

Eagles Swiss Mountain training Level 2 Avalanche Tour 31 on the 17-19 March 2025.

Venue: The hotel Kurhaus in Arolla

Participants:

Jason Clifford, Torquil Chapman, Matilda Edwards “Tilly”, Catherine Mangham, Dennis Mooney, Tom Wilson, and Scott Whitehead.

Mountain Guide: Terry Ralphs

Course Aims:

The aim of this 3-day avalanche course was to follow the Swiss Mountain Training Level 2 syllabus as a foundation and expand on this to give a better understanding on how we can manage avalanche risk. The avalanche rescue component conformed to the Manuel Genswien system.

Avalanche Danger Risk Level:

During this course the avalanche risk level was moderate (2) and the main avalanche risks were due to “old snow problem” (weak layers) combined with “new snow problem” at altitude and “wet snow problem” low down. The weather was cold and with clear skies for all three days and good fresh powder could be found on the shady aspects and spring snow forming on the sunny aspects.

Schedule:

Monday 17 March.

Theory morning session in avalanche the phenomenon and how to manage the avalanche risk from the Swiss Mountain Training syllabus ([swissmountaintraining.ch](https://www.swissmountaintraining.ch)).

This was followed by a theory session in avalanche rescue. We examined the science behind transceivers and how this can affect their functionality. We used the afternoon to covered efficient search techniques and effective digging systems as from the Manuel Genswein systems ([MountainSafety.info](https://www.MountainSafety.info)).

Tuesday 18 March.

The aim of this day was to put the avalanche theory on the first day into context on the mountain by making an analysis of a snow profile.

We took the first drag lift (Fontanesse 1) on the Arolla ski resort and then skinned towards the Pas de Chevre. On this route we found a suitable north facing slope on the moraine to the left of the ski itinerary below spot height 2601m. We then prepared 4 snow profiles either side of a small change in slope aspect. This gave us chance to examine the spatial variability of the snowpack which was deep on the east side and much shallower on the wind scoured west side. We found that the shallower snowpack was much more unstable due to the larger amount of depth hoar grains and facets which were present.

We made extended column tests, Rutsch block test and several weak layer investigations to test the stability of the slope. The results conclusively showed how weak layers propagate and are more present in a shallower snowpack due to a higher temperature gradient within the snowpack.

On our return to the Kurhaus we plotted our snow profile graphs and analysed the results. We also planned and risk managed the following day.

Wednesday 19 March.

A day on the mountain in which we put into practice the Munter 3x3 risk management

framework. We also looked at group management and route choice to find the most defensive approach to our ski tour.

We took the two drag lifts (Fontanesse 1 and 3) on the Arolla ski resort to the col de la Forclette. We did a double transceiver group check and then descended to Remointse de Pragra. From here we made an ascent to the Col des Ignes making careful route choice and group management to minimise our avalanche risk. We finished by descending to La Gouille, (725m ascent and 1800m descent).

The group members took turns in leading with feedback from the guide (Terry). This hopefully gave an insight into the subtleties of having a defensive route choice with regards avalanche risk. We discussed and implemented group management and to see how that can improve safety and reduce the avalanche risk.

We were very lucky to have such a fabulous day's skiing finding some excellent powder snow and spring snow low down with not a cloud in the sky.

After a debrief at 17hrs in the Hotel Kurhaus the course was closed.

Many thanks to the participants for their contributions and the Hotel Kurhaus for hosting the course.

Terry Ralphs 20 March 2025