

2025 ICAR CONGRESS – JACKSON, WY (USA) AIR RESCUE COMMISSION FINAL REPORT



By Eva Sophia Shimanski, ICAR Air Rescue Commission Executive Secretary
With gratitude to Teton County SAR for various photos

The ICAR 2025 Congress took place in Jackson, Wyoming, USA, hosted by ICAR member Teton County Search and Rescue.

The ICAR Air Rescue Commission (AirCom) presentations and workshops were developed under the direction of ICAR Air Rescue Commission President Charley Shimanski and Vice President Renaud Guillermet. AirCom Executive Secretary Eva Sophia Shimanski, who has supported the AirCom as a volunteer for the past 7 years, served as Air Operations Chief and provided AirCom meeting management, as well as this report of minutes of presentations, gathering and distributing all presentations, and audio-visual support.

114 men and women registered for the AirCom sessions, with more than 120 rescue personnel participating in the AirCom room for multiple sessions. In contrast, 84 rescuers registered for the 2022 AirCom sessions in Montreux, Switzerland.



- 126 of the AirCom registrants, including ICAR Partners, came from 39 ICAR Membership Organizations
- Our 126 AirCom participants came from 37 countries
- Our AirCom registrants came from 51 partners and agencies

ICAR CONGRESS PRACTICAL DAY – AIR RESCUE COMMISSION STATIONS

The 2025 Congress Practical Day was an immersive and hands-on experience designed to simulate real-world rescue scenarios in alpine environments.



The AirCom Practical Day events included:

- Rescuer and Aircrew Safety when Connected to the Helicopter and Ground
- Weber County, Utah - Full Scale Demonstration of sUAS/drone operations for SAR Mission Support
- Drone Amplified X Recco: Demo and MONTIS AVY System

ICAR CONGRESS PRACTICAL DAY – VIA FERRATA PICK OFF DEMONSTRATION

While enjoying their lunch at the Rendezvous Lodge, more than 300 ICAR Practical Day participants viewed a demonstration by Teton County Search and Rescue that included their SAR H125 helicopter.

The crew demonstrated a pick off 2 individuals stranded on the Jackson Hole Resort Via Ferrata route. The demonstration included a long line insertion of two rescuers and then the retrieval of two rescuers and two subjects. The rescuers were both utilizing the *Petzl LEZARD Helivac Lanyard* to connect themselves to the wall while performing the evacuation.





UPDATE ON ICAR AIRCOM TOPICS AND ELECTIONS OF AIRCOM LEADERSHIP

By Charley Shimanski (AIRCOM President)

Charley and Renaud updated the group on their recent work associated with the ICAR Air Rescue Commission.

They attended and presented at multiple conferences, contributing to ongoing discussions in the air rescue community. Renaud attended the 2024 European Rotors, while Charley made presentations at Vertical Association International, Aviation Public Safety Association and the Onboard Systems' Hoist and Winch Operators Conference.

Together with others, Charley developed a paper titled "*Considerations for HEMS Programs Operating in the Vicinity of Paragliders and Base Jumpers*," which was published in *AirMed & Rescue Magazine*. Charley will also author a synopsis on helicopter rescues at very high altitudes for *AirMed & Rescue Magazine*.

Additionally, the AirCom Recommendations Task Force continues to work diligently, with additional sessions planned to explore their progress in greater detail.

Elections of 2025 AirCom Leadership



After 7 years as AirCom President, Charley Shimanski announced last year at the 2024 Congress in Thessaloniki that he would not run for another 4-year term. He expressed at that time his desire to pave the way for new AirCom leadership, noting that best practices in nonprofit governance call for regular transitions in leadership.

Elections for Air Rescue Commission leadership were conducted. Renaud Guillermet from Sécurité Civile (GSM; FR) was elected as the next AirCom President, in a motion made by Dale Wang (MRA; USA) and seconded by Drew Harrell (UNM; USA), passing unanimously.

For AirCom Vice President, candidates Clayton Horney (Colorado National Guard; USA) and Nigel Harling (Mountain Rescue New England and Wales) were considered, and there was agreement that having two Vice Presidents would serve AirCom well, given the number of projects currently underway in the commission. As such, a motion for unanimous consent — proposed by Giovanni Renso and seconded by Petter Gjersvoll — also carried without opposition or abstentions. Renaud Guillermet was recommended to the Assembly of Delegates for final voting on Saturday and was elected unanimously.

Congratulations to the new leadership of AirCom.



ACCIDENTS AND INCIDENTS IN HELICOPTER RESCUE

Paraglider Rescue in a River

By Renaud Guillermet (AirCom Vice President)

Renaud presented a detailed account of a paragliding accident in which a paraglider crashed into a river during a rescue operation complicated by strong currents and nearby powerlines. The team had briefed on these hazards beforehand and executed a validated action plan, but the situation quickly escalated when the paraglider became entangled in his wing lines. The rescuer was unable to secure the strop around the paraglider. Despite initial control, the safety parachute deployed in the current unexpectedly, dragging both the rescuer and paraglider downstream. The hoist operator reacted swiftly, guiding the pilot to maintain a vertical line and preparing to cut the hoist cable if necessary. The victim suffered severe hypothermia, and the rescuer experienced significant stress. Although the helicopter remained undamaged, several pieces of equipment—including the strop, hoist cable, headset, and tactical gear—were compromised. The incident underscored the complexity and danger of water-based rescues and highlighted that the team may have operated at or beyond the acceptable risk threshold.



Jammed Hoist Cable on Bell UH-1 Skid

By Jason Stanley & Eric Gagnon (King County, WA)

This report shared insights from a near-miss incident that deeply shaped the King County Air Support Unit's approach to training and safety. In 2014, during a rescue at Chair Peak involving an injured climber, the team encountered severe updrafts that led to the loss of tail rotor authority and a dangerous oscillation on the hoist. The rescue cable formed a large

pendulum, struck the helicopter's right skid, and became jammed

between the skid and guard, causing fraying and the parting of 18 strands of cable. Ultimately, rescue specialist Eric Gagonon and the patient were brought into the aircraft. The incident revealed inconsistencies in training and underscored the need for humility, competence, and rigorous preparedness among crew members. Eric emphasized that while training and



equipment are vital, the people behind them are even more important. The team has implemented emergency procedures to address circumstances such as this one.

Capitol Peak Rockfall Incident

By Clayton Horney (Colorado National Guard; USA) A serious rockfall incident occurred on Capitol Peak during a rescue operation involving recreational climbers and four ground rescuers. Despite the crew's attempt to signal the climbers above about the danger, it appeared the warnings were not understood. The situation escalated when a large rockfall—spanning over 200 feet—struck the area, injuring three rescuers and severely injuring one who was hit by a boulder the size of a microwave and thrown several meters down the slope. Fellow rescuers immediately responded to assist. The incident underscored the inherent risks involved in body recovery missions, especially in unpredictable terrain where rockfall or avalanche hazards are significantly heightened. It also raised important questions about how rotor downwash and the actions of public climbers can exacerbate rockfall risk for rescuers operating in exposed environments.



Engine Failure during Hoist

By Andrzej Gorka (Tatra Mountain Rescue Service, TOPR)

A review of Poland's response to the 2019 Mt. Giewont lightning incident, which injured multiple people, highlighted the lack of formal triage procedures in mountain rescue operations. During the exercise, a real emergency occurred when a helicopter lost an engine due to a fuel pump malfunction, narrowly avoiding a crash into the training area. The pilots landed safely in a nearby field. The Polish military provided the helicopter of the same type as a replacement and the TOPR aircraft returned to service in July. The event reinforced the importance of preparedness and clear triage protocols during both training and real operations.

Since this incident, a GARB (Green, Amber, Red, Black) triage system has been adopted, with joint national training held on June 4–5, 2025, to strengthen mass casualty and medical response coordination.

Accidents that Might Have Been Avoided with Better Helicopter Ground Support

By Charley Shimanski (Air Rescue Commission President)

Charley reviewed several helicopter incidents that highlight operational safety lessons. The first involved Luxembourg Air Rescue 2, where a main rotor struck trees during takeoff—an event that underscored the need for stronger ground communication and helicopter marshalling. The second, during an Arch Air Medical training exercise, saw a tail rotor strike after landing in a dimly lit area using night vision goggles, emphasizing situational awareness during low-visibility operations. The third involved a HEMS pickup near a high school, where the aircraft's flight path crossed radio tower guy wires known to ground personnel, illustrating the importance of shared awareness between air and ground teams. Each of these exemplified accidents that might have been avoided with better helicopter ground support for the pilot and crew.



AIR RESCUE COMMISSION RECOMMENDATIONS

By Dale Wang; Mountain Rescue Association (USA) and Julien Benet; GSM (FR)

Under the leadership of Dale Wang; Mountain Rescue Association (USA) and Julien Benet; GSM (FR), the group reviewed the purpose of the recommendations, reaffirming a focus on program safety and consistency. They discussed creating a base set of recommendations for new and existing programs to reference. The restricted airspace item was withdrawn as unenforceable. Revisions were accepted for REC001 and REC005, while REC011 will be revised further to focus on avoidance of entanglement. REC002 (PINS) will remain under review for future evaluation. A working group was formed to evaluate REC0014 and to address the question of whether the Air Com can endorse the ESPN-R paper on hoist HEC equipment.

AIR RESCUE COMMISSION RECOMMENDATION 002

By Renaud Guillermet (AirCom Vice President), Julien Benet (Groupe Secours Montagne) & Clayton Horney (CO National Guard)

The ICAR AirCom discussed "Air Rescue Commission - Recommendation 0002 - RESTRICTED USE OF INSTRUMENT FLIGHT". The recommendation will be rephrased by the current workgroup and presented to AirCom delegates with the objective of validating the final version during the 2026 ICAR Congress so that it can be voted during the 2026 AOD.

HELICOPTER STATIC TRAINING TOPICS



Four helicopters, a Leonardo AW169, Airbus H145D3, Airbus H125, and Bell 429, were featured in a static display at Phil Baux Park. ICAR Air Rescue Commission delegates toured each aircraft to learn about their equipment and mission profiles, including medical configurations, RECCO technology, and fenestron designs. The public was later invited to view the helicopters, and the day concluded with a "Helicopter Happy Hour" that allowed ICAR Congress participants to further connect and exchange knowledge about the aircraft.

NEW HOIST SYSTEMS - TESTING TO MAKE THEM SAFE FOR ALL

By Richard Bryson (Onboard Systems Hoist & Winch)

Richard described the complexities of developing new hoist products for the HEC environment, including the significant internal engineering, production and testing required as well as the challenge of meeting regulatory requirements.



AN OVERVIEW OF AND THE CHALLENGES OF HELICOPTER RESCUE IN THE UK

By Nigel Harling (Mountain Rescue England and Wales)

A brief overview of search and rescue operations in the UK highlighted a volunteer-based system supported by professional pilots. The country's air assets are divided among three main groups: HM Coastguard Bristow bases operating S-92, AW189, and AW139 aircraft; 26 Air Ambulance charities that handle medical emergencies without winches; and the National Police Air Service, which provides aerial surveillance but does not land or transport people. Training remains a key challenge, with required Coastguard CPD sessions conducted primarily as ground-based exercises due to cost and logistical limits. There is no live rotor or mountain training, though efforts are underway to expand online and base programs. Risk management was also discussed—while Coastguard assessments are not publicly shared, MREW maintains a comprehensive document. Overall, increased and consistent training was emphasized as the most effective way to minimize operational risk.

INTEGRATION OF DRONES IN NORWEGIAN SAR OPERATIONS

By: Bernt Inge Hansen (Norwegian Red Cross) & Ivar Windju (Norwegian Peoples Aid)

This presentation explored how Norway maintains safe airspace between manned and unmanned aircraft in search and rescue operations.

Early drone use around 2012 began with hobbyists and limited regulation, but formal laws introduced in 2016 established standards for operators and documentation. Since then, local efforts have evolved into coordinated national systems, with drones now widely used by police and rescue organizations. Their value lies in providing “eyes in the sky,” accessing remote or hazardous areas, and reducing risk to personnel.

Norway's Joint Rescue Coordination Centre (JRCC) oversees integration and coordination between manned and unmanned aviation, supported by national guidelines for communication, airspace separation, and data sharing via systems like HemsWX. Success has come through collaboration, shared procedures, and mutual trust among all SAR actors.

HOW CAN WE INCREASE EFFICIENCY IN HEMS & DISASTER RELIEF MISSIONS? AN INSIGHT INTO EUROPE

By: Sebastian Schneider (DRF Luftrettung)

Sebastian Schneider of DRF Luftrettung emphasized the principle that “fortune favors the prepared” in advancing efficiency within hoist operations for HEMS and disaster relief missions.

Basti traced the progression from early, simple helicopter rescues to today's complex and highly specialized operations across onshore, offshore, and high-altitude environments. While modern technology and personnel capabilities are strong, he noted that regulatory limitations, maintenance requirements, and procedural delays continue to restrict operational efficiency.



Schneider advocated for a structured, step-by-step approach grounded in comprehensive training, improved coordination, and expanded tactical capabilities across regional and federal levels. He concluded that future success will depend not on technology, but on preparedness, adaptability, and timely decision-making.

AIRBUS AND THE EUROPEAN SAFETY PROMOTION NETWORK ROTORCRAFT (ESPN-R)

By: Alex Weissenboech (Airbus/ESPN-R)

Alex Weissenboech's presentation highlighted ongoing efforts to enhance safety and collaboration in helicopter hoist operations. The European Safety Promotion Network – Rotorcraft (ESPN-R) unites OEMs, operators, and regulators to develop best practices, training materials, and safety initiatives. Current projects include multilingual e-learning modules, standardized hoist operator and pilot training guides, and new simulation-based training using VR and tower systems.

The ESPN-R team is also improving hoist pendant design for better ergonomics and consistency across manufacturers and developing a hoist passenger training guide to support safe, end-to-end operations.

Overall, ESPN-R aims to strengthen safety, efficiency, and standardization across the rotorcraft community.

DRONES IN AVIATION SAR

By: Kyle Nordfors (Weber County Sheriff's Office (USA) Search and Rescue)

This session on UAS in Search and Rescue highlighted the growing role of drones as vital aviation assets that must be treated with the same respect, safety standards, and protocols as manned aircraft.

Kyle emphasized sharing best practices across agencies and adopting aviation safety principles such as Crew Resource Management, Threat and Error Management, and Aeronautical Decision Making. Beyond search functions, drones now support ground teams with lighting, supply drops, route scouting, and incident command oversight. Heavy-lift drones are expanding possibilities further, delivering essential supplies in disaster zones.

Kyle also introduced a very personal and emotional case study that captured the attention – and hearts – of the attendees.

The overarching goal remains clear: to improve efficiency, safety, and the likelihood that everyone returns home safely.





RESCUER AND AIRCREW SAFETY WHEN CONNECTED TO THE HELICOPTER AND GROUND

By: Dave Weber (Mountain Rescue Collective) supported by Charley Shimanski (AirCom President)

This presentation emphasized that there is no single perfect method for helicopter short-haul or hoist transition techniques—the right approach depends on each team's terrain, mission challenges, and available resources.



Dave Weber demonstrated several common systems for connecting a rescue specialist to both the helicopter and the ground at the same time. His hands-on demonstrations included Quick Clip, Releasable Hitch, Cutaway, and the Petzl Lezard, each with distinct advantages and limitations related to cost, complexity, and safety features.

The Yosemite SAR helicopter offset technique was also discussed for use in near-vertical terrain.

The key takeaway was that all techniques require consistent and thorough training, and teams should focus on standardizing one method and practicing it regularly to ensure efficiency and safety in operations.

LESSONS FROM SCOTLAND; CHALLENGES OF OPERATING DRONES IN MOUNTAIN RESCUE

By Tom Nash (Search & Rescue Aerial Association)

Tom's presentation examined the challenges and progress of integrating drones into mountain rescue operations in Scotland. Establishing and managing drone units has required balancing capability, portability, and cost while contending with shifting regulations, limited volunteer time, and diverse terrain. Despite these hurdles, teams have developed consistent procedures, pilot handbooks, and strong ties with DJI to standardize operations.

Though legislation evolves slowly, Scotland's drone program has grown rapidly—now boasting 33 trained pilots, standardized tactics, and a normalized, risk-reducing role in mountain rescue.





APPLYING THE INTERNATIONAL RECOMMENDATIONS FOR STRESS RESILIENCE TO ALPINE RESCUE

By: Laura McGladrey (University of Colorado, Stress Trauma Adversity, Research and Treatment Center)



Laura McGladrey's session addressed the importance of integrating stress awareness, exposure management, and psychological resilience into rescue and aviation operations. It emphasized that while most programs focus heavily on the incident itself, far less attention is given to preparation, pre-planning, and post-incident support. The goal is to ensure everyone returns home safely—physically and psychologically—by embedding procedures that identify and manage stress in real time.

Examples from Sweden demonstrated the value of incorporating stress training into annual medical programs and routine operations.

Recommendations included forming resilience or peer support teams, using assessment tools after potentially traumatic events, and applying the Stress Continuum and Psychological First Aid principles of safety, calm, connection, efficacy, and hope. MedCom is leading efforts to formalize these practices, with aspirations to establish an international hub for stress resilience.

RECENT VERY HIGH-ALTITUDE HELICOPTER RESCUE EXPERIENCES IN THE HIMALAYAS

By: Maurizio Folini

Maurizio shared his experience doing High-Altitude External Sling Load Operations (HESLO) in Nepal. He explained that becoming a skilled high-altitude pilot requires years of training and experience, particularly in Nepal's extreme conditions between 5,000 and 7,000 meters.

Last spring marked a milestone when a Nepali pilot, trained under his guidance, completed the first solo long-line rescue at 7,000 meters. Maurizio described the challenges of operating within Nepal's restrictive civil aviation system and unpredictable weather, as well as the need to modify EASA training standards to local realities.



High altitude helicopter rescue operations rely heavily on H125 helicopters, optimized by stripping unnecessary weight and managing limited fuel via jerry cans at base camps. He emphasized that high-altitude flying pushes both machines and pilots to their limits, demanding precision, sensitivity, and constant adaptation – “living life in the yellow.”



AVIATION RESCUE IN THE US NATIONAL PARK SERVICE

By: Chris Bellino (National Park Service, USA)

Most US federal operations that rely on aircraft are primarily designated for firefighting, law enforcement, or medical transport. The Jenny Lake Rangers and Teton County Search and Rescue programs have a unique partnership which allows the park to use county aircraft for rescue missions—a rare arrangement within the U.S. National Park system.

Chris' presentation outlined how the National Park Service (NPS), under the Department of the Interior, operates within a broader interagency system dominated by wildfire priorities, with funding and aircraft contracts largely tied to the U.S. Forest Service. Exclusive-use and on-call aircraft contracts are structured around unit needs and funding availability, with rigorous Office of Aviation Services testing for pilots and aircraft. The Teton model stands out for its consistent interagency cooperation and shared-use agreements, though challenges remain—particularly bureaucratic barriers to funding ongoing rescue-specific training.

AIR RESCUE COMMISSION RECOMMENDATIONS FINAL UPDATE

By: Dale Wang (Mountain Rescue Association) & Julien Benet (Groupe Secours Montagne)

A conversation was held in the room following updates from the Recommendation Work Groups, providing an opportunity for members to discuss recent progress, clarify ongoing priorities, and share perspectives on implementation. Participants reflected on the intent behind each recommendation, examined areas requiring further development, and emphasized the importance of collaboration and consistency across programs to enhance safety and operational standards.

THE FUTURE OF ICAR AIRCOM AN OPEN DISCUSSION

By Renaud Guillermet (Next AirCom President), Clayton Horney (Next AirCom Co-Vice President) & Nigel Harling (Next AirCom Co-Vice President)

An open discussion was held to gather delegate and attendee feedback on future topics, session formats, and structure for upcoming meetings.

Participants suggested introducing more focused sessions tailored to specific roles such as pilots, hoist operators, and rescue specialists, as well as adjusting class lengths to allow shorter, more dynamic sessions with brief breaks. Proposed topics included:

- Increased collaboration with regulators and industry
- The impact of private individuals entering the rescue field with their own aircraft, and



- How to better define the scope of “Mountain Rescue” within ICAR to align with other commissions.

There was strong interest in exploring drone integration—both as part of existing operations and as a potential sub-commission—along with discussions on ethics, equipment demonstrations, and practical training opportunities in Tyrol next year. Members emphasized the importance of carefully curated joint sessions and agreed to include additional topic suggestions in a follow-up survey.

ULTRA TRAIL DU HAUT-FIFFRE TURNS INTO NIGHTMARE

By: Col. Bertrand Host (Peloton de Gendarmerie de Haute Montagne)

The PGHM (High Mountain Gendarmerie Platoon) presented a case study from the 2024 Ultra Trail race near Mont Blanc, emphasizing the importance of safety planning for large-scale endurance events in extreme environments. The accident occurred early on June 15 under severe weather conditions—heavy rain, cold temperatures, and poor trail stability—resulting in one fatality, three injuries, and multiple cases of hypothermia. PGHM launched ground and air rescue operations, with helicopter extraction completed by late morning. The incident prompted an investigation and broader reflection on whether event organizers possess adequate resources and risk management frameworks to ensure participant safety.



As ultra trail races grow in popularity despite their inherent physical and environmental risks, PGHM underscored that current regulations do not fully address their unique vulnerabilities. The presentation concluded with the reminder that such events require strict adherence to the *precautionary principle*—if organizers must question whether it is safe to proceed, the reasonable course may be to postpone or cancel.



RISK MANAGEMENT AND TAKING RESPONSIBILITY TO HALT THE RESCUE OPERATIONS

By: Gregor Dolinar (Mountain Rescue Association of Slovenia)

Gregor Dolinar of the Slovenian Mountain Rescue Service shared lessons from recent high-risk operations to emphasize the importance of decision-making and leadership in rescue missions.



Over the past 30 years, Slovenia has lost seven rescuers, underscoring the need to continually reduce operational risks through strong training, equipment, organization, and judgment. Decision-making was identified as the most unpredictable and influential factor, with clear chains of command and pre-defined stop criteria being critical to safety. Three case studies illustrated these principles: a multi-day Christmas 2024 operation in extreme winter conditions that involved over 100 rescuers and immense external pressure; a March 2025 karst shaft recovery where the team faced difficult choices about whether to extract a deceased hiker from a deep cave; and two complex night-time rescues requiring both ground and air coordination. Each example reinforced that rescue leadership must be clearly defined, information must flow effectively among decision-makers, and—above all—safety must take precedence over mission completion.

THE GOOD, BAD & UGLY OF RESCUE TEAM CULTURES

By: Dave Weber; Mountain Rescue Collective

Dave Weber's entertaining session explored what defines effective rescue team culture, emphasizing that high performance is rooted in humility, teamwork, and continual learning.

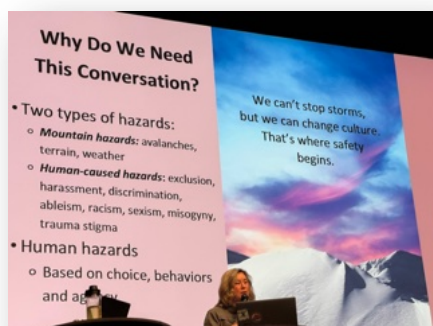
Operating in high-risk, low-frequency environments demands mastery of both technical and interpersonal skills—what the speaker called the “nuts and bolts” and the “soft skills that are actually the hard skills.” Using a July 2024 rescue as a case study, the presentation illustrated how preparation, communication, and trust determine whether teams perform under pressure. High-performing teams share clear standards, mutual accountability, and a commitment to debriefing and growth, while low-performing cultures often fall prey to ego, complacency, and blame. The session urged leaders to hire and develop team members with sound judgment, trainability, and a team-first mindset. Ultimately, great rescue culture comes from ownership, humility, and focus—keeping the mission simple, supporting one another, and ensuring that everyone comes home safely.



COMPETITION VS. COLLABORATION: SHAPING SAFER CULTURES IN ALPINE RESCUE

By: Dana Kent, (Dana Kent LLC) & Janna Allen (Solitude Ski Patrol)

This session examined how cultural and human factors influence safety and performance in alpine rescue, emphasizing that psychological safety is as vital as physical preparedness. The discussion highlighted not only environmental risks like avalanches and weather but also human-caused hazards such as harassment, discrimination, and exclusion that erode trust and collaboration. The speakers explored how “masculinity contest culture” and scarcity beliefs—particularly the notion that there is only “one spot” for women—undermine inclusivity and psychological safety.





Research findings revealed that women in rescue face disproportionately higher rates of harassment and discrimination, often rooted in bias and perceptions of incompetence. Teams with low psychological safety tend to become competitive and risk-prone, while those fostering authenticity, vulnerability, and mutual respect achieve greater collaboration and operational success. Participants were encouraged to challenge biases, establish mentorship programs, and integrate psychological safety practices into training and daily routines. The session concluded that addressing human hazards is not optional—it directly impacts physical safety—and that collaboration, not competition, is the most reliable gear for mountain rescue.

EFFICIENCY SAVES LIVES: UNIFYING NORWEGIAN SAR WITH A COMMON DIGITAL PLATFORM



An Interdisciplinary Presentation from Norwegian Red Cross, Norwegian People's Aid, Norwegian Search and Rescue Dog Association, RNoAF-330SQN - Royal Norwegian Air Force

This presentation showcased Norway's new Joint Mission Support System, a digital platform designed to unify search and rescue (SAR) operations across the country. With roughly 8,000 missions annually—2,000 involving volunteers—the system enhances coordination among the many agencies contributing to Norway's rescue network. Launched in spring 2025, the platform integrates mapping, live tracking, mission logs, and intelligence tools to ensure all teams share the same situational awareness. Features include

real-time and offline tracking, automated mission logging, and secure communication via both mobile and desktop applications. From an aerial perspective, the system reduces planning time, improves communication, and lowers workload, allowing responders to deploy faster and with greater precision. Embedded within the national police framework, this unified platform strengthens interagency collaboration and demonstrates how digitization can streamline operations, reduce risk, and ultimately save lives.

HOW MANY FUNERALS DOES IT TAKE?

By: Terry Miyauchi (Arizona Dept. of Public Safety (ret.), Bell Helicopters)

This powerful presentation reflected on the human factors behind preventable accidents in rescue operations and the responsibility each team member holds in fostering a culture of accountability. Terry speaker shared the story of Bruce Harrolle, a highly skilled rescuer who lost his life during a mission—an incident that underscored how even the best operators can fall victim to





overlooked behavioral risks and team dynamics. Once attributed mostly to mechanical or environmental causes, 90% of accidents today stem from human factors, often preceded by visible warning signs. The message emphasized that how teams live, work, and communicate with one another is more critical than any equipment or technology. Participants were urged to build “ideal teams” grounded in humility, excellence, and honest feedback—where ego is set aside, poor habits are confronted, and culture is shaped intentionally. The speaker’s final challenge, “Who’s your Bruce?”, encouraged everyone to identify and address unsafe patterns before tragedy strikes, reminding the audience that genuine care and courage to act can save lives.

NEAR MISS: HOW UNIFYING OPERATIONAL LANGUAGE ACCELERATES CULTURAL COHESION AND REDUCES RISK

By: Laura McGladrey (University of Colorado, Stress Trauma Adversity, Research and Treatment Center) & Clayton Horney (Colorado National Guard)



This session explored how the Colorado National Guard (CONG) developed a system to build stress awareness and manage risk through unified operational language and structured monitoring. Recognizing that both acute and chronic stress affect individual wellbeing, team performance, and mission safety, the program aimed to integrate stress management into daily operations rather than treating it as an afterthought. By using shared tools such as the Stress Continuum, color iconography, and standardized procedures, CONG created a consistent framework for detecting and responding to stress across teams. Effective monitoring considers both the incident and the responder, with response plans ranging from chaplain and clinician support to preventive care initiatives. The initiative also revealed that key duty positions faced high turnover due to unaddressed cumulative stress, emphasizing the need for awareness, mentorship, and proactive

intervention. The presentation concluded that embedding stress response systems into operational structures—through common language, training, and clear protocols—strengthens resilience, reduces risk, and preserves experience within rescue organizations.



RESCUE MINDSETS: A NEW FRAMEWORK FOR RESPONSE

By: Michael Ackerman & Jonathan Wilson (Silverton Avalanche School)

This session introduced how the Silverton Avalanche School has adapted the AvGAR system from the U.S. Coast Guard's Green-Amber-Red (GAR) risk assessment tool, and restructured it to better address the human and psychological factors in avalanche and mountain rescue operations.

Their updated approach shifts focus from numerical scoring to meaningful crew discussions that build awareness, honesty, and alignment—acknowledging that “the ego is never our amigo.” The presenters also outlined a *Rescue Mindset Framework* that helps teams recognize and transition between readiness, mobilization, and de-mobilization phases, promoting adaptability and recovery. Emphasizing that “Plan B is not Plan A harder,” the session encouraged rescuers to integrate open communication, reflection, and humility into their daily practice, creating safer, more resilient teams.



If you have any questions about this report, please contact ICAR Air Rescue Commission Past President Charley Shimanski at charley.shimanski@gmail.com or the new AirCom Presdeint, Renaud Guillermet at r_guillermet@hotmail.com.

Thank you.