

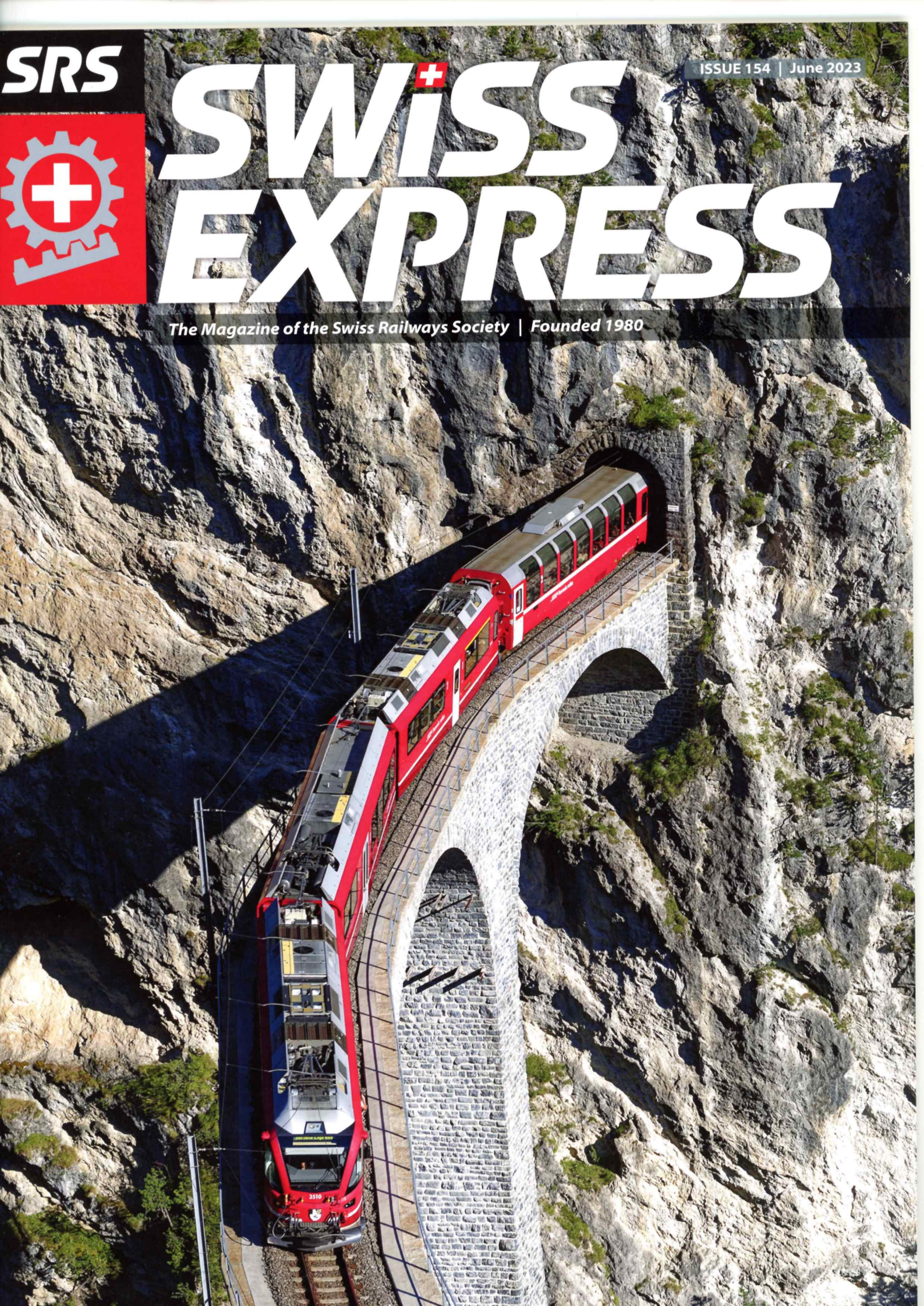
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# SWISS EXPRESS

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# *Panoramic ride across the Alps*

## **50 years of the *Bernina Express***



The first-generation *Bernina Express*, travelling between Samedan and Bever in the Engadine on 6 August 1976. Above the locomotive Ge 6/6<sup>II</sup> 706 rises the Bernina massif, crowned by the 4048 m high Piz Bernina. Behind the locomotive five green short unit type I cars can be seen, running as *Bernina Express* from Tirano to Chur. The seven rearmost carriages of the train are forming a service from St. Moritz to Chur: There is a red "Fliegender Rätier" type reinforcement carriage, a dining car, three normal length type I unit carriages, a baggage car and a mail car.

*Text and all photos by Bernhard Studer*

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**The *Bernina Express* offers an unforgettable travel experience: a journey from the glaciers on the Bernina Pass to the palm trees in sunny Valtellina. On 3 June 1973, 50 years ago, this train made its first journey from Chur via the Albula and Bernina lines of the Rhaetian Railway to Tirano and back again. Since then, around 10 million passengers have enjoyed this unforgettable journey.**

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Since 1910, the Bernina Railway has been running from Valtellina across the Italian/Swiss border into Val Poschiavo and on over the 2253 m high Bernina Pass into the Upper Engadine. It is the only railway line that crosses the Swiss Alps without a summit tunnel. The metre-gauge Bernina Railway was built and operated independently of the Rhaetian Railway. It was not until 1943 that it was integrated into the RhB. Even today, the Bernina line has differences to the RhB main network: the Bernina line is operated with direct current, originally at 750 V and later increased to 1000 V while on the main network the locomotives are fed with alternating current (11 kV 16.7 Hz); on the Bernina Pass the track climbs a maximum of 70 per thousand (main network = maximum 45 per thousand); on the Bernina line the tightest curve radii are just 45 m (main network = minimum 100 m).

So it is not surprising that the Bernina line continues to lead a special life even after it has been taken over by the RhB. Due to the narrow curves, the passenger rolling stock running over the Bernina line have to be shorter than those running over the main network. Therefore, direct coach services from Tirano to Chur have only been offered since the 1969 summer season.

### **The *Bernina Express***

On 3 June 1973, the RhB offered the first scheduled direct connection from Chur to Tirano under the name *Bernina Express*. The initiator of this train was Josef Hardegger, then head of operational planning at the RhB and later director of the Appenzeller Bahnen. The train, which at the time consisted of shortened Type I standard carriages, was run



from Chur via the Albula line to Samedan together with an express train travelling to St.Moritz. At Samedan, the train was taken over by one, sometimes both Gem 4/4 801 + 802 dual-power locomotives, running in diesel mode as far as Bernina Diavolezza. This complicated procedure was dropped in 1981 after a track was installed in Pontresina that could be switched from alternating to direct voltage.

To speed up the train's journey, the *Bernina Express* has only stopped at selected stations on the Bernina line since 1975. Since then, for the first time since the takeover by the RhB, express trains have been travelling over the highest railway line in Graubünden. But just like the *Glacier Express*, the *Bernina Express* does not see itself as an express train in the true sense of the word: speed is not the main focus. On its four-hour journey from Chur to Tirano, the train covers a mere 144 km, so its average speed is 'only' 36 km/h. Other key figures are all the more impressive: The journey leads through 55 tunnels and over 196 bridges. On its journey from Chur (584 m above sea level) through the Albula tunnel (1820 m above sea level), down to Samedan in the Upper Engadine (1705 m above sea level), up to Ospizio Bernina (2253 m above sea level) and back down to Tirano (429 m above sea level), the train overcomes enormous differences in altitude. In all the journey ascends or descends almost 4000 m – on average almost 17 metres per minute!

In 1983, rolling stock purchased specifically for the *Bernina Express* was used for the first time. More and more passengers wanted to use the train, and so the now longer train between Chur and Samedan could no longer run together with another train. The second-generation *Bernina Express*, now formed from type III standard coaches, therefore ran independently directly from Chur to Tirano and back. Another innovation was the elegant red/brown exterior paint scheme, which was only used on the the coaches of the *Bernina Express*.

The continuing success led to new coaches being procured as early as 1992/93. The *Bernina Express* of the third generation was formed from type IV standard coaches, again in the unique red/brown design.

Since the summer of 2000, the *Bernina Express* has been equipped with



Gem 4/4 801 has coupled to a first-generation *Bernina Express* and is ready to depart for Tirano at Samedan station. Diesel traction will be used to Bernina Diavolezza where the pantograph will rise and electric traction provided by the DC overhead used for the remainder of the trip over the Bernina Pass to Tirano. 26 May 1974.



Gem 4/4 802 and ABe 4/4 41 haul a third generation *Bernina Express* on the climb from Alp Grüm to Ospizio Bernina. 28 July 2001.



*Bernina Express* of the second generation, underway along Lago Bianco between Ospizio Bernina and Alp Grüm. 2 August 1986.



On 24 July 1977, Gem 4/4 801 in front of the first-generation *Bernina Express*, on Alp Bondo between Bernina Lagalb and Ospizio Bernina.







On 20 September 1984, ABe 4/4 41 + 43 pause at Campocologno, the last station on Swiss territory. Immediately after the station, the *Bernina Express* will cross the Swiss/Italian state border.

air-conditioned panorama coaches. Between 2000 and 2007, the RhB put a total of 26 such cars into service. Unfortunately, the brown window band could no longer be fitted to the large, almost continuous windows. The pleasing design of 1983 had to be abandoned again and the fourth generation *Bernina Express* therefore runs with the uniform red design, like all other RhB trains. All unit coaches III and IV formerly

used on this train have also lost their special red/brown livery and now travel through Graubünden in RhB uniform red (officially “similar to RAL 3000”).

Since 2011, all express trains transferring from the RhB main network to the Bernina line have been hauled by three-car ‘Allegra’ dual-voltage multiple units of type ABe 8/12. With a simple switching of the overhead voltage while the train is at Pontresina, the change of traction units (to/from two ABe 4/4s) that used to be necessary at that location is no longer required.

Once sufficient rolling stock was available, a *Bernina Express* service was also offered from Davos via Filisur to Tirano and return during several summer timetables from 1995 onwards. Today, the *Bernina Express* services concentrate on connections between Chur and Tirano as well as – for the

Engadine holiday guests and the increasing number of day tourists from northern Italy – between St.Moritz and Tirano.

### A train, unique in its kind

Guests on the *Bernina Express* do not want to be transported from one place to another. They are travelling for the sake of the journey. They seek and find contact with



On 26 July 2009, ABe 4/4 43 + 46 are between Cavaglia and Cadera, climbing from the Val Poschiavo to the top of the Bernina hauling the fourth-generation cars of the *Bernina Express*.





On 16 October 2006, ABe 4/4 53 + 52 have just exited the 192 m long Scala Tunnel and will shortly reach the top of the Bernina Pass with a fourth-generation *Bernina Express*. The formation of the original Scala curve can be seen to the right of the train.



On 10 April 2010, ABe 4/4 51 + 48, have just left Poschiavo and are starting the steep climb up the Bernina Pass with the *Bernina Express*. ABe 4/4 51 is wearing the UNESCO livery that it wore between 2007 and 2015. Today, this section of line is double track.





The Davos section of the *Bernina Express*, complete with open-air car on the rear, crossing the highest bridge on the RhB network, the 89 m high Wiesner Viaduct, between Davos Wiesen and Filisur on 13 July 2018.

the alpine world, with the scenic beauty of Graubünden. Travelling with the *Bernina Express* brings the guest closer to those qualitative values that are so much talked about in times of changing environmental conditions. A fantastic travel experience!

The *Bernina Express* from Chur to Tirano is the only train that allows you to travel the entire length of the Albula/ Bernina landscape, which is on the Unesco World Heritage List. Unesco has only designated three railways worldwide as World Heritage Sites: firstly, the three mountain railways of



On 7 June 2019, the *Bernina Express* from Davos to Tirano, is seen between Davos Frauenkirch and Davos Glaris. The river in the foreground is the famous Landwasser.





Ge 4/4' 610 has almost topped the Albula Pass and will shortly pass through Preda and enter the Albula Tunnel. 16 October 2007.



On 17 October 2007, *Glacier Express* liveried Ge 4/4''' 651 is hauling its 'sister train' down an autumnal Val Bever toward Samedan.




Once Pontresina station was equipped with a track that can be switched from alternating to direct current, the *Bernina Express* could run end-to-end with electric traction, with the locomotives changing at Pontresina. Today, with the Allegras, even changing 'locomotive' is not required. On 18 July 2007 Ge 4/4' 610 can be seen at Punt Muragl, shortly before Pontresina, where it will be swapped for two ABe 4/4'' railcars.

India – Darjeeling Himalayan Railway, Nilgiri Mountain Railway and Kalka Shimla Railways; second, the Semmering Railway in Austria; and, third, in 2008, the "Rhaetian Railway in the Albula/Bernina Landscape".

The *Bernina Express* runs through three language regions – German, Rhaeto-Romanic and Italian. It connects cultures. And depending on when you travel, you can experience several seasons in a very short time. In June, for example, the train travels within a few hours from the snow-covered Bernina Pass down to springtime in Val Poschiavo and on to the almost summery Valtellina. A real insider tip for connoisseurs and gourmets!

The *Bernina Express* is at its busiest in summer. Then the temperatures on the Bernina Pass are pleasant, while down in the Valtellina it is often oppressively hot. In spring, autumn and winter, demand for the *Bernina Express* is less strong, although the more pleasant temperatures in the Valtellina make a trip on this train more advisable.

All tickets valid in Switzerland are recognised on the *Bernina Express*, including Eurail, Interrail, Swiss Pass, Swiss General Abonnement and Half-Fare Card. The Rhaetian Railway charges a surcharge for passengers travelling in the panorama cars. No surcharge is payable by passengers travelling in the Allegra railcar. 





Bernina Express of the fourth generation, consisting of the Allegra railcar ABe 8/12 3505 and air-conditioned panorama cars, crossing the Schmittentobel viaduct between Alvaneu and Filisur on the Albula line on 2 August 2013.



On 8 July 2022, Allegra railcar ABe 8/12 3514 leads the Bernina Express, passing Lago Bianco, the summit of the Bernina Pass. Above the train 3606 m high Piz Cambrena with the Cambrena glacier.

## Bernina Express Timetable 2023

	PE971	PE951	PE973	PE955	PE975
Chur		08:28		13:34	
Domat/Ems		08:35			
Bonaduz		08:43			
Rhâzüns		08:45			
Thusis		08:58/59		14:10/11	
Tiefencastel		09:18		14:28	
Filisur		09:32/33			
Bergün/Bravuogn		09:45/47		14:56/57	
St Moritz	09:17		13:17		16:14
Pontresina	09:25/28	10:25	13:25/28	15:41	16:22/23
Bernina Diavolezza (request stop)		10:42		16:06	16:39
Ozpizio Bernina				16:19	16:52
Alp Grum	10:06/18	11:01/15	14:07/18	16:28/40	17:00/16
Poschiavo	10:54/56	12:01/10	10:53/55	17:15/24	18:00/01
Le Prese	11:03	12:21	15:02	17:32	
Tirano	11:32	12:49	15:31	17:59	18:39

	PE950	PE972	PE974	PE952	PE976
Tirano	08:06	10:06	13:17	14:24	16:06
Le Prese	08:35	10:41	13:44	14:55	16:40
Poschiavo	08:45/47	10:48/50	13:53/57	15:06/10	16:46/48
Alp Grum	09:23/48	11:26/42	14:42/59	15:44/45	17:27/42
Ozpizio Bernina	09:58				
Bernina Diavolezza (request stop)		12:00			
Pontresina	10:25	12:25/27	15:34/36	16:22	18:15/17
St Moritz		12:35	15:45		18:25
Bergün/Bravuogn	11:02			17:04	
Filisur	11:17			17:17/18	
Tiefencastel	11:32			17:32	
Thusis					
Rhâzüns					
Bonaduz					
Domat/Ems				18:22	
Chur	12:22				



On 20 September 2022, Allegra railcar ABe 8/12 3506 hauls the Bernina Express past Lej Nair (black lake), next stop Ospizio Bernina at the top of the pass.

## Where's Heidi?

### Question:

On which station's platforms would you see this rusty item?

Photo: Heidi Marriott

