VINCOLETON

The much loved and lamented S&D has inspired many layouts. MICK CLEMENTS and GUY CRADDOCK of Redditch Model Railway Club describe a fictitious location, modelled in 4mm, midway between Masbury and Evercreech Junction. Photographs by MICK CLEMENTS.

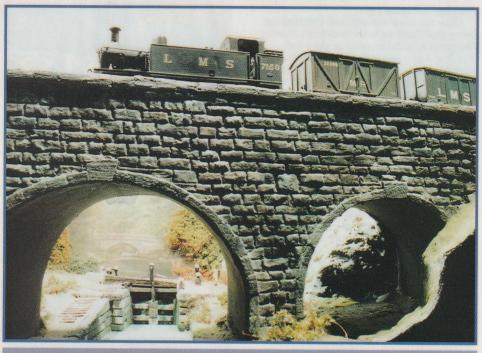
he year is around 1930 and a Monday morning sometime in early May finds us standing on the platform at the delightful station of Wincoleton deep in the heart of the Somerset countryside on the Somerset & Dorset Joint Railway (S&DJR). A train can be heard struggling up the gradient on its approach to the station. It passes over the high canal viaduct after entering a short tunnel, then runs over a level crossing before entering the station. The junction by the level crossing marks the end of the single-line section and the start of a double-track one. As the locomotive passes the signalbox, a solid clank can be heard as the Whitaker single-line tablet catcher is activated. The train, a long freight, accelerates through the station hauled by a Class 7F 2-8-0. We count 40 wagons as they bounce over rail-joints - the limit for this locomotive type without banking assistance over the various gradients on the line.

As the freight fades into the distance, our train, hauled by a Class 2 4-4-0 No. 71, draws into the station. The train consists of both S&DJR blue and Midland Railway (MR) maroon-liveried coaches. This is a semi-fast service heading south towards Bournemouth. A whistle is heard and we set off onto the single-line and the driver also makes use of the tablet exchanging equipment. We enter the short tunnel and then run onto the viaduct and as we do so, a barge loaded with coal is entering the lock on the canal below... Well, now back to reality.

The layout

Wincoleton is the name of the third S&DJR exhibition layout to be constructed by the Redditch Model Railway Club. The previous two being called Wrilington and Otterly St Marys respectively. The S&DJR feel is, hopefully, partly created by the name chosen which combines the station names of Cole and Wincanton to form Wincoleton.

Research for a new layout can be as fulfiling as the actual construction and it is usually just as time consuming. Planning, however, is very important before actual construction begins as mistakes, with such things as baseboards, are not easily rectified at a later date. Being a member of the Somerset & Dorset Trust helps. Much of the information that is needed is available from the Trust's journal called 'Pines



▲ LMS No. 7150 runs over the viaduct on a freight. The viaduct is one of the major features of Wincoleton. The stone cladding was made from modelling clay and the whole structure took three weeks to make from start to finish.

Express' and archive material which is also held by the trust. However, the 'Bible' for layout construction can be considered to be a book, now sadly out of print, entitled 'The Historical Survey of the Somerset and Dorset Railway' by Judge and Potts.

When the layout was planned experience gained with previous ones was used. The layout occupies a total space of 15' x 6'. It is scenic on three sides with a seven-road fiddle yard to the rear and operates on the traditional tail-chasing format. A critical requirement was that the whole layout had to be transportable in one average-sized hatch back car. However, if you want to carry the rolling stock at the same time, some of the baseboards have to be

transported in a small trailer and this requirement led to the shape of the layout.

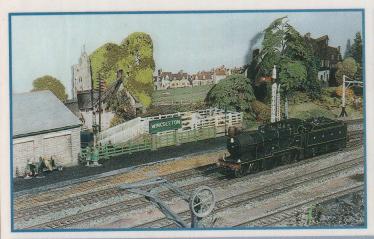
Perhaps the biggest compromise is the radii on the corner tracks which are rather sharp. This had to be done to keep the width of the layout within 6' and scenery has covered up the problem to some extent. Construction of the layout was started in February 1993. It was first exhibited, though not yet complete, in May the same year. Many improvements and the smaller details were added later.

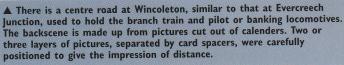
The imaginary station, Wincoleton, is set in the beautiful Somerset countryside on the S&DJR main line from Bath to Bournemouth, midway from Evercreech Junction to the south and Masbury to the north.

At Wincoleton, a five-mile branch line diverges to serve the small mining town of Mangaford. Although the service is usually operated by either an SR two-car set or an LMS pushpull train, here an LMS 2P 4-4-0 is entrusted with the service.



LAYOUT FOCUS







▲ The cottages and 'The Crown' public house are totally freelance and are scratch-built around card shells. At one exhibition, a lady customer was fully convinced that she had sat outside the prototype pub — nobody wanted to disillusion her.

found using photographs of the prototypes. The model ones are scratch-built from wire and brass which have been soldered together. Unfortunately, the models do not work. References to the design of the signalbox, goods shed and the other station buildings can be found in the 'Historical Survey' (pages 32, 33, 35, 41 and 42).

The signals are virtually scratch-built using various parts. The lattice posts were made using brass frets, the other posts being Ratio. The signal arms are of Great Western design. The shape of the spectacle plate has been altered to represent the LSWR type; the LSWR supplied the original equipment to the S&DJR, thus ensuring that its standard designs were used. The bracket signalbox is due for replacement shortly with an SR rail-built post. The water cranes and fire devils are totally scratch-built from brass and wire, and are based on the prototypes at Evercreech Junction.

The cottages and the 'The Crown' public house by the level crossing are totally freelance, being scratch-built around card shells using the same methods as the other structures. At one exhibition, a lady customer was fully convinced that she had sat outside the prototype pub — we did not want to disillusion her.

The road bridge was based on the one at Shepton Mallet which crossed a single-line but was widened when the line was doubled. The model is made around a plywood base.

The viaduct over the canal at the other end of the layout is purely imaginary and was made to fit the space. Once the baseboards were made, a cardboard mock-up of the structure was built and after the proportions were established, the sides were cut from plywood using the card as templates. The decking was made out of chipboard. Stone cladding, made from modelling clay, was then added and scribed to form the stones. However, a small section was modelled using Slaters 7mm scale stone cladding whose stone sizes are the right proportions for the sort used on such a viaduct. Cardboard formers were used to make the under parts of the arches, taking much trial and error to achieve the right internal radii. When completed, the whole structure was painted and weathered.

Through the middle arch flows part of the canal which includes a lock. This section was

made up as a separate unit using a plywood base, stonework and paving being made from scribed balsa wood. After the completed unit was added to the layout, the surrounding scenery was built up to it.

Scenery

The scenery was built up using mainly polystyrene as a base. We were lucky to come by some of the type used by professional model makers. They use it to sculpture such things as mock-up car shapes for wind-tunnel tests. The substance is ideal for railway scenery model making. Hills and rock faces can be carved and filed to form the required shape. A thin layer of Polyfilla is then added, making the whole surface of the landscape become very solid and very light in weight important to portable layouts. The ground is painted with green and brown poster paints to provide the basic colour and rock faces are also painted and weathered. The basic scenic ground cover is added to give the ground cover some depth and this is built up in several layers, each of which is left to dry before the next one is added. More recently, various dried mosses have been added and these were glued down with PVA and sprayed with a cheap hair spray to preserve them.

The backscenes provoke a fair amount of

comment at shows as they are threedimensional and give a very effective sense of depth without taking too much space. Pictures from calenders were mounted on card and the effect is created by using two or three layers of these pictures with card spacers in between. Many hours were spent finding the right perspective and building them up to form a backscene. Once these were made

up, some careful painting of some pictures was done using poster paints to remove modern-looking items such as cars etc. Before it was installed, the whole unit was matt varnished to remove the shine and it also means that they do not appear as white blobs on photographs.

Locomotives and rolling stock

Normally, the layout has been exhibited with stock from the late 1920s era. The following is some of the locomotives normally seen working during exhibitions.

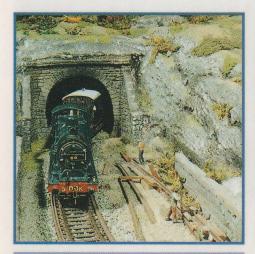
There are three 0-6-0T 'Jinty' type locomotives Nos. 23 and 25, painted in S&DJR blue livery, representing members of the small batch of locomotives supplied by the MR to the line. No. 7316 is also from the batch but is in the later standard LMS black livery. It has also been renumbered into the standard LMS scheme. Originally, it would have had a two digit number, similar to the other two locomotives. All three locomotives are detailed and are based around Hornby models.

There are two 0-6-0 Class 4F tender locomotives. The first is No. 60, also of a batch supplied to the S&DJR and like so many of the lines' locomotives, it was built by a private contractor, in this case Armstrong Whitworth. Although the body was scratch-built around 20 years ago, the chassis is basically a Hornby

▼ To the right of 'The Crown' public house is the level crossing. Here, vehicles either head straight up the road or turn left towards the station.



- The Somerset & Dorset Railway in the 1930s



▲ Soon after leaving the station, trains heading towards Bournemouth enter a tunnel and emerge immediately onto the viaduct. In its attractive blue livery, S&DJR 4F 0-6-0 No. 60 leaves the south-eastern portal — treating the new trackwork with respect.

Most of the main line trains call at the station on route to Bath, Bournemouth, Evercreech Junction and beyond. There is a centre road within the station, similar to that at Evercreech Junction, used to hold the branch train and pilot or banking locomotives needed to assist some of the heavy trains on their climb up the 1 in 66 gradient towards the lines at Masbury. At this point, the railway line is 811' above sea level. For those who knew the line, Wincoleton is effectively replacing the station of Shepton Mallet. The station has staggered platforms as per Wincanton, and the main platform, on the north east side, has all the main buildings.

The small mining town of Mangaford, to the east of Wincoleton is also served and both the mine and town are reached by a five-mile branch line which joins the main line at Wincoleton. The passenger service on this line is normally operated by either a Southern Railway (SR) two-car set or a London Midland & Scottish (LMS) push-pull train. Trains to Mangaford leave from the main platform and when running toward Mangaford operate on the wrong line. This is to gain access to the branch line whose access is within the fiddle yard.

Baseboards and track

Usual methods were used to make the baseboards – that of 2" x 1" timber frames and 1/4" plywood for the tops. All the baseboards were made in this way except the viaduct section which, because of the depth required, used the open framework method. The level of the track remains more or less constant right round the layout so the viaduct was constructed on two drop boards some 8" lower than the rest of the layout. All the boards are joined using pattern makers' dowels made of metal and form part of a



many famous S&D features. The Station-Master's house at Wincoleton is based on the one at Masbury although the ornamental down pipes and gutters are similar to those at Midsomer Norton.

◀ Wincoleton incorporates

plate. Each plate not only has a locating dowel but also a hole for a nut and bolt to ensure that when the layout is put together the baseboard joints line up perfectly each time. The whole layout is supported on trestles, each with a chain to adjust the height

All the track is Peco Streamline Code 100 as the finer Code 75 was not available when the project was started. It was laid on cork sheet and then ballasted with granite chippings and stuck down using diluted PVA glue. The conventional manner with a small amount of washing up liquid to break the surface tension was used. The sleepers on the track immediately each side of a baseboard joint were replaced with a copper clad one. The rail is soldered to the copper clad for added strength. Once the track was ballasted and tested, the rail sides were hand-painted using a colour to represent rust found on the prototype.

Wiring

The layout is wired by the normal common return method to provide cab control via two control panels. One is situated behind the station, while the other is over the tracks in the fiddle yard. The second panel effectively forms a bridge which the trains pass under. All the connections between the baseboards and control panels are made using industrial connectors. The isolation sections are controlled by centre off single-pole singlethrow switches which are wired so as to be able to switch any part of the layout to either one of the two Gaugemaster controllers. This is important, because of the change from a single-line at one end of the station to a double-line at the other. There is a need to be able to continuously control a train right around the layout without changing controllers. The switching allows the layout to be worked intensively as per the prototype. Currently, most of the points on the scenic section are worked by the wire in the tube method but plans are in-hand to electrify them and power them via H&M point motors.

Structures

The buildings are based on originals from the railway and all are scratch-built around a cardbased structure. This was built on a foundation of around about 1/2", so when the completed building was finally sited, the unprototypical gap often seen at ground level was avoided. The card-based structure was covered in various claddings such as brick papers and plastic card to replicate stone and brick finishes as on the prototypes. The roof tiles were made from thin card, such as that used to make blank postcards, and cut into strips. Along one of the long edges, a series of cuts were made about half the width of the paper in length. The paper strips were then stuck to the roof structure, starting at the bottom edge, with each layer partly over-lapping the former one. The ridge tiles and flashing were made from thin paper and when completed, the whole roof structure was painted and weathered in suitable colours

The Station-Master's house was based on the one at Masbury. Plans were drawn up using photographs from the 'Historical Survey of the Somerset & Dorset' (pages 41 and 42) as a guide. The building is complete with the outbuildings alongside the main structure. The lamps are from the Mikes Models range, while the gutters and downpipes, as on all the buildings, are based on those from Midsomer Norton – the drawings of which came from the Somerset & Dorset Trust's Journal Nos. 94 and 106. The building is complete with interior. The goods shed is also based on the one from Midsomer Norton.

The signalbox is based on a standard S&DJR type, the one from Chilcompton providing the basis. The inside was modelled complete with the lever frame. Outside, are models of the Whitaker tablet exchange equipment. The system allowed single-line tablets to be exchanged at much higher speeds than by hand. Many of the locomotives used on the line were fitted this equipment – usually mounted on either the bunker or tender depending on the locomotive type – which helped to speed up the operation of the single-line section of the railway. The design of the model ones has been

one. The second Class 4F, No. 4558, is a standard Airfix model with a fair amount of detail added and the tender will soon be altered to a more prototypical Johnson type.

There are four 4-4-0 Class 2P tender engines and of these, Nos. 45 and 46 are in S&DJR blue and were made by Mainline. Sadly, their running capabilities do not match their accurate modelling because of the large amount of plastic used in the manufacture and the lack of space to add any meaningful additional weight. No 78, a heavily modified Tri-ang model, is also in blue. Its body is based around Tri-ang's model of a SR L1 Class and the tender, a Johnson MR type, is from a Ratio kit. No. 567 is in LMS Maroon and is also a modified SR L1. Its tender is, however, a Fowler type and has been scratch-built.

The locomotive class which is most associated with the S&DJR is the 7F 2-8-0 tender engine, 11 of which were specially built and designed for the railway. No. 9673 is in the early LMS livery and while it was originally S&DJR No. 83, in later LMS days it was numbered 13803 before receiving its final number of 53808 under BR. Like the 4Fs, these locomotives never carried S&DJR blue livery and were always painted black. The model was scratch-built 20 years ago, its boiler barrel is a piece of plastic drain pipe and the chassis is from a modified Hornby Dublo Stanier 8F, while the drive is a Hornby motor situated in the tender. It is planned to build at least another two more 7Fs in different liveries and these models will have several constructional modifications made; the present engine will be built to the same modification.

The rolling stock has been constructed to suit the era and while most coaches are scratch-built, extensive use has been made of Ratio coach parts such as sides and roofs. Its GWR four-wheel coach sides were chopped

The S&DJR - prototype notes

The S&DJR was formed in 1862 by the amalgamation of the Somerset Central and Dorset Central railways. This formed a through route linking the Bristol and English channels via Burnham-on-Sea and Wimborne.

In 1869, the Midland Railway (MR) opened its terminus at Bath Green Park station (the S&DJR's head offices were here) at the northern end of the line. By 1874, the Bath to Evercreech Junction section was opened and thus, the MR and London South Western Railways (LSWR) had a standard gauge line passing across GWR broad gauge territory. In 1875, the line was leased by the MR and LSWR, as the 'Bath extension' (Bath to Evercreech) had drained the S&DJR's finances to the extent that it was unable to cope with increased traffic

Passenger traffic was always seasonal. There was much double-heading on Summer Saturdays of the trains from Bath to Evercreech because of the hilly nature of the line. Freight traffic was also important, with coal and stone traffic being particularly heavy. The death knell of the line came in the 1960s, when it was transferred by British Railways to the Western Region. Through traffic was transferred away in 1962 and the line closed completely on March 5 1966.

into sections which were then assembled in a different order to produce a S&DJR coach. In the main, the roofs are made using a Ratio SR bogie parcels van and it is very much a case of referring to drawings of original coaches, using ingenuity to create miniature replicas of them.

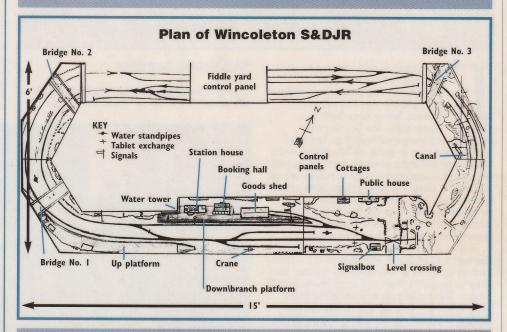
The wagon stock is a mixture of modified ready-to-run, kit- and scratch-built items. The Club has enough stock from all the eras from the 1920s until the 1960s to operate the layout

in any one of the periods and as most S&DJR exhibition layouts tend to be based on the period just prior to closure, this layout becomes something different.

We hope that the layout has fulfiled the aims we set out with and the praise we have had at shows leads us to believe we are getting there. Certainly, the layout would not have been constructed as quickly without the help of the Redditch MRC and its members.



▲ A canal runs through the middle arch of the viaduct – which actually covers part of the lock. The water was made from a piece of perspex, with the underside painted to represent the colour of the water and the top varnished to give a ripple effect on the surface.



▲ The fiddle yard plays an important part in allowing the railway to operate in the best prototypical manner as possible and it is laid out so that it is not just a place to store trains. The Up and Down roads can accommodate trains of a reasonable length allowing two shorter trains to be substituted for one long train — such as a Class 7F 2-8-0 and 20 wagons. The branch line trains operate to and from the tracks on the inside of the yard. These include local passenger, general freights, milk trains and even a push-pull train. At the moment, this is hauled or pushed by a Jinty until the model of the more prototypical 0-4-4 tank is completed.