Internationale Kommission für Alpines Rettungswesen IKAR
Commission Internationale du Sauvetage Alpin CISA
International Commission for Alpine Rescue ICAR

Presentations of All Commissions

Place:	Krynica, Poland, Hotel Czarny Potok
Date:	October 6, 2012
Time:	8 a.m.
Participants:	Members of all Commissions
Chairmen:	Gebhard Barbisch, Bruno Jelk, Patrick Fauchére, Dominique Létang
Minutes:	Fabienne Jelk

Peter Paal, Hermann Brugger: Results of the "Pig Study" – Implications for Avalanche Burial

Presents the results of the pig study. This is a study Hermann Brugger and his team carried out in order to analyze cooling rate, circulation, and metabolic parameters. There were two groups of pigs, both completely buried; one with breathing pocket and one without. Due to the public's reaction, the tests had to be suspended after 8 pigs; 25 pigs had been planned. Nevertheless, they were able to achieve results that will be published soon.

Questions/Remarks: None.

Doug Brown: Hypothermia Case

Presents insights regarding hypothermia cases. He shows an algorithm that will be published at the end of November. For mountain rescue this can be broken down into 3 steps:

1. Does the patient need CPR?
2. How can the patient be transported?
3. Isolation/rewarming

Questions/Remarks:

> You were talking about core temperature and that it is difficult to determine. We measure this in the ear. What is your opinion on that? You say that a severely hypothermic patient can be rewarmed. What about moving such a patient? In order to transport the patient, he/she has to be moved.

Brown: The temperature can be measured well in the ear. There is a risk in severely hypothermic patients that they when they are moved they could be injured. The patient should be moved as little as possible. One has to be cautious and careful but do what needs

to be done. It can lead to cardiac arrest, but the patient has to be transported. This has to be done carefully.

How long can a resuscitation work on a hypothermic patient?

Brown: Very long. The longest duration we know of is 6.5 hours.

ECMO can increase the chance of survival. Can you say something about that?

Brown: That is true. The machine can also be transportable and taken to the patient.

Giacomo Strappazon: Medical Aspects of Canyoning Rescues

Shows study results regarding this topic. There is an increasing number of people who do canyoning but the accidents are not increasing. People do canyoning in known canyons. Often the accidents are small accidents. Most accidents happen between July and August. There are also many women who do canyoning. The average age is 32 years. The rescue time on average is 90 minutes and in 51.7% of the cases it is an air rescue. There are also night rescues; a physician needs to be used to that. Canyoning rescues can also carry the risk of hypothermia. Rescuers need to be protected as well.

Questions/Remarks: None.

Michel Pierre, Sécurité Civile, France: JVN and IFR

The civil defense in France is commissioned to do rescues. The year 1897 is the birth year of the French mountain rescue. In 1955 Jean Moine landed on Mont Blanc. In 1956, Vincendon et Henry-Sache, for the first time an army helicopter was hired to rescue two Belgian mountain climbers. Having helicopters available in mountain rescue, especially the Alouette III, is a revolution. Michel Pierre also talks about IFR rules. Only a few pilots are IFR licensed. He warns about thinking that IFR or flying with night vision is possible in any condition. One should also not forget that the pilot is neither a magician nor a robot.

Questions/Remarks: None.

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19-IFR-France-Helicopter.pdf

Dan Halvorsen, Bjorn Jecoues, Lasse Coucheron, Norway: Mountain Rescue in Norway

Talks about an accident of 2 climbers in Norway in February. The rescue operation took several days. The accident happened in southwest Norway. A boulder broke off. Overhanging ice and falling rocks complicated the rescue. Therefore, the helicopter could not fly close to the rock face. They took pictures and determined the temperature differences of the bodies. Based on this, data was analyzed. Everything pointed to both of them being dead. Difficult questions needed an answer: Should we fly in? How should we proceed? Who should do the rescue (the rescuers knew the victims)? On day three the victims could be recovered. It was difficult to see the two climbers hanging in their ropes but not being able to get close enough. Other difficulties included the media and the fact that the rescuers knew the victims well.

Questions/Remarks: None.

File:
20-Climbing-Accident-Kjerag.pdf

Cap. Laurent Jaunatre, CRS Alpes: Via Ferrata Accident

During a rescue on a Via Ferrata one rescuer and the physician were injured. On May 23 two witnesses, a Belgian couple, called in stating that they had seen someone fall down to the bottom of the Via Ferrata. A helicopter with two rescuers and one physician flew in. The first rescuer was dropped off, by winch, as close as possible to the likely position of the victim in the forest. When the helicopter took off, a tree broke and injured the rescuer. The helicopter winched the second rescuer as well as the physician down to the injured rescuer to care for him. The injured rescuer was put in a stretcher and prepared for transport when a second tree broke off and fell on the band that connected the physician to the stretcher. The physician was pulled towards the tree and broke several ribs. Through the impact of the tree on the band, the stretcher was picked up and fell back on the ground upside down. Because the physician was connected to the stretcher, neither the rescuer in the stretcher nor the physician could do anything to help each other.

At this time the possible victim on the Via Ferrata had still not been found, and the Belgian couple was still on the Via Ferrata in shock. The rescuers also found out that the victim's brother was also in shock and still on the Via Ferrata above the Belgians. A firefighter who had also been on the Via Ferrata was able to take the brother down to the Belgians. In a terrestrial rescue operation the climbers on the Via Ferrata were brought down. The injured rescuers were evacuated. The rescuers in the Via Ferrata found the broken band sling of the victim, so they could figure out what had possibly happened and had to assume that the victim was dead. The search was suspended until the next morning.

The climbing set was very old and worn out. It was actually a set that is usually used for children, which is why there were knots in the band sling. In testing the sling, it broke at only 23 centimeters fall height. An expert also looked at the trees at the bottom of the Via Ferrata. Over the years the trees had been systematically injured by falling rocks, which occurred when the Via Ferrata was established and the rock face was cleaned and secured. In addition the root systems of the trees were weakened due to the slope and were felled by the rotor wash of the helicopter. One recommendation for rescue operations in such an area is to reduce rotor wash as much as possible and to stay away from trees underneath such a rock face. The autopsy of the victim showed that he had died immediately in the fall.

Questions/Remarks: None.

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21-Via-Ferrata-Accident.pdf

Mathilde Gletty, Psychologist ANENA: A Study of Behavioral Patterns of Young Freeriders

Mathilde Gletty wrote a doctoral dissertation on this topic. Young people between the ages of 20 and 30 especially are freeriders. There is not much known about the behavior of these young freeriders. They obviously are cognizant of the avalanche risk; however, they engage in increased risk and accept the negative consequences of an avalanche. Additionally, they

are looking for the adrenaline rush and therefore assume greater risks. On the other hand they do not consider self competence in order to reduce the risk. Many believe that an avalanche is simply bad luck and that they can not do anything about that. Therefore they do not take precautions to avoid an accident. Dialog needs to be opened up between freeriders and mountain rescuers. There are many prejudices on both sides. There will be an extensive study regarding this topic in the next 3 years. First results should be available at ISSW in Chamonix in 2013.

Questions/Remarks:

> Dominique Létang: In France the local youth have been neglected lately. There have been accidents of young local people who went freeriding without security precautions. So it is not only tourists who are involved in such accidents.
>
> What do you think about qualitative methods, or does everything have to be statistical?

Gletty: Qualitative data is necessary to establish quantitative data. Both are needed.

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22-Gletty-Freerider-Studie.pdf

Jean-Baptiste Estacky, PGHM Chamonix: Avalanche on Mont Blanc

Talks about an accident on Mont Blanc on July 12, 2012 and the method of decision making in rescue. The avalanche was triggered on Mont Maudit. Twenty-three alpinists were affected; 9 died, 7 injured and 7 were unhurt. Forty rescuers were involved in the field rescue. Thirty flights were executed. The first notification came in at 5:25 a.m. At 6:20 a.m. the first rescuers were on site. The last victims were found around 12 noon.

The following approach was taken:

1. Emergency measures: Send rescuers to the location immediately, establish a list of potential victims, call in reinforcements, inform authorities.
2. Organize a command and control structure, legal tasks (identifying victims, groups), PR, appointing an on-site rescue leader.
3. Issuing orders. Rescuers were also sent to the Mont Blanc summit to keep climbers from going down the route of the accident. Posts were also established at the Aiguille de Midi.

Various factor had to be considered: The „big chiefs" want to be informed about happenings before they happen; the media wanted to fly along instead of rescuers; the forensic technicians did not want the bodies to be moved; friends started calling in after seeing the incident on TV. A consensus needs to be found for all this.

Important: The accident site needs to be cordoned off well.

Another problem was officials who appeared on site quickly. It should be considered in such cases to establish a second operations center only for officials and to transmit the rescue to them via monitors. PR could have been handled better, and the helicopter deployment better coordinated.

Two more points should be mentioned:

1. The operation took place in the high mountains. It was not easy to get the rescuers on site. The weather development was unclear, it was windy. It was uncertain if the helicopters could keep flying after the first flight. It took about 2 hours to return all rescuers off the mountain down to the valley.
2. A crisis always takes longer and carries consequences: Official inquiry. Should climbing Mont Blanc be forbidden? Media.

Questions/Remarks:

> Did I understand you right? You had to go back to the avalanche run out and work because the minister was there?

Estachy: We were done at 2:50 p.m. Another row of rescuers was lined up for probing. One of the departments had demanded this so that the minister could see that we were working.

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23-PGHM Chamonix - Avalanche Mont Maudit.pdf

Bruno Jelk, Beat Dietrich, Dan Halvorsen: Avalanche Accident on Siachen Glacier in Pakistan

Bruno Jelk presents an avalanche accident in Pakistan. One hundred and thirty-nine soldiers were buried in a military camp. The contingent came in at 8 p.m. from DEZA (Swiss Agency for Development and Cooperation SDC) in Bern. The next day a team of one rescuer, one dog handler, and one official from the Swiss Government flew to Pakistan. The accident happened in the Gayari Valley. A military camp consisting of barracks and ammunition dumps was buried. The avalanche happened at 2 a.m. Cause was an avalanche at 7000 meters above sea level that carried pieces of the glacier as well as scree. The drive to the site was done under close guard; soldiers with machine pistols accompanied them. The avalanche's area was enormous; about 1.2 kilometers wide and 1 kilometer long, with lots of scree and ice. One of the problems was a lack of adequate machinery. Only soldiers who had been in a bunker during the event would have had a chance of survival. However, it was not know if there were even bunkers and if so where they were.

Dietrich: The search with the available machinery was not done systematically. The dog pointed a few times, but there were still 50-70 meters of snow. There were also signals on Recco. The German team searched with an acoustic device. One avalanche beacon, backpacks, and material was found but no people. Then there was a secondary avalanche. A river was buried under the avalanche and a lake started building, which also posed a danger. A spillway was dug for the water to drain. There are other places in this valley where such an avalanche could occur.

Halvorsen/Hjelle: We heard about the avalanche through the media. There was an inquiry whether the Norwegian rescuers could help. The problem was that we had very little information about the avalanche. When our team arrived, the weather was good. Team Zermatt had had bad weather. The avalanche cone consisted of gigantic masses of sand and rock. First the avalanche was mapped using Google Earth in order to position the structures pre avalanche. Then the positions were marked on the cone using GPS. The area was searched with a radar device. One colleague tried to work with a steam probe, but that was

practically impossible. The deepest we could get to was 2 meters. The Pakistanis had lots of dogs with them; however, they were not used for searching but for guarding the area.

A video is shown.

It is important to support these countries even though they are not members.

Questions/Remarks:

> Manuel Genswein: Pakistan also has civilian rescuers. The avalanche was a political even. The local rescue teams could not go on site due to politics.
>
> Gebhard Barbisch: We should not forget that in such cases the UN Disaster Relief Organization is very important. Austria had also been asked for help, but had decided not to go. Help was offered via conference calls.
>
> Whoever wants to go can go, but in such a case adequate machinery is needed, otherwise there is nothing one can do.

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24-Einsatz Lawinenunfall Pakistan.pdf

End of Meeting: 12 noon.

For the English Translation: Olivia A. Cashner