

Swiss Section

Technical visit to the Railway Laboratory Switzerland (EBL) and 2023 AGM

Report by Chris Glättli



Chris reports on a model train layout which has been used for training and research in Switzerland, and the Swiss Section AGM.

Visit to EBL

Two well-known model train layouts in Switzerland, and using real interlockings(!), could no longer be maintained by their owners due to a lack of knowledge, funding, and space, so Heinrich Brändli saw an opportunity to preserve the layouts. One was the ETH (Eidgenössische Technische Hochschule) layout located in Zürich at the Swiss Federal Institute of Technology and the other was in the Swiss Federal Railways (SBB) Training Centre Löwenberg in Murten.

A company, Eisenbahnlabor Schweiz AG (EBL), was established, but further help was needed. Heinrich found help in the industry, from well-known companies and universities who could provide labour and funding. Even a club was founded to identify experts from different fields to work on the layouts, including some IRSE members. But one thing Heinrich made clear, it is not a model train association! Research and development as well as training, were the main purposes of the EBL. One sponsoring university has a research project on satellite train positioning using the EBL. Several devices were hung under the ceiling to act as the satellites of a GNSS system and students now have the opportunity to program the positioning system.

The objective for EBL is to try and provide a wide range of training using the original infrastructure. A passenger car bogey is on display, along with many metres of track and a point machine. In earlier times, training of rail personnel was performed directly on the network, where it was common to block a track, jump into the four foot and have a look at the infrastructure. Nowadays with much denser traffic and more safety regulation this is much more complicated – but EBL now has a solution.

Earlier in the development of the training facility, past president Markus Montigel was involved many years ago with the maintenance and operation of the layout at ETH, where he created timetables for training sessions under the father of Heinrich, who was professor Heinrich Brändli. Markus led multiple groups through training sessions and had “some happy hours playing” and if the trains were on time at the end of the session he said he was very happy.

Moving the layouts into today’s location at the hangar 7 of the Dübendorf airfield was incredibly difficult, and the advice received that the cables did not need to be tagged before dismantling was very bad advice. In hindsight, Heinrich says it would have been far quicker to tag them anyway. The EBL opened publicly for the first time in May 2022 for the 175-year celebration of SBB. A huge effort was required to have as many interlockings running as possible and the last ones have only recently been made available.



Model train layout with real relay interlocking (visible in the background) providing multi block signalling with main and distant signals system L.



Above: Train in track 2 about to depart, signal G2 shows 'proceed 6', which means 60km/h. Also, visible multiple dwarf signals, one showing a clear aspect, others stop.
 Right: Nadia Hürlimann explaining the operation of electromechanical interlocking station Zetthausen.
 Bottom right: Beatrice Müller and Markus Montigel shortly before he was made an Honorary Fellow.

The variety of the training interlocking technologies available is fascinating. The station Iggswil is a mechanical interlocking from Bruchsal type J, with a double track line with semaphore signals, and lever operated. Station Ypslikon is a relay interlocking type Domino 67 with shunting routes including dwarf signals, and remote controlled via an ILTIS TMS. Station Zetthausen is an electromechanical interlocking with level platform access. Station Pewald is equipped with a relay Domino 69 without shunting routes. Remote controlled via ILTIS are the stations Wedorf and Testadt, which is a bigger node with a double track junction, with type N signals with numerical display to indicate the speed.

In total there are six connected interlockings, 750m of H0 track, 91 main and distant signals, 109 points, 30 locomotives, seven trainsets, 50 passenger and 100 freight wagons. With the layout operated by inexperienced trainees you can have a huge mess in no time, but of course this is where good learning can be acquired, and the trainees can look into the next stationmaster's eyes.

IRSE Swiss Section 2023 AGM

After the technical visit of the EBL, the 2023 Swiss Section AGM was held at the premises of Dübendorf Aviation Museum. President Daniel Pixley conducting this as ever in great spirit and good efficiency. The annual report, financial statements as well as this year's planning and budget were promptly approved. The committee was rejuvenated and because the treasurer had a double role as the vice chair, Chris Glättli was elected as the new vice chair. A highlight of the AGM was awarding Markus Montigel the status of Honorary Fellow of the IRSE Swiss Section, recognising him as the section's founding president, a long time member of the IRSE Council and IRSE president 2018/19. The award was well deserved and he was awarded much acclamation. Congratulations Markus!

