

## Special service for english speaking readers: Translation of the most important legends:

### Prefaces

page 5: OOK (left), first president of FREMO and three of his successors: Axel Hartig, Henk Lindner and Torsten Geissler, photographed during the FREMO annual convention 2004 in Braunlage.

p. 6 (newspaper man cartoon): „Train-operation you say? Never heard that. You'll have to explain me that later. But first things first: How big is your baseboard?“

p. 7: Such signs in the form of a stylized fir tree are called Dennert-Trees and are found throughout the Harz mountains to mark and explain places of historic and cultural interest. The presumably only one outside the Harz is installed in the stairway that leads down to the BAE layout.

### Chapter 1: Influences and stamps

page 8-1: Tilsit, the author's birthplace, had two single track tramwaylines. While he does not recall this crossing of lines he does remember the single tramcars passing in front of the house.

p.8-2: The metre gauge electric railway which ran across the Memel river had its terminal in front of his grandfather's house where the little electric motor cars had to run around their train. While he does not recall this procedure it must have burned itself into his mind and stamped him.

p. 9-1: The author's model railway career began in 1952 at age 12 with the MÄRKLIN TM 800 which was a somewhat rough replica of a class 80 0-6-0T.

p. 9-2: The colourful little MÄRKLIN cattle wagon was the author's first model railway purchase. If he did still have it today he could realize twenty times the 2.40 Marks he paid for it.

p. 9-3: My first attempt as a sixteen year old to build a layout (H0) with scenery. Without any help or instruction.

p. 10: After a visit to Braunlage and Walkenried in 1962 - the Südhartzbahn was still alive - I became a fan of the metre gauge railways in the Harz mountains. This mighty metre gauge 0-10-0T impressed me permanently.

p 11-1: From measurements I had taken myself I built the SHE's Walkenried station building and installed it on the first section of my planned H0m layout (H0 scale/ 12 mm gauge)

p.11-2: Long before I saw the Albulabahn in Switzerland for the first time I built this spiral for my H0m layout, now called Mittel Harz-Eisenbahn (Harz Central Ry.). It also was my first attempt with the rib-method to build scenery which was a nice finger exercise for the later BAE layouts.

p. 11-3: As a youth I did not know that there are no curved viaducts. But the well known Faller kit came in handy. Moltofill, a plaster-cellulose filler was my favourite scenery building material then as it is today.

p. 12: A peccadillo of youth was this H0 layout I built for the son of my landlord during my studies. Having been a subscriber of Model Railroader magazine for two years already this conventional layout was a shame.

p. 13-1: OOK (first from the right) is stacking sleepers at Heiligenberg station of the heritage railway in Bruchhausen-Vilsen. Maybe this was the key stimulus for his later track building activities in 0m gauge.

p. 13-2: This Germanized LGB Stainz was OOK's first attempt to adapt LGB rolling stock to metre gauge prototypes. He installed a different sand dome, a Ramsbottom safety valve and a silencer for the Körting vacuum brake and modified the front and back windows to the typical German oval form.

p. 13-3: OOK's short career as a fireman and engine driver took place on the 2 ft. gauge Dampf-Kleinbahn Mühlenstroth. This photo shows him on Walter Seidensticker's HF 110C.

p. 13-4: DEV-KURIER was the first magazine edited by OOK. The cover of issue no. 25 shows the 2-6-0T SPREEWALD's trial run on the Harzquerbahn at the home signal of Steinerne Renne.

p. 14: Like the H0m layout shown in p. 11-2 OOK's LGB garden layout had a spiral to stretch distances and running time. Here, the little 0-4-0T ex 99 5001 tackles the long gradient with a Mindener Kreisbahn 0-4-2T as a helper. The luggage van is a replica of the Pw 32 of the Herforder Kleinbahn preserved at Buchhausen-Vilsen. OOK built the model from plain styrene.

p. 15-1: Hardboard is very handy for the construction of formwork for the casting of concrete foundations for garden trackage. Here OOK is tamping concrete in the spiral of his garden layout.

p. 15-3: The little 0-4-0T has passed under Uchte station with its short train and will soon arrive on the track in front of the ballast wagons. The one in the middle is a scratch built model of one of the Kerkerbachbahn. In chapter 12 the prototype is shown together with OOK's 1:45 model of the same wagon.

p. 16-1: My son is shunting in Uchte. The handheld controller is a LGB rheostat controller with its ground frame building cut off. At the middle of the station the lever box for assigning each track to controller 1 or 2.

p. 16-2: Mindener Kreisbahn 0-4-2T was a further rebuilt of the Germanized LGB Stainz from p. 13-2. After the end of the garden layout it went to the LGB-museum in Nuremberg. After die LGB bankruptcy the engine appeared at ebay and was aquired by a friend.

p. 17-1: The German-Austrian border between Innsbruck and Lake Constance. In addition to the existing Ausserfernbahn Garmisch-Partenkirchen - Reutte (-Kempten) OOK invented a couple of new towns and a new connection (boldoutline) between the Ausserfernbahn and the Arlbergbahn. The northern half of it was going to be the „prototype“ for his H0 layout Felsentalbahn (Rock Valley Line) in the loft of his house.

p. 17-2: The fist inspection of the loft was disappointing. Enough headroom yes, but only in the middle. Would it be possible to build a layout here?

p. 17-3: A ÖBB 1040 and a 1045 as helper pull a long mineral train along lake Traunsee towards Gmunden. I substituted the 1040 with a 1670 which was available from ROCO at the time, the mineral cars came from Kleinbahn, another Austrian manufacturer.

p. 18-1: Such wonderful mixed trains were normal on the Ausserfernbahn, the prototype of the Felsentalbahn layout until die eighties. These were the dream trains for my layout.

p. 18-2: In 1980 heldheld throttles were unknown in Germany. These were developed at my order and used on the Felsenbahn layout successfully. But they had no memory and had to be connected to the transformer all the time.

p. 18-3: The Loisach viaduct on the Außerfernbahn at Ehrwald looks like curved but is polygonal of course. The openings of different width as well as the round holes intrigued me. I wanted this as a signature element for my layout.

p. 19: Very close to the ill-reputed spaghetti-bowl: the Felsentalbahn with its spiralling main line. The cross section on top illustrates the confinements of the loft.

p. 20-1: It's a miracle how Ivo Cordes could draw this rendering of the Felsentalbahn layout from memory years after die demolition of the layout. All the buildings and the trains are there. No photograph could show the layout like this unless the roof would have been untiled.

p. 20-2: The rolling stock has survived the layout by nearly twenty years: Austrain (orange) and German (green) vintage electric locomotives with matching passenger cars and wagons.

p. 20-3: One set of graphic timetables has been saved and shows the dense traffic on the Felsentalbahn layout in the eighties: goods trains in blue and semi-fast trains in yellow.

p. 20-4 and 5: Very few photographs exist of the Felsentalbahn layout. In the upper photo OOK is sitting on a very low stool carving rock and in the lower photo he is even sitting on the floor doing some wiring.

p. 21-1: FREMOdul no. 1 built by OOK. The uneven measurement of 1.05 metres length (radius 4 metres) was meant to help establish an open system without loop-building.

p. 21-2: The same module finished and as part of a small arrangement. This was the beginning of modular railway modelling in Germany. Nowadays FREMO module meetings have arrangements filling entire gymnasiums.

p. 21-3: From January 1979 to August 1986 OOK was editor of Hp1-Modellbahn. After his stepping down the magazine was continued by several editors and exists to this day as FREMO's official gazette.

p. 22-1: Kaiserweg halt on the Südharzbahn had one single turnout for a lumber loading ramp. Eventually the siding was used for train meets. The little station building had a service room with a telephone for contacting the dispatcher in Braunlage.

p. 22-2: OOK built the little structure from plain styrene sheet after measurements taken by himself.

p. 22-3: Towards the end of OOK's FREMO career this issue of Hp1-Modellbahn contained an article and drawings of the Duderstadt three stall loco shed from which Faller developed its well known kit in H0 scale.

p. 23-1: Königskrug was (and still is) an old country inn situated remotely but idyllicly on the road from Braunlage to Bad Harzburg. On the vintage post card the rocky top of the Achtermann is visible behind the inn. No settlement ever existed here, just foresters' houses and ski lodges.

p. 23-2: As the Kaisergweg module was lost when I reentered the hobby after a time out, I planned a new one: Königskrug with only four points on a total length of 2 metres.

p. 23-3: The first public appearance of 0m gauge „non Swiss“ took place in the mid eighties in the loco shed of Asendorf on the Bruchhausen-Vilsen heritage line.

p. 24-1: Winter 1992/93. Not the regular paper work on my desktop but one half of the Königskrug module. A covered wagon from Axel Hartig is the only 0m vehicle I owned at the time. All the rest of the future BAE was pure fantasy.

p. 24-2: The module Königskrug nearly finished. While the goods shed was free lance, the wooden transformer tower did have a prototype, see 24-3.

p. 24-3: In the nineties the wooden transformer tower could still be photographed beside the Königskrug inn. Now it is gone, but the little structure to the left is still there.

p. 25-1 and 2: During his time as editor of Mittelpuffer OOK built a small 0e layout called Pyritbahn together with Herbert Fackeldey. The diminutive layout (1.20 by 2.20 metres) demonstrated to the public of more than a dozen expositions that realistic operation could be done in so little space.

p.25-3: The very first appearance of the layout in public took place at the Rail 98 in s'Hertogenbosch (NL). Here a photo of the German-Dutch crew. It was a not intended pun to have the Dutch slogan „Dat kunt U ook“ (You too can achieve this.) ending in OOK.

p.25-4: The first issue of OOK's third (and last) magazine Mittelpuffer was produced in a copyshop (initial press run 20 copies), but soon offset printing took over, black and white at the beginning but soon in full colour, the press run sometimes exceeded 2500 copies.

p. 25-5: No. 48 was the last issue of Mittelpuffer. For a lot of narrow gauge enthusiasts this was a sad moment.

## Chapter 2: Theme and concept

page 26: This is Harz narrow gauge: A typical Harz mallet storming up-grade on 3.3% with its special train passes the ex halt at Goetheweg on its way to the Brocken summit.

p.27-1: Very few standard gauge branch lines made the Harz mountains accessible. And all of them with the exception of the Rübeland line are gone today. Without the three metre gauge lines Nordhausen-Wernigeröder Eisenbahn, Gernrode-Harzgeröder Eisenbahn and Südharzbahn which formed a network the Harz mountains would have been a traffic desert. But even this network had a lot of gaps.

p. 27-2: The inner German border had cut the SHE line to Tanne; as a result operation ceased after the war. The “main” line from Walkenried to Braunlage, however, remained in operation until 1963.

p. 28-1: Brunnenbachsmühle Junction with a mixed train to Walkenried and several loaded hopper cars. The home signal already indicates clearance for the subsequent train from Braunlage visible in the background.

p. 28-2: Motor car T02, built by the SHE shops, stops deep in the forest at Stöberhai station, which still is a popular restaurant destination today, even though the trains are long gone.

p. 29: Cross section of the Oder valley south of Rinderstall, showing the planned HBE line at an elevation of 600 metres. A bridge or viaduct to cross this valley would have required a height of 130 meters and a length of 2 kilometers.

p. 30-1: Today’s bus lines operated by the KVG show us how to get from St. Andreasberg to Braunlage (both at 600 m elevation): either going down to 430 m via Oderhaus, or going up to 825 m via the pass south of Sonnenberg.

p. 30-2: An ordnance survey map illustrates the technically feasible line routing of the BAE between Braunlage and Königskrug. The Grosse Bode valley has to be followed up to Bärenbrücke (Bear Bridge) to avoid exceeding the ruling 3.3% gradient. In reality the SHE operated the line from Braunlage to the Wurmberg loading site, which is where the fictitious BAE connects.

p. 30-3: the 18th century miners had carved the ditch out of the solid rock and built a maintenance road from the residue. The drawing proves that a metre gauge engine would have been a perfect fit.

p. 31-1: Almost the same map as the one on p. 30-1 but instead of the two alternative bus lines it now shows the correctly located BAE line. The first half of this was supposed to be realized with the initial basement layout.

p. 31-2: Water runs down the Rehberger Graben ditch from the Oderteich reservoir built in the 18th century to St. Andreasberg to this very day. However, today it is not used to drive the water wheels of mines anymore, but to power turbines. The logging road alongside the ditch could just as well have been a railway line.

p. 32-1: In the upper Sieber Valley the Schluff forester’s house was a well known day trippers restaurant until some decades ago. There also were cow houses for a big herd of cattle, but no town or village.

P. 32-2: The forester’s lodge is gone, but the little stone bridge crossing the Sieber river that can also be spotted in the picture postcard in p. 32-1 is still there. A prototype for the BAE?

p. 33-1: The red letter box typical for the German Reich dates the layout to the thirties.

p. 33-2: This map shows what a logical addition the BAE (shown in red) would have been to the pre war metre gauge network of the Harz. Travellers from Sieber to Gernrode and Harzgerode would certainly continue to go via Nordhausen but those from Andreasberg would go via Braunlage which suggests through coaches in this relation.

p.34: The most important businesses in the Harz mountains:

p. 34-1: The number of quarries in the Harz mountains has always been high, a few still working today. This is the big granite quarry at the Wurmberg near Braunlage which had a loading spur of the Südharzbahn.

p. 34-2: The stones from the quarry on the Hippeln hills near Wernigerode were brought down via two inclines. One of them ended at the Thumkulental spur of the Harzquerbahn with a crusher building.

p. 34-3: Strange enough most mines in the Harz mountains did not have railway connections, but the Baryte mines near Bad Lauterberg even had their own 750mm gauge railway.

p. 34-4: The old silver smith shop at St. Andreasberg is one of the few relicts of the one busy ore processing plants. But the one at Wiedaerhütte (photo below) has been demolished long ago.

p. 34-6: The lumber was transported to the loading sites or to nearby sawmills (a small one in Sieber in the photo below) by waggoners.

p. 35-1: The Hochharz-Express with its shortest off-season consist has just passed the Sieberberg tunnel, rounds the curve around Mount Königsberg and is going to disappear into Stumpfer-Stein tunnel in a couple of seconds. In Sonnenberg the through coach from St. Andreasberg to Wernigerode will be added which operates throughout the year. During the high season the express train has up to three more cars, then pulled by one of the big 0-10-0T steam locomotives.

p. 35-2: Logs are transported to the saw mills mostly with pairs of bolster cars. Unfortunately, the BAE owns only a few of these.

p. 36-1/2: There is no day without several loads of coal. In the town of St. Andreasberg, canalisation works are going to start in May 1936. Before this date hundreds of concrete sewer pipes have to be transported there from Wernigerode, two car loads per day minimum.

p.37: Three covered wagons in a row in this train to Braunlage, which has just passed through the village of Schluff. Looks like this might be through traffic, maybe newsprint from Herzberg to Wernigerode, who knows?

### **Chapter 3 The tiny BAE (BAE I)**

p. 38-1: The final result of lots of doodling and drafting, the plan for the first BAE layout in the small basement. Instead of applying 90 cm as radius everywhere, I used 80 cm at one place in order to achieve 133 cm at another, this being an exact replica of the 60 m minimum radius of the real Harz railways.

p.38-2: In the left foreground the small station of Königskrug complete for the first time. Behind it the line continues with 2,5% gradient through the 80cm radius curve in front of the Witch Cliffs.

p. 39-1: The two ultra light segments of Sonnenberg station built from thin plywood are absolutely rigid after the installation of the two decks. They have survived several dismountings and remountings of the layout without damage.

p. 39-2: Sonnenberg on top (139 cm above the floor), Braunlage underneath in these two lightweight only 20 cm high open boxes.

p.40-1: The rails form 5 and form 6 developed by the Prussian state Rys. were common rails on private short lines a narrow gauge rys. The number after the S indicates the weight per metre in kilograms. The swiss VST 36 is very similar to the form 6.

p. 40-2: To the right common H0 flextrack with code 100 rail, to the left 0m track made from the same rail which seems so light with the wider gauge

p. 40-3: In this very first plan for Sonnenberg station I had cockily drawn two combinations of two points with a crossing and a single slip crossing. Paper is very forgiving. Fortunately I had eliminated the single slip and one of the combinations before construction began.

p. 41: In a one week vacation in Garmisch-Partenkirchen in the Alps I built this combination of two points and a crossing completely from scratch because the ordered frogs hadn't arrived before my departure from home.

p. 43-1: There it comes, the T 02 motor car built by the late Wilfried Link and me, still in its „wedding look“ (totally

white with golden jewellery). A dream has come true.

p. 43-2: The difference between 0e and 0m gauges becomes very obvious when looking at these two wheelsets. To the right one of a Magic Train car from Fleischmann, the other one a Romford 00-gauge wheelset regauged to 22.2 mm with correct diameter for metre gauge cars.

p. 44-1: The first 0m car produced by AHA (Axel Hartig) was also the first car on BAE tracks, photographed here in front of the Königskrug goods shed.

p. 44-2: The Magic Train 0e line by Fleischmann had initially been conceived for children but at least the goods wagons were exact replicas of Austrian Steiermärkische Landesbahnen wagons. In the foreground a frame with the typical 2.7 m wheelbase.

p. 44-3: This is a BAE open wagon type Ow as a rebuilt of a Fleischmann Magic Train car. The Romford axles now have a 3 m wheelbase typical for German metre gauge goods wagons.

p. 45-1: When the BAE I had to be dismantled (Dec. 1993) to be transferred to bigger quarters, Sonnenberg still did not have all its tracks and some areas were still undecorated.

p. 45-2: The linear track scheme of the BAE I layout shows how much operation had been possible. Not much at first sight, at least not much on line traffic. But as Braunlage as a fiddle yard did not only represent itself but also the complete SHE, freight from Sonnenberg and Königskrug could go to all metre gauge stations beyond Braunlage.

p. 46-1: As very few photographs had been made at the time of the BAE I, here a restaging of an everyday scene, OOK's red T 02 ex Südharzbahn and Herbert Fackeldey's blue T 67 ex Mittelbadische Eisenbahn Nr.7, but identical to T 1 of the Gernrode-Harzgeroder Eisenbahn, meet at Königskrug. This did happen several times during a normal operating session. Eventually one of the motor cars pulled a goods wagon or two, the blue one only when running downgrade to Braunlage.

p.46-2: At the time of the BAE I graphic timetables were not produced with a PC but with felt markers on squared paper. But the essential information was visible anyway, for example PmG designating a mixed train. These were drawn in two copies, one for each personnel.

p.47-1: These car circulation cards are reproduced from memory as the original cards are gone. In the left card the car has five destinations/consignees. In each session it is moved from one destination to the next and the paper clip moves one position down. The conductor of the next Gmp (mixed train) coming along can easily see which cars he has to pick up.

p. 47-2: Special tickets for four guests of honour had been printed for the inauguration of the BAE I, for instance for Wilfried Link, co-builder of the T 02 and his wife.

p. 48-1 to p. 49-7: Show the 15 moves necessary for a simple switching job: to put 01 to the loading ramp (Gl. 3a), to pick up 05 from that ramp and to place G3 at the good shed (Gs).

#### **Chapter 4: The BAE II in Bremen**

p. 50: Not more than two people are awaiting the motor car to Braunlage which is just coming to a halt at Schuft station. The two local characters Willy Banse and Karl Peix seem not impressed at all by this and continue to talk shop about their forest stuff.

p. 51-1: Only a very small part (marked with brown outline) of the overall concept could be executed with the BAE I, this even omitting the station of Oderteich. The dream of the complete BAE from Braunlage to Sieber and St. Andreasberg still remained a dream or let's say a vision.

p. 51-2 and 3: How do you adapt a 4.4 by 2.7 m layout into a 4 by 6 m room (green outline)? Like this (51-2) or like that (51-3)? How can one achieve the biggest gain in mainline length and/or number of stations? A classic layout design puzzle.

p.52-1: When looking for new bigger quarters for a short time a basement of 6 by 4.2 m had been an option. With 25 square metres that would have been almost twice the footprint of the BAE I. But in spite of using all design tricks and even drawing a peninsula into the room only one additional station was the result. The mainline run (center of station to center of station) would be 26.2 m compared with 14.3 m of the BAE I.

p. 52-2: The linear track arrangement of the BAE I from p. 45 compared with the one of the never built BAE 1.5: longer main line one additional station, option of a branch line to St. Andreasberg (second fiddle yard)

p. 53: With his Proxxon circular saw OOK has cut sleepers from 3 by 5 mm stripwood. Now he is cleaning the ends with an emery card nailfile. This way he had produced a stockpile of over 2500 sleepers for D-day , when bigger quarters would be available.

p. 54-1: The harbour inn in the westend of Bremen had been idle for some time when the house was offered for sale. The fake garage doors to the right hid the billard room of the inn. Could that be a place for BAE II?

p. 54-2: A look down the ultra steep stairs leading to the basement. Not very inviting.

p. 55-1: OOK needed only one night after visiting the house to draw this plan for the L-shaped billard room. Parts A - G are from the BAE I layout which could be incorporated. The plan was so convincing for me that the next morning I called the vendor and said yes.

p.55-2: January 1, 1994 the newly-minted owner is sitting in his 37 square metres billard room looking impassive, not showing that he is totally happy. Now he can build the BAE of his dreams.

p.56-1: Thanks to the modular design of the BAE I several parts of the old layout were remounted in the new quarters by the evening of January 2, 1994.

p. 56-2: The first half of the Eselsschlucht (Donkey's ravine) and the tunnel entrance of the old fiddle yard stand on temporary legs. Soon the backdrop will hide the Werder Bremen logo and the dicecup, last witnesses of the billard room past.

p. 56-3: The guest book entry of Herbert Fackeldey from March 20, 1994 tells about intense track building activities of two persons. And of a lot of optimism.

p. 57-1 and 2: Directly after the German reunion a cycle path had been installed over the old SHE bridge at Voigtsfelde near Braunla- ge, thus the handrail. I took photos and measurements and built a 1:45 scale replica for the BAE.

p.57-3: The motor car T 67, owned by my friend Herbert Fackeldey which had always been around on the BAE I has to stop on the new brige over the Sieber because of the trapeze sign which substitutes a home signal.

p.58-1 and 2: OOK is spiking track in Schluftherütte behind the main rib of the future Butter Hill which will seperate the stations of Schluf and Schluftherütte visually.

p. 58-3: With this rudimentary track arrangement HFy (Herbert Fackeldey) and OOK inaugurated the „operation“ on the BAE II between Sonnenberg and Schluftherütte. And it even was fun.

p. 59: Everything is still raw and undecorated, only the backdrop conveys a bit of Harz atmosphere. A stop sign in the track indicates that the switch in the foreground still is not ready and can only be used one way. Nevertheless operation is just in full swing. Herbert is going to add five wagons to the T 02 motor car and prepares for the run to Sonnenberg.

p. 60-1 and 2: Butter Hill ist taking shape and after it is closed Schluftherütte is no more visible from Schluf station. Now only a foot or two of track must be added in the foreground in order to make operation possible up to there.

p. 60-3: Looks like Königkrug and indeed this was Königkrug on the old layout. But now this is Schluf. Artist

Helmut Heinert is painting Harz mountains onto the backdrop.

p. 60-4: This rudimentary fiddle yard in the kitchen had to be sufficient for the start. Goods trains could be formed here and passenger trains could have their engines put to the other end (by 0-5-0 crane) for the back trip.

p. 60-5: The lower end of Schluftherhütte is in the foreground and the tunnel mouth of the St. Andreasberg branch is on the other side of the operators' aisle.

p. 61-1: The St. Andreasberg branch diverges at Sonnenberg (to the right) and descends with a 4.5% gradient in order to dive under the main line and reach the hidden St. Andreasberg fiddle yard.

p. 61-2: The scenery is still very rough and very few cars are on the roster, but operation is in full swing. HFy is examining the alignment of switches at Sonnenberg for his long train pulled by T 02 while Heiner B. has arrived at Schlufth with the little T 67. Having set out the open wagon at the lumber loading ramp the small blue motor car runs around its single car train. Unfortunately it hides nearly completely behind the wooden transformer tower.

p. 62-1: Engine driver's timetables were crude like these in 1994. I found them glued into the guest book together with HFy's entry from August 14, 1994. It says: „This weekend a very important event could be entered into the BAE records: the beginning of dispatcher guided operation. The timetable allowed for generous pauses for the personnel of the passenger train who were very thankful for this, but the mixed train had to roll without any interruption. Herbert Fackeldey“

p. 62-2: The situation of the fiddle yard Sieber (compare with p. 60-4) was not satisfying because it was a long way to reach it from the layout room. A hole in the wall allowed the installation of a more easily accessible fiddle yard in the adjacent office.

p. 63-1: Another guest book entry from HFy attesting a fairly good job to the dispatcher.

p. 63-2: I found this graphic timetable for the 26th and 27th November 1994 - evidently a beta version because there are some bugs in it - in my paper piles. The trains are still without numbers, Herbert's blue-white motorcar is number T 64 for a change and its lines drawn in red while those of the red T 02 are drawn in black. Unfortunately no correct timetable of that period could be found. The abbreviations of station names which are still in use today show up here for the first time.

p. 63-3: On the BAE I layout Sonnenberg had been a small terminal station. But on the new layout it became an important junction. Not only the branch line to St. Andreasberg should diverge here but also the mine branch to the Charlotte-Elise pit. Beside three platform tracks for the passenger services some shunting tracks would be necessary for the goods and mine trains. Ten new points had to be built.

p. 64-1: The new right half of Sonnenberg is coming into being, most of the tracks and points are already there. At the right of the photo the passage to the office is visible. Immediately to its left a tunnel shall be driven through the wall.

p. 64-2: HFy is installing a points lever in Sonnenberg. The backdrop is already there and the switchback of the mine branch is roughed in. The regauged Magic Train locomotive is waiting for the second switchback to be built under its wheels.

p.65-1: The little grey backwoods locoshed was meant to be the home of the mine loco.

p. 65-2: While the second switchback still is not there Rainer is shunting mineral cars with the little motor car and will set them out at the makeshift minetrack to the right.

p- 65-3: The zig-zag-configuration of the mine branch allows the right-of-way to gain height, 14 cm in total, without consuming much space. A mine train has to back up three times between Sonnenberg and the mine, complicated but entertaining.

p. 65-4: OOK is standing upright within the still open hill and works at the mine installation. the little train is

impatiently awaiting test runs.

p. 66-1: When the real railways had been built the Harz mountains looked stark like this, too. This way the zig-zag of the now finished mine branch is clearly visible. The planned afforestation did not become reality because the BAE had to move again.

p. 66-2: A last look at the mine branch. In the foreground motor car T 02 is leaving Sonnenberg towards Oderteich, a station that still does not exist. So the big home signal is marked out of service.

p. 66-3: The tunnel toward Oderteich has been driven through the thickest wall of the house. The right-of-way is under construction.

p. 66-4: Compared with the BAE I, a quite different part of the whole BAE-network is executed with the BAE II layout. Only an extension into the office would make it possible to add the missing parts. The arrows show the connections to the outside world, brown ones metre gauge, grey ones standard gauge.

p.67-1: The grey area marks the Oderteich showcase within the office. There is little room for the station tracks and the points will have to be curved. The branch to Torfhaus was built but had been used only for a short time.

p. 67-2: Do you see a model railway layout anywhere? Oh yes, Oderteich station is hidden behind the white panels. And if you lift the cover panel of the sideboard at the left you'll find Sieber fiddle yard there.

p. 67-3: A passenger train from Sonnenberg exits the eastern tunnel portal and enters Oderteich station. The station building may look familiar to some readers. Sure, it is the same one that was used on the first 0m module Kaiserweg, scratch built after a prototype on the Südharzbahn (p. 22-2)

p. 68-1: Track plan of the fiddle yard originally built by Herbert Fackeldey for use at 0m module meetings. On the BAE II it became Braunlage and was stowed away between operation sessions.

p.68-2: Temporary modules are added to the now finished Oderteich in its diorama box. A new Königskrug with one spur is visible, and after the curve in the foreground Braunlage fiddle yard follows out of the picture.

p. 68-3: During operating sessions the door leaf between the layout room and the office is taken away so that we can look up to Schlufft with the Butter Hill behind it. In the foreground Sieber fiddle yard on the side board.

p. 69-1: Taken before the finishing of Oderteich this photograph shows the temporary extension to Braunlage in its entirety.

p. 69-2: Only a low resolution cellphone photo, but it gives an nearly complete overview of the layout room. Only the part to the left around the corner behind Butter Hill is out of view. At the back of the modeller the curved village street of Schlufft with its tiny houses. There the trains run in the paved in track in the street.

p. 70-1: There they are again, the two characters Willy Banse and Karl Peix from the title photo of this chapter. Kalle Bönhold has joined them and they talk shop like the day before. Or they are demanding themselves what may be in the van that occupies the passing track.

p. 70-2: In this intact little world, coal, cement and bricks still arrive by train, there is no other way. And you can see that nobody is really in a hurry.

p. 71: The trains pass through the little village of Schlufft on the main street on paved-in tracks. As there are very few horse-drawn vehicles and even less motor vehicles the passage normally is without problems.

p. 72-1: But when cowherd Walter Ederleh comes back with his female band (Harz typical byname of the herd of cows because of the music from their cowbells) from the meadows in the woods, a tricky situation can arise when he meets a train and maybe even a cart in the village street.

p. 72-2: Behind the small shelter structure at Schluftherütte there is a certain smell. Mr. Untermann, director of the local foundry works knows that and has chosen a place far enough of the dark corner. The lady from Göttingen doesn't seem to know the local peculiarities. In the small second class compartment of the motor car the two are soon going to get acquainted.

p. 73-1: Between Schlufth and Schluftherütte the train passes under the so called Firestones and will then climb the 3.3% gradient to Sonnenberg.

p. 73-2: The goods train to Sieber is waiting for an oncoming train which is just entering the station. It is the usual T 02.

p. 74-1: Carter Hannes Füllgrabe is whooping his team with the whip in order to get another wagon load of lumber to the station.

p. 74-2: This cut called Eselsschlucht (donkey ravine) did exist before the BAE as a two part module and took part in meetings of the FKSB (a narrow gauge modular association). The ravine forms a 90° circle with 133 cm radius and a 3.3% gradient.

p. 75: After all these detail plans here once again the complete plan of the BAE II layout in Bremen as executed. Compared to the original pre-construction plan (p. 55-1) very few changes can be noted. In the other plan the mine branch was still not there and St. Andreasberg had another position.

p. 76: Schluftherütte (to the left), the bridge over the Sieber and to the right Rehbergklippe with its quarry a few days before the beginning of demolition. The layout still is not completely decorated but it was wholly operational and only some days earlier trains were rolling on these tracks. But the time is over. The BAE has to leave.

p. 77-1: The route profile of the BAE II represents quite obviously a mountain railway climbing from a starting point at the foot of the mountain to a summit and then goes downgrade again. The branch to St. Andreasberg is less convincing in this regard because Braunlage and St. Andreasberg ought to be on the same level.

p. 77-2: Under the Butter Hill there was a small workshop without standing clearance, but it was a cozy place for building wagons, houses, trees and so on.

p. 77-3: That's the worst case scenario. The dismantling of the BAE II has begun. The layout owner has to move and tries to salvage as many parts of the layout as possible. The first result is dirt, dirt, dirt.

## **Chapter 5: Planning the BAE III**

p. 78: Motor car T 15 with its short mixed train is drifting downgrade towards Königskrug through Achterman's Gap, a cut through a rocky spur at the end of the „superlong peninsula“, one of the chief design criteria when planning the BAE III.

p. 79-1 and 2: These could have been alternative prototypes for the new layout: the Berninabahn of the Rhetian Rys in Switzerland which runs mixed trains to this day or the Mariazellerbahn in Austria whose planned but never executed prolongation over the Hochschwab mountain chain would have been an excellent concept for a model railway.

p. 80-1: Drawn after a sketch in Layout Design News 1/90, this shows how two separate scenes could be placed back to back in a confined space. How could I achieve something similar on the BAE III?

p. 80-2: Now that's really a big basement. Non supporting walls are broken out and a supporting wall replaced by a central column and two girders. The plan of the BAE II is inserted for comparison. Now there are ideal conditions for planning on a grand scale (pun intended).

p. 81-1: One of several early rough sketches in order to define the general layout shape. The critical U-turn curves at the ends of the peninsulas are drawn with a template for 1 metre radius. The longer one of the two peninsulas is more

than 6 metres long, what a difference to that one of the BAE II.

p. 81-2: Some lines have been eliminated from the plan above in the old-fashioned way with eraser and Tipp-Ex and new curves have been drawn. And lo and behold: only one peninsula has remained but one that can really be called super-long. The two double side backdrops have been welded into one as well, eight metres long! That looks already very John Armstrong like, doesn't it?

p. 82-1: The essential of p. 80-1 again. Something „like that“ ought to be possible on the BAE III, provided the layout could be built high enough.

p. 82-2: The central position of Sonnenberg within the BAE-system is obvious in this graphic. It should be like that on the layout, too, if possible.

p. 82-3 (cartoon): „If you do not want me to have a head-on collision with your ideas you should add some centimeters to the headroom under your layout.“

p. 83: Now the anteroom has been incorporated and contains the terminal stations Sieber and Braunlage. The root of the peninsula has been replaced against the wall to the heater room. All stations of the main line could be placed with Sonnenberg nearly exactly in the middle. It could be done!

p. 84-1: The (imagined) straightening of the operators' aisle illustrates the linear concept of the layout.

p. 84-2: Wherever you are and look over the layout: west is to the left and east to the right - like on a map. And towards the backdrop you look north. Everywhere.

p. 85-1: The BAE is a typical mountain crossing line with the summit in the middle. The relation between towns is not always optimal but nearly.

p. 85-2: If you want to use the space under the layout extensively the open grid method does not work for you. The rib method makes it possible to get bigger connected spaces which can be used in different ways: storage, workshop(s), additional mainline. In order to achieve headroom the whole layout must be constructed high enough. Elevated aisles must be installed when the height of the track exceeds 1.3 metres.

p. 86-1: Once again the main rib of butter hill of the BAE II layout. The little workshop underneath did not have enough headroom. That should be much better in the BAE III.

p. 86-2: Some of the „saved“ parts of the old layout. They should be integrated into the new layout, but that did not make planning easier.

p. 87: The main level of the BAE III is shown here completely designed and planned in all aspects. Arrows mark the transitions to levels I (shown in chapter 9.2) and III (shown in the inset).

p. 88-1: Track planning for sectional track is best done with a real track planning program. But if you plan for flextrack or build your track yourself like OOK, a conventional vector graphic program is better.

p. 88-2: Under this header OOK runs his own layout planning forum „for prototypical operation“ on the internet.

## **Chapter 6: Building the BAE III**

p.89-1: Above the debris of the old layout OOK indulges in his favoured rib-method which is a must for a layout with working space underneath.

p. 90-1: Two rectangular holes in the wall to the anteroom were the first real activities in the construction of the BAE III. The lower hole is for the mainline coming from Braunlage fiddle yard, the upper one belongs to the mine branch.

p. 90-2: The chest of drawers which an hour earlier was standing outside on the other side of the street for kerbside collection and the leafs of two doors from the broken out walls have become part of the layout substructure. Between

the two door leafs the future passage to the underworld.

p. 90-3: Parts of the old layout were covered with dirt from the breaking out of walls like everything else in the basement. No nice start.

p. 90-4: An XXL-outprint of the layout plan is very helpful in the placement of supports and pieces of subroadbed.

p.90-5: With a makeshift compass made from a piece of stripwood the subroadbed pieces are drawn on 8 mm plywood.

p. 91-1: The first part erected was one part of Königskrug from the previous layouts and some new parts are tried to fit on the floor first.

p.91-2: A piece of stripwood about 10 x 10 millimetres, some centimetres longer than the largest planned radius, is turned into a compass by fixing a pencil or ballpen at one end and drilling three holes for each radius, one for the center line and one for each cut line.

p.91-3: The subroadbed is cut out with a saber saw at a 45° angle and thin plywood is glued underneath as planum.

p. 91-4: The user's manual tells you how to fix the saber saw for a 45° bevel cut. But pull the plug before you do anything, by all means.

p. 91-5: When you put a small block 1 centimetre thick under one end of a 30 cm level, you get a 1 in 30 gradient when the bubble shows level. 1 in 30 is the same gradient as 3.3%.

p.92-1: An undecorated curved module which had been used on the BAE II as temporary extension in the office fitted very nicely as part of the U-turn at the end of the peninsula. After fixing it on sturdy supports the ridge board could be positioned which provided a long free space under the mountain ridge. At the beginning of layout construction the table for the circular saw had its place here.

p.92-2: A piece of backdrop recycled from the BAE II layout is being screwed to the ridge board shown in the photo above. The headroom under this construction is about 1.84 metres.

p. 93-1: Construction aids for the suspended station Oderteich: a support of a basement rack, a sturdy strip of wood and a railway modeller from Aachen.

p. 93-2: Cross section through the two stacked stations Oderteich and St. Andreasberg which are to be looked at from different sides.

p. 93-3: The middle section of Schluff from BAE II set up as center part of Oderteich in the new layout. The saved time was lost in straightening the curved tracks.

p. 93-4: This view from Köngiskrug in the foreground to the (topless) station building and goods shed of Oderteich shall hopefully never be possible again. In the center of the photo the 3.6 m long girder supporting Oderteich without blocking the sight to the future St.Andreasberg underneath. First ribs are set for the steep rock wall that will block this view.

p. 94-1: New Year's Eve 2005. These complicated ribs were jigsaw-cut according to card templates fabricated by the trial and error method. By midnight OOK could empty a glass of champagne (see first photo of this chapter).

p.94-2: The same place one month later and looked at from the opposite side. Rainer from Delmenhorst near Bremen is an old faithful from BAE II times and is now spiking track on the mine branch.

p. 95-1: On the St.Andreasberg branch on the BAE II there had been a quarry siding named Rehbergklippe (Deerhill Cliff) which had never been finished. On the BAE III it could easily be fitted on the mainline between Oderteich and Sonnenberg and got the name Dreihörste.

p. 95-2: At the end of the operators' aisle the mainline has to describe a 180° curve. The track is already there, only a bit of scenery has to be added. Michael is just in action.

p. 96-1: Templates for the building of a double cross-over at the eastern end of Sonnenberg have been glued together. The crossing will be a regauged one from Schullern and the double slip switch from Model Rail, Liechtenstein. The other points are going to be built from scratch.

p. 96-2: Until that date, Michael only had laid Peco Flextrack, but when OOK asked who would be interested in laying the double cross-over it was him who first called: Me! Here he has already made some progress in glueing sleepers onto the templates.

p. 96-3: The rest of the surface of the new Sonnenberg still is rather empty. Markus has begun to spike track no. 5, the future goods shed track.

p. 97-1: Looking back: Schlufthütte on the BAE II. The bridge over the Sieber is a quarter circle ahead. The only building there is the storehouse and office building of the foundry.

p. 97-2: On the BAE III the arrangement of things will be a little different: the bridge comes immediately after the station of Schlufthütte (Shü) followed by the Donkeys' Ravine and its 90° curve and its 3.3% grade.

p. 97-3: The two parts of Donkeys' Ravine are erected now with their front panels taken away because some more scenery has to be added there. In front of the yellow plaster mixing bowl the strip of plywood is the site of the future bridge.

p. 97-4: One half of the baseboard of Schlufthütte station is already there with the tiny station building built by Kurt Karpinski of Worpswede (more details on that on p. 119).

p. 98-1: The plywood base for the village street of Schlufthütte is already fixed and OOK tries out the best placement of the forest road with a card pattern. Three houses for the village coming from the BAE II are awaiting positioning.

p. 98-2: The cut stone retaining wall upon the Sieber is 1.75 metres long and 17 centimetres high and OOK will need some time to carve all those stones into the plaster.

p. 98-3: The biggest portion of the mainline between Schlufthütte and Schlufthütte lies in the pavement of the village street in a 3 metres radius.

p.98-4: Old wizard Horst Bertram (see box at end of ch. 15) has just cut out a baseboard for the riverbed of the Sieber and is going to fit it in front of the village street.

p. 99-1: Michael is sanding the filler in the gap between a piece of backdrop from the BAE II and new raw hardboard.

p. 99-2: Where the village street ends at a level crossing Nico is applying some plaster to form a soft transition between the ramp and the scenery.

p. 99-3: One of the few trial runs (too few had been executed). Henrik is running his train on the 3.3% gradient from Königskrug to Oderteich.

p. 100-1: Jürgen widens a forest road in order to create a place for the storage of freshly cut lumber.

p. 100-2: Stefan fits a new piece of track between Donkeys' Ravine and Sonnenberg.

p. 100-3: Room lighting also is an important part of layout building. Here, Hubert from Palatinate is doing some wiring of fluorescent lamps.

p. 100-4: Level crossings are important, the prototype has so many of them. On a model railway they are interesting because trains have to whistle and ring the bell.

p. 101-1: Special wiring is necessary for the drop down bridge at the foot of the stairs.

p. 101-2: Here we see Rainer at the same place as on p. 94 spiking track; now it's scenery work.

p. 101-3: Sieber, end of the line, has been reached, the last points are being fixed at the beginning of the drop down bridge.

p. 101-4: At long last on October 10th, 2007, two and a half years after the beginning of construction the last gap in the mainline between Braunlage and Sieber could be closed and the golden spike driven at the entrance of Sieber station. OOK is driving an original railspike from a German narrow gauge railway painted with gold bronze. Then a model spike painted the same way was driven in front of the motor car coming out of the tunnel.

## **Chapter 7: Stations**

p. 102: Looks like a normal train meet, but that's a wrong conclusion. The train on track 2 ends here, its loco will run around the train and continue to Charlotte-Elise mine with the last coach only. For more details, see ch. 8 „The mine branch“.

p. 103-1: If you ignore the thin lines of the mining railway's tracks, you get an ordinary station with two tracks for train meets, as well as a siding for the ramp and the goods shed.

p.103-2: Henrik is positioning the double slip kit from Model Rail, Liechtenstein on the sleepers he has glued and sanded before. Sounds easier than it is.

p. 103-3: The threading of the mine branch into the station was first done the way as it was planned: with the double slip.

p. 103-4: The first couple of operating tests showed that this was not the stroke of genius I had thought it would. So a different threading in of the mine branch was tested with some turnout templates.

p. 104-1: With the new track plan without the double slip operation in, Oderteich works like this: the loaded mine train arrives on track 3 even though empty mine wagons will usually be waiting there. After backing the loaded ones into track no. 3a, the loco couples to the empties on track 3 and starts with them towards the mine. No running around the train at all is required.

p. 104-2: The upper storey of the Oderteich station building has been made from parts of an ADDIE kit while the ground storey is made of plain styrene with stones carved in. This picture from construction phase was taken on the BAE II, where the building was placed at Schluft.

p. 105-1: Although there is no specific prototype for it, the station building at Oderteich looks like a genuine Harz structure. The old station sign from BAE II times has already been removed, but the new one is not yet mounted. The upper floor contains the station master's flat. In the foreground, some empty mineral wagons of the Harzer Baryt-Industrie are waiting to be taken to the mine for loading.

p. 105-2: A tedious work: engraving cut stones into plain polystyrene.

p. 105-3: Oderteich station is named after this lake (Teich = pond) built in order to provide a reliable water supply for the water wheels of the pumps and hoists in the silver mines in St. Andreasberg. Unfortunately no railway ever existed here.

p. 106-1: The dam of the Oderteich was built by miners in the 17th century and is still intact today. The little structure in the middle of the dam houses the plug operator for the water outlet and still exists to this day. The other building is gone. Today countless vehicles and lorries cross the dam. In the BAE vision the mainline uses this dam, too to cross the valley of the Oder.

p. 106-2: The Oderteich forest inn was a popular destination before the war. After the war was it closed down soon and eventually dismantled. For the fictional BAE station of Oderteich this inn represents an interesting and handsome

signature structure.

p. 107-1: The 1:45 model of the Oderteich forest inn is built mainly from wood with ADDIE windows.

p. 107-2 and 3: While one side of this residential building is boarded, the other one is covered with slates. Michael tries to find a place for it, but it doesn't fit—too big. But maybe it could be cut in half, and both halves used separately ...

p. 107-4: Test set-up of the houses at Oderteich with paper dummies. Not really satisfying. The inn at least should find a better place - and a small parking lot at one side of the station building would be nice, too.

p. 108-1 and 2: On February 18th, '12 (the century being of no importance here) the forest inn at Oderteich was inaugurated in the presence of the architect and the master builder. Under a winterly dull sky the mayor of Schlufthaus is delivering a speech to the sparse audience, his colleague from Oderteich being in hospital.

p. 108-3: A nice invitation note like this one in the style of the period is essential for a great celebration. For details about celebrating the inauguration in 1:1 scale see ch. 19.

p. 108-4: While the mining company owns a loco shed for its diminutive 0-4-0T at the mine site with all the necessary machinery for maintenance, there is another one here at Oderteich because the loco has to start here early in the morning with the miners' train and shall not bivouac there.

p.109-1: The Oderteich loco shed looks abandoned during the day as the loco is out on the line, here coming downgrade from the mine.

p. 109-2: In the thirties a merchant for coal and builders' supplies could be found at nearly every station on any railway, and of course also in Oderteich, directly on the loading platform.

p. 110-1: The BAE fiction does not contain any specification of the number of households at Oderteich, but there must be enough of them to make a coal merchant profitable. H. Koch is a good client of the BAE, there is almost no day without some goods arriving by train. After being sacked the coal is distributed by horse-drawn cart. A construction article about this structure appeared in MIBA 4/14.

p. 110-2: Train Ex 77, the Hoch-Harz-Express, here with its shortest off-season consist, has a short stop at Oderteich. From here on there some snow remains here until March or even April because of the elevation of 750 metres.

p. 111-1: Secluded in the middle of the woods Eisfelder Talmühle is a major junction of the Harzquerbahn. (Postcard from 1910). The three tracks to the left belong to the Gernrode-Harzgeroder Eisenbahn (Selketalbahn) which connects here. The station tracks are bristling with action. I imagined my Sonnenberg on the BAE more or less like this. Even the station building would fit nicely (\*dreaming\*)

p. 111-2: Although the prototype Sonnenberg contains this typical Harz-style wooden house, there is none at BAE's Sonnenberg (but one at Oderteich, as we have seen). On the other hand, there will be a replica of the wood-covered transformer tower whose original has been gone for some time.

p.111-3: The Sonnenberg wayside inn on this a century old postcard does exist to this day nearly unchanged, but without its restaurant function.

p. 111-4: A detail of an old map: Oderteich lies to the right, the road to the lower right leads to St. Andreasberg.

p. 112-1: The trackplan of Sonnenberg has undergone some development from BAE I over BAE II to BAE III. In the latest version mine branch has vanished and the branch to St. Andreasberg leaves the station to the right.

p. 112-2 and 3: More changes of plans during construction: With a double slip template and H0 flextrack new connections and a possible fourth track are tried out at Sonnenberg.

p. 113-1: As a result of the try outs the track plan of Sonnenberg shall look like that now: four instead of three tracks, but no direct exit from track 4 to the left. That would be possible with a double slip switch instead of W 9 but this

way the run around length between tracks 3 and 4 would be limited considerably.

p. 113-2: The double slip has become a single slip and the then missing way from track 4 to track 3a has been reestablished via a bypass over W 6 and 8.

p. 113-3: The die is cast: The single slip won't be installed as W 4 a/b but as 6 a/b as can be seen in plan p.113-2. OOK is spiking the new connection to track 4.

p. 113-4: The home signal of Schierke from the Drei-Annen-Hohne side survived the end of the GDR only for a short time and was replaced then by something luminous. The 0-scale signals from Weinert would have looked exactly like this one if built without any changes.

p. 114-1: Sonnenberg's home signal from Schluftherütte is positioned on the left of the track because otherwise it would be seen to late in the deep cut of Eselschlucht (Donkeys' Ravine). The grid-like semaphore arm and the actuation disk at the frontside of the mast give it a vintage look. The M-sign means that a train may pass on oral order of the dispatcher, which is very convenient during operating sessions.

p. 114-2: One of the first trial operating sessions in February 2010. Paper dummies still take the place of the station building and the goods shed. Platform 2 is still under construction but operation is in full swing. Motor car T 12 has just arrived from Braunlage, and the conductor of the goods train is asking the dispatcher if both trains may continue their run. In the background snow covered Mount Brocken can be seen.

p. 115-1: Some progress has been made. At least the goods shed is no longer a card dummy and all tracks are ballasted. The express waits on track 1 for the through coach from St. Andreasberg to be added while the short goods train is arriving on track 3.

p. 115-2: This is the final plan for the western throat of Sonnenberg, with direct entry from the line track into tracks 3 and 4. The points have been renumbered, W 17 and 18 are new.

p. 115-3: Only a few more work hours for the platelayers, then the goods trains will be able to run directly into tracks 3 and 4.

p. 116-1: Some BAE visitor on seeing the Brocken like in p. 114-2 expressed doubts that it could really be seen from Sonnenberg. This photo should be evidence that it does. It is taken about 300 m from the wayside inn.

p.116-2: The wayside inn still looks very much like the one on the old picture postcard (p. 111-3) but it has been out of business for some time.

p. 116-3: Dieter who lives in the Bavarian Forest built the 0-scale model of the station building of Eisfelder Talmühle. Here he is lifting off the paper dummy for the unveiling ceremony of the now Sonnenberg station building.

p. 116-4: With the erection of this massive station building a very special signature building has been put on the BAE because every railfan who has travelled the Harz knows Eisfelder Talmühle (see p.111-1). The inauguration was celebrated with the inevitable champagne.

p. 117-1: The small refreshment kiosk has a second counter to the left for bus passengers without platform ticket. The BAE had a love-hate relationship with the blue Büssing buses. They were nasty competition but also valuable feeder of additional passengers.

p. 117-2: Stoves and cast iron sewer covers were typical products of the foundry at Schluftherütte. The goods train has set out a standard-gauge coal wagon on transporter trucks. Photo of 1960.

p. 118-1: Wiedaerhütte station on the Südharzbahn about 1905. The meeting trains are short—the one on the right has only one car—, but who could afford to travel at that time? There are no goods waggons to be seen but the foundry got all its raw materials, and shipped all its products, by rail.

p. 118-2: Compared with the other stations, the track plan of Schluftherütte was obvious from the start and never needed to be changed: two tracks for train meets and two loading tracks for the foundry. Only a handful of the many buildings of the foundry are represented on the layout, the other ones are thought to be in the operators's aisle.

p. 119-1: At the 0 Narrow Gauge Exposition NUSSA 2006 Kurt Karpinski, a modeller from Worpswede, hands over a model of the Wiedaerhütte station building he had custom-built to OOK, director of the BAE.

p. 119-2: In this picture, the little gem is already at its place at Schluftherütte, where Henrik is currently building switch no. 2. Soon trains will run here.

p. 119-3: The two foundry tracks are in place. HFy is soldering an actuation rod for switch no. 1 at Schluftherütte.

p. 120-1: Before it can continue to Sonnenberg, the motor car has to wait for the arrival of the incoming goods train with its two waggons of coal for the foundry.

p. 120-2: The piece of art built by the modeller from Worpswede whose handing over we've seen at p. 119-1 now serves as station building in Schluftherütte. In front of it the refreshment kiosk of the same type as in Wiedaerhütte.

p.121-2: When the director of the foundry was about to leave his office there were two gentlemen from the town administration of St. Andreasberg in front of the building who wanted to enquire about sewer pipes and covers.

p. 122-1: The old hammermill at Wieda doesn't contain a hammer any more but it's still a charming historic structure even though, during a reconstruction effort, one of the side walls lost its earlier ornate windows which had been cast in the Wieda foundry.

p. 122-2: The paper dummy is a free lance model inspired by the Wieda hammer mill and had to serve as a place holder for some time.

p. 122-3: Rudi from Bielefeld has rescaled a drawing of a hammer down to 0-scale so that he could use it as a construction aid for the building of a real hammer model.

p. 122-4 and 5: Rudi has built the hammer from the same material as the prototype: wood. In the photo to the right he is positioning the finished working model into the hammer mill building.

p. 123-1 and 2: Now everything has come together: the hammer mill building (made from plaster), the big chimney, the water wheel and the sluice gate. For the time being the water wheel has to be turned by hand in order to see the hammer hammering, but it will soon be driven by a small motor.

p. 123-3 and 4: The two sluice gates were designed after typical Harz prototypes. The ornate windows are custom laser cuts by Jürgen.

p. 124-1: The spartan track plan of Schlufth could have been designed by Mr. Lenz (the one from Berlin): two tracks for train meets and two spurs, that's it. But the combined traffic for goods shed, loading platform and saw mill will most probably result in quite a bit of shunting action.

p. 124-2: The little goods shed of Schlufth is one of the three commercial buildings on the layout, a ready to use model by Paulo. While its prototype stands in the Prignitz near Berlin it fits quite well into a Harz layout because of the clapboard siding. Twice a day the parcelvan stops here.

p. 124-3: The goods train from Sieber to Braunlage has arrived at Schlufth and is shunting an open wagon into the sawmill siding where it is to be loaded with timber. The covered wagon will probably go to the goods shed and the open one in the left foreground with its load of foundry sand must certainly be forwarded to Schluftherütte, so two run arounds are due.

p. 125-1: The pair of bolster wagons with its load of long logs has been spotted for unloading. One wagon is to be loaded (the brown one to the right) and one ready to be picked up (the green one from the Gernrode-Harzgeroder Eisenbahn). In any case the next goods train will have to do quite a bit of shunting.

p. 125-2: The original wooden frame of the horizontal saw had been replaced by one of cast iron made by Fa. Mayer in Böblingen in 1905. Since 1925 it is driven by electricity instead of a water wheel. Behind the frame the rack with wedges against the jamming of the saw blade.

p. 126-1: The track plan originally devised for Sieber. Sieber Nord (Sin) station was intended to be installed across from the Braunlage fiddle yard, complete with an locomotive terminal. In order to get enough run-around track length, a drop down bridge over the entrance from the stairway would have been necessary. The fiddle yard Sieber Reichsbahn (Sir) was added later to the plan.

p. 126-2: OOK is spiking track at the entrance points to Sieber. The definite track layout can already be recognized. The loco stands on the lead track to the future turn table.

p. 127-1 and 3: This is the track plan of Sieber that finally emerged from our trials. After Wolfgang had finished all the trackwork for the locomotive terminal (photo below) it turned out that the turntable did not work correctly, so we removed it, and the terminal was moved to the other end of the station, where no turntable was needed.

p. 127-2 BAE-fan Martin has hurried from Braunlage (the real one) to Sieber (the modelled one) and is glueing sleepers for a stub track on the drop down bridge.

p. 127-4: The tracks at Sieber Nord are mostly in place. But some time will elapse before everything will be painted, ballasted, platforms built and a station building erected.

p. 128-1: If you are a railway buff, you'll immediately notice that this is a replica of the station building at Hasselfelde. But something seems to be missing. Well, the two original extensions on both sides did not fit here, a goods shed is not necessary because there is (an imaginary) one at Sieber Reichsbahn. The little structure at the right is not a loo but a ground frame with signal cranks.

p. 128-2: The card kit OOK got for a semi-round birthday from the BAE gang is no longer recognizable, so thoroughly Dieter of the Bavarian Forest reworked the kit. The details and signs have been added by the presentee himself. The departure timetable (Abfahrt) shows the trains which really start from here during a normal operating session.

p. 128-3: The fiddle yard Sieber Reichsbahn has three tracks to stage trains starting from here. There is no run around facility, trains are pushed in one direction or the other according to the timetable.

p. 129-1: This building should look familiar to readers of my blue book on model railway planning. It is the old pulp mill of Sieber which plays an important role there in a track plan called Sieber Valley Ry. As the BAE has a Sieber station, too, this signature building was paramount for adding identity.

p. 129-2: At the site of the non-working turntable the pulp mill has found a suitable place together with a small currant- and apple-juice factory which delivers its products to nearly all inns and restaurants in the Harz mountains. So the parcel van pauses here every morning before being taken up the line.

p. 130/131: If you like to stage a detail orgy, you can set up a rubbish dump, a backyard with thousands of colourful blossoms or a market place with dozens of fruit and vegetable stands. But you can also remain nearer to the railway theme and have a look at a plate-layer's yard. There you'll find a clutter of tools and materials spread like a mess all over the place. The BAE-boys tried to find, buy or build from scratch as many of these special items as possible and put them together in front of the plate-layer's workshop at Sieber Nord.

p. 132-1: The welding cart, the track-lifting jack, the pick-axe and the frog of a set of points were purchased, the ram for aligning rails and the rail clamps were made by the BAE crew.

p. 132-2: The initial spark which brought up the idea of the superdetailed scene was this photograph of the „Feldschmiede“ in Gernrode. The BAE wanted a similar chaos.

p. 132-3: By means of such sedans plate-layers carried the plates to the construction site.

p. 133: The new engine terminal has found a place on the far side of the drop down bridge against the wall to the laundry room which also houses the fiddle yard Sieber Reichsbahn. There are three stalls in the shed, the room of the fourth is taken by the framework under the water tank.

## Chapter 8: The mine railway

p. 134: The little 0-4-0T of the mining company has pulled the three loaded wagons to the summit of the branch line. Now the trip will continue level through the tunnel and then with a 4.5% gradient down to Oderteich.

p. 135-1: The approximate prototype of the HBI-mine railway is the one of the Deutsche Baryt-Industrie in Bad Lauterberg, which had 750 mm gauge. The photo is from Harzer Schmalspur-Spezialitäten vol.II

p. 135-2: Between the Wurmberg tunnel I (right) and Wurmberg tunnel II the mainline of the BAE mounts to the left towards Königskrug. Exactly 25 cm higher I installed the pit Charlotte Elise with its little terminal. A fluorescent lamp under this board lights the lower level. This is the only part of the whole layout with visible double deck.

p. 136-1: This cutout from the BAE trackplan shows the mine railway in black outline, the normal BAE mainline and tracks in grey. The mine ry. crosses the doublesided backdrop two times with important results.

p. 136-2: Quite at the beginning of the works on BAE III there were these two holes in the wall. The upper one was for the mine railways bunker.

p. 137-1: BAE Club member Rai- ner (in the background) has travelled more than twohundred kilometres in order to spike track on the mine branch.

p. 137-2: Originally the mine branch should have left Oderteich from track 1, the last one from the layout edge, and then head directly for the backdrop in order to traverse it. But I realised that this would have been a fatal error.

p. 137-3: 180.5 cm is a good clea- rence, nevertheless the railway modeller has to incline his head in order to pass under the mine branch without banging against it. Would the line have started from Oderteich as shown in p. 137-2 this clearance would have been 5 cm less.

p. 137-4: The summit tunnel of the mine branch lies at 180.5 cm above the floor. The line goes downgrad to both sides.

p. 138: On its way back from the mine Charlotte Elise the workers' train passes the loading place for pit wood and is going to enter the summit tunnel in a few moments. One level lower the motor car from Braunlage has left the Wurmberg tunnel II and is going to arrive at Königskrug in a couple of seconds. The two trains will meet at Oderteich.

p. 139-1: Pit head installations can not be much smaller than these. Hidden in the backwoods of the Harz mountains the mine Wol-kenhügel of the German Baryte Industries is an ideal prototype for modellers with limited space. In this foto by Alfred Spühr the 0-6-0T HELENE is pulling a cut of freshly loaded wagons out of the pit head.

p. 139-2: Not in the Harz moun- tains but at home in the Bavarian Forest BAE member Dieter is constructing the pit head für Charlotte-Elise. The front of the bildung still is a computer print-out. His Fleischmann 0n30 vehicles have to act as stand-ins.

p. 140-1: A few months later Dieter has installed the pit head on the BAE layout. And as he just was there he took the opportunity to ballast the tracks in the mine yard with waste material from the mine.

p. 140-2: If a normal rectangular bridge crosses a line at 60°, clearance problems arise at the corners of the abutments (red circles). A bridge with a rhomboid footprint reduces this problem considerably.

p.141-1 and 2: As we can read in an old bridge handbook, an oblique-angled bridge is a very uncommon thing, even

in prototype situations and should be used only in extreme cases. But the BAE guys threw all caution to the wind and installed an oblique-angled bridge like the Südharzbahn had done it at Wieda.

p. 141-3: The old Vollmer H0 bridge kit was 15 cm long, not much in 0-scale, that would be 7.5 cm in H0.

p. 141-4: The new longer crossbars were cut from styrene. Even in 0-scale the girders of the H0 bridge look sturdy.

p. 142: All diagonal braces are glued between the rectangular ones and gusset plates added. The bridge is ready now and looks so well proportioned that one is asking oneself if Vollmer didn't think of it as 0-scale secretly.

p. 143-1: As can be seen in the photo of the Wieda bridge (p. 141-2) sleepers on an open bridge have to have a square cross-section. So does the new bridge of the mine branch.

p. 143-2: This wooden shed in Schierke with its clapboard-siding was the vague prototype for the free lance loco-shed.

p. 143-3: Michael's task is to fit the loco-shed at the end of track 3a in Oderteich.

p.144-1: While this is only an overnight shed it is equipped with some tools and machinery for minor repairs and maintenance.

p. 144-2: It's 5.15 a.m., the morning rush-hour in Oderteich. Train P 3 has arrived from Braunlage with the parcels van at the end and the P 2 on track 2 from Sonnenberg has brought the special miners' coach which runs directly from St. Andreasberg to Charlotte-Elise.

p. 145-1: P 3 is gone and the loco of P 2 has run around its train and transferred the miners' coach to track 3. And now as this is a Saturday it leaves Oderteich with it and heads for the mine. On normal workdays the little 0-4-0T of the mine does this job.

p. 145-2: Also a Saturday situation: The BAE loco has brought the miners' coach through the summit tunnel and will now convey it downgrade to the mine.

p. 146-1: A group of three empty mineral wagons is arriving at Oderteich with the morning goods train from Sieber and will soon be transferred to the HBI. At the same time three loaded mineral wagons are waiting on track 3 to be picked up.

p. 146-2: In the mine yard every track has its special function and the operation here follows the same procedure each time. The game begins with the arrival on track 2, otherwise it won't be successful.

p. 146-3: An empty mineral train arrives at Charlotte-Elise. It depends of the hour if the loco will go back to Oderteich with a loaded train or with the miners' coach.

p. 147: That's the right way. The empty mineral train has arrived on track 2, the loco has uncoupled and is now proceeding into the bunker in order to pull out the three loaded wagons through track 1.

p. 148: Well, now the loco is pulling the loads out to daylight over point no. 4. The switchman must not forget to thrust the switch back to track 2. When the loaded wagons are parked on track 1 the loco will push the empties into the bunker and return then to the head of its train while the miners's coach is waiting patiently for his turn.

p. 149: Snow flurries can easily happen every day in March 1936. This time it has caught the afternoon mineral down train and the P 53 to Sieber. But experience teaches that the snow will turn to sleet and then rain after Sonnenberg or that they'll even encounter dry weather in the Sieber Valley.

p. 150-1: The red lines and arrows show the way of the baryte mineral from Charlotte-Elise via the mine branch to Oderteich and then via BAE over more than half the layout to Sieber. That's what brings tonne kilometres.

p. 151: Not more often than two times a week the pit of Charlotte-Elise mine produces so much baryte that an extra blocktrain has to be run. because that would be too much tonnage for the regular goods train. Here the heavy 0-10-0T has reached the highest point of the BAE mainline at Dreihörste quarry. From here on it's more or less a braking problem down to Sieber.

## Chapter 9.1 The inverted mushroom

p. 152: This is no adjoining room to the layout room, this is the space under the layout, at least part of it. Here the St. Andreasberg branch describes a half circle around work places 1 and 2. In the workshop area it is undecorated. One level higher passes the big U-turn at outside end of the superlong peninsula.

p. 153-1 and 2: A double deck layout principally gives you the double of mainline length. That has to be paid for with a non optimal height of at least one of the levels, in most cases of both of them. And the distance between levels generally is too little, too.

For comparison here once more a graphic from the planning-chapter: Oderteich and St. Andreasberg are stacked one above the other but are looked at from different sides.

p. 153-3: A combination of a classic double deck layout and a half mushroom was shown in my blue layout planning book in a plan for a garage layout. That's a good solution for rooms which are sufficiently high but not broad enough for a peninsula with a real symmetric mushroom. The upper level of this plan can be downloaded from the MIBA-Verlag's website.

p. 154-1: The principle of the original mushroom-design is illustrated by the darker outlined mushroom. The upper level spreads out to both sides. The important thing is that the two levels are looked at from different sides, the upper one from the inside where the operator stands on a raised floor.

p. 154-2: With the inverted mushroom-design the direction of looking is inverse: the lower level is looked at from the inside, the upper one from the outside where there are raised floors. This way considerable spaces are won under the layout that can be used in manifold ways. The limited clearance above the tracks of the lower level can be regarded as a problem or as a challenge. I opted for the latter.

p. 145-3 (cartoon): The bubble says: „Dunno. Somehow I had imagined the double deck thing kinda different.“

p. 155-1: Each club-member has his preferred workshop-place. Henrik likes to sit at place no.4 (to the right). Here he is studying the construction info for the kit of a four-wheel motor car from Markus Klünder while Rainer is checking the stock of brass profiles.

p. 155-2: Thomas is a dyed-in-the wool gauge 1 modeller, but he doesn't mind to do some repair and maintenance works on 0m-locos from time to time.

p. 155-3 and 4: Wolfgang (left) prefers the secluded situation of work place no. 6 directly under the Charlotte-Elise mine. The photo to the right with Michael illustrates the confined situation here and the limited head room.

p. 156-1: A considerable number of vehicles are waiting on the repair shelves while Stefan fabricates some detail part on the lathe.

p. 156-2: The plan shows the situation of the different working places (Pl. 1/2 and so on) and the black arrows show the corresponding photos and direction of shooting.

p. 156-3: At the bend of the cave there is the biggest space with free head room so that people gather here easily and rub shoulders.

p. 157-1: What's up here? Anything for free? Well, Wolfgang has soldered together a very complicated kit for a points lever. Everybody wants to see that.

p. 157-2: This time the crowds did not gather behind the modeller but in front of him, unnoticed.

p. 157-3: At the narrowest part of the passage between workplaces 1/2 and 3/4 the underside of the big quarry at Königskrug protrudes into the aisle. After many head-bumps this was the first place where the „ceiling“ has been covered and smoothed.

p. 158-1: Henrik (to the right) and OOK are holding graphic timetables in their hands so this discussion is about operation. Even Dieter has to interrupt his construction work in order to listen.

p. 158-2: Workplace no. 7 is more a make-shift than a real workshop. It's a 60 to 80 centimetres „wide“ choke-point beneath Sonnenberg station. But seems to be fun.

p. 158-3: The vault below the layout scenery is reinforced by doubling the ribs for safety's sake.

p. 158-4: The use of the jig-saw is an old art which seems to go extinct but is still indispensable in railway modelling. Nico still knows to use it.

## **Chapter 9.2 The St. Adreasberg branch**

p. 159: The peninsula as a cut out from the complete layout plan; all tracks on the main level are represented in grey, the St. Andreasberg branch on the lower level in black. If one imagines Sonnenberg station as a fiddle yard to the right of the right portal of the Sonnenberg-tunnel, one has a complete layout with two stations between the terminal stations and not less than ten metres of mainline. The long spur at Rehbergergrabenhaus (Rgh) can be used as a back up track for train crossings.

p. 160-1: The original version of Königskrug had a crescent formed space behind the tracks on which the station building and the goods shed should be placed. And exactly underneath should be installed Rehbergergrabenhaus station on the St. Andreasberg branch. A timely check showed that the light distance between the two levels would be only 18 cm, definitively too little for the operation of the lower station.

p. 160-2: Markus is spiking rail on the roadbed for the Sonnenberg tunnel by which the St. Andreasberg branch shall be lead from Sonnenberg station into the underground area.

p. 160-3: trial runs on the make-shift 5 % section erected on all sorts of wooden blocks. Would normal trains cope with this gradient?

p. 160-4: This later invisible part of the St. Andreasberg branch is hung with droppers from the cove underneath the scenery. Cardboard strips shall prevent derailed vehicles from falling down to the floor.

p. 160-5: The baseboard of Rehbergergrabenhaus station. The under-side of the quarry still hangs deep over the station, in spite of all efforts.

p. 161-1: Michael is priming the cove underside of the scenery with sky blue paint. Scenery details will follow.

p. 161-2: A paper dummy of the Grabenhaus building as well as the sleepers glued to the baseboard announce the future station here. In the background the underside of the quarry limits the clearance above the tracks.

p. 161-3: The lining of the cove has made some progress and the bowden cables for the actuation of the chutes of the quarry bunker still visible in the previous photo are concealed now.

p. 161-4: Train P 160 to St. Andreasberg exits the south portal of Sonnenberg tunnel and comes out into the open, this under the layout. When the vegetation will have regrown, this part will look as presentable as the upper side of the layout.

p. 162-1: In between a look at the real Rehbergergrabenhaus (to the left) with the workshack across of the forest road. Instead of this road there could have existed a metre gauge track as well, doesn't it? On the layout the shack is beside the Grabenhaus.

p. 162-2: Another Harz typical building assembled in the Bavarian Forest. Dieter built the model shack as a demodernized mirror image of the real one.

p. 162-3: Who has said that there are no eye-catchers on the BAE? Here we have Gustav the Grabenhaus factotum whose eyes are caught by the signboard with today's dishes.

p. 162-4: The Rehbergergrabenhaus was the last station building installed on the layout, just in time before the deadline of this book. Harz hikers will recognize the building, they only will not remember railway tracks there.

p. 163-1: A lot of imagination is necessary to envision the future quarry at this site. The radius of the visible track is 80 cm while the one of the invisible track at the outside of the peninsula is 100cm.

p. 163-2: A part of the Jorandshöhe with the quarry is being created here with a lot of styrofoam and plaster. The scriber with the wrapped handle indicates ongoing stonework in the wall.

p. 163-3: Now one can already make out what this is going to be. But a lot more time will go by before stones are loaded here because the bigger part of the landscaping work still has to be done.

p. 163-4: Ready! Well, not totally. The wall and the rock still have to be coloured and the usual quarry stuff as we have seen it at Königskopf quarry still must be brought in. Train PmG 160 is going to set out the hopper wagon here.

p. 164-1: This little shelter building stood at the former Selketalbahn's Albrechtshaus station and served as a bus stop shelter for forty years. After the German reunification it was soon demolished.

p. 164-2: far right: The first virtual relocation took place in 1997, when Rainer Emmermacher built a 1:45 scale model and sold it to the BAE director who set it up at Schlufthütte on the BAE II.

p. 164-3: On the BAE III layout the shelter building found its definite place at the halt at Jordanshöhe quarry. A telephone box has been added in order to make train order communication possible.

p. 165-1: A single worker is breaking his back here and filling tip wagon after tip wagon and tipping its load into the waiting hopper hired from the SHE.

p. 165-2 and 3: The photo to the left is from the BAE II chapter: HFy mounting a switch throw from Weinert at the right end of Sonnenberg. The photo to the right shows the same track arrangement turned 180° in St. Andreasberg on the BAE III.

p.165-4: Working conditions like in a coal mine: OOK is spiking rail in the only 40 cm thick coal bed.

p. 166-1: The „definite“ track plan of St. Andreasberg. Definite in quotation marks because a track 3c may be added in the future. Goods trains have a lot to do here. Serving the coal merchant's track is tricky.

p. 166-2: On January 22, 2012, the Ts5 loco has been decorated in celebration of the opening of the St. Andreasberg branch and is waiting for the start signal at Sonnenberg with the inauguration train.

p. 166-3: An uplifting moment, as the Ts5 with the inauguration train is cutting the red ribbon at the south portal of the Jordanshöhe tunnel.

p. 167-1: Between Jordanshöhe and Rehbergergrabenhaus there is an ultra old module from FKSB times which should demonstrate how the St. Andreasberg branch should be built long before its realization. In this older photo the „ceiling“ still is very raw.

p. 167-2: The end of the St. Andreasberg branch still mostly undecorated. But shunting is already possible. The 0-10-0T is standing on the coal merchant's track and the 0-6-0T on the transfer track to the standard gauge.

p. 168-1: The plywood desert visible in the photo on the previous page has been occupied now by the coal merchant Diederich's bins and office building. Three sorts of coal are stored in the bins made of old sleepers from the BAE. In

the photo on page 169 the still missing fence allows us to observe the worker at his job of filling coal into sacks.

p. 1168-2: Beside the portal of the Jordanshöhe tunnel the entrance to the Samson pit has been erected in a brutalist way from raw concrete.

p. 168-3: One of the two 0-6-0Ts is arriving at St. Andreasberg with a goods train. Soon it will be busy shunting the wagons to the different destinations.

p. 168-4 and 5: The former platform side of the station building at St. Andreasberg Stadt as a rectified photo and (lower photo) one half of the street side with the two gables and the polygon kiosk.

p. 169-2 (below): The 1:45 model of the so called town station of the St. Andreasberg rack railway is a textbook example of selective compression. Jürgen Hans (Jaffa's Moba Shop) has shortened the platform side by omitting one of the dormers and a third of the long roof when drawing up the file for his laser cutter. Additionally he has transferred the two gables and the polygon kiosk from the street side to this side gathering all the interesting elements on the visible side of the building.

The wagons with the sewer pipe loads are a daily view in this station. The concrete pipes are produced by a plant in Wernigerode and transported by train to St. Andreasberg in preparation for the soon beginning canalisation works.

### **Chapter 10.1: Operation**

p. 170: The breakdown of an 0-10-0T assigned to goods train Ng 204 led to an 0-6-0T as traction loco. Here in Schlufthütte the conductor had calculated a tonnage overrun for the 3.3% gradient ahead and asked for a helper. When it finally arrived the train could not start immediately because it had to wait for an oncoming train. The arrival of it was an opportunity for the crew to take a shot.

p. 171-1: General cluelessness at the first operation day February 20, 2010. The use of timetable and rule book was unfamiliar. Only two of the seven modellers shown had operation experience from the BAE II.

p. 171-2: Each crew member gets a yellow card strip with his personal duty-rota. The abbreviations and symbols are cryptic for newcomers but easy to read for experienced crews.

p. 172-1: The service timetable for passenger train P 85 from Braunlage to Sieber which will meet the P 84 in Oderteich (with stop at the trapeze-sign) and the P 181 in Sonnenberg

p. 172-2: At the three terminal stations as well as in Sonnenberg the consists of the passenger trains are shown on a panel and crews are advised to observe and follow them.

p. 173-1: Goods trains are made up in the fiddle-yard Sieber and Braunlage according to specified order plans posted there. This way wagons shall have the optimal position in the train for setting out along the way.

p. 173-2: A timetable-page and a duty-rota together on a clip-board.

p. 174: Two sample pages (reduced in size) from the book of rules of the BAE. Crews must not keep this book under their pillows nor know the rules by heart, but looking into them time and again is always a good idea.

### **Chapter 10.2 Dispatcher guided operation**

p. 175: There are three things indispensable for the work of the dispatcher: the graphic timetable (under his elbow), the record sheet (under the ruler) and, of course, the telephone by which he gets all the position reports and track warrant requests.

p. 176-1: One of the first graphic timetables from the time when only one half of the mainline was in operation. Because of the relatively low density of information it may serve as a good example to illustrate the dispatching system.

p. 176-2: There we have one of those „bloody“ goods-trains, the same one as on page 174. It is running half an hour

late now and in a moment it's going to mess up the well planned concept of the Sonnenberg station master.

p.177-1: The overtaking of the Ng 105 by the P 3 looks like this in the graphic timetable. The local goods train must interrupt its shunting activities in good time and clear a passing track for the P 3.

p. 177-2: A clip out from the dispatcher's record sheet. After having issued track warrants to the trains P 1 and P 2 he has drawn the red arrows in direction of their destination which means that the corresponding sections of the line are blocked for any other train. A green line is drawn to the arrival time line making the section free again.

p. 178-1: The Ng 105 is running late. According to the timetable it should have left Königskrug at 6.30, but apparently shunting has taken more time again than planned and the dispatcher gets the track warrant request at 7.00. Shall he authorize the train to proceed?

p. 178-2: A freight train has stopped at the trapeze sign as required in the timetable and has given the attention signal. If there is no answer (whistle blow) from the station, the conductor will step down onto the ballast and walk to the telephone box (with the F-sign) and ask the dispatcher what he shall do.

p. 179-1: Timetable no. 10 needs four - and for a short time five - train crews. And the highest degree of concentration of the dispatcher. He has to supervise 24 train meets, and in case of any delay he'll have to relocate meets by train order.

p. 179-2: Clip out from a graphic timetable for the OBL (supreme operation chief). The different colours of the train lines show him which loco or motor car will normally convey a certain train.

p. 180-1: There are telephone boxes at all trapeze signs on the BAE. But only one has a door that can be opened and a model of a vintage telephone inside. The outside bell apparatus is necessary because the dispatcher must be able to call back a waiting train.

p. 180-2: According to timetable, transfer run no. 311 shall arrive at Sonnenberg before the departure of train P 12. Due to a delay of the transfer run the dispatcher issues a train order prescribing the inclusion in the quarry siding at Dreihörste and await the passing of train P 12.

p. 181-1: The small dispatcher office shown on the first page of this chapter turned out to be too confined for proper working and was replaced by a much bigger area in my office. Now the dispatcher has a good overview over the whole BAE system. He can stop the clock in case of emergency.

p. 181-2: A short goods train from Oderteich has arrived at Sonnenberg. The station master has dialled the number of the dispatcher in order to give the arrival notice while the conductor is waiting for shunting instructions.

### **Chapter 11.1: Freight traffic**

p. 182: The so called Baryte Empty is a blocktrain travelling only on demand with up to nine empty mineral wagons from Sieber to Oderteich where they will be taken over by the mine company's own railway.

p.183-1: Quarries are very popular among railway modellers and that's why many layouts do have one. But quarries were so typical for the Harz that one quarry would not be enough for the BAE. So the Dreihörste quarry seen here is only one of three on the layout. And it's not the biggest one.

p. 183-2: Just as a reminder: Wagon cards like those ones were used on the TAE garden layout and on the BAE I. Very practical but not prototypical.

p. 184-1: The freight cards of the BAE in business card format are made on an ink jet printer and then laminated with a clear coating. Normally they contain a cycle of three movements: 1. empty to shipper, 2. loaded to consignee, 3. empty to yard.

The wagon identification marks are added by hand with a non permanent marker pen and are wiped off after the cycle is complete.

p. 184-2: The heavy 0-10-0T has reached the end of the 1-in-30 gradient just before Oderteich. The engineer already has closed the throttle. The two empty open wagons behind the loco are certainly destined for one of the quarries or the Samson mine in St. Andreasberg.

p. 185-1: Unlike the graph in the concept-chapter the situation of the BAE in the railway network of the Harz is shown here in linear way so that it becomes more clear which transports are completely online, going offline or transit.

p. 185-2: In the siding of the foundry in Schlufthütte there are an open wagon and a van. Their freight cards are to be found in the arrival department of the card rack. But there is one card in the right departure compartment, too, but no third wagon. Now its up to the „Wagenrepartiteur“ (wagon manager) to define what has to happen next.

p. 186-1: These are the three cards mentioned in 185-2. The first not crossed out line names the next consignee. The first card (Gm 350) lacks the third line (to yard) because according to line 2 it is going to the fiddle-yard Braunlage anyway.

p. 186-2: The wagon manager Rudi has arrived at Schlufthütte with the data acquisition sheet shown on the next page on his clip board and browses the compartments of the card rack, decides on wagon movements and crosses out the accomplished movements.

p. 186-3: In order to produce the right feeling that the railway is transporting something it is of paramount importance that the open wagons really are filled by the load marked on the freight card or at least an imitation of it. The four open wagons, all of them of different construction of this goods train between Schuft and Schlufthütte show examples of what can be in them (from the front): coal, foundry sand, lumber and bales of peat.

p. 187: The data acquisition sheet approximately original size. The wagon manager notes the empties at every station by visual inspection and reads out new needed empties from newly drawn freight cards, then he puts them down in the respective cases in the acquisition sheet. Finally he draws arrows for the movement of empties.

p.188-1: The drawing of new cards provides for variety in freight traffic so that each goods train has a different consist. Once a week a wagon load of empty barrels is transported from the Rinkemühle on the GHE to the baryte mill at Siebertal.

p. 188-2: A green bogie covered wagon can only be GHE owned and is probably loaded with a suiting back load to a consignee on its home network. The advantage of covered wagons it that no load imitation is needed. They contain always what's marked on the freight card.

p. 189-1: That's why the goods shed at Sonnenberg is so long. Every day at noon the three piece goods courses of the BAE meet here. The letters A, B and S mark their destinations: Andreasberg, Braunlage and Sieber.

p. 189-2: The three piece goods courses have a three day circulation. They are mostly conveyed by passenger trains and normally skip one train at each goods shed.

p. 189-3: Piece goods wagon A skips a train at the shed of Rehbergergrabenhaus. The next train running downgrade will take it to its final destination St. Andreasberg.

## **Chapter 11.2 Freight train Ng 235**

p. 190.1: Coming from Braunlage, train Ng 235 has passed Wurmberg-Tunnel II and has come to a halt on track 2 in Königskrug. The conductor must look into the way bill rack in order to learn if the pair of bolster wagons in the background with its log load has to be picked up.

p.190/191: The train is uncoupled after the open wagon Ow 256 and the 0-10-0T is pulling it off the train and is going to park it on the arrival point. Then it will pick up the pair of bolster wagons which is currently hidden behind the shelter building.

p. 192-1: Train Ng 235 contains seven wagons (beside the guards van), so the conductor carries seven cards in his

accompanying papers. Upon arrival at Königskrug he fans them out and looks if there are wagons to be set out here. That's the case with Ow 256, which must be shunted to the lumber loading platform.

p- 192-2: If Ng 235 is going to add some more minutes to its delay the meet with the P 26 at Oderteich could become a problem. The dispatcher must consider a possible transfer of the meet to Königskrug.

p. 192-3: There is one single card in the Sonnenberg compartment of the card rack at Königskrug. The bolster wagons with a load of long timber for the sawmill in Schlufft must be picked up.

p. 192-4: While the empty open wagon is parked on the arrival points the loco can pull the pair of bolster wagons out of the loading platform track.

p. 192-5: After having pulled the timber wagons out of the loading platform track the loco backs them against the parked O 256. After that it will pull all cars forward and finally shove the empty car into the ramp track.

p. 193-1: The restart on the 1-in-30 gradient after the stop at the trapeze-sign has worked well. Only some dozen metres more until the end of the gradient and Oderteich will be reached.

p. 193-2: The conductor of train Ng 235 has noticed the empty open wagon at the loading platform just upon arrival. His papers tell him that he has to pick it up but there is nothing to set out. Shunting can begin as soon as P 26, that is the motor car on track 1, has left station.

p. 194-1: Not without my guard's van. That's what the guard of Ng 235 may have thought when sending the 0-10-0T to the loading platform track in order to pick up the open wagon. Right now it is pulling both cars forward to shunt them onto the end of the train.

p. 194-2: Well, the open wagon has been added to the train, the loco can run around its train and couple onto it - and off we go.

p. 195-1 The section between Oderteich and Sonnenberg is the highest one of the BAE. In March 1936 there are almost always some remains of snow in this cut under the mine branch bridge. After diving under the bridge the 0-10-0T has to tackle the last stiff gradient to the summit before arriving at Sonnenberg.

p. 195-2: The Ng 235 passes the Dreihörste quarry, but it pays no attention to the loaded wagon on the siding. Picking this one up is the job of a transfer run during the rest of the day.

p. 196-1: Finally the last gradient is crested, the home signal of Sonnenberg shows the Go aspect. Thus it is a pleasure to be an engine driver. And in a few minutes Sonnenberg will be reached and possibly some hot beverage to be got.

p. 196-2: The train enters Sonnenberg quite slowly over the double crossover and the single slip switch to enter track no.3. Let's see what shunting will be necessary here.

p.197-1: The different shunting moves are shown here by red arrowed lines.

(1.) Arrival of freight train Ng 235, entering track No. 3. (2.) Train is pulled forward unto Limit-of-Shunting Sign. (3.) Van is shoved to goods shed. (4.) Back to train, same way. (5.) O 255 and guard's van parked right on switch No. 4. (6.) car with concrete pipes load brought to track 3a.

p. 197-2: Oh that looks tight. The sign partly visible behind the loco is the limit of shunting sign. Will that be far enough to clear the point no. 16 so that it can be changed for the goods shed track?

p. 198: No, that was not enough. Obviously, the sign had to be passed, but of course not without previous agreement of the dispatcher.

p. 199-1: Oh boy, that was some act to get this cut of wagons into the goods shed siding! But now the van with NWE owner marks has been positioned at gate C of the goods shed.

p. 199-2: Second last act in the Sonnenberg theatre. The last two wagons have been parked on the point no. 4 so that

the two three plank open wagons with their load of concrete pipes can be set out on track 3a, the transfer track for the St. Andreasberg branch. The next freight train to St. Andreasberg will take them with it.

p. 200: The 0-10-0T trundles downgrade through „Eselsschlucht“ (donkey ravine) with closed throttle approaching Schluftherütte. the trapeze entry sign which can already be seen. Photo by Jürgen Hans

p. 201-1: The imaginary station master of Schluftherütte has set the points so that Ng 235 enters the station on track 2. The waiting passenger indicates that an oncoming train is going to arrive soon.

p. 201-2: The loco of Ng 235 has entered the foundry siding with a cut of wagons while the open wagon picked up at Oderteich and the guard's van await its return on track 2. Yet, before the two cars can be planted, the car that's standing there has to be removed.

p. 202-1: The O 256 is only parked on the outbound track so that the two open wagons with coal and foundry sand can be backed into the inbound track.

p. 202-2: Looked at from a balloon the shunting scene in the foundry looks like this. The O 256 still sits in the outward track where it is wrong and a covered wagon on the inward track where it is wrong, too. What's up with the shunting master? Did he park the covered wagon on that track, too?

p. 202-3: Done. Now it is all clear: the wagons for the sawmill in the following station form a cut now with the covered wagon at the rear. The train can now be reassembled including the cars on track 2. It will then be ready to leave for Schluf and may ask for permission to proceed.

p. 203-1: 15 kph is the speed limit in the village road of Schluf, but most engine drivers run their trains at an even slower speed. Ng 235 rumbles along the street at walking pace. Fortunately no horse drawn cart is coming along and now girls' band\* either. The first three wagons are for the sawmill, followed by the van destined for the team track.

\*explanation at p.232/233

p. 203-2: After the arrival at Schluf and after uncoupling the last two vehicles, the van can be shoved into the loading track together with the cut for the sawmill. Then the sawmill cut will be pulled out again while the van remains in front of the goods shed.

p. 204-1: The conductor of Ng 235 has this track plan of Schluf like a photograph in his mind. That's why he could pre-sort his cars correctly already in Schluftherütte.

p. 204-2: The loco has to run around the three wagons of the cut in order to push them into the sawmill track.

p. 204-3: The engine has run around all cars in order to shove them onto the sawmill track. The log cars, the covered hopper to be loaded with sawdust, and the open car belong there – yet, this green car sitting there, must be put out of the way first.

p. 205-1: The green open wagon that was barring the entry to the sawmill track has been put out of the way and is now parked between switches 3 and 4. So finally the loco can push the three wagons onto the sawmill track.

p. 205-2 and 3: The sawmill has finally got its cars and now the engine returns with the two other ones to pick up the parked green open wagon. The brakeman is just releasing the handbrake.

p. 206-1: Suddenly a train, P 84, is waiting at the trapeze sign, requesting entry to the station through a whistle blow. That means that the shunting crew must clear the switch to the passing track in a hurry. After that, signal Hr 2 „Approach“ can be given.

p. 206-2: There it is, the P 84. And indeed there is somebody who wants to board. The steam engine will have to wait for the motor coach to leave the station before it can run around its train again and then head for Sieber.

p. 206-3: That's the pathetic rest of our proud Ng 235. With just two cars plus the guard's van it is about to enter

Stumpfer Stein Tunnel and will soon arrive at Sieber terminal station.

## **Chapter 12: Königskopf quarry**

p. 208-1 and 2: After a trial positioning of place holders for the station building and the goods shed I became aware that the station was encircled by high mountains and I had to plan an access road which would have to climb to the top of the ridge. It had to become steep, very steep!

p. 208-3: Here the course of the road has been positioned in form of a cardboard strip, climbing with a stiff 20% gradient.

p. 209-1: After fixing the cardboard road with braces and contour ribs and forming the landscape with screen wire a scenery coating of plaster is added.

p. 209-2: The laboriously built road and the ridge are torn down again without mercy because the whole thing turned out to look more like in the Alps than in the Harz. Instead a quarry will be constructed behind the station tracks with several elevated levels giving more head clearance under the layout for the St. Andreasberg branch to be built there.

p. 210-1: The old crusher at the Wurmberg loading site of the Südharzbahn was more or less a prototype for the one on the layout.

p. 210-2: Without the quarry with its stepping up levels Rehbergergrabenhaus would not have fitted underneath.

p. 210-3: The shell of the crusher was built of plain plywood. It fits on a socket and can easily be lifted off.

p. 210-4: While the track plan remains unchanged the station is now completely redesigned with the quarry behind the tracks, the stone crusher will be placed 13 cm higher than the original station building.

p. 210-5: The wood plankings of stone crushers were never painted. This siding shall look like an unpainted weatherbeaten structure.

p. 211-1: The form of the quarry is roughed in. Rock will be cut here on three levels.

p. 211-2: In my Harz-forum I asked for tips how to acquire model windlasses for the quarry and one member showed this photo and asked: „Something like this?“ When I said yes he sent it to me as a gift. That was the beginning of a wonderful friendship because Jürgen, that's his name, came to visit the BAE, fell in love with the quarry and offered to take over the finishing and detailing.

p. 211-3: I am rather good in forming landscape but others are better when it comes to colour. Michael for instance who is giving the charming reddish tint to the quarry, very similar to that one of the original Wurmberg quarry near Braunlage.

p. 212-1: The quarry is eating up the hill on different levels. Some attractive area for detail lovers, isn't it? In any case Jürgen the winch donor saw it and it dawned on him that here was his future activity area.

p. 212-2: As a professional designer and developer Jürgen is used to start with an exact plan before he begins to work. So he took measurements of the quarry scene and drew this plan.

p. 213-1: A typical Harz quarry derrick in the Knaupsholz quarry near Schierke on the Brocken line. (Collection of J. Steimecke)

p. 213-2: The shape and the colour of the big quarry are already there. Now Jürgen is adding details and crushed stone. But that is only the beginning.

p. 213-3: Not far from Steinerner Renne station near Wernigerode an old quarry derrick has been installed as a show piece including the once steam driven windlasses.

p. 213-4: The partially deleted wire mesh of the fencing lets us see the different levers of the driving mechanism.

p. 213-5: Construction drawing of the driving mechanism, drawn by Jürgen.

p. 214-1: First trial positioning of the derrick produced by Jürgen. Like with the original the boom is moved by turning the main mast pulling the cable around the sheave at the foot this way or that way.

p. 214-2: The essential parts of the driving mechanism ready to install.

p. 215-1: Jürgen built a rather exact replica of the derrick driving mechanism at Steinere Renne including the vertical steam boiler.

p. 215-2: Some examples of the details Jürgen built at home for the Königskopf quarry on the BAE. The turning plate was built from original Decauville plans.

p.216-1: Despite the use of pneumatic drills the principal stone breaking down work is still done by hand with sledge hammer and an array of wedges. A backbreaking job.

p. 216-2: The entry to the crusher is only possible from the uppermost level so that material broken out at a lower level has to be hoisted up.

p. 216-3: Behind the crusher building Willi Dreyman has his sharpening shack where he sharpens wedges and other tools.

p. 217-1: The construction drawing of the crusher shows a much steeper chute than a prototype would have. That is necessary because model ballast is much more difficult to be put into motion.

p. 217-2: Because of the high stone wall the chutes had to be mounted into this instead of into the crusher wall.

p. 217-3: The ballast bin built by Jürgen is set into OOK's crusher building.

p. 217-4: Jürgen installed bowden control cables for the raising and lowering of the chutes and for the shutters.

p. 218/19: Eight out of the fourteen men quarry crew are visible in this telephoto shot from the top of the Devil's Towers. The others are doing their jobs in the interior of the crusher building.

p. 220: There is no electricity in this backwoods quarry, so pneumatic power rules. The workers are modeled after photos from the Wurmberg quarry of the Südharzbahn.

p. 221-1 and 2: After filling the bunker with ballast Jürgen shows the other club members how he operates the chutes and the loading mechanism of the crusher and lets the ballast flow into the hopper wagons.

### **ch. 13: Schluff im Siebertal**

p. 222: Everyday life in Schluff. Mr. Zietz, the village's only grocer has installed a petrol pump in front of his house, following a wish from the mayor. That's very practical, but one should not be in a hurry when Mr. Zietz has to serve customers in his grocery.

p. 223-1: A typical Harz village, Wieda, extending along a street: The Südharzbahn track is in the foreground.

p. 223-2: June 14, 1992 I wrote this entry in my BAE-diary. Today I am amazed about the maximalist ideas I had at the time. But its essence has become reality.

p. 224-1: On the BAE I layout the radius of the track in the main street had to be reduced to 90cm in order to fit everything together. That was not really the idea of my diary entry.

p. 224-2: Not more than three houses lined the village street, yet the impression of a Harz village was there.

p. 224-3: House no. 1 was the upper storey of the WALDHEIM station building from Addie. I had simply replaced one window by a door and put the building onto a plaster foundation.

p. 224-4: That's me in a holiday flat building another house for the village street of Schlufft from raw polystyrene and Evergreen board and batten siding. The houses in the background are not Harz- but Grisons-style, as the holiday flat was at the Albula line of the Rhaetian Rys.

p. 224-5: One cannot recognize that house No. 2 on Schlufft's main street was built in Switzerland. The style is very Harzish, although there isn't a specific prototype. The windows are from the line of Addie. Fortunately I did not have to pay customs duty on the house model when reentering the European Community (of which Switzerland is not a member). Now the model has been placed on its foundation in Schlufft.

p. 224-6: A humble lumberman's hut, the house no. 3 had been placed on the main street of Schlufft on the BAE II layout, but now it has found a place on the diverging forest road on BAE III.

p. 225-1 and 2: Twice as much space not only for the whole BAE but especially for the village street of Schlufft, which is now visible from the inner side of the curve, much better.

p. 225-3: Trial and error with a dummy cardboard road in order to find the best position according to the graphic above.

p. 226-1: This building in Wernigerode-Hasserode caught my eye each time I drove into Wernigerode coming from Braunlage. Thus I already had several pictures of it when I was looking for prototypes for the local grocery of Schlufft.

p. 226-2: The grocery looked like that when I received it from the builder who had put a lot of effort into it. The shop window has an inset that can be pulled out and replaced with a shop window display.

p. 226-3: It's typical for the Harz region that even humble houses feature elaborate doors. These two may be called masterpieces.

p. 227-1: First experimental positioning of the four then existing houses plus the transformer substation in their undecorated environment. That's how I envisioned the main street. The track has still to be nailed down onto the plywood in front of the houses.

p. 227-2: HFy is creating grooved rail track in the village street by nailing a code 83 in groove distance against a normal code 100 rail. After this the road will be paved. The houses are still positioned provisionally.

p.227-3: Horst from Oldenburg is putting his stamp onto the BAE, literally. He is forming cobble stones with a selfmade metal stamp.

p. 227-4: Right behind the houses of Schlufft the forest covered Harz mountains begin, with real trees in front, then more painted onto the backdrop.

p. 228: That's how the finished grooved track in the cobblestone street looks. When the little green Hanomag rolls along on it it rumbles quite a lot. In comparison the trip by train is much quieter and smoother.

p. 229-1: Ah, now we know who is the owner of the Hanomag: Mr. Kohlrusch, the mayor. We could have imagined that, the only motor vehicle in the village! There the mayor is standing on his balcony looking towards his sawmill at the other end of the station.

p. 229-2: In Bad Lauterberg, where I lived as a youngster, stands this pretty frame house that I found adequate for the mayor of Schlufft, Mr. Kohlrusch.

p. 230-1: The first version of the wainwright's shop building looked more like a blacksmith's or a foundry and was

thus rejected.

p. 230-2: Instead I built a new one from plain styrene with door and windows from ADDIE. There is no specific prototype but I had different carpentries in the Harz region in my mind when drawing plans for this building.

p. 230-3: The wainwright's shop leans against the slope of the hill in order to reserve enough space for a works yard. The small shack to the right represents, so to say, the outer limits of the village. Right after that the town sign follows.

p. 230-4: Workers at the Apel wainwright's shop are very busy but not all the time. Here Mr. Apel has come with his clip board in order to discuss the next jobs. A good opportunity for those not involved to have a short chat.

p. 231: The diminutive chapel at Elend is available in H0 scale from Busch as a laser-cut kit. Initially I had in mind to build a 1:45 model for Schlufft. But a try with a cardboard dummy told me it would tower the village too much.

p. 232/233: „When cowherd Walter Ederleh returns from the meadow in the woods with his girls' band\*, a tricky situation can arise when a train and maybe even a cart meet in the village street.“ That was the legend to the picture on p. 72 in the BAE II-chapter.

How much the pictures are alike, with the only difference that the cows are not coming back but going out to the woods as can be judged from the cow coming out of the yard gate and joining the herd.

\* „Damenkapelle“, engl. Girls' band, is a typical Harz byname for a herd of cows because of the music from their cowbells. These bells were composed in a way that the cowherd would note a lost cow by the missing tone.

p. 234-1: Are there any „lovely“ details here? The red letter box is bought (from the Paulo line) and put there because it was like that in reality at the time.

I put a special effort into producing the „salted herring“ sign that I designed, cut out and manipulated on top of the barrel in the shop window. The ornate door has been detailed not by myself, but by Kurt Karpinski from Worpsswede, mentioned on several occasions.

p.234-2: The warrior memorial erected by the Navy society of Schlufft is a very special feature in the Schlufft village street and it does have a prototype: the Navy society's memorial in Bad Lauterberg.

On this older picture the anchor, the wreath and the Eagle visible in the big photo on the preceding pages are still missing.

p. 235-1: A very special detail: one humoristic member of the BAE-Club glued a condom dispenser onto the wall of the grocery while the boss was off preparing coffee and posted a photo of it in the Harz-forum asking: Why does the lady burst out: “But that can't be true!?”

p. 235-2: Wow, Mr. Kohlrush has got a new car, a Mercedes 130. He proudly answers the questions of Schlufft's elderly citizens: an engine with 1.3 litres displacement and 26 HP and an unbelievable top speed of 94 kph. Kohlrusch has sold his little Hanomag to the innkeeper of the Waldschänke in Oderteich.

p. 236-1: An awkward meeting at dawn. Old mother Füllgrabe had gone into the wood very early in order to pick up some firewood - without permission, of course. Bad luck that old head forester had his morning walk exactly at the same time. What can he say, given they are distantly related?

p. 236-2: Heini Heitmüller from Sieber comes twice a year to Schlufft with his self-propelled bandsaw to cut firewood. On the road this would be a lengthy trip given the vehicle's max. speed of 5 kph. But there is a silent agreement with certain BAE officials that Heini and his bandsaw are transported for free by train and in return he cuts the firewood of the stationmasters of Schluffterhütte, Sonnenberg and Oderteich.

p. 237-1: When the bandsaw is there everybody has to lend a helping hand, because Heini doesn't do „anything but saw“. Bringing the raw logs to the saw and taking the cut wood away is up to the client.

p. 237-2: From time to time the rumble of a passing train is added to the shrieking of the bandsaw. But Heini continues his work without even looking.

## ch. 14: Scenery

p. 238: A view from Mount Rehberg across the Jordanshöhe towards Stöberhai. That's Harz at its best. Is it possible to reproduce in a model what this photo conveys?

p.239-1: The railway is the only witness of civilisation, all the rest is pure nature, landscape, countryside (if you overlook the dirt road). It is a difficult challenge to recreate this impression on a model railway layout.

p. 239-2: Thin flexible MDF board is a very good base for a backdrop. In this photo a new piece of MDF is added to an older one from the BAE II.

p. 239-3: The horse painter has changed subject and is painting sky and clouds onto the backdrop above Königskopf quarry. When this is done she'll add forest in the lower parts.

p. 240-1: OOK at one of his favourite jobs: to apply plaster onto screen wire, at least in the past. Today he prefers styrofoam as scenery base.

p. 240-2: At the curve around Königsberg the rough form of the landscape is built of layers of styrofoam which are then covered with a thin plaster coating.

p. 240-a: A casting mould for a tunnel portal reinforced with a tile profile. The wooden borders are screwed to the base and can be taken away for dismounting.

p. 240-b: Plaster filler of medium viscosity is poured into the mould. Too much water gives a brittle result.

p. 240-c: The plaster is set but still too soft for being taken out of the mould.

p. 240-d: After carving the stones the tunnel portal is incorporated into the scenery.

p. 241-1. OOK at another typical job: to scribe mortar lines into plaster walls. A layout with strong relief needs a lot of them.

p. 241-2: The horse- er, backdrop painter has come again to the BAE and is creating a forest in her incomparable way. On the covered area in the foreground there is a forrested area with a lumbering scene to be built.

p. 241-3: Michael too has his typical jobs and movements: He is scattering ground foam onto the landscape.

p. 241-4: Behind these spruces at its edge the forest looks black and deep. After the melting of the snow the grass is short and flat, so that fibres are not needed to imitate it.

p. 242-1: To create a typical forest ground, no fibres are needed either, because from a distance of 15 m (33 cm in 1:45 scale) no blades of grass are noticeable.

p. 242-2: A lonely track, apart from that just countryside. Between Achterman's Gap and Königskopf quarry this ridge is more than four metres long and 90 cm high. It has to be forrested or more than a hundred stumps have to be set in.

p. 243-1: This is the triangle C in the graph to the right, a block of styrofoam, positioned directly against the backdrop. The front side will be painted black, too. The surface may be inclined mounting towards the backdrop, and small mass production spruces will be put on top.

p. 243-2: Not more than 18 spruces are clustered here on 30 cm in order to fake the forest edge on the small space behind the Königsberg curve whose development was shown on pages 240/241. In the graph below in is the green patch marked A.

p. 244-1: Faker than fake: Not more than two rows of high spruces cover the sight onto the styrofoam block with the small second grade spruces on top.

p. 244-2: With this picture with the very deep forest (just 10 cm) on the Butterberg on the BAE II layout we come to the next issue: the golden fur of the Harz.

p. 245-1: In autumn the sort of tall prairie grass which covers the non wooded surfaces of the Harz is golden and undulates attractively in the wind. Someone who wants to recreate the Harz in autumn can easily do this with fake fur. Not so on the BAE layout where we have early spring.

p. 245-2: In spring after the melting of the snow the grass lies or hangs flat on the ground or slopes and has lost its luminous colour. As this is the season if the BAE, efforts must be undertaken to represent this kind of grass in this form.

p. 246-1: The „Witch-Kitchen“ above the Oker valley is an example of the so called woosack-weathering so typical for the Harz.

p. 246-2: Otto rock between Hohne-ridge and Steinerne Renne has not been christened after OOK as one might think but after the Prince Otto zu Stolberg-Wernigerode. with a heigth of 36m it's an impressive woosack tower made of granite.

p. 246-3: Seeing this carload of sacks of wool being shoved into the wool washing by an Aachen street car one understands the expression woosack weathering at once.

p. 246-4: Free hand working with plaster is a messy job. That's why the workbench looks like that during the making of the Devils Towers with a photo of Otto rock as a reference.

p.247-1: One of the two towers of the Schierke Firestones on an advertisement of the thirties. The bigger tower is 23m high.

p. 247-2: The Schlufft Firestones from the BAE II (see page 73) have been implemented into the BAE III and are called now Devil's Towers. They have got company from the Witch Wall, a rock formation similar to one on the Brocken.

p. 248-1: The construction of roads leads to cutting off parts of hills. If the rock is solid, more or less vertical walls remain like here at the federal road 27 along the Oder resevoir. If not, stone or concrete walls have to hold them at bay.

p. 248-2: Running down from Harzgerode to Alexisbad this 2-10-2T passes a vertical cliff that has been formed by blasting the right-of-way for the railway line.

p. 248-3: The rock formations of Achtermann's Gap are a continuation of those from p. 250.

p. 249: The stone material that has been broken out during the construction of the tunnel has been used for the tunnel mouth wall but not for the stone brigde in the foreground. Three spruces had to be chopped down for photography's sake.

p. 250: One spruce from Noch (to the left) and three from Busch are 25, 12, 20 and 17.5cm high. The fronds of the Busch-spruce are neatly detailed but at least for H0 they have too little volume and are too regular. The Noch spruce is better in this, but the lower fronds are going up instead of hanging down and the top is somehow wrong. Tries to bend the fronds up or down are likely to prduce fractures.

p. 250-a: The BAE ballast is harvested at a relatively quiet spot of the Bode stream near Braunlage. It is shoveld into a bucket with holes so that it can easily be drained, then spread on the balcony of the holiday flat in St. Andreasberg (hence the name Braunlage-Andreasberger Eisenbahn!) for drying.

p. 250-b: Then the material is put into a baking oven with air circulation and dried at about 200° Celsius. After cooling (open oven door) the ballast can be sorted into different grain sizes by sieving with a set of sieves.

p. 250-c/d: As the ballast is harvested literally at the same site as the original Südharzbahn ballast, the colour mix is absolutely authentic. Stone ballast is applied dry and distributed with a small brush, sprayed with wet water and then thinned glue (not the water-insoluble variety) is applied. 24 hours later, the ballast is solidly fixed and looks dry again.

p. 251: On the BAE (0m gauge) a goods train rumbles downgrade through Achterman's Gap and then passed behind big spruces. Big ist not meant relatively here but absolutely: they reach 40cm height, not quaint even in 0-scale. With the 20cm high Noch spruces in the background a forced perspective is created.

p. 252-1: Mr. Meyer built his spruces elaborately like this: he soldered twigs of thin wire to branches of thicker wire and scattered the whole thing with „foliage“. These elegantly curved fronds were typical for his spruces. Each tree was a unique item and could not be cheap.

p. 252-2: The little grove above Königskopf quarry still is formed entirely of spruces à la Meyer. On p. 251 one can read how a forest with depth effect can be created with relatively few Meyer spruces.

p. 252-3: At that time (1995) Mr. Meyer's spruces were the best to be had and put on a 1:45 layout with a Harz theme.

p. 253-1: Brush handles are cheaper than wood rod and do not need to be filed conical. The bristles are put on the layout as weeds.

p. 253-2: From the Grünig needle-mat that comes in pieces of 35 x 45cm, stripes of 3 to 6cm width are cut depending of the size the fronds shall have. From these stripes triangles with blunt ends are cut.

p. 253-3: Small holes are drilled into a brush handle and branches of 1 or 1.5mm isolated wire are shoved through them and formed in a way that a branch hangs out at both sides of the trunk. A drop of superglue fixes them.

p. 253-4: These spruces are made from brush handles, but only partially. The uppermost part is a mini spruce from Busch or a 20cm spruce from Grünig (far right).

p. 254-1: Grünig coniferes have a realistic root web which is formed from the drilled wires of the trunk. They can be bent and adapted to slopes and uneven ground. The center pin is for grafting the tree onto the brush handle.

p. 254-2: These roots can be undrilled and redrilled to form short branch stubs for the transition area between the brush handle and the grafted trees on top. A long piece of wire drilled around two of these branch stubs gives two long branches.

p. 254-3: Now it is possible to fabricate real branches in the transition area. The pieces of Grünig needle mat (see 253-2) are folded roof like and then glued to the wires.

p. 255: The highest spruces between Sieber and Braunlage (on the BAE layout) have a height of 46 and 49cm respectively. Looks impressive but converted to real measurements that is only about 22m. But the „trained“ eye of the modeller sees them as giant.

## **ch. 15: Rolling stock**

p. 256-1: After Wilfried Link's early death the T 15 (foreground) came to the BAE and was reunited with its twin, the T 12 waiting in the background. Both motor cars were built by Wilfried and OOK after a Südharzbahn prototype. The T 12 was the very first motive power on the BAE and was called T 02 on the BAE I and II layouts.

p. 256-2: The main part of the T 02 is already assembled, only the narrower end parts have to be added. Beside the halfready roof the roof template.

p. 257-1: The diesel-electric T 02 of the SHE (Südharzbahn) had a 2nd and a 3rd-class compartment plus a baggage room and could be a complete train in itself. It also could pull a couple of cars, and that's why it was the ideal starter for a model railway.

p. 257-2: In the old narrow gauge club FSKB this was called the wedding look: completely in white polystyrene. A couple of days later the car body blushed under the air brush spray.

p. 257-3: In the tiny workshop under the BAE II layout the carbody of the second T 02 model stands in front of the ready first one. When the second one will be finished they won't see each other for the next fifteen years.

p. 257-4: This van was a stroke of genius of KS-Modelleisenbahn in Waldlaubersheim. The car body was of plywood, the door and the vertical profiles with its bolt heads were cast in white metal and placed in milled slots. A true scale model of a typical Harz wagon.

p. 258-1: In march 1974 I could shoot these two veterans in Alexibad, both out of service already. To the left a a rebuilt mineral wagon from the SHE, the other one a so called bed frame wagon of the GHE. I would never have dreamed that 0m models of both of them would be available some day.

p. 258-2: The same types of wagons in 0m gauge, built from AHA-kits.

p. 258-3: The original SHE hoppers, to the left a builder's photo, to the right an 0m model built by Emmermacher.

p. 258-4: The standard Magic Train transformation: The car body is cut in four pieces and then glued together with some joint fillers 6mm longer and 7 mm broader. A door from a FRAMOS 0-scale wagon replaces the original narrow door from Fleischmann.

p. 259-1: All five vans are built from the same type Magic-Train wagon. From the left: 1. lengthened and broadened, new door; 2. no changes, only new colour and lettering; 3. lengthened, new door, platform taken away; 4. like 3. but also broadened and a cut out in the roof for brake man; 5. lengthened, window and platform door added.

p. 259-2: Butchered parts of a Magic-Train wagon frame are glued together to form a new wooden mineral wagon. The white polystyrene makes the regauging visible. Chief butcher HFy is at work with the special glue from Ruderer.

p. 259-3: One of the so called donkey back mineral wagons of the Kerkerbachbahn. To the right an 0m model built from different Magic-Train parts plus some bits of polystyrene.

p. 259-4: The BAE owns seven units of these five plank wagons, resin castings from a shortened MINEX-wagon.

p. 259-5: Once they'll have got the diagonal braces and steel doors like these, they can be relettered for SHE.

p. 259-6: A self-made drawing of the donkey-back wagons of the Kerkerbachbahn. The prototype, too, was „home made“ by the railway to no standards. Ideal for scratch builders.

p. 260-1: The GHE wagon is an AHA product, the open one a bashing of two Magic-Train low boards with regauged 0n3 archbar bogies, free lance but very similar to a certain SHE wagon.

p. 260-2: From garish to pleasing: The three parcels wagons of the BAE (to the right) are made from banana-wagons of the Faller Hit-Train line.

p. 260-3: Three correct Harz coaches (from the left): one „Eisfelder“, one HAWA and a SHE with barrel-shaped roof. The HAWA is from Weinert, the other two from the forge of Axel Hartig. The barrel-roof car was mounted and painted by Daniel Melzer in Blankenburg.

p. 260-4: Between two mail-baggage cars built from AHA brass kits an unfinished project, a so called coffin-lid coach of the NWE. The bogies are still not the final ones.

p. 261-1: Simulated start. The 0-10-0T would pull this ten car train easily alone. But the mallet that has be assigned as helper still has no well working mechanism. That's why the start is only simulated.

p. 261-2: These heavy steel coaches from Wismar were nicknamed coffin-lid cars. At least two of them shall be put in service on the BAE as direct coaches Wernigerode - St. Andreasberg. But some water will run doen the Sieber

until this happens.

p. 261-3: The Harz Baryte Industry (HBI) owns only one coach, the so called team car. It is a model of a GHE car made from an AHA kit, mounted and finished by Daniel Melzer.

p. 262-1: All six steam engines on the BAE - the little mine loco included - have gathered here in front of Königskopf quarry for a press photo. Two of the 0-10-0Ts are brass models with sprung axels, the third one has a plastic body and is not sprung.

p. 262-2: Stefan tries all his mechanic and electronic tricks to give some better running qualities to the little 0-4-0T.

p. 263-1: Yes, that's a genuine Harz mallet coupled as helper in front of the Ts5. It's prototype is the mallet 99 5906 of the Harzquerbahn, built by MF Karlsruhe. It is a permanent loan of a member of the BAE-Club who has bought it on a second hand market.

p. 263-2: Ten spoke drivers with 1 metre diameter cannot be bought. Ulf Haußen fabricated a special set for this loco.

p. 264-1: What Ulf Haußen has produced here just looks nice: He fabricated a completely new brass mechanism with equalized axels. The front frame can swivel and pitch freely.

p. 264-2: The BAE/HBI roster shows very few vacancies which have to be filled. Time will accomplish that.

p. 264-3: A short time before the deadline of this book the mallet came to the BAE in order to execute some trial runs. The program was to pull 150 tons on 3.3% gradient. After some sandbacks had brought the loco to the axel load of the Ts5 this could be accomplished.

## **ch. 16 Life ain't no Ponyfarm**

p. 265-1: Oh it should have been an especially dashing run: The Hochharz-Express should have passed Schlufthütte without stopping. And then this! Emergency stop and rerailling instead of shooting through the station. What a pity! Definitely no ponyfarm.

p. 266-1: Is it the point or the wheelset if something derails? It's the same question each time.

p. 266-2: Oh, that doesn't look good. Pliers, two gauge checks and a box of rail spikes, that can only mean that several derailments have taken place on this point. Now the gauge has to be checked and corrected in a hurry.

p. 267: Oops, shit happens! As OOK wrote in his BAE-Club newsletter (blue box to the left): „... and then the car sits in the ballast.“ It looks like that when it has happened again. The green mail van could not be held on the rails. A lot of effort and tenacity will be necessary to minimize such accidents.

p. 268-1: Two point-builders at work in Oderteich. After the sleepers have been glued to the baseboard and the glue has set they are sanded and the dust is vacuumed off the point is assembled bit by bit and nail by nail. Precision and patience are required here, for many a reason to keep away from 0m.

p. 268-2 (bottom): The axle of a wheelset is being pressed into the slot of the wheelset gauge. If the wheels hug the gauge flat and tight everything is ok.

p. 268-3: An American On3 archbar truck regauged to 0m. The wheelsets are regauged Romford axles again. Is the gauge correct? That is checked with a custom made stainless steel wheelset gauge.

p. 268-4: To the right an original Magic-train wheelset. Cute, but too small for 0m. To the left a Romford 00 wheelset with 16mm diameter regauged to 22.2 mm.

p.269-1: No crew member should forget that „0m ain't no ponyfarm“ as the sign says. And everybody knows what that means: to correct gauges here and there, to check and adjust wheelset gauges, optimize points and more. Everything that doesn't kill us makes us stronger.

p.269-2: A jig-saw is ideal for forming points.

p. 269-3: An typical example for the good enough philosophy: The MINEX 0-6-0T: no superdetailed model at any rate, not even a Harz prototype but very similar to one. Awaits superdetailing with separate piping, lamps, correct valve gear ans so on, but in service like it is until further notice.

## **ch. 17: technical details**

p. 270-1: Y-sockets are used as plug-in points for handhed throttles. The backside of the Y is used for networking.

p. 270-2: Still unlabeled the patch-panel with plug-ins A-H is hidden under the St. Andreasberg branch - but accessible.

p. 270-3: This loconet distribution plan shows the cascade-configuration ot the network. A plan like this ist posted at both patch-panels and makes debugging easier.

p. 270-4: Still not in its definite state the DCC center with the intellibox and the bus distribution panel. The mainline is electrically divided into nine sections, the St. Andreasberg branch into two and the mine branche is a separate section, too.

p. 271-1: The FRED throttles in the original FREMO-version with defined 0-position of the rotary knob and a toggle switch for reversing is easily held and operated single handed.

p. 271-4: A possible form of OOK's desired single hand throttle (steam version): steam throttle (linear) and separate brake actuator with three positions: brake, release and neutral. Only the most essential elements are on the main surface (tactually discernible) and eventually some more at the sides. No display, no keyboard. The definite form should be a lot more rounded than in the graphic.

p. 272-1: Some of the mineral wagons still sport the first BAE couplings with a real center buffer and a clevis like a Märklin coupling.

p. 272-2: Experimental state of the new coupling with a centering spring and a keep down spring

p. 272-3: The asymmatric tension lock coupling allows an extreme sheer movement, very important with bogie cars.

p. 272-4: Horst produced the first experimental couplings the hard way with a jig saw from thin brass (a), in (b) he smoothens parts already eched in small quantities and in (c) he assembles a coupling in a jig developed by himself.

p. 272-5: The first new coupings are mounted and still must (a) be stained and (b) prove their reliability. The similarity with the Fleischmann coupling is obvious.

p 273-1 and 2: Hot moments on the BAE. In the photo to the left Jürgen is soldering the screw to the coupling that will hold it in the buffer beam. But before this can be done the old couplings have to be removed. That can become very tricky with a vehicle built completely from brass. Ony the pin sharp flame of a gas torch can avoid the disassembly of the whole thing.

p. 273-3: A bit overscale but easy to assemble and to operate: the switch throw from the Jewo line.

p. 273-4: Original graphic from Mittelpuffer nr. 1/1993: an underground micro-switch to change frog polarity

p. 273-5: A switch throw from Weinert gets a longer finger to actuate the underground micro-switch.

p. 274-1: The three actuation knobs of the rods by which the home signals of Sonnenberg were operated. Practical but not verly stylish.

p. 274-2: Only three points of the western end of Sonnenberg are operated from this ground frame: point 16 with the

lever to the right (still unmarked), and points 17 and 18 with the lever in the centre. The red lever is for the home signal. In the background the operating instructions for the alignment of roads.

p. 274-3: My trial effort to install a mechanical transfer of the lever actuation to the points and the signal failed because the joints at the cranks were not precise enough.

p. 275-1: After soldering wires to the contacts of the jumpers in the clock generator this small clock controlpanel could be integrated into the big dispatcher's trackpanel.

p. 275-2: The neatly populated printed circuit board of the Härtel clock generator. The red circles enhance the two jumpers by which the cadence and the fast forward speed can be controlled. Their contact had been connected by wires with the clock controlpanel in order to make control easier.

p. 275-3: One of the ten slave clocks of GDR production could be acquired at ebay. Only one of them was not working.

p. 275-4: Analogue clock with BAE style encasement, panel version mounted in Königskrug.

### **ch. 18: names and signs**

p. 276-1: Here it is clear from the beginning where one is: in Schluftherütte, even if there is still not much to be seen of it. This makes sense also on smaller layouts with only two or three station, mainly for identity.

p. 276-2: The signboard with the cute slogan is no invention of the layout builder but a copy of the one at the real Königskrug inn. The slogan says: „If you are visiting the Harz region, then stop by at Königskrug inn“, this in a poem like rhyme.

p. 276-3: The photo not only tells us that the bunker building is only a couple of centimetres thick but also the name of the pit and the concern it belongs to. „To the pit“ would not be sufficient as destination on a way bill because there are two pits on the BAE. Furthermore we learn the name of the tunnel by which trains enter the layout room when coming from Braunlage.

p. 277-1 (bottom left): Before there the war there was a lignite works named Hercynia at Blankenburg (Harz) which also produced briquettes. The signboard at the goods shed of Schlufth is a reminiscence of the forgotten regional name.

p. 277-2: The prototype of the little station building of Schlufth is the one of Kaiserweg at the Südharzbahn. and even the style of the characters of the lettering was emulated. The waymarker indicates the direction of the footpath to the forester's lodge shown on p. 32.

p. 277-3: Even without the sign with its vintage characters of the thirties one would be able to see that this is a builder's merchant. But it isn't any builder's merchant but this special one. And the telephone number of Braunlage adds a regional touch.

p. 277-4: Is there a better way to convey the name of a town or village than by the official town sign? An advantage of the bigger scale is that the sign is legible, even the fine print.

p. 278-1: Drei Hörste is an operating site on the BAE but no public halt, hence no station nameboard. Only the lettering of the card rack tells where one is.

p. 278-2: In the dark interior of the sawmill the log frame saw is not very well visible. Mr. Bernhard Kohlrusch, as can be read in another chapter, is the mayor of Schlufth - and also the owner of the sawmill. His Harz typical name and the word Siebertaler convey the regional reference.

p. 278-3: The vertical panels of the layout give place for some sign stuff. The miniposter of the Feuerstein brandy stand in for a scale one which would not be legible.

p. 278-4: Signs and labels which have to do with operation shall have regional context, too. The direction sign is fan aid for orientation for operation newbees.

## ch. 19 The Wellness Club

p. 279-1: Special events shall be celebrated as and when they occur. The inauguration of Waldschänke Oderteich is celebrated in 1:1 scale also. For the model version, see chapter 7 “Stations” p. 108). Dieter (left) has brought and installed the building he had constructed, and now we have the promised beer from Hasserode – although the brewery doesn’t know about that. Photo by Rainer Schmitt via automatic release.

p. 280-1: The cramped conditions under ground also create some kind of sociability, adding to the wellness of the members.

p. 280.2: Below there’s proof of the subheading „men need caves“.

p. 281-1: „Slide show“ on computer screen one club event. Here, one member gives a report on his visit to Expo Rail in Walferdange, Luxemburg. On other occasions we show pictures of the narrow gauge railways of the Harz region, but would also discuss official issues: how to handle as dispatcher one or another specific situation? What to do when I’m stopping in front of a trapeze sign and nobody whistles me into the station?

p. 281 cartoon, left bubble: “I say MÄRKLIN, nothing else!”; right bubble: Two rail DC, you oaf, nothing else.”

p. 282-1: When the landlady offers sparkling wine, something special must be going on. In this case it’s the driving of the Golden Spike. During most of the get-togethers („Höck“ would be the Swiss wording) we typically have beer, mostly without alcohol.

p. 282-2: Group Photo with one lady (behind the camera): after the driving of the Golden Spike (in 1:45 scale) near the gateway to Sieber we have a glass of bubbly together, accompanied by some pithy words by the BAE-inventor (in red plaid shirt). Photo by Christa Kurbjuweit

p. 283-1: BAE master electronic technician Stefan from the Eifel region demonstrates the experimental circuit design of the BAER, the planned proprietary BAE handheld throttle.

p. 283-2: extreme left: The operations manager explains with the track layout of Oderteich how interaction between BAE and mine railway in this station is conceived. „If switch No. 4 is locked orderly, mine railway vehicles may move freely in that area“ and so on. Everyone pays attention, hopefully.

p. 283-3: An example of a Doodle-chart on the internet, making it very clear: no BAE-meeting will take place July 19th, but July 26th there would come seven friends, and five on August 9th.

p. 283-4: He who works hard should also eat something substantial. We do not always have as much fun as in the photo, yet quite often. And, of course, the level of the dishes is more German Railways canteen than gourmet restaurant: good and hearty.

p. 284-1: The former reference library in the editorial office of „Mittelpuffer“ (central buffer) magazine is still there and can be used by club members, even as a lending library. During breaks and after work a whole lot is going on there, leading to some expert talk.

p. 284-2: several club members met at „Café Volldampf“ (full steam) after their individual tours through the „Intermodellbau“ fair at Dortmund, in order to exchange impressions. Similar meetings took place at NUSSA, Stadtoldendorf, and „Spur-0-Tage“ (0-Gauge-Days), Buseck/Gießen.

p. 284-3: Visiting club member Michael’s (extreme left) 0e gauge layout, to have an exciting operating session.

p. 284-4: Four happy guys visiting the „Märkische Museumseisenbahn“ at Hüinghausen, in front of the freight shed. After riding the steam train, they enjoyed W. D. Groote’s guided tour through the exhibition. He is the founder of the heritage railway and also the author of the book about the „Plettenberger Kleinbahn“ and likes to offer his expert

knowledge in detail.

p. 284-5: After the Märkische Museumsbahn, the BAE club members visited a copper hammer (above) and a sawmill with its log frame saw (below) in a museum in Hagen.

p. 285-1: Often a stand-up-meeting arises spontaneously. One would indulge in discussion, philosophy, and sometimes polemic. Unfortunately, the topic here is unknown.

p. 285 cartoon: “Why we are sitting here like that? Well, OOK said we should do what we would like to.”

## **ch. 20 About playing and golden bananas**

p. 286: This banana van from the Faller Hit-Train line is rather garish than golden and utterly toylike. A photo in chapter 11 shows how a wonderfully fitting 0m van can be created from this.

p. 286 cartoon: „Needn‘t be afraid. He only wants to play.“

## **Flylead (end paper)**

left page (above): Timetable Winter 1935/36 of the BAE as it had been posted in A2 format at every station and edited as flyer in A4 format, too. Coll. of Kohlrusch, Schlufft

right page: Poster for travel agencies for an upper class public.

to the left: two original BAE tickets in Edmonson format from the thirties plus one not holed edited by the Südharzbahn

below left: Ticket from a conductor’s ticket block valid from St. Andreasberg to Jordanshöhe

below center: The BAE did not have its own ticket office at Braunlage, so that their tickets were issued by the Südharzbahn.

below: A special collector’s item is this holiday ticket from Sonnenberg to Dinkelsbühl via Nuremberg. This ticket coll. Kohlrusch, Schlufft, all the other ones coll. of B. Gabt-Forger, Hanover

left page - bottom line:

The Braunlage-Andreasberger Eisenbahn (BAE) is fictional. The „documents“ shown on these pages are part of this fiction.