eastleigh based loco and this had the correct fuel tanks. I thought the fuel tank and battery box section was too wide, luckily this part of the model is just clipped on and with a little persuasion comes off, even better is that this moulding is made up of four parts. I worked out that 2mm needed to be taken off, so I took 1mm from each side of the centre section which doesn't interfere with the clips that hold the molding on to the chassis I then re-drilled the locating holes and put the whole assembly back together and clipped it back under the chassis. It now looked right and hadn't taken too long to do. The other job on the chassis was the two exhausts at number 1 end. I made these from brass rod and drilled a small hole to locate them on to the solebar. Last job was the buffer beam where I replaced the moulded steps above the buffers with etched ones. Before putting the loco back together I gave the interiors a splash of paint and added a driver, job done.

I gave 33010 some slight weathering and I am very happy with the result and apart from the narrow window pillars I think this is a worthwhile project. Since doing 33010 I have done another 33 this time 33026 was the chosen loco, while doing this loco I read about an improvement that can be done to the bogies, it involves cutting the centre springs off and remounting them further back, I can't remember who first did this conversion but I did read about it on RMweb .

Earlier this year Pete Harvey brought out some nice etches for the bogie steps. Not all class 33s have this design of step with the holes down the side and some loco's have a mix of steps with holes and without. I decided to buy a set for 33026 and I am quite pleased with how they have come out even though I did burn my fingers a few times.

Buffer Beam Pipe Work and Couplers

Peter Mantle

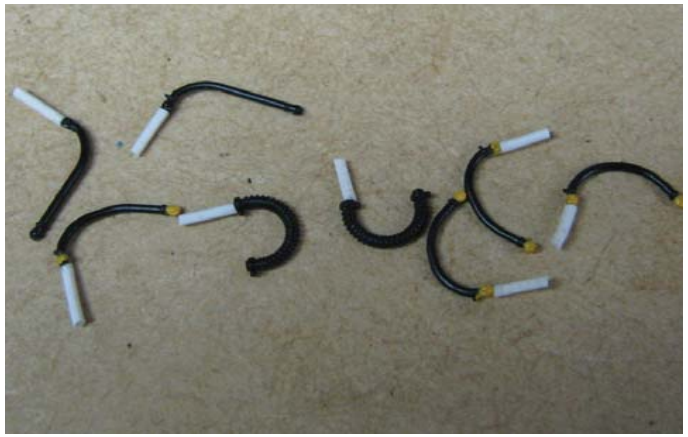
I have always liked to put buffer beam pipe work on my locos, even in the early days when I was repainting Lima and Hornby locos and using Craftsman detailing kits which came with air and vac pipes etc. For a while I would detail one end and leave the coupler on the other end. I was happy with this until I decided to build my layout which was going to be a terminus. Locos need to have a coupler both ends for this; so, for a while my locos ran without pipework.

When I moved to Oz, back in 1995, I was introduced to Kadee couplings. I started to fit them to my stock and locos. Being quite narrow I worked out I could fit some pipework either side of the Kadee and still have enough bogie movement. This wasn't perfect but it was better than nothing.

The problem was solved a few years ago when I read an article by Jim Smith-Wright called "Working Brake Pipes" in which he describes using the elastic from luggage straps or Bungee Cords and small magnets. The article can be found on Jim's P4 Newstreet website. http://jsmithwright.demonweb.co.uk/

I adopted the use of the elastic for my air pipes, though without the magnets, on my locos and it worked really well. It was while I was working on a pair of Bachmann Class 20s I came up with the best solution yet, and I could use the detail pack that comes with most of the locos these days. I know not all are perfect and I have also used Shawplan air and vac pipes on some locos.

Hopefully the pictures help explain what I do, but here goes. I cut off small pieces of elastic about 3mm long and superglue it to the air or vac pipe after I have removed the lug which normally goes into the hole in the buffer beam. After leaving it to set for a few minutes I put a small drop of superglue in the buffer beam hole and push the air or vac pipe in place.



I did the Class 20s over a year ago and the pipework has stayed on, I was a bit worried the paint or glue would perish the elastic but it all seems OK. Recently, I have been working on some Bachmann Class 47s using this method for attaching the supplied pipework. I also removed a Kadee and put the normal Bachmann coupler back in and it seemed to work fine though I would test it on your own layout before getting too carried away, my layout does have a few curves but I am not sure what radius they are.

The pictures also show some work I have done on the 47 chassis which may be of interest. I have cut back the buffer beam cowling so it is level with the bottom of the buffer beam, the raised part on the side of the cowling (I am not sure what it is) is sliced off then moved up a bit, I think this improves the cowling though it is probably still a bit to deep, I have also added missing bogie pipe work and engine cut offs. I did make up some buffer beam steps but I wasn't happy with them, so for now the locos run with out the steps. I think someone could do a nice etch for these, I would certainly buy a few.

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The DCComatic - users' perceptions of systems

At the RMweb Members' Day in July Ian Morton aimed to give participants the ability to choose which DCC system was most likely to suit their needs.

In my role as a DCC guru the question that I am asked most often is "which is the best DCC system?" The answer is, of course, "it depends". You can get DCC systems that are ideal for various schemes from children's train sets through to large club multi-operator layouts. The trick is to pick the system that is right for you.

Whilst you can operate any DCC decoder with any DCC command station, the cabs, command stations and boosters are not necessarily compatible between manufacturers so once you decide on a system from a particular manufacturer you are going to be stuck with your choice for a long time. By and large, the more flexibility and functionality that you require from your DCC system, the more you will have to pay. Fortunately, in many cases it is possible to add extra units to a basic system to expand it, without having to discard your original items.

At the bottom end of the range of prices and functions are the basic systems, such as the Bachmann E-Z Command which has limited capability but is exceedingly simple to install and operate. At the top end of the range are systems which allow more cabs and boosters than you are ever likely to need; these can be interfaced to a computer as well as operating many functions and accessories. In between these extremes are some mid-range systems that have sufficient functions and flexibility for most British layouts.

It is usually difficult to compare systems side-by-side unless you are fortunate enough to be able to visit a well-stocked dealer or drop lucky at an exhibition and can get the operators on different layouts to let you try their DCC systems. With this in mind I set up a test track at the 2011 Members' Day to enable people to test and compare a number of different systems.

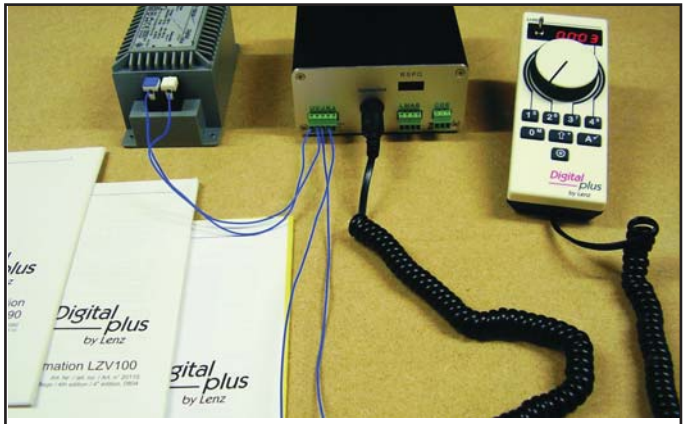
The choice of systems was governed by those that were available to me at the time and included the Bachmann EZ Command, Bachmann Dynamis, Lenz 90, Gaugemaster Prodigy Wireless, Digitrax Zephyr and, courtesy of RMweb member 'Traction', an NCE PowerCab. The test track consisted of two independent ovals of OO gauge track which could each be connected to any of the controllers by means of a pair of rotary switches.

However good a system appears on paper, there are a number of questions that can only be answered when you see it reality:

- If it is a walkaround, does the cab fit comfortably in your hand?
- Is the speed control easy to operate?
- Are the buttons large enough for you to operate comfortably?
- Can you read the display?

During the course of the day a number of people tried the various systems and it came as no great surprise that there was no firm consensus as to the best or worst system but the feedback is shown on the following page. We never did answer the question "which is the best DCC system?" but one thing that everyone who stopped by agreed was that it was great to be able to try different systems side-by-side. Perhaps some of the bigger shows could adopt the idea and have their own 'DCC play pen' stands?

The **Bachmann EZ Command** is the most basic controller available. It can only run addresses 1 to 9 (or 10 if you have a Bachmann DC controller connected to it) and cannot program anything except address and direction of travel. Its big advantage is simplicity. You press a button to select a loco and drive. For a child's train set it has a lot to commend it – a slave unit, the Command Companion, is available so that two (or more) people can drive trains at the same time.

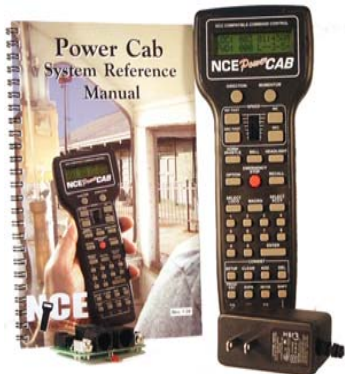


The **Lenz 90** is an old workhorse that has been around for many years. The software in the handset and command station have been updated periodically to add functions but the user interface remains basic. The controller is best suited to running one of a limited selection of locos. The large knob appealed to a gentleman with arthritic fingers and a young girl but the poor interface got a thumbs down from a lot of people.

The **Digitrax Zephyr** is a traditional 'sit down and operate' controller rather than a walk-around handset. The regulator-style control was of interest but many people preferred the idea of a walk-around handset. One interesting feature of the Zephyr is the ability to connect a DC controller up to it and assign a DCC loco to it – giving a cheap way to allow a visitor to run a train.

The **Bachmann Dynamis** is a system that you either love or hate, there seems to be no middle ground with this one. People who use games consoles find it easy to use and it also appeals to left-handers who find handsets with knobs difficult to operate. If you use the lanyard around your neck the handset can dangle and collide with things as you lean over the layout. Some people have reported difficulty with the infra-red signal between the handset and base station but no difficulty was encountered during the day – until the batteries in the handset ran out. If you want to have multiple handsets then Bachmann will try to sell you the expensive Pro-Box upgrade but this isn't actually necessary. Provided that you can live with the system not being clever enough to know if two people are trying to control the same locomotive you can use multiple handsets on the same base station.

The **Gaugemaster Prodigy Wireless** is the latest version of the popular Prodigy system. Gaugmeaster have rebadged the US MRC controller and whilst expensive it is very popular due to the easy user interface (helped by an aide-memoir on the back of the handset). The handset has a radio link to the base station so you don't have to worry about remaining in line of sight or even being in the same room. This could be a big benefit on a garden railway. Some people found the handset a little too large for comfort.



The **NCE PowerCab** was kindly loaned for the day by RMweb member 'Traction'. This was the first time that I had the opportunity to play with one and I was pleasantly surprised. It has a good user interface, fits comfortably in the hand and was easy to use. Unusually it features a thumbwheel rather than a knob for speed control. This was appreciated by left-handers who tend to find that the usual clockwise turning knob goes the opposite way to their natural direction. This could make the NCE ideal if you have both right and left handed operators. An added bonus is that the speed can be nudged up and down using buttons for precise control.

Next month - ECML in O

John Ryan's expresses