

Zweitesfeld

Introduction:

Some while ago, whilst operating a friend's layout at an exhibition, it was suggested that I might also try my hand at building a layout for the exhibition circuit. Initially I dismissed the idea, preferring to dabble rather than really get my own hands dirty ... and then I thought ... well maybe I could! The new layout would have to be portable and be able to fit in my car, it would have to be entertaining to the casual observer, the hardened modeller and the operator but most important of all, it had to be Swiss! With this remit in mind, I set about laying out track templates on rolls of wallpaper and finding out what I could and could not fit in a space of about 7 feet. To entertain the casual observer, a continuous run was to be the order of the day, with a steady flow of trains, whereas the hardened modeller and operator would perhaps require a little more. This came by way of a locomotive depot which would allow me to display my ever growing fleet of Swiss locomotives ... and so Zweitesfeld was born.

Having seen many layouts and being lucky enough to visit Switzerland on a regular basis, I was short of neither ideas nor inspiration. I think that my main inspiration, without doubt, was my friend Alan Wardman's Belgium layout - Stellabeek - which demonstrated the operational possibilities a layout with a motive power depot as its centre-piece could offer. The name Zweitesfeld (roughly translating as "Second Field") was cloned from the small Swiss railway town of Erstfeld (First Field) and this is where the "Swiss" inspiration came from. Erstfeld is situated at the foot of the North ramp of Switzerland's Gotthard Railway and The Hotel Frohsinn at Erstfeld has served me, and many other enthusiasts, as a "base camp" for numerous photographic trips to The Gotthard. Prior to the opening of the Gotthard Base Tunnel, Erstfeld saw a regular flow of locomotives of the Swiss Federal Railways (SBB) in red, green and cargo liveries, whilst it was also possible to see, and in great quantities, Deutsche Bahn (DB) class 185s, Bern Lötschberg Simplon (BLS) class 185s, 485s and 486s, along with those of private operators including Crossrail and MRCE.

The layout:

The advantage of building in N gauge was that there would be room to build a reasonable sized motive power depot and also include other features that would add to the interest.

On settling on a layout plan, it was decided that Zweitesfeld would be set somewhere in central Switzerland and close to a marshalling yard feeding one of Switzerland's trans-alpine routes. The layout is served by a 5 road fiddle yard, which consists of 2 Up lines, 2 Down lines and a central, bi-directional "engine line" which is split into 4 isolated sections and can be accessed by either Up or Down lines. On the viewing side of the layout, there is a small station with platforms lengths capable of holding a "loco + 4" formation - which forms the regular passenger services. With the layout being limited to a total length of approximately 7 feet, the length of freight trains that I would have liked to have run has been compromised and in order to give the impression of typical length trains, I tend to run mixed freights with short wheelbase wagons. Since the layout is a "continuous run", the tight curves at the ends of the layout are in tunnels, as unrealistic curvature is a pet hate of mine! At one end the railway passes beneath a hillside whilst at the other end the line passes under the town of Zweitesfeld. The main feature and centre-piece of the layout is the motive power depot with its numerous sidings and headshunts that form an intricate track layout.

The depot complex can be approached in 3 ways; firstly, direct from the fiddle yard "engine line" via a dive under that passes beneath the main lines. Considerable planning went into the construction of this approach in order to achieve credible gradients and adequate pantograph clearances within the limited space available. In order to soften the impact of the gradient from the fiddle yard approach, the running area has a series of inclines between the different levels, which creates interest and is pleasing to the eye. The second approach to the depot is directly off the main line, in close proximity to a main to main crossover, which allows easy access to the depot from both the Up and the Down main lines. The third access is hidden from public view and is by means of a line entering the rear of the running shed. This line can be used for introducing and removing locomotives to and from the layout and also allows double headed combinations to enter the shed and be detached off-scene in order to minimise the number of times a hand comes over the backscene (pet hate no. 2!). Within the depot area in addition to the 2 road running shed, provided for the SBB locomotives, there are two sets of stabling sidings, one set designated for SBB use, whilst the other set is DB and BLS territory as was the arrangement at Erstfeld.

Construction:

The baseboard is made up of 3 sections; the main baseboard and the 2 end sections. The deck is made of 6mm MDF, whilst the frame is made of 3 ¾" x ¾" timber. The frame is exceptionally deep to facilitate the dive under line between fiddle yard and depot. The baseboard sections are joined together by butt hinges, which are sufficiently robust, give good alignment and convenient for erecting and dismantling in a matter of seconds when setting up and breaking down the layout at shows.

Electrics:

Control is analogue and power supply for traction purposes is supplied by 2 Gaugemaster transformers; a twin for the main lines and a single for the depot complex. The power supply for the colour light signals is also derived from one of these transformers. Control of the layout is by means of a mimic panel, with separate isolated sections identified by different colours- British Rail protocol has been adopted for the colouring, with Down Lines being depicted in either Brown or Green and Up Lines being depicted in either Blue or Yellow – an easy way to remember this is, if you look down you see the earth and grass and if you look up you see the sky and the Sun. Although the rear of the panel resembles a spider's web of wires, the wiring is quite simple and is coloured coded to a certain extent to aid fault finding. The main lines are split into 2 sections – with isolations being strategically placed for operating purposes, whilst facilitating the circuit break required with a live frog system. The depot area, although fed from one power supply, has 4 feed points and as a loco moves through the complex, all 4 feeds may be deployed at one time or another. A feature of this arrangement combined with live frog points gives an inherent route setting (or some may say, idiot proofing!) system, whereby a train will (hopefully) not be able to run towards a short circuit established by a point set against it. The layout also has a number of fully operational colour light signals. The signals are made by MicroScale Models of Switzerland. Their brochure lists in excess of 20 different Swiss signal arrangements in 'N' gauge alone and these include post mounted, overhead mounted and gantry mounted examples along with working ground signals. The signals are of excellent quality though a trip to their factory in Gelterkinden did prove to be an expensive day out! The operation of the signals on Zweitesfeld is very straightforward, there is no interlocking between them and the "on" and "off" aspects simply follow the operation of their respective switch on the mimic panel.

Operations:

In order to keep the layout entertaining at shows, the layout is run to a meticulously planned sequence (of approximately 80 moves) – this takes out a lot of the "on the spot" thinking whilst operating at shows and means that the same train does not continuously circulate. Passenger services are operated by Swiss Federal Railways with trains being formed of prototypical stock. Freight trains are hauled by a variety of motive power of Swiss, German and private ownership. At Zweitesfeld, heavier trains, usually hauled by one or two DB locomotives, either take on a Swiss pilot, or have a loco change in favour of a pair of Swiss locomotives, before tackling the mountain climb. The uncoupling mechanism, for detaching locomotives, is something that I have added to the layout in later years and always catches the attention of the viewing public. Since the depot is the centre-piece, numerous "on shed" movements can be seen taking place along with regular movements off shed to the nearby freight facilities where locomotives take up their next duties.

Rolling Stock:

Approximately 20 locomotives are used on Zweitesfeld, about a half of them are Fleischmann products, with the remainder being a combination Kato and Hobbytrain. Anyone who has travelled to Switzerland and studied its railways will know that the Swiss do not like to dispose of their old locomotives, though they do add new ones to the fleet, as a result it is not uncommon to see a class Ae 6/6 of the 1950s beside a modern locomotive some 50 years its junior – from a modelling perspective, this gives you great freedom of choice! Coaching stock is of Roco, Kato and Brawa manufacture, whilst freight wagons are sourced from Fleischmann, Roco, Creanorm and Lilliput. In addition there are a batch of wagons, marketed under the Modellbahn Union banner, though these are actually Dapol products.

Trackwork:

All track is Peco, on the front of the layout I have used code 55 rail and in the fiddle yard I have used code 80 rail. All points are manually operated and point operation is carried out by means of welding rod, guided through terminal blocks for alignment and connected directly to the underside of the

points. Where polarity changes are required for the double slips, the point rod connects to an in-line switch, which changes the polarity with the movement of the double slip. The track was laid onto cork, glued in place, ballasted with Woodland Scenic products and weathered with Humbrol paint that was applied by airbrush.

Buildings and Scenery:

All buildings, tunnel mouths and walling are Faller products and all ballast and scatter materials are from Woodlands Scenics. The hillside area was created by covering contoured polystyrene with modroc. Rocky outcrops were then formed using polyfilla, which was sculptured and painted with acrylic paint before adding vegetation. When ballasting the depot area, I used light grey ballast, which I smoothed down to give the impression of gravel that would be typically used around a depot area for walkways and the like. All overhead equipment is Sommerfeldt. My initial proposal was to provide gantries, masts and cross spans, but without catenary and contact wire – my thoughts being that the contact wire should be so fine, it would be barely visible to the human eye and may save a lot of heart-ache, in not providing it, for those occasions when a locomotive needed rescuing or a troublesome piece of track needed cleaning. It was intended that the locomotives would run with their pantographs semi-restrained to give an impression of running under the wires. Not totally convinced with this solution, I bit the bullet and opted for full catenary and contact wire, with pantographs “riding the wire”. Finally I dulled down the wires with a misting of grey paint in a bid to make them less conspicuous. A light application of 3 in 1 oil is applied to the contact wire, this aids smooth running of the pantograph, whilst also preventing tarnishing of the contact wire.

Thanks:

I would like to express my sincere thanks to Alan Wardman for setting the seed and his help and advice along the way that has seen Zweitesfeld come to fruition. Last, and by no means least, I would like to extend a very special thanks to my wife Lynn and daughter Sam for their help in building the layout and their help in operating the layout, without which would mean that the layout would not be able to appear at shows.

Update:

Zweitesfeld has gone on to appear at several model railway shows in the UK where it has been well received by audiences.

Since this article appeared in the March and May 2014 issues of the Continental Modeller magazine, Zweitesfeld has been awarded the winner of the Continental Modeller Cup 2014 as voted for by the readers as the best article in the magazine for that year – an achievement which was unexpected and of which I am very proud!