

The Abbey End



Modelling and words: **DAVID MALTON** Model photography: **CRAIG TILEY**

The Abbey Light Railway was a 2' gauge line that ran along a patch of wooded parkland near the ruins of Kirkstall Abbey in the middle of suburban Leeds. It operated passenger trains on Sunday and

Bank Holiday Monday afternoons. Construction started in 1978 by Peter Lowe, who was a lecturer at Leeds Technical College, helped by his family and a group of enthusiastic friends, including my Dad from

the beginning and myself when I was old enough join him. Prior to that the ALR had provided my first ever train ride, aged roughly six weeks.

It was built to house Peter's collection of 12 vintage ex-industrial and military locomotives and give them somewhere to run, but arguably its most valuable role was as a twice-weekly social activity; Sunday afternoons were spent with friends either driving trains or tinkering in the workshop. Tuesday evenings were usually occupied leisurely changing a rotten sleeper or two during the summer months, whilst more often than not gathered round the stove listening to Peter put the world to rights over a cuppa during the winter.

The line was built using track salvaged from the defunct internal railway of Knostrop Sewage Works in Leeds, using crushed brick as an inexpensive and plentiful alternative to stone ballast.

◀ The largest loco in the ALR fleet, ex-RAF Ruston diesel Vulcan, awaits the right away at the real Abbey End – the inspiration for the layout. Photo: David Malton



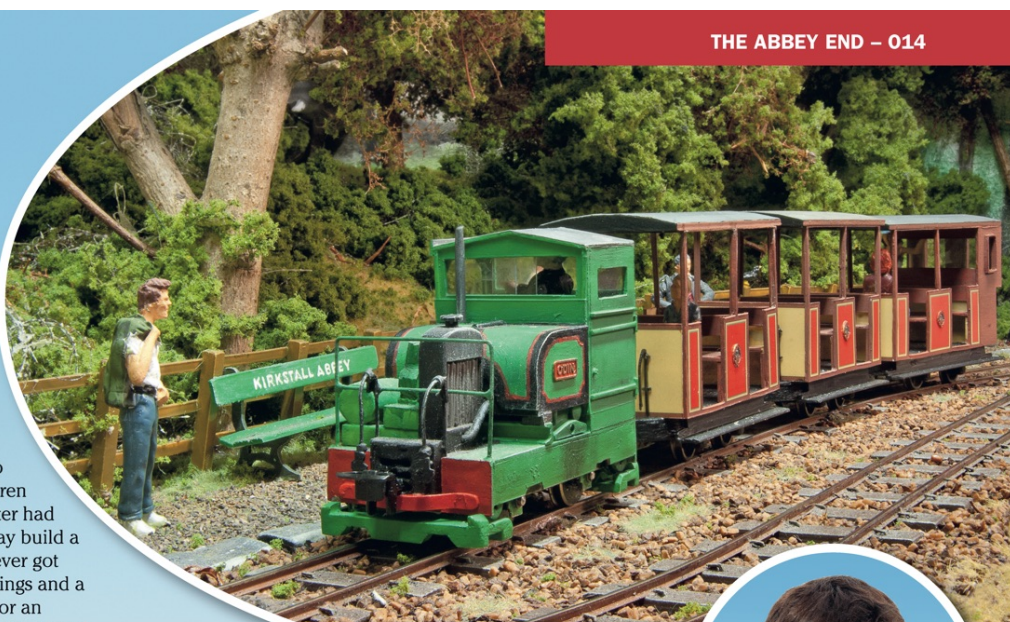
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RAILWAY MODELLER

The ¼-mile route included a level crossing, river bridge and cutting, with a run-round loop at each end. The yard at the depot included sidings, two loading ramps and a wagon turntable. The sheds were not connected to mains power or water, instead water was collected from the roof and electricity was provided by a wagon-mounted diesel generator.

Steam on the ALR was limited to two occasions when Kerr Stuart Wren Class *Peter Pan* visited the line. Peter had a grand plan that we would one day build a replica Wren ourselves, but this never got further than acquiring various castings and a set of frames for it. In all, it made for an interesting and unique full-sized train set and although the passenger service rarely ran full and its takings barely covered the running costs, details like that didn't spoil the many hours of fun we had there.

Sadly Peter died in 2012 and for various reasons the ALR had to close. All his locos and rolling stock went to good homes, but the railway itself was lifted and consigned to the history books.



▲ The passenger train arrives, hauled by *Odin*, an ex-Leighton Buzzard sand works Simplex loco, scratchbuilt from plasticard.

“ – the ALR provided my first ever train ride, aged six weeks – ”

David Malton



▼ A panoramic view that shows the entire scenic section of the layout, with *Druid*, another scratchbuilt plasticard Simplex, waiting for the off. Eagle-eyed readers may be able to spot a rather large animal lurking in the trees!



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Heading south

When not at the ALR I helped my friend Robin Brogden at exhibitions with his layout *Museum of Transport*, where I developed the ambition to one day build an exhibition layout myself. For a long time I had the ALR in mind as a good original idea for a layout, but at the time I had the real one to play with so there was little point! When I emigrated from the north to become Design Engineer for Peco here in Devon, my involvement with both the Abbey Light Railway and *Museum of Transport* reduced and I missed them both, making it the perfect time to get building.

7mm scale on 14mm track

Professionally I dabble in most scales and gauges, but O-14 was a new one to me. I chose it upon realising that there are kits available for some of the ALR loco types to give me a headstart. Kirkstall Abbey station, or 'The Abbey End' as we always referred to it, was chosen as its simple track plan was not too daunting as a new starter to hand-building track. It would also allow me to get trains moving relatively quickly so as not to lose interest, and it is of a size that can be easily stored at home and transported in my small hatchback car.

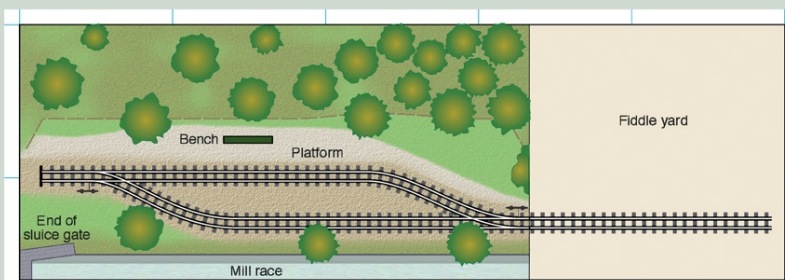
The construction of the layout is fairly ordinary. The scenic area of the layout is housed in a 1m long wooden box, with separate 50cm long fiddleyard on the end. These sit on top of a wooden frame which drops apart for transport and storage, with 6mm bolts with wing nuts holding it all together.

Power is 0-12Vdc analogue and comes from a Gaugemaster Combi controller. The track is split into five sections for maximum 'play' value with the minimal track plan. DCC was considered, but fitting decoders into the small locos would have been a challenge.

A separate transformer provides power to a Pecolectrics SmartSwitch servo system, which powers the uncoupling ramp, animated photographer and the rat in the riverbank.

Scenic details

The scatters and ballast are from Woodland Scenics and the walls are plasticard faced with DAS modelling clay. The fencing and point levers are scratchbuilt in plasticard. The tree trunks are made from twigs cut from a hedgerow, and have sea moss and scatter added to create the effect of a woodland canopy. The animals are types that had been seen at or near to the actual location, with a few notable exceptions, and are mostly from the Langley range. Figures are either S&D Models or the



The Abbey End Overall layout size 1500mm x 500mm. Each grid square = 300mm sq.

brightly-painted figures obtainable direct from China online, suitably repainted. As the number of locos exceeded the number of regular volunteers at the ALR, they are fitted with generic driver figures rather than representations of real people.

Static grass has also been used, along with rubberised horsehair and a sheet of ivy effect material, available online from International Models, to create the ground cover. The backscene was painted *in situ* by myself using inexpensive children's poster paints as

a bit of an experiment, but has turned out better than my expectations!

Presentation

Something I feel important to an exhibition layout is the presentation. Therefore the façade of the layout has filled and smoothed screw heads, and is finished in the ALR's standard loco livery of green with red lining and black edging. The front of the fiddle yard is home for one of the cast aluminium crests from the side of one of the coaches.

The layout also features a display of information along the front, explaining the history of the line along with information about the



◀ The author and his father stand either side of the layout on the occasion of its exhibition debut at ExpoNG 2014.

Photo: Dirk Schambach

Couplings are Peco 009 items, uncoupled by a pad in the track which is raised by a servo acting on a cam beneath the board.





▲ John Malton (the author's father) runs *Atlas*, an ex-MOD Hudson-Hunslet, round the passenger train at the real Abbey End.

▲ A modified plastic figure changes the lever as the points are thrown. The fact that he is actually throwing the wrong lever (for the Facing Point Lock) has so far gone un-noticed!



Two wagons is about the limit for the tiny Greenbat battery electric loco, which made only occasional appearances at the Abbey End. Quiet shunting operations around the depot were its speciality.



rolling stock and pictures of the real location, as well as the essential 'Can you find...?' list of animals. The final presentational refinement is to the operators, who wear matching ALR polo shirts, which were printed by a local specialist shop.

A unique locomotive fleet

The locos are either adapted kits or scratchbuilt and all feature custom etched nameplates, works plates and ALR crests by Narrow Planet. I have used 3D printing to create some of the more fiddly components on some locos, and the body of the 20DL Ruston is entirely 3D printed, including the driver. They all represent members of Peter's collection, in the condition in which they ran on the ALR.

The only current exception to this is the Orenstein & Koppel. This loco was under restoration at the time the ALR closed, so the model is finished in an imagined 'might have been' completed condition. I plan to model the rest of the fleet when time and funds permit, and have a few ideas for other 'might-have-been' locos, including the Wren that Peter had always wanted to build.

Rolling stock

A defining feature of the ALR was its three coaches, which were constructed in-house on the converted chassis of 2-ton ammunition wagons originally built by



▲ As *Atlas* draws past the points to run round, a rat comes out of his hidey-hole to see what the noise is. He is actually pushed out by a SmartSwitch servo (inset) mounted underneath the trackbed.

Robert Hudson for the RAF in WW2. As there is not a kit available for these wagons in 7mm scale I had some chassis 3D printed, along with the roofs and air brake pipes. The rest is made of plasticard, which was pre-printed with the colour scheme before

assembly, calling in a favour from the Peco factory for the printing process.

Four other examples of these RAF wagons existed on the railway, and three have been modelled using the same 3D printed chassis as the coaches, with individual scratchbuilt plasticard bodies (the fourth was under the generator and never left the shed). One is fitted with a hydraulic hoist and outriggers, representing the very handy 'crane wagon', which was used for all sorts of lifting and moving activities around the railway. The other two are flat wagons, one loaded with a Muir-Hill loco chassis, as the prototype was for some time.

The slate wagon is a Langley brass kit with Gibson wheels, and the other wagons use varying amounts of the KScale Hudson 'Rugga' tipper wagon kit, with plasticard

additions or scratchbuilt bodies as appropriate.

Exhibition debut, and the future...

The layout was spotted by the organisers of ExpoNG on the NGRM-online forum, where I have been posting photos of its progress during construction, and was invited to their 2014 show. This motivated me to get the layout finished, and it was very well received. To my relief everything worked perfectly, and continued to do so at the Small & Delightful event at Shepton Mallet in February this year.

As they say, a layout is never truly finished and I am planning to keep developing, extending, and showing *The Abbey End* to represent more gone, but never forgotten, scenes from my favourite little railway.



▲ The photographer figure, which is animated using a servo, turns (right) to take a picture of the Hudson Go-go tractor as it roars into the station. The loco is dragging with it the passenger train and *Druid*, the latter required to operate the train air brakes.

