



SAR-Related Triage and Dispatch Guidelines

for

Emergency Managers, Incident Commanders and Communications Personnel

Prepared by:

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A program developed to assist search and rescue management and dispatch centers in the area of triage, dispatch and deployment. This program was developed based on several decades of search and rescue missions, and similar dispatch programs.

About the Author

Tim Kovacs is a former career deputy sheriff who also served until recently as a sworn reserve deputy of the Maricopa County Sheriff's Office in Arizona, assigned to Air Support. He has been a member of the Maricopa County Sheriff's Office Mountain Rescue, AKA: Central Arizona Mountain Rescue Association (www.mcsomr.org) since 1983, has served as its Commander, and holds the field position of Operations Chief-Paramedic. He developed the unit's first comprehensive training program and manual for Helicopter Rescue Operations and external loads in 1987. He has also had past duties as a police-fire-EMS telecommunications operator-dispatcher and supervisor, an area SAR Coordinator and SWAT/TOU member with experience as a sworn county park ranger, city police officer as well as deputy sheriff.

Kovacs has proudly served the Mountain Rescue Association (www.mra.org) as President, the Education Director, and in other officer's positions. Since 1995, Tim has been one of four selected delegates from the U.S. to the International Commission for Alpine Rescue (www.ikar-cisa.org), which meets with its 26 member-countries in Europe each October to address safety issues and standards in wilderness and mountain search and rescue throughout the world. Since 2004, he has served on the US Department of Homeland Security, *FEMA NIMS Search and Rescue Resource Typing and Credentialing Working Group* as Chair of the Land SAR sub group; and serves on the ASMT F-32 (SAR) standards committee as well as NFPA 1006, *Professional Qualifications for Technical Rescuers*.

Kovacs has been a climber since 1974 and a mountaineer since 1983. In his second career, he is assigned to a Special Operations Company with the City of Phoenix Fire Department, Local 493.

Model Triage & Dispatch Guidelines for Search and Rescue

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Distribution: Communications Section, SAR Division, SAR Units (paid and unpaid)

Model Triage & Dispatch Guidelines for Search and Rescue

Objectives

The Mountain Rescue Association, a western hemisphere non-profit membership association of operational SAR teams and organizations dedicated to saving lives through rescue and mountain safety education, has developed this program to be used by any organization that may respond to a backcountry search or rescue operation.

At the conclusion of this course, the student should be able to;

1. Identify the basic categories of search and rescue triage and dispatch;
2. Understand the basic capabilities of various SAR resources in their areas of operations;
3. Know where to find the appropriate SAR incident categories and sections in the guide and to utilize the triage and dispatch guidelines and protocols.

This course comes with a basic companion powerpoint text & photo presentation, but is best used by a formal trainer. Contact the author at tkovacs@cox.net, for the presentation or for a training course or session.

This document is consistent with related NIMS ICS, Resource Typing and Credentialing.

This document has not addressed all the complexities of Disaster-Urban Search and Rescue (USAR) or Weapons of Mass Destruction (WMD) (see reference #15) responses, but this is a vital companion to dispatch procedures for those disciplines.

This program would not have been possible without the kind assistance and peer review of many search and rescue, fire service, law enforcement and emergency medical professionals, paid and unpaid. My thanks to all of you. I would especially like to thank the MRA's Charley Shimanski for his insight.

Presented at the "International Technical Rescue Symposium", Salt Lake City, Utah, Nov 2003 and at the NASAR (National Association for Search and Rescue) "SAR 2004" Conference in June 2004.

Revisions

March 2004;

1. Integrated into the guidelines the prioritization of multiple simultaneous SAR calls, assigning them a Priority 1, 2, 3, or 4 (P1, P2, P3, P4) in descending order of importance.
2. Integrated response modes of Advanced Life Support (ALS) vs. Basic Life Support (BLS).
3. Integrated response modes of Regular Response (Code 2- C2) vs. emergency lights & siren (Code 3 - C-3).
4. Automatic Aid Sample Request for Agreement

May 2005: Added a W.M.D. Triage & Dispatch reference in the references section.

May 2006: Integrated the differences between utilizing Disaster/Urban SAR services versus Civil SAR **services**.

Jan 2009: ASTM F32 completed Standard F2662 for "Minimum Training of SAR Dispatchers", based on this project.

Dec 2009: Added into Missing persons, considerations for Alzheimer's & Depression Dementia cases.

Under Development;

1. Simultaneous multiple calls (flood, etc.)
2. ASTM F-32 Parallel Standard for call-specific questions.

Introduction

Formal, written triage and dispatch guidelines for Search and Rescue are extremely difficult to find in the US. While Emergency Medical Services, Fire Services, and Law Enforcement have developed training, guidelines and protocols in triage and dispatch in their specific disciplines, the specialized area of SAR dispatch has remained an enigmatic subject – one with no written guidelines or training.

The following are written as guidelines, but they follow the concepts of “protocols”, which are more structured. These guidelines are based on the very few existing dispatch programs, primarily in the United States (listed under “References”), but are also based on experiences of personnel in public safety triage and dispatch, deputy sheriffs, mountain rescue operations chiefs, and others in the public safety and military professions.

These guidelines are intended for use by agencies which process, triage and dispatch potential search and rescue calls. Incidents that require Technical and Mountain Search and Rescue encompass a wide variety of situations including; high angle or rope rescue, water rescue, confined space rescue, trench rescue, and structural collapse.

This handbook may lean toward a wilderness or county sheriff’s system, but it can be adapted toward other systems. Simply change the names of resources to those of your local “language” or resource types.

In some agencies the dispatch center deploys all resources based on initial and ongoing triage, while in others, the agency prefers an on-duty or on-call SAR Coordinator to make final deployment decisions. You must choose which method you will employ. The key is to dispatch resources with efficiency and with the presumption that you can still positively impact the outcome by not delaying. It is critical to use someone who has been properly trained in search and rescue management or triage – this is a professional specialty within itself and anything less has proven to be a failure. An NTSB investigation report of a fatal incident involving a Coast Guard search said it very well, “The overall effectiveness of the ...search and rescue mission is largely a function of the readiness of its operations and communications centers.”(Ref # 13, page 59). We have far to go to accomplish this with any competence. The information is “out there” but it has not been integrated into the EMS, law enforcement and SAR dispatch or decision systems. This relegates SAR to “merely interesting”, and “not accepted as part of the real public response system”, as some professionals have observed.

An agency can not claim to have a professional or adequate SAR system, unless it has developed a proper dispatch and response system that favors the most efficient, quick, complete and appropriate response to the victims.

These guidelines will not cover every situation that may arise. Where situations arise that are not covered explicitly in the guidelines, the Communications Specialist, SAR Officer or other decision-maker should, to the best of their ability, obtain the information needed using the most applicable guideline(s).

Proactive vs. minimalist-reactive. We find the disciplines of law enforcement dispatch to be different from fire-EMS dispatch in a couple of key manners. While fire-EMS tends to dispatch based on sending multiple and specific resources early (proactive vs. reactive) and canceling resources only once an on-scene unit determines they are not needed, law enforcement tends to dispatch minimal and non-specialized units (reactive vs. proactive) and add more as needs are “confirmed” by on-scene officers. There are advantages to each, except that, in the area of injured victims or those in the potential and actual life threatening situations of SAR, the far superior method is that of the EMS and fire service. Delays in dispatch of a SAR unit can easily result in up to and beyond a 2 hour delay of a *qualified* team into a wilderness area.

We have long understood that in wilderness SAR there has been a tendency to under-deploy. Due to the bold work of some agencies, such as the Los Angeles County Sheriff’s Office, the Phoenix Fire

Department, Fairfax County Fire in Virginia, the Las Vegas Metro Police SAR unit, and sadly, due to increasing lawsuits in the area of SAR, the trend has changed positively to deploying a fully equipped and trained SAR unit (whether paid and/or unpaid matters not) to incidents more quickly. This positive evolution has also occurred due to the integration of the more proactive EMS standards of care and philosophy into law enforcement methodology. This “team-based response” or multi-disciplinary approach to dispatch which is now being used by more and more SAR mandated law enforcement agencies has resulted in saved lives and lessened loss of limb and certainly provides the agency with defensible actions for actual and potential lawsuits.

Another issue is that of the deployment of trained volunteer (unpaid) resources. While the fire service is still chiefly volunteer in the U.S., and those personnel are deployed immediately, we still tend to inappropriately withhold the deployment of SAR personnel when they are volunteer resources, which still make up 98% of all the inland SAR response in the U.S. Capability-wise, SAR team members, many Air SAR Crews, and the NIMS-equivalent SAR Operations Section Chiefs and even the bulk of SAR Incident Commanders in the U.S. are still volunteers or “unpaid professionals”. And if or when it is ever transitioned to full time personnel, it will take another 10 years for the unpaid personnel to pass on not only the training, but more importantly, the experience and knowledge of technical rescue.

Current thinking in the industry leans toward the following, quoted from a progressive, management level sheriffs officer in the southwest United States;

“We should never sacrifice service to the citizen by delaying the dispatch of a qualified resource simply because it is a volunteer unit, or even because it is not our own agency personnel. Deploy the closest and most appropriate resources to the incident regardless of type of agency (FD, SO, authorized volunteer) and regardless of paid or unpaid status.” And by this we mean a full wilderness rescue team, not just a beat officer, a single unit, a fire department team or an urban-trained SAR team.

“To serve the public properly and to lower liability, we should look for a reason to dispatch (a SAR team), rather than look for a reason to not dispatch (a SAR team).”

These guidelines also follow the proven concept of automatic aid, the “regional” or “multi-agency” activation of resources developed in aggressive-progressive areas of the US, and they have been shown to provide faster and applicable services to those in need. An example of this is having a central dispatch or coordination for all rescue-capable rotorcraft for a given area, rather than calling each one individually to see if they can respond.

Further, this positive trend follows the philosophy of “If it mentions or hints of an injury, don’t delay, don’t wait”. That is, if there is a mention or hint of an injury, dispatch SAR and EMS resources immediately. Then, cancel them later, rather than waiting until someone is on scene to confirm whether there are injuries or not. Such a delay in the city costs a few minutes. In the wilderness, that delay puts the patient way beyond the “golden hour” that *is* within our control. Law enforcement already employs this successful method by the simultaneous dispatching of EMS to a “possible” or even “unknown” injury motor vehicle accident, and should now also do so for SAR. The risk at not doing so in urban areas or even highways might be minutes, while the risk and cost in the backcountry is hours, blood and oxygen to needed tissue, heart and brain! And, more and more, in the cost of liability and successful lawsuits against your agency.

The goal of a public safety agency that has a responsibility or mandate for wilderness search and rescue (primarily sheriff’s offices in the United States) and urban SAR (primarily fire departments) is to send the highest possible quality search and rescue services in any situation. If in doubt, the Communications Specialist or decision-maker should treat an incident as a rescue with a savable life until *confirmed* otherwise. Again, that means immediate dispatching of the appropriate SAR team(s), and that has little or nothing to do with whether they are paid or unpaid teams or field/incident managers.

Non-Starters and Premature cancellations. Another current issue in SAR dispatch is the premature canceling of these specialized units. Certainly it is our desire to put personnel back in service or send them back to their “other” lives if they are not needed. But SAR is not a hobby, nor can the legally

responsible agency simply decide to relegate the SAR incident to another agency or service and “not show up” with their own personnel (paid or unpaid) or cancel early. You can easily defend sending a volunteer manager to a scene. You can not successfully defend canceling early, or not showing up at all to an incident in your own jurisdiction, and you can not successfully defend sending a paid employee without proper training to run an incident when you have a qualified “volunteer” in your “posse”.

Finally, when coupled with the reality of the frequent underestimating of the time, manpower and equipment it takes to safely and effectively resolve a SAR incident, many agencies have learned to “not cancel specialized rescue resources until all personnel and aircraft from all agencies are safely out of the back country to the command post.”

In 1989, the NAEMSP (National Association of EMS Physicians (www.naemsp.org) published a position paper on dispatching (9), and in 1990, the ASTM (www.astm.org) set forth the “Standard Practice for Emergency Medical Dispatch” in their book of standards (10). Both take a position that dispatchers should utilize appropriate “protocols” in the decision-making process.

Like it or not, the law enforcement or fire agency which has responsibility to respond to SAR incidents can not avoid in dealing with medical and SAR scenarios in their 911 center. Either the SAR agency must train its 911 personnel in EMD (Emergency Medical Dispatch) concepts, or at least follow those concepts/prompts and work as a team with the local EMS dispatch system (conference calls with reporting parties, etc.).

The NAEMSP defines its requirement for a dispatch center to include 1) *systematized* caller interrogation; 2) *systematized* pre-arrival instructions; and 3) *protocols* which match the dispatcher’s evaluation of the illness or injury type and severity with vehicle response mode and configuration.” The ASTM standards document states that “the emergency medical dispatch priority system directs the EMD to complete a full, *Programmed* interrogation” (emphasis added). The implication in each of these documents is that EMDs, and, by extension, SAR Agency dispatchers, should follow a structured, predetermined interrogation process to activate preprogrammed response modes and provide medical (or other) instructions to callers prior to EMS (or rescue) arrival. Those do not exist in most agencies(!), hence this guide was developed.

Typically, a caller is “compelled by a ‘Just send help!’ orientation” to which an operator/dispatcher can easily fall into the same trap (send a cop or a non-technical rescue fire company). A structured interrogation is necessary to assure that the dispatcher *always* accomplishes four basic, but very essential tasks:

1. Identification of the proper response configuration and mode.
2. Identification of the presence of conditions that may require pre-arrival instructions.
3. Collection of information that will assist responders in preparing for and addressing the call.
4. Collection of information that will assist in assuring the safety of patients, bystanders, and responders (8).

As stated earlier, you must have someone knowledgeable in SAR to develop the decision tree and training, or to be there to oversee the decisions, or you will fail. There are little more than a handful in the entire U.S. at this time who can properly claim this SAR knowledge. Properly instituted and executed with such qualified SAR “experts”, this guide should help bridge the existing gap.

“Unfortunately, experience has shown that in far too many legal dispatch cases, EMDs’ individual discretion in... evaluation has been incorrect and medically injurious. At the very least, it’s inconsistent and, at times, dangerously arbitrary.” This guide is necessary whether you use a SAR triage professional in the dispatch center or not.

Further, “Years of quality-assurance review of medical dispatch tapes reveal that unstructured interrogation may lead to irrelevant questions that ultimately fail to identify the basic problem in the dispatcher’s mind. (11)

Again, we can apply this to SAR triage and dispatch. On the following pages are examples of SAR dispatch cases studies which help to underscore how this continues to occur in the SAR triage and dispatch process.

Wilderness SAR Triage and Dispatch Case Studies

These cases are real. They are used here to educate and to improve service to citizens. There are always multiple lessons to be learned across the spectrum, that is, not only in dispatch and deployment, but in administration, command, and field supervision and tactics.

Case #1. Improper Search. Dispatch of Resources.

A sheriff's agency is called by an estranged but concerned wife stating that her husband had planned to investigate some area caves, including one in particular, and he is approximately one day overdue. There is some reported history of family discord. The agency sends a unit and locates his car near a couple of caves and mines, close also to some area homes and common sites, and including the cave he is reported to be in or near. The agency personnel enters the front of the cave, seeing only very small holes which he reportedly does not feel a person could fit through, looks and yells for the man and gets no response. Further attempts are made over the course of a couple of days by yelling into the cave from inside the front of the cave by personnel and via some unspecified local SAR personnel (non-technical, non cave rescue). The agency member reports back that he has checked the cave, can find no one, and the case is pursued as a non-SAR missing person.

Months later, some cavers on a recreational outing report to the agency that they have discovered a semi-mummified body in that particular cave. A qualified cave rescue team from a neighboring county is requested to go in after evidence and to attempt to retrieve the body. Evidence in the cave at and near the body clearly indicates that the man had remained alive for up to three days. He had disassembled a flashlight and had lit several cigarettes and matches.

The wife sues the agency and is paid a settlement.

Retrospective

Caves are notorious for having hidden and seemingly "impassable" rooms and passages.

Caves require dispatch of and search by specialty cave SAR teams which are trained and equipped for the many unique challenges of this environment.

Case #2. Dispatch of Resources.

A local tow truck driver calls 911 on his cell phone to say that he was requested to pull an SUV (sports utility vehicle) out of a wash that has flash-flooded with heavy rains during monsoon season, describing it as water coming over the hood, and the SUV moving. Here is an excerpt of the transcript.

1851 hours. "Hello. Hello

Hello

911

Yeah. My ____ at xyz Tanks.

At where.

Xyz Tanks, it's a river crossing.

Where's that.

Xyz Tanks, it's off of

What's the address there.

Excuse me.

What is the address there

It's the river. It's off of 97 and Sunflower

Are you at the abc River?

Uh, no. It's ____ creek

You're at what creek

Xyz Tanks crossing is in Sunflower.

In Sunflower

In Sunflower, yes.

OK, Hold on
What's going on up there.
Excuse me.
What's going on up there.
There's a van with about ____ people in the river. It's up to the windows.
And which river is this.
It's the crossing you get to Bushnell Tanks. It's off of 97, I think ____.
OK. You're at State Route 87.
87, yes.
OK. At what mile post is that up there.
Do you know.
It's just past Sunflower____
...
OK is anybody in the car.
Yes. There's about six people in the car.
Is the car under water.
It's starting to float away right now.
It's over the hood
OK. They can't get out
If they get out _____ I think they might be washed away.
They're just sitting on the roof right now.
Can they swim across.
The river seems pretty strong
It's pretty strong
Yeah...

The first patrol unit (no swiftwater training) dispatched: 1900 hours. 8-9 minute delay.
Swiftwater rescue unit requested /dispatched: approximately 1940. 48-49 minute delay.

Retrospective

Under the model program, swift water rescue resources could have been dispatched much sooner, at the first mention of people in the river, water up to the windows.
Orientation of dispatchers to generic locations in their area can save time in such situations. Even without a specific milepost, a patrol unit and rescue team can head that way, and be updated enroute.

Case #3. Request for and Dispatch of Resources.

Rope rescue is mentioned repeatedly during initial phases of a wilderness train derailment needing rope system extrication of victims, and for wilderness aspects of the operation. Although discussed on radio, the request is not processed and a team not officially dispatched. At least one rope system was improvised by untrained responders on scene to extricate a victim. Inadequate helicopter base management was also a major factor identified in the multi-agency debriefing.

Retrospective

SAR units are valuable resources on incidents such as this for technical rescue systems and wilderness helibase management support. Since a multiple casualty incident of this nature does not occur often enough for agencies to be accustomed to handling them routinely, cues by dispatch to field units to clarify needs, or pre-arranged protocols can be useful in getting resources to the scene.
It can be difficult to remember or to integrate non paid resources into the day to day affairs of an agency.
We have to get over it and just get it done.

Case #4. Dispatch of Resources

NY boating deaths, January 2003.

A TCO (Telecommunications Operator), hearing a cell phone call from young boys saying they were taking on water in a boat and need help in Long Island Sound, loses the connection. She has a general idea of the location, but does not dispatch a unit to investigate it. The dispatch computer rejected her attempt to enter "Long Island Sound" and she and a supervisor "determined there was too little information to dispatch help."

Neither the police nor the Coast Guard were notified and so could not search. (12)

Excerpt: Associated Press Writer. © 2003, The Associated Press

June 12, 2003, 4:00 PM EDT

Badillo's and Dufty's sons, along with two other teens, were in a rowboat on Long Island Sound on January 24 when they began sinking in the frigid waters.

Henry Badillo, 17, called 911, saying, "Oh, God, we're gonna die," before the call disconnected. The four drowned, leading many public officials to complain that government and private companies have been slow to implement technology that would allow 911 call centers to trace the location of cell phone callers. Recounting her son's final moments, Badillo said, "if the 911 enhancements could have been in place, our sons could be alive today." "Hopefully we'll be the last parents to lose our children in this type of accident."

Retrospective;

Even without location tracing, it is standard to send a unit to a location when you have a generic request for help and a general location.

Dispatch guidelines or protocols, or consulting a SAR manager would assist in making a balanced decision.

Case #5. Improper Search.

Hurd vs. U.S. - 2002

A SAR agency, not having a watercraft in the immediate area, uses the marine radio to issue a general call and uses a non-SAR agency (privately owned) watercraft and operator who happens to be in the area to begin a search. The location is quite some distance from the agencies resources, but within their jurisdiction. The non-agency resource finds nothing, and the agency suspends the SAR mission. Three individuals had been lost and were found later, deceased. The agency is held liable for not pursuing or following up the search with official resources.

Retrospect;

While this is a federal case, and while federal cases sometimes do not have direct legal application to state and local SAR, they do establish precedence which can be used and greatly influence the outcome of a lawsuit, an out-of-court settlement or a court case.

The agency was held liable for the deaths of the three victims. Dispatch of a qualified unit was necessary and could not be replaced by a searcher not officially with that agency.

It also held that even if a person or group performing a SAR mission has no legal duty, once they undertake that responsibility, they have the obligation to conduct a proper SAR mission, exercise due care, and not make the situation worse. Meaning they are held to the standard of care of a bona fide SAR unit. Proper incident command as well as enhanced dispatch protocols may be useful.

Case #6.

<http://www.nts.gov/publictn/1999/MAR9901.htm>. During the early morning hours of December 29, 1997, the 34-foot recreational sailing vessel Morning Dew struck the rock jetty on the north side of the shipping channel into the harbor of Charleston, South Carolina. The owner/operator of the vessel and his three passengers, all members of the same family, died as a result of the accident.

The major safety issues identified in this investigation are the adequacy of the reasoning and decision-making of the operator; the fatigue and hypothermia suffered by the operator; the adequacy of the reasoning and decision-making of U.S. Coast Guard Group Charleston's watchstanders; the adequacy of

Coast Guard Group Charleston's personnel, equipment, and procedures for responding to an emergency; and the role of the Coast Guard in providing factual information for safety investigations.

As a result of its investigation, the Safety Board makes safety recommendations to the U.S. Coast Guard, the Governors of the 50 States and the U.S. Territories, the National Association of State Boating Law Administrators, the U.S. Coast Guard Auxiliary, the U.S. Power Squadrons, the National Safe Boating Council, and the Boat Owners Association of the United States.

"Regrettably, in the case of The Morning Dew, the Coast Guard did not make the effort that might have saved the life of at least one, and possibly more, of the survivors of the Morning Dew collision. Other issues raised in the analysis included training decision makers too quickly (page 57), poor analytical skills for atypical incidents (page 58), no guidance from formal telecommunications procedures in the given discipline (page 59), no oversight of a single person making autonomous decisions (page 62), not obtaining critical information (page 64), and calling or activating resources they have at their disposal (page 65).

Retrospective

The investigative report says it all, above. The rest of this report is excellent and very applicable to the public safety dispatcher/telecommunications operator involved in SAR and is must-reading.

Case #7. Premature Cancellation.

A swiftwater team is dispatched for 2 people who have called 911 from a cell phone after their SUV is washed away in a wash with them in it. Clinging to a tree, the caller asks for help. Local FD swift water rescue resources arrive and are able to rescue the two. Sheriff's dispatch prematurely cancels its own rescue team. Seeing the sheriff's office present, the fire units demobilize and leave, believing the sheriff's office – who has the legal responsibility for SAR in that area - will complete management of the incident. The SUV is still running, with its lights on, in the wash – an attractive nuisance at the very least. The water level is lowering near the SUV, but now four people are stranded on the far side of the flooded wash with no other way to get out and the water there is still running too fast and deep. Despite being canceled, a few SAR Coordinators and sheriff's swiftwater personnel continue to the scene since they are close, and discover the stranded people.

With weather allowing, a rescue helicopter is called to retrieve the people, and, when the water level has lowered to safe levels, a swiftwater rescue team member under the watchful eyes of a throw bagger is able to safely approach the SUV and make it safe until it can be towed away the next day.

Retrospective

Premature cancellation of units to a SAR mission can result in further risk to those still at the scene, and can leave them with no back up resources as well, leaving all there feeling "pressure to perform" outside their area of ability or training. Response by specialty teams should not be cancelled until all victims and all personnel from all agencies are safely returned to the command post.

Case #8. Dispatch of Resources from Jurisdiction of Authority.

A local FD has a technical rescue team which they dispatch to a rescue incident in the backcountry. With the call coming directly in to them as the PSAP, they have neglected to notify the local sheriff's office and the sheriff's rescue team, who has the jurisdiction. The FD, not as familiar with the back country as the sheriff's unit, responds to a different trailhead resulting in a 45 minute delay. The FD suffers a further problem during the evacuation due to their lack of training in the given conditions, resulting in a further delay and injury to the patient.

Retrospective;

Agencies which are a PSAP should conference in or notify the agency of jurisdiction of a SAR mission and participate in automatic aid.

Agencies choosing to perform SAR in the back country must become familiar with the areas they will enter.

There were several cases of this type reported where a local FD, law enforcement officers with no SAR training, or some other agency responded and

1) later necessitated rescue from the sheriff's team,

2) required help from an aviation unit to extract their members who were unprepared (and therefore unsafe) for the back country, and

3) for incidents where victims which were being evacuated still, 2 or more hours after the local agency (FD, law enforcement, etc.) cancelled the sheriff's wilderness rescue team.

This underscores the need for the AHJ (Authority Having Jurisdiction, the sheriff's office in most states) to continue in their SAR team until all victims and personnel from all agencies are back to the command post. This also brings in a whole different aspect to be discussed in another forum. That is, the competitive nature of SAR (usually the rescue portion) between fire agencies and SAR teams not calling or utilizing one another. The patient deserves all the care and the best care from the fire service, EMS service and the sheriff's SAR system. There is no justifiable excuse for not dispatching other local SAR resources in the response to a SAR mission, and this will certainly not pass the "headline test" or a court process.

Case #9. When in doubt, don't call 911, call Mom!

Stranded Rower Phones Mom for Help

Wed Jul 30, 11:04 AM ET

BOSTON (Reuters) - A Frenchman attempting to row across the Atlantic called his mother for help as he sat atop his capsized boat in rough waters 100 miles off Cape Cod, the head of the Ocean Rowing Society said on Tuesday. Emmanuel Coindre, who set off for France from the coast of Massachusetts last week, capsized early on Monday due to inclement weather and used a satellite phone to call for help as the boat took in water.

"After five hours (trying to right the boat) he phoned his mother in France who called the French coast guard who called the U.S. Coast Guard (news - web sites)," Kenneth Crutchlow, executive director of the London-based Ocean Rowing Society, told Reuters.

The U.S. Coast Guard rescued him on Monday and brought him ashore.

"We are recovering from hours of anguish since yesterday," Sylviane Coindre, the rower's mother, said in an e-mail to Reuters. "As parents we never lost hope."

Coindre has crossed the Atlantic from east to west twice and last year became one of only a handful to row across the ocean the other way.

"Last year he landed in a pretty bad storm," Crutchlow said. "Frankly he got in just in time."

He completed the crossing in 87 days, failing to beat countryman Gerard D'Aboville's record 72-day journey. He set out last week for another crack at the record.

Plans to break the record this year and become the first to cross the Atlantic alone three times seem lost as the row boat is now missing at sea. Coindre spent Tuesday on a fishing vessel searching for his craft.

"It's very unlikely he will find it," Crutchlow said. "I'm not saying it's impossible, but the only way they're going to find that boat is by sheer luck."

Retrospective

When in doubt, call your Mom. OK, I'm kidding with this one. On the other hand, we have heard stories from more than one agency reporting that if it were not for "Mom" lighting a fire under the agency or government, things may have proceeded more slowly. Seems Mom really pulls a lot of weight!

Case #10 (May 2005)

The agency gets a call of an injured hiker in a remote canyon who can not extricate himself, and there is no communication to the actual victim. A companion hiked out to call 911. The local deputy responds, as does the local fire-EMS. The fire service automatically decides to send their technical rescue team (urban trained).

After some delay, units on scene determine this is probably a wilderness rescue and the appropriate sheriff's-based rescue team is requested in the following manner; the on-scene urban fire-rescue and sheriff's patrol personnel say to send "just a couple of helicopter rescue capable members that can perform a 'short haul' with a local police helicopter" (with whom they have not trained, and which is underpowered for the task). The wilderness team is called and told their sheriff's rescue helicopter is unavailable. The local police helicopter is now reported as hesitant to leave the scene to pick up the qualified members. Reportedly then, the fire rescue team and the police helicopter will attempt a heretofore unpracticed rescue from the helicopter in order to save time, and the sheriff's rescue team is cancelled as unneeded.

Knowing the terrain and other factors, the sheriff's team secures hard-won authorization to continue the response and locates a helicopter for transport, still arriving before the local resources have been fully field deployed. The local resources and deputy say they did not cancel the team, but did feel "pressed into action". The fire rescue team and air crew who are now in the back country realize they can not perform the short haul with the small police helicopter or with their urban based team (it is getting dark, this will be an overnighter.) The fire team leaves the patient and the backcountry. The sheriff's team is redispached and completes this overnight rescue operations with proper assets.

Retrospective.

Misunderstandings abound in SAR dispatch. That is all the more reason to dispatch the (sheriff's) wilderness rescue team at time of dispatch of the other first responders and not cancel them.

The rescue team managers should determine the level of response, since they are uniquely qualified to do so.

Considerations for Cell Phones (Rev. 1-18-04)

An additional area of concern for telecommunications operators is that of cellular phone use in the wilderness, and their impact on the 911 system.

While we are on the verge of the new technology that will allow us to locate a cell phone user with GPS, we still have problems with "skips". When a cell phone user calls in from a wilderness area or mountain top, they can easily experience a skip in their signal which can send their 911 call to a neighboring state or county.

It is for this reason that TCOs must ask specific questions; are you on a cell phone? How much battery power do you have left?

What city, county and state are you near or in, the name of the mountain range, et cetera.

Beware of wilderness locations which have similar names. In one case, a deputy in a county over 18,000 square miles was mistakenly sent to "xyz draw" that has the same name as a draw in a neighboring county of over 8,000 square miles. This resulted in an extreme delay in help. Ensure the caller gets services from the proper county of jurisdiction.

A simple public service announcement on TV, radio and visitors guides in your area can help, informing residents and visitors that they need to specify their location and county – whatever possible – when they call 911 for help.

Sample PSA:

"Did you know your cell phone can 'skip' to distant emergency centers when you dial 911 on your cell phone in the wilderness? If you need to call 911 for help in the wilderness, make sure you tell the 911 operator as much as you can about where you are, the county, the mountain range, even the state! When you are high in the mountains or in the back country, a cell signal can skip to a neighboring county or even

state, and the operator may not know where you are. Some mountain areas have a range in neighboring state with the same name, causing further confusion. Know where you are going and take a map!"

And playback capability is absolutely required in a public safety dispatch system, especially with the problems of cell phones, static and other interruptions with clear communications.

12-5-09. As of this date, it is reported that all cellular phone companies in the U.S. use WGS84 as their GPS datum. Formats may vary.

Rural Geographical Knowledge of TCOs

For the reasons above, it is critical for a telecommunications operator to have studied the area they are responsible for. Here is a simple and inexpensive solution to gaining this knowledge. In some areas, the local SAR team will take new a TCO on a tour of their response area, pointing out hot spots and confusing locations, ones with names similar to other locations. If this takes too much time, a table-top orientation of 15-30 minutes with a forest service or other map is a great help to point out hot-spots/ trouble spots.

Poorly Designed CAD systems

CAD (Computer Aided Dispatch) systems are not perfect. Many do not have a program for locations outside of a formal address or milepost system. As one public safety dispatcher put it,

"On ... (search and) rescue calls, no such (location) information exists (in the CAD system) other than possibly the trailhead. In order to deal with ... rescue calls the system has to be tailored to the specific area with special places made up for common call locations.

With the new PLBs (Personal Locator Beacons) and GPS cell phones things are slowly changing but even then, interpreting best access to the incident scene from a GPS point is a tall order for a dispatcher, especially when best access might be through a different jurisdiction (or the other side of the mountain).

For us what it comes down to is that the dispatchers have a huge amount of information they need to have at their finger tips. Knowing the location of all the trails, all the common and not so common names for rocks and hills and being spatially aware enough to ask a caller to look north and describe what they see and then interpreting that to a CAD system is very difficult.

It is for this additional reason that a structured, preventive dispatch system is useful, as the one in the following pages of this guide book.

Who will lead us? Legal Mandate for SAR, Multi-Jurisdiction Teamwork

The legal mandate or response system for SAR can be confusing. Fire service, EMS and Law Enforcement TCOs should be given orientation to the SAR law and resources in their area, and since SAR is managed and performed largely by unpaid professionals, it should be done without regard to paid, full time employee or unpaid status, so long as the SAR unit is bona fide and works under the guise/ authority of the local SAR AHJ. In most states in the U.S., the county sheriff has the legal mandate to provide search and rescue. While more and more fire departments have some technical rescue capability and can provide EMS services as well, and while sheriff's offices do not seem interested in taking back technical rescue from within incorporated cities, the sheriff's office or equivalent authority in your state can not be relieved of its legal responsibility to provide SAR in the wilderness.

So without an inter-government agreement (IGA) or a change of statute, even if another agency does respond, the Sheriff's Office (state police, rangers, etc.) can not avoid the responsibility for search and rescue. The mandated agency must act as the county-wide or state-wide public safety leader of SAR pre-planning, coordination and excellence, willing to lead other agencies with state of the art procedures and responses and to sponsor multi-agency task forces.

At minimum, the sheriff's SAR coordinator, or mandated agency, must be notified immediately of any search or rescue mission in their county, regardless other agencies responding, and this includes disaster and terrorist attack SAR. It's all about getting the most and best resources to the victims!

9-11-01 and NIMS have brought about the very positive change of encouraging or requiring regional and multi-agency working groups for emergency response, and while many areas as of 2009 still give it good written-procedure-they-do-not-follow and lip service, law enforcement and fire service and all other SAR-related entities, government and non government, can only improve the system of saving lives by working out the details ahead of time, together.

Search and rescue missions are *extremely* labor and manpower intensive, and a typical, basic search mission can require anywhere from 25 qualified searchers to 300, and more. A typical technical rescue can require 15 or more qualified rescuers, and easily as many as 40 or more. A cave or mine rescue will require *many* more than that. History has shown that you still can not send too many *qualified* people to a rescue mission. And these numbers are *in addition* to the other public safety personnel who are there to provide support functions such as command oversight, traffic control, aviation, logistics, investigations, etc.

Local fire and enforcement agencies which have rope rescue training are trained with an urban setting in mind. Urban SAR has been described as a sprint with minimal supplies, while wilderness and disaster SAR is described as a marathon with extended needs.

Responding typically in fire station gear or bunkers and with their "rehab" supplies in a sector at the command post, they are well-prepared for the urban SAR mission or local disaster. They do not train or equip for wilderness or overnight bivouac operations. Despite NFPA standards under 1670 and 1006, fire service does not actually get or provide adequate training for wilderness responses at this time. That will take cooperation with and instructors from the wilderness sector. Further, fire apparatus (vehicles) can be too large to pass through wilderness roads and trails, yet sometimes not large enough to carry the needed wilderness rescue equipment in addition to their firefighting equipment. They will need relief, assistance and leadership from the wilderness-experienced county or state SAR teams, be they paid or unpaid.

Bottom line: ***All these FD and sheriff's (etc.) units should be simultaneously dispatched via automatic aid and work together under unified command.***

Don't Get Stuck in your Triage Card. Listen

Sometimes, especially new 911 operators stick so closely to their "script" or their system, that they do not listen to the caller. This is a critical factor in wilderness 911 calls.

An example given by one agency. "I was climbing when someone was injured. I wanted to transition my role to that of rescuer and get a county SAR mission number so the rescue was officially sanctioned. I called 911, explained I was "a Rescue Leader with ABC Rescue and was on the summit of Mt. X where an accident had just occurred, and I needed to get the call routed to the XXX County Sheriff's SAR Coordinator on duty." The 911 operator's response was "Address please." I repeated that I was on the summit of Mt. X and there had been a climbing accident, but the 911 operator responded again "Address please." I finally had to so "Listen! I am on the SUMMIT of Mt. X. There is no address or street here. It's on top of the mountain. I need the Sheriff's SAR Coordinator for XXX County." This finally got the 911 operator out of "urban" mode and to realize that, though in urban situations they may require an address, this emergency was in a location where there were no streets and she'd have to do without that information.

As of 2009, this has occurred in other countries twice within mid 2009 alone, where a dispatcher either hung up on the caller, or disregarded the call!

Simultaneous Multiple Calls

Under development is the most effective method of addressing multiple calls that come in regarding the same incident, such as a flood with victims in many places, or a disaster-type incident which poses the same challenges. That is, 1) can I plan ahead, if only by hours or minutes, for calls coming in that would require multiple technical rescue or SAR resources. Some agencies have enough personnel to respond at any given time to perhaps 2 calls at the same time.

2) how do I decide to which call to send what level of SAR response?

The STAR program of Travis County Texas addressed this in and around recent Hurricanes (local, FEMA and EMAC deployments in and out of state) when they received literally *hundreds* of calls for flood rescues simultaneously and for several hours and days.

The guidelines in this packet will help, especially when used with existing EMD guidelines. For example, normally, a person in a flooded house in no further danger is a lower priority than one floating outside the house in swiftly moving water. That same person, if he is 82 years old or with a heart condition is a much higher priority. At the same time, you may be able to send a swiftwater rescue first responder-boat operator to the man simply trapped with the heart condition, while sending the technician-level team to the one floating down the street.

3) certainly, call in additional call takers and dispatchers, and develop an "IDT" or Incident Dispatcher Team made of area dispatchers trained in SRD (search and rescue dispatch).

Stay tuned.

Know Your Resources

Ask your local SAR coordinator to provide you with an area resource list of all city, county, state and federal SAR resources.

In some areas, your mountain rescue team will also be the swift water rescue team, the rescuers to be placed on the helicopter, the confined space rescue team, and the K-9 team. In other areas, each of these may be separate units. It is critical to know the difference and to call the proper resources.

When using this guide, you may need to replace certain words with your own local title (mountain rescue team vs. technical rescue team vs. swiftwater rescue team, etc.) or your appropriate rescue agency.

Conclusion

In 1993, Sheila Quilter Wheeler, a well-known expert in nurse telephone triage, stated: "Telephone triage is both art and science, a synthesis of human and artificial intelligence. Artificial intelligence parallels the thought processes, logical steps, rules and intuition used in problem-solving. The same process is used in "computer diagnostics" to help physicians think through diagnostic and treatment decisions. Like computer diagnostic systems, protocols help analyze and classify symptoms and perform several functions:

- *Problem solving.* Protocols are expert systems on paper or computers that guide ... through the processes of interview, assessment and decision-making, comparable to having an expert at one's side.
- *Structure.* Protocols organize vast amounts of information for consideration by the decision maker. They determine what constitutes *significant* information.
- *Risk Management Safeguard.* Protocols show the interrelationship of various data, forcing consideration of all possible decision choices and safeguarding against stereotyping.
- *Reconstructive.* In some institutions.....must defend their dispositions. Protocols can help to reconstruct the decision-making process (12)."

So we see by this that we can help problem solve, provide structure, reconstruct triage and dispatch processes and help lower our liability in the event of a question or lawsuit.

Finally, there is no way that these guidelines can be perfect or completely applicable in every situation or geographical area. You should have specialists and stakeholders (SAR, Mountain Rescue, EMS, Dispatch personnel) to review these guidelines at least annually to ensure they still are consistent with national EMS and SAR standard of care and practice. An example would be that the section on "Lightning" should be reviewed by all the mentioned stakeholders plus a specialist in the effects of lightning, perhaps a meteorologist and a wilderness emergency medical control physician.

This author wishes to remain a SAR practitioner and manager and is not interested in making money, only sharing knowledge, and will be happy to help in any way in these reviews. Formal courses are available at nominal cost.

Remember, triage and dispatch for wilderness SAR incidents can defy traditional emergency medical and law enforcement and fire service triage and dispatch protocols or thought processes. SAR Dispatch is a specialty within itself which will continue to change and challenge us for years to come.

It is time to take the years of experience of SAR personnel and emergency response professionals - paid and unpaid - and integrate it into the structured triage and dispatch to search and rescue incidents. Increasing lawsuits infer it, common sense decrees it, and the citizens deserve it.

Triage & Dispatch Guidelines for Search and Rescue

7-11-07

Format

The format used for the triage and dispatch is based on the "Triage Card" system and can be adapted into most agencies' Computer Aided Dispatch (CAD) system. It can be used in "pull up mask" format, "Fill in the sections on a form", or just as a training outline/ aid and a reference book to consult as needed. This handbook and its definitions are kept as simplistic as possible to give the user basic information and knowledge about SAR in order to help them make triage decisions.

Terms

Asset and Resource. "Asset" is more a military term while "resource" is used more by civilian public safety personnel. We shall use the term "resource" in this document.

Code Three, or Emergency Lights and Siren

Means that an emergency lights and siren response should be authorized for the primary field unit(s) and a Code three vehicle response or a helicopter response for 1-3 (Sheriff's) SAR Technicians or Ops Chiefs, with precedence to Ops Chiefs and the ALS level. Of course, the duty SAR Manager/Coordinator should also be so authorized. This allows a minimal number of qualified wilderness rescue personnel to arrive in a timely fashion, take command, ensure safety and to begin a rescue plan.

Automatic Aid & Mutual Aid Resources.

Your SAR division and Technical /Mountain Rescue Unit should update a list and computer database periodically for SAR resources inside the agency. Either the state or perhaps another group may be involved in developing and maintaining such a list of resources outside your agency that may be helpful for a mission. There are many resources which agencies are not readily aware of, and for which the dispatcher will have no current contact numbers.

Automatic Aid is described as aid given by another agency, automatically upon dispatch, when written into dispatch guidelines or protocols. Automatic aid is generated by your Communications Center by simultaneously requesting or notifying the outside resource upon initial dispatch of incidents. Automatic aid should be arranged for technical rescue incidents and programmed into your CAD (Computer Aided Dispatch) system.

Mutual Aid is described as aid given by another agency, case by case, when requested by a member of your agency.

Civil SAR, as described in the U.S. National SAR Plan, covers Maritime (involving rescue from an oceanic water environment); Aeronautical (SAR assistance near airports); Land (SAR operations associated with environments such as wilderness areas, swift water, caves, mountains, etc.); Provision of initial assistance at a scene of a distress situation; delivery of survivors to a place of safety; and saving property done in conjunction with saving lives. For the purposes of this standard, it includes SAR in all geographies but not usually disaster SAR.

Disaster and Urban SAR, as described in the U.S. National SAR Plan, Urban SAR (US&R) operational activities include locating, extricating, and providing on-site medical treatment to victims trapped in collapsed structures during major disasters, and for the purposes of this standard, includes other search and rescue services within an urban jurisdiction or area.

Explanation of capabilities for dispatch of technical SAR incidents; these vary between agencies. You MUST first ensure that the resource you are about to send is qualified for the tasks. NIMS or other officially “Resource Typed” or verified teams and resources are an excellent way to accomplish this.

SRD: Search and Rescue Dispatch(er). Personnel trained in these unique methods.

Mountain Rescue (MRT): These members typically have advanced training and certification in all technical, four season, high altitude, foul weather and helicopter rescue disciplines as well as wilderness medicine, with all required specialized equipment to be self-sufficient for 2-3 days and with sufficient personnel to complete the mission requirements (SAR missions are surprisingly manpower and equipment intensive). Some mountain rescue teams are trained for multiple other disciplines (mountain, alpine, mine, cave, swift water, helicopter, hazmat, disaster, etc.), while others are not. Your SAR Manager will know and should annually publish a resource list to that effect.

Technical Rescue (TRT): This usually, but not always, refers to teams which are specific to urban rescue and do not specialize in wilderness rescue.

Search and Rescue: This could mean a team, unit or posse that does only ground searches, or tracking, or ATVs but MIGHT possibly also perform technical rescue.

Lake Patrol/ Back Country or Range Deputies. USFS, BLM personnel: Single resource personnel who are usually intimately familiar with trails and wilderness areas and who can assist in non-technical, low angle terrain and short carry-outs.

Rescue/Public Safety Divers (PSD): Divers and rescue divers are appropriate for still water, but not for swiftwater unless trained and equipped for both.

Rescue or SAR Aviation: A helicopter certified by FAA, NIMS ICS or qualified by a recognized standard for performing *human external loads* (helirappel, short haul) or specialized rescue techniques (mountain flying, confined area flying, skid and hover ingress and egress, over water, et al).

You must know which aircraft are needed for what purpose, and which are capable of performing which SAR functions, transport, observation, external loads *before* you ask them to a mission.

SAR Coordinator or Mission Coordinator: A deputy sheriff, state police officer or other paid or volunteer officer with specialized training in the management of SAR incidents and who typically becomes the Incident Commander or Command /General Staff/Section Chief.

Patrol units: initial information-gathering, securing the scene, able to resolve simple searches before arrival or within 15-30 minutes after arrival on scene or within ¼ mile of a trailhead or 2wd road. Even if they patrol in 4wds or have some rescue equipment, they will be ill equipped for a full SAR mission alone once in the unforgiving and remote back country and hence should not be dispatched to a SAR mission alone.

Other sheriff’s SAR units or area SAR units: Searching, Low angle carryout assistants. May have additional capabilities.

Non-SAR volunteers and other fire and sheriff’s and police departments: refer to your local Technical SAR Resource Guide. Most FDs do not respond to searches. They may be able to assist on some rescue incidents within ¼ mile of a trailhead or a 2wd road. Larger fire departments are specially trained and equipped for HazMat, but again, usually in the urban setting. They will need support of Sheriff’s / Wilderness SAR when in the back country.

Confined Space: For the purposes of this document and for brevity only, the Confined Space category means any space, including those which are typically not directly governed by OSHA Confined Space regulations (29 CFR 1910, et al) but under another regulation, such as Abandoned Mines, Active Mines (MSHA), Caves and Crevasses. While these 3 are more appropriately called “underground” incidents, so as not to imply they are governed only or exclusively by OSHA, it is simpler (K.I.S.S.) to call them all Confined Space.

Some Other Tips

- A Technical Rescue “assignment” or dispatch should consist of the nearest patrol unit, the Technical/Mountain Rescue Unit, a SAR Coordinator at a minimum and a SAR or recon-capable rotary winged aviation where available.
- A typical FD TRT assignment includes 2-3 engine companies and 1 Ladder company (with at least two of those being TRT companies), one ambulance, 1-2 helicopters, the duty special ops captain and a battalion chief).
- Nature code: use that “type” description which is as close as possible to the incident (high angle, cave, mine, alpine, swiftwater, helicopter, aircraft crash rescue, search, recovery).
- Injury calls: the local EMS/fire department should be conferenced into the call. The 911 operator should monitor EMS calls to determine whether they involve a rescue scenario, swiftwater, mine, cave, mountain, search, disaster, etc.
- For all technical rescue calls in your jurisdiction, even ones in progress by another agency, your Sheriff’s Mountain Rescue/Technical Rescue Team should be activated or at least be placed on Stand-By, however, they should never not be called.
- The communications specialist is not required to ask every question in the series. Ask only those questions that pertain to the specific call.
- Remember, these guidelines are extensive, and adequate time must be spent in order to “train” the coordinator or dispatcher and to do so with the many tools required. When you have the time and only one SAR call to triage, the entire list of questions can be covered. When you have multiple calls and limited personnel, you may need to shorten it to 30 seconds of triage maximum.
- NIMS Communications Interoperability. In the dispatch center, have a list of not just radio channels, but also of frequencies and tone codes to be able to give other responding agencies. Most SAR agencies still operate on VHF or UHF.
- Remember, in SAR incidents, an EMS unit is needed on scene not just for victims but also for the care and welfare of rescuers for the duration of the incident.

Sample Request for Automatic Aid Agreement For Technical Rescue

To: XYZ FD, S.O, State Police or Rangers, Rescue Team, CERT Team, etc.

(state statute, county code, etc. #____), states that the Sheriff (State Police, etc.) is responsible for all search and rescue in the county. The _____ County Sheriff's Office has the specialty units, both paid and unpaid and available 24 hours, 7 days, to perform or co-perform these missions, including advanced life support medical care in the unique wilderness environment.

We have incorporated into our CAD (computer aided dispatch) system the automatic calling of your agency in situations involving search and imminent recovery of an injured person, and for certain types of rescues.

We require that, pursuant to this law, you incorporate "Automatic Aid" of the Sheriff's Office Technical Rescue Unit (via our Communications Center) into your search and rescue responses into the following situations:

- Any search in (unincorporated) _____ County.
- Any technical rescue in (unincorporated) _____ County
- Any injured person beyond a trailhead or 2wd road anywhere in (unincorporated) _____ County

The on-call SAR Coordinator or designee will determine what level of response is needed from the Sheriff's Office. This may include no response by the sheriff's office, for example, to an urban trench rescue that is being handled by a fire department technical rescue team, up to and including the dispatch of the Sheriff's full SAR resources. The Sheriff's Office will follow the NIMS-based Incident Command System including unified command principles. This "Automatic Aid" notification system also allows the Sheriff's Office to responsibly track and accurately report all SAR missions of all agencies in the county to the county, state and federal government.

Per State Statute # _____ and the State Division of Emergency Management Administrative Rule;

- "RESCUE means to render aid, under the direction of competent authority (sheriff), to persons whose life or health is threatened by circumstances beyond their control and return them to a place of safety."
- "SEARCH means to seek out and locate, by the use of air, surface, and/or subsurface equipment and qualified registered personnel, live persons known or thought to be, by competent authority, in a distress situation and unable to reach a place of safety by their own effort."
- "RECOVERY means to relocate, under direction of competent authority, a deceased person from the site of his demise to an appropriate location."
- "MISSION COORDINATOR is the SHERIFF. ON SCENE COORDINATOR is the individual or team chief designated by the Sheriff as the on scene person in charge of a particular search and rescue mission."

"Rescue" in the practical sense means anywhere in _____ County, a technical rope rescue, swift-water or flood rescue, snow or blizzard rescue, confined space rescue (mine, cave, silo, sewer, well, trench, crevice, structural collapse, industrial space, vessel, etc.), or a rock or snow avalanche, disaster and terrorism SAR including these incidents as follows;

- past a trailhead or a 2wd road; an aircraft crash, a multiple casualty disaster or terrorism, or any injured person off of a 2wd road.
- involving an animal to be rescued; and any requests for the _CSO helicopter to perform a rescue in such conditions.

We appreciate your help and cooperation to make our joint responses more efficient in order to provide the best, quickest and mandated service to the community in need.

Model Triage & Dispatch Guidelines for Search and Rescue

Sample Dispatch

1. Call for help comes in to PSAP, etc.
 - a. to 911 from a citizen, outdoor group, other agency or PSAP or
 - b. to a radio dispatcher/alarm room from a field unit or patrol unit
2. Agency Phone Operator or Dispatcher gathers initial information
3. Agency Communications Operation dispatches patrol unit, Rescue Team, Aviation, SAR Coordinator, FD and EMS, as needed, or places them on stand by, with the following information via Text Page, Voice Page, and/ or via radio;
“High Angle Rescue at Dark Cliffs near Water Users, reported as male who fell unknown distance. Unknown injuries. Tom-526 & EMS enroute. Aviation standing by for hasty team. Traffic is on Channel 8.”
4. Dispatch notifies the duty SAR Coordinator. For Searches, the SAR Coordinator is consulted before SAR Team Deployment. For a possible or apparent rescue, the resources are dispatched without requiring advance Watch Commander or SAR Coordinator approval.
5. Dispatch gathers secondary, additional information from caller(s) per guidelines.
6. Dispatch gives follow up page and radio broadcast with additional information to units, team and SAR Coordinator;
“Subject reported on ledge 100 ft up, not moving. Tom-526 enroute & advises Dark Cliffs has no close LZ (landing zone), and is 2 miles from trailhead. Caller states unknown time of occurrence, but caller hiked out at 1345 hours. Two friends stayed to help. EMS hiking in.
7. Rescue Team Duty Ops Chief or SAR Coordinator will typically coordinate aviation pickups and page units for further updates.
8. First unit confirms critical dispatch information and gives an “on-scene” report of situation.

On Scene Report: “P.C.A.N.”

All items are important. All field members should be trained in this system.

Position: Your location (in relation to the victim scene, side of mountain, etc.)

Conditions:

- (Call Sign) Tom 526 copy on-scene (or updated) report.
- Updated location is _____, approximately __ miles down the (name of) trail.
- Directions are/ flagger is...
- Staging is at _____
- This appears to be a Mountain/ Alpine/ Mine/ Cave/ Swiftwater Search or Rescue with
- # subjects, in a
- Stable or unstable (stranded, secure, hanging, etc.) situation with
- Unknown, minor, moderate, major injuries
- This appears to be a technical or non-technical rescue.
- Describe critical weather problems, weapons, felon, psych, etc. involved

Actions:

- There is/ are # EMT/ FD/ climber, etc., with the subjects
- subjects and/or units are tied in/ not secured...and
- BLS/ ALS is with the subjects.
- We will work off of Channel/ frequency _____

Needs: We will need these additional resources;

- EMS or Rescue equipment as follows:
- Manpower (general, SAR teams...) as follows:
- Water, food, rehab unit, etc. as follows:
- Please ensure the Duty SAR Coordinator is notified

Give critical updates as critical information changes.

SAMPLE TECHNICAL RESCUE CALL OUT PROCEDURES

11-9-02 Destroy all previous versions.

CALL-OUT:

Preferred method: Text Page

1. **TEXT: Enter Arch Communications PIN Code ____:**
 - a. enter brief text of mission
 - b. enter who the sender is (SO Radio, etc.)

Example: Hi Angle Rsq, 2 stranded, not injured, CP @ Water Users. -SO Radio.

OR Voice Page System

1. Call ____ - ____ - ____.
2. Leave a brief voice message with at least these dispatch details;
 - a. Type of mission
 - b. number of subjects
 - c. injuries
 - d. location of command post.
3. Call a second time and enter "911" or the call may not be answered immediately.

For a Complex Situation or a Consult:

1. For complex dispatches or consultation, call ____ - ____ - ____ and enter your number (radio/alarm room, etc.) and *911 (eg, 602-256-1030*911)
 - A. A SAR Manager will call immediately for details.

THEN

1. Always Notify the Duty SAR Coordinator ASAP.

No acknowledgement within 4 minutes

The text paging system used is _____ Wireless, Inc. and is subject to occasional failures. If no response is heard from Technical/ Mountain Rescue within 4 minutes, use the Voice Page System, as above.

Distribution: SO Radio, SO SAR, Team File Copy

SAR Triage and Dispatch

The Short Version

4-6-04

Several people have asked if I could “boil it all down to one page”. That’s not really fair, but it is true that if you take the simplistic approach of some agencies (if it smells of SAR, send a full response) here it is:

To Communications Center:

Callout/ Dispatch Procedures for Search and Rescue calls.

Pursuant to State Statute # _____, the Sheriff (State Police, etc.) is legally responsible for all search and rescue in the county. The Sheriff’s Office has the specialty units, both paid and unpaid and available 24 hours, 7 days, to perform these missions, including advanced life support.

* **”rescue”** in the practical sense means anywhere in ____ County, a technical rope rescue, swift-water or flood rescue, snow or blizzard rescue, confined space rescue (mine, cave, silo, sewer, well, trench, crevice, structural collapse, industrial space, vessel, etc.), or a rock or snow avalanche, disaster and terrorism SAR including these incidents as follows:

- past a trailhead or a 2wd road; an aircraft crash, a multiple casualty disaster or terrorism, or any injured person off of a 2wd road.
- involving an animal; any requests for a helicopter to perform a rescue technique in such conditions.

To process these calls:

INJURED in a SAR environment or a RESCUE:

Any 911 call or request indicating any injury in the wilderness or a SAR environment, a rescue*; any request from any field unit, any call from another agency inside or outside the county for Mutual Aid or Automatic Aid for a rescue*, or when in doubt

1. Activate “Mountain Rescue”

Text Page: Pin # _____ and enter text. Example:

Hi Angle Rsq, 2 stranded, not injured, ICP @ Water Users. -SO Radio.

OR Numeric Page: 000-000-0000. Enter 911*000-000-0000

2. Activate the Duty SAR Coordinator
3. Place a rescue capable helicopter on Stand by, which will be primarily to transport rescuers and assist at the scene
4. Dispatch nearest field patrol unit, EMS and other nearest agency technical rescue team via automatic or mutual aid.

SEARCH, RECOVERY

Any call indicating any search, rescue or recovery of an animal, property, evidence or body;

1. Dispatch nearest patrol or field unit
2. Page the Duty SAR Coordinator
3. Dispatch nearest field patrol unit.

SEARCHES OUTSIDE COUNTY.

Any requests for search assistance from outside of _____ County, page the duty SAR Coordinator.

Contacts:

Search and Rescue Division phone:

SAR Division Supervisor, Name, Phones

SAR Coordinators: Names, Phones

Mountain Rescue Commander or Ops Chief Names, Phones

Distribution: Radio, SAR, Mountain Rescue, Lake Patrol, SWAT/TOU, Homeland Security

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SEARCH AND RESCUE INCIDENTS: General, Index

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INITIAL UNIVERSAL QUESTIONS

1. **When did it happen?**
2. **Where is it happening? What county or city is it near (cell phone skips)?**
3. **Where are you calling from? Your call back number. Your relationship to the party?**
4. **How far from the nearest trailhead or 2wd road?**
 - a. **If >¼ mile, or is a technical rescue situation, dispatch SAR, nearest public safety helicopter (rescue capable, see resource list), nearest FD and SO SAR Coordinator.**
3. **How many victims?**
4. **Is anyone injured? Yes = Dispatch mountain/ technical rescue hasty team via helicopter and EMS. Conference with FD/ EMS.**
 - a. **Classify as Minor, Moderate or Serious injuries, etc.**
5. **What have bystanders or other agencies on scene done so far?**
 - a. **Update responding units via radio and pager (rescue team).**
6. **Location: Wilderness (name of mountain, valley, drainage, trailhead and/or other landmarks.**
7. **Highway/Other (road number, mountain pass, side of pass, milepost, other landmarks)**
8. **If wilderness / backcountry / off road (distance from road / trailhead to accident site in miles or minutes).**
9. **Conditions: Trail is gentle, rugged or technical**
10. **Conditions: Weather at site is;**
 - a. **Generally: Clear, partly cloudy, cloudy, obscured**
 - b. **Precipitation: none, snow, rain**
 - c. **Winds: clam, light, moderate, strong**
 - d. **Visibility: good, fair, poor**
11. **KEYWORDS: "Fall Injury" may be a distractor for what is actually a SAR call.**

If the caller is calling about themselves or someone else...

- | | |
|--|--------------------------|
| 1. Stuck or injured on cliff, ledge, building, tower, tree or rock face | High Angle Rescue |
| 2. Vehicle into ravine or over embankment | High Angle Rescue |
| 3. Injured/Ill and further than ¼ mile from a 2wd road or trailhead | High Angle Rescue |
| 4. In trouble in water | Water Rescue |
| 5. In a confined or underground space
(mine, cave, silo, sewer, well, trench, crevice, structural collapse, industrial space, vessel, etc.) | Confined Space Rescue |
| 6. Involved in Hazardous Materials spill or leak | HazMat Rescue |
| 7. Requests a helicopter rescue | Helicopter Rescue, et al |
| 8. Other agency request for technical SAR resource | Other Agency Request |
| 9. Aircraft crash | Aircraft Crash Rescue |
| 10. Multi-casualty disaster, natural disaster,
Terrorism SAR, Weapons of Mass Destruction | MCI-WMD-Disaster Rescue |
| 11. Stranded in Blizzards/ Snow | Blizzards/ Snow Rescue |
| 12. Avalanche | Avalanche |
| 13. Stranded in heat/ desert/ dust storm | Heat/ Desert Rescue |
| 14. Lightning incidents | Lightning Rescue |
| 15. Missing or overdue person, hiker, etc. | Search |

Ask initial questions, then Refer to type/nature code:

16. Recovery of body, property, evidence from a technical location Search
17. Animal Rescue from any technical environment Animal Technical Rescue
When in doubt, consult an on duty SAR Coordinator or Rescue Team Leader.

For any call involving any injury or HazMat: "I'm going to conference call the fire department with us so you only have to give us information once." Then refer to applicable page above.

Enter all location references into call text. They may mean nothing to the Call Taker, but can be critical for responding units. It may be easier for the responding unit to call the caller's cell phone.

Hazards on wilderness searches and rescues: Dehydration, hypothermia, hyperthermia (heat exhaustion & heat stroke), cardiac, blunt trauma, head injuries, lacerations, electrocution, falls.

NOTE: The communications specialist is not required to ask every question in the series. Ask only those questions that pertain to the specific call.

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Cellular Phone Considerations for SAR Incidents:

© Tim Kovacs 12-5-09

1. Consider every cell call a possible skip from another jurisdiction, or even from another state.
2. Are you on a cell phone?
3. How much battery power do you think you have left?
 - a. Prioritize your most important questions
 - b. Consider safe ways they may conserve the battery
4. What is the name of the mountain range you are in?
 - a. What city, county and state are you near or in?
 - b. Beware of mountain ranges and wilderness locations with same or similar names that are miles and counties away from one another
5. Where did you park? May help locate the person.
6. What trail are you on or did you enter from?

12/2009: U.S. Cell Phone Companies use GPS Datum WGS84 for their coordinates but may vary in their Formats (minutes, degrees, decimals, etc.).

Playback capability is absolutely required in a public safety dispatch system, especially with the problems of cell phones, static and other problems interrupting clear communications.

Final Post-Dispatch Advice and Instructions for Technical SAR incidents:

2-18-04

- If using a cell phone: Do you have unlimited power to your phone (cord, batteries, etc.)?
- Do not move an injured person unless trained and/or in order to remove from an immediate life threat.
- Do not attempt to climb up or down to them, even if you can see them.
- Do not enter floodwater or moving water to try to rescue a victim.
- Do not enter a confined space (asphyxiation from gasses or displaced air, trauma, trench, etc.).
- Send a flagger back to the roadway or obvious access/trailhead location if at all possible.
- If unable to send a flagger, Listen carefully for responders calling out person/ caller names as they search for you. If you have a whistle or other noise-making device, activate it when you hear your name. These device sounds will normally travel much farther than yelling and won't fatigue you as quickly.
- If a Helicopter is to be used, tell caller to wave a shirt or towel over the head as a means of flagging the aircraft. Light-colored items will work better than dark. Contrast against the background colors.
- The helicopter may insert personnel by Rappel or Cable Hoist. Stay away from the underneath and flight path of the aircraft.
- Do NOT approach any helicopter unless clearly told to do so by an air crew member.
- Clear the immediate (100 feet or greater) area of any loose objects that can disable the helicopter (jackets, small backpacks, towels, etc.)

© Tim Kovacs

High Angle Rescues - "A"

Calling about someone stranded, stuck on a ledge, cliff, rock face, tree, building, tower.

Calling about a car over a steep embankment or into a ravine that requires a rough hike or ropes to get to or out of.

7-11-07 © Tim Kovacs

P1- Any injury or Savable lives. Code 3 (lights and siren authorized).

P2- Stable ledge or platform.

P3- Animal, deceased, non human

1. Where are you calling from?
2. Where is the incident occurring?
3. Can you see the victim(s) from where you are?
4. Where is the victim in relation to a landmark?
5. How far up from the ground or down to the victim is it?
6. Does the person (car) appear to be on a small or unstable position or ledge?
7. Does the person appear injured (conference FD/ EMS), ill or acting abnormally, or in danger of imminent injury? ALS
8. Does the person or vehicle appear in danger of falling? Being smothered by palm fronds or branches?
9. Is the person or vehicle farther than ¼ mile from a major trailhead or a 2wd roadway? (nature code: Wilderness Rescue)
10. Does this involve ice (frozen waterfall, etc.)? Clarify such to responders. Must be Mountain Rescuers.
11. Does this involve a utility pole or utility tower? A specialized team is required.

If yes to any of 6-9, or if no one is with the victim, or if a victim has been reported as possibly deceased but not confirmed, or if circumstances are unknown, **Dispatch:**

***Sheriff's (state, etc.) Technical Rescue,**

***Recon/ SAR Aviation,**

Nearest Patrol unit and, Back Country/Lake Patrol unit(s) if near their area,

***SAR Coordinator,**

the nearest fire department technical rescue team

Nearest ALS as specified above

*** In order to use this guide properly, you must NOT just fill in, for example, your local helicopter into the "Recon/ SAR Aviation" category. You MUST first ensure that the resource you are about to send is qualified for the tasks. NIMS or other officially "Resource Typed" or verified teams and resources are an excellent way to accomplish this verification.**

If victim is on small or unstable ledge and feels their life is threatened, tell the caller...

- Tell the person to stay where they are, and that help is coming.
- Ask them if they are injured or ill and to describe their injuries.
- Do not stand directly under where you may be struck by rock fall, etc., or where you may shower debris onto the people.

Update the rescue team and responding units.

If victim/ vehicle is on a large or stable ledge, solid ground, no fall potential and does not feel they are about to fall or that their life is threatened, or if they are confirmed deceased, Tell the caller...

- We are sending the rescue team. Go to a safe place near where the person(s) is and be prepared to guide rescuers to the scene. Advise the victims to stay where they are.
- DO NOT CLIMB UP OR DOWN TO TRY TO HELP THE VICTIM !!!

Enter all location references into call text. They may mean nothing to the Call Taker, but can be critical for responding units. It may be easier for the responding unit to call the caller's cell phone

Refer to High Angle Rescue "B"

Go to **Final Post Dispatch Advice**

Hazards: trauma, falls, insufficient manpower & equipment, changing weather, poor communications from site, lengthy evacuations, falling debris, unstable vehicle, smothering and enormous weight from tree branches or palm fronds.

© Tim Kovacs

High Angle Rescues - “B”

Follow Up information to gather while units respond:

8-4-01 © Tim Kovacs

1. When did the incident happen?
2. What is the person's name? Age?
3. What is the person's Medical history? Behavioral history?
4. Can you see them from where you are? (Stay on phone, give updates until first unit arrives)
5. When did you last see the person, or hear from the person?
6. About how far up or down is it to the person (feet, car lengths, etc.)
7. If there is someone with the victim...
 - a. What medical training and equipment does this helper have?
8. Is the person Alert/ Not Alert?
9. Did the Person Fall? About how far? (any altered mentation, unconscious or 10 foot+ fall is ALS)
10. Will rescuers have to climb to get to the person? (up or down)

11. What radio frequency is being used on-scene.
12. Is another helicopter en-route or on-scene (law enforcement, military, rescue, EMS, news)
13. What actions have been taken so far by those bystanders and agencies on-scene?
14. Is the person a suspect of a crime? Is he/ she violent or threatening or mentally unstable?

15. What other hazards are present? (weather, visibility, fire, lightning, predatory animals, etc.)
16. Are especially long ropes (greater than 300 feet) needed?
17. Is specialized equipment needed? (air bags, air monitors, shoring, etc.)
18. Is a rescue litter on-scene? (may make response quicker and lighter)

Update rescue responders via radio/ pager.

Go to **Final Post Dispatch Advice**

Thank you for helping us with this important information.

© Tim Kovacs

Water, Swift Water and Flood Water Incidents - “A”

This includes responses to dry creek beds during any storm warnings (per national weather service), monsoon and storm seasons (almanac) and runoff seasons (spring).

7-10-07 © Tim Kovacs

A, B, C, D are P1, Code three, ALS responses.

1. How many people? (victims?)

If the caller is...

- | | |
|---|----------------------|
| ■ calling about or from someone trapped in or on a vehicle | Refer to:
Water B |
| ■ reporting someone stranded, floating or drowning in moving water (creek, stream, ditch, river, canal, etc.) | Water C |
| ■ reporting someone drowning in still water (lake, pond, etc.) | Water D |
| ■ calling from a flooding house, building or mobile home/trailer | Water E |

- If the water has ice covering it, dispatch Ice Rescue and Dive Rescue and Aviation. This incident requires a combination of specialty rescue teams.

All water incidents require an ALS response.

Even if a person or vehicle is not currently washing away, all rescue resources should still be dispatched immediately, as the situation can change quickly.

Enter all location references into call text. They may mean nothing to the Call Taker, but can be critical for responding units. It may be easier for the responding unit to call the caller's cell phone.

NOTE: Would-be rescuers (citizens, police officers, non-swiftwater rescue divers and firefighters) make up a majority of those killed or injured in swiftwater and flood accidents. Do not enter water unless you are part of a formal swiftwater rescue team.

Hazards: automobile accidents, drownings, debilitating hypothermia, electrical shock, cardiac, blunt trauma, lacerations, burns from stationary or floating propane tank ruptures, waterborne diseases and exposure to hazardous chemicals in flood water, trauma from partially submerged objects, false roadway bottoms, sucked into street manholes, unseen underwater grates, strainers and sieves, collapse of shore within 10 feet of water.

Non-Emergency Advice (if time permits):

- You can get general information at our local emergency broadcast station (if available).
The radio station is at: _____ AM; _____ FM or 162.550 MHz.
- You can call our local non-emergency phone line (if one is set up for the incident).
The number is _____
- You can also listen to NOAA weather radio (if you have one), or get in touch with the nearest National Weather Service office.

NOTE: The communications specialist is not required to ask every question in the natural disaster series. Ask only those questions that pertain to the specific call.

Adapted from Ft. Collins, CO, NDIC

Swift Water or Flood Rescues - "B"

Calling about someone trapped in or on a vehicle.

9-8-03 © Tim Kovacs

1. Where are you calling from? What is the nearest city or county you are in?
2. How many victims?
3. Where are you in relation to the shore or landmarks?
4. Is the car in deep or fast moving water?
5. Is the vehicle moving?

Dispatch: - Sheriff's (etc.) Swift water Rescue; - Recon/ SAR Aviation,
 - other nearest FD swiftwater rescue team or sheriff's (state police asset, etc.)
 swiftwater rescue team,
 - nearest Patrol unit and/or FD unit. - SAR Coordinator
 - ALS.

If vehicle or person is floating toward 5 miles of another jurisdiction (fire district, county, state);

- Dispatch downstream law enforcement, unpaid and fire department technical rescue teams.
- Advise them that we are working a swiftwater rescue and are asking them to stage downstream of the location.
- Advise them of the radio channel to monitor.

If the trapped victim is in deep, fast-moving water - especially if water is getting into the vehicle and the victim feels their life is threatened. If the vehicle appears stable, have them stay on top of it. If they have something for flotation, have them hold on to it.

If it is unstable (floating away...): Tell the caller...

- Have person in car try to open a side window, or break it out with a shoe or other solid object.
- Try to find a flotation device of some sort in your vehicle, or theirs. If nothing else is available, tell them to use a jacket or shirt to trap air, and create their own makeshift flotation device.
- Have them exit car carefully & try to get to dry ground: remind to keep hold of flotation device.
- If they are swept downstream, follow along, but do not go into the water after them.
- If you have a rope or an unplugged long power cord, take it along as you follow, and wait for the opportunity to throw an end to them. Do not enter the water.
- If you have something that floats & is small enough you can throw out to them, take it with you.

If the trapped victim IS NOT in deep, fast-moving water, or floating away: Tell the caller...

- We are sending the rescue team. Stay on your car.
- For callers who are not victims: Go to a safe place near where the people are trapped. Be prepared to guide rescuers to the scene. Advise the victims to stay in or on their car.
- **DO NOT ENTER THE WATER TO TRY TO HELP THE VICTIM !!!**

Additional Post Dispatch instructions;

NOTE: If someone is swept away they should stay flat on their back, feet pointed downstream. They should not stand up as the force of the water can break their legs. To steer, they should backstroke toward the desired shore.

It is better to throw a line or flotation object just behind them rather than in front of them, as in front of them tends to float away from them.

Go to **Final Post Dispatch Advice.**

Adapted from Ft. Collins, CO, NDIC

Swift Water or Flood Rescue - "C"

Calling about someone stranded, drowning or floating in moving water (creek, ditch, canal, stream, flood, etc.).

9-8-03 © Tim Kovacs

Dispatch:

SO Swift water Rescue;
Recon/ SAR Aviation,
nearest FD swiftwater rescue team or law enforcement, unpaid swiftwater rescue team,
Patrol officer and/or Fire Dept unit,
SAR Coordinator,
EMS at the ALS level unless the rescue team has ALS

If the vehicle or person is floating toward 5 miles of another downstream jurisdiction (fire district or county);

- Dispatch downstream law enforcement, unpaid and fire department technical rescue teams.
- Advise them that we are working a swiftwater rescue and are asking them to stage downstream of the location.
- Advise them of the channel to monitor.

1. Where are you calling from?
2. How many victims?
3. Where is the victim(s)?
4. Is the victim washing away or stationary?
5. How deep does the water appear?

If the victim is washing away:

Tell the caller:

- We are sending the rescue team.
- Where did you last see the victim(s)?
- How long ago in minutes?
- In what direction? (N.E.W.S., downstream, etc.....)
- **Do not** try to search for the victim unless you can clearly see the edge of the embankment, and can remain at least 10 feet from the water's edge at all times.
- **DO NOT ENTER THE WATER TO TRY TO HELP THE VICTIM !!!**

If the victim is clinging to an object and seems relatively safe for now:

Tell the caller:

- We are sending the rescue team.
- Go back to near where the victim is trapped and you are safe,
- Let the victim know that help is on the way, and stay in the area to help direct rescuers in.
- **DO NOT ENTER THE WATER TO TRY TO HELP THE VICTIM !!!**

Go to **Final Post Dispatch Advice**

Adapted from Ft. Collins, CO, NDIC

Still Water Rescue - “D”

Calling about someone drowning or trapped in still water (lake or pond).

9-12-03 © Tim Kovacs

Dispatch:

nearest FD,
EMS at ALS level (separate unit or rescue members),
rescue divers,
consider nearest Recon/ SAR Aviation unit

If the water is covered with ice, this requires a special rescue team. Dispatch Ice Rescue Team.

1. Where are you calling from?
2. How many victims?
3. Where is the victim(s) in relation to the shore or a landmark?
4. Is the victim floating/washing away, or stationary?
5. How deep does the water appear?
6. Describe the boat.

If the victim is in a submerged vehicle or appears they will fully submerge:

Tell the caller:

- We are sending the rescue team.
- Where did you last see the victim?
- About how long ago in minutes?
- Do not try to search for the victim.

Is the victim clinging to an object and appearing relatively safe for the moment?

- We are sending the rescue team
- Go to where the victim is trapped and where you are safe. Tell them help is on the way. Stay in the area to guide rescues in.
- Do not enter the water to try to help!

Beware: Street manholes that suck you in, drains in pools and manmade still water that suck you to or in.

Go to **Final Post Dispatch Advice**

Adapted from Ft. Collins, CO, NDIC

Swift Water or Flood - “E”

Calling from a flooding house, building or mobile home (including trailer).

4-10-04 © Tim Kovacs

P-1 or P-2, Code 3

1. Where are you calling from?
2. How many occupants?
3. What type of structure (house, mobile home, etc.)
4. Is the structure on fire or collapsing?
5. Are there sparking utility outlets?
6. Is there fire or smoke or any other immediate danger?
7. A patient in a flooding house with medical symptoms, chest pain, SOB, etc. should result in the call type being upgraded to P-1, Code 3 status. Non-rescue resources may not be able to access, stabilize or extricate a patient with life threatening medical condition in a timely manner.

If there is fire danger, smoke, or threat of structural collapse:

- Conference with the fire department.

Tell the caller:

- We are sending the fire department and the rescue team. If the water seems to be rising, evacuate the structure or find the highest place of refuge inside or outside the structure.
- If the water in the street outside your house appears deeper than one foot, do not attempt to drive away.
- If the water outside your house appears deeper than 3 feet and/or seems to be rising or flowing fast, take a flotation device (couch cushion, spare tire, etc.) with you when you leave. Take one device for each person.
- If there is no nearby dry ground, try to get into a tree, or onto a roof.
- Make sure that pets are free to swim with you, but do not attempt to carry larger pets, you could both lose your lives.

If the people are in danger of washing away, dispatch:

SO Swift water Rescue;
Recon/ SAR Aviation,
nearest FD swiftwater rescue team or other law enforcement, unpaid swiftwater rescue team,
nearest Patrol Unit and/or FD unit,
SAR Coordinator.

If the vehicle or person is floating toward 5 miles of another downstream jurisdiction (fire district or county);

- Dispatch downstream law enforcement, unpaid and fire department technical rescue teams.
- Advise them that we are working a swiftwater rescue and are asking them to stage downstream of the location.
- Advise them of the channel to monitor.

Adapted from Ft. Collins, CO, NDIC

Swift Water or Flood - "E1"

Calling from a flooding house, building or mobile home - no apparent fire or collapse problem.

4-10-04 © Tim Kovacs

P-3, Code 2, FR

1. Where are you calling from?
2. How many occupants?
3. Do you have a basement?

If yes:

1. Is there water in the basement?
2. Without entering it, does the water at least knee deep (1 ½ + feet) and/or rising?

- Stay out of your basement. You could be drowned or electrocuted if you go downstairs.

If caller has no basement;

1. Is the water getting into your house?
2. Does the water appear knee deep (1 ½ +feet) and/ or rising?

If the answer is **knee deep and/or rising fast:**

- You need to evacuate immediately.
- If water in the street outside your house is deeper than 1 foot, do not attempt to drive away.
- If the water is 3 feet or more, and you can not swim or paddle, consider remaining at refuge at a high spot. Take a flotation device with you, such as a couch cushion or spare tire. Take one such device for each person leaving.
- If there is no nearby dry ground, try to get into a tree, or onto a roof.
- Make sure pets are free to swim along with you, but do not try to carry larger pets. You could both lose your lives.

If the people are in danger of washing away, dispatch:

SO Swift water Rescue;
Recon/ SAR Aviation,
nearest FD swiftwater rescue team or other law enforcement, unpaid swiftwater rescue team,
nearest Patrol Unit and/or FD unit,
SAR Coordinator.

If the vehicle or person is floating toward 5 miles of another downstream jurisdiction (fire district or county);

- Dispatch downstream law enforcement, unpaid and fire department technical rescue teams.
- Advise them that we are working a swiftwater rescue and are asking them to stage downstream of the location.
- Advise them of the channel to monitor.

Water Rescue E1 continued

If the answer is **knee deep and/or rising fast**:

- You need to evacuate immediately.
- If the water in the street outside your house is deeper than 1 foot, do not attempt to drive away.
- If the water is 3 feet or more, take a flotation device with you, such as a couch cushion or spare tire. Take one such device for each person leaving.
- If there is no nearby dry ground, try to get into a tree, or onto a roof.
- Make sure pets are free to swim along with you, but do not try to carry larger pets. You could both lose your lives.
- If the answer is **not knee deep nor rising fast**:
 - To avoid safety and electrical hazards, consider not attempting to turn off the power
- Evacuate if the water begins to get deep and/or starts to rise fast.

If a mobile or portable home (trailer, etc.) and water is already inside the mobile home or trailer;

Tell the caller:

- If the water outside isn't flowing fast, or if the water doesn't contain too much debris, then choose a place to evacuate (such as nearby dry ground).
- If the water is flowing fast, or if for any other reason it seems unsafe to try to get to high ground, try to get to the roof of a stable structure.
- Take some sort of flotation device (such as a couch cushion or inflated spare tire) with you when you leave. Take one such cushion for each person that is leaving.
- Make sure that your pets are free to swim with you, and do not attempt to carry larger pets. You could both lose your lives.

If water is not inside the mobile home or trailer;

Tell the caller:

- (If a technical rescue-evacuation is required (boat, helicopter, water rescuers), tell them, we are sending a team to get you out.
- Stay in the structure until water begins to come in. Get flashlights and locate things to use for flotation devices, such as couch cushions or inflated spare tires, and have them ready to go. Find one flashlight and flotation device for each member of the family.
- Decide where to evacuate if it becomes necessary. Nearby dry ground is best, but only if the water isn't flowing too fast, or if it doesn't contain much debris, but do not allow rising water to trap you in the structure. Be prepared to evacuate, conserve cell phone power. Take medications with you if you can.
- The roof of the trailer or tree might be used, if nothing else is available.
- Call back if water begins to get inside the mobile home.

Adapted from Ft. Collins, CO, NDIC

Confined Space or Underground Rescues “A”

In a mine shaft, cave or any other confined space

(including silo, sewer, trench, crevice, tunnel, pipe, tank, industrial space, structural collapse, canyon, crevasse and any other locations where ventilation and access are restricted by the configuration of the space)

7-11-07 © Tim Kovacs

P-1, Code 3, ALS

1. Where are you calling from? Can you see the victim(s) from where you are?
2. How many victims?
3. Where is the victim in relation to a landmark?
4. How far up or down to the victim is it?
5. Does the person (vehicle) appear to be on a small or unstable position or ledge?
6. Does the person appear injured, ill or acting abnormally
7. Does the person appear in danger of further imminent injury?
8. Does the person or vehicle appear in danger of falling?
9. Is the person or vehicle farther than ¼ mile from a major trailhead or a 2wd roadway?
10. Is the person buried by debris?
11. Is this an active mine? If so, clarify that to the SAR Coordinator. Active vs. Abandoned mine ops are critically different and require different resources, training and equipment than most SAR and FD teams have.

If yes to any of 4-10, or if no one is with the victim, if a victim has been reported as possibly deceased but not confirmed, or if circumstances are unknown:

Dispatch:

Law enforcement, unpaid 's Confined Space, Mine Rescue and/or Cave Rescue, Consider Recon/ SAR Aviation, SAR Coordinator and the nearest fire department confined space rescue and HazMat team ALS (separate unit or rescue members).

Refer to the HazMat guide as needed.

If the victim is on a small or unstable ledge and the victim feels their life is threatened:

Tell the caller...

- Tell the person to stay where they are, and that help is coming. Do not enter the space to attempt rescue or allow anyone else to attempt rescue
- Ask them if they are injured or ill and to describe their injuries.
- Do not stand directly under where you may be struck by rock fall, etc., or where you may shower debris onto the people.

Update the rescue team and responding units.

If the victim (or vehicle) is on a large or stable ledge, solid ground, no fall potential and does not feel they are about to fall or that their life is threatened, or if they are confirmed deceased:

Tell the caller...

- We are sending the rescue team. Go to a safe place near where the person(s) is stranded, etc., and be prepared to guide rescuers to the scene. Advise the victims to stay where they are.
- **DO NOT CLIMB UP OR DOWN TO TRY TO HELP THE VICTIM !!!**

Confined Space Rescues “A” continued

Hazards: Falls, asphyxiation from unseen gasses or air displacement, false floors, structural instability and collapse, smoke, fire, explosion, drowning or exposure to foul / toxic water in bottom, flooding from sudden rains unnoticed from inside, respiratory compromises, carcinogens, injured and volatile animals, falling debris, bats, snakes.

NOTE: The communications specialist is not required to ask every question in the series. Ask only those questions that pertain to the specific call.

Let FD ask their questions ensuring that the following questions are asked:

“I’m going to conference the Fire Department with us so you only have to give us information once.”

When the Fire Department answers the phone state “This is the Sheriff’s Office (etc.) we have a caller on the line reporting a Confined Space Rescue”

1. What Type of Confined or Underground Space is the victim in?
2. “NO ONE IS TO ENTER THE SPACE TO ATTEMPT TO RESCUE THE VICTIM”
3. Are there any known chemicals/gasses/hazardous environments in the space?
4. Without entering, can you tell if he/she is Conscious?
5. Without entering, can you tell if he/she has any obvious injuries?
6. If incident is at a business, ‘Do you have an Emergency Response Team?’

Sample dispatch and pager message:

“Cnfd Spce Rsq at Sunrise Mine, 91 Av & Pinnacle Peak. 1 trapped & no response. SAR Coord & FD enroute. Air 1 at hangar for hasty team. Traffic on Ch 8”

Follow up page/ radio announcement example:

“Rescuer entered and collapsed. Deputy on scene and restricting access.”

Go to **Final Post Dispatch Advice**

Adapted from Austin Regional EMS/ STARFlight, TX

HazMat - “A”

If the person is trapped or contaminated by a HazMat situation, with NO confined space, flooding or rope rescue problem...

7-11-07 © Tim Kovacs

P-1, Code 3, with ALS assist

Conference in the FD and let them ask their questions, ensuring that the following questions are asked:

1. Is the person(s) in a technical rescue situation, needing ropes? (silo, industrial tank, fuel or other tanker) or farther than ¼ mile from the nearest 2wd access?

If yes, **dispatch Patrol unit for crowd & traffic control, Sheriff’s Technical/Mountain Rescue and SAR Coordinator.**

If no, turn over to FD.

2. If this involves confined space, flooding or rope rescue, use those additional guides.

Follow up questions FD or SO needs to ask.

1. Is s/he safe and out of danger?
2. Is s/he burned?
3. Is he alert (able to talk)?
4. Is s/he contaminated with Chemicals?
5. What kind of chemicals (fumes) are involved?
6. Where are the chemicals (fumes) coming from?
7. Is there a placard number on the chemicals (chemical ID)?
8. Is there a possibility of involvement of terrorism, weapons of mass destruction?

If person contaminated, **DO NOT TOUCH PERSON.**

- Do not enter the same area as the person.
- Get exact spelling of chemical if possible.

Update responders by radio and pager.

Transfer caller to appropriate Fire Dept. Communications Center using One Touch button

Dispatch:

Nearest FD HazMat team,
Nearest public safety aviation helicopter as tactical recon
Nearest ALS (Paramedic) EMS unit.
Notify your agency’s Homeland Security Division

Hazards: exposure from getting too close, unseen gasses in air, fire, and explosion.

Go to **Final Post Dispatch Advice**

Adapted from Austin Regional EMS/ STARFlight, TX

Helicopter Rescue Requests (other than medical transports with no rescue)

7-11-07 © Tim Kovacs

P1, Code 3.

Any request outside your jurisdiction for your Helicopter to perform or assist with a technical rescue/evacuation and any request for evacuations from a full landing zone with no technical hazards: Consult Aviation and SAR. EMS and SAR must be integrated into the response.

Any request within your jurisdiction for your Helicopter to perform or assist with a technical rescue/ evacuation or from less than a 100 x 100 foot landing zone; Dispatch your Aviation unit, Technical/Mountain Rescue, a SAR Coordinator, and EMS as needed. Typically any injury to be rescued by helicopter is ALS.

Help coordinate for Aviation to pick up a mountain rescue hasty team of 1-3 people.

Whenever a helicopter is requested to perform a rescue, the technical rescue team should also be dispatched in the event the aircraft develops a problem or there is an alternative rescue method without the helicopter.

Also refer to the appropriate guide for the problem and dispatch those resources (water, snow, technical, confined space, etc.)

NOTE: Consult your local resource list to determine which area helicopters are capable of what services (medical, transport, helirappel, human short haul-longline).

1. Advise the agency that we will require a safe Landing Zone to rig the aircraft once the helicopter arrives on scene, at least 100 ft x 100 ft, possibly bigger depending on the aircraft.
 2. Advise that we will need ground control and radio contact to check for power lines, wind direction other obstacles.
 3. Do not shine any lights directly into the ship.
 4. Go to Outside Agency Requests guide.
 5. If Aviation is not available to respond, offer that our Technical Rescue Team (Mountain Rescue) can assist by ground. Tell them that our SAR Coordinator or Rescue Operations Chief will be able to consult with them and you can establish a phone patch if they will hold for a minute.
 6. Go to the applicable guide for the type of incident for follow up information.
-
- If a Helicopter is to be used, tell caller to “wave a shirt or towel over the head as a means of flagging the aircraft”, and to “Use an item that contrasts against the background terrain or your body.”
 - The helicopter may insert personnel by Rappel or Cable Hoist. Stay away from the underneath of the aircraft.
 - Do NOT approach the helicopter unless clearly told to do so by a crewmember. Normally, they will come to you.
 - Clear the immediate (100 feet) area of any loose objects that can disable the helicopter (jackets, small backpacks, towels, objects higher than 1 foot, etc).
 - Use proper ground to air signals or the appropriate radio frequency (International Commission for Alpine Rescue-ICAR frequency recommendation is 123.1 MHz).

Go to **Final Post Dispatch Advice**

© Tim Kovacs

Outside Agency Requests for SAR or Remote EMS

7-8-07 © Tim Kovacs

P1 or P2, Code three

For Searches (P2): Consult SAR Coordinator.

In-State, **any technical rescue or helicopter rescue** request from another sheriff's office, or; In-County any fire department, law enforcement agency, EMS agency or industrial rescue team or outdoor group or club shall receive immediate response:

Dispatch SO SAR, and notify SAR Coordinator

Help coordinate any air pick-ups needed for the team

For all others (non-sheriff's office outside County, etc.), consult duty SAR Coordinator or Operations Chief.

1. Callers name and agency
2. Caller's location
3. Caller's call-back number
4. Who is the Contact at the location?
5. What Radio Channel or frequency will they be on? We prefer _CSO Channel ___.
6. Is there a phone number we can call the Command Post directly at?
7. What specific assistance would you like from Search and Rescue?
8. Location to respond to.
9. Specific equipment needed
10. How Many victims are there?
11. What are the Victim(s) injuries, if any? (minor, moderate, serious)
12. What resources/personnel are on the scene to assist?
13. What actions have been taken so far?
14. Is there a possibility of involvement of a crime suspect, weapons of mass destruction or terrorism?

Go to applicable guide for type of incident to gather all needed information.

Go to **Final Post Dispatch Advice**

© Tim Kovacs

Aircraft Crash Incidents

Aircraft crashes anywhere in your jurisdiction occurring farther than ¼ mile from the nearest 2wd access, or involving technical rescue circumstances, or involving more than 10 passengers (number may be less based on EMS agency staffing and capabilities):

1-8-04 © Tim Kovacs

P1, Code 3, ALS

Injuries? Conference FD/ EMS.

Dispatch:

- Nearest Patrol unit,
- SO Technical/Mountain Rescue,
- Recon/ SAR Aviation,
- SAR Coordinator,
- Nearest EMS at the ALS level,
- Nearest FD, preferably with aviation firefighting and fuel containment capabilities.

Ensure through your supervisor that FAA & NTSB have been notified.
Consider notification of your agency's Homeland Security Division.

You may be requested by field units to call the local FAA/Tower for a Temporary Flight Restriction (TFR) of air space.

Hazards: Explosions, fire, chemical/fuel contamination, moving blades, rotors and parts, severe lacerations from debris, over-fatigue, underestimation of need for resources, hazardous materials, weapons of mass destruction, terrorism.

Go to **Final Post Dispatch Advice**

© Tim Kovacs

Multiple Casualty Incidents – Disasters – Terrorism SAR – Weapons of Mass Destruction

Any incident in your jurisdiction involving more than 10 persons injured in a crash, derailment, or other catastrophe or disaster, or involves any technical rescue aspects (ropes, etc.), or which is farther than ¼ mile from 2wd access or a trailhead:

1-9-03 © Tim Kovacs

P1, Code 3, ALS

Conference FD/ EMS

Dispatch:

- Nearest Patrol units
- Recon/ SAR Aviation
- SO Technical/ Mountain Rescue
- SAR Coordinator
- FD
- EMS at the ALS level
- S.W.A.T./ T.O.U.
- Notify your agency's Homeland Security Division

NOTE: If this involves a Nuclear Generating Station, follow your agency-specific guidelines for that facility.

If this may involve weapons of mass destruction or terrorism, advise responding units to use appropriate staging, and dispatch WMD/Terrorism/Homeland Security/SWAT units.

Hazards: Terrorism, bombing, secondary devices entrapping responders, secondary collapse of vehicle or structure entrapping responders, exposure to weapons of mass destruction, unstable structure or vehicles, hazardous materials and fuel spills and fumes, fire, explosions, crushing injuries, over-fatigue, underestimation of need for resources.

Go to **Final Post Dispatch Advice**

© Tim Kovacs

Avalanche

1-26-04

Actual, suspected, or impending avalanche. Wilderness, highway, skier, snowmobiler, etc.

P1, Code 3, ALS © Tim Kovacs

Dispatch only avalanche-qualified resources (Mountain Rescue Association units, National Ski Patrollers, Avalanche Professionals and specially trained avalanche dogs) to avalanche searches, rescues and injuries.

1. **Avalanche setting:**
 - a. **Wilderness/ Backcountry, Highway, Town, Railroad, Ski Area.**
 - b. **Did they get avalanched while in a vehicle? (other than snowmobile)**
2. **People Buried? How Many?**
3. **People Injured? How Many? Type of injuries, generally:**
4. **Did the victims have avalanche or personal locator beacons?**
5. **Were victims' beacons turned on? Were they in transmit mode?**
6. **What were they doing? Skiing, Snowboarding, Motorist, Snowmobile, Highway Work, Mountain or Ice Climbing, Other:**
7. **Other people at accident site? How Many?**

Dispatch:

- Local Avalanche rescue team: mountain rescue and ski patrol
- Avalanche dogs
- Helicopter to transport hasty team of avalanche dog and rescue team
- SAR Coordinator
- Local EMS at the ALS level to stage in safe area out of hazard zone
- Possibly, heavy snow removal equipment (plows, etc.) but stage them first.

It is critical that members of the party and witnesses stay on scene – in a safe area well out of the avalanche zone – to brief rescuers about what they saw, clues, etc.

Hazards: More avalanches, asphyxiation, trauma, hypothermia, use of untrained personnel and non-avalanche dogs, rescue aircraft triggering further avalanches.

- Only 50% of those buried survive after 30 minutes. Undelayed dispatch is critical.
- Only trained personnel should risk going into the avalanched zone.
- Public education is geared toward training outdoor users for avalanche safety and rescue, and the trained companions of victims are typically told to “not go for help unless it can be there 5 minutes or less” as the victims’ best chance is rescue by those already on scene – again, so long as they are trained in hazard awareness and rescue techniques.

Informative Web sites:

www.mra.org, Training Programs, Public, Avalanche or directly at

http://www.mra.org/Avalanche_2002.pdf

www.nsp.org, Safety Information, or directly at

http://www.nsp.org/nsp2002/safety_info_template.asp?mode=bc_safety

<http://users.south-tyrolean.net/avalanche/>

© Tim Kovacs, Adapted from Dale Atkins, Colorado Avalanche Information Center and Grand Teton National Park Avalanche SAR Dispatch Priority procedures.

Blizzards/ Snow - “A”

8-4-01 © Tim Kovacs

- | | |
|--|---|
| ■ Someone stranded outdoors | B |
| ■ Someone stranded in a vehicle | C |
| ■ Someone stranded in a house, mobile home, trailer, or other building | D |
| ■ Broken pipes | E |
| ■ Tree limbs on power lines | E |

Non -Emergency Advice, if time permits;

- You can get general information at our local emergency broadcast station (if available).
The radio station is at: _____ AM; _____ FM or 162.550 MHz.
- You can call our local non-emergency phone line (if one is set up for the incident). The number is _____.
- You can also listen to NOAA weather radio (if you have one), or get in touch with the nearest National Weather Service office.

Hazards: avalanche, hypothermia (frostnip, frostbite), automobile accidents, cardiac, falls, asphyxia from gas-type heaters in tents and enclosed areas.

NOTE: The communications specialist is not required to ask every question in the natural disaster series. Ask only those questions that pertain to the specific call.

Adapted from Ft. Collins, CO, NDIC

Blizzards/Heavy Snow - "B"

Someone stranded outdoors (not in a vehicle)

8-5-01 © Tim Kovacs

P2 or P3, Code 2

1. Can you pinpoint your location?
2. Can you see any signs or landmarks?
3. Describe your route to us.
4. How many people were and are with you?
5. Are any elderly or children? Code 3
6. How long have you been trapped?
7. Do you have food, water, warm clothing, blankets?
8. Is anyone injured or ill? (Conference FD/ EMS) Yes? Code 3 + ALS

Dispatch:

Nearest Patrol unit,
Recon/ SAR Aviation.

If anyone has altered mentation injuries or illnesses, dispatch nearest EMS, prefer ALS.

If snowbound more than ¼ mile from a major passable roadway and a snow plow probably cannot access it, dispatch Recon/ SAR Aviation and snow rescue teams.

Tell the caller:

- Have everyone put on all dry clothing they can find.
- If you are alone and in a phone booth, stay there. If you are calling on a cell phone, find shelter (for everyone) as quickly as possible, identify an obvious landmark nearby, and report your location.
- Try to stay dry.
- Cover all exposed parts of the body.
- If there is a clearing nearby where you can be seen by a helicopter and has shelter, stay near it.

If they cannot find shelter, tell the caller;

- Prepare a lean-to, windbreak, or snow cave for protection from the wind.
- Build a fire for heat, and to attract attention.
- Place rocks around the fire to absorb and reflect heat.
- Do not eat snow directly. Melt it first. Frozen snow will lower your body temperature.
- Exercise lightly and regularly to keep your circulation active.

Always consider the possibility of the victim being in or near an avalanche-able area.

Go to **Final Post Dispatch Advice**

Adapted from Ft. Collins, CO, NDIC

Blizzards/ Snow - "C"

Someone stranded in a vehicle

8-5-01 © Tim Kovacs
P2 or P3, Code 2, FR

1. Can you pinpoint your location?
2. Can you see any signs or landmarks?
3. Describe the route you took.
4. How many people were and are with you?
5. Are any elderly or children?
6. How long have you been trapped?
7. Do you have food, water, warm clothing, blankets?
8. Do you have unlimited power to your phone (cord, batteries, etc.)?
9. Is anyone injured or ill? (Conference FD/ EMS). Yes: ALS

If they appear to have plenty of fuel, no hazards to occupants, power to phone, and in an obvious and accessible location, give them the number of a towing agency.

If not, Dispatch:

Nearest Patrol unit,
Recon/ SAR Aviation.

If anyone has altered mentation injuries or illnesses, dispatch nearest EMS – prefer ALS

If snowbound more than ¼ mile from a major passable roadway and a snow plow probably cannot access it, dispatch Recon/ SAR Aviation and snow rescue units.

Tell the caller:

- If you are not with the others and cannot return safely, stay put.
- Have everyone put on all dry clothing they can find. Try to stay dry.
- Cover all exposed parts of the body.
- Stay in your vehicle. Disorientation occurs quickly in wind driven snow and cold. People have been lost within a hundred feet of their vehicle.
- Run the motor about ten minutes each half-hour for heat, but:
 - Open the window a little for fresh air to avoid carbon monoxide poisoning.
 - Continually make sure the exhaust pipe is not blocked!
- Make yourself visible to rescuers:
 - Turn on the dome light at night when running the engine.
 - Tie a colored cloth to your antenna or door that contrasts from snow & vehicle.
 - Raise the hood (after snow stops falling) indicating trouble.
 - Light your spare tire on fire with matches, a flare or some fuel.
- Exercise from time to time by vigorously moving arms, legs, fingers, and toes to keep blood circulating and keep yourself warm.
- Build a fire for heat, and to attract attention but do not build a fire inside the vehicle.
- Place rocks around the fire to absorb and reflect heat.
- Do not eat snow directly. Melt it first. Frozen snow will lower your body temperature.

Always consider the possibility of the victim being in or near an avalanche-able area.

Go to **Final Post Dispatch Advice**

Adapted from Ft. Collins, CO, NDIC

Blizzards/ Snow - “D”

Stranded in a house, mobile home, trailer, or other building (school, mall, nursing home...)...

8-5-01 © Tim Kovacs
P2 or P3, Code 2, FR

1. What address are you calling from?
2. Is any part of the building collapsing, on fire, etc.?
3. How many occupants are there?
4. Is anyone injured or ill? (Conference FD/ EMS). Yes: Code 3, prefer ALS

If collapsed, collapsing on fire or other life hazard,

- Conference with FD.
- Dispatch FD, EMS and a patrol unit.
- If building is snowbound >¼ mile from a major passable roadway & a snow plow probably can not access it, dispatch Recon/ SAR Aviation and snow rescue units and a SAR Coordinator for evacuation assistance.

If a multiple dwelling structure, especially a nursing home or handicapped dwelling, declare a Multiple Casualty Incident/ Disaster and activate additional manpower for evacuations (SO and Aviation, SAR, ambulances, etc.).

Tell the caller:

- If you cannot leave the building entirely, gather all of the occupants together and move them to an unaffected part of the building.
- Evacuate only if there is no other option (for example, a natural gas leak).
- Stay inside where it is dry and warm.

If structure is not collapsing, on fire or with other life hazard or if there is a power outage:

Tell the caller:

- Call the power company for power outages.
- Stay inside where it is dry and warm. Leave or drive only in an emergency.
- If there has been a power outage, call the power company (the company that bills you for service).
- If there is no heat:
 - Do not use camp appliances to heat! Lack of ventilation can asphyxiate with no warning!
 - Use alternative heat from a fireplace, wood stove, or space heater, but follow manufacturer safeguards, & always assure proper ventilation. Don't burn trash.
 - Hyper-insulate your home. This means to:
 - Close off unneeded rooms.
 - Stuff towels or rags in cracks under doors.
 - Cover windows at night.
 - Eat and drink (non-alcoholic fluids) if possible.
 - Food provides the body with the energy for producing its own heat.
 - Fluids prevent dehydration and hypothermia, which can occur quickly.
 - Alcohol gives a warm “feeling” but actually worsens hypothermia.
 - Layer your clothing.
 - Layers of loose fitting (traps dead air which insulates), lightweight, warm clothing.
 - Remove layers to avoid overheating, perspiration, and subsequent chill.

Assess need to dispatch a patrol or EMS unit that can access for evacuation or welfare check, if needed.

Always consider the possibility of the victim being in or near an avalanche-able area.

Adapted from Ft. Collins, CO, NDIC

Blizzards/ Snow - “E”

Calling about broken water lines, tree limbs on power lines, or broken tree limbs.

8-4-01 © Tim Kovacs

P4

Broken Water Pipes

1. Has any structural damage occurred?

Tell the caller:

- Shut off the water if you know how to do this.
- If the water HAS caused structural damage:
 - Avoid going into the affected area.
 - If you smell gas evacuate the building and *do not go back for any reason*. (Conference, dispatch and consider turning over to FD).
- If the water HAS NOT caused structural damage:
 - Call a plumber (listings in *Yellow Pages*).

You can purchase a sump pump from a discount outlet or hardware store, and might be able to rent one through a local rental company.

Broken tree limbs on power lines;

Tell the caller:

- If the power lines are laying on, or against your house - especially if sparking is occurring - evacuate your house immediately. (turn over to FD)
- Stay in the house if you are not in immediate danger.
- Do not go near, or come in contact with downed power lines. *Let your power company deal with the problem.*
- Call the power company (the company that bills you for service).

If tree limbs are breaking, but not causing a safety problem;

- Is the broken limb in the roadway or otherwise causing a hazard?
- You can get help by checking in the *Yellow Pages* under "Tree Service."

Always consider the possibility of the victim being in or near an avalanche-able area.

Adapted from Ft. Collins, CO, NDIC

Heat/ Desert/ Dust Storm Someone stranded outdoors

9-8-03 © Tim Kovacs
P1 or P2, Code 2, FR

1. Can you pinpoint your location?
2. Can you see any signs or landmarks?
3. Describe the route you took.
4. How many people were and are with you?
5. Are any elderly or children?
6. How long have you been stranded?
7. Do you have food, water, shade?
8. Do you have unlimited power to your phone (cord, batteries, etc.)?
9. If a dust storm, pull safely off of the roadway to avoid being struck by another vehicle.
10. Is anyone injured or ill? (Conference FD/ EMS). Yes: Code 3, ALS

If only stopped by a dust storm with no other problems, wait until dust storm subsides.

If stranded and they appear to have plenty of fuel, no hazards to occupants, power to phone, and in an obvious and accessible location, give them the number of a towing agency.

If not, Dispatch:

Nearest Patrol unit,
Recon/ SAR Aviation.

If any have altered mentation injuries or illnesses, dispatch nearest EMS.

If stranded more than ¼ mile from a 2wd roadway dispatch Recon/ SAR Aviation and consult the duty SAR Coordinator.

Tell the caller:

- If you are not with the others and cannot return safely, stay put.
- Stay in or with your vehicle. Disorientation occurs quickly in dust storms and heat. People have been lost within several hundred feet of their vehicle.
- Conserve fuel and only run the motor occasionally for keeping yourselves cool.
- Make yourself visible to rescuers:
 - Turn on the dome light at night when running the engine.
 - Tie a colored cloth to your antenna or door that contrasts from snow & vehicle.
 - Raise the hood indicating trouble.
 - Light your spare tire on fire with a match, flare or some fuel.
- If you are alone and in a phone booth, stay there. If you are calling on a cell phone, find shade shelter (for everyone) as quickly as possible, identify an obvious landmark nearby, and report your location.
- Try to stay cool and protect your selves from the sun – seek shade. Drink non-alcoholic fluids!

If they cannot find shade-shelter, tell the caller;

- Prepare a lean-to, windbreak, etc. for protection from the wind.
- Build a fire to attract attention, in a safe area that will not spread from combustibles or wind.

Go to Final Post Dispatch Advice

Adapted from Ft. Collins, CO, NDIC

Lightning - “A”

8-3-01 © Tim Kovacs

There are two (2) contingencies that warrant E-911 response:

- **Someone has been struck/ hit by lightning:** **B**
(Injuries handled per normal procedures but to reduce exposure to further injury..)
 - **House hit by lightning** **C**
- Otherwise, time permitting,
- **Worried about lightning, no damage or injury** **D**

Non-Emergency Advice (if time permits):

- You can get general information at our local emergency broadcast station (if available).
- The radio station is at: ___ AM; ___ FM or 162.550 MHz.
- You can call our local non-emergency phone line (if one is set up for the incident).
The number is _____.
- You can also listen to NOAA weather radio (if you have one), or get in touch with the nearest National Weather Service office.

Hazards: electrical shock, burns, cardiovascular, struck multiple times.

NOTE: The communications specialist is not required to ask every question in the natural disaster series. Ask only those questions that pertain to the specific call.

Adapted from Ft. Collins, CO, NDIC

Lightning - “B”

Someone has been struck by lightning.

8-4-01 © Tim Kovacs

P1, Code 3, ALS

Conference with FD/ EMS.

Dispatch;

EMS

If further than ¼ mile from the nearest 2wd road or has multiple casualties, dispatch MCSO or DPS Aviation and Mountain Rescue and ensure ALS (separate unit or rescue members).

1. Where are you?
2. Where is the victim(s)?
3. Are you/ they still exposed to lightning?

Communications specialist:

- Try to determine if the victim is disoriented, or having difficulty breathing.
- Ask the caller how many seconds there are between the lightning flash and the associated sound of thunder. If the count is **30 seconds or less**, the caller is **at risk** for further strikes. If the count is **less than 10 seconds**, the caller is in **grave and imminent danger**.

If the caller is still directly exposed to further lightning strikes:

Tell the caller...

- You must get to a safe place. NOTE: Inform the caller that they are at risk of further lightning strikes if the lightning-thunder count is low.
- Try to get inside a building, or into a metal-roofed vehicle and roll up the windows.
- Stay away from windows and electrical appliances.
- Avoid isolated tall trees.
- Unless you are on a portable or cell phone, hang up until the lightning has passed. Lightning can travel along phone lines and injure or kill you.

Once the caller is in a safe place, FD can handle any injuries per normal EMD procedures.

Maintain contact with caller if any SO SAR resources are activated.

Go to **Final Post Dispatch Advice**

Adapted from Ft. Collins, CO, NDIC

Lightning - “C”

House or building has been struck by lightning

8-3-01 © Tim Kovacs

P2 or P3, Code 2

Conference with FD and consider turning over to FD.

1. Where are you?
2. Is the structure on fire? FD Code 3
3. Do you see or smell smoke?
4. Is anyone injured? (go also to Lightning “B”). Yes: Code 3, ALS

If the structure IS on fire, dispatch a full structure FD response:

Tell the caller...

- You need to evacuate the structure immediately.
- If lightning is still striking nearby, you must get from your house to another shelter quickly. Get to a neighbor's house, or into a metal-roofed car and roll up the windows.

If the structure does NOT appear to be on fire:

Communications specialist:

- Ask the caller how many seconds there are between the lightning flash and the associated sound of thunder. If the count is **30 seconds or less**, the caller is **at risk** for further strikes. If the count is **less than 10 seconds**, the caller is in **grave and imminent danger**.

Tell the caller...

- Stay in your home unless some indication of fire develops.
- If you see fire, or see or smell smoke, then you must evacuate the structure.
- If lightning is still striking nearby, you must get from your house to another shelter quickly. Get to a neighbor's house, or into a metal-roofed car and roll up the windows.
- Unless you are on a portable or cell phone, hang up until the lightning has passed. Lightning can travel along phone lines and injure or kill you.

Adapted from Ft. Collins, CO, NDIC

Lightning - “D”

Worried about lightning (no damage or injury).

8-5-01 © Tim Kovacs

P4

1. Where are you?

Communications specialist:

- Ask the caller how many seconds there are between the lightning flash and the associated sound of thunder. If the count is **30 seconds or less**, the caller is **at risk** for further strikes. If the count is **less than 10 seconds**, the exposed caller is in **grave and imminent danger**.

Tell the caller...

- Your house is the safest place to be in a lightning storm. If you are inside, stay there. Avoid windows and electrical appliances, including phones when not an emergency.
- If you are not inside, and lightning is still striking nearby, you must get to a safe place immediately. Get inside a house or building, or into a metal-roofed car, and roll up the windows.
- Unless you are on a portable or cell phone, hang up until the lightning has passed. Lightning can travel along phone lines and injure or kill you.
- Call back if you see lightning hit something such as a person or a structure

Informative Web sites:

Adapted from Ft. Collins, CO, NDIC by Tim Kovacs

Search and Missing Person Incidents, Non specific and otherwise, and Missing or Overdue person in a wilderness or desert or park area.

7-8-09 © Tim Kovacs

P2, Code 2, FR

P1, Code 3, ALS: Elderly, very young, injured, medical issues, mentally challenged, physical disabled.

Outside County: Consult Duty SAR Coordinator.

Any evidence searches, body or property recovery missions: Consult SAR Coordinator.

Missing, Runaway or Overdue and not known to be going to a wilderness-type area: Follow standard local policy (deputy call back or respond patrol unit) and/ or consult SAR Coordinator. **Never completely rule out the wilderness or SAR involvement on a missing or overdue person report.**

Alzheimer's and Depression Dementia (a known or suspected diagnosis of or family history of); These must each be very aggressively approached. The subject can wander great distances, into previously unpredicted areas, and may appear normal to the untrained person. Consult recent studies' recommendations including these sources - http://www.dbs-sar.com/SAR_Research/wandering.htm

Inside your jurisdiction:

If there is also any aspect of a "rescue" involved go to the applicable guides.

1. What is your name
2. What are your phone numbers? Where are you calling from?
3. Where did you last see the missing person?
4. Is the person a fugitive or a suspect of a crime?

YES: Consult applicable law enforcement supervisor and SAR Coordinator (Mountain Rescue or other SAR units can supplement their needs).

NO:

1. Where exactly where they planning to go (from and to)
2. When were they due back?
3. What type of vehicle did they have?
 - a. Full vehicle description
4. Where were they planning to park the vehicle?
5. Did they take overnight and foul weather gear?
6. How many days food and water did they have?
7. Did they take any firearms?
8. Did they take a cell or satellite phone? What is the number?
9. Did they have some other track-able device?
10. Did they take a radio? What frequencies or type?
11. Have they ever been lost or missing before? What was the outcome? (where found, etc.)
12. What is the description of the missing person (s)?
 - a. Name, Approximate Age,
 - b. Description and Clothing,
 - c. Point Last Seen,
 - d. Time Last Seen,
 - e. Known Medical Conditions
 - f. Known behavioral conditions and substance abuse issues

NOTE:

1. Victims seemingly incapacitated have been found to be hiking out on their own, so a full description is still important for responding units.
2. Searches involving the elderly (whether alzheimer's or not) , very young or foul weather require immediate dispatch and aggressive searching and investigating.

Tell the caller:

- Please stay available at the scene or by phone.
- Call us immediately if you hear from the person(s), and tell their relatives and friends to do the same.

Go to **Final Post Dispatch Advice**

© Tim Kovacs

Animal Rescues

Any request for the technical rescue of an animal:

7-10-07 © Tim Kovacs

P3 or P4, no lights or siren unless human(s) at risk

- **If you have a team capable of performing animal technical rescues, place them on “Stand By”**
- **Consult Duty SAR Coordinator**
- **Activate Humane Society and / or Local Animal Control**

1. Where is location?
 2. What type of situation is animal in?
 3. Whose animal is it?
 4. Is any human in danger, or attempting a rescue? (If yes, go to applicable situation.)
- Refer also to the technical discipline involved (flood water, confined space, etc.)

Tell caller:

- We are consulting the Search and Rescue Coordinator now.
- Do not risk human life to go into a technical situation for an animal.

Hazards: Attractive nuisance to local citizens and untrained agencies to help the animal if a trained rescue team does not respond, animal bite, rabies, pulled under water or off cliff by scared animal, as well as hazards involved in the technical environment.

Go to **Final Post Dispatch Advice**

© Tim Kovacs

Technical Search and Rescue Triage and Dispatch

References:

1. Fort Collins Colorado, *Natural Disaster Information Cards*.
<http://www.ci.ftcollins.co.us.us/oem/ndic.php>
2. Austin (Texas) Regional & STARFlight EMS Dispatch cards.
3. Shimanski, Charley and Kovacs, Tim. Mountain Rescue Association, *Model Technical Rescue Dispatch Guidelines: Risks in Mountain Rescue Operations*. www.mra.org
4. ASTM F-32 for Search and Rescue standards. www.astm.org
5. ASTM F32, Standard F2662, *Standard Guide for Minimum Training of Dispatchers and Telecommunicators of SAR Incidents*, which was based on this document.
6. ASTM F-30 for EMS standards
7. LA County Sheriff's Office, California.
8. Phoenix (Arizona) Fire Department, *Technical Rescue Dispatch Policies*, Volume 11 and Volume 2.
9. Clawson, Jeff J., MD, et al. *Protocols vs. Guidelines: Choosing a Medical-Dispatch Program*
10. National Association of EMS Physicians. Position paper; *Emergency Medical Dispatching. Prehospital and Disaster Medicine* 4(2): 163-166, 1989.
11. Standard Practice for Emergency Medical Dispatch. *Annual Book of ASTM Standards* (No. F1258-90). Philadelphia; American Society for Testing and Materials, 1990.
12. Wheeler S. *Telephone Triage: Theory, Practice and Protocol Development*, p. 119. Albany, NY: Delmar Publishers, 1993.
13. NY Times, February 18th 2003: *Boating Accident Leads to (911) Disciplinary Charges*.
14. NTSB, 1999. Sinking of the recreational sailing vessel Morning Dew.
<http://www.nts.gov/Publictn/1999/MAR9901.pdf>
15. Nicholson, William C. *Emergency Response and Emergency Management Law*. 2003.
16. U.S. Department of Army. *Dispatch Guide for WMD Incidents*. September 2004.
http://www.edgewood.army.mil/hld/dl/WMD_DISPATCH.pdf
17. (US) National SAR Plan; (US) National SAR Manual; (US) National Response Plan; (US) National Incident Management System, SAR Resource Typing and SAR Credentialing.

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