2017 International Commission for Alpine Rescue (ICAR) Assembly of Delegates

Terrestrial Rescue Commission Report

By MRA Terrestrial Rescue Commission Delegates

Dave Clarke, Portland Mountain Rescue

Tom Wood, Alpine Rescue Team

2017 ICAR ASSEMBLY OF DELEGATES OVERVIEW

The 69th annual ICAR Congress and Assembly of Delegates took place in the small mountain resort village of Soldeau, Andorra from October 18th-22nd. Hosted and organized by local rescuers from the Bombers d'Andorra, the four-day gathering was attended by a few hundred mountain rescuers from all over the world. The Mountain Rescue Association sent 7 delegates for representation in each of the 4 commissions (Air Rescue, Avalanche Rescue, Alpine Emergency Medical and Terrestrial Rescue).

This year's preconference field day was the terrestrial theme of Big Wall Rescues. The final day's Assembly of Delegates marked an historic moment in the history of ICAR in that major changes to ICAR membership categories were presented and ratified and ICAR topped 100 member organizations from 37 countries.

Also of note, longtime MRA MedComm Delegate Dr. Ken Zafren (Alaska Mountain Rescue Group, above) was unanimously elected as an Honorary ICAR Member, (D type membership), becoming the first American mountain rescuer to receive that honor.

As always, the full videos from Topograph Media beautifully captured the full ICAR experience, and they can be viewed by clicking on this link: https://vimeo.com/242661300

ANDORRA

Bordered by France to the north and Spain to the south, Andorra is nestled within the Pyrenees Mountains and is officially known as a principality. It is the 16th smallest nation in the world (181 square miles), with a population of about 77,000. A mountainous country, it's capital city of la Vella is the highest in Europe at 1,023 meters.

The official language is Catalan, which was officially spoken for the first time at an ICAR Congress this year. Spanish, French and Portuguese are also often spoken. With only 120 full time firefighters/rescuers in the country, and all of the terrain being mountainous with several world-class resorts, the Andorra Bombers have their hands full each year during ski season as the country can see more than 10 million visitors annually.

PRECONFERENCE PRACTICAL DAY

2017 ICAR Preconference Practical Day, Terrestrial Rescue theme was Big Wall Rescues, with several different stations being set up and run (in the rain of course) by various rescue organizations.

MRA Delegates Alison Sheets, Dave Clarke and Tom Wood ran a monopod station that demonstrated the benefits of a dual tensioned system utilizing a high directional monopod (the TerrAdaptor) with load sharing anchors and backties for raising and lowering a litter during a big wall (or hotel rooftop) rescue.

Friction mitigation on the raise (Tom Wood and Dave Clarke hauling on the left) and a better edge transition for the rescuer demonstrated why high directional can make for a safer and more efficient rescue. The rain made for a soggy day, but Dave Clark and Alison Sheets, below, still kept smiling through the nine repetitions of the rescue demonstration.

Italian station: This showed rappel techniques using brake plate, carabiners, and 10mm ropes. Italy has 7000 responders with 700 rope technicians. They keep gear universal and use no mechanical devices due to freezing, wet/dirty ropes. They showed two alternatives to a prusik, called a bolognese and taz knots. For rappel/belay they use the Kong Gigi for one-person belay and the Kong Totem for heavier loads. They use the flat single overhand bend to tie ropes together with a 40-60 cm tail (easy to pass and slide over edge).

Italian rescuers also demonstrated how a Canyoneering team floated a litter with a waterproof patient bag. They did a raising with litter with the rescuer as counterweight—they use rescuer counterweight as much as possible because it's quick. They used a single rope with a vertical raise, with the tail of the rope tied also to the tail of the litter. When they reached the edge, they used a pike and pivot: a second rescuer at the edge tied a separate rope to the litter top and unclipped the raising rope, which allowed the raising rope the act as the pivot rope since it was attached the tail.

The French rescuers showed a two-rescuer recovery and spinal immobilization of a patient on a rope on a cliff using hard collar and Kendrick Extrication Device (KED). They then showed three techniques for transferring a patient from the ground to the KED: a two-person transfer and a single person transfer.

The rescue of a big-wall injured climber using a single rope technique was demonstrated by the Slovenians. They first showed rope pickoff using a rig similar to an CMC Aztek. They then did a two-person, single-rope rappel with the Petzl ID.

The Austrians worked to show techniques at extrication for suspension intolerance. Mechanism of injury was venous pooling and neurologically mediated unconsciousness from a climber hanging by a waist harness for an extended period. The take home from the Austrians: After extrication of a patient hanging by seat harness, keep supine. (NOTE: At present, the ICAR MedComm is working on recommendations for treatment of Suspension Intolerance)

Pelvic fracture stabilization techniques using a pelvic binder were shown by the Germans. (As a side note, somewhat controversial in the US)

(Christopher Van Tilburg and Tom Wood)

TERRESTRIAL RESCUE ASSEMBLY OF DELEGATES

Revision of ICAR Terrestrial Rescue Recommendations:
Led by the Terrestrial Rescue Commission President Gebhard Barbisch and Vice President Kirk Mauthner, the Terrestrial Rescue delegates met on the first day for both presentations and to discuss revisions to several ICAR Terrestrial Rescue recommendations. It is important to note that ICAR makes recommendations for mountain rescue, but these recommendations should not be construed as standards or guidelines.
Here are the Terrestrial Rescue Commission recommendation revisions that were voted on and approved:

TER-REC0001 – Using Connector/Carabiner in Mountain Rescue Organizations
Current:
Using of Carabiner with Self-Lock-Systems in Mountain Rescue Organizations
20051016-TER-REC0001 Commission for Terrestrial Rescue Recommendation

The ICAR terrestrial rescue committee recommends at organized mountain rescue operations for main and central carabiners and for air rescue operations only the use of push/ pull and twist carabiners which is conform to EN 12275Q.

New:

The ICAR Terrestrial Rescue Commission recommends at organized mountain rescue operations for main/central attachment points and for air rescue operations only the use of:

- Triple action gate carabiners or
- connectors/carabiners with a screw gate.
- Connectors/carabiners must conform to EN 12275 or EN 362 and/or NFPA 1983 US-Standard
- Steel main or central connectors if used with air rescue.

Connectors/carabiners used in flight rescue operations as a part of the equipment of the crew or helicopter are regulated by an extra recommendation AIR-REC0014HECHHO-Equipment from the ICAR Air Rescue Commission.

Discussion:

Change: Removal of „and“.

Q. Question regarding triple action carabiners: Can one also use carabiners that are opened through pressure on the backside (Klettersteig carabiners)? These conform to EN 362.

A. No, but they can be used for securing oneself.

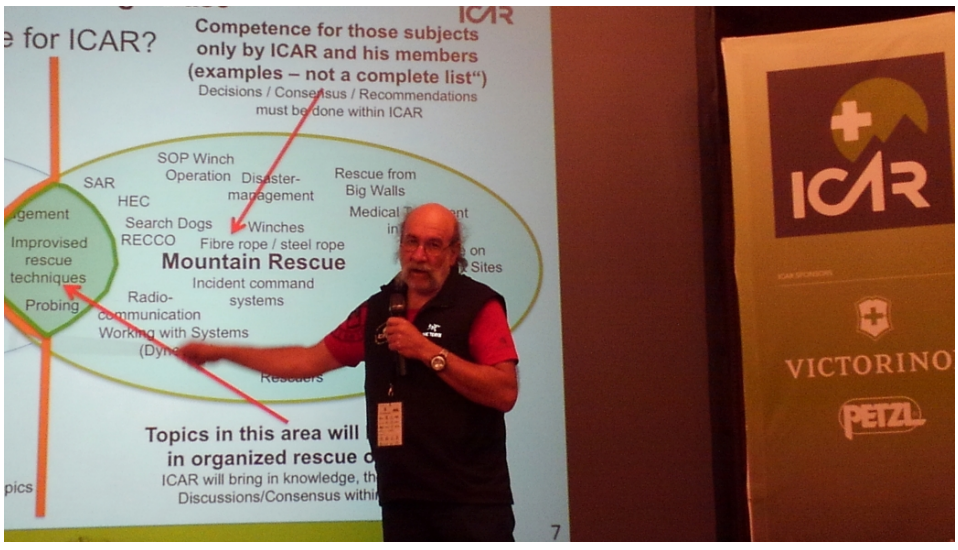
A reference will be included that the recommendation concerns main and central carabiners.

Change: "Incidents" is replaced by "activities" (in explanatory notes).

Vote:

The recommendation with the changes is approved.

File: 20171019-1030-TER-REC0001-E-Final.pdf



TER-REC0004 – Rope Connection for Rope Extensions

Current:

Static Rope Knots for Rope Extension

20141007-TER-REC0004 Commission for Terrestrial Rescue Recommendation

Knots for Joining Conventional Kernmantle Rescue Ropes:

Only a figure eight follow through, a flat figure eight or a double fisherman's knot are allowed for joining and extending conventional kernmantle nylon and/or polyester rescue ropes conforming to EN 1891 or CI 1809-98 for the purpose of mountain rescue operations.

New*:*

Static rope Knots for rope Extension or Rope Connections for Rope Extension

Suitable knots for connecting ropes to extend them are:

• Ropes with sewn terminations: 10-mm standard maillon connector
• Ropes with NO GROUND CONTACT:
o Double or triple fisherman's bend.
• Rope with NO GROUND CONTACT BUT HIGH TENSION:
o Reef (square) bend with double fisherman's backup
o Double or triple fisherman's bend or
o Figure eight bend
• Ropes WITH GROUND CONTACT:
o Flat Double overhand knot
o Postman's knot
o Single flat overhand knot when load not more than one person and with ropes of the same diameter and type.

Pictures of these notes can be found in Section 4. Glossary

All knots must be properly dressed and all strands must be individually set prior to use. Bends require tails to be at least 10 times the rope diameter. Knots require sufficient tail to allow at least one roll.

Discussion:

Removed: Static rope knots for rope extension in the title.

Q. Triple fisherman's bend: Were the different prerequisites of Dyneema ropes taken into consideration?

A. There are two types of fisherman's knots, both of them were meant.

Change: Kernmantle is included in the title of the recommendation.

Q. Regarding the tail of the knot: One rule is 10 times the diameter. Is that applicable here as well?

A. This does not work with all ropes or knots. Tucked knots require longer tails. The recommendation will be amended accordingly.

Add-on to the recommendation: All knots must be properly dressed and all strands must be individually set prior use. Bends require tails to be at least 10 times the rope diameter. Knots require sufficient tail to allow at least one roll.

Change: Several expressions in the explanatory notes (bend, knot).

Vote:

The recommendations with the changes are approved.
File: 20171019-1100-TER-REC0004-E-Final.pdf

TER-REC0005 – Redundancy for Lowering or Raising People with Fiber Ropes (Program switch – 10.06.2017)

Current:

Redundancy for Lowering or Raising People with Fiber Ropes

20051016-TER-REC0005 Commission for Terrestrial Rescue Recommendation

The ICAR Terrestrial Rescue Committee recommends for lowering or raising people with fiber ropes fundamentally two anchors, three dimensional apart as practical, have to be used.
One anchor is for the load rope or winch, the other is for the belay (rope).
If fiber rope winches are used the load rope runs over the winch. Using the winch the load is lowered or raised.
The three dimensional separated belay line runs through a braking device.
If the course of the rope on the winch must be changed the belay line has to be fixed to hold the rope.
A practical three dimensional separation of the load rope and the belay line is necessary to prevent damage and shearing of both ropes at the same time.
The belay line always must be kept tight over the whole rope length. For no reasons loose rope slings are allowed to develop.

New:

Redundancy for Lowering or Raising People with Fiber Ropes

The ICAR Terrestrial Rescue Commission recommends two-tensioned rope systems for high consequence terrain when lowering or raising with fiber ropes that provide a mutual backup in the event of a failure of one of the rope systems.
Redundant anchor systems should be used for two-tensioned rope systems, preferably with some separation between ropes.
Whether using fiber rope winches or pulley systems, sharing the tension between rope systems is recommended, including when switching between lowering and raising.
If all tension is to be placed on one rope, then an additional risk assessment must be made.

Discussion:

Q. PGHM winch: The system PGHM uses does not conform to the recommendation. The tension cannot be placed on two ropes except if there are two winches.
A. There are many winches than can only handle one rope. However, there are winches that can handle the two-tension rope system.
Explanation Herbert Streibel:
A redundant location does not require two separate locations. Everything is already doubled. The location needs a safety factor of 10.
Winches: There is one winch that can pull up both ropes at the same time, which is why the two-tension rope system was adopted.
Explanation Kirk Mauthner:
The two ropes do not need to carry equally divided tension. The risk is already reduced

if the tension can be divided.
Comment Tom Wood:
We need to differentiate between ropes: natural fibers are not meant.
Change: Adding to the title conventional Kernmantle ropes. Problem: some use Dyneema ropes. Therefore, add fiber ropes in the title. This will be further defined in the glossary as no natural fiber ropes.
Winch problem:
Kirk Mauthner poses the question if "winch" should be removed.
Winch will not be removed but the following added to the recommendation: If all tension is to be placed on one rope, then an additional risk assessment must be made.

Addition to the glossary: High consequence terrain: Conditions which can lead to serious injuries.
Vote:
The recommendation with changes is approved.
File: 20171019-1130-TER-REC0005-E-Final.pdf

(Tom Wood)

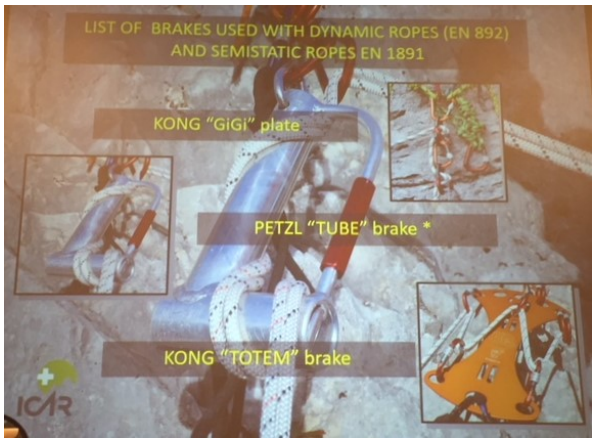
PRESENTATIONS:

In addition to the revision of the Terrestrial Rescue recommendations, there were several excellent Terrestrial Rescue Commission presentations given, with most of them being tied to the 2017 theme of Big Wall Rescues.

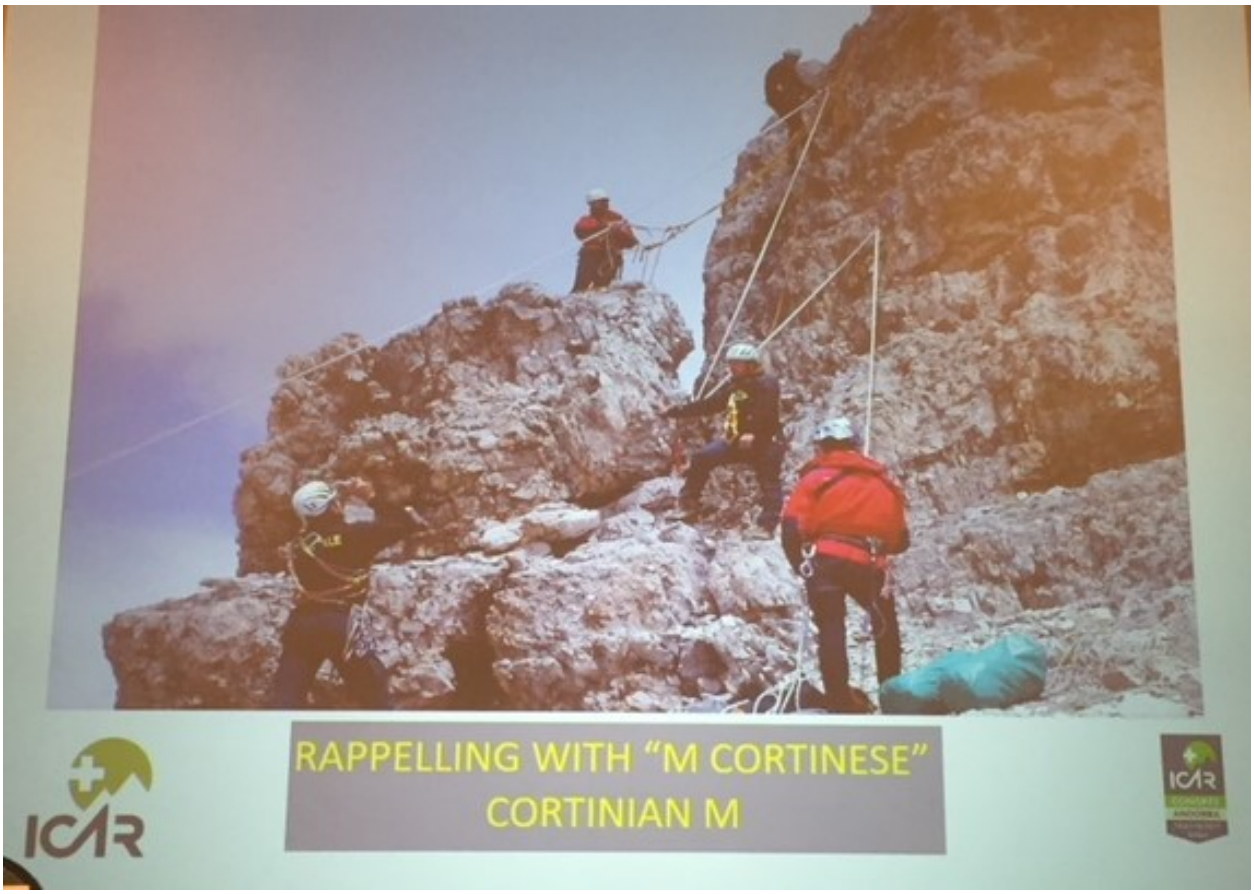
Lowering Techniques on Big Walls

Ennio Rizotti from the Italian National Service for Mountain and Cave Rescue (CNSAS) gave an interesting presentation on the techniques they use for lowering rescue loads on big walls. I'm not sure if it is a translation error or a difference in terminology but they used the term rappelling for what we would call lowering in North America. The Italians have a well developed national system with 6583 volunteers based out of 242 alpine rescue stations and 27 cave rescue stations. Twenty seven bases have hoist equipped helicopter teams. All the teams use the same equipment and are trained by national instructors, so they can work together seamlessly.

They utilize several Descent Control Devices (DCDs) depending on the height and configuration of the wall. Devices include the Gigi plate, Alpine Brake Tube, Totem and a person based technique called the Cortinian "M." They use dynamic and semi static ropes 50-200meters in length but longer lowers are easy as they can easily pass knots through the Totem or Tube brake devices. As the photos show, they use a two-rope system but run both ropes through the same device(s.) This method simplifies speed control but doesn't give full redundancy. They also lower a subject in a litter with two attendants. They demonstrated some of these techniques during the practical day which can be seen in the Toograph Media video at minute 13:20-1500.



Descent Control Devices used by CNSAS



They concluded with the following points being necessary for successful operations on big walls:

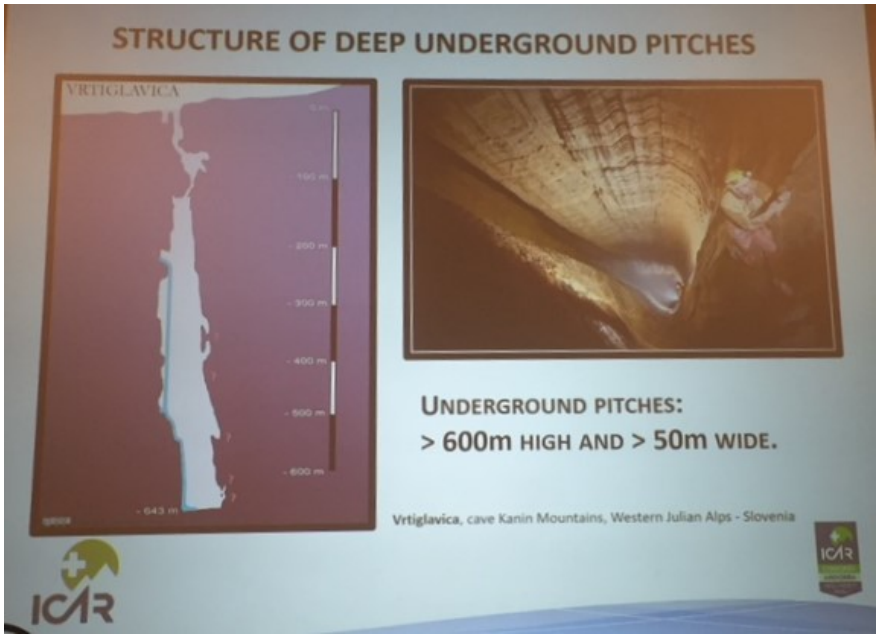
- Pre-emptive knowledge of the big wall
- Operating procedures must be clear to all rescuers
- Place only the indispensable operators on the wall
- Do not throw down ropes without rescuers
- All rescuers must have a radio

(Dave Clarke)

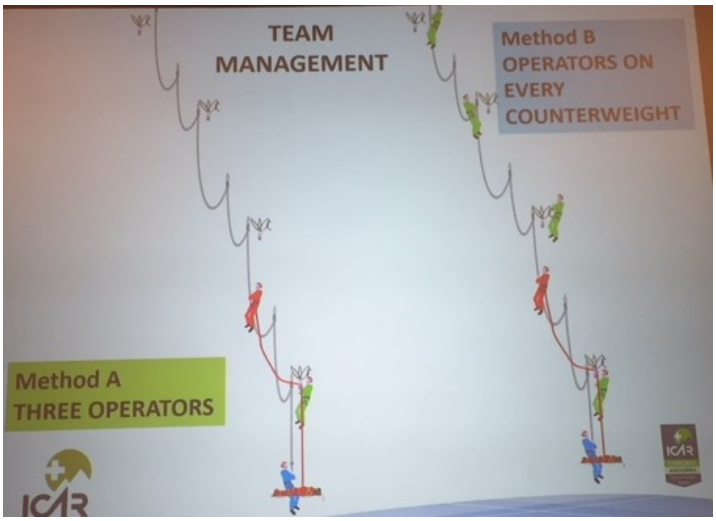
Rescue Systems for Deep Cave Pits

This presentation showed the cave rescue techniques used in very deep cave pits by the Italian National Service for Mountain and Cave Rescue (CNSAS). For example, the Vrtiglavica cave in Slovenia has 600meter deep pits that are 50meters wide. Others have 300merter ice pitches in the pits. The rescue team's focus is to minimize the number of rescuers and the amount of gear necessary. The presentation mentioned the use of preexisting static lines set up with rebelays to eliminate rope contact with edges. This creates an excellent environment for using

counterweight raises. However, dealing with such deep pits they have refined their systems to be highly efficient. They illustrated two of them with some excellent animated graphics that hopefully will be made available on the ICAR website; They are worth checking out to better understand these systems. Additionally, CNSAS has made available their 364 page "Cave Rescue Handbook" as a free download.

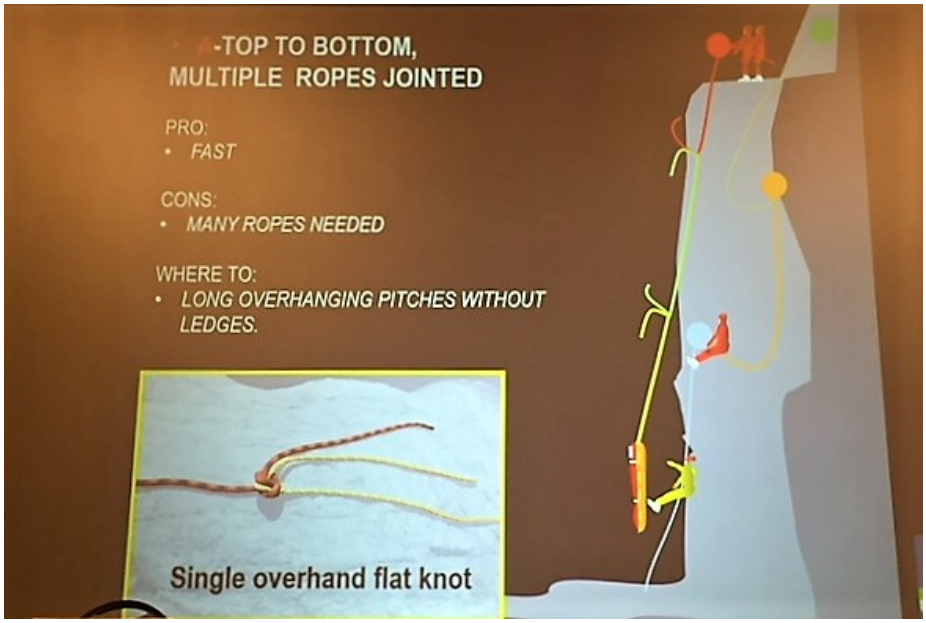


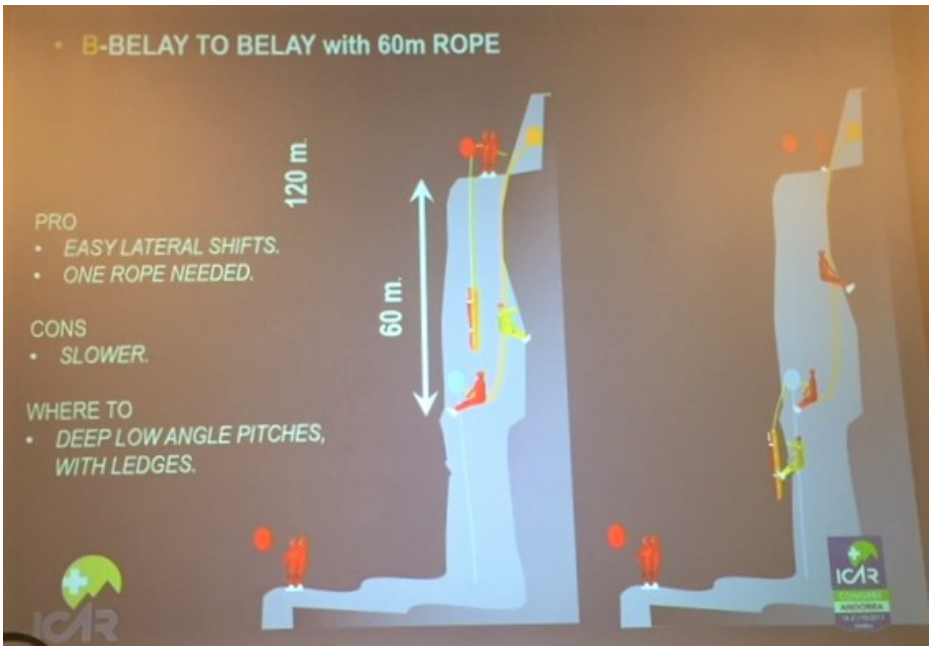
The first system uses three rescuers who essentially rotate through the roles as they ascend. They "leapfrog" past each other as they ascend, sharing the physically demanding tasks. This poses fewer risks as there are fewer rescuers to move around thereby reducing the potential for rockfall or mistakes. The cons are that the operators must be highly skilled and fit as fatigue is a major factor in these deep pits. The second system stages a rescuer at every pitch and is faster but takes more skilled rescuers, has more potential for human error, and more people exposed to potential rockfall. *(Dave Clarke)*



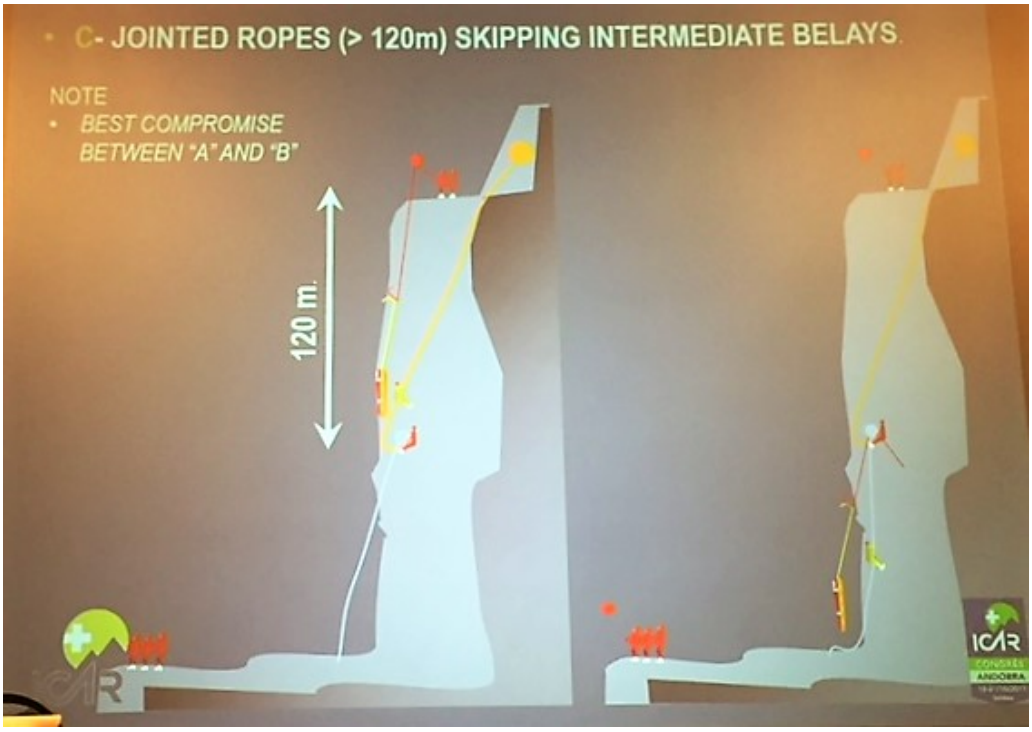
Rescue Systems with the Canyon Stretcher for Big Walls in Canyons

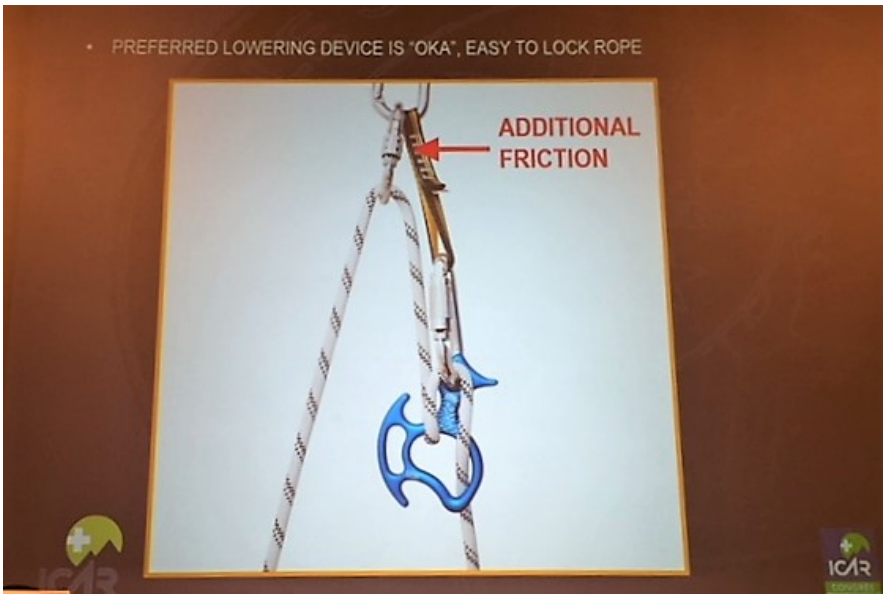
A final presentation from the Italian National Service for Mountain and Cave Rescue (CNSAS) was about their use of the Kong "Canyon stretcher" for waterfall rescues in canyoneering accidents. They use three different systems on their tall waterfalls: a top to bottom lower with multiple ropes joined, multiple 60m pitches, and joining just two ropes to skip every other belay station. They use 10mm static lines and a two-tensioned rope system in areas with a potential for rockfall. The litter is often in a vertical orientation to avoid rockfall and the waterfall itself.





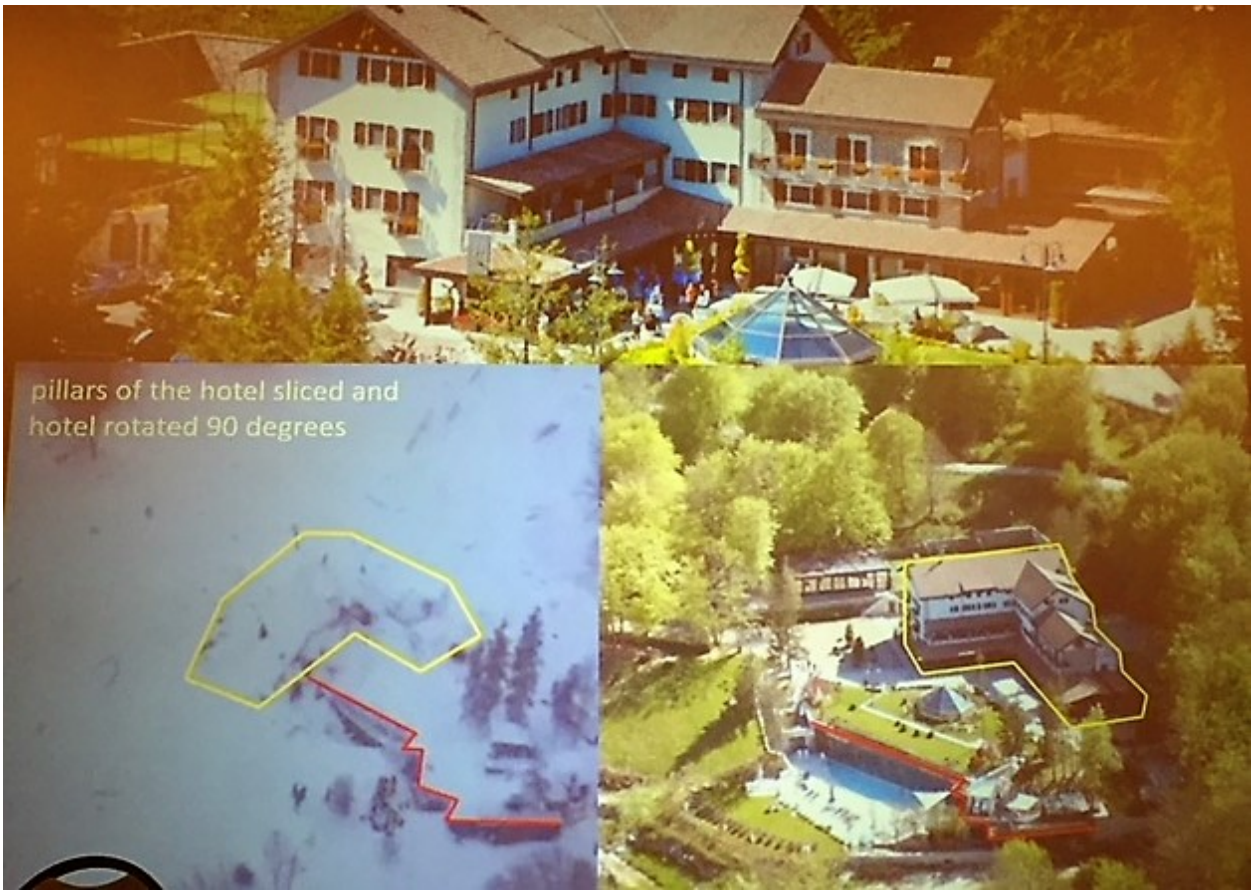
The attendant follows the litter rappelling on a separate line. The DCD is the Kong "OKA." The CNSAS also demonstrated a counter balance raise with the Canyon stretcher during the practical day which can be seen in the Toograph Media video at minute 15:00-17:35. *(Dave Clarke)*





The Rigopiano Hotel Avalanche Disaster

On the afternoon of 18 January 2017, a major avalanche occurred on Gran Sasso d'Italia a mountain in Rigopiano, a tourist destination in Southern Italy's Abruzzo region. The avalanche struck the luxury resort Hotel Rigopiano, killing twenty-nine people and injuring eleven others. It was reported that shortly after a series of earthquakes hit the region, many of the hotel guests were gathered on the ground floor of the hotel awaiting evacuation when the avalanche struck. At the time, there were forty people in the hotel including twenty-eight guests and twelve employees. Upon impact, the avalanche caused part of the roof of the hotel to collapse, and moved it 10 meters down the mountain.



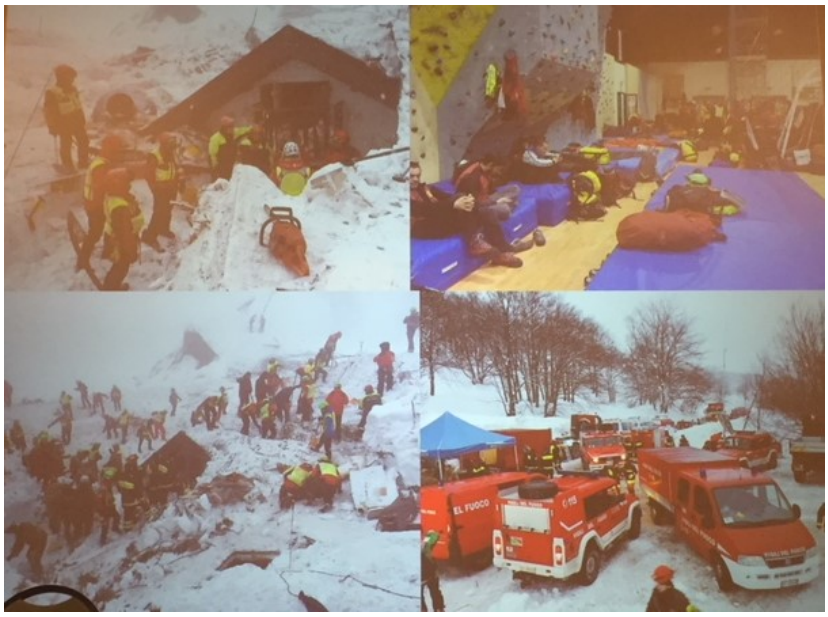
The avalanche largely destroyed the resort Hotel Rigopiano. A total of eleven people were rescued following the avalanche, including two people who survived the avalanche because they were standing outside the hotel when the avalanche hit. The survivors trapped inside the hotel, sheltered by lofts that had not collapsed, were located around 12:00 on 20 January, over 30 hours after the avalanche. Overall, five adults and four children trapped below the ruins and the snow were rescued, the last ones after 58 hours, having survived on frozen snow. Ten out of the eleven people rescued received minor injuries related to hypothermia. The eleventh person also received a compression injury to his upper arm, which he underwent surgery for. On 23 January, rescuers recovered a twelfth body, but also located three puppies alive under the

snow, indicating that the twenty-two people missing may still be alive. However, it was later revealed that no one else had survived the avalanche.

Two causal factors for the avalanche of 2017 include a series of earthquakes that struck the region earlier in the day (four above a magnitude of five followed by over 100 smaller quakes) and the record snowfall which occurred in the region for days prior to the earthquakes and avalanche. Later analysis revealed that the average slab depth was two meters and the total volume of 180,000 cubic meters. Further the hotel was built in an area that has a 50-100 year avalanche frequency. With the last major slide occurring in 1956.

The initial response the incident was delayed due to miscommunication. There was limited cell coverage and no land lines were functional after the earthquake. Eventually on cell call made it through to a dispatch center but was incomplete and was not deemed to be credible. Dispatchers called the hotel owner who was not on site and he reported that he didn't know of any problem.

First responders had difficulty reaching the hotel due to large amounts of snow which had fallen for several days prior to the accident, and did not arrive at the scene until 0430 local time. When rescuers arrived on scene, they stated that the hotel had been buried under at least four meters of snow, and that it could take days before they would know if there were any survivors. In addition, a base camp for rescue workers with ambulances was set up in the town of Penne approximately 10 km away. There is only one access road to the hotel which was blocked by the snowfall. In fact, the recovery efforts went on for six days.



Eventually the response involved over a hundred rescuers from many agencies including: military, police, firefighters, carabinieri, forest rangers, mountain rescue, Guardia di Finanza, and civil protection. I thought that the response was especially impressive considering that the

region was already in disaster response mode from the earthquakes. For example, it was cited that one quarter of the regions people were without power. Many responders did not have avalanche training or PPE. The access road was exposed to a lot of potential new avalanches complicating the response. Rescuers also employed a cell phone eavesdropping device used for anti-terrorism known as an IMSI catcher to locate buried phones.

All told the incident response was quite impressive considering the delayed reporting and the fact that it occurred during the response to another regional earthquake disaster. The presentation closed with the memorable quote "No one can choose how to die but everyone can choose how to live." *(Dave Clarke)*

BASE Jumping In Norway, Some Aspects for Rescue

Dan Halvorsen, an Air Rescue Technical Advisor delivered an interesting presentation with stats from Norway about BASE jumping fatalities. As it does here in North America, BASE refers to the departure points of: Buildings, Antennae, Spans, and Earth. He also detailed some of the problems and solutions from rescuing BASE jumpers from the big walls in Norway. The Topograph Media ICAR video has a segment of Dan and an overview of his presentation from minute 5:25 to 9:00 in the video.

Between 1984 and 2017 there were 34 fatal BASE jumping accident in Norway. They report that BASE jumping is 5-8 times higher risk than parachuting from a plane. However, in recent years the equipment has become safer. The accidents that Dan reported on involve jumping from big walls in the Fjords.

Some of the dangers for rescuers are that often the victims are in areas that are not frequented by climbers so there is loose rock and often difficult access. He showed an impressive slide of the dust cloud from a massive rockfall during a rescue in Trollveggen. Additionally, there is the danger of the rotor wash from rescue helicopters inflating the chute and sending the victim into an uncontrollable fall. This happened inadvertently in one rescue, in this case the subject was already deceased.

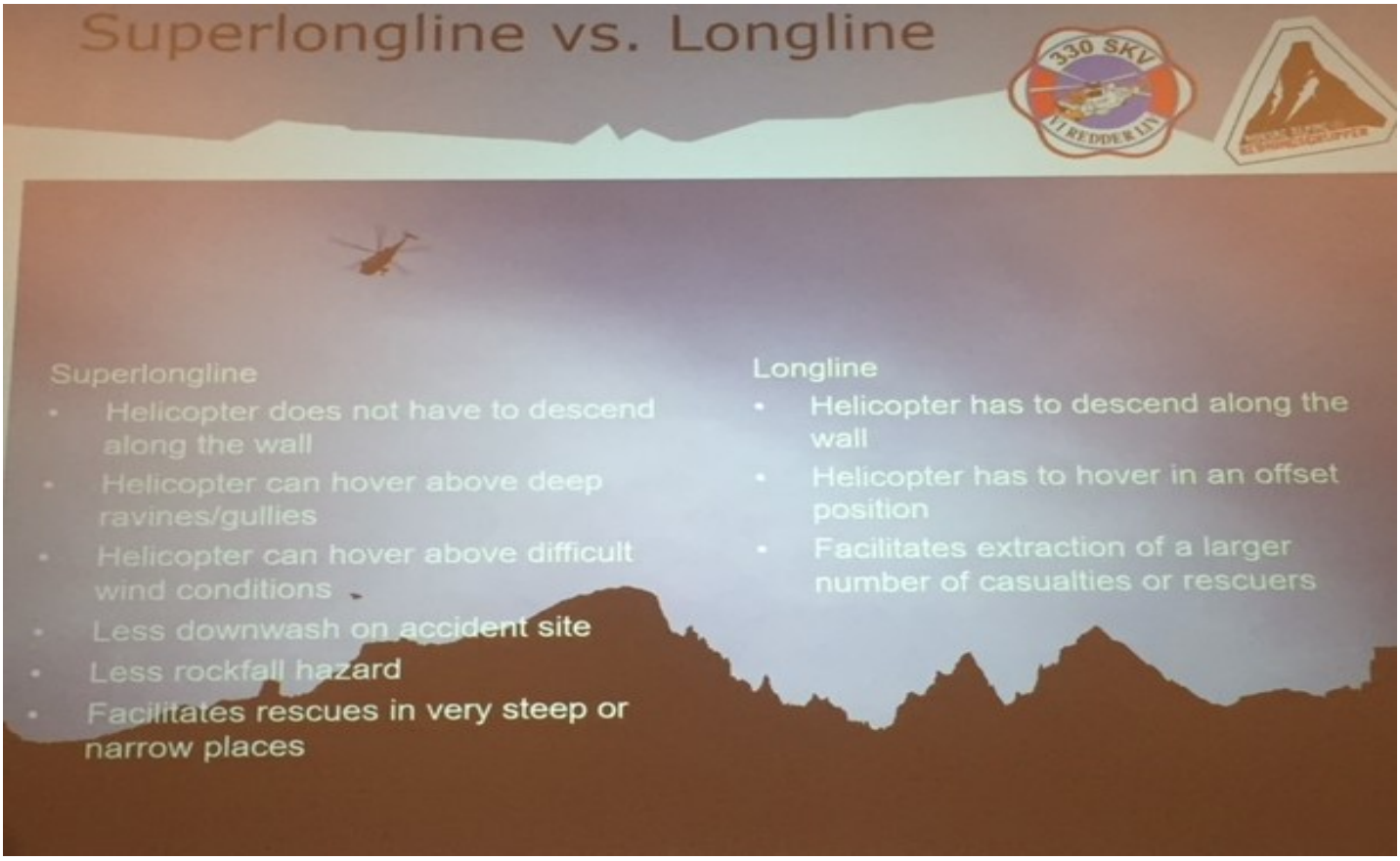
Other difficulties associated with helicopter rescues on these big walls are determining if the subject is dead or alive and just gaining access to the cliff face. Other presentations mentioned how other teams deal with these challenges and it was interesting to see how different solutions have evolved in different countries. In the case of the Norwegians, they presented their approach using the cable hoist, long lines and "super long lines." Their rescues are conducted jointly by alpine rescue groups and air rescue squadrons.

They utilize a SeaKing rescue helicopter with a crew of six including a doctor. It has dual hydraulic hoists with 245' of cable. In the long line and super long line procedures a rope of the needed length is added as an extension to the end of the cable. Typically, the rescuers are set down above the subject and rappel down to the site. Due to the long distance between the rescuer and the pilot they rely on radio communication rather than hand signals. The main

criteria for line length is to keep the aircraft above the big wall thereby greatly reducing the risk of a rotor strike and minimizing the effects of terrain influenced winds. The downside is that the greater line length worsens the depth perception issues for the pilot.

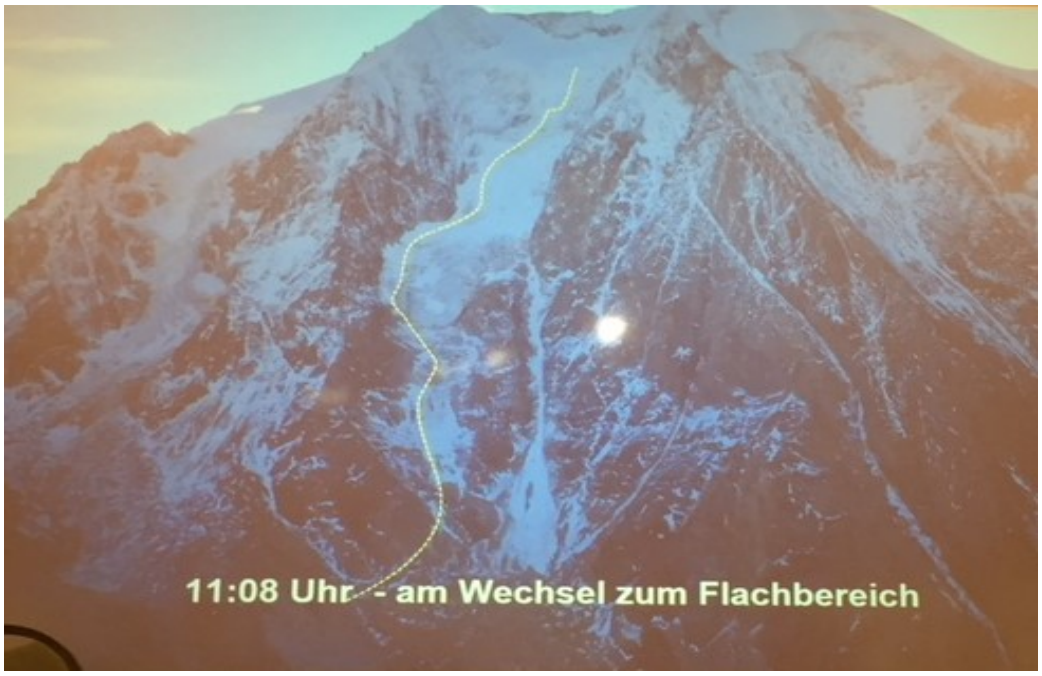
With the long line procedure, the crew identifies a suitable insertion point for the rescuer(s) above the subject and then extends the hoist cable with a 60m rope to keep the helo above the wall. The rescuer is then inserted in a short haul fashion, they rappel down to the subject bringing the end of longline with them (while the helo descends along the wall and hovers in an offset position) to pull the end of the cable in to the extraction point. Then the longline is used as a tag line to control the load during the hoist operation. One advantage is that this technique can be repeated to extract several subjects and/or rescuers.

The super long line technique differs in that as the rescuer(s) descend by rappelling or lowering to the subject they lay out a third un-tensioned rope which will become the super long line. In this case a rescuer would stay at the upper belay station and that is where the extraction connection to the helo is made. The advantages are that the helo doesn't have to descend along the wall and that it can hover above steep ravines or gullies, there is less rock fall hazard and less rotor wash at the accident site. *(Dave Clarke)*

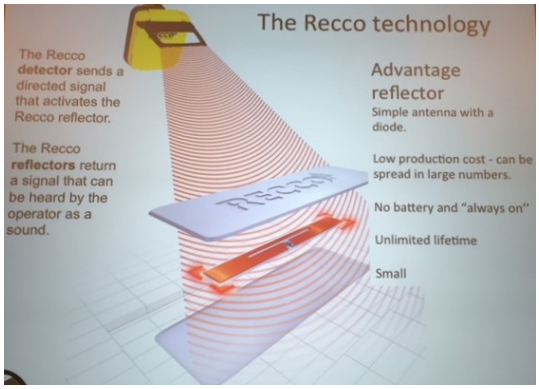


Rescue on the Hochferner Northface

Matthias Hofer a climbing guide from South Tyrol Italy related the story of a difficult search and recovery following a climbing accident in Oct.2016 on the Hochferner northface which is an 11,235' peak in northern Italy. You can see Mattias summarize his presentation on the ICAR video by Topograph Media (minutes 1:30-13:30.) The mission was made more difficult since three of the four subjects were mountain rescue teammates. However, the presentation was made more interesting by the fact that they recovered a camera with 70 photos and a GPS watch with a track and heart rate data. This enabled the team to do a more detailed analysis of the accident.



An initial response was started at 2300 hours when it was reported that the climbers hadn't returned. Once on scene the rescuers quickly realized that the climbers had been hit by an avalanche and had fallen 84 meters downslope. The first responders found two bodies almost immediately but then searched for four days to locate the remaining two. The key to finding them was the use of the Recco SAR, a new Recco detector that is slung beneath a helicopter. The team had just trained on a prototype version of the device two weeks prior. The last body was located with a hand held Recco detector and was under two meters of snow. Luckily that climber had a Recco reflector on his helmet which Recco reports can be detected up to 600 meters away in ideal conditions.



The Recco detectors can locate other electronic devices but the actual reflectors are able to be picked up from a much greater distance. The Recco SAR device is currently still in development with seven units being tested in Europe. The company hopes to have them in North America soon. *(Dave Clarke)*

Backcountry Zero: Rock Safety and Self Rescue Skills

Teton County Search and Rescue member Stephanie Thomas presented examples of how their rescue team has partnered with the Teton County Search and Rescue Foundation (TCSARF) to put together a comprehensive public education program for backcountry safety in the Tetons. Since 2015 the Backcountry Zero program, based in Jackson Hole, has been working to reduce injuries and fatalities in the mountains of Wyoming. According to their website, "Backcountry Zero is a four-season, cross-sport, community-led program created by the to inspire, educate, collaborate, and foster leadership in order to develop and heighten awareness for safer practices in the backcountry. Backcountry Zero aims to cultivate a culture among user groups with a common language of principles that guide safer, enhanced decision-making and travel in the backcountry. These aims are accomplished through working with the community (guides, teachers, mentors, retailers) to create program touchpoints, and through crafting and implementing events, educational opportunities and workshops, granting programs, and shareable multimedia."

For more information, visit their website at: http://www.backcountryzero.com/#ride *(Tom Wood)*

2017 ICAR CONGRESS ASSEMBLY OF DELEGATES (FINAL DAY)

On the last day of the Congress, all assembled delegates met for the annual business meeting and to vote on important ICAR issues. There were 35 A and 26 B members present. The Assembly of Delegates had a total of 96 votes, with a majority needing 49 votes to pass. The MRA is one of five organizations (the others being Teton County SAR, Silverton Avalanche School, Wasatch Backcountry Rescue and the newly approved University of New Mexico International Mountain Medicine Center) representing mountain rescue organizations in the United States to ICAR.

Several new organizations were approved for ICAR membership, including:

DAF-JKCMOX – Dutch Armed Forces / Joint Centre of Competence for Military Operation > C Members

ISMM – International Society for Mountain Medicine > C Members

LDMRSDA – Lake District Mountain Rescue Search Dog Association > B Members

CMH – Centre Médical Héliporté > B Members (CMH becomes ICAR's 100th Member Organization!)

GERA – Grupo Especial de Rescate en Altura / Cuerpo de Bomberos de la Comunidad de Madrid > B Members

UIM-PGME – Unitat Intervenció en Muntanya / Policia de la Generalitat Mossos d'Esquadra > B Members

UNM-IMMC – University of New Mexico / International Mountain Medicine Center > B Members

Dr. Ken Zafren as ICAR Honorary Member > D Member

New ICAR Membership Category Structure:

The Assembly of Delegates were presented with and unanimously approved an historic restructuring of the ICAR Membership Categories. This was done in response to the results of a 2017 survey sent to ICAR member organizations by ICAR Board member Dan Hourihan (Douglas County, Nevada SAR). The new member categories are designed to better reflect the current roles played by each ICAR member organization within their area of responsibility. The MRA retains its status as an A member organization, making it the only A member organization from the U.S. The new ICAR Membership Categories are listed below.

• **Type A**: Rescue organizations of a Nation or national importance* who cover all the

aspects of mountain rescue and fulfil recommendations set out by the ICAR Assembly

of Delegates. Type A member organizations have 4 delegate votes at the ICAR Assembly of Delegates. The annual membership fee is € 1'000.

• **Type B1**: Rescue organizations of regional importance including alpine associations** and organizations who cover part of the aspects of organized mountain rescue. They should fulfil recommendations set out by the ICAR Assembly of Delegates. Type B1 member organizations have 2 delegate votes at the ICAR Assembly of Delegates. The annual membership fee is € 500.

• **Type B2**: Subject specific organizations who cover part of the aspects of mountain rescue. Their rescue activities should fulfil recommendations set out by the ICAR Assembly of Delegates. Type B2 member organizations have 1 delegate vote at the ICAR Assembly of Delegates. The annual membership fee is € 400.

• **Type C:** Organizations within the field of mountain rescue who are not directly active in the ICAR and organizations that aspire to be members who cannot currently meet the guidelines for A or B membership. Their rescue activities should fulfil recommendations set out by the ICAR Assembly of Delegates. Type C member organizations do not have any voting right at the ICAR Assembly of Delegates. The annual membership fee is € 200. A waiver of this fee for a limited amount of time in specific and justified cases is at the discretion of the ICAR Executive Board.

• **Type D**: A person of special merit with regard to ICAR may be appointed as Honorary Member or Honorary President by the ICAR Assembly of Delegates, following the nomination by an ICAR Member Organization. Type D members do not have any voting right at the ICAR Assembly of Delegates. There is no annual fee for this membership type.

• **Type E**: Organizations, with no organized mountain rescue mission, who support ICAR goals. Type E members do not have any voting right at the ICAR Assembly of Delegates. There is no annual fee for this membership type.

** National importance is determined by a relationship with the national government which states the organization will be*

called upon in national need.

*** An alpine association that maintains an organized mountain rescue component within their membership.*

Mountain Safety Knowledge Base

ICAR President Franz Stampfli informed the ICAR Assembly of Delegates about the "MSKB-MSI Memorandum of Understanding DRAFT" received for joint signature by UIAA, IFMGA, ENSA, SLF & ICAR.

The ICAR Executive Board had studied/discussed the paper and came to the decision that it

may be signed, as it develops the basics to which we can agree.

Future ICAR dates and locations:

ICAR Convention 2018 in Chamonix, France October 16-20, 2018, Registration will open in April 2018, General Topic will be "The Influence of Climate Change to Mountain Rescue Operations"

ICAR Convention 2019 in Zakopane, Poland October 8-13, 2019

The complete official minutes of the 69th Assembly of Delegates can be found here: http://www.alpine-rescue.org/ikar-cisa/documents/2017/ikar20171208004550.pdf

(Tom Wood)