

fw

SEARCH AND RESCUE MAGAZINE

contents

FEATURES

Washington State SAR Conference	4
A Visit with Jon Wartes	12
A Child is Lost by Lena Reed	18
Mountain Search for the Lost Victim, Chapter 1	26

DEPARTMENTS

Editorial	2
Book Review	34
News and Rumors	35
Calendar	34

CONTRIBUTORS

Joyce Sherbert	Vance Yost
Peggy Marth	Hal Foss
Rick LaValla	Lena Reed
Wendy Wartes	
Daisy Kuhl	



SEARCH AND RESCUE MAGAZINE is published 4 times each year by Dennis E. Kelley, P.O. Box 153, Montrose, California 91020 USA. Phone (213) 248-3057. Copyright 1973. Advertising rates on request. Subscription price is \$3.00 per year. Individual price per issue is 90¢.

EDITORIAL

Comments from the publisher.

Welcome to Search and Rescue Magazine. The purpose of this magazine is to satisfy a need for a common communications media for all SAR organizations and personnel. Specifically, this magazine will address:

- SAR advances in the state-of-the-art
- SAR significant events
- SAR philosophy
- SAR prominent individuals and their ideas
- SAR case histories and critiques
- SAR news and rumors
- SAR stimulation to individual involvement
- SAR techniques and procedures

Search and Rescue Magazine is intended for the paid and volunteer, the coordinators and team members of:

- Mountain Rescue
- Ski Patrol
- Civil Air Patrol
- Explorer SAR
- National Guard SAR
- Air Force SAR
- Coast Guard SAR
- 4X4 SAR
- Snowmobile SAR
- Motorcycle SAR
- Scuba SAR
- Posse SAR
- Search Dog
- Bloodhound
- Border Patrol SAR
- Sheriff Aero Bureaus
- Sheriff SAR
- Fire Department SAR
- Citizen Band SAR
- etc.

It has been my belief for some time that there is a need, though small, for SAR personnel to be made aware of each other. I believe it is very common for many SAR individuals to operate without the benefit of convenient communications with other teams or individuals. With this first issue of Search and Rescue Magazine, I am initiating a common communications media for SAR. I sincerely hope that your needs are served. Your comments and suggestions for improving this service will be appreciated.

To elaborate on some of these services, in my own travels I have seen much SAR innovation and invention. Believe me, SAR technology is not standing still. Here again, it is my hope that as technological breakthroughs occur, we can quickly pass this information on to you.

In addition, there have been many fascinating meetings, seminars and forums during this last year. Unfortunately, most of these meetings have gone unnoticed by the average SAR individual. Presently, there is no way to communicate these significant SAR events to many of us who have specialized interests and who would gain much from these educational activities. Search and Rescue Magazine will attempt to meet this need with a SAR Calendar.

The foundation of this SAR fraternity is outstanding individuals. Hopefully, on a regular basis, Search and Rescue Magazine will publish a feature on one of these outstanding people. This feature may take the form of an interview, an autobiography, or a profile. I think you will find these people as fascinating as I have.

Finally, I hope Search and Rescue Magazine will provide a platform for interested parties to launch appropriate drives upon SAR organizations, agencies, governments, teams and individuals to upgrade this business for the victim's sake. What makes this activity called SAR so interesting is the controversy. There are so many things yet to be done, so many ways it could be done, and so many people who want to get it done.

Dennis Kelley



Photo by George Novinger



The night before the opening of the 5th Annual Washington State Search and Rescue Conference, the air was warm and the sky was filled with a million stars. Gracious Law Enforcement Explorer Scouts provided this weary reporter directions to the dormitory. I anticipated a weekend of magnificent weather.

The next morning, the jovial Mayor of Fort Townsend, Joseph Steve, provided the only warmth as a cold northern wind and over-cast sky chilled everyone for the next two days. Approximately registered Washington State SAR volunteers attended the May 4 and 5, 1973 conference at Fort Worden near Port Townsend on the Olympic Peninsula. Much to my surprise however, everyone's enthusiasm completely overwhelmed the foul weather. Hal Foss, the North Olympic Peninsula SAR Council,

and all participants must be credited with a superb conference that truly had the charm of many good people doing their "own thing." The informality was refreshing, even with the presence of many notables from Federal, State and local governments. The overriding theme of the conference was these same notables giving generous praise to all the fine SAR units of Washington State. The conference was a great success.

Standing on the porch of the Fort Worden administration building, Lt. Col. C. M. Ker on, USAF, as master of ceremonies, gave everyone an enthusiastic welcome to open the conference. Lt. Col. Ker on is described as an old friend of Washington SAR, and was the former SAR Chief for the 42 ARRS at Hamilton AFB. He has since retired from the Air Force.

ANNUAL SAR CONFERENCE



The first session of the conference began with everyone visiting the general displays on the old fort parade grounds. A good deal of effort went into these displays, and there was much to see and learn. Worth mentioning were the beautiful dogs of Bill and Jean Syrotuck. These German Shepherd search dogs are real crowd pleasers.

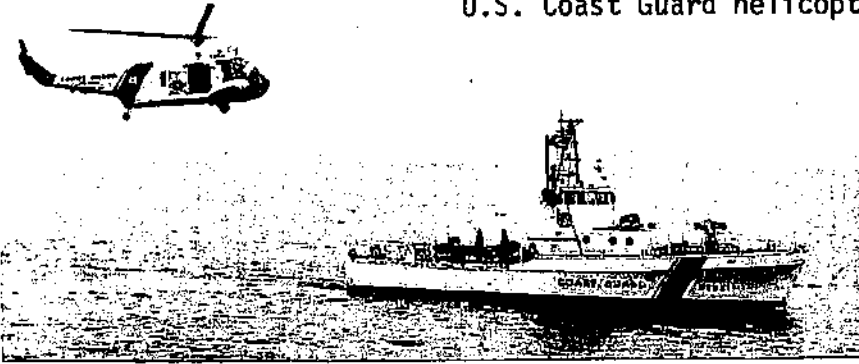
Gene Fear's displays in one of the big tents was fascinating. Particularly interesting to me was the hypothermia demonstration display. This display is made up of cans simulating the human body clothed in various types of attire. Clothing used in the demonstration were wool, cotton, rain gear and the birthday suit. The contents of the cans are subjected to wet chill by wetting the outside and adding a breeze. An hour or so of these

conditions and the resultant drop in temperature easily demonstrates the action and danger of hypothermia. Details on this outstanding hypothermia demonstration and Gene's new book, "Wilderness Emergency, Surviving the Unexpected" are available from Gene Fear, Tacoma, Washington.

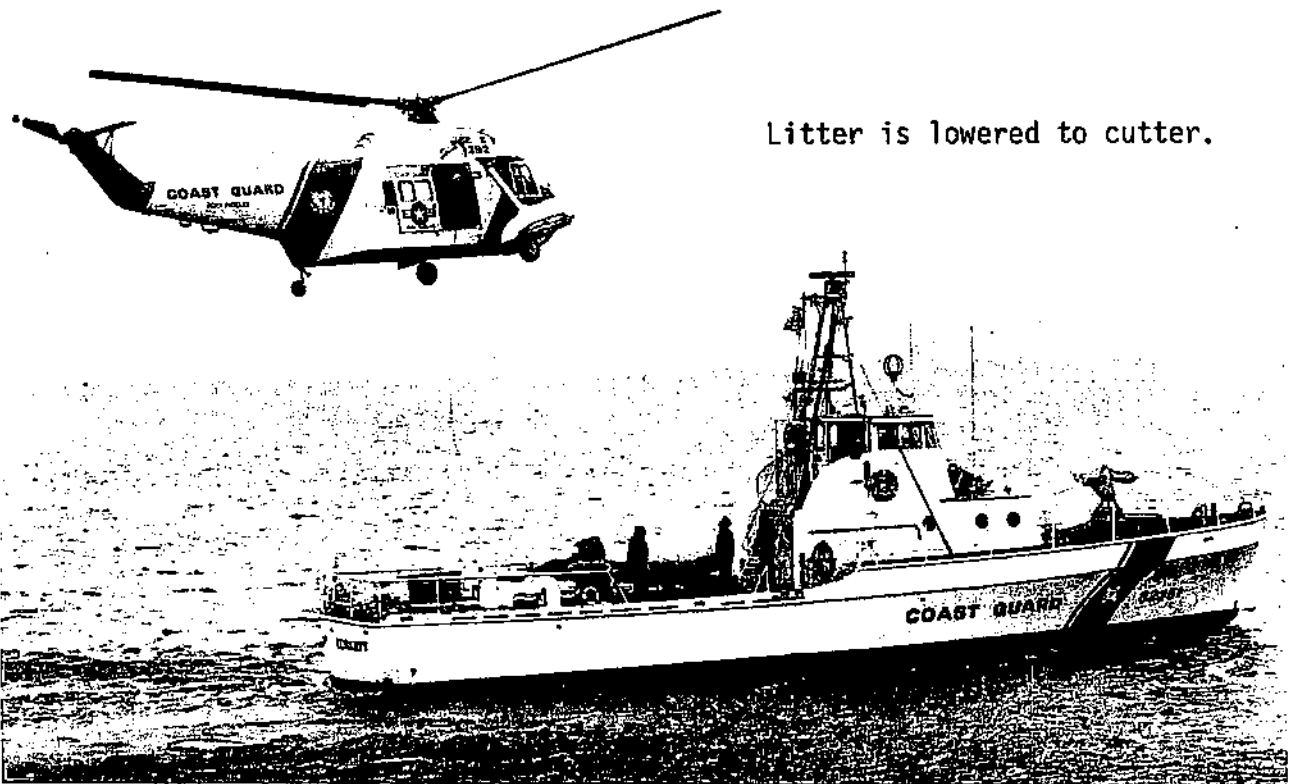
Gene makes available a tremendous assortment of free and saleable mountain safety information and educational material. Gene surprised me by reporting that this free material moved very slowly at the conference. Considering the SAR personnel in attendance, one must conclude that everyone already knew it all or at least they thought they did?

The U.S. Coast Guard and the Clallam County Dive Team (scuba) gave an exciting

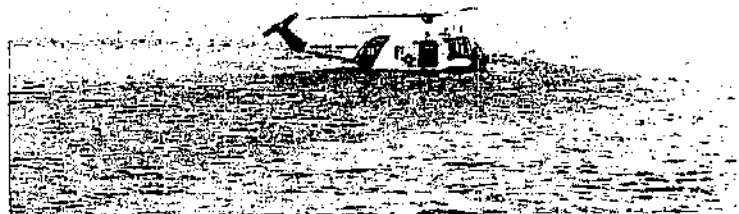
U.S. Coast Guard helicopter and cutter demo.



Litter is lowered to cutter.



Chopper lands to pickup victim demo.

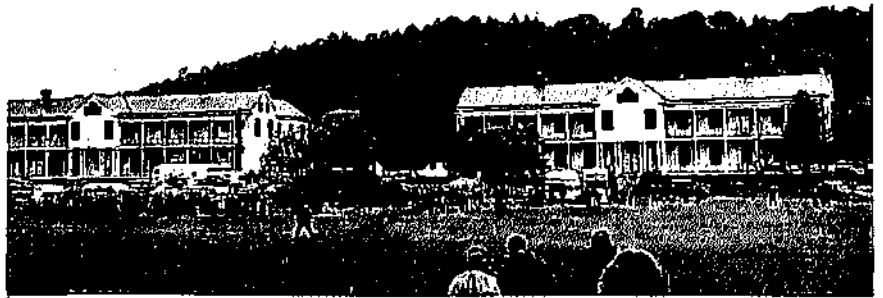




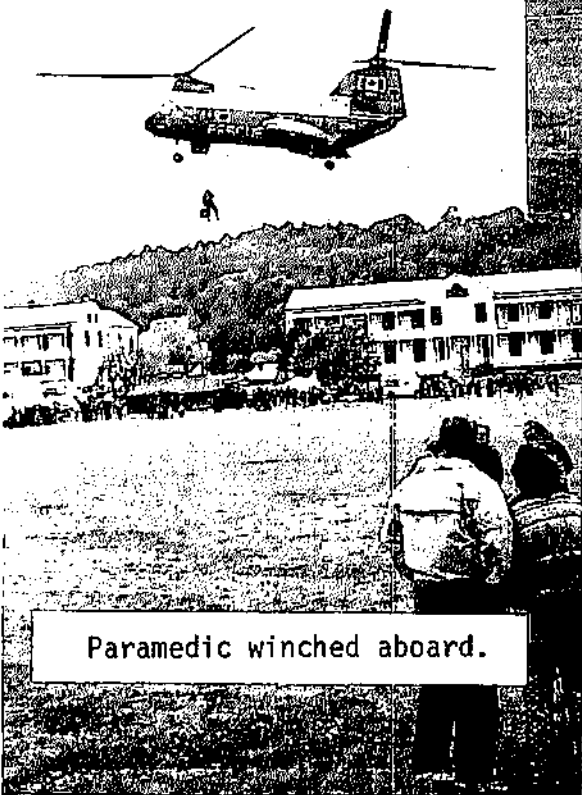
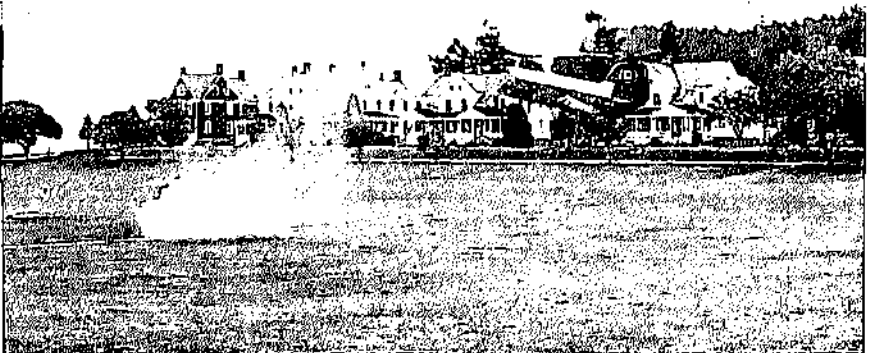
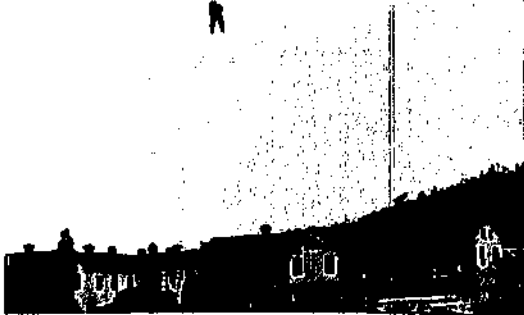
Canadian paramedic rescue team member rappelling.



Litter lowering.



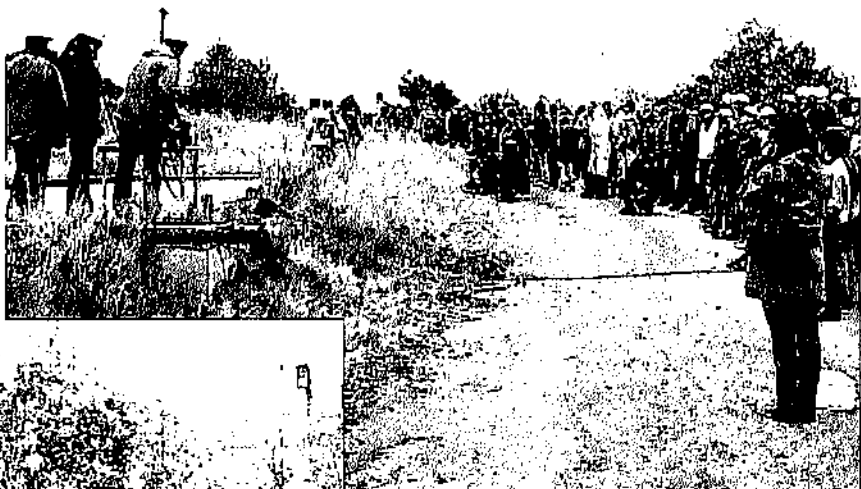
Chinook helicopter touchdown.



Paramedic winched aboard.



Canadian pilot briefing kids.

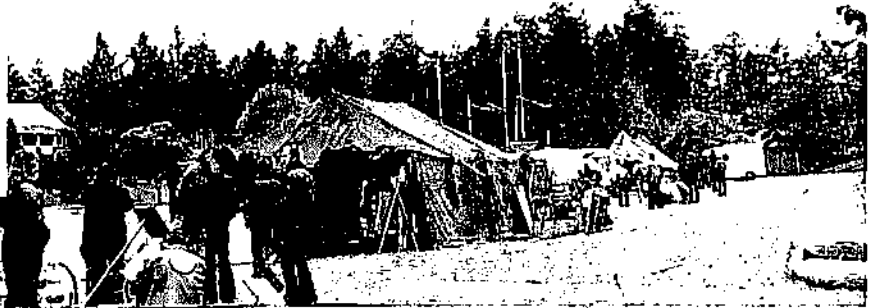


ESAR grid search demonstration.



Survival education tent.

John Simac's hydraulic winch.

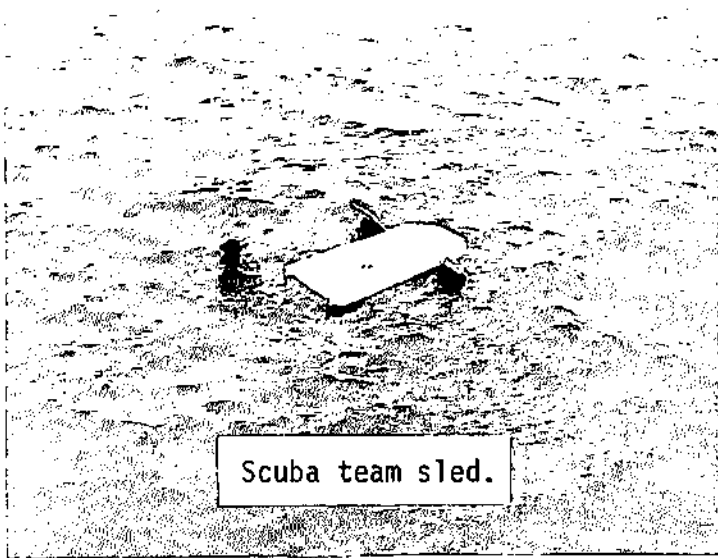


ESAR displays.

Gene Fear's hypothermia display.



MAST helicopter arriving.



Scuba team sled.



Hal Foss and Lt. Col. John O'Neil.



Explorers cleaning up.

demonstration of water search and rescue near the wharf of Fort Worden. Considering the weather, it was a very interesting combination of men and machines in action. The U.S. Coast Guard's helicopter and cutter worked perfectly together. The scuba team, in performing an underwater sled search, came up with the largest starfish I have ever seen, plus a few juicy sea cucumbers, to everyone's surprise. On the wharf, the onlookers were quick to appreciate the wetness of sea cucumber surgery as one diver demonstrated the preparation of one for cooking.

The next demonstration was the Canadian AF Rescue team performing an spectacular emergency evacuation. A paramedic rappelled from a hovering Chinook helicopter to the victim below. A litter was then lowered by winch. After winching the simulated victim aboard the still hovering craft the paramedic was also winched aboard. Finally, as a salute to all of us observing on the ground, the Canadian pilot made a high-G turn before landing.

As a novice at aerospace rescue, I found it interesting that no safety line was used in either the paramedic rappel or the litter or paramedic winching aboard the chopper. I have always been taught that redundancy was the byword of SAR activities. Having seen a truck winch cable recently separate, dumping the litter and mountaineers on a moderate slope unexpectedly, I question any SAR practice which lacks a safety or redundancy in the system. Comments will be appreciated.

John Simac (Mr. Mountain Rescue it is said) demonstrated his portable power hydraulic winch. There is no question of the innovative advancement of the state-of-the-art here. Future developments in the competition between mechanical and hydraulic portable power winches should be interesting.

The Washington State Explorer Post SAR teams next gave a demonstration of grid or sweep searching under the direction of Grant Smith and Jon Wartes. The effectiveness and enthusiasm of these youth is very impressive. Here again, innovation is the name of the game with ESAR.

The guest speaker Saturday evening was Lt. Col. John O'Neil, USAF, Aerospace Rescue and Recovery Service Director, Operations and Plans Headquarters, Scott AFB, Illinois. Lt. Col. O'Neil gave an exceptionally interesting and entertaining presentation, and warned the SAR personnel in attendance of surpassing their own and their equipments capabilities in the heat of the assignment. Lt. Col. O'Neil believed that excess was all too prevalent nowadays in emergency activity and that a second thought was frequently appropriate.

Lt. Col. O'Neil was quick and lavish in his praise of the SAR volunteers of Washington State with specific comment on Gene Fear, John Simac and ESAR. Lt. Col. O'Neil hinted at a ARRS sponsored International SAR Conference this fall. I believe Lt. Col. O'Neil won the hearts of many in attendance that evening.

Later, Gene Fear gave a mini-briefing on survival to ESAR personnel. Many others of us crowded into the small room. I believe everyone came away a good deal smarter about personal survival. Thank you, Gene Fear.

The social hour gave everyone a chance to express his opinion, compare experiences and techniques, wash off lamp black (thank you, Minor Harkness), and pay homage to your own personal hero.

Sunday's finale in still cold, windy weather consisted of the Washington State SAR unit reports as conducted by Rick LaValla of the Department of Emergency Services.

Later, Mountain Rescue gave a litter evacuation demonstration and Bill Syrotuck showed search dog slides.

All in all, it was good fun, educational, and a rewarding conference experience. I would recommend all SAR personnel who can, to attend next year. Governor Daniel J. Evans and Thomas S. Pryor, Director of the Department of Emergency Services should be proud. ▲



JON WARTES

A VISIT WITH JON WARTES at the Washington State SAR Conference May 5, 1973.
Jon is Training Director for the Western Region Explorer SAR Advisory Committee and
Operations Coordinator of the Seattle ESAR. The interviewer is Dennis E. Kelley.

Kelley: HOW DO YOU PRONOUNCE YOUR NAME, JON?

Wartes: wôr'téz

Kelley: HOW DID YOU GET INTO SAR, PARTICULARLY ESAR?

Wartes: I joined an Explorer Post that was lead by Max Eckenberg. I was fourteen at the time. It was one of those lucky things that happens sometimes in a persons life. Something that you don't plan. It turns out to be getting into a lucky situation.

Kelley: HOW OLD ARE YOU, JON?

Wartes: Thirty.

Kelley: YOU HAVE A GOOD NUMBER OF YEARS EXPERIENCE. WHAT DO YOU FEEL IS YOUR STRONGEST SAR ATTRIBUTE.....HOW DO YOU PICTURE YOURSELF AS A LEADER IN SAR.

Wartes: I don't consider myself a vigorous hard worker. I guess I do see myself as one who will keep things going. Not just at a maintenance level, but I try to keep things going at a reasonable rate, improving, incorporating and trying new things. My function with the Seattle ESAR as Director of Operations is mostly that of keeping the operational aspects of the unit workable and going.....

Kelley: THAT IS A HECK OF A LOT OF RESPONSIBILITY, LEADING YOUNG PEOPLE AND PUTTING THEM IN SITUATIONS THAT OBVIOUSLY COULD BE DANGEROUS AT TIMES. I THINK THAT IS UPPERMOST IN MANY PEOPLES MINDS REGARDING SAR AND YOUNG PEOPLE.

Wartes: Yes, I've thought about that sort of thing often....and sort of felt that that is one of the risks that I am willing to take. Being in Scouting offers considerable protection. There is liability insurance taken care of and provided by Scouting.

Kelley: HOW ABOUT WORKING WITH YOUNG PEOPLE.....HOW DO YOU FIND THAT?

Wartes: Excellent! That is one of the most enjoyable things about young people, they lend themselves readily to discipline. They understand the importance of this work and they are ready to do it. I don't think there is any thing more demanding and tedious than a gridline (sweep search) for a sustained period of time through our devils-club or vine-maple. But the guys are willing to do it. A good example was last Fall, when we went to Pend Oreille, which is in the Northeastern part of the state (Washington). We flew over in jet transport. We were met with three school buses and they transported us up to the corner of the state.....(we) carried out a search under the most trying circumstances we've ever had. There were all these opportunities where someone might have lost a pack or where someone could act up. Where if it happened once it might cause a real problem and it didn't happen. It gives one an awful lot of confidence. By and large I find the saying true, 'the further you hike back into the woods, the more intelligent hiker you'll met'. I think we have a similar kind of thing, the kind of guys who are going to suffer through the training and go out and do this kind ofthing are the guys who are more or less self directive.....

Kelley: HAS ESAR BEEN A REAL BENEFIT TO THE COMMUNITY, NOT FROM AN ESAR STANDPOINT, BUT BECAUSE IT GETS YOUNG PEOPLE INVOLVED AND OFF THE STREETS?

Wartes: I think there have been a lot of benefits other than just reasonably well run search operations. I don't know if the benefits are so much social as they are personal. I'm speaking individually. Like guys have gone through our training, been out on operations, graduated from high school, then gone to Vietnam and written back that the skills they had like map and compass, getting from one place to another, have been very important. In a few cases, considerably important. We find a lot of guys, because of their exposure to SAR, will pursue advanced training.....we have six fellows taking Emergency Medical Technician (EMT) courses now. Two have already completed. A year ago we had none. Its because I guess the environment we put those guys into. They're exposed to it (SAR) and have been given a reason for continuing that kind of advanced training.

Kelley: IN TERMS OF ESAR, WHERE DOES EMT TRAINING FIT INTO YOUR PROGRAM AND DO YOU FEEL THERE IS JUSTIFICATION FOR YOU TO UPGRADE YOUR UNITS IN EMERGENCY MEDICAL CARE PROFICIENCIES?

Wartes: I see it as the kind of thing that I'm pleased the guys are wanting to take. But truthfully, if you were to encourage them to take it (EMT) because of a need, we haven't had any where near that much need.....The time intervals are so long (between the incident and the rescue) that a person is generally going to be dead or he's not in that much trouble. From a functional standpoint, beyond self-care first aid, a fairly good basis on hypothermia, good general care and litter evacuation, we haven't had a real demand for the more sophisticated medical type of education.

Kelley: WHAT ABOUT CARDIO-PULMONARY RESUSITATION?

Wartes: I've seen demonstrations and done the practices on the dummy and this sort of thing as a number of our people have. Fact is that this is part of the advanced first aid courses. But again on a practical basis, we have never encountered this on a search operation.

Kelley: JON, HOW ABOUT THE FEDERAL GOVERNMENT, HAVE YOU SEEN MUCH SUPPORT FROM THEM IN TRYING TO DO YOUR JOBS?.....

Wartes: No! The biggest thing we get from the Federal Government from a SAR standpoint is the availability of helicopters. There is no way anyone else could afford it. Thats got to be a government expense.....In that way the government is very helpful. You are as aware as I how helpful helicopters are and how much they can do for a search. But other things like food, radios, transportation, we get none of that kind of support. The ESAR Posts in Oregon do to some extent get National Guard support for transportation. This may be coming here too. But there is a lot of feeling.....that it is perhaps wise to avoid reliance on the government entity for a couple of reasons. The Federal Government tends to be a here again, gone type of thing....and.....because any time money passes hands, so do obligations. Especially because we are in Scouting, we prefer to avoid any political types of entanglement.....

Kelley: HOW MANY (MEMBERS) ARE ON YOUR TEAM?

Wartes: Our Seattle unit consists of about four-hundred (400) members and at anyone time we can put 100 to 120 in the field.

Kelley: WHAT KIND OF BUDGET DO YOU HAVE?

Wartes: Yes, last year we lived on, excluding capital expenses, somewhere around \$2000. Including capital expenses we have spent an additional \$3100. for portables (radios) We got a \$4500. truck last year which we refer to as the worlds largest dune buggy because it has no backend. We're working on the money to put a backend on it now. Vertually all our money comes in from donations.

Kelley: WOULD THIS BE SERVICE GROUPS?

Wartes: Yes, very often we accept small donations from the family of the one we're looking for. Or else some of the bigger fellows will go out to the service clubs, a company, or a union and explain what we are doing, and say, 'wouldn't you like to buy us a couple of articles?' You ask enough times and the people will say yes.

Kelley: HAVE YOU INVESTIGATED OR PRACTICED TRACKING AS A SEARCH TOOL?

Wartes: No, though we've had interest in it. This we have been talking about for this last couple of years. It seems that the type of tracking necessary for this country does exist, but only among a relative few old people who as they die, the art is dying. I think for ESAR it is not a method that we will be able to use because we are using young people and tracking requires I think a lot of training..... I honestly don't know but I would guess that tracking in this country would be very difficult.....

Kelley: HOW DO YOU COMPARE YOUR UNIT WITH OTHERS THAT ARE FREQUENTLY ASKED TO DO THE SAME JOB AS EXPLORERS?

Wartes: Mostly we don't have to. It sort of evolved here that the grid searching is left almost exclusively to the ESAR. The Tri-county SAR (team).....is the exception because we have found that adults don't like to hit the brush. Certainly years ago Mountain Rescue was less active..(because of the increased use of helicopters).....and they were worried about getting too inactive, so they atarted getting into searches. So they got this same quest-ion, some of their fellows come out on rescues but not on searches. Indeed they did increase this activity but it never did reach the point they were thinking about.

Kelley: HOW ABOUT TWO OF THE BIG CROWD PLEASERS, BLOODHOUNDS AND SEARCH DOGS?

Wartes: My exposure has only been at a few seminars and SAR operations. My impression of search dogs (mostly German Shepherds) is that when they work, they really work..... But they are not sure enough, not dependable in performance....

Kelley: WHAT DO YOU THINK THE FUTURE OF THE VOLUNTEER IS? ARE THEY BEING REPLACED BY PAID PROFESSIONALS?

Wartes: It is interesting because my whole experience has been volunteers and I've seen it catch on and grow. Its the kind of thing that will catch on and grow and then later will die out. We've all looked around here for 10 - 15 years and observed the tremendous growth.....

Kelley: DO YOU HAVE ANY PAID PROFESSIONALS THAT YOU CAN COMPARE YOURSELF WITH?

Wartes: (No!)



Kelley: HOW ABOUT THE SAR COORDINATORS? DO THEY SEEM TO KNOW THEIR JOB AS WELL AS YOU KNOW YOURS?

Wartes: Sometimes yes and sometimes no. In those counties where there is a high incidence of SAR activity, those deputies that have been learning on the job, have learned and will generally do a fine job of administration and running a search. But frequently we move into a county that has few operations but then will have a big one and call in outside help. They don't always know how to administer it..... Currently we have a proposal in for yet another volunteer who would be working under the auspices of the State Department of Emergency Services, and if you like, as an inter-agency coordinator.... Available to a local Sheriff to help him run a big search and resources throughout the whole state.

Kelley: HAS THERE BEEN ANY RESPONSE TO THIS PROPOSAL?

Wartes: Yes, most favorably.

Kelley: THAT'S ENCOURAGING, AND OF COURSE YOU HAVE SOMETHING UNIQUE HERE IN WASHINGTON WITH YOUR STATE DEPARTMENT OF EMERGENCY SERVICES.

Wartes: I understand that Washington is one of the leaders in this sense. This is what I have been told.

Kelley: DO YOU HAVE A HERO? THAT IS, SOMEONE IN SAR THAT YOU HAVE TREMENDOUS RESPECT FOR?

Wartes: Yes, there are two men that I admire quite a bit. ... These two are among those that started ESAR in Washington State that I admire and respect a good deal.....One is the type of guy that isn't afraid to take the first step even if he doesn't finish for years. I respect him for his ability to take on a big task and see it through..... The second, because of his ideals and in his kind of work he is a very personable man which means a lot. The first is Max Eckenberg who you have not met and the other is Don Wilson who is now Director of Western Region ESAR for BSA.

Kelley: ASSUMING THAT THERE IS SOME UNNECESSARY FRICTION BETWEEN SAR GROUPS, WHETHER PAID OR VOLUNTEER, IS THERE ANYTHING THAT YOU'VE THOUGHT OF DOING.....TO ABATE SOME OF THIS HOSTILITY?

Wartes: Yes, most of the times I've encountered this situation, I've found that the direct approach is the best, which is another aspect of my personality. That is, if you have a problem, you go to that person and say what you feel and you work towards resolving it.....

Kelley: HOW DID ALL THE UNITS COME TO BE ONE WASHINGTON STATE ESAR?

Wartes: I suppose it happened because the influential leaders wanted it to happen. Even now if you were to talk to Grant Smith or any others, we look upon ESAR as one big program.

Kelley: THANK YOU, JON WARTES, FOR YOUR COMMENTS.



A LITTLE GIRL IS LOST

by LENA F. REED

A LITTLE GIRL IS LOST
By Lena F. Reed

It was after dark when the call for help came. The area was farm and forest land south of Tacoma, Washington; it was February 18th, and the temperature that night was in the low twenties. A little girl was lost.

Sandra Michelle Scalf, just five weeks short of her third birthday, long blonde hair, blue eyes, dressed in pink pants and pink and white striped tee-shirt. Believed to be accompanied by her two half-grown bird dogs. Thus ran the cryptic description which rapidly drew approximately three hundred searchers from as far as sixty miles away to the isolated country home where Jack and Lois Scalf lived with their five children. Little Sandra, wandering coatless in the dark fir forests of Western Washington, was the youngest.

In an emergency of this kind, in addition to his own staff, the Pierce County Sheriff has at his disposal the services of several volunteer groups. Among those who responded to Sgt. "Bud" Edmonds' call were Explorer Scouts, Tacoma Mountain Rescue Association, Tacoma Citizens Band Radio Association, a helicopter crew from the Army's nearby Fort Lewis, Jeep and Four-Wheel-Drive clubs, and a Search Dog Club. In addition, friends and neighbors of the Scalfs joined in the search, provided cooked food and coffee for family and searchers, and stayed to comfort the anguished family.

It was 7:00 p.m. when the Search Dog Club was called. Ten members and their dogs -- seven German Shepherds and a bloodhound -- answered the call. The man with the bloodhound was typical of three hundred strangers who became one family for one night. He had worked hard that day, and had been lying on his couch, watching television with his boots off. The call reached him at 7:15; and within ten minutes he was dressed and in his truck. His two-way citizens band radio and change of clothes were already in the truck camper, ready for just such an emergency. His registered hound, a U. S. and Canadian show champion, was ready the minute he saw the tracking harness taken from the hook on the wall.

The German Shepherds in the search dog club are trained to "search" by working off-lead with a handler, and locating any human in the area. The area surrounding a search site is divided into a "grid," and searchers, maintaining visual contact, are assigned to each. Bloodhounds are trackers, guided by the scent of the one person whose identity has been established to them, and following that trail wherever it may lead. They are worked in harness, and on lead; as bloodhounds are silent trackers, and a bloodhound on track waits for no one.

Due to this different method of operation and the urgency of the situation, the sheriff's deputy at the scene instructed the bloodhound's owner to commence search immediately. He would establish radio contact with his team chief later when the balance of the club members arrived. There were already some two hundred searchers in the area, and more on the way.

The handler went into the home to obtain an article which would give the hound the scent he was to follow. A stack of soiled clothing was waiting by the washing machine, but Lois Scalf was in such a state of shock that she could not identify those belonging to the missing child -- out of her sight a matter of minutes. It was Sandra's six-year-old sister, Jackie, who brought the little coat which Sandra had forgotten when she slipped, unnoticed, from her home. The man buckled the tracking harness onto his hound, wrapped the lead rope twice around his hand, and held the coat to the animal's nose. Then he gave the command. "Boomerang! Find!"

For a few seconds the broad nose worked over the coat like a nervous vacuum cleaner. Then the big black and tan bloodhound swung his head, casting about for the scent, and plunged into the woods north of the Scalf home with his owner running behind.

The trail led about a quarter of a mile, through the woods, and along the roadside, then into the yard of a farm home. The owner came out. Yes, he had seen the little girl and her dogs, he said; she had played a few minutes and gone on.

The hound pressed on, leading his master to the small building at the west side of the pasture, circling it, and then continuing west on the road the farm faced; a road which crossed that on which the child lived. But Sandra Scalf could not have known that; at not quite three she could not have thought a great deal about the fact that every road does not lead home. The thoughts in her mind will remain her secret; but the bloodhound, tracking at a fast trot, led his owner to a second home a mile down the road, where two young men, working in the barnyard, also stated that they had seen a little girl with two dogs. Then, still running, the hound tracked for another mile and a half down the blacktopped road, which had now made a wide loop to the south, to run parallel to the road on which Sandra lived. There was a third house on the other side of the road, but the trail did not lead there. It was some distance past it before the hound crossed the road and turned east, into the woods.

The land was wet and heavily forested, and the headlight on the searcher's hard hat offered limited visibility. Then at a spot of muddy ground it gave testimony to the hound's nose, when it lit the print of a little shoe. They were still on the trail; she was still safe.

The trail led to a road -- the same road on which the Scalfs lived, but well south of it. For the third time the hound led his exhausted owner to a home, where he ran back and forth along the fence in evident excitement. The owners had not noticed a visitor, but it would have been dark by the time a little child could have walked those miles. There was an uncovered swimming pool in the yard. While bloodhound and owner rested, searchers probed it with poles, fearing what they might find. Nothing. Then the command was given again. "Boomerang! Find!"

The trail now led across the road, until the tracking team was stopped by a multi-strand barbed wire fence. "Those people must be fencing in rabbits," the man complained later. "I never saw a fence with so many strands, so close together. We couldn't get through or under."

They followed the fence line, looking for a low spot in the ground, where a two hundred pound man and a one hundred thirty pound bloodhound might crawl under. By the time they found one, they had lost the trail. Then there were cross-fences; and a cow, with murderous intentions toward the hound. The searcher had a running battle across that wide pasture to protect his hound from the enraged Ayrshire. At 2:00 a.m. he received the call on his radio to suspend the search until daylight.

Meanwhile, other teams of searchers were combing the surrounding countryside. A little child could have fallen into a ditch or hole, or be sleeping, exhausted, beneath a fallen log or low-branched evergreen. Explorer scouts and local high school students tramped the dark woods, and checked out every farm building and abandoned shed in which a child might fall asleep; until they themselves could walk no longer, and crawled into their sleeping bags on the Scalf yard, warming themselves at bonfires. Thinking of a little girl with no sleeping bag and no bonfire. Praying for the sun to rise early, so they could resume the search.

By now the temperature had dropped to twenty two degrees.

A helicopter from the sheriff's department assisted in the search that night. Its captain flew dangerously low, dodging the trees which suddenly reached from the darkness, in the hope of shining the craft's floodlight on a little figure dressed in pink. "Those trees in the dark scared me to death," one of the crew members said later, with a shudder. "I closed my eyes and listened for the crunch."

Jack Scalf pushed himself mercilessly in the search for his baby; but by night exhaustion and shock had robbed his wife of the therapy of work. "Your job is the hardest," the deputy sheriff had said, comforting and reassuring her. And it is the hardest work in life to wait, hoping and fearing, watching the faces of returning searchers and trying to read meaning into their expressions. Sandra had been out of her sight for less than ten minutes before she had disappeared. She had never left the yard before; she had never crossed the road.

"I was sure of the time," the mother explained. "I had been watching a television program that ended at four o'clock, and Sandra was almost asleep in my lap when it ended. Then I went outside to set out some flowers, and left the children eating animal crackers and watching a kiddie program. She loves that program, and ordinarily won't move while it's on."

Yet this time, Sandra suddenly decided to run outside to her dogs. The school bus driver passes the Scalf home at 4:10 in the afternoon, and he saw one of the dogs come out of the woods north of the Scalf home. Sandra was already on the way to the first house through the woods then; but when Lois Scalf came back into the house at 4:20 she assumed that the sleepy child had fallen asleep somewhere. A search of the house failed to locate her; she was nowhere about the yard. Polly and Dutchess, the two half-grown Weimeraner-Laborador crossbreed pups, were missing. They were devoted to Sandra; they were her dogs. Terror gripped Lois Scalf. The search began.

A little creek runs across the land south of the Scalf home, crosses the road, and continues through the fields enclosed by barbed wire fences. That was where the search began; but Sandra had gone north, and was far out of hearing before the volunteers began flocking toward the country home. It was four the next morning before the heart-sick parents fell asleep, praying for their child; praying for the sunrise, when the search would be resumed.

In addition to the cooked food brought to the home by friends, two local stores had contributed a supply of groceries. When morning came, volunteers helped feed the searchers who had camped overnight in the yard; and the groups were reorganized and assigned their areas. The thorough, foot by foot, search went into its second day.

An Army helicopter from Fort Lewis, piloted by Captain Kerry Denson, joined the operation now. While ground searchers methodically covered their assigned areas, the chopper flew in ever-widening circles, like the widening ripples of a stone dropped in the water. Shortly before 10:30 the hearts of the crew members fell, when they looked down to see a small pink-clad figure, apparently floating face-down in a pond. The two dogs were still beside her.

Since the sheriff's radio did not receive the Army radio frequency of the helicopter, Captain Denson returned to the Scalf home to contact the deputy sheriff. Sgt. Edmonds was in charge then. He gave orders that the report be withheld from the parents pending verification, and put in a call for the coroner. But among the searchers gathered in the yard the word drifted in dull whispers: "Floating face down in a pond."

Jack and Lois Scalf saw the arrival of the chopper, the whispered conference, and the downcast expressions. Then Lee Tegner of the Tacoma Mountain Rescue team jumped into the helicopter, and it flew off; not circling in search, but heading directly toward a location to the east. The sheriff's car left immediately, followed by the car from KTNT-TV. The waiting parents felt the cold certainty of doom.

The man who had directed the Explorer Scouts during the night, a short, jolly person, came into the house. He had been unflinching in his smiles and words of reassurance during the night. The mother turned to him, hoping for denial of the message in the whispering groups, their eyes averted. "No news," he insisted; but the smile of the long night was missing, and his voice seemed to quaver.

There was a small field near the pond where the pink-clad figure had been spotted, separated from it by the creek which flowed south of the Scalf home. It was about one hundred yards through the brush to the State Highway which leads to Mount Rainier. Captain Denson set the chopper down, and Lee Tegner jumped out. He was a veteran of fourteen years in mountain rescue work; and all through the search he had had faith. As long as the dogs had not come home, he was sure the child was alive; if they had returned, that would have been different. Now, as a deputy coroner, it was his job to remain with the body until the coroner arrived.

There were raised banks on each side of the creek, so the men in the helicopter could not see the body from the field. Tegner walked to the bank, and Sandra Scalf's two dogs charged onto the opposite bank, barking and snarling threateningly. Then Tegner gleaned the reward of his night's faith. A little girl dressed in pink sat up and said, "Hi." He shouted back to the helicopter crew, "She's alive!" and jumped into the creek.

The cold water was from three to four feet deep. He waded across, to find himself at eye level with a pair of protective dogs, baring "teeth about a foot long." Sandra was wet and shivering. He took off his coat and threw it to her, but the dogs got it first and shook it thoroughly. Finally she pulled it away from them and put it around herself. Still they would not let the man out of the water, until a crew member jumped into the creek farther down, and lured them away. When they charged the new menace, Tegner was able to scramble from the creek and pick up the child. Now the dogs seemed satisfied that their mistress was safe; they declared peace, and followed as he carried Sandy back across the creek.

The child was a fearless little thing, Tegner reported. She never cried, though complaining of being cold and hungry, as she chattered steadily on the way home. One of the crewmen gave her a stick of chewing gum, and she bit down eagerly. She had slept, she said; and her puppies had cuddled up to her and kept her warm.



Capt. Kerry Denton carried Sandra to the highway where the Sheriff's car was waiting.



Sgt. Edmonds returns Sandy to her mother.

The helicopter was ready, but Sandra refused to ride in it. "I don't like it." she insisted. "It makes too much noise." The pilot shut down the motor; and knowing that the sheriff's car would be on the nearby road, he took her from the arms of the thoroughly-soaked Tegner and carried her to the road.

News and television photographers were waiting with the Sheriff's car, and crowded around her. One asked, "Do you want to say something, Sandy?"

"Where's my puppies?" she asked. One of them was scooped up and tossed into a returning car; the other shied away and was brought home later. Sgt. Edmonds called his report to the sheriff's radio truck in the Scalf yard.

Jack Scalf had gone outdoors, hoping for news of the search, when he heard the message come over the air from the sheriff's radio truck: "Cancel the coroner's wagon; she's alive!" He rushed into the house to embrace his wife. "They've found her! She's alive!" Together they ran outdoors, weeping with happiness and relief, to wait for their child's return. This time the message could be shouted. "Thank God, thank God, she's alive!"

Tegner, who has worked on many searches, found an unknown element in this one. He had remained on the search site all night. At 7:00 the next morning he had called his wife in Tacoma, telling her to phone his employer and explain that he would not be at work that day. "I have something strange to tell you," his wife replied. Then she related that their six-year old daughter had wakened not long before, and told her mother that she had dreamed about the lost child. "They should look across the road from her house, in a big field near the trees," the little girl said. "Her doggies are keeping her warm." Tegner's daughter has never been near the Scalf home, and had no way of knowing the area.

A week later, Sandra seemed unchanged by her experience. She darted about, a quicksilver child, playing with the puppies who had earned their pensions in one night, showering her love on her family and friends.

If Polly and Dutchess, the two Weimeraner-Laborador puppies, recognized their V.I.P. status, they were accepting it graciously.

The remainder of the Scalf family, however, will have that one night branded into their memories. Scalf is a retired Army man, holder of the Bronze Star and Silver Star from the Korean War. In all the years they have been married, the mother said, she had never seen him cry except for tears of pain when he had his shoulder dislocated. "But that night," she said, "he cried too. Men can cry."

Nor was he the only man who could cry. "You women think you are the only ones who can show feelings," one of the German Shepherd handlers said later, discussing the search. "When they announced that the little girl was alive there wasn't a dry eye on the place."

The Scalfs will not forget the hundreds of strangers who were there, helping when help was needed. Those who searched, those who offered food and comfort, and those who quietly cleaned up the yard where the searchers had camped. "Last summer," Mrs. Scalf said, "the little daughter of a friend of ours was drowned in a lake. Nobody saw her fall in, apparently, but one man; and he turned his back. An hour later he asked someone, 'Did anyone ever help the little girl who slipped off the log?' and then he disappeared." Her voice changed to a tone of bitterness. "He didn't want to get involved, I guess." ▲

MOUNTAIN SEARCH FOR THE LOST VICTIM

In the interest of advancing the state-of-the-art, MOUNTAIN SEARCH FOR THE LOST VICTIM is being serialized in SAR magazine. One chapter each issue is presented here for your consideration. It is appreciated that most readers only scan an article, but I ask that all readers study this text for its appropriateness to your situation and activities. Your comments will be appreciated because I wrote the book to be universally applicable to all search situations. However, because my experience has been restricted to only one area of the country, there is some question of the reality of this goal. I am requesting help in this regard.

Copies of this book are available from the author, at \$ 3.95,

Dennis E. Kelley
P.O. Box 153
Montrose, California 91020
Phone (213) 248-3057

Chapter 1. Introduction	1
2. The Victim	5
3. Responsible Agency	37
4. Strategy	59
5. Tactics	91
6. Base Camp	141
7. Searcher	178
8. Training	214
9. Contingency Analysis	228
Appendix	255

Search
is
an
Emergency

x



In memory of
Charles Dudley Rea
1934 - 1969

Charles Dudley Rea drown January 26, 1969 while attempting to rescue a sick child stranded by the great storm in Big Tujunga Canyon of Angeles National Forest near Los Angeles. The photograph was taken by Bob Nixon.

CHAPTER 1: MOUNTAIN SEARCH INTRODUCTION

CONTENTS

1. INTRODUCTION	1
1.1 DEFINITION OF MOUNTAIN SEARCH	2
1.2 WHO PAYS FOR SEARCHES?	2
1.3 WHO GETS LOST?	2
1.4 HOW DO YOU SEARCH FOR THE MISSING?	2
1.4.1 IF YOU BECOME LOST!	3
1.5 MOUNTAIN SEARCH RESPONSIBILITY	3
1.6 THE SEARCHER	3
1.7 TO BE A SEARCHER	4
1.8 WHY VOLUNTEER SEARCH TEAMS	4

CHAPTER 1

MOUNTAIN SEARCH INTRODUCTION

I hope this book will encourage individuals living near mountain or wilderness areas to join volunteer search and rescue teams. The popularity of outdoor living and the population growth have meant that more people inevitably get lost. Those of us in the field need help to cope with this increase. In addition, this book will advance the mountain search state-of-the-art to make it even more successful and efficient.

1.1 DEFINITION OF MOUNTAIN SEARCH

Mountain search and rescue involves finding, administering first aid, and evacuating a lost, stranded, sick, injured, runaway or dead person. This book is about the outdoorsmanship specialty search. The search part of search and rescue (SAR) is defined as the detection and/or tracking and finding a missing person. The specialty of rescue, which includes first aid and evacuation, is the topic of numerous books referenced in Appendix I.

1.2 WHO PAYS FOR SEARCHES?

The cost of a mountain search is great. I estimate the cost in the United States as \$10 million annually. The cost of one small rescue helicopter alone is \$100 per hour. The American taxpayer usually carries the financial burden of a search. Service club donations support volunteer search teams and the individual volunteer's expenses average \$500 a year.

1.3 WHO GETS LOST?

People of all ages, both sexes, and from all walks of life become lost. They get lost by themselves and in groups. I have searched for whole youth groups. With lost children, however, it should be remembered that it is often adults who place them involuntarily in strange and sometimes suddenly hostile environments. In fact, the most common lost victim is the teenage boy. One reason we call the missing person a victim is because of the involuntary situation of many victim's plight.

While less than six-tenths of one percent (or fewer than one every four years) of those missing are never found, in terms of resources and manhours required, finding lost humans can be a formidable task. Statistically, the average victim is missing 18 hours and requires a dozen searchers. One helicopter and three vehicles will be used.

1.4 HOW DO YOU SEARCH FOR THE MISSING?

Search strategy is a combination of:

MOUNTAIN SEARCH INTRODUCTION

1. Theory of search
2. Predicting victim behavior

The theory of search was born with operations research in World War II. The theory of search was used by the Office of Naval Research to cope with the menace of Nazi submarines. The essence of search theory is that preliminary search activities have the greatest effect on the search outcome. Specifically, initial searcher response time, the ability to confine victim activity, and the early detection of clues to the victim's whereabouts greatly improve the chances of finding a victim. The well conceived and applied theory of search is the baseline for success in search and rescue.

Predicting victim behavior helps to identify the area where the victim is most likely to be found, and by indicating the maximum potential distance travelled, determines the size of the search area. A knowledge of your local wilderness, and experience in predicting victim behavior will help you, as a search director, to arrive at a pretty good idea of the victim's probable location. The most interesting and challenging aspect of victim behavior is that survival is 80% attitude.(1) Yet attitude is the most difficult victim attribute to measure and predict.

1.4.1 IF YOU BECOME LOST!

Anyone can become lost. If you do, your next three actions could save your life.

1. Stop, look, listen, and think.
2. Mark your location and attempt to signal for help.
3. Relax, conserve yourself and wait for help.

Remember, survival is 80% attitude, 10% equipment and 10% skill.(1)

1.5 MOUNTAIN SEARCH RESPONSIBILITY

The responsibility for mountain search has traditionally and legally been with the County Sheriff's Department. The exception is National Parks, Forests and aeronautical accidents. Your local sheriff will probably supervise a mountain search while permitting volunteer SAR teams to execute the operation. Major equipment requirements, such as vehicles and helicopters, are the responsibility of the sheriff.

1.6 THE SEARCHER

There are two types of searchers: volunteers and paid professionals. Today, the majority are highly trained and experienced volun-

- (1) See #1 entry in Appendix I Bibliography. Hence forth, () denotes the equivalent entry in the Bibliography.

MOUNTAIN SEARCH INTRODUCTION

teers who donate their time freely. These are both men and women; ages 18 to 55. A growing minority are the paid professionals who are deputy sheriffs, forest service, and military personnel.

For the searcher, mountain search is a combination of experiences. The excitement of wilderness travel, the camaraderie of a team effort, the exhaustion of sustained physical endeavor, and hardest to accept, the frustrating lack of clues to the victims whereabouts.

The buddy system is the key to searcher safety. Every searcher is his buddy's keeper. Training and redundancy of systems enhance safety. Most volunteer SAR teams train in the field at least one weekend a month and in the classroom at least one night a month.

1.7 TO BE A SEARCHER

If you are not now, but would like to be a mountain searcher, your first contact should be your local sheriff station. Ask the search and rescue coordinator or duty officer for the business meeting place of the local team. Then attend. Your first six months of involvement will be intensive weekly training. At the end of that period, you will take both a written and field examination that will thoroughly test your abilities and qualifications as a full-fledged search and rescue team member.

1.8 WHY VOLUNTEER SEARCH TEAMS

The question is frequently raised as to the desirability of volunteer teams in search and rescue. This is particularly true as law enforcement, fire suppression and government agencies become unionized and associated. The argument is raised that a volunteer takes food out of the mouths of an unemployed man's family.

The point is that most counties or cities cannot afford to maintain a force of 20 to 25 men full-time who must be proficient in search, rescue, emergency medical care, mountaineering and helicopter operations. The cost previously mentioned is entirely out-of-scope for all but the largest government agencies.

Most important however, is that volunteer teams exhibit a spirit-dec and competence that cannot be bought. The reason is that the volunteer team is generally comprised of public spirited members of the community such as doctors, lawyers, businessmen, tradesmen and scientists. These volunteers are not constrained by demands for overtime, sick-leave, management or supervisory problems.

Volunteers epitomize the American tradition of immediate, unselfish response to cries for help from anyone in distress.

BOOK REVIEW

National Search and Rescue Manual
Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402
Price \$1.50 180 pages

The National Search and Rescue Manual is the basic American document for SAR. For this reason it is being reviewed in this first issue of Search and Rescue Magazine. It should be appreciated however that the document has been around for a number of years and it is also rumored that a revision is being undertaken presently.

The manual is an outstanding document that unfortunately reflects a bias of the U.S. Coast Guard, its custodians. The manual refers to most of us, such as the Mountain Rescue Association, Ski Patrol, Explorer SAR, etc., as inland ground searchers. There is however a tremendous information chasm between the manual and we inland ground searchers. As far as the inland ground search is concerned, the manual is more philosophical than technical. What is interesting is that there is a similar chasm between real inland ground search and the Regional SAR Centers mentioned in the manual. The utility of the manual at the individual searcher level is very obscure because of this chasm.

There is a solution however. Provisions are made to expand the manual to incorporate changes, improvements, advances and innovations in the state of the art, ala page i of the manual. "Each service command or civil agency may recommend changes and additions to the manual. Such recommendations should be transmitted to the parent service or agency with a copy to Commandant (0), U. S. Coast Guard, Washington 25, D.C."

As mentioned above, there are provisions available to update the manual to properly reflect all national SAR activities, and perhaps some international such as Baja. Unfortunately, there are many organizations with a vested interest in the activities and procedures of inland ground search. Who should decide on

these issues and even more important, who will even volunteer to take on this tremendous task.

The point is that the manual reflects the entire federal posture on SAR through the National SAR Plan and someone associated with inland ground search, like perhaps the Association of SAR Coordinators, should make the effort to update it.

In any case, I think everyone associated with SAR should read the National SAR Manual. I think you'll find some interesting surprises including being impressed by its depth. Dennis Kelley.

CALENDAR

1973 Aug. 18 - 23

Explorer Search and Rescue Survival Training, Fairchild AFB, Washington. Don Wilson 13002 26 S., Seattle, WA 98168

1973 Aug. 26 - 31

Camp Jurray, Washington - Washington State SAR Training and Symposium. Hal Foss, 4220 E. Martin Way, Olympia, Washington 98504

1973 Sept. 15

Wenatchee, Washington - Council for Survival Education. Hal Foss, 4220 E. Martin Way, Olympia, Washington 98504

1973 Oct. 14

Rick LaValla's Birthday.

1973 Nov. 12 -16

Seattle Center, Seattle Washington - Third National Avalanche School. Richard H. Spray, NAS Coordinator, USDA - FS, 444 East Bonita Ave. San Dimas, Calif. 91773 (213) 332-6231.

1973 Nov. 16 - 17

Seattle, Washington - Fall Mountain Rescue Association Business Meeting. Vance Yost Executive Secretary, P.O. Box 9, Altadena, Calif. 91001

1973 Nov. 30, Dec. 1 & 2

Carson City, Nevada - Nat. Assoc. of Search and Rescue Coordinators. Hal Foss, 4220 E. Martin Way, Olympia, Washington 98504

NEWS AND RUMORS

After originally voting to join the Los Angeles Sheriff Department, the Sierra Madre Search and Rescue Team has since reversed its decision, even before the Altadena Rescue Squad became involved, because of difficulties in negotiations.

The possibility of an International SAR Conference this Fall was suggested at the Washington State SAR Conference last May by Lt. Col. John O'Neil, USAF, Director of Operations, Aerospace Rescue and Recovery Service.

A universal search data form is being distributed by the Mountain Rescue Association for use in research and to enhance search operations. Your contributions in using this form is needed to make this program of building a large statistical data base on search victims and operations successful. Forms and details are available from MRA, P.O. Box 9, Altadena, California 91001.

Major Johnny Kai of the Green Berets has added a whole new dimension to personal survival. If given the chance, don't miss a presentation by this expert in individual motivation.

An Explorer Search and Rescue Advisory Committee has been formed in the Boy Scouts of America Western Region. Don Wilson is Director and Jon Wartes is Training Director. Details are available from Don Wilson, 13002 26 S., Seattle, WA 98168.

The Los Angeles County Sheriff's, Emergency Services Detail (ESD), a paid SAR team is rumored to be interested in joining the Mountain Rescue Association. It has been suggested that the volunteer teams of Los Angeles County should be excluded from the qualification testing of this experienced Sheriff's team because of a conflict of interest.

Californian Forms Team For Rescues

KATMANDU, Nepal (AP) — A former U. S. Peace Corps volunteer has helped found a group to rescue mountain climbers and hikers in distress on Nepal's towering Himalayan peaks.

The rescue team is the brainchild of John Skow, 27, of Saratoga, Calif. He said Saturday the nonprofit organization, called the Himalayan Rescue Association, will emphasize educational services to inform people how to survive on the mountains. It will also provide rescue services, starting on the treacherous Khumbu Glacier that stretches across the approaches to Mt. Everest, the highest mountain the world.

SUNDAY, JUNE 10, 1973

San Gabriel Valley TRIBUNE **A7**

The Mountain Rescue Associations' social director is still arranging the First International Mountain Rescue Seminar at Mexico City, for the Spring of 1974, perhaps during Easter vacation. Joint transportation is being arranged from Los Angeles to Mexico City and return. For details contact Paul Williams.

FOR SUBSCRIBERS!

THIS INTRODUCTORY ISSUE OF

SEARCH AND RESCUE MAGAZINE

IS FOR YOUR PERSONAL REVIEW. WE HOPE YOU
LIKE IT ENOUGH TO BECOME A REGULAR READER.

Subscribe now to SEARCH & RESCUE Magazine at:

SAR Magazine
P.O. Box 153
Montrose, CA 91020

Enter my subscription for: 1 year \$ 3.00,
 2 years \$ 5.00

Payment enclosed, Bill me.

Name _____

Address _____

City _____ State _____ Zip _____