

TERRESTRIAL RESCUE REPORT

International Commission for Alpine Rescue



IKAR-CISA



Chamonix-Mt. Blanc, France, 9 - 12 October 2008

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INTRODUCTION

The International Committee for Alpine Rescue (IKAR-CISA) met for its annual congress in Chamonix-Mt. Blanc, France, 9-12 October 2008. This year's meeting marked the 60th anniversary of IKAR and the 50th anniversary of French government funding and oversight of mountain rescue services in the region.

Chamonix is a town and commune in eastern France, in the Haute-Savoie *département*, at the foot of [Mont Blanc](#) (4808m). At the census of 1999 it had a population of 9,830 inhabitants and a land area of 116.53 km² (44.99 sq mi). The town lies at an altitude of 1,035 metres.



Chamonix

The 1924 Winter Olympics were held at Chamonix.

The Chamonix valley runs from northeast to southwest, and is watered by the Arve, which rises in Le Tour. The Arve is joined by the torrent l'Arveyron, which rises in the famous Mer de Glace just above Chamonix. On the southeast towers the snowclad summit of Mont Blanc, and on the northwest the less lofty, but rugged chain of Le Brévent (2525m) and of the Aiguilles Rouges.

Chamonix is a popular winter sports resort in France. As the highest European mountain west of Russia, Mont Blanc holds a special allure for mountain climbers, and Jon Krakauer, in an essay in his collection [Eiger Dreams](#), described the town as "*the death-sport capital of the world*" because Chamonix serves as an ideal playground for almost all types of outdoor activity, especially in their more extreme variants, such as ice climbing, rock climbing, extreme skiing, paragliding, rafting, canyoning.

Chamonix is famous for its spectacular cable car up to the Aiguille du Midi (3842m). Constructed in 1955 it was then the highest cable car in the world. Together with a cable car system going up to the Point Helbronner (3462m) from Entrèves in the Aosta Valley (Italy) it is possible to cross the entire Mont Blanc Massif by cable car.

In the summer months Chamonix is a mecca for alpine mountaineers, drawn to the area by challenges like the north face of the Dru, the Frendo Spur on the Aiguille du Midi, traversing the Alps on the legendary GR 5 footpath or more accessible challenges like summiting Mont Blanc (by a number of possible routes). (Wikipedia)

The theme of this years IKAR Terrestrial Rescue meeting was "Mountain Rescue Involvement in Disaster Response" and presenters from around the world were required to submit proposals and papers in advance, with a standard 20 minute presentation period followed by 10 minutes of questions.

This was the biggest gathering sponsored by IKAR, with more than 300 rescuers from 32 national organizations represented. Representing the MRA at Chamonix were Dan Hourihan and Rick Lorenz (Terrestrial Commission) Dr. Ken Zafren and Tim Kovacs (Medical Commission) Dale Atkins (Avalanche Commission) and Ken Phillips (Air Rescue Commission). Simultaneous translation was provided for all major sessions in English, French and German with the latest equipment and headphones, as well as sound proof booths for the translators. Attendance of the U.S. delegates was made possible by support from **CMC Rescue, Goodrich Corp., and RECCO**, as well as funding by the MRA . The U.S. MRA delegates are grateful to our sponsors for the long term support of this important international exchange.

The Congress: Many delegates arrived in Chamonix on the afternoon and evening of Tuesday, October 7. A day of field demonstrations and exercises was held on Wednesday, October 8 and regular sessions began with a grand opening and welcome at 0830 Thursday morning. Delegates stayed in several hotels and the general meetings were held in a first class conference hall in the center of town. There was a vendors exhibition with displays of outdoor and rescue equipment.

General Commission Issues: The minutes from last year's meeting in Pontresina, Switzerland, were read and approved.

Toni Grab, IKAR President began the Congress by outlining the goals of meeting discussions: 1.) mountain rescue involvement in disaster response; 2.) increased government demand for accountability; 3.) increased pressure on mountain rescue resources from new laws and regulations

and resulting unfunded mandates; and 4.) the potential of new standards to constrain operational flexibility during missions.

Toni Grab (Switzerland), IKAR Vice-President Reinhold Dorflinger (Austria), Terrestrial Rescue Chair Bruno Jelk (Switzerland), Terrestrial Rescue Vice-Chair Gebhard Barbisch (Austria), and Treasurer Felix Meier (Switzerland) were reelected to their positions through 2012. Patrick Fauchere (Switzerland) was elected the new Air Rescue Chair. Toni and Gebhard are both long-time friends of U.S. MRA, having attended MRA annual meetings in Seattle and Anchorage.

Comment: You can find a list of existing IKAR Recommendations and Standards at the publicly accessible website at www.ikar-cisa.org. IKAR is facing some of the same issues as MRA in terms of standards and increased government regulation. Most IKAR countries rely primarily on volunteer teams, with the exception of the professional mountain police in France.

Wednesday Sessions: Practical demonstrations were held on the flanks of the Aiguille Verte. Participants were transported via the Grand Montets cable cars to approximately 11,000' overlooking the Argentiere Glacier. More than 200 rescuers took part in the day's activities. At the venue there were eight stations demonstrating a variety of technical, glacier, avalanche, and communications equipment innovations. Groups were organized by language: German, French and English. Demonstrations included use of mono, bi, and tri pod cliff evacuation operations, crevasse extrication, as well as use of the RECCO system. These sessions are covered in greater detail in this year's IKAR DVD produced by Rick Lorenz, a member of the U.S. delegation, and his INREAS staff.



Left: Aiguille Verte location of Wednesday field sessions.



Right: The Argentiere Glacier from the Aiguille Verte.

Thursday Sessions: The Terrestrial and Avalanche Commissions met together for the opening session. Terrestrial Commission President Bruno Jelk made opening comments and thanked the Chamonix organizers. After these general comments, the two commissions separated for the balance of the day to address discipline specific topics.

Emergency Response Organization, Valais Canton, Switzerland: Dr. Jean-Pierre Deslarzes

Dr. Deslarzes delivered a presentation detailing the emergency response resource organization for the Valais Canton in southern Switzerland. Created in 1997, this organization integrates all components of the public safety infrastructure (police, fire, EMS, SAR, helo) under one centralized command during emergency response incidents. The system is similar to the Unified Command ICS template used in the U.S., with similar successful results. Eighteen organizations are involved.



Waldbrand am Stagor Fire: Joseph Brandner and Peter Pompenig, Austrian Mountain Rescue



Mountain Rescuer with Fedco backpack pump

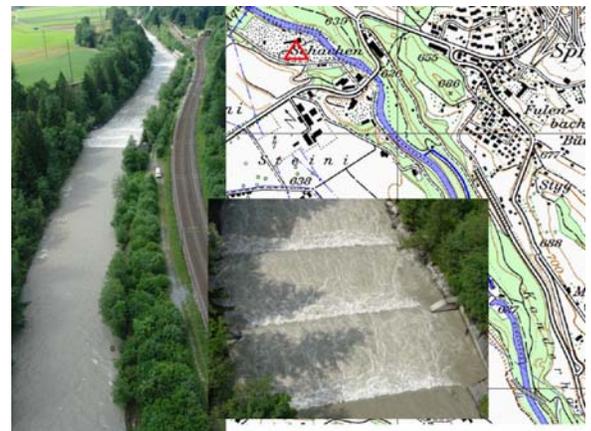
The speakers detailed the involvement of Austrian Mountain Rescue personnel in a major fire in the Waldbrand am Stagor region of Austria in February, 2003. The fire covered 472 square kilometers and threatened the homes of 13,500 citizens. The majority of the fire burned on steep, mountainous terrain, requiring belayed access and advanced anchoring techniques. The fire attack continued for fourteen days and severely taxed fire response resources in the region. A total of 1,021 personnel were involved in the response representing police, fire, military, alpine rescue, Red Cross, and aviation agencies. Forty-one (41) alpine rescue personnel provided the following services during the incident: communications,

helibase/helispot management, targeted helo fire retardant drops, steep terrain fall protection, and firefighting with backpack pumpers on belay. Although integration of alpine rescue resources in this incident were both vital and successful, the speakers recommended that such potential operations be a component of incident preplanning and coordination efforts.

Kander Incident, Switzerland: Hans Martin-Henny, Swiss Army Mountain Service

Mr. Martin-Henny detailed a river incident that occurred in June, 2008 near Thuner Lake in the vicinity of Bern. Three rafts, with five soldiers in each, were conducting rafting training when they approached a series of three low head dams. Two of the boats capsized, throwing all occupants into the river. All were swept downstream into a stretch of the river lined with steep, difficult to access terrain. The rescue response involved police, fire, EMS, helicopter, and mountain rescue resources; both civilian and military. Access to the river required both belayed access and river crossing highlines. The involvement of mountain rescue resources was critical to the success of the mission; despite the lack of training, experience, and specialized equipment of the mountain rescue personnel for river rescue. The major challenges during the mission involved the lack of common communications equipment and procedures, undefined authority amongst the various agencies involved, and the need for specialized training and equipment prior to an incident.

Comment: It is interesting to note that multi-agency coordination is well developed in certain areas of Switzerland (e.g. Valais Canton) and is still evolving in others; much like the U.S. The common thread, however, is the recognized need for such.

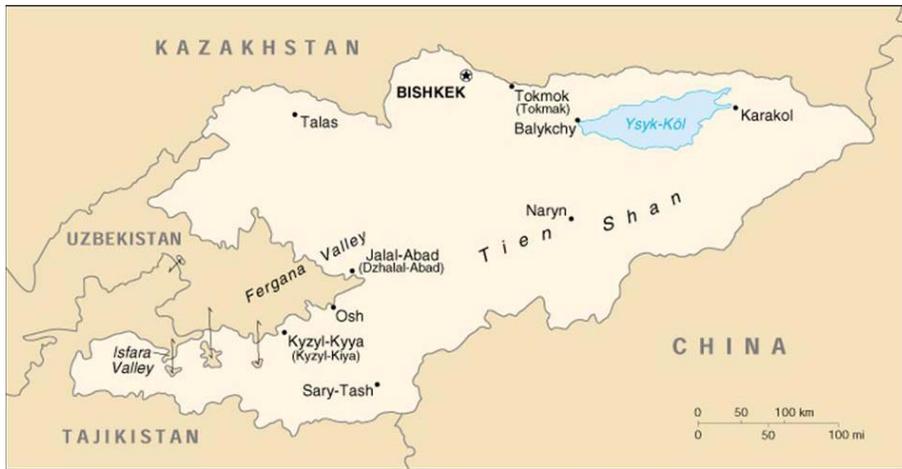


Man muss miteinander sprechen!
One must speak with each other!



Kyrgyzstan International Cooperative Training: Milan Sekelsky, Slovakia Mountain Rescue

Mr. Sekelsky detailed a two year training program provided by Slovakia Mountain Rescue to better organize and prepare Kyrgyzstan mountain rescue personnel to provide services in the Kirghiz Mountains. Thirty-seven students participated in the program which conducted training in the



following disciplines: avalanche rescue and recovery, technical rock and ice, crevasse rescue, search, and mission management. After successful completion of the course, participants received a certificate recognizing their accomplishment. The Kirghiz Mountains receive frequent international mountaineering expeditions and there has been very limited capacity for rescue response in the event of mishap. All field training and classroom

sessions were conducted with the use of translators, a daunting, but successful, task.

Comment: This is an exemplary example of the benefits of international exchange and cooperation. Mr. Sekelsky cited the great personal and professional satisfaction enjoyed by the Slovakian trainers, as well as the significant enhancement of mountain rescue capabilities within the affected Kyrgyzstan region

The possibility of international exchange exists within the structure created by the MRA: the parameters of which are entirely dependent on the participating teams.



A group of the Kyrgyzstan graduates

Integration of Mountain Rescue in Crisis Teams: Andreas Bardill, Director, Swiss Alpine Rescue

Mr. Bardill discussed the challenges and actions needed to fully integrate highly qualified mountain rescue teams in to crisis teams dealing with non-traditional mountain rescue incidents. He used as an example the crash of a German Air Force Tornado jet fighter in April, 2007. The jet was flying very low at high speed through a mountain valley in the vicinity of the Mittaghorn when the pilot lost control and the aircraft crashed into a mountain rock face. The weapons officer was able to eject, but his parachute became hung on the rock wall. Nine agencies from two countries (Switzerland, Germany) were involved in the rescue and follow up investigation.



swissalpinerescue

Weapon systems operator

ABOUT 200 METERS BELOW THE POINT OF IMPACT
ABOUT 200 METERS ABOVE THE RIMAYE

13/01/2009

Consequences for the Swiss Alpine Rescue



- Management
- Communication
- Staff
- Information
- Material
- Logistics



The ability and the possibility to cooperate as well as the use of expert knowledge on all levels are often more efficient than individual specialists in a crisis team.

13/01/2009

Major lessons learned

The initial action was a straight forward mountain rescue operation. Remarkably, the weapons officer survived the ejection and impact with the rock wall and was successfully rescued! Due to the nature of the terrain at the impact point, mountain rescue personnel and techniques were needed to access the aircraft debris and undertake the crash investigation. Major challenges faced during this mission included Hazmat, weaponry, and terrain. The outcome was a full review of the manner in which Swiss Alpine Rescue manages their training programs and missions, with emphasis on multi-agency integrated operations (see slide).

Comment: The involvement of mountain rescue personnel in non-traditional mountain rescue disaster incidents raises many concerns, as witnessed in this case. As the U.S. federal government undertakes the “typing” of all potential response resources, including mountain rescue teams, and “credentials” individual responders, Hazmat training and PPE requirements will become a necessity for those wishing to be utilized.

Mountain Rescue and Disaster Response in the United States: Dan Hourihan, MRA

Hourihan presented examples of U.S. MRA teams' involvement in non-traditional incident response. Included were San Diego Mountain Rescue Team's actions during wildfires in Southern California, Central Arizona Mountain Rescue Association's services during the Hurricane Katrina aftermath, and flood response in Grand Canyon National Park. Mountain rescue teams can and do serve a vital role in disaster response. The potential response capability of each team is based on its skill set, relationship/coordination with local authorities, and desire to participate in non-traditional mountain rescue incidents. Possible incidents include: wildfire, flood, extreme weather, earthquake, airline crashes in mountainous terrain, and major terrorist acts.

Comment: Although traditional mountain rescue is rooted in a rich history of mountaineers helping other mountaineers in the mountains, trained and experienced teams possess significant skills of great value to those in need anywhere. It is likely that teams will respond when their services can contribute; so it is important to consider potential disasters in their operational area and prepare for such.

Right: San Diego Mountain Rescue Team wildfire response

Mountain Rescue Related Services in Disaster Response

- ◆ Team Organization
- ◆ Medical Care
- ◆ Search Capability
- ◆ Communications
- ◆ Hazardous Terrain
- ◆ Well Equipped
- ◆ Self-Sufficient
- ◆ Law Enforcement

STATES OF DEVASTATION: KATRINA'S AFTERMATH

Mountain Rescue contributions in disaster response



Multi-Function Helmet: Peter Veider, Tyrolean Mountain Rescue, Austria

Entstehungsgeschichte und Hintergründe

Verpackung: Info Recco



Info Alpinpolizei



Info Bergrettung








© Veider Peter, Bergrettung Tirol

Peter Veider introduced an innovative helmet design which is suitable for mountain rescue, skiing, sledding, skateboarding, and bicycling, with an imbedded RECCO reflector. The helmet is UIAA, EN, and ASTM approved and is currently priced at 150 euros. Introduced in 2007, 4,000 were available the first year with 7,000 manufactured in 2008. The helmet is currently marketed by Dynafit and will also be by Salewa, called the Xenon helmet. A smart choice for those enthusiasts of varied outdoor activities requiring helmet use.

Multi-Function Harness: Bavarian Mountain Rescue

The Bergwacht Bayern (Bavarian Mountain Rescue) has developed a harness system that is applicable both alpine and air rescue use. It is an integrated chest and sit harness system that incorporates materials approved for both applications and allows a variety of configurations, e.g. single and double hoist.



Bergwacht Bayern (Bavarian Mountain Rescue): Otto Moslang, Bavaria, Germany

Mr. Moslang, the Bavarian Mountain Rescue director, presented an overview of the Bergwacht Bayern's operation. Their area of responsibility includes 7 regions and 92 towns. They handle approximately 12,000 missions/year; 6,000 of which require medical actions. The 85 year old organization has 4,400 members, of which 2,700 are active rescuers and 150 are doctors. They serve a major role in disaster response throughout Bavaria including: fire response in steep terrain, medical evacuations, floods, landslides, major highway transportation closures, and significant



events. He detailed, as an example, the Bergwacht's service provided during this year's Zugspitz Race, a very popular mountain race. The race was held during very poor weather; high winds, rain, and temperatures in the 40's. Many racers became disoriented and lost on the mountain, with dozens overdue and unaccounted for. Of the 580 participants, 100 required medical aid, with 2 requiring resuscitation and 18 requiring advanced medical procedures. In Bavaria, the police, fire, and rescue services all have lawful responsibility to respond and provide services during disaster operations. This drives the coordination and pre-planning efforts that take place. It also has led to

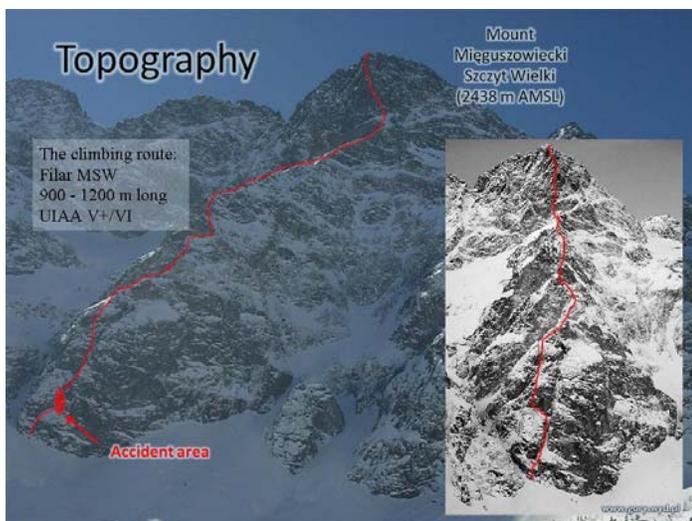
the development of training modules by the Bergwacht addressing the management of disasters, including multi-agency coordination and multi-agency exercises.

Comment: The Bergwacht Bayern provides a high quality model for emergency response in mountainous terrain. Although comprised almost entirely of volunteers, the public funding they receive, by virtue of its lawful responsibilities, provides the foundation for an outstanding training program. Of note is the invitation, with tuition, housing and meals free of cost, that has been extended to the MRA to send two rescuers each year to the Bergwacht Winter Rescue Course held in the Alps near Sonthofen. In January, 2009, rescuers from Seattle Mountain Rescue and Portland Mountain Rescue will attend.



- 800 Teilnehmer gemeldet
- 580 Teilnehmer trotz schlechter Wetterprognosen gestartet
- 2 Personen mussten gleichzeitig reanimiert werden
- 18 Personen mussten bergrettungsdienstlich und notärztlich versorgt werden
- 100 Personen mussten bergrettungsdienstlich betreut werden.

Winter Climbing Accident, Tatra Mountains, Poland: Tomasz Witkowski, TOPR, Poland



In February, 2008, a solo climber on Mt. Mieguszowiecki fell while attempting the central pillar on the mountain's north face. He was not discovered until the following day, when two members of the TOPR Mountain Rescue team attempting the same route encountered him. He was hanging free, suspended from his SOLOIST device, with no support from his sit harness. It appeared that he had fallen 25 meters and remained in the free hanging position since the fall. The cause of death was attributed to extended free hang and the improper use of the SOLOIST device. The climber sustained no external injuries.

International Disaster Response Coordination: Gebhard Barbisch, Austrian Mountain Rescue

Mr. Barbisch detailed his involvement with the EU efforts, in conjunction with the UN and other international organizations, to prepare agreements for mutual aid responses to disasters on an international scale.

Comment: Though this presentation holds little relevancy to the vast majority of mountain rescue teams and their members, it should be noted that the U.S. National SAR Plan, developed by the National SAR Committee (NSARC), details major domestic disaster response in its Catastrophic Incident addendum. The interface of the U.S. in international disaster response is detailed in the U.S. supplement to the International Aeronautical and Maritime SAR Plan (IAMSAR). See <http://www.uscg.mil/hq/cg5/cg534/NSARC.asp>

Delegates' Meeting

IKAR President invited each of the Commission Chairs to summarize the activities of their commission during the Chamonix congress (see individual Commission reports on the MRA website at <http://www.mra.org/training/ikar.php> . He summarized the 2008 theme of Disaster Response by reiterating the value of mountain rescue team skills integrated in a multi-agency, coordinated response. He further stated that the major current challenge to mountain rescue was the governmental development of standards and regulations affecting mountain rescue operations. He stated that mountain rescue must be involved in the development of any standards and regulations and that they must not restrict the flexibility so necessary in actual field operations. He invited any IKAR member organizations to reach out to IKAR for support if they encounter problems with such regulatory or standard development in their home country.

The 2009 IKAR Congress will be held in Zermatt, Switzerland 23-26 September. It will have a day of field presentations on 23 September focusing on avalanche operations. The themes of the Congress will be Disaster Response Coordination and Mountain Rescue Standards and Regulations.

Respectfully Submitted,

Dan Hourihan, Alaska Mountain Rescue Group, MRA
U.S. IKAR Terrestrial Commission Delegate