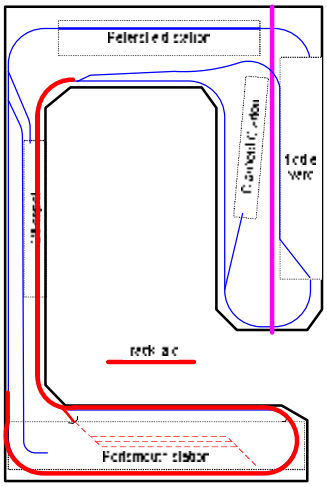
5: A Long Absence!



It's a long time since I've been able to do any work at all on The South Downs Railway. Several lengthy absences due to work haven't helped; nor has a need for a demonstration track for the Warley 2007 exhibition, where CML Electronics was present on the Digitrax stand.

The mark of a good design is its robustness to change. The design for my railway has seen a couple of changes planned to it in the last couple of months.... Firstly, planning for the next block of electronics identified that one of the block detectors was not going to be installed in the right place. One was scheduled to be under the fiddle yard but servicing, mostly, other areas.
Decentralisation of block detection is no bad thing, but where four locations each need a quarter of a block detector where should it best go?
The "errant" detector has now been moved to the panel that will live under Petersfield station – some might remind me that was the purpose of those panels in the first place. All the connections were well documented and the necessary paperwork changes took around 15 minutes.

More significant is a planned change to give the children an opportunity to extend the railway. There is a recognised standard for modular N gauge railways called "N-Trak"(http://www.ntrak.org/): this establishes a set of 4'x2' modules with defined locations for tracks to come off and on the modules.

The modules can be brought to an exhibition and joined to those belonging to other modellers, making a large "composite" railway.

What I plan to do is to bring a single track line off from the "main" railway somewhere (possibly in the fiddle yard). This will allow one or more N-Trak modules to be added in the central area. The baseboard heights are compatible and there is room available. Perhaps a small country terminus? A goods depot? An engine shed? I'll leave the Junior Modellers to decide that!

A further fiddle yard design change has deleted the two sidings for train addition & removal. Each track now has 5 loops and one of these is accessible at the edge for train adding and removing. Some kind of cassette storage will probably be used.

Electronics, Part 2

At last some "real" progress rather than excuses! The next track expansion will be past Eastleigh in both directions, taking in the junction running into Petersfield and the track in front of that. The power feeds in that area come from a booster at the "north" end, and thast meant new construction and wiring.

The panel under Petersfield station was always intended to house much of the electronics at this end; see above for the reason why it now has a little more.

The PM42 and BDL168 boards come from Digitrax with an edge connector... and a right pain it is. The holes in the connector "spills" are just too small for even 16/0.2mm wire (3A rated) so just what you are expected to use for track connection I'm not sure. Luckily the holes are oval, and the wire can be squashed with pliers after tinning.

I've always wanted the wiring to be connectorised, to allow fault finding etc. No real problem with DCC and power connections – I've found a connector strip that is like a "chocolate block" but which

splits into two connectorised halves. However that just wouldn't work for the sheer number of block detected track feeds.

On the first BDL168 boards, I'd added screw terminals soldered directly into the edge connector spills: this was a poor solution. This time around I've used 600mm lengths of 16/0.2mm wire, terminated in a crimped "bullet" connector. This leaves a big bundle of wire coming off the panel, but that is its purpose! So far this solution looks a lot better, as long as the labelling doesn't get rubbed off. Each bullet terminal has the block detector number written on using an indelible pen.

The attraction of the "connectorised panel" approach is that this construction can take place on the workbench and not sat under the railway. With a test cable to one of the "connectorised chocolate block" thingamys I can connect power for programming and simple testing; I can connect the DAC10 to a programming track if needed.

Rolling Stock Update

We've added some "Tomix" kit to the roster of rolling stock recently. These items are available at very reasonable prices from a number of sources but we've very little experience of running them yet.

- "Thomas, Annie and Clarabel" will be instantly recognisable. They were an impulse purchase, but will be able to visit the railway at least some of the time!
- We've also added a pair of track cleaning cars purchased at Warley. These include a mini vacuum cleaner and facility for dry or wet cleaning of the rails. Straight out of the box they run on DCC, which was a welcome (and I think accidental) bonus: the designers have thought through that the vacuum needs to "suck" regardless of which direction the unit is travelling; so they've rectified the power.

Locomotive	**Decoder**
Kato Eurostar	DN163K0B
Farish class 94xx 0-6-0 PT	DZ123
Farish class 08 shunter	
Farish Class 47	DZ123
Farish class 66	DZ123
Farish class 159 DMU	Not yet!
Thomas the tank Engine	Not yet!

The older Farish locos have the DCC Supplies "DCC Hat" to isolate the motor bushes. I've retrofitted this to the 060PT loco: the first decoder installation had the pickups isolated, but that made the meshing of the motor and axle unreliable.

I don't know if this is normal or not but the railway is extremely intolerant of dirty track. After an absence of a month I could get nothing to run even a few inches. The cold location in the shed may not have helped, but with a dehumidifier it shouldn't be too damp. A swift wipe with a track cleaning rubber made a big difference; hopefully a train with the "Tomix" cleaning cars can run an automated cleaning schedule one day. The main tracks can all be run on a continuous sequence, so something pounding around them should be able to clean most of the railway.