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Autor: Weber, Bill
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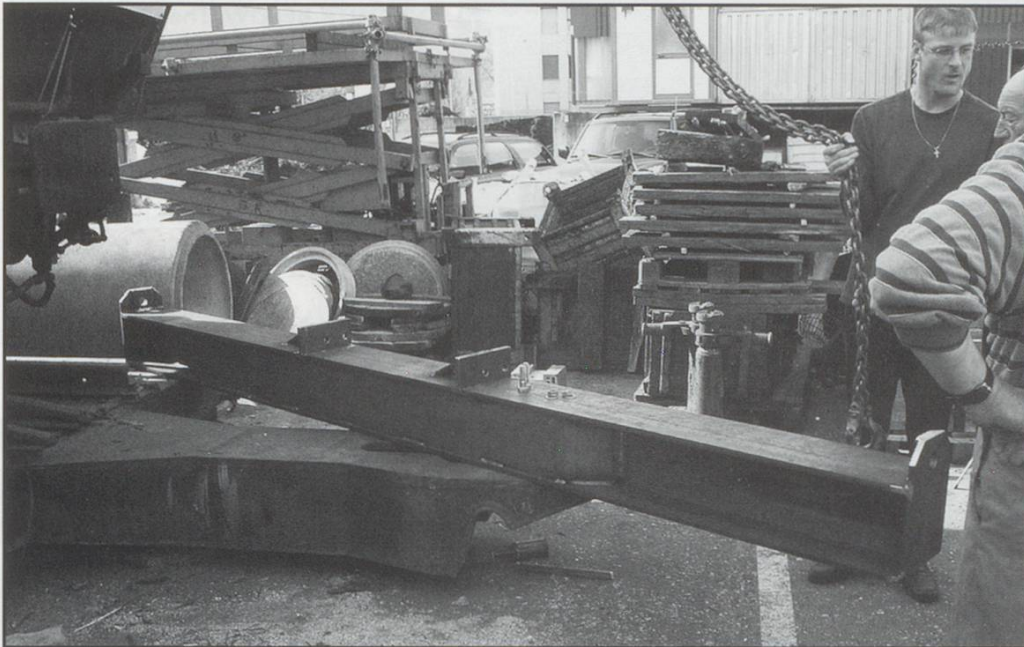
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FROM RUIN TO RACK

After a Complicated Road Journey Restoration begins on Europe's Largest Narrow Gauge Steam Rack Locomotive

In the September 1999 Swiss Express Peter Arnold wrote an article about the repatriation of the DFB locomotives from Vietnam. Bill continues the story.



One of the lifting "I" beams.

ALL THE PICTURES ARE BY BILL WEBER-MEMBER VFB EDELWEISS SECTION

These Locomotives are designated as HG 4/4, indicating that the locomotive (H) is steam powered, (G) has rack driving wheels, (4/) means it has 4 driven axles and (/4) has a total of 4 axles. The locomotive being moved was manufactured in 1930 by SLM in Winterthur, Switzerland for

The next stage in the restoration of this large narrow gauge abt-rack steam locomotive began on Thursday 22nd April 2004 with its planned relocation. It was envisaged that two days would be needed to load, transport, and unload this 35-ton locomotive. The locomotive has been in a storage yard in Altdorf since it was returned from Vietnam in the program "Back to Switzerland" in 1990. The locomotive was to be transported to and unloaded in the Dampfbahn Furka Bergstrecke (DFB) workshop in Chur.

SNCF to be used in Indochina (Vietnam). The locomotive carried many different identification numbers, Vietnam No. VHX-40-308, SLM No. 3413/1930, SNCF

Preparing to leave Altdorf for Chur





LEFT: The crane lifts the locomotive onto the trailer at Altdorf

CENTRE: The unit takes a rest at Restaurant Distel near Altmatt/Sattel

BELOW: The trailer is positioned under the hoists in the Chur workshop

OPPOSITE UPPER: The turntable built to rotate the loco in the workshop

OPPOSITE BELOW: The loco is lowered very gingerly onto the turntable

No. 708. It has not been determined what designation or name the restored locomotive will carry.

The relocation from Altdorf



began on Thursday afternoon with volunteers from several Verein Furka-Bergstrecke (VFB) groups helping to prepare the locomotive for loading. This included mounting "I" beams on the locomotive chassis, which would be used for lifting, securing any loose items, and placing large yellow advertising banners on the locomotive.

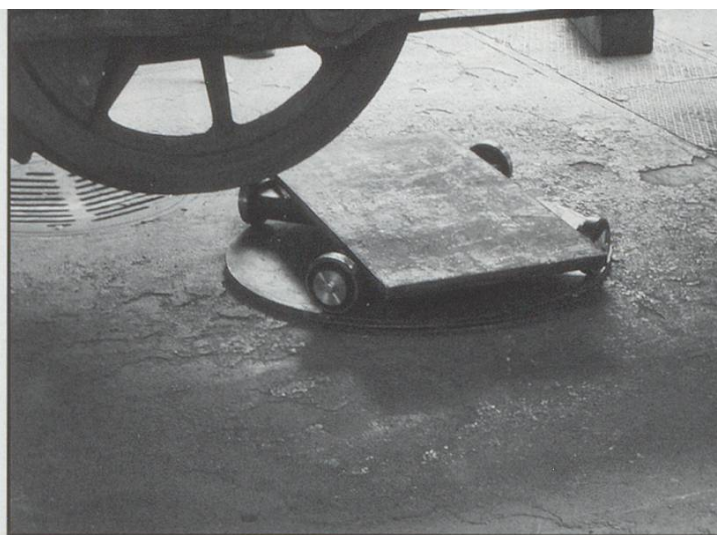
After the beams and other items were taken care of, a

large crane and a specially configured HGV and trailer owned by Wipfli AG, Flüelen arrived. The crane was set up and lifting chains were attached to the lifting "I" beams. The trailer had a section of metre-gauge track installed for the locomotive. The crane then proceeded to lift the 35-ton locomotive and place it on the transport trailer. The lifting beams were then removed, stored and the locomotive was secured with chains. During the move from Altdorf to Flüelen it was noticed that the tracks supporting the locomotive were showing signs of bending and a detour was made to the transport company's office and an additional support beam was placed under the rear of the locomotive.

The unit, trailer and locomotive spent the night parked in front of the Hotel Tourist in Flüelen. Then on Friday morning on the dot at 06:00 the convoy, with the transporter, several vehicles with supporters and helpers and first but not least, a Canton Schwyz police escort, departed for Chur.

The only delay occurred at Sisikon where roadworks had reduced the road to one narrow lane. Negotiating this took some time because of the width and length of the transport (25 metres, 75 feet).

During the trip, the convoy stopped at the Restaurant Distel, Altmatt/Sattel, and at



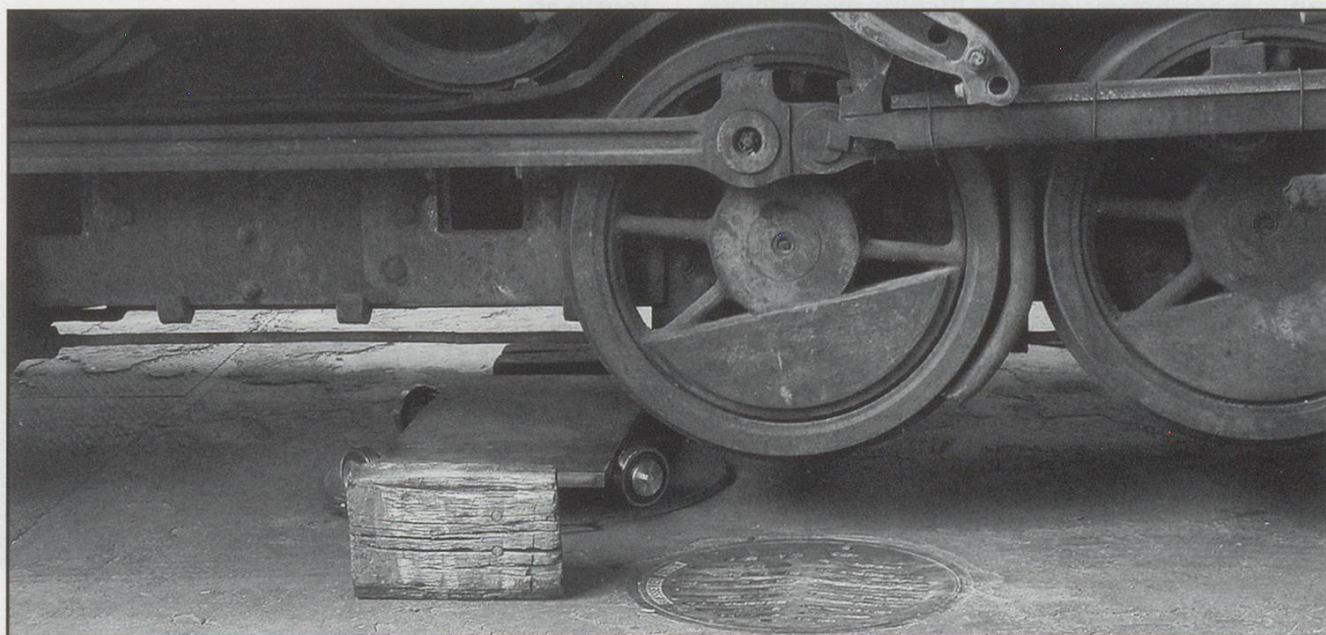
Glarnerland rest area, where we were met by TV cameras and reporters, before proceeding to the workshop in Chur.

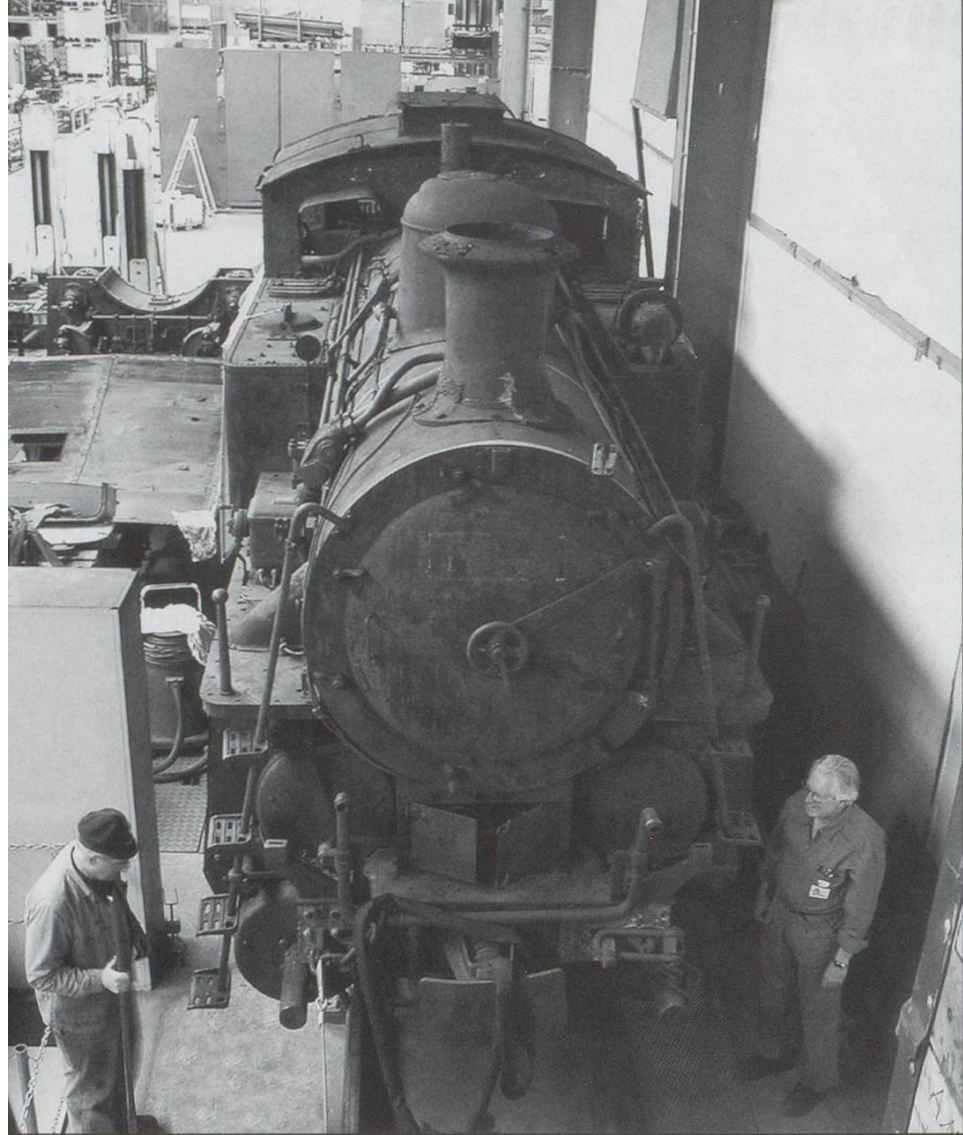
The most interesting part of this journey was to come when the convoy arrived at Chur. How do you unload a 35-ton locomotive and rotate it 90 degrees, without a crane?

The convoy arrived in Chur about 1130. The trailer was parked in the building where the locomotive was to be unloaded, placed on a track section and moved into the workshop.

In Altdorf, a large crane was used to lift the locomotive but in Chur large floor lifts were to be used to raise and lower the locomotive.

The transport trailer had to be positioned very accurately, so that when the locomotive was unloaded its centre of gravity lay at the centre of the tracks in the workshop where the locomotive will rest during the restoration.





The loco is finally in position ready for work to begin

The locomotive was again raised and temporary tracks were installed and the locomotive was lowered. The final step in the relocation of this 81 year old, 35-ton, mechanical wonder was to pull it into the workshop.

The present plans are to have the HG 4/4 restoration completed in time for use on the restored tracks between Gletsch and Oberwald which is estimated to be in 2008 or 2009.

Restoration Support

It is estimated that the restoration of this SLM HG 4/4 locomotive will take about 4 years and cost in the region

of SFr1 million. At the present time, the 1000er Club has been raising funds for this restoration. The membership requirements are a one-time fee of SFr1000 and an annual fee of SFr100. If you would like to support this restoration project, information may be found at:

<www.vfb-edelweiss.us/projects.html>

The large "I" beams were again attached to front and rear of the locomotive and using four synchronized electric 12,000 Kg floor lifts the locomotive was raised and the trailer was removed.

After several attempts and changes to the support configurations the locomotive was lowered onto the temporary tracks. The next challenge was the rotation of the locomotive 90 degrees without a crane. A small turntable, approximately one metre square was constructed which could support 60 tons. This is the reason the locomotive centre of gravity had to be determined so accurately. With the support beams placed on the turntable, the locomotive was then lowered on the turntable. Because the locomotive had had items removed the actual centre of gravity was unknown and it required a second try before the centre of gravity was located to enable the locomotive to be turned with no problem.

1. Note from Editor-I may be speaking a bit out of turn here but in looking at the trailer and the need for a crane it struck me that here in the UK we actually do things rather better. Low suspension trailers allow the winching of the locomotive directly onto the trailer from the rear and actual rail track is used to support the locomotive. It would not have bent as in this case. Of course the question would then have to be asked as to why this is. Answer: it is far cheaper to move single railway items by road rather than by rail because of access charges, pathing difficulties and any number of obscure rules and regulations. Any one care to comment?