Peter Hodge

A LEARNING CURVE

The development of an OO layout

Ashdean is a large British prototype club layout, set mainly in the 1960s and located in Wellington, New Zealand.

The Wellington British Railway Modellers formed their club in the early 1980s. For the first seven or eight years meetings were held in members' homes and the club grew slowly. Membership now totals 35.

In 1990 a sub group of the club was charged with developing an exhibition layout. The result was Ashdean, built in twelve months to display at the New Zealand Model Railway Convention at Masterton in 1992. It was operated at other exhibitions and was recently on display for a year at Upper Hutt, 20 miles north of Wellington, where the club had space in a Model, Toy and Car Museum.

The 1960s era is the most popular interest among members. Those modelling pre-British Rail tend to favour GWR and LMS but there is support for LNER and Southern. There is also a strong modern image special interest group. The layout can cover either steam or diesel periods by using changeable "plug in" station signs and lineside accessories.

Above: Hornby A3* Flying Scotsman *and Pullman train.

Right: Hornby LNER A1* Royal Lancer *at the cement works tunnel.

Construction

Ashdean is built on 12 baseboards and occupies 24' × 8'. It was planned to give simple operation and uninterrupted train running to maximise audience appeal at exhibitions. To avoid collisions the up and down tracks are separate. This concept is ideal for modern image operation with a minimum of shunting.

The learning curve

Ashdean has several interesting features. The main station is built at one end of the layout. Because trains passing through the curved platforms disappear offstage to the fiddle yard beneath a train shed roof only half the station length has to be modelled, saving considerable space. That also leaves long straight tracks at the front of the layout free for through running. A loop and a bay platform hold trains in the station without hindering through workings.

Road bridges at the platform ends and halfway along the front provide visual scenic breaks. Public interest is enhanced by having a stabling point to display locomotives at the front of the layout and a small cement works at the far end from the station.

Scenery has been kept simple, with semi relief buildings and trees made from yarrow stalks dipped into white glue and sprinkled with coarse Woodland Scenics materials.

Building Ashdean has been a learning curve for those involved, underlining the importance of an exhibition layout being easy to dismantle, transport and erect. It has enabled club members to discover new talents and develop confidence and skill in modelling. A number have home layouts of good standard.

Operation

The operating crew for exhibitions numbered four, two controlling the visible section of the layout and two marshalling trains in the storage yard. At the 1992 convention open day many visitors found the work going on in the storage yard as interesting as what happened up front.

The operating sequence for exhibitions employs 13 set trains. All locomotives and rolling stock are supplied by members. Hornby, Lima, Bachmann, Mainline and Wrenn are represented among the proprietary locomotives.

The storage yard comprises eight loops. Five are long enough to hold two trains each; one or two locomotives are held in the stabling sidings. At exhibitions trains in service comprise four diesel multiple units, Speedlink and cement workings, an engineer's train, a Freightliner, two expresses, a parcels train, a special (eg a steam excursion), and a block train. Trains ran non stop through the station unless otherwise specified (eg local passenger trains or shunts to and from the cement works). As a train departed from the front section of a storage yard loop the yard operator moved forward the train on the rear section of the loop.

rains always returned to the same loop. At ıe end of the sequence all trains had ɜsumed their starting positions.

lectrics

everal decisions had to be made early on ecause they had a major influence on iring which closely followed tracklaying. lectrofrog points were chosen for reliable unning. To give operational flexibility track locks were isolated by control panel witches. That eliminated some complica-ions of using electrofrog points but meant nore wires between the track and control anels.

Because the club wanted to provide for uture electrification with overhead cate-ıary, it was decided to use common return iring, bonding all left hand rails. Most eady-to-run dual-mode locomotives (draw-ng power from track or catenary) use left ıand wheels as the common electrical eturn. Common return wiring also has the potential to almost halve the number of wires connecting baseboard modules.

Experienced members pointed out that previous club layouts had failed through electrical continuity problems. Despite care in construction, some fishplates/rail joints became oxidised, preventing good electrical contact. To avoid that, bond wires were soldered around all fishplates.

With twelve baseboards and four control panels there are anything up to 36 individual wires between modules. Thorough documentation during construction paid dividends when fault finding later. The club was able to obtain numerous wiring colours. Consistent pin numbers on plugs and sockets were used for each colour and the same pin numbers were maintained throughout each circuit. To counter power loss on long wiring runs, seven strand flexible wire of 0.5mm squared cross-section area (the thickness used by LGB), obtained from a nearby model railway club, was used for longer circuits. The local amateur radio club supplied rugged 12-pin plugs and sockets at low cost for connecting modules.

Points are powered by Peco PL-10 motors. Low resistance wiring has proved useful in ensuring the motors receive their rated 3.6 amps at 16 volts. Point control is by the stud and probe method, powered by a capacitor discharge unit. The CD unit first chosen was rated at 16 volt input but would not reliably operate two point motors at the same time. Increasing the capacitor value by a factor of three and capacitor voltage rating by a factor of 1.5 permitted operation on 24 volts input and gave completely reliable working (some might say ballast-shaking overkill!). Point motors were also wired with their own common return, separate from the track common return.

Feedback-type hand-held controllers are used. Small squares of Velcro were added to both the control panel and the rear of the hand-held units for those operators preferring a fixed-location controller.

Retirement

Ashdean may be in retirement from exhibitions but still has life left in it. One of the conditions of having space in the model, toy and car museum was that the layout was seen by the public. It has also become a club layout in the sense of being available for train running at meetings. The club is looking into developing *Ashdean* to meet the requirements of a club layout as opposed to those for exhibitions.

For many years railway modelling in New Zealand was handicapped because currency regulations and high customs duties made it very difficult to buy model railway equipment from overseas. Items available in local model shops were limited and expensive. The easing of currency regulations and customs charges have made it very easy to import model railway equipment. Most members of the Wellington British Railway Modellers Club are interested in British prototype because they came from Britain or have lived there. Another factor is that Hornby was the brand most readily bought in model shops in those bad old days.

The WBRMC has an N scale group which has built a layout measuring 12' × 4'. It has been exhibited, most notably at the New Zealand model railway convention held at Porirua during Easter 1994. Club member John Keyte's *Middle Norton*, an OO model of a fictitious station on the Banbury-Cheltenham Direct Railway, has appeared at exhibitions including the Porirua convention.

British prototype layouts, owned by clubs and individuals, are found in many parts of New Zealand.

Acknowledgments

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Opposite, from top: platform ends at Ashdean — with a "Bubble Car" (converted from a Lima DMU), Hornby A3 Pacific* Flying Scotsman, *and a Bachmann GWR 2-6-0.

Modified Hornby A4* Dominion of New Zealand *passing the loco stabling sidings. Originally* Mallard, *the locomotive was repainted and fitted with appropriate nameplates.

Ex GWR 2-6-0 and a well weathered Mainline J72 0-6-0T at the cement works siding.

This page: modern image at Ashdean: left a Class 117 DMU and (right) Scotrail 47 704.

***No. 31 568* The Enginemen's Fund *passing the loco stabling point at Ashdean. Other locomotives are (left to right) 60 003* Christopher Wren, *56 074, and 37 137* Clyde Iron.

All photographs: Peter Hodge.