



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

Place: Åre, Hotel Holiday Club

Date: October 22, 2011

Time: 8:15 a.m.

Participants: Members of the Air Rescue, Avalanche Rescue, Terrestrial Rescue, and Alpine Medicine Commissions

Chairmen: Patrick Fauchère, Hans-Jürg Etter, Bruno Jelk, Fidel Elsensohn

Minutes: Fabienne Jelk

**MFXB Pat Fauchère, Greg Zen Ruffinen, Partick Torrent KWRO/OCVS: Bourg St-Pierre/Avalanche with 10 Casualties**

The alarm came in to dispatch at 12:37 p.m. on March 26, 2011. The caller stated that 11 people were involved in an avalanche, 10 of which were buried. Problems: Localization, language problems, busy air traffic, etc. A search flight was undertaken and the 11 people were found in a small gulch. When the rescuers got there, they saw one person who was stuck in the snow and body parts and material protruding from the snowmass. The avalanche danger that day was a 3 in east-north-west flanks. The problem was that the avalanche came down in a small gulch. The rescuers had no escape route. The helicopter pilots were not informed on how many other helicopters had also been mobilized. German as well as French pilots were participating, which in turn created problems in communication. The radio channels were overloaded. Cell phones did not work. There were a total of 11 helicopters involved, 6 emergency physicians, 8 avalanche rescue dogs, 20 mountain guides from Zermatt, 20 mountain guides from Entremont, 2 ambulances, and 1 PMA. It was unusual that 10 people were buried. Five died. One of the victims was not found until a couple of months later. Six people survived. The avalanche consisted of very heavy snow, which was an additional difficulty for the physicians due to the pressure on the victims' bodies. The rescue operation was brought to an end at 5 p.m. One person was still missing. The physicians, at that time, stated that there was practically no chance of survival. Many people were put at risk through this rescue operation. Robert Bolognesi came to the site to evaluate the snow condition. The chance of survival for the victims was getting less and less. However, the risk for the rescuers was increasing (secondary avalanches). An avalanche was triggered artificially the next day. During the day of the rescue, two helicopters were at the fracture line and were watching the situation. After the blasting of the avalanche, there were 15 meters of snow in the area where the last victim was lying. Consequently, visual checks were carried out every week. On May 18, 2011, the last victim was found. What we learned from this accident: there were many victims in a small area. Not only was the situation at the site difficult but also the fact that too many helpers were present, which was difficult to coordinate. There were too many rescuers.

Too many people were on the avalanche runout zone. Communication problems developed. When several helicopters are in the air, a coordinator on the ground is necessary. Medically, the great difficulty was that 10 victims were buried so close together.

Questions: None.

[File: 19-Valsorey ava\\_2011.d.pdf](#)

### **Klaus Opperer, Mountain Rescue Bavaria: Evacuation of Gondola on Brauneck and Tegelberg**

Talks about a stoppage of a gondola on August 13, 2011 on Tegelberg. That day a paraglider and his cameraman flew into the cables of the gondola. One rescuer was rappelled via the cable. After one hour the pilot was rescued. The gondola could not run anymore. There were 200 people at the summit station. They could only be reached on foot or by air. The ones who could not walk were flown down to the base station. Technical material was flown to the top station. The gondola had two track ropes and a haul rope, all of which were tangled into each other. It was attempted to untie the knot from the helicopter. Ultimately, one cable came free but the other two were still entangled. The people in the downhill gondola were rappelled. The uphill gondola could not be reached by helicopter because the thermal was too strong. The canopy still could not be removed from the cables. Towards the evening the media interest was enormous. By 10 p.m. it was decided to suspend the operation and to provide rescue blankets, food, and toys for the children to the 20 people still stuck in the gondola. At the same time the area below the gondola had been prepared for an evacuation. The terrain was not passable. The next day at 5 a.m. the evacuation began. They were flown from the gondola. Two days later the canopy was finally removed from the cables.

Questions: None.

Links:

<http://www.n-tv.de/mediathek/videos/panorama/Amateur-filmt-Gleitschirm-Unfall-article4043391.html>

[http://www.bergwacht-bayern.de/index.php?id=75&tx\\_ttnews\[tt\\_news\]=6344&tx\\_ttnews\[backPid\]=14&cHash=bad36b5666228313c4dc2de650e5a757](http://www.bergwacht-bayern.de/index.php?id=75&tx_ttnews[tt_news]=6344&tx_ttnews[backPid]=14&cHash=bad36b5666228313c4dc2de650e5a757)

<http://www.bild.de/news/inland/seilbahn/polizei-video-rettungsaktion-19392200.bild.html>

<http://www.br-online.de/aktuell/seilbahn-gleitschirmflieger-unfall-ID1313218914576.xml>

<http://www.heute.de/ZDFheute/inhalt/3/0,3672,8319651,00.html>

### **Walter Würtl, ÖAV: Training, Organization, and Mode of Operation of the Avalanche Commissions in Tyrol**

In 1999, 38 people died in an avalanche in Galtür/Valzur. Tyrol is densely populated. There are many steep areas, a lot of snow, and lots of tourists in winter. Many avalanches come down. Two hundred and twenty-seven avalanche commissions with 1300 members were founded. These are regulated by the avalanche commission law. The mayor of a county is bound by law to convene an avalanche commission. The members are appointed for 5 years. They are required to have the appropriate training. The avalanche commissions are working as consultants. They advise the county operations command and make recommendations to the appropriate offices (operator of the skiing area, road crew supervisor, etc.) Mountain guides, district attorneys, physicians, police, avalanche warning service, etc. participate in the training. Tyrol is

required by law to offer training courses. The avalanche commission members are required to attend the courses. The mode of operation consists of three steps. Collecting information: photos, danger zone plans, avalanche situation report, weather report, etc.; personal observation is essential. A special program is used to collect data (LWDKIP). The data is analyzed and ultimately recommendations are submitted. It is documented who made the decision. All steps are documented.

Questions: None.

[File : 21-Wuertli-LKK-Tirol\\_IKAR\\_english\\_2011.pdf](#)

### **Colonel Blaise Agresti, CNISAG/PGHM: The Role of the Chief of Rescue Operations in a Complex Crisis in the Mountains**

What kind of decision-making process can be initiated in a crisis? A crisis can have fairly long-term consequences. The crisis does not last long but the consequences can last decades. There are two levels: chief of operations at the site and a second level in order to overcome bigger crises. At the higher level there is a coordinator and an assistant to the coordinator so that complete overview can be afforded. Another problem is the decision within the first 3 minutes. One has to prepare and plan even before the crisis happens. The means have to be utilized appropriately; the appropriate authorities need to be informed. All this has to be decided immediately in an emergency. The chief of operations works on three levels: administrative and legal dimensions, media relations, and the operation itself. One has to react quickly in an operation, competencies and decision-making powers have to be clearly regulated, the operational concept has to be determined. The risk has to be assessed. Needed to know: The general outline (what, who, when), what is the operation about (what has to be done, with whom, who can bring reinforcements), how is the operation carried out. Often in coping with crises, people have a one-track mind; one decides within the first minutes on a path and sticks with it. One has to be open to changes and also has to think of them. There have to be people who accept the risks associated with the operation and afterwards also answer for it. In order to learn from the experiences, a debriefing needs to be held after the crisis. After the avalanche in 1999 a 2-week training was initiated. Summarily, in a crisis one fights against time. The chief of operation's freedom to move has to be sustained. The key is a quick and structured decision-making process. Organizational charts cannot be too complicated.

Questions: None.

[File: 22-BESSANS RETEX.pdf](#)

[22-MAO COES 2011.pdf](#)

[22-PGHM- le rôle du COS ENGLISH.pdf](#)

### **Hans Martin Jenni, KZDGA: Learning from Near Misses**

Case 1: A patient was rappelled in a gurney. There were 2 messenger ropes in addition to a belay rope. The man at the belay rope lost control. Two people were able to grab the rope and hold on to it. The Petzl ID was used as a brake. With big loads, preparations need to be undertaken, which were not done. The device was utilized in the wrong manner and this almost ended in a fall. Case 2: From the adventure area, flying fox (zip-line), Tyrolienne. It had been agreed that the base station always reports when the installation is ready for the next person. One person did not wait until he/she got the okay, and crashed into another person. We can learn from these near misses. For this reason an outside person who watches these things would be a good thing

(advocatus diaboli). The first case resulted due to human error. Lessons can be learned in the areas of the human factor, material, and technique. The main load was not on the messenger rope but on the belay rope. Also, not the messenger rope needs to be doubled but the belay rope. The device was utilized incorrectly. If the device is used for loads of more than one person, special preparations have to be undertaken. There is talk about System CIRS in Switzerland. Mistakes are collected with this and then made available to different people. For example, avalanche accidents can already be reported to the SLF. It is also already in use in medicine and flying.

Questions: None.

[File: 23-Schweiz-Lernen-Beinaheunfälle.pdf](#)

### **Hrvoje Dujmic, Franke Bevic, CMRS: Preventive Safety in the Mountains; Modern**

#### **Agile Task Management in SAR Operations**

Talks about search operations in Croatia and the techniques utilized. The first step is the collecting of information regarding the missing person in order to try to figure out what happened to the missing person. Then, priorities are established and tasks assigned. The resources available for the search are being kept up to date as soon as there is news. The people in the field also feed information back to the incident command. In cases of missing persons, a great number of people are involved, so it becomes difficult to keep an overview and to know who is waiting where for an assignment and who is where on the way. The management is, for example, overloaded when at first too many helpers are available which cannot be given an assignment. This creates pressure on the incident command. A system had to be found in which as many searchers as possible could be deployed. This is shown on a table consisting of 4 columns: backlog (what still needs to be done); to do (what is ready to be carried out); in progress (what is being carried out); is done (what is done). For example: Sector H still needs to be searched (backlog); search river C (to do), the people assigned to this task are being briefed, since when is which person in this area (on the field); once river C has been searched, it will be moved to column "done". Advantages to the method: The assignments are visualized, the plan is clearly evident, one can choose from the tasks, new assignments can be added, one can see what has already been done. When searchers are added, the system can still be utilized. The tasks are stated more precisely. There is no lack of tasks.

Questions: None.

[File: 24-Agile Task Management in SAR operations.pdf](#)

### **Hermann Brugger, EURAC: Changes in Avalanche Algorithm**

The first avalanche rescue algorithm was created in 1996. In 2001 the main focus was whether or not the airways were patent and if a breathing pocket was available. Since institution of the first algorithm, the number of rewarmings has dropped. The quality of patient care has not improved. Only in 12% of cases in which patients had an air pocket had rewarming taken place. Two years ago the algorithm was integrated into ILCOR. Yesterday, the algorithm was adjusted. The algorithm is intended for medical personnel. The principle stays: No avalanche victim with hypothermia and patent airways will be declared dead before he/she has been rewarmed.

Questions: None.

[File: 25- Brugger Are ILCOR and ICAR MEDCOM guidelines.pdf](#)

### **John Ellerton: Oxygen Demand in Terrestrial Rescue**

Talks about the question whether a minimum level of fitness should be required for rescuers. This can have an influence with regards to the care of the patient (time needed to get to the hospital, etc.). Studies were done regarding physical fitness of the rescuers. The rescuers had to run on a treadmill until exhaustion. On average the maximal oxygen consumption was 52.6, which is excellent. This was followed by a simulated evacuation with a gurney. The ascent was much more strenuous than the descent. Rescuers strain themselves much longer than other emergency services. Should a minimal standard be demanded? This is more a political than a medical decision. As a rule, the selection occurs naturally.

Questions: None.

[File: 26-ICAR Rescuer fitness 2011.pdf](#)

### **Giacomo Strapazon: Nepalese Mountain Rescue Development Project**

Talks about a training project in Nepal. A team of technical and medical personnel will be put together by 2017. Between 2012 and 2017 the project will be carried out in four steps. Ten Nepalese mountain rescuers and ten Nepalese mountain physicians will be trained. Courses will be organized in Europe and Nepal. A mountain rescue station will be equipped.

Questions: None.

[File: 27-NMR\\_Strpazona\\_Brugger.pdf](#)

### **Iztok Tomasin: Which Factors Influence Activation and Response Times in HEMS in Mountain Rescue**

Time is life. Last year new standards for helicopter rescue were published. The time between the emergency call and the arrival at the accident site should be under 20 minutes. It was also examined how long it takes from activation time to the arrival at the rescue station. The activation time was only once under 5 minutes, the arrival time at the site was not always under 20 minutes. Facts are presented that influence the activation time and arrival time at the site. Most factors can be improved through organizational adjustments.

Questions: None.

[File: 28-Tomazin Factors influencing activation and approach times in HEMS.pdf](#)

### **Budda Basnyat, UIAA MEDCOM: Misuse of Steroids and other Drugs at the Base Camp of Mt. Everest**

Dexamethasone is a steroid. It helps to prevent altitude sickness as well as cerebral and pulmonary edema. The medication is used at base camp in order to get the climbers up to Mt. Everest. In certain cases the medication was misused. There was a case of a physician who prescribed the medication to his patient who wanted to climb Everest. The patient took the medication preventatively, developed a rash, and stopped the medication thinking it caused the rash. However, he went through steroid withdrawal and became psychotic. The side effects of dexamethasone are exhaustion, depression, insomnia. Many patients complained of depression after discontinuation of the medication. It is ironic that some people do not want to use oxygen yet take steroids

and Viagra to reach the summit of Everest. Another problem are pilgrims who climb the summit for religious reasons. These people do not know about altitude sickness and already have preexisting conditions. They climb to the summit in order to get healed of their preexisting illnesses. About 75-100 pilgrims die each year. Some of them want to die there because they believe it is a good place to die. This problem needs to be addressed.

Questions: None.

[File: 29- Misuse of Steroids.pdf](#)

End of Meeting: 12:05 p.m.

For the English Translation: Olivia A. Cashner