



Internationale Kommission für Alpines Rettungswesen IKAR
Kommission für Bodenrettung
International Commission for Alpine Rescue ICAR
Commission for Terrestrial Rescue
Commission Internationale de Sauvetage Alpin CISA
Sauvetage Terrestre



Presentations Commission for Terrestrial Rescue

Place: Vysoké Tatry, Starý Smokovec, Hotel Bellevue
Date: October 7, 2010
Time: 1400 hours
Present: Members of the Commission for Terrestrial Rescue
Chairmen: Bruno Jelk and Gebhard Barbisch
Minutes: Fabienne Jelk

Motion Mountain Rescue Bavaria

Herbert Streibel gives a short presentation. In Bavaria the figure-eight with long ends has been used as a knot for connecting ropes. Now they are using the two-loop figure-eight. Several tests were done with this knot. Advantage when fastening with a bowline-on-a-bight: It is easy to loosen after a heavy load and maintains 100% knot strength on ring tension.

Recommendation REC B 0004, knots when using static ropes. There is a motion to add the two-loop figure-eight to the recommendation.

Suggestion: In addition to the two knots (figure-eight follow-through and double fisherman's knot), the two-loop figure-eight is to be added.

Unanimously approved.

File: 03-BWB-doppelter-Sackstich-Empfehlung-4.PDF

Peter Veider, ÖBRD: Gondola Rescue

Presented their system for gondola rescue. There was resistance from the gondola industry. The system can be used on all gondolas. The system is certified. The rescuer is pulled up. The devices have to function without help from the passenger. The evacuation should be completed in 3.5 hours. The rescuing of the passengers by rappelling is only possible if the height is not more than 100 meters and the terrain is suitable. The system should be light and easy. Networks need to be built. The training facility is in Jamtal. Many ski areas converted to this system. There is training material available for this system. When a lift converts to this system, the documentation is handed out.

Questions: None.

Bruno Jelk: The systems have to function. When rappelling, there is also the problem of getting the people away from the site as soon as they are on the ground if they are badly equipped; for example bad shoes.

File: 04-OeBRD-Peter-Veider-Seilbahnrettung.PDF

Klaus Opperer, Mountain Rescue Bavaria: Gondola Rescue, Gondola Emergency

The norm states that the lift manager is responsible. However, very often they have never had to do media work, coordination of helicopters, care for victims, etc. The managers do need the help of the rescuers for this work. There is training available. This training is regional and the most important parts of the training are trust building, i.e. getting to know each other, and a coordinated rescue and alarm plan, the work distribution and resource planning. For example, who is responsible that the gondola stands idle? Each individual needs to have a defined task. During the workshop, systems are demonstrated and leadership simulation training is held. Klaus Opperer talks about an incident where evacuation was necessary (Brauneckbahn). Luckily, there were no injuries and no fatalities. The weather and the pilots were good.

Questions: None.

File: 05-BWB-Fachworkshop-Seilbahnnotfall.PDF

Sepp Brandner, ÖBRD: Paraglider Rescue

Talks about gliding accidents in the upper Drautal. The Drautal extends west to east, so the south slopes have excellent thermic conditions. There are constantly competitions which are held. About 10-15 gliding accidents happen per year. However, there are also other accidents which are not noted here. Most often they are paragliders. There are different operational techniques: Terrestrial rescue and air rescue. Hang-gliders have high speed and in most cases fall to the ground. If they hang up in treetops, they are difficult to secure. King-post hang-gliders are usually entry models and do not achieve such high speeds and have guy-wires that give good fasting possibilities. They tend to get hung up in trees. Topless hang-gliders have little resistance, high performance potential, and in general tend to fall all the way to the ground. They also have no guy-wires. Flight behavior is similar to gliders. Important aspects of a rescue: Suspension, halyards. Paragliders: Important equipment parts are GPS or radio for locating, knowing how the pilot and his glider are attached. Paragliders are often injured on their lower extremities, back, and pelvis in addition to abrasions etc. Head injuries are rather seldom. Hang-gliders often have severe head injuries and internal injuries. For locating them, the position format, among other things, is important. Then the situation is assessed (operational team, accident victim, terrain, conditions, weather). Then the course of action for the rescue is decided. First get in touch with the pilot; he stays calm and has to be secured in a flexible manner. Rescue is prepared. Rescue the pilot and recover the canopy. It is the same with hang-gliders; however, first the hang-glider is secured and then the pilot is secured. The rescue team consists of 1 rescuer, 1-2 rescuers as securing team, and the ground crew depends on the terrain.

Questions: None.

File: 06-OeBRD-Flugunfall.PDF

Enrico Ragoni: Dyneema Rope

What can be done and what are the critical aspects when using Dyneema? The MERS2 system is briefly presented. Dyneema is a brand of the Dutch company DSM Dyneema. Dyneema consists of „high modulus polyethylene HMPE“. It is not the same as Kevlar. Dyneema has practically no stretching, is UV resistant to a high degree, and has high tensile strength. The temperature is critical; 70 degrees Celsius is the limit, any higher and structural damage occurs. Advantage: Light, strong, little stretching, UV resistant as well as acids, alkali, and anything based on petroleum, relatively easy to splice without sheath. Dyneema does not take on water and is lighter than water. Cons: Surface structure (very slippery), temperature compatibility (over 50 degrees Celsius critical), sheathed ropes are difficult to splice, no stable cross-section, critical when it rotates, loss of strength depending on the ratio of payload to tensile strength. Dyneema is not a “good-natured” material. The water goes in between the braids; therefore, it takes longer to dry. Dyneema is not suitable for climbing. It is completely static. Knots can slip, moving of sheath and core. Critical is working on the rope; there is no dynamic absorption and when pulling the rope over rocks, there is abrasion. Dyneema use turns immediately critical if the application does not meet rope properties.

Questions:

Can slipping be avoided?

I am not aware of any Dyneema rope wherein the sheath does not slip.

File: 07-Ragoni-Dyneema.PDF

Iceland, Sigi: Super Jeeps in SAR

In Iceland these vehicles have been used since the 1920s. Definition of a super-jeep: Vehicle can drive over any terrain and has special tires, 4 x 4. It is demonstrated how such a jeep is built and how it is equipped. ICE SAR uses about 200 jeeps. There are different models which are used depending on the circumstances. Last year they made a drive up a volcano. There have also been several accidents with these jeeps, for example with crevasses.

Questions: None.

File: 08-ICE-SAR-Super-Jeeps-in-SAR.PDF

End of Meeting: 1640 hours.

For the English Translation: Olivia A. Cashner