

# NOSTALGIE RUN

## DIE LAWINENSICHERUNG

### LAWINENFORSCHUNG UND -SICHERHEIT

Die schweren Lawinniedergänge von 1919 gaben Anlass zu grossen **Lawinerverbauungen am Schiahorn und dem Dorfberg (Bau von 1920-24)**. Diese galten damals als vorbildlich für die ganze Schweiz. Bei einem schweren Lawineneunglück im Jahre 1951 hatten die Nachbarorte von Davos einige Lawinenofer zu beklagen. Der Kurort Davos selbst blieb bei diesem Lawinniedergang dank den neuen Verbauungen verschont.

Lawinen wurden zu Beginn von Hand, danach mit Minenwerfern und seit 1963 mit Raketentuben ausgelöst. Ab 1975 wurden permanente Abschlusstellen eingerichtet. **Heute sind auf Parsenn 200 Sprengpunkte installiert und es wird pro Wintersaison im Schnitt 2 Tonnen Sprengstoff verwendet.**

Seit 1975 bis heute wurden auch die Rettungsgeräte bei Lawinniedergängen, wie z.B. Stabilisierungsmatratzen, Schaufelbohrer oder Luftschiene stetig optimiert.

Neben der Lawinensicherheit wurde nach der Kriegszeit immer mehr in die Lawinenforschung investiert. Dank dem Bau der Parsennbahn hatten Forscher ab 1935 die Möglichkeit auf dem Weissfluhjoch Forschung zu betreiben. **1943 wurde auf dem Weissfluhjoch deshalb das bundeseigene Institut für Schnee- und Lawinenforschung (SLF) errichtet.** Noch heute wird das Lawinenbulletin täglich vom SLF in Davos - jedoch mittlerweile nicht mehr vom Gebäude auf dem Weissfluhjoch - erstellt und ist eine der wichtigsten Grundlagen zur Lawineinschätzung im ganzen Alpenraum. 2019 wurde das SLF-Gebäude auf dem Weissfluhjoch von den Davos Klosters Bergbahnen übernommen.



Foto: SLF Archiv / Ralph Feiner



cke auf Weissfluhjoch



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## THE AVALANCHE SAFETY

### AVALANCHE RESEARCH AND SAFETY

After the intense avalanche falls in 1919, **large avalanche barriers had to be installed on Schiahorn and Dorfberg (built between 1920 and 24)**, to prevent avalanches coming down to the village. These constructions were the start of avalanche safety and used as role models for whole of Switzerland at that time. In a serious avalanche accident in 1951, the neighboring villages of Davos suffered several avalanche victims. Thanks to the new constructions, there were no major injuries in this avalanche disaster in the town of Davos.

Avalanches were initially triggered by hand, then by mine launchers and since 1963 by rocket tubes. From 1975,

permanent launch sites were set up. **Today, 200 blasting points are set up at Parsenn and an average of 2 tonnes of explosives are used per winter season.**

From 1975 to the present day, the rescue equipment for avalanche descents such as stabilization mattresses, shovel drills or air rails have also been continuously optimized.

In addition to avalanche safety, more and more avalanche research was undertaken after 1950. Thanks to the construction of the Parsenn mountain railway, researchers were able to conduct research on the Weissfluhjoch from 1935 onwards. In 1943, **the Federal Institute for Snow and Avalanche Research (SLF) was established on the Weissfluhjoch.** Even today, the avalanche bulletin is produced daily by the SLF in Davos - but no longer in the building on the Weissfluhjoch - and is one of the most important documents for avalanche assessment in the entire Alpine region. In 2019, the SLF building on the Weissfluhjoch was taken over by the Davos Klosters mountain railways.



**HISTORY OF THE FEDERAL INSTITUTE FOR SNOW AND AVALANCHE RESEARCH (SLF)**  
In 1936, a handful of researchers moved into the first snow laboratory on the Weissfluhjoch. Since then, the SLF has developed into a renowned research institute with almost 150 employees in Davos.

#### A short summary of the milestones:

1936: A wooden barrack on the Weissfluhjoch served as a snow laboratory. A new laboratory and experimental field are set up on the Weissfluhjoch, 2'662 m above sea level, to study snow metamorphosis and avalanche formation. The Parsenn mountain railway provides a wooden barrack and a working room in the mountain station. Every winter, the wooden hut is covered by snow and thus fulfills its function as a natural refrigeration laboratory under the snow cover with a constant temperature of -5 to -7°C. The temperature of the snow is kept constant at all times.

1942: The Swiss Federal Institute for Snow and Avalanche Research Davos-Weissfluhjoch is founded and moves into the first institute building on the Weissfluhjoch in 1943 under the direction of Dr. Edwin Bucher. The central research areas are: development of the snow cover, snow mechanics and avalanche formation, and crystalline structure and transformation of snow.

The avalanche winter of 1950/51, which claimed 98 lives in Switzerland, brought a decisive change. In addition to basic research, practical support in construction techniques and the avalanche warning service is now also in demand. Cooperation with the Swiss Meteorological Institute (SMA), now MeteoSwiss, is being expanded in order to further increase the reliability of the avalanche bulletin.

1996: Relocation from the Weissfluhjoch down to the new institute building in Davos Dorf. The newly built institute building on Flüelastrasse in Davos Dorf becomes the headquarter of the SLF. The former institute building on the Weissfluhjoch was taken over by the mountain railways in 2019.

Today the SLF is an interdisciplinary research and service center in Davos. Around 150 people research snow, atmosphere, natural hazards, permafrost and mountain ecosystems, and develop innovative products in which they put their knowledge into practice. The measuring points of the SLF, **a total of 160 stations**, are spread over the whole Alpine region.