Abbey Light Railway extended

DAVID MALTON *brings the story of his enlarged O-14 industrial layout, representing a now-closed Leeds-based collection, up to date in advance of its return appearance to Expo-NG at Swanley.*

The ALR was a little railway run by volunteers near Kirkstall Abbey in Leeds that played a big part in my life right up until I moved to Devon for work. Unfortunately in 2012 Peter Lowe, who owned the railway, passed away and it has been dismantled, although happily everything survives in good homes around the country. The first incarnation of the layout was a depiction of the terminus at Kirkstall Abbey, which featured in the June 2015 issue of RM.

As my collection of locos and rolling stock increased, so too did my desire to extend the layout to accommodate more of them on-scene

▲ **A typical Sunday afternoon scene: locos stood on display outside the shed, one being the O&K under restoration being steadily worked on.**

▲ **Rebuilt Simplex *Druid* trundles past the yard with a passenger service bound for the Abbey.**

Layout photography by Craig Tiley and the author, location photography by the author

Ex-Leighton Buzzard Simplex *Odin* disturbs the peace but not the heron as it accelerates over the Mill Race bridge gaining momentum for the upcoming gradient in the cutting.

Hudson-Hunslet *Atlas* heading for Bridge Road with an unusually full load of passengers. This was arguably the most scenic part of the line, hence my reason for modelling it.

and improve operational interest. My plan was to add two more boards between the existing Abbey station board and the fiddle yard. One depicts the S-bend where the railway crossed the Mill Race by a bridge (arguably the most scenic part of the route) and the other board would feature the yard area outside the sheds, which would allow for the display and casual shunting about of the rest of the rolling stock collection by the second operator.

An exhibition invitation for the whole layout in extended form later in the year was the motivation needed to get on with it!

New layout, same car

For convenience I still wanted to use my own car to transport the layout instead of hiring a van, but being only a small hatchback this required some careful planning when constructing the new boards. The new yard board was built to the same general size and height as the existing Abbey End board, making sure that the width was sufficient that the two could sit side by side between the rear wheelarches. The two boards sit on top of new leg units, which fold and stack neatly on top of each other.

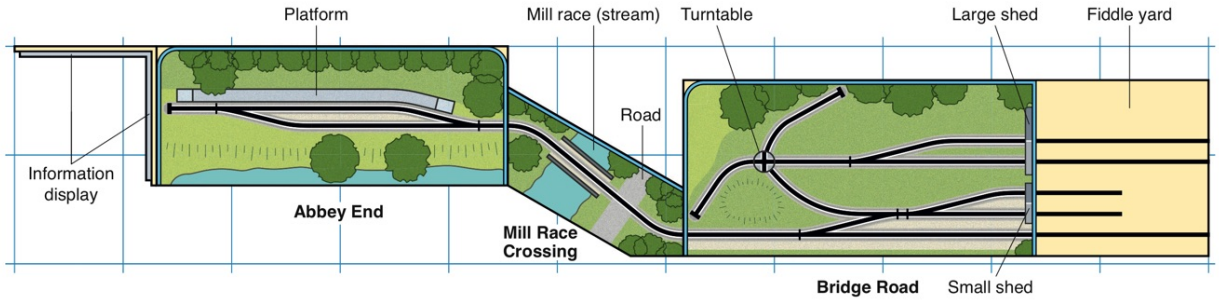
As the backscenes on the boards are identical heights and built substantially, covers were added for transit that protect the scenery and form a shelf for the bridge board and fiddle yard to sit on. After a few late nights out in the garage it was finished on time (just!) and fitted into the car as planned for a successful first outing.

Handmade track

As usual for O-14, all the track had to be handmade. I used Peco code 75 rail on 30mm lengths of O scale plastic sleeper strip. Rails and sleepers were glued down with impact adhesive then four spikes per sleeper were individually drilled and fitted. The points were made by now-retired Peco

ABBEY LIGHT RAILWAY (EXTENDED)

Overall exhibited size: 11' x 1' 11". Each grid square = 1ft x 1ft.



designer Bob Phelps, with the exception of the one buried in the ground which I made myself using copper-clad sleepers. They are powered by DCCconcepts Cobalt point motors, which also handle the frog polarity changing.

12V dc analogue control is used on the layout, provided by a pair of hand-held Gaugemaster controllers, one for the 'main line', the other for the yard area. The toggle switches that control the various track sections and the point motors are located on control panels on the top rear edge of the backscene. Here they are protected in transit, discreet, and accessible from the front of the layout by reaching over the lighting pelmet. This is very handy for testing and troubleshooting, but also gives the option for the layout to be set up against a wall and operated in this manner at home.

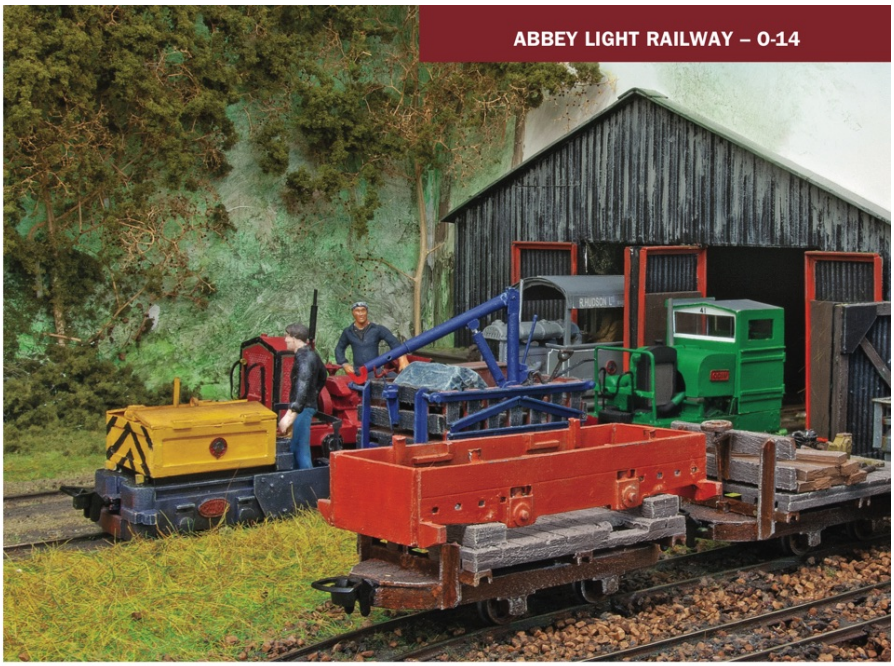
The ALR had a Kerr Stuart wagon turntable

Lister AutoTruck *Loweco* is engaged in manoeuvres involving the crane wagon and the turntable as *Druid* returns from the Abbey on passenger duties.

The Kerr Stuart turntable is powered by a Peco SmartSwitch servo. The real one was powered by putting your back into it!

The whole layout. At the left are information panels about the prototype and on the front of the fiddle yard is a cast ALR crest that used to be carried on one of the coaches.

The Ruston 20DL approaches the road crossing. This is the second version of this 3D printed model, this time with a higher level of detail made possible by advances in the technology.



A typical scene outside the shed. The chassis on the wagon is that of ALR No.9, a Fordson/ Muir Hill loco that was never fully restored. Happily its new owners have finished the job.

in the yard, but it was used mainly as a sector plate between two sidings and very rarely for complete 180° turns. The turntable itself and the base on which it sits were 3D printed and designed to accommodate code 75 rail and wiring to make one route live. A Peco SmartSwitch system is used to turn the deck, with the servo horn simply glued to the underside. It only moves about 45° between the two sidings it serves, but does so very reliably and has ample power to move even the heaviest of my locos.

Scenic additions

The Priestman Cub excavator was converted from an old Corgi diecast toy, described in detail in RM March 2012. The tracks were replaced with 3D printed versions and the jib modified to represent the machine the ALR acquired to assist with the construction of the railway. Once this job was done the Cub had little further use and it sat in the yard for many years gently decaying until it was finally sold.

Happily it is now restored to immaculate condition and in regular use at Threlkeld Mining Museum in Cumbria. It is currently joined on the layout by my scratchbuilt plasticard model of the railway's Ransomes MG dumper truck and a diecast representation of my Dad's long serving Range Rover, which was our usual transport to and from the railway.

Non-railway vehicles on the layout include the Priestman Cub excavator, the Ransomes MG dumper truck and my Dad's Range Rover.

Loweco draws some V-skips out of the little shed. The wagons lived in a locked compound beside the sheds and had to be shunted out of the way in order to run passenger trains.

The trees on the layout are often complimented, but are in fact very simple. I used real twigs and branches cut from a hedgerow to represent trunks and branches, onto which bits of sea moss and Woodland Scenics green foliage were glued for branches, twigs and leaves. Most of them are glued to the backscene and *en masse* they provide the right woodland effect. Other greenery is a combination of rubberised horsehair, more Woodland Scenics foliage and static grasses from the Peco Scene range.

Motive power additions

The loco collection has expanded. Recent arrivals are:

- Lister Autotruck *Loweco*, which was scratchbuilt in brass and plasticard using some heavily modified castings from the KBscale kit on a custom chassis.
- 48DL Ruston *Vulcan*. This has a body scratchbuilt in plasticard, loaded with lead weight in every available space to match the prototype's 8T bulk. It runs very reliably on a BullAnt chassis.
- 10hp McEwan Pratt loco. After some trials with 3D printed parts, I had the main frames and coupling rods produced as custom etches by Narrow Planet. Romford wheel rims are used, but to produce the correct spacing for the spokes and position of the balance weights I designed new wheel centres to be 3D printed, which are pressed into the rims and have Romford crankpins carefully added. The jackshaft gears were produced in the same way, but without the wheel rims. The body was scratchbuilt in plasticard.
- Using the redundant 3D printed trial parts from this I made the other McEwan Pratt we had at the ALR, which remained unrestored so is modelled in this state as a static model. It can be placed on the track in the yard, but is really intended as a scenic item on a future extension of the layout.

This brings the locomotive total up to 12, so now the whole ALR fleet is represented in model form. There is always room for improvement however, and this has led to two existing locos being almost completely renewed. The 20DL Ruston has a new 3D printed body produced on a higher spec' machine with a much greater level of detail than the original. Also the 20hp Simplex *Odin* was in need of a new chassis, but when this arrived it would not fit in the original body so that too has been replaced with a new more detailed version.

Many locos now sport drivers scanned and 3D printed by Modelu, which in my opinion are the best figures available. One of the firm's recent releases is supposed to be an industrial workman, but I took a double-take when I first saw him on the website as it is the spitting image of the ALR's founder and

48DL Ruston *Vulcan* tentatively rolls onto the turntable. In later years I repainted the real loco in ALR lined green, but I finished the model in its earlier 'Rusty' orange colour scheme for variety.

No.11, a 10hp McEwan Pratt built for use in the trenches of WW1, is the only one of the three surviving members of the type that has been restored to working condition. It now takes pride of place in the museum at the Welsh Highland Heritage Railway.

owner Peter Lowe in his favourite jacket and flat cap. One of these figures is now painted up as Peter and oversees operations from just outside the shed, a favourite position of the man himself during a Sunday operating session.

Conclusion

The layout has been popular at exhibitions, and it surprises me how even when exhibiting in the south-west there are still people that recognise it and tell us they visited the prototype back in the day, hundreds of miles away in Yorkshire. Recently we met a gentleman who recognised the Simplex *Druid* from when he used to drive it at the Creekmore Light Railway, which was one of its previous homes before the ALR. He had made the nameplate for it, which is faithfully reproduced on the model. Apparently it was named after the BR Class 42 Warship of the same name, which we'd never known before! Exhibition invitations are still regularly received, and this year the layout is making a return to ExpoNG, which was also its first outing back in 2014.

Key to having a layout that stands the test of time is that it represents a subject you are passionate about. In my case I wanted to keep the spirit of the Abbey Light Railway alive as it holds so many fond memories from growing up and quite honestly I can't think of another railway I'd rather spend all this time modelling, nor the hours at exhibitions talking about. For this reason, although other layouts may come and go, I'll probably be building, improving, operating and exhibiting the *Abbey Light Railway* and its rolling stock for decades to come.

The superb range of Modelu scanned and 3D printed figures are used where possible, although none are scans of real ALR volunteers.

***Atlas* hauls the quirky Hudson/Fordson 'Gogo' tractor out of the shed. Stood in front of it is the ALR's owner, Peter Lowe (or at least his Modelu lookalike!) admiring his collection.**

Meet David at Expo-NG

David is booked to bring the *Abbey Light Railway* to Expo-NG at **Swanley** on Saturday 26 October. Details in Societies & Clubs.