ICAR Chamonix 2008 – October 10, 2008

Joint meeting of the Avalanche and Terrestrial Rescue Commissions
Toni Grab welcomes all attendants and thanks them for their collaboration. Hans-Jürg Etter welcomes all participants and takes the opportunity to provide some information about next year's conference in Zermatt. The main topic will revolve around avalanche rescue missions, and we expect that everyone will share their experiences. Hans-Jürg Etter offers to answer any questions. He introduces Dale Atkins from Colorado, Vice President of the Avalanche Rescue Commission, and thanks him for bringing in his experience.

ABS-System – Future development
Considerations for future development of the system – particularly in the area of triggering within a group – are presented. The effectiveness of the system can be derived from SLF Davos statistics. To date, 200 incidents are listed. In 180 cases the system worked perfectly; in 20 cases there were problems (human error, technical defects, or poor maintenance of the system. Human error was the prevailing cause of failure: panic, improper operation, etc.). Considerations are being made to minimize these issues. Automatic triggering within a group should eliminate some of these occurrences.
File: 13-ABS.pdf

Question	Answer
Pulling the handle while practicing is very easy. Under stress on the slope, it is more difficult – how can this be prevented?	There are several possibilities. The group has to be well organized, and you have to keep practicing. Additionally, your hands should not be in the wrist loops of the poles.
How many settings are there for group triggering?	In Europe there is only one radio frequency available. Each handle has a unique identifier as well as an identifier for the group.
What is the range?	This depends on the shape of the terrain – with an unobstructed line of sight, it can be up to 300m. The fact that the signal is repeated from one unit to another is helpful.
Isn't it dangerous if each user can trigger the group?	The settings allow you to define who is the master and therefore can trigger the group.
Can the system be reliably disabled while in a helicopter?	A jamming transmitter is being considered. However, normal triggering cannot be prevented.

Risk Management on Avalanche Rescue Missions - Theo Maurer, ARS
Avalanche rescue missions are often conducted under enormous pressure and in inclement weather conditions. A risk assessment must be conducted very quickly and the safety of the rescuers must always be ensured.
A checklist “3X3 Intervention in the Winter” is presented – it is a job aid for the decision-making process, which is used in the training of rescue personnel in Switzerland.
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Localization of Buried Subjects – Use of High-Frequency Radio Waves - Arne Bestmann
A company called “Lambda4 Hamburg” presents a prototype device to locate buried subjects using high-frequency radio waves. The prototype evolved from research in other areas. At the end of the development, the product shall allow rescuers to locate buried subjects easily and quickly. The device shall be the size of a credit card. The company welcomes input from our membership, especially with regard to the desired functionality of the system. Dale Atkins refers to an ICAR recommendation outlining the requirements for prototypes.

Question	Answer
In what frequency range does the system operate?	2,4 to 2,5 GHz
What is the range?	You have to differentiate between our prototype and the planned final product. We have measured ranges of up to 1km with an unobstructed line of sight. We believe that the range will be comparable to that of a cell phone.
Is there any danger for humans?	No.
Can it be used to locate cell phones?	It may be possible, but it is still very expensive.

Rescue Efficiency with Minimal Training – Manuel Genswein
Manuel Genswein reports on the efficiency of a group that received 3 45-minute units of training. A variety of training methods and materials were used. The training terrain was variable with several steep slopes. Varying burial depths were used. It became evident, that the performance of the trainers is very important. Mistakes made by trainees must be addressed and corrected immediately and consistently.

Recco R9 - Dale Atkins

Dale Atkins outlines the development history of the Recco devices. Partnering with outdoor clothing manufacturers has been advantageous for the technology. The public is increasingly seeking out apparel with built-in Recco reflectors. The business model aids rescuers as it encourages athletes to wear the reflectors. The proliferation is also important for future enhancement of the technology.
Tips for the use of the Recco detector:
Swing the detector like a flashlight, and aim about 4m ahead of yourself. On the second swath, reduce the distance to 2m. Snow and moisture can always reduce the range. A 457 kHz receiver is built in allowing for a transceiver search with the latest Recco detector. The correct handling is described in a presentation on Recco's website.
File: 16-RECCO-R9_ATKINS.pdf

Question	Answer
How long can the device be used?	2 hrs with a fully charged battery.
Can search times be improved?	Searches are increasingly shorter with the new technology.

Ortovox –Rolf Matzner

Rolf Matzner provides an overview of the novelties. Besides the technical features, special focus was put on the range and compatibility with older devices. A reduction of the search time is being attempted by simplifying the display on the device. Vital data information is not being displayed on Ortovox devices.

Question	Answer
Do you intend to display vital data of a buried subject in the future?	We must be aware that making medical judgments is very problematic. You have to be very careful with data regarding a person's medical condition. A physician remarks that it would be very precarious to judge a person's medical condition based on vital data transmitted by an avalanche transceiver.

Rescue Missions in the Tatra Mountains- Slavek Riemen

Slavek wanted to give this presentation himself, but has unfortunately fallen ill. We wish him well and hope to see him soon again. The presentation describes an avalanche accident in the Polish Tatra Mountains in 2008. The victim triggered the avalanche himself through a cornice collapse. The companions were skilled mountaineers, but could not render aid, because they did not want to put themselves at

risk.
The second accident report tells about a fall on rope. The victim died after a longer period of free suspension, without having the means for self-rescue.
Files: 17-TOPR-Avalanche.pdf, 18-TOPR-Climbing.pdf

Grid Wanding in the Snow – ÖBRD - Peter Veider
Peter Veider from Austria introduces a system to improve the organization of avalanche rescue missions. It contains checklists for all eventualities on an avalanche rescue mission. Contents of an avalanche rescue pack, including wands, shovels, probes, etc., are also listed.
File: 19-Rasterfahnung-im-Schnee.pdf

Disaster Mission with the Fire Department – ÖBRD - Arthur Rohregger
Arthur Rohregger presents a mission in which a forest fire was fought together with the fire department. A line was cut in difficult terrain to avoid the spread of the fire. A film of the mission is shown. During the past winter, mountain rescue personnel were often asked to assist with clearing snow off of roofs to avoid collapses and to belay firefighters. The importance of regular joint training with other emergency services is stressed.
File: 20-OEBRD-Schneechaos-Kalkalpen.pdf

Mt Fuji – Mountain Rescue in Japan – Presentation of the Japanese Mountain Rescue
Mountaineering and mountain rescue on Mt. Fuji is presented. Thanks are offered to ICAR. The Japanese look forward to an increased exchange to further improve their training.
File: 21-Japan-Ami-Mont-Blanc.pdf

At the end of the meeting, Bruno Jelk thanks for the presentations on behalf of both commissions.