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SEARCH AND RESCUE MAGAZINE

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PUBLISHER' FORUM

Dennis E. Kelley

Alaska: DICK MCGOWAN of Mountain Travel recently spent two weeks in Alaska visiting with PAUL WILLIAMS, ex-Seattlean and ex-President Mountain Rescue Association . . .

California: Lt. BILL SALKA, Ventura Co. Sheriff's Dept. has announced the acquisition of 5 'excess property' Huey helicopters . . . Sgt. FRANK OAKDEN, Los Angeles County Sheriff's Dept., Emergency Operations Bureau, sz recent Federal Communication Commission (FCC) amateur radio changes are jeopardizing Radio Amateur Civil Emergency Services (RACES) . . . DON IRWIN, State Office of Emergency Services, Telecommunications, sz US Dept. of Transportation is actively pushing Program NEAR, CB ch. 9, as national emergency radio frequency . . . JERRY BARLOWS, San Dimas Mtn. Rescue Team, and I search great together since we both come from Missouri . . . Dr. NORMAN H. MELLOR, MD., Riverside Mtn. Rescue Team does not favor our snakebite treatment ad . . . RICHARD KELTY of Sierra West believes GORTEX rain gear will significantly enhance SAR foul weather capabilities . . . Big News: Chief WAYNE KRANIG, Law Enforcement Div., State Office of Emergency Services and Sheriff PETER J. PITCHESS, Los Angeles County, announced appointment of first volunteer, BEN PEDRICK, to State SAR Advisory Board . . . JERRY GOODWIN, Bay Area Mtn. Rescue President, is now into selling using mountaineering books . . .

Colorado: STAN BUSH, SAR Board President has a new \$100,000 command and control center in Littleton . . . State SAR Coordinator BLAIR NILSSON sz TOM LEWIS, Littleton Fire Dept., is updating his SCUBA search and recovery book . . .

Maryland: TIM KNEELAND is assembling a glossary on survival education . . .

Missouri: JIM KENT, State Park Ranger, sz posse is very effective in Southern Mo. searches . . .

New Hampshire: JACK STEPHENSON sz that anyone interested in making a prototype hypothermia rearming blanket should contact him

New Mexico: DENNIS ROSSBECK, Albuquerque MRA, makes a questionable liquid consumable called 'Death' . . . PAUL KOENIG, ex-NASAR Secretary-Treasurer may join local SAR unit at his new home at Angel Fire . . . DAVID BATES, Philmont Scout Ranch, declares emphatically that whistle blowing when lost boosts your moral . . . JOE MCKINNEY, Explorer SAR, asks how often do you yell the victim's name in inland ground search . . . BILL SQUIRE, Search & Rescue Dog Assn., was appointed by NASAR's VP RICK GOODMAN as Exhibit Chairman for NASAR's 10th Annual Conference October 5-8, 1978 in Albuquerque . . .

New York: TIM ARNSTEIN of Precise sz he has a new compass with a light that is great for night search. He sz it also has a mirror so you can see who's lost . . .

Oregon: JOHN OLSON, State SAR Coordinator, sz NASAR resignation rumor was the result of a comedy of errors . . .

Pennsylvania: SAMMY SNIDER, State Dept. of Transportation, Aviation Safety Specialist, wants his State to become a communications satellite applications program participant . . .

Tennessee: LACY SUITOR is State Office of Emergency Services Director while GERRY MACFARLAND is on leave . . .

Utah: JOYE CROUCH, National JEEP SAR Assn. newspaper editor has stepped into this tough job and is doing great . . .

Washington State: RICK LAVALLA, State SAR Coordinator is now also Deputy Director of State Dept. of Emergency Services . . . FRED MEYER, Seattle, is offering a great 'Little Demon' Survival Stove Kit

Air Force: Promotions: RAYMOND HUFNAGLE, BOB MATTSO and PETE WARN made USAF Lt. Col. list. Incidentally, Ray who is military aid to Deputy Assistant Secretary of the Air Force LLOYD MOSEMANN, gave us one of the biggest 'good news' stories of 1978. See Mosemann speak this issue . . . Also, Lloyd sez he hopes to have nine spotting lites on USAF ARRS helicopters using similar gear as US . . . Unfortunately, ARRS C-130 aircraft VHF radios for military/civilian SAR coordination is snarled in red tape . . . For emergency locator transmitter (ELT) direction finder (DF), JOHN MOORE of Southwest Research Institute has a new training course and HARTLEY POSTLEWAITE IV of Happy Flyers Group is completing a new film . . . Correction: BILL LANGLEY, Scott AFB is Lt. Col. vs Major . . . Lt. Col. CLARENCE LONG, Canadian Air Force Rescue Specialist Training Officer sz difference between Canadian and U.S. para-medie jumpers (PJ's) is that Canadian PJ's are peace-time oriented . . . When Col. BRUCE PURVINE, USAF, Director Inland SAR, AFRCC, sz, "Do you have a minute?" Lookout!

Border Patrol: CARL WESTBURG, Explorer SAR, phoned to say that the Phantom Freeway Rock Thrower was caught by mantracking Border Patrolman JACK KEARNEY . . .

Civil Air Patrol: CAREY MOORE, Lt. Col. USAF/CAP Liaison sz 'Give me DF, steer' pre-radar aviation term for pilot requesting DF bearing on his radio signal by control tower . . . Lt. Col. JIM BIGELOW, CAP, initiated an interface agreement with the California Region, Mountain Rescue Association . . .

Coast Guard: Cmdr. JOHN WYPICK USCG SAR Ops. Officer, Long Beach, CA sz he's averaging a 5-6% increase in SAR missions each year . . . USCG Cap. MERL WOOD, Washington Hqtrs. sz there are 137 officers and enlisted men interfacing with the USCG Auxiliary (volunteers) nationally . . .

Defense Civil Preparedness Agency: VINCENT J. TUSCHER, DCPA Region One, Emergency Information Officer sz CB's will be useless in nuclear war because probably all CB's will be confiscated as were amateur radios in WWII . . . DONALD E. THOMAS, Editor of DCPA's 'Foresight' magazine sz DCPA Director BARDYL R. TIRANA has suspended publication indefinitely since June '77 . . .

Government Accounting Office: DAVE MARTIN, of SAR investigation fame, is now looking into Military Reserves . . . JOANNE WEAVER also of GAO is inquiring into USCG SAR helicopter deployment for House Appropriations Committee, Sub-Committee Transportation. Hearings may be in March 1978 . . .

Nat. Aeronautics and Space Administration: GORDON COOPER, Ex-Astronaut and now Walt Disney Productions executive sz use of HALON as aircraft cabin fire suppressant in Azores Islands disasterous runway plane collision might have saved many lives . . .

National Association for Search and Rescue: RICK GOODMAN and TOM STAADT, NASAR VP and Membership Committee Chairman respectively, have moved but only locally . . . The big search of 1978 so far is for a formal photo of NASAR President RICK LAVALLA . . . Latest additions to the Search and Rescue Magazine staff are: RICK STRASSER, Retail Sales Manager and DOREE

WILSON, Circulation Manager and JULIA MACLAY, Advertising.

National Park Service: TONY ANDERSON, Ranger, recently of Yosemite and Olympia NP's, is now Ranger in Charge of SAR in Washington DC, having replaced ANDY HUTCHISON who is now in Georgia at Fed. Law Enf. Training Ctr. Tony has estimated SAR costs per climber of \$1229 in scoping Park System SAR problem, though still preliminary data . . . BILL WADE, Great Smokey Nat. Park, Assistant Chief Ranger, conducted a management by objective exercise for the NASAR purpose with it's board of delegates at Nashville. It was a real milestone for NASAR . . . HERB GERKE, Pt. Reyes Nat. Seashore sz DONALD LAUHER, 19, ex-member trainee of Los Padres SAR Team in Santa Barbara, CA drowned at McClure Beach when swept out to sea by a 30 foot 'Sleeper' wave. Later during the rescue attempt, a 50 foot 'Sleeper' swept a NS Jeep away with fortunately no casualties. . .

On December 15, 1977, Dennis Kelley, Publisher of Search and Rescue Magazine, announced the appointment of Rick Strasser, a member of the Southern California Nordic Ski Patrols, Emergency Services Team, as Retail Sales Manager. Mr. Strasser, the Outdoor Education Coordinator for Sport Chalet, Inc. in La Canada, California, stated that plans are now underway to create a section in the magazine as a SAR Shop and Equipment Guide. Rick has asked, to insure a more beneficial guide everyone to please send in to the magazine the name and address of s in your area which you often patronize. When sending in your list, please try and include the types of departments the store has such as technical rock or ice gear, communications equipment, books, and scuba, etc. ●



RICK STRASSER, SARM Retail Sales Manager
DOREE WILSON, SARM Circulation Manager



NEW YORK FIRE DEPARTMENT AUTO RESCUE

Firefighters from both Staten Island and Brooklyn, New York, were required to free an accident victim from his vehicle in which he became trapped after losing control on an ice slicked roadway.

Officials on the scene said that John Haynes, of Florida, had been visiting friends in Staten Island when he lost control of his car as he was traveling southbound on Hylan Blvd. Haynes, whose speed was said to be well over 85 mph at the time of the accident, hit a patch of ice causing his car to go into an end over end roll. The car then continued rolling some 300 feet dislodging three utility poles, coming to rest at the corner of Arbutus Street and Hylan Blvd.

When firefighters arrived on the scene they were confronted with both leaking gasoline and downed electrical wires. After a quick wash down and cutting of power lines firemen began a search for the driver of the wreck. At first it was thought that no one could have survived the accident, but cries for help by Haynes dispelled any doubts. First attempts by firemen were unable to free Haynes and a call for additional assistance from Rescue Co. 2, in Brooklyn, was issued.

Upon their arrival members of R-2 found they would have to enter the vehicle through the underside, cutting away most of the chassis beams and floor boards. After removal of the floor, firefighters then had to climb into the car in order to remove Haynes who was still trapped by interior debris. Using a Hurst Power Tool and air hammers firemen from Rescue 2 finally removed Haynes from the auto.

In all, the victim was trapped for 65 minutes and remained alert throughout. During rescue operations Haynes was given first-aid by a number of FDNY members who were all EMT qualified. He was removed by the New York City EMS to Richmond Memorial Hospital where he under went emergency surgery throughout the night. He is listed in critical condition in the hospital's ICU. John Haynes 46 years old, resides in Deerfield, FL. He retired 3½ years ago from the New York City Fire Department. ●



article and photos
by Wayne T. Parola

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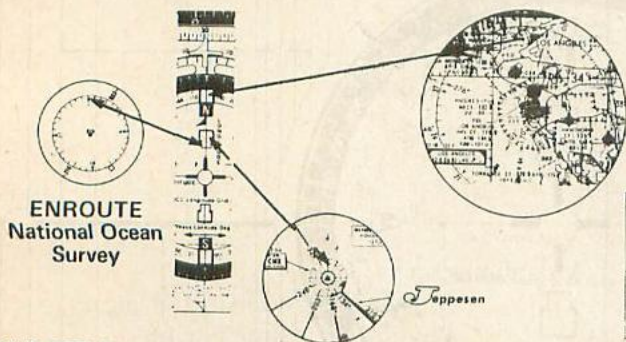
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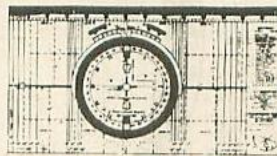
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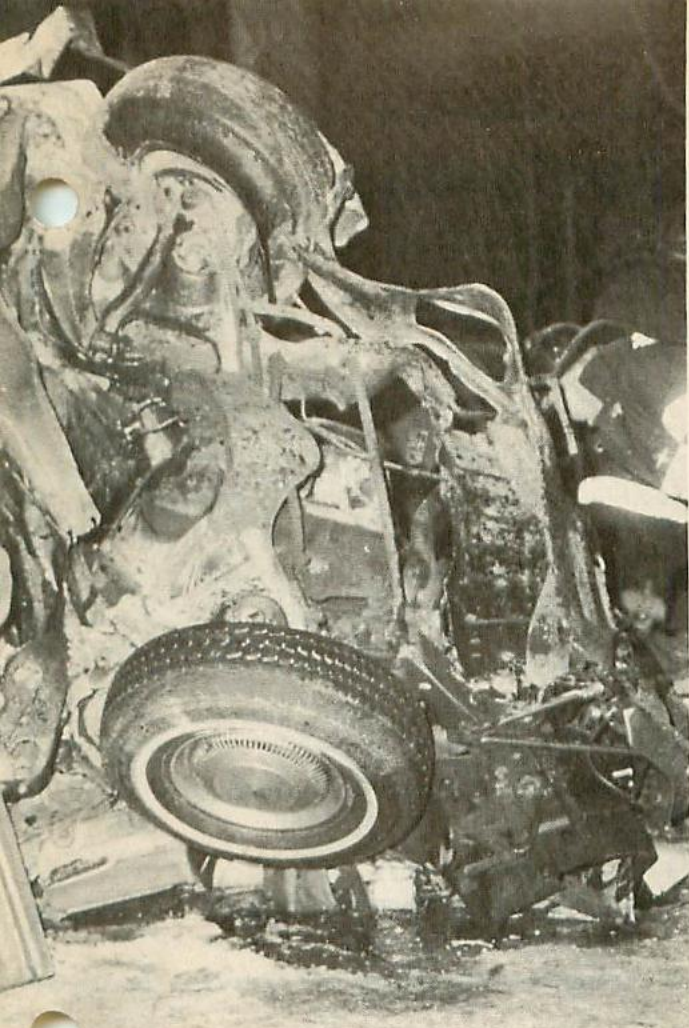
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INTRODUCTORY SAR OFFER

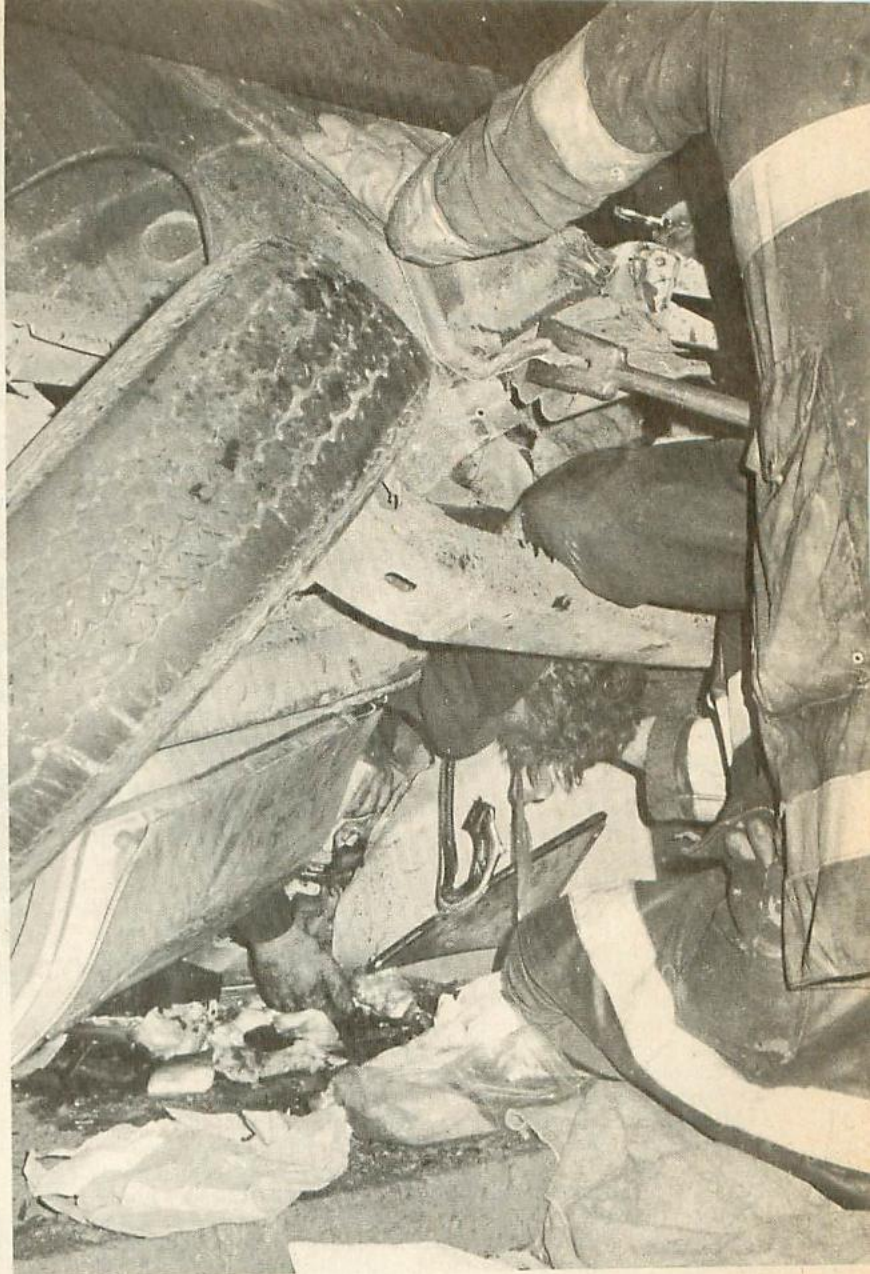
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Overall view of the scene. Firefighters try to comfort Haynes as they wait for the arrival of Rescue Unit 2.

Firefighters work with Hurst Tool in an effort to free the victim.



Rescue efforts begin. Note Haynes' hand and head trapped in the wreckage.

Haynes being taken by members of R-2 to waiting ambulance.



**SPEECH FROM DEPUTY ASSISTANT
SECRETARY OF THE AIR FORCE FOR
LOGISTICS LLOYD K. MOSEMANN, II
DELIVERED AT THE NAT'L ASSOCIATION
FOR SEARCH AND RESCUE
CONFERENCE IN NASHVILLE, TN ON
SEPTEMBER 17, 1977**

Thank you very much. It is a pleasure to be here representing the Department of Defense and more specifically the Department's Executive Agent for Search and Rescue, the Secretary of the Air Force.

You know, it has been said that man's knowledge has increased exponentially or geometrically; that all knowledge in all the centuries of the existence of human life does not equal the knowledge that we have acquired in the last twenty to thirty years. Certainly man's ability to get lost and in trouble is increasing. Yet search and rescue is not really all that new an art.

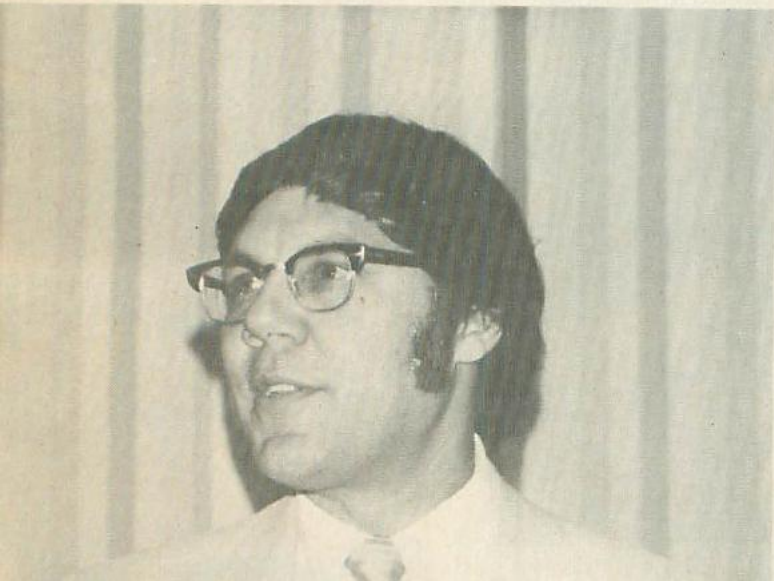
EXAMPLES OF SEARCH AND RESCUE

As we look back into the annals of history, we come to think very quickly of the Saint Bernard dog. We think of the story of the Good Samaritan as told in the Book of Luke in the Scriptures. While these are old examples of search and rescue, I think embodied in them are all the ingredients, all the essence which is the basis, or which forms the foundation, of NASAR and all of the national plans for search and rescue efforts. Basically, "technology" is seen in the Saint Bernard dog. He is perfectly adapted to the mission for which he is sent out, and moves in his environment with grace and bearing, naturally.

On the other side of the coin, we see that the technology must be accompanied by attitude. It must be accompanied by a commitment, a willingness as in the Good Samaritan to help a stranger, to help someone that has no claim on him and on whom he has no claim. Yet by the love of God which has been shed abroad into the world, in which everyone of us has some part because we are creatures of his creation, we can allow this love to be expressed through us to the stranger. In effect, then, the human and technology together form a perfect whole.

It is interesting and significant, I believe, that this is the 9th NASAR Conference. The number 9 is very intriguing. I don't know if you have ever played with the number 9, but if you take the number 9 and you multiply it against any other number, and then you add the individual integers of that particular result, you will also always end up with the number 9. (Example: $9 \times 32 = 288$; $2 + 8 + 8 = 18$; $1 + 8 = 9$). The number 9 is significant in many places as being a number of fulfillment; and truly we've heard already this morning of the several search and rescue operations going on right now here in the State. The Lord only knows how many are going on in other states and in other countries around the world.

Truly we are placed in a unique posture — we see an embodiment, we see integration, we see the foundation and standardization of efforts such as could never have been visualized in years past. Only that doesn't mean that we need to stop. Your goals in NASAR are coordination, they are communications and they are standardization.



Dr. Anthony J. Calio
**Associate Administrator for Space
and Terrestrial Applications**

NASA

Washington, D.C. 20546

18 JAN 1978

Dear Dr. Calio:

At the December meeting of thy Interagency Committee on Search and Rescue, the NASA member presented a draft memorandum of agreement which provided for joint NASA, Department of Transportation and Department of Defense participation in the Satellite Aided ELT program. After unanimous sanction by the Committee, the NASA member requested formal agency commitment to the program.

I am pleased to inform you that the Air Force, as Executive Agent for the DOD for Inland Search and Rescue, is ready to proceed with the NASA and DOT under the provisions of Dr. Martin's previous communique to Dr. Lovelace. I suggest NASA forward the draft MOU to the DOD member of the Interagency Committee on Search and Rescue for formal staffing in preparation for my signature.

I would further suggest we begin a joint effort, through the Interagency Committee, to consolidate location and communication requirements for all emergency services, employing "total" systems approach resulting in a follow-on national system.

If I can be of further assistance, please feel free to contact me.

Sincerely,

Lloyd K. Mosemann II
**Deputy Assistant Secretary of the
Air Force for Logistics**

INTERAGENCY COMMITTEE ON SAR

I'm not going to talk long this morning, but I thought that perhaps I would acquaint some of you who may not have heard of another organization which we call ICSAR. (ICSAR always makes me think of Icarus, the guy that put wings on himself and tried to fly toward the sun, but as he got closer, the wings melted and fell off. We trust that is not the case with this ICSAR.) The ICSAR that I speak of is the Interagency Committee on Search and Rescue. This interagency committee is the group which you call the "feds", I guess. Embodied are all the federal departments, agencies and organizations that combine together and really stand behind General Saunders and the Air Force Search and Rescue Coordination Center at Scott Air Force Base. However, contrary to public opinion, there really is no such thing as the "feds"! The Federal Government really consists of a whole series of independent dukedoms, shiekdoms, and kingdoms. They are all competing and fighting for dollars; and I think it is really exciting to see this really very heterogenous mass able to combine together and provide the kind of support we saw depicted in the film, [A joint Tennessee State Emergency Services and National Park Service film on search and rescue.] and which goes on every day out at Scott and around the country. This interagency committee, while it has been in existence since 1974, has in the last couple of years really taken on some sparkle. I'm pleased to say that in May we had the first meeting of the executives of the various agencies and organizations that are associated and represented in ICSAR. I'm pleased to tell you that the charter for ICSAR is being revised, it's already been rewritten. It's going to be presented to the committee later this month on the 27th. This charter is essentially going to increase the authority of this committee. In some sense, it takes us from being simply a confederation more in the direction of purposeful union.

The objectives of coordinating, integrating and developing policy, procedures, and compatible equipment or technology are all designed to increase the effectiveness of our search and rescue endeavors throughout the nation. I believe that the ICSAR will be more actively and positively influencing search and rescue at all levels of effort, whether state, local or private or federal, to develop equipment and procedures. Again, a statement of work has been established and it has some interesting things in it, such as the objective of designating some assigned radio frequency channels, things of this nature. Of course, ICSAR is also working with and supporting and standing behind NASAR in efforts associated with the use of satellites.

**MEMORANDUM FOR THE
SECRETARY OF THE AIR FORCE**
**SUBJECT: Responsibility for Search and
Rescue (SAR) Operations in
CONUS DEC. 14, 1977**

With the recent revitalization of the Interagency Committee on Search and Rescue (ICSAR), I want to reemphasize and clarify the Air Force's mission, as DoD Executive Agent, for this humanitarian endeavor. Military search and rescue equipment and facilities should be employed to the maximum extent to enhance the effectiveness of national humanitarian search and rescue while ensuring that the component primary combat-related mission is not jeopardized.

The Air Force Military Airlift Command Aerospace Rescue and Recovery Service (ARRS) will continue to function as the DoD mission control center for the prosecution of inland military and civil SAR missions, drawing resources from the Navy, Army, Coast Guard and other federal and local agencies as required. Further, the Air Force will be responsible for programming and budgeting actions necessary to ensure the Department of Defense has adequate, efficient and compatible equipment required to interface with other federal and state SAR agencies. Congressional budget visibility for this mission should be provided via a shredout of Program Element 35113 entitled "DoD Civil SAR." Policy and procedural coordination with other federal agencies will continue to be through the ICSAR.

The above guidance will be reflected in the forthcoming rewrite of DoD Directive 5160.2, "Single Manager for Airlift Services."

C.W. Duncan
Deputy Secretary of Defense

NEW DOD SAR REALIZATION

The Department of Defense traditionally, in the past, has looked upon search and rescue as really kind of an appendix, something that we do when we have the time and equipment available. I'm pleased to share with you the fact that in the last six months or so that there has become a new realization that the National Search and Rescue Plan is a part of our mission. I think that one of the first indications of that, I'm sure you've heard of already, is that the DOD no longer will simply provide transportation to the scene of the search and rescue incident, but that if we get you there, we will get you back. It is a significant advance, I think, and it reflects the fact that bureaucracy can be very insensitive unless we are conscientiously working to increase that sensitivity. Unless we are conscientiously working, we can become insensitive to the kind of experience that you saw in the film, the blood, the broken bodies and the sweat that is involved in getting there to get them out.

Also worthy of note is the fact that I think we have broken loose funding to buy VHF-FM radios to put in our HC-130s so that we can communicate directly with the civil efforts on the ground.

I think the other thing that I should like to mention, and I'm sure you will hear more about this later, is the fact that ICSAR has got a variety of efforts underway to support the emergency locator transmitter program. Not the least of these is to make use of satellites for this purpose. One of the things you may not have heard is that this really moves search and rescue in a very real sense beyond the national border. The present plan for this particular satellite system is that the vehicle, what we call the platform itself, will be a U.S. platform, and the processor will be French, and the transmitter will be Canadian. There are a number of other countries that have either signed or plan to sign protocols with the U.S. concerning this, even including the Soviet Union. I must be frank to admit that this provides us in the Department of Defense with some

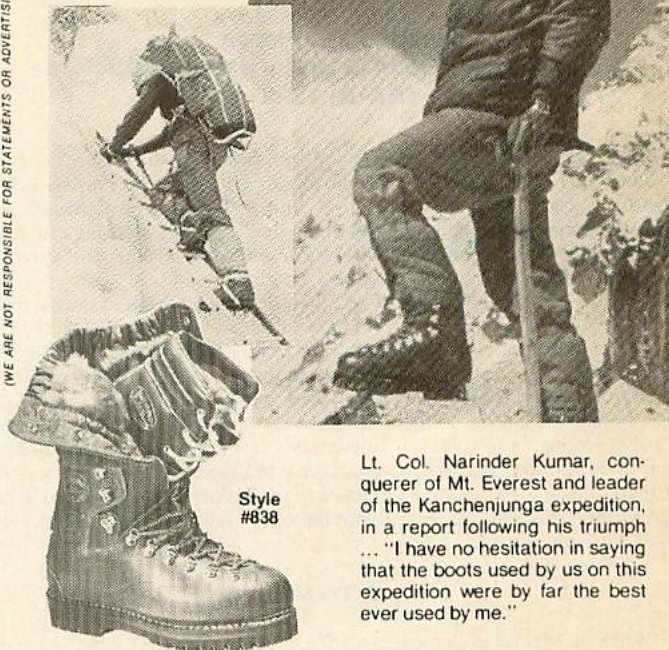
problems, and it does restrict in some measure the level of technological support which we can provide the program. Insofar as moral support, you can count on us; it's a good program.

In summary, by way of keynoting your conference, let me say again that search and rescue is a humanitarian endeavor. Humanitarian endeavors require human beings to help other human beings. We can talk technology all we want to — we can talk about satellites, radios and airplanes and all these kinds of things — but in the final analysis, the thing that makes it work is a Good Samaritan — that means people — and that's you. Thank you very much. ●

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Lt. Col. Narinder Kumar, conquerer of Mt. Everest and leader of the Kanchenjunga expedition, in a report following his triumph ... "I have no hesitation in saying that the boots used by us on this expedition were by far the best ever used by me."

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DEEP WATER RESCUE BREATHING

by: Albert L. Pierce

National Association of Underwater Instructors
(NAUI) 1292

What can you do? You've just found your buddy on the surface in open water, **NOT BREATHING!** If you tow him to shore he may be dead before you get there. He needs air — and **FAST!** But how? Mouth to mouth rescue breathing has saved many lives on dry land. But can you breathe air into the mouth of a limp, unconscious victim when the water is so deep you can't stand on the bottom?

The movie, **DEEP WATER RESCUE BREATHING**, shows two ways of giving this vital air: Mouth to Mouth, and Mouth to Snorkel.

If you swim, snorkel or scuba dive, as more and more people do these days, you owe it to yourself and your buddy to learn one or both of these methods. Most people can learn them easily. Mouth to mouth is uncomplicated and not difficult at all to learn, but without floatation or fins, is very tiring to continue. In contrast, you won't get tired giving air, mouth to snorkel, because you don't have to lift your head above water. However, you may need some practice to perfect making a good seal over the victim's lips with the snorkel mouthpiece. A few minutes practice is all that is usually needed.

MOUTH TO MOUTH

When there is no equipment available, if you are a strong swimmer and can tread water well, you can give a few breaths of air to a non-breathing victim, mouth to mouth. Here's how:

1. Start with a chin pull with the victim's face up. Using your free hand, turn his head, pull down the corner of his mouth and let any water run out. (Figure #1)
2. Hook your free arm over the victim's near arm and place your hand underneath his back. If you can, cradle his neck between your thumb and forefinger at the back of that hand. (Figure #2)
3. Release the chin pull and press with the heel of that hand on the victim's forehead, tilting his head back for an open airway. You can easily pinch his nostrils then with your thumb and forefinger.
4. Turn his head and body toward you.
5. Seal your mouth over his and blow.

The initial chin pull position (which may precede both mouth to mouth and mouth to snorkel methods) should have at least two points of contact. The victim's head should be held firmly in the crook of your arm or against your chest. This will afford complete control so he will not drift away in waves or current.

If you kick down at an angle toward the victim's feet, the forward momentum will keep both your faces out of the water. Also, the more parallel to, and closer to the surface you can get, the less likely you are to be swamped by waves and swell. You will be buoyed up instead.

Your mouth should be pressed tightly over the victim's lips, and the seal kept tight while blowing to fill his lungs with air. It's like blowing up a balloon. You can feel the pressure building up in his lungs, so you know he's getting air. If you feel a blockage, tilt his head back more. Your practice victim can help you by relaxing all muscles, and allowing you to blow into his lungs. You should blow gently at first. If you blow hard with a strong gust, a conscious victim will be likely to block the air flow by closing his throat. A gentle pressure at first will encourage him to open his throat and allow his lungs to be filled with your expired air.

If there is water in his lungs, you may find it difficult to get air into the victim. If you blow a little harder you will be able to force enough in to overcome the effect of the water.

IT WOULDN'T HURT ANYMORE THAN A TONGUE KISS

However, blowing too hard may force air into his stomach. This, plus the water he probably swallowed is likely to cause vomiting. You should expect it and not let it throw you. Regurgitated stomach fluid looks, smells, feels and tastes bad. But you could even eat it and it wouldn't hurt you anymore than a tongue kiss — assuming you don't breathe it in. You would not, but an unconscious person is likely to do just that. It will probably kill him. The hydrochloric acid content will ruin his lungs; or his bronchial tubes will be blocked by the lumps and cut off his air. You'll have to stop and clear out his mouth of any vomits. Sweep it out with your fingers so you won't blow it into his lungs.

If you object to practicing mouth to mouth, you can simulate it by placing yourself and your victim in the proper position without making actual contact. However, you should realize you are missing something. Filling another person's lungs without getting any water into his mouth or lungs is vitally important. There is probably someone in your life, spouse, relative or friend, with whom you can feel at ease during mouth contact. Practice with him or her. In a swimming pool, you will be surrounded by a mild antiseptic solution. Also realize that you are more likely to be swimming or diving with a friend or relative. So when you have to make a rescue, the victim will probably be one of them.

Turning the victim's head and body toward you allows you to seal your mouth over his without lifting your head out of the water. If you don't turn his head, the weight of your head above water may force his face under before you can make a good seal. It won't matter if his face accidentally submerged, if you have made a good seal before going under. But be sure his face is above water before you release. If water gets into his mouth you may blow it into his lungs. That can cause serious problems.

The arm over arm position (sometimes called the "doe-si-doe" due to its similarity to that position in square dancing) affords excellent control of the victim. It can be done equally well from the right or left side, but should be practiced from both sides. If two rescuers are available, both can hold the victim in the "doe-si-doe" with one rescuer on each side. One can then help support the victim while the other is giving mouth to mouth. When he gets tired they can switch. If a third rescuer is available, he can help by pushing the victim's feet with his shoulders. (Figure #4)

When you are adept at mouth to mouth in shallow water, try it in deep water. It will help if you first try it while wearing fins or some kind of floatation. Fins will make it easier for you to kick high enough to place your mouth over the victim's. The extra buoyancy of an inflated life jacket or buoyancy compensator on the victim will help to keep him from sinking when you make mouth contact. Skin and scuba divers will normally have this equipment. You may or may not want to inflate your own jacket. If both are inflated you may not be able to get close enough for good mouth contact. Even one fully inflated vest may be too bulky. If so, release some of the air through the inflator tube or dump valve.

Continued



Fig. 1

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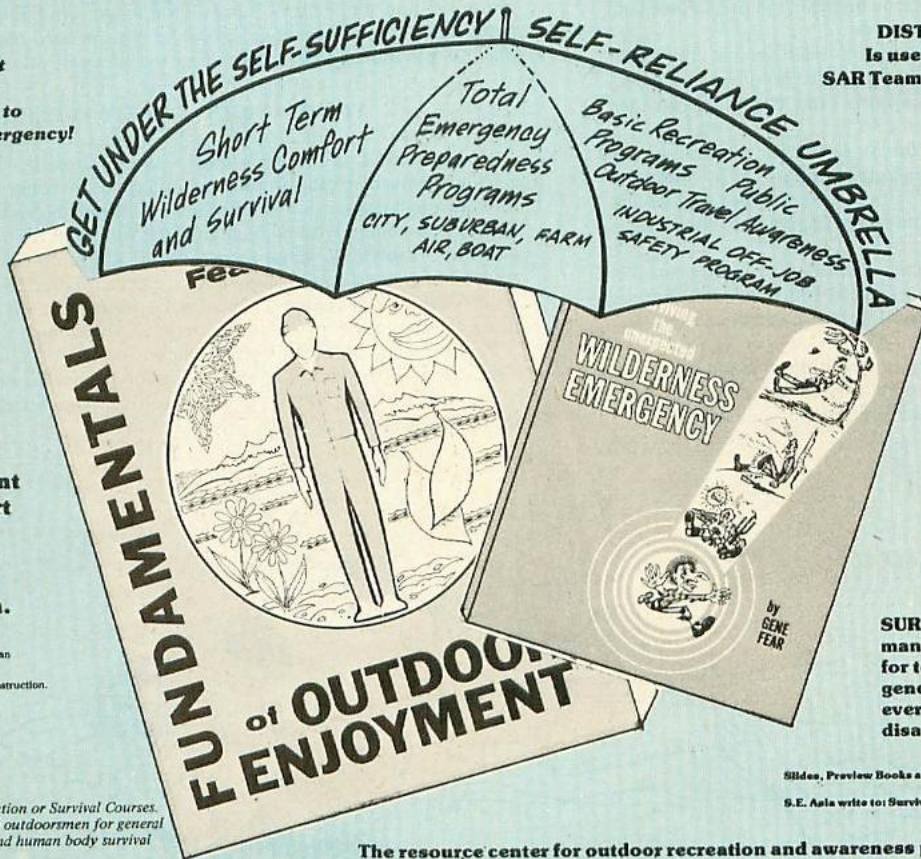
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Continued

If you and your buddy try your jackets in practice you will know whether one or both inflated will be useful in a rescue. There is another consideration. The extra bulk of vests inflated will make it more difficult to swim, especially against a strong current.

THE VICTIM'S PRIMARY NEED IS AIR

Dropping the victim's weight belt also adds buoyancy. But be sure to get some air into him first, in case you have to struggle with the belt. The victim's primary need is air. Gear manipulation or removal should be done only after initial, or between subsequent attempts to give air. Four quick breaths should be given, without letting the victim exhale completely, as soon as you can do so. But even one breath may keep his heart from stopping.

Try sealing the victim's nostrils by snubbing your cheek up against his nose, this will leave one arm free to use for swimming. If you can't seal his nose perfectly, don't worry. If you blow harder and longer you'll be able to fill his lungs even if a lot of air leaks out. If you can give air only alternately after swimming a few strokes, it will be better than none at all.

Once you are confident of your ability to give mouth to mouth in deep water using floatation, you should try it without any added buoyance or fins. This will be very difficult. But it can be done for at least a few breaths if you have a strong kick for treading water. Scuba divers should also practice in full scuba gear, including wet suits, tanks, weight belts and life jackets. They can start by wearing only wet suit gloves. They will make your hands feel clumsy at first. But with practice it will become easier. Continue practicing in open water in varied conditions of waves and current.

Mouth to mouth rescue breathing is fast and requires no equipment; but without floatation or fins it is very tiring. Even if you are a strong swimmer you will have trouble giving more than a few breaths. And even with fins, you won't be able to make much progress toward shore. What you need is some way of giving air without lifting your head high out of the water.

So — as you approach your drowning buddy to give him air, mouth to mouth, slip your mask strap, with snorkel attached, over your arm. You are going to get tired, and can use your snorkel later.

MOUTH TO SNORKEL

If a snorkel is available, yours, the victim's, or someone else's, even if you are a weak swimmer, you can give rescue breathing in deep water, and tow a victim to safety at the same time. Read on.

1. Start with the chin pull, holding the victim's head against your chest. You'll have good control of him so you won't have to hold him in the doe-si-doe position you used for mouth to mouth. Your free hand can then control the snorkel.

2. Clear the water from your snorkel by letting it run out, or by blowing it out. Keep it clear by bending the tube end up, or by holding it in your teeth. You can bend it with one hand if you use your middle and index fingers on top, and your thumb and other fingers pushing up from underneath. (Figure #5)

3. Release your fingers from the chin pull to receive the snorkel mouthpiece between your middle and ring fingers. But keep control of the victim's head by holding it tightly between your wrist and your chest. See figure #6.

4. Press the snorkel flange over the victim's mouth, making sure your fingers press tightly down all the way around the snorkel flange.

5. Pinch his nostrils with the thumb and forefinger of that hand.



6. Place the tube end of the snorkel in your mouth with your other hand and blow. You'll have to blow a little longer than with mouth to mouth to overcome the dead air space of the snorkel.

7. After filling his lungs, remove the tube end and allow the victim's exhaled air to escape through the tube. You won't be able to see his chest rising and falling, but you can hear the exhaled air and feel it on your cheek.

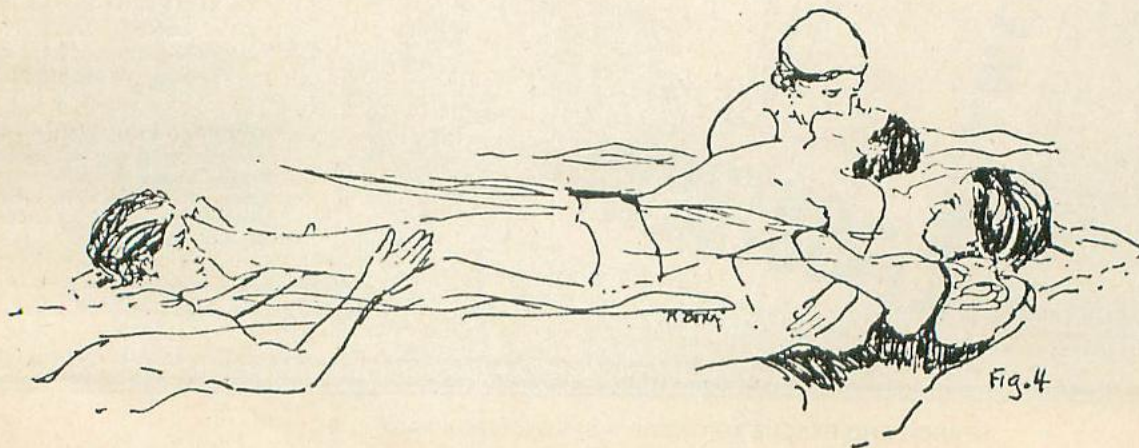
8. Continue blowing and releasing as you tow the victim to safety. On your back you are positioned well for a carry.

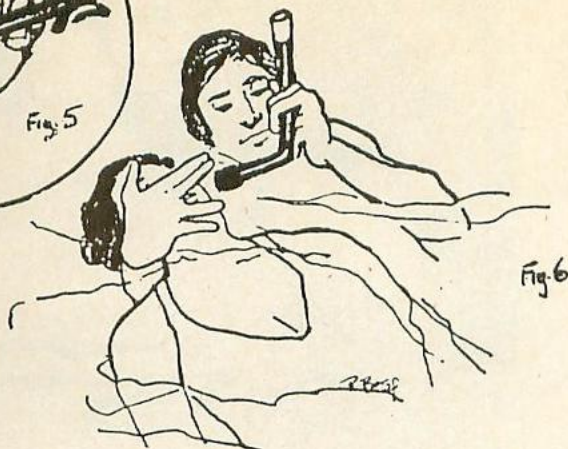
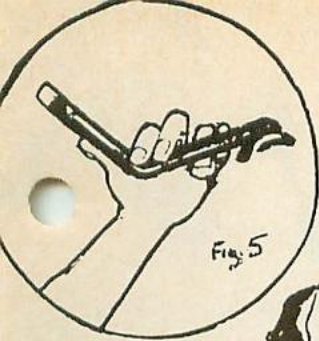
If your seal with the mouthpiece is imperfect, or if his nostrils are not pinched shut, you may feel air escaping around your fingers, and may notice a lack of build-up of pressure as you blow. This is a signal that you are not filling the victim's lungs. Readjusting your fingers may make a better seal. If you feel an air blockage, tilt his head back more. Or, you may have to blow harder to overcome the effect of water in his lungs.

YOU MAY GET A DIZZY FEELING

You should fill the victim's lungs with each breath. This will insure his getting plenty of fresh air and not just stale air being moved back and forth through the snorkel and his airways. When the victim stops exhaling you can immediately blow back into the tube and refill his lungs. It will not hurt a drowning victim to receive air at a rapid rate, but you, as the rescuer, may get a dizzy feeling from hyperventilation. If so, you can slow down your rate. Of course, while the victim is exhaling you are inhaling, being careful not to breathe in the victim's exhaled air.

You may not need to pinch the victim's nostrils. You may be able to block the air from escaping by pushing up against his nose with the edge of your index finger. This will allow you to make a better seal with the snorkel flange over his mouth (See figure #8)





An almost perfect seal will result if the snorkel flange is inserted between the victim's lips and teeth. But this isn't easy to do on an unconscious victim, and you may waste time trying. If the flange is pressed tightly over the outside of his lips, the seal can be made good enough, and a lot faster. You can practice by pressing the flange over your own mouth. Test for leaks by blocking the end of the snorkel with your thumb and blowing through the mouthpiece. If you find it difficult to make a good seal with the flange on the outside of the victim's lips, try twisting or screwing the flange into his mouth. Your seal does not have to be perfect. He may be getting plenty of air even if some escapes. The real test of a good seal is whether or not the victim is comfortable while submerged. This will simulate waves swamping his face as you tow. If you practice with the victim's face submerged, be sure to have him signal OK with his hand out of water so you'll know he's not drowning.

A FEW SNORKELS CAN'T BE USED

Most snorkels will work, including contoured types and those with corrugated tubes. But some work better than others. You must be able to aim the mouthpiece down over the victim's lips and still keep the tube end out of the water. Either the tube must be flexible or the mouthpiece must swivel to allow this. Check your snorkel and see how it works. A few are too inflexible and can't be used. If you bend a flexible snorkel too sharply, it may cut off the air.

If the snorkel is too long it will be difficult to blow into the tube end and still keep a good seal. You may wish to shorten yours. A snorkel with a wide flange is desirable. It will help to make a better seal over the lips. Also, there should be enough room for your fingers to fit around the tube behind the flange.

It will be wise to learn the technique with an easy snorkel. Later you may find you can make a good seal with almost any snorkel. For instance, if the flange is too narrow for a good seal over the outside of the victim's lips, it may be easier to get it inside, between his lips and teeth for a better seal.



Snorkels with purge valves will work if you prevent the air from escaping out of the valve by covering it with your finger or hand. Air can then be released for exhalation through either the tube end or the valve. Since this will require you to use both hands, you'll have to hold the snorkel tube in your teeth, and be careful not to breathe in the victim's exhaled air.

The orientation of the snorkel "J" is important. With the tube end held in your left (or non-preferred) hand, the curl of the bottom of the "J" formed by the snorkel should be oriented so that the mouthpiece is aimed toward the fingers of your right hand. This allows easy control of the tube end on the left of the victim's head while you are holding the snorkel flange over the victim's lips with your right hand from the right side. (See figure #6)

If you need to use a snorkel which is tightly attached to a mask, don't bother to separate them. Just let the mask dangle. It won't be in the way. If the victim is wearing a mask, and you are sure it is clear of water, it may be left on. It will protect his face from waves and spray. You can seal his nostrils by pinching through the mask, or by pushing up on its skirt. If waves are no problem, you may want to remove the mask so you can see his face clearly.

If the victim vomits, you will have to remove the snorkel, clear his mouth, swish the snorkel through the water to clear it, let it drain, and then replace it and start over.

Since both you and your victim are more parallel to the surface, you will ride up better on any waves or swell. This is an advantage over mouth to mouth rescue breathing because then you must kick downward to get your head high enough to give air, and are thus more liable to be swamped.

THREE IS BETTER THAN TWO IS BETTER THAN

If two rescuers are available, one can help support the victim from the opposite side. He will also be in a better position to watch the victim's face for return of color, or to warn of possible vomiting. If he has brought a line and float with him, he can control the victim's buoyancy and stability while all are being towed to safety. If there is a third rescuer, he can place the victim's feet on his shoulders and push.

Practice mouth to snorkel on land first. Making a good seal is tricky, because it is difficult to see what you are doing. Locate the mouth with your fingers. If you place your little finger on his chin, your hand will be about right. Practice applying the mouthpiece until you can do it easily. Since you don't have mouth to mouth contact, both you and your victim may feel more relaxed.

Then practice your seal in shallow water. You should stoop down until the water is at chin level, while you support the victim in a floating position with a chin pull. Here you can practice keeping the tube end out of the water while applying the mouthpiece.

When you feel confident in shallow water, try it in deep water. If you find that difficult, use a floatation vest on the victim, yourself, or both. Fins are a big asset. You can tow the victim easily with your legs while you control the victim and the snorkel with your hands. Start towing the victim head first while applying the mouthpiece and his momentum will help to keep his face out of the water.

WET SUIT GLOVES MAKE YOU CLUMSY

Scuba divers should practice this also with full scuba gear. The thick neoprene of wet suit gloves will make your fingers feel clumsy; but you may find that they will help to make a better seal. Because of this even three finger gloves or mittens can be made to work.

Keep practicing under varied conditions until you are sure of yourself. Open water, waves and cumbersome gear make a big difference.

Mouth to mouth rescue breathing has saved many lives on dry land. As deep water rescue breathing becomes part of standard rescue training, many more lives may be saved!

Mouth to snorkel rescue breathing was developed in 1961 by James Gabel and James Waterfield, Scuba Instructors at the Mid-city YWCA, Philadelphia, Pa. They adapted it from a "Tube Method of Mouth to Mouth" recommended in an article in *Skin Diver* magazine, June, 1960, by Garrald H. Howland, former President of the Board of Directors of the National Association of Underwater Instructors (NAUI), and Dr. James P. Donahue, MD.

Illustrations are by Robert Betof, Director of Health and Physical Education, Mid-City YWCA, Philadelphia, Pa.

The movie, *Deep Water Rescue Breathing*, in 16 mm color/sound, 10+ minutes, is available from Pierce Productions, P.O. Box 1037, 50 Elm Rd., Ext., Westford, Mass. 01886, Phone 617-692-3700. Rental is \$15, deductible if purchased at \$110. ●

EAST MEETS WEST

Recently members of the Japan Red Cross Rescue Team visited the United States to increase their knowledge of rescue techniques. The trip was also in celebration of the one hundredth year of the Japan Red Cross Society. The team visited National Park Service Rangers in Yosemite and was treated to a tour through the rescue cache. They were also given a slide presentation depicting "Big Wall Rescues" as performed by YOSAR, Yosemite search and rescue. After observing climbing techniques at Yosemite the Japanese came to the Los Angeles area to spend a day in training with the Sierra Madre Search and Rescue Team (SMSR). SMSR has been involved in other joint trainings with an international flavor when they conducted training for the Bomberos (Firemen) of Tijuana, Mexico.

BACK IN THEIR KIND OF MOUNTAINS

The day began with a briefing on team organization, funding, and operational responsibilities. Jerry Newcomb next displayed a text book bloodhound search, with his dog Belle Star sniffing out the victim in record time. Then all concerned moved up Bailey Canyon above Sierra Madre for further demonstrations. As we moved up the canyon the conversation of the Japanese grew louder and happier. I inquired of one of the interpreters "what are they talking about?" She said that they were happy to be back in their mountains, explaining that the San Gabriels, with their decomposed granite, rotten canyon walls, scrub oak, and chaparral, are very similar to the mountains where the Japanese team works. At first falls in Bailey Canyon we demonstrated a vertical litter lowering with two attendants and used one of the Japanese as a victim.



East meets West as Anderson pulleys are used with a G.M.B. brake plate (made in Japan) to rig a traversing 2-to-1 mechanical advantage (MA) for narrow canyon litter raises. This system was rigged by the Japanese team during a one-on-one session in conjunction with lunch break.

Sierra Madre's method of stranded hiker evacuation is shown. This is a common place type of rescue in the San Gabriel mountains of California.

Next we showed a stranded hiker assist, lowering the rescuer and the victim to the canyon floor. We left the canyon and went to the large field at the monastery for a helicopter rappel and litter winch-out demo and a surprise helicopter ride for the Japanese team director and three of his team.

BACKPACK WINCH DEMO

When we broke for lunch everyone continued talking techniques and a beautiful one-on-one session developed with language not a problem at all. After lunch we set up the backpack winch and proceeded to pull 5 Japan Red Cross Team members up a very steep practice slope. After observing the use of the winch some of the Japanese operated the system to haul up the rest of their team members. Then three-to-one and four-to-one MA's (pulley systems) were operated jointly by both teams. A walk-through of the two SMSR rescue trucks and their equipment was followed by another search dog demonstration. Larry Twedell and his German Shepard "SAR" performed a letter-perfect search for a Japanese team member hidden from sight but not from scent.

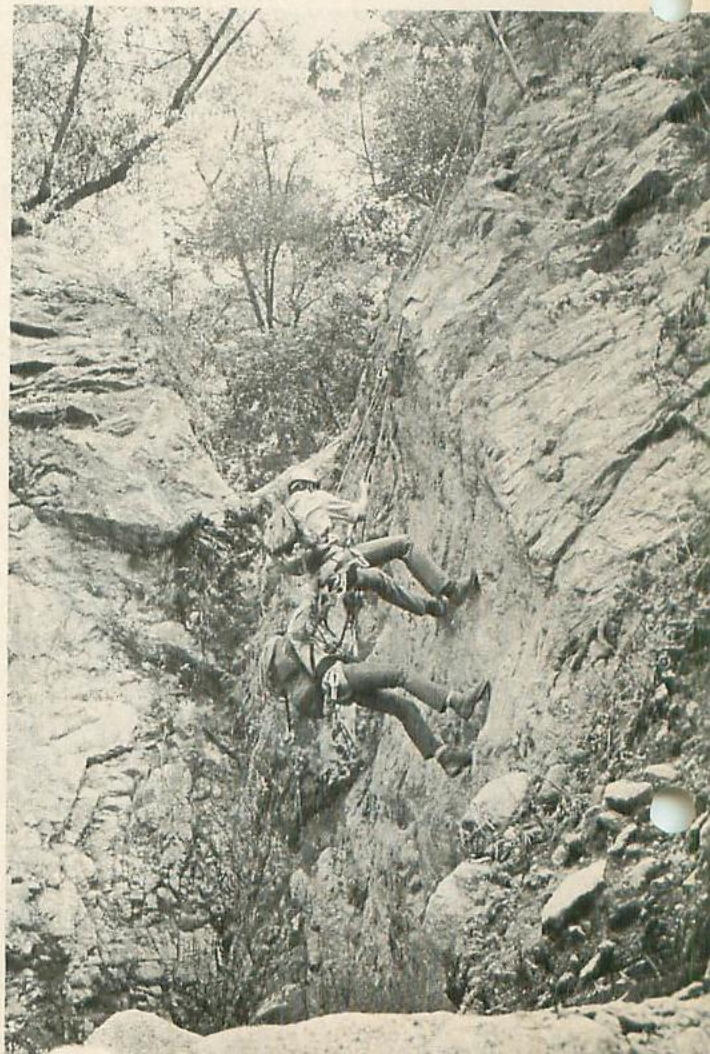
HOSPITALITY

The day concluded with a traditional California cookout and party for both teams. A great sense of camaraderie and respect for each other's talents and knowledge was developed during the day and we look forward to perhaps meeting again someday. ●

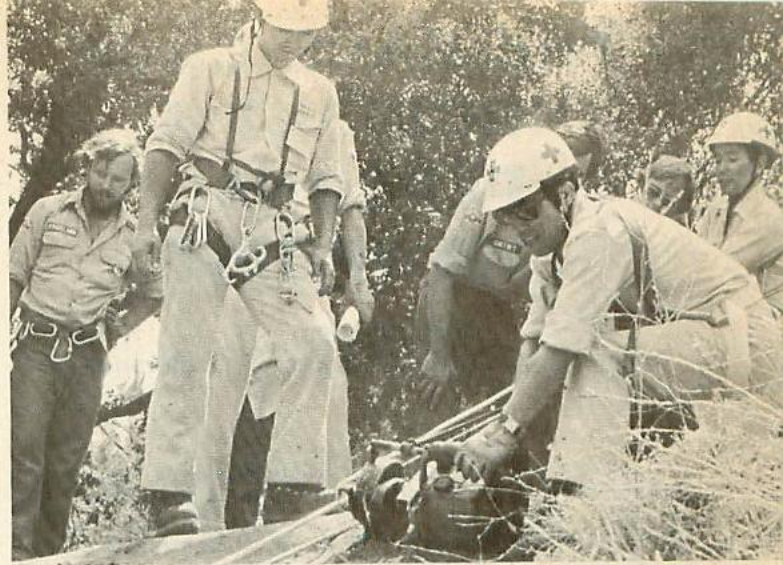
by: Dick Sale

Sierra Madre Search and Rescue Team, California

Photos by Jerry Newcomb



After observing the use of the gasoline powered backpack winch the Japanese try their hand at operating the system. Mr. Kon, the trigger man on the winch was impressed by it's operation. Note the comparison of hardware as displayed by a Japanese team member and Pete Frickland of SMSR as shown to the left of the winch operator.



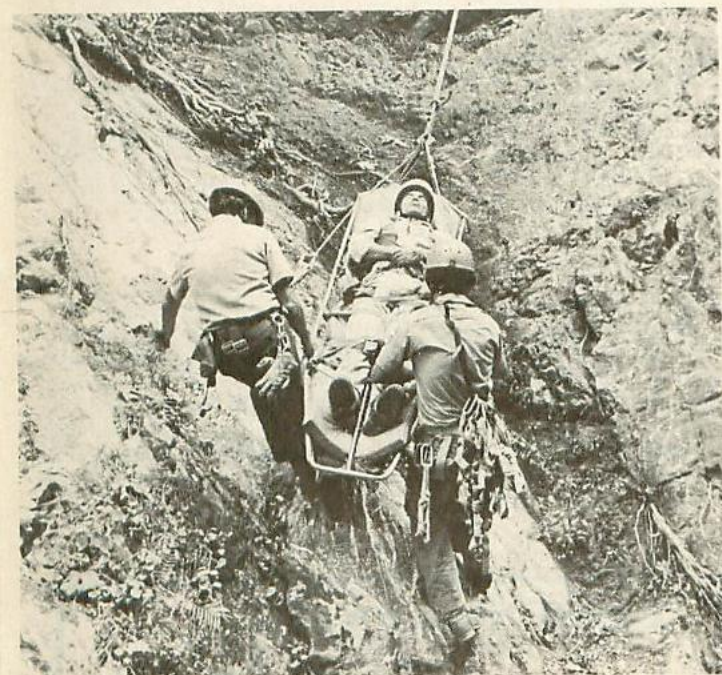
True team work as the tall (6'5") and the not so tall try out the new Russ Anderson wheel on a litter. SMSR team V.P. Arnold Gaffrey and Ladd Anderson (no relation to Russ) are working with Japanese team members.



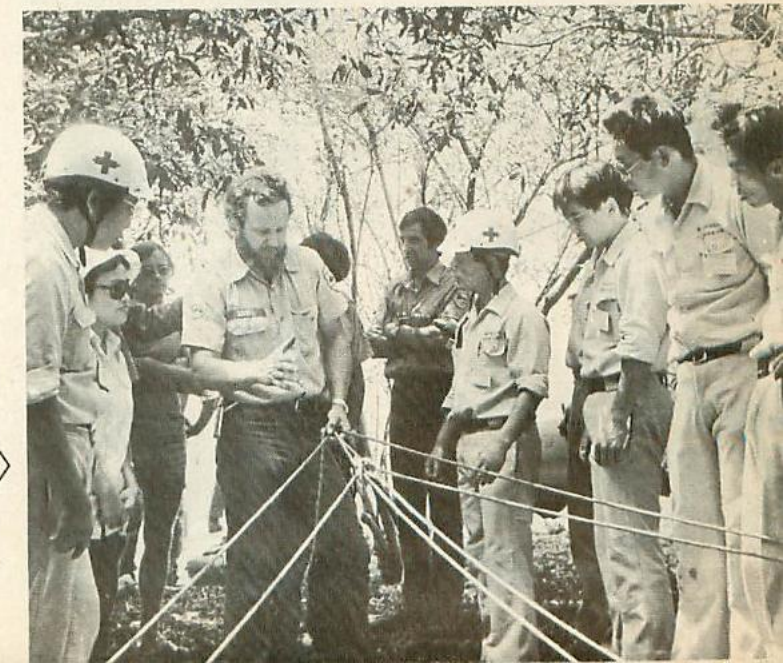
SMSR team members Bob Howery (rear) and Dr. Larry Newton (foreground), litter attendants, complete the litter lowering demonstration. [Note improvised foot stirrups for victim.]



A vertical litter lowering is demonstrated with a Japanese team member as the victim. [Note pad in litter for victim comfort.]



Bob Kroll discusses a self equalizing anchor system with the help of Ms. Jane Urata, Japanese language interpreter from the Los Angeles County Sheriff's office, while Yuji Sawaki (left) Director of the Japan Red Cross Mountain Rescue Team and fellow members look on. [Note Japanese pants construction with strong belt loops and reinforced knees.]



THE CASS CAVE INCIDENT: A PERSONAL VIEWPOINT

by: Bill Clem,
Appalachian Search and Rescue Conference

I received a call from Nancy Dorset of Mountain State Grotto (MSG) at 21:08 on 28 Aug. 77. She informed me that she was notified by Greenbrier Grotto (GG) of a rescue situation at Cass Cave. I took this as official notification of the Cave Rescue Communications Network (CRCN) despite the fact that GG had not notified CRCN. Calling Jerry Kyle's, I was told by a friend that a party of three was trapped below the falls in Cass Cave and one caver was seriously injured or dead. GG was notified of the CRCN callout at this time. During the next few minutes I notified Tom Vines, District of Columbia Grotto (DCG), Ray Cole, DCG, Bob Barlow, V.P.I. Grotto (VPI), (with instructions to callout VPI and Blue Ridge Grotto (BRG)), Bill Queitzsch, Blue Ridge Mountain Rescue Group, Nancy Dorset, MSG, and attempted to notify the Shenandoah Valley Grotto without success. Nancy assured me an adequate response, so I gathered Steve Wagner at 22:15, and we winged our way to Cass, West Virginia.

Upon our arrival we received directions from the National Radio Astronomy Observatory security guard, and arrived at Cass Cave uneventfully. We conferred with Bill Balfour, Chuck Hempel, and the local State Trooper. On returning to the cave with our equipment, we ran uneventfully. We conferred with Bill Balfour, Chuck Hempel, and the fairness to GG, Jerry and Debbie were on their way to call CRCN. Bill and Jerry asked that I immediately reach the two cavers in the pit. Chuck was trying to set up field phones and communications. I reassured all that help was enroute, and we decided to proceed.

A TECHNICAL RESCUE

Jerry and I entered the cave at 24:00 or 0:100, and came quickly to the waterfall area. Bill Jones had already decided to arrange a hauling system from the belay loft based on the previous rescue in 8/76. At first another caver was drafted to drop the falls and check the caver suspended there.

The personnel in the photo from the Twigg's Cave rescue are (l. to r.) Barry Baumgardner, an EMT from West Virginia; the victim, James Wright; Bill Clem, the author a member of the Appalachian Search and Rescue Conference, the administrator of the Cave Rescue Communications Network, and who was on the cave rescue program in Nashville; Ben Glaser, a physician, who is a member of the Appalachian Search and Rescue Conference.



As he had had little experience in technical rescue, he asked that I attend to this. (I should mention that this was my first experience with a waterfall). Pulling on a short wet suit, I headed for the falls. Bill Jones decided to send Sara down from the belay loft to reassure the two cavers in the pit when I lowered the third caver.

SUSPENDED UPSIDE DOWN BY HIS KNEES

Leaving all my packs — trauma kit, rescue pack and cave pack — to be lowered once I reached the bottom, I began to descend on the rope that the original rescue party said reached the bottom. I was armed with my usual solo rescue gear, a carbide lamp, two flashlights, and, as I was headed over the edge, I grabbed an electric everready headlamp, and slung it around my neck. I descended down through the waterfall @ 70' to a small 4 x 6' 45° ledge. The third caver was suspended from two ropes — the initial red Edelrid climbing robe he was ascending, and a piece of 7/16 goldline, which has been fastened to him by his own party. He was suspended upside down from slings around his knees. A quick physical exam indicated that he was dead. Rigor mortis had begun to be evidenced, and, though cold temperatures prolong the onset of post mortem rigidity, it was my opinion that he had been dead for several hours. He was in the middle of the waterfall, was without gross evidence of trauma, and my impression was that hypothermia was the most likely cause of death. I attached a seat sling to him, and, using this and his own chest harness, I tied him into the end of my 7/16 goldline rappel rope. Having already tied myself off on the rope upon my arrival, I fixed a cam above my rappel set (CMI-8), attached a rappel rack to the cam, and threaded the rope attached to the body through the rack. Having tied this off, I cut his slings, and lifted him off the ledge. Upon the addition of the combined weight to the rope, I "fell" about 10-14'; once stabilized, I lowered the body app. 30', where it hung on a small V-shaped ledge. I removed the line from the rappel rack, tied it into my own rappel apparatus, rappelled to this new level, reset the lowering device, and lowered the body the remaining 50-60' to the floor of the pit without complications. During the entire recovery, I was in the waterfall, and was unable to get clear until I rappelled to the bottom of the pit.

STAGE I HYPOTHERMIA

Upon reaching the bottom, I examined the two other cavers who were in Stage I hypothermia. Over the next hour or so, Sara succeeded in rewarming the pair with dry clothes, hot drink, and food. A hauling line was set up, a parachute harness was lowered, and both cavers were evacuated uneventfully. Afterwards, a Neil-Robertson stretcher was lowered to the bottom, I placed the body in the stretcher while it was in the waterfall, and the body was removed with difficulty.

As I had been in the water for as long as two hours on 4 separate occasions, I was feeling chilled and a bit tired. My cave pack with my ascending gear had not been lowered with my other packs, so I asked Bill Jones for a lift out of the pit. The remaining equipment was gathered for the final haul, I was lifted out, Sara ascended on the fixed line, and the equipment was removed. We left the cave at app. 10:00, 29 Aug 77.

COMMENT

All in all, things ran exceptionally smoothly. Communications were excellent — courtesy of Chuck Hempel, Bill Jones and Bob Barlow did an excellent job in rigging and executing the hauling system that allowed removal of the three cavers and myself. Sara handled herself well, and was indispensable in the events on the pit floor. Bob Balfour and the local Trooper did a fine job on the outside it seemed, and a good response from those cavers I had asked to come was a large deciding factor in the success of the operation. Jerry Kyle and the remainder of the GG handled the initial stages quite well. ●

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THE FIRST STEP IN THE "SECOND MILE"

INTRODUCTION

There is apparently a tremendous interest in the development of an Emergency Medical Technician-Wilderness program. Great quantities of information have been received in the form of outlines, response to the earlier mailings, manuals and descriptions of courses already being taught. Many thanks to all who have sent in this material.

And, yes, there ARE programs of this type being presented in some limited areas of the country where SAR teams have been interested and there has been the right interface between them and the medical profession. They vary widely in scope and content but can serve as a base for some of our work.

The material presented here is not the work of the chairman, but is a compilation in an attempt to organize the material into the modular concept. It is oriented toward the "wilderness" environment and could be modified easily to include modules on the "rural" environment. So —

For sake of clarity, let's redefine those two. "Wilderness" implies ANY area (high cliff, swamp, center of a disaster scene, ocean) where the victim is at least one hour from any vehicular access. "Rural" implies vehicular access to the victim but some distance from any definitive care unit (such as a road-head 20 miles from the nearest clinic, a small, isolated town, etc.)

PROBLEMS

They'll be with us always. Some of them have been noted before. They're listed here to regain your awareness. We hope you'll consider them and work on them in your areas. Solutions are welcome!

- ★ Without central leadership many programs involving paramedic/EMT/SAR personnel are in operation, but none are "certified" and they are on many levels and in many disciplines. This is not necessarily bad, for the needs of a rock SAR team are different from those of a desert unit. But we must accept this and not be critical of those using techniques that fit their particular needs.
- ★ We still lack victim orientation in some of our programs. We need to teach the material that the rescuer can effectively use to help HIM and not elaborate in areas that are only for the advanced personal satisfaction training of the rescuer.
- ★ Work needs to be done on terminology so that we all speak the same language — both in SAR procedures and in paramedical procedures.
- ★ Regardless of what program is developed it will be of little use unless it is disseminated with the ultimate goal that the 'first-in' rescuer to ANY victim has this knowledge. This will be our biggest problem — to prepare the materials, AND get them to the field rescuer — considering his problems of the time he has for training, how much he can afford to pay, etc. Through colleges, weekend seminars, field training teams, etc. it MUST be disseminated.
- ★ We must realize that we cannot be all things to all people. If we try to put out an emergency care program that will be for the scout leader, hiker, rescuer and expedition leader all in one package it will be too complex for some and too elementary for others. We must limit ourselves to the EMT-W concept and avoid the other areas. (Incidentally, these other areas are already being well managed by red cross, survival education and mountain medicine books, courses and seminars.) We must concentrate on training the rescuer.
- ★ All of us — even your chairman — often believe we are 'experts' in this field. We can't afford that luxury! We must presume the reverse and keep an open mind to what we learn from others as well as be willing to change as we find something better.
- ★ We can't presume that just because someone is a doctor, or nurse, or holds an EMT card that they are able to manage wilderness care. Particularly with the wide variety of EMT programs abounding mere course completion is not enough. We need review and reteaching in many areas as part of our program and some evaluative criteria — eventually certification.
- ★ We have four problems on any major wilderness victim management mission and they will vary from mission to mission, so our program must be flexible enough to consider them. They are: (1) Terrain and access. (2) Environment and conditions of nature (blizzard, high

wind, etc.) (3) Time — to reach the victim, to manage him, to evacuate him. (4) Communications — and how to manage if we are unable to establish them.

- ★ Lastly, in the outline to follow, we were unable to establish any time frame for each section of the course outline. That will have to be developed later. If the briefest time for an EMT-W course were used it would be about 80 hours. The longest recommended was over 250!

GENERAL CONCEPTS

These were recommended by the majority of contributors. Some are redundant, and some have been mentioned before. They are included here — as is much of this material — for consideration and discussion. They are not in any order of priority.

The EMT-W *MUST* have a very high proficiency in the *BASICS*. In the words of Dr. Norman H. Mellor, M.D., Corona, California, "Most important is to save the victim's life. If you can't save his life after you get to him — why go? You should have sent the coroner instead. In other words, the three things that are going to kill him are: (1) Cardiac arrest, (2) Respiratory arrest, (3) Shock. And these three are potentially involved in all of the subjects in this course."

- ★ We are working closely with physicians and DHEW to set up pilot programs in selected areas to test our concepts, the amount and type of training needed, gear requirements, etc. We'll need this practical experience to revise our outline.
- ★ The need to gather data on existing techniques and research is critical *and* this data needs wide dissemination as it becomes available.
- ★ The need for new equipment for our special area — and applications of present equipment — is still great. Research in this area could be included in some pilot programs.
- ★ The program must present a basic body of information in modular sections and be so designed that each mod has its own extensive *practical* training, evaluative tools and testing program. Trainees may have to take all modules of the basic program or, if they can meet the practical and testing requirements they might skip one or more of them. This way the program can be flexible to account for variations in basic training and experience of the individual.
- ★ Beyond the basic course will be additional modules for special rescue and special conditions as noted in the outline included. They would be taken by those involved in a particular field or by those wishing cross-training.
- ★ In ALL cases both the basic and special rescue modules must be tailored to fit the parameters of the physicians who will be specifically advising the SAR unit taking the training *and* the hospitals with which they interface. At this time this will mean a wide variety of freedom and limitations on field care because of the wide gap in what is approved by doctors and hospitals throughout the country (in Denver alone some emergency physicians *never* want a 4-poster applied for neck injury while others say the patient should *always* come in with one on!!) Hopefully, this will be solved nationally by some group (HEW, AAOS, AMA,??) but for now we must be realistic and accept it.
- ★ The course must be readily available to the field SAR team member.
- ★ The course must be developed by first an outline (included here), then concept acceptance, then testing, then presentation, then reevaluation and restructuring. This must be continuous. This course will NEVER be completely written for it must be updated continuously.

ACTION

Now, *you* tell *me* — what do you think of the materials here? How can we get the program started? How can we learn what's new in this field? How can we get the needed equipment? How can we test this concept? Where do we go from here?

THE FUTURE

Most of our work to date has been on this outline for an EMT-W course. That's not the sole function of this committee. We want to continue getting answers to the questions just asked, but we're also interested in all aspects of emergency medicine and some long range plans include equipment research, a central data bank of information, coordination of the efforts of many groups — such as CAP, ski patrol, etc. in the care field, and study of proper identification and certification of emergency care personnel. (Red Cross is recognized. Blue has become paramedic. We're looking at an orange cross for EMT-W superimposed over a blue compass).

But the greatest plans and hardest work will be useless unless YOU become involved by supporting the committees plans, providing information and making yourself heard. How about it? ●

EDITORIAL:

The SAR Problem in the United States

Is there a SAR problem in the United States? Yes, I definitely think there is a SAR problem, not to the extent of our capabilities to respond to emergencies, but in the communication exchange of information, ideas and techniques and resources used throughout the United States.

As you well know, SAR is not new to the United States. SAR has been with us ever since life began. Adam had to find Eve somewhere.

What is new, is the different concepts and techniques used to accomplish SAR objectives. This is where the problem lies. How do we effectively communicate these improvements throughout the United States so that others can capitalize on the new technology and "not have to re-invent the wheel."

I think the answer to that problem has been found, but still requires tons of refinement and money before we are able to say we have accomplished our objective. Of course, that answer is NASAR.

This is no simple answer! The National Association for Search and Rescue must be able to effectively communicate between numerous organizations from Federal Government agencies, including the military, to state agencies, to local entities who are actually responsible for directing the rescue effort down to "Sam Saver", the individual performing the rescue. NASAR must provide the medium of exchange for all. How we accomplish this, will be up to all parties concerned. We at NASAR must "sell" NASAR to all concerned. To succeed, we must all support the objectives of this organization. NASAR has not yet received support from all agencies or individuals involved in SAR.

The support we need must be financial as well as active participation of those involved in SAR. Without either one, we will not succeed or survive.

Caution, many of those not closely involved look upon NASAR as a regulatory type of organization. We must change that image. We do not want to regulate or dictate policy or techniques. NASAR wants to provide a exchange of information ideas and techniques "so that other may live."

Thomas A. Stadt
Chairman — NASAR Membership Committee ●

BOOK REVIEW:

COORDINATION OF VOLUNTEER SAR UNITS

by Captain Marvin J. Jacinto
Placer County Sheriff's Department, California
32 pages \$3.00
NASAR
P.O. Box 2123, La Jolla, CA 91020

This nuts and bolts personal philosophy of the Sheriff's SAR Coordinator's job is apparently very successful in dealing with volunteers. But it is still honest and should be part of every Sheriff's SAR library. The leadership role of the SAR Coordinator proposed in this timely document is a bit unique and unusual in assuming the initiative and responsibility for organizing formal SAR units. Yet the author goes even further by suggesting ways to fund this activity. The bottom line of this fine author's document can be quoted, "...he (the SAR Coordinator) has a moral obligation, if not a legal one, to provide SAR capabilities to his area."

Dennis Kelley ●

NASAR CONVENTION

Rick LaValla, President of the National Association for Search and Rescue, speaking after a recent Conference Committee meeting in Albuquerque, announced plans for a vastly expanded NASAR Convention this fall. The NASAR annual convention, scheduled for October 5-8 at the Albuquerque Convention Center will include a wide range of exhibits which support the theme of the NASAR convention and the mission of the NASAR membership generally. Rick Goodman, 2nd Vice-President of the Association and General Chairman for the 1978 Convention, along with Bill Squire, Exhibits Director for the 1978 Convention have begun preparations to solicit an elaborate array of exhibitors relating to the many facets of search and rescue as well as the overriding theme of safety in the outdoors. Exhibits Director Squire is preparing a quality exhibit show planned to include exhibitors of equipment, supplies, and services related to search and rescue and all areas of outdoor recreation including hunting, fishing, camping, hiking, mountain climbing, skiing and the like. Squire views the exhibit show as supporting both the Association and the Convention by providing exhibits which address a three-dimensional orientation:

1. Materials and services used by Federal agencies involved with the search and rescue mission;
2. Equipment, supplies, gear, and services used by search and rescue personnel, individually and in teams, in search and rescue operation;
3. Sportsman and outdoor enthusiasts who attend the convention and exhibit show out of an interest in outdoor sport and recreation, but who will, through their attendance, gain insight into preventive search and rescue, namely develop new skill in how NOT to get lost or injured during outdoor recreation OR what to do if becoming lost or injured.

Exhibitors at the 1978 NASAR Convention will have an outstanding opportunity for contacts with outdoor sportsmen and enthusiasts, in addition to NASAR members and convention participants. The Convention's exhibit show will be extensively announced within the Albuquerque -Santa Fe communities, inviting people to visit the exhibit show. Furthermore, the NASAR Convention dates coincide with the famous Albuquerque International Hot Air Balloon Fiesta. This event will be attended by nearly 25,000 people, mostly outdoor enthusiasts and who also will be invited to attend the Convention exhibits.

All in all, the 1978 NASAR Convention has the makings to become a superb event. The meetings and seminars will provide new learning and challenges to NASAR members and convention participants. The exhibit show will offer extensive insight into the supplies, materials, gear, and services available to NASAR personnel and outdoor sportsmen. The preparation and coordination of the exhibit show will be done by CAM-S (Convention and Association Management Services) who have been retained to provide this service for the NASAR Convention.

NASAR members can assist in the preparation of an outstanding exhibit show. NASAR members should suggest to the suppliers and vendors they know to provide quality goods and services that those vendors participate as exhibitors in the Convention. Members should contact Bill Squire with suggestions for possible exhibitors or refer potential exhibitors to:

Bill Squire
4720 Hilton Avenue N.E.
Albuquerque, NM 87110
(505) 881-6210

or

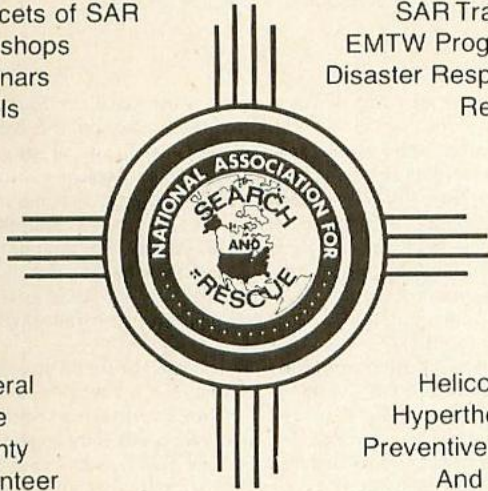
CAM-S (Convention and
Association Management
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Abstracts (200-300 words) of proposed workshop with learning objectives clearly stated — DUE MAY 15, 1978

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Other proposed papers for printing, distribution and sale by NASAR — DUE JULY 15, 1978

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THE U.S. COAST GUARD AUXILIARY — SPECIALISTS IN SMALL BOAT SAR AND ITS PREVEN- TION

Unlike its parent service, the Coast Guard Auxiliary is not well known to the national search and rescue community. Yet, in 1976 this organization of civilian volunteers saved the lives of 878 recreational boaters, assisted some 56,000 others in distress and saved, or otherwise aided, nearly \$170 million worth of property.

SEARCH AND RESCUE MOST IMPORTANT

As the missions of the Coast Guard continue to grow with increasing responsibilities for environmental protection, tanker safety, and marine law enforcement, the importance of the Coast Guard Auxiliary and its work in small boat SAR are also growing. While the limited resources of the Coast Guard are being augmented in many mission areas by the Auxiliary, none is more important than that of search and rescue.

In 1976 alone the Auxiliary responded to over 19,000 requests for assistance and spent tens of thousands of hours on safety patrols. In addition, their facilities routinely supplemented busy search and rescue stations and even stood in for Coast Guard cutters and aircraft. Seven Coast Guard lifeboat stations on the Great Lakes have been completely manned by Auxiliarists during peak boating periods since 1973. This has resulted in increased SAR coverage and an annual savings to the tax payer of millions in boat and personnel costs.

by: LCDR John F. Ebersole, USCG
Director of Auxiliary
Eleventh Coast Guard District

The search and rescue work of the Auxiliary over the years has presented many challenges. They have assisted in flood relief and other major disasters. They have recovered survivors from an airline crash at sea. But, the day-in, day-out SAR work of the Auxiliary is seen in their service to America's pleasure boaters. When it comes to towing the disabled small boat, recovering a capsized sail boat or freeing a grounded fisherman it's the Auxiliary that both the boating public and the Coast Guard will frequently turn to.

In carrying out their work of assisting the Coast Guard and the nation's boatmen, the members of the Auxiliary volunteer not only their time and talents. They also volunteer the use of their private boats, airplanes and communications equipment. In return, they receive only an occasional "thank you" and reimbursement for some of their fuel.

AGES 17 TO?

Today, there are some 46,000 persons in the Auxiliary. Surpassing the Coast Guard in size by several thousand members, the Auxiliary is composed of men and women from all walks of life and all age groups (17 to ???). Housewives, mechanics, doctors, students, teachers, businessmen and the retired work side-by-side in the Auxiliary, sharing a common interest in boating and public service. In addition to themselves, these members, in 1977, have offered 6510 vessels, 95 aircraft and 512 communications facilities for use at the Coast Guard's direction. These vessels range in size from skiffs to radar equipped, ocean going vessels. The aircraft are equally diverse including everything from single engine, two placers to a PBY.

As varied as its equipment, the Auxiliary may be found anywhere there is a Coast Guard responsibility for boating safety. There are, for instance, Auxiliary flotillas in Alaska, Hawaii, Guam, Puerto Rico and throughout the Continental United States. A Coast Guard Auxiliary vessel is as likely to be found towing a disabled boat on Lake Tahoe as Lake Superior. The Ohio River and the Columbia are as familiar to this organization of expert seamen as are the bays of Chesapeake and Mobile.

Continued

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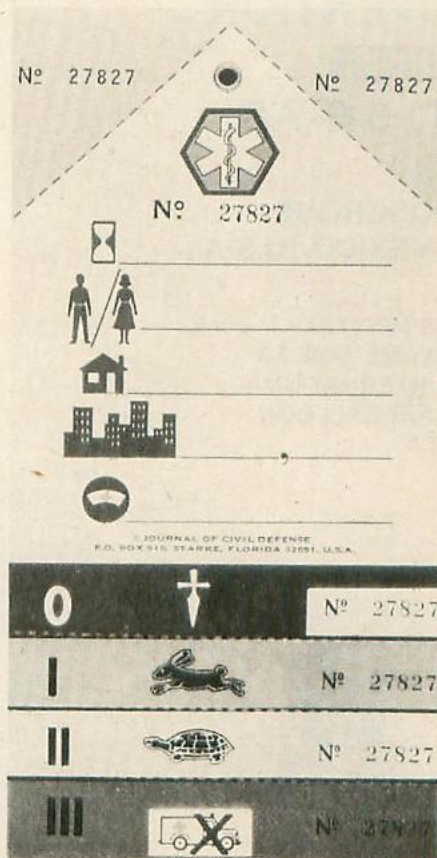
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U.S. Coast Guard Auxiliary emergency response.

PROFESSIONALISM, A TERM NOT OFTEN USED

To aid the membership in conducting these far flung operations, the Coast Guard provides advanced training in search and rescue, communications, seamanship, navigation, weather, and patrols. This training, coupled with strict standards for the Auxiliarist's equipment, has helped the organization achieve a reputation for efficiency and professionalism (a term not often used in reference to a group of unpaid volunteers).

This unique arm of the Coast Guard was created in 1939. Established by act of Congress, the Auxiliary is charged with a responsibility to: (1) Promote safety and effect rescues on and over the high seas and navigable waters; (2) Promote efficiency in the operation of motorboats and yachts; and (3) Facilitate other operations of the U.S. Coast Guard. The USCG's auxiliary is the only civilian boating organization with such a mandate.

Even though larger than the Coast Guard, the Auxiliary recognizes that it can not hope to meet its responsibilities in boating safety through an aggressive search and rescue program alone. With a boating population of 52 million people and 9 million boats, the Auxiliary is actively working to prevent the search and/or rescue case from ever occurring.

THE KEY TO BOATING SAFETY

In cooperation with state and local boating authorities, the Red Cross and the U.S. Power Squadrons, the Auxiliary is involved in a comprehensive boater education effort. Like the Coast Guard, the Auxiliary is strongly committed to the belief that the "key" to boating safety and SAR prevention lies in effective operator education. Toward this end the Auxiliary sponsors courses in basic boating, seamanship, sailing and navigation. These vary in length from 1 to 13 lessons. They are offered at no cost to the student, other than for materials.

The "preventive SAR" efforts of the Auxiliary has another facet in its Courtesy Motorboat Examination (CME) program. At no cost to the recreational boat owner, a specially trained member will examine any mechanically propelled vessel up to 65 feet in length to determine if its safety equipment meets federal and state law and the additional standards of the Auxiliary. Those vessels in compliance with these standards are awarded a special decal. This decal is recognized by marine law enforcement officials as indicating voluntary compliance with the boating laws.

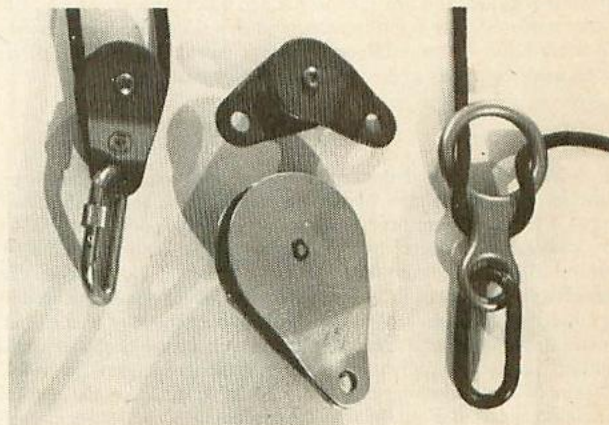
The effectiveness of the Auxiliary's three pronged approach to boating safety (education, equipment examination and a prompt SAR response) has been supported by an analysis of 1976 boating accident statistics. Last year saw fewer boating fatalities than at any time in the past decade. As the major contributor to the national boating safety program, the auxiliary deserves as much credit for this dramatic reduction as for the 878 lives which it saved directly.

In the years ahead the various groups which make-up this nation's SAR team can expect to hear much more of the U.S. Coast Guard Auxiliary. It is an organization as dedicated to the prevention of SAR as to its skillful execution.

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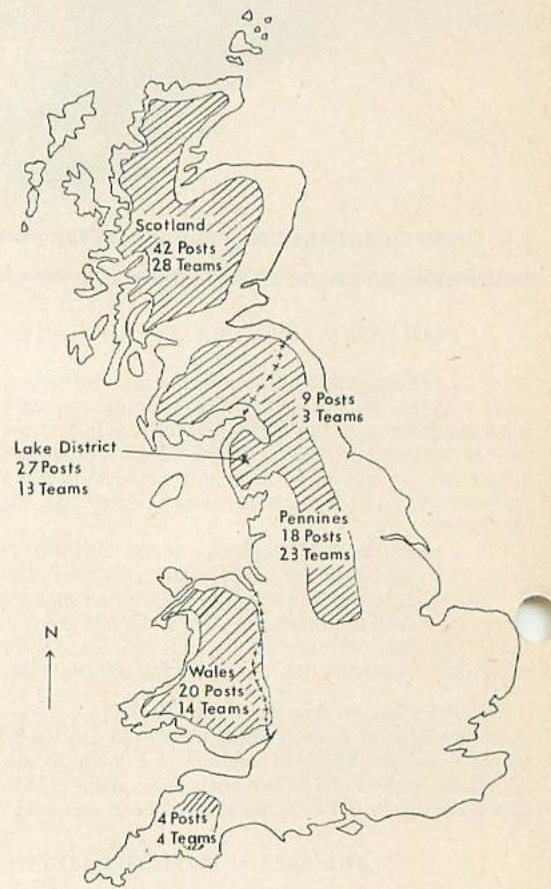
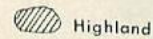


Mountain Rescue Post sign.

MOUNTAIN RESCUE ORGANISATION IN BRITAIN

by: Bill March,
University of Calgary, Canada

LOCATION OF MOUNTAIN RESCUE POSTS & TEAMS IN BRITAIN



There is a fundamental difference between mountain rescue in Britain and mountain rescue in the Alpine countries of Europe. In the European countries like France and Switzerland, mountain rescue is in the hands of professional guides and any person rescued will face a very heavy bill for services rendered. The opposite occurs in Britain where there has always been a tradition of mountaineers helping mountaineers and all rescue services are given freely at no cost to the person being rescued.

FOUNDED IN 1933

In order to understand this situation one must examine the history of mountain rescue in Britain. Mountain rescue is the responsibility of the Mountain Rescue Committee which was originally founded in 1933 as the Joint Stretcher Committee by the Rucksack Club and the Fell & Rock Climbing Club. The committee produced a report in 1935 recommending materials and equipment including a stretcher which should be used in the steep and rough country of British hills. This stretcher was called the Thomas stretcher after its designer and is still in use today as standard mountain rescue equipment. The committee grew until in 1946 the explosion of rock climbing and hill walking resulted in the committee arranging ownership of all the first aid equipment to be vested in itself. In 1947 the government recognized the importance of rescue work and the then Ministry of Health accepted responsibility for the cost of supplying, repairing and replacing the basic equipment including morphia, through the National Health Service to all Mountain Rescue posts affiliated to the Mountain Rescue Committee.

MOUNTAIN RESCUE COMMITTEE IS OFFICIAL BODY

The committee continued to provide additional equipment and in 1950 it took on the status of a Charitable Trust the better to deal with the subscriptions and donations which it needed to continue its work. At the present time the Mountain Rescue Committee still holds its charitable status; it is still a voluntary body of representatives of organizations interested in mountains and now includes many different agencies including the Police, Royal Air Force Rescue Service and the Sports Council; and it is still the official body through which the Department of Health & Social Security recognizes the affiliated Mountain Rescue teams and approves the issue of morphia and equipment to them.

The objects of the Mountain Rescue Committee are as follows:

1. To provide and equip rescue posts in the mountain areas of Great Britain.
2. To maintain and replace equipment as required.
3. To encourage and develop mountain rescue teams where they are required.
4. To stimulate research/experiment in rescue first aid methods.
5. To further the cause and improve the efficiency of mountain rescue.
6. To represent mountain rescue interest to other bodies.
7. To raise funds and administer them for these purposes.

The basis of the Rescue Service in Britain is the mountain rescue post which may be manned or unmanned. The position of all the posts are marked on the Ordnance Survey maps used by climbers and hill walkers and each post has a mountain rescue post sign which is always displayed in a prominent position. The posts contain a stretcher and two rucksacs containing medical supplies. In some districts but not all they are looked after by mountain rescue teams and are sited where it has been found that they are most needed.

A stretcher evacuation using the old standby, manpower.





The Thomas Stretcher.

TEAMS ARE LISTED IN MOUNTAIN RESCUE MANUAL

In addition to the rescue posts volunteer rescue teams have been established in many mountain areas and these are listed in the mountain rescue handbook. The members of the teams are climbers and hill walkers and have the great advantages that they are familiar with the terrain in their district. They train on a regular basis and hold joint exercises with the Police and the Royal Air Force Mountain Rescue. The Royal Air Force maintain six mountain rescue teams 24-36 strong to cover areas especially dangerous to aircraft. Although service requirements have priority they are available to assist in civil rescues and can be called on by the Police. The Police forces are the statutory body responsible for the co-ordination of search and rescue and are in overall control. Unless it is actually quicker to get directly to a manned Mountain Rescue Post all calls for help must go through the 999 system to the Police. They will then call out the volunteer rescue teams and public services needed. In most areas the police work in close liaison with the civilian teams and elsewhere they have formed specially trained teams themselves.

ONE DOG EQUALS 20 SEARCHERS

One further group the Search and Rescue Dog Association founded by the Scottish mountain rescue expert Hamish McInnes provide a valuable service to mountain rescue. The association trains dogs and handlers for search in mountain country and avalanche. A trained dog is equal to approximately 20 searchers and many more when the casualty is buried under snow. Annual courses are held each winter and any rescue team member or mountaineer may attend. The dogs are graded and a list of addresses and telephone numbers of dogs handlers is compiled for each mountain area. The association is divided into three areas, England, Scotland and Wales and each country has an Honorary Secretary responsible for administration.

Each major mountain area is now served by many different teams each covering a particular area with definite geographical boundaries. In order to improve local efficiency and co-ordination local associations have been formed e.g. the Lake District Mountain Accident Association, The North East England Mountain Rescue Co-ordinating Panel, the Mid Pennine Mountain Accident Panel, Peaks District Mountain Rescue Organization, the North Wales Mountain Rescue Association, South Wales Mountain Rescue Association. These associations co-ordinate major search

Continued



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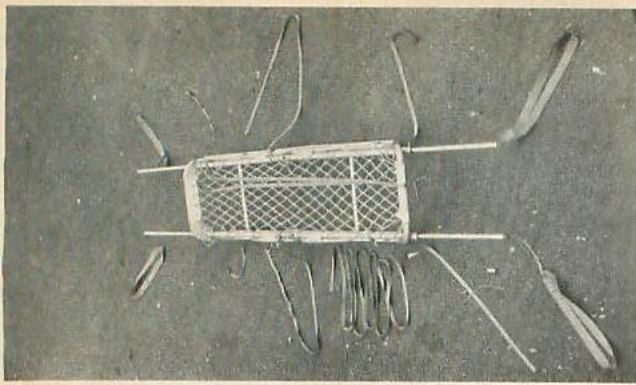
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operations in conjunction with the police and provide back up support for multiple rescues occurring in one particular area. In Scotland because of the geographical situation and remoteness of the Scottish mountains, rescue work is organized by the Mountain Rescue Committee of Scotland. Both committees maintain close liaison.

ADMINISTRATION OF MORPHINE

The overall administration of the mountain rescue posts is the responsibility of the Hon. Secretary of the Mountain Rescue Committee. Every time rescue kit is used from a post he must be informed and also an accident report is requested in order that an accident statistic may be compiled and analyzed. Another responsibility of the Hon. Secretary is to monitor the use of morphine which is used in ampoule form in the standard first aid kit. The administration of morphine by mountain rescue personnel is allowed in the U.K. because of the need to alleviate suffering in remote mountain accidents where no doctor is available.

DONATIONS FROM VICTIMS

As has already been mentioned the Ministry of Health supply through the National Health Service, the basic first aid kit and support is also given by the National Parks. Other expenses are borne by the rescue team members who give their time for free and also raise money by various fund raising efforts. Donations from victims and relatives to the teams or directly to the Mountain Rescue Committee are an additional source of income. Until recently the Committee provided insurance cover up to £1,000 (\$1,750) for death or serious injury to all volunteer rescuers including while on training. The police now insure all members of official mountain rescue teams up to £10,000 (\$17,500) and the Mountain Rescue Committee maintain an Emergency Fund for injured rescuers who can show genuine hardship.

The organization of mountain rescue in the U.K. is, therefore, basically decentralized and almost self financing. The basic principle of self help reflects the underlying sport and tradition of British mountaineering.

APPENDIX: AUTHORIZED LIST OF EQUIPMENT

- 1 or more stretcher. (with head shield for selected posts).
- 2 Rucksacks including one medical rucksack.
- 1 Casualty bag and one large Polythene bag, 6ft.6in.
- 6 Triangular bandages. 12 6 in. Domette bandages.
- 1 1" Zinc Oxide strapping.
- 1 3in, Elastic Bandage.
- 2 Straight Aluminum Arm Splints or Kramer wire splints.
- 1 Inflatable leg splint; 1 inflatable arm splint (For selected posts)
- 1 Airway Brooks, Hewit's or modification (Ambu Respiratory apparatus for very busy posts only)
- 1 Protective Helmet (For selected posts)
- 1 Container Antiseptic Powder or Liquid.
- 6 Factory Dressings or Equivalent.
- 1 Pocket Gauze. 1 1/4lb. packet cotton wool
- 1 Pair Surgical stainless steel dressing scissors.
- 2 Dozen safety pins.
- 1 Electric Hand Lamp (For selected posts)
- 3 Cups including 1 Feeding cup.
- 2 Thermos Flasks.
- 3 Ampoules of Morphine (Omnopon) containing 15 milligrams.
- 1 Pair Stainless steel dressing forceps.
- 1 Ampoule of surgical needles and sutures. (For selected posts).



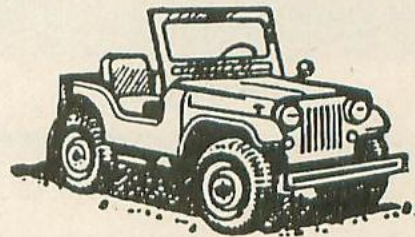
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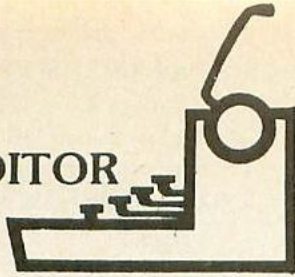
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LETTERS TO THE EDITOR



LOW BRIDGE!!!!

Dear Editor:

By a coincidence I just was given your Fall 1977 issue.

Concerning the picture of the SAR rescue by one of our helicopters under the Golden Gate Bridge: it was much more of a feat than you imply. **DID YOU KNOW THAT THIS RESCUE WAS ACCOMPLISHED IN THE FOG AND RIGHT UNDER THE BRIDGE????** That takes some doing!!! The pilot has been duly decorated by the U.S.C.G.

ROLFE W. SALIN, Captain, USPHS
District Medical Officer

DOGS????

Dear Dennis,

I recently received a copy of the Colorado State SAR Report, 1977, by Blair E. Nilsson, Colorado SAR coordinator, in this report there is a paragraph which reports on a tracking Dog Clinic presented at Camp George West EOC near Denver on August 6 and 7, 1977. There are two points in this paragraph I would like to address.

First, to suggest Glen Johnson to fill the shoes of Bill Syrotuck is absurd. Bill was briefly involved with tracking dogs early in his S&R career. However, as he was interested in improving the value of dogs in S&R, he developed the air scenting concept and was never involved with the development of tracking dogs again. As a coordinator of S&R missions, he employed available tracking dogs in situations which indicated their use would contribute to the mission.

To find a replacement for Bill Syrotuck as it relates to the use of dogs in S&R NASAR could and should look within its own ranks. There are members with over ten years experience in using Air Scenting dogs in Search and Rescue. A member unit, The American Rescue Dog Association, is undoubtedly the most experienced, and most dedicated and it belongs to NASAR.

Another point I would like to clarify is that the Tracking Dog Clinic held August 6 and 7, 1977 at Camp George West was not intended to train tracking dogs for use in Search and Rescue.

The clinic was designed to provide purebred dog owners with a structured program whereby they could train their dogs to pass the American and Canadian Kennel Clubs' Tracking Tests. There is a world of difference between Search Trailing and AKCT Tracking. Glen and I share the feeling that a dog with a Kennel Club Tracking Title is little, if any, value in an actual search situation. Much more training in many other aspects to make a dog and handler an asset to search situations.

Thank you for this opportunity to clarify.

Very truly yours,

LORENZ D. ARNER
President, International Federation of Rescue Dog Associations

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about your changes of address. When you move, drop us a line with your new address so we can get you *Search and Rescue Magazine* on schedule. But PLEASE, send us both your new and OLD address, just to help keep our records straight.

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THE NEED FOR...

Dear Ms. McCoy,
Consulting Editor

NASAR's comments about integrating SAR techniques into urban emergency service provision were proven tragically on target the Monday after the Symposium when Kansas City was hit by the flood. Perhaps little could actually have been done to reduce loss of life, but I'm sure that the flood must have given pause to many city administrators when the flood was raging and traditional ground-based methods of providing care suddenly became almost totally useless!

Please accept my thanks to you and the members of NASAR that came to Kansas City to provide a much-needed perspective in emergency health care delivery.

Sincerely,

C. R. Sayler
Lawrence, Kansas

SNAKE-BIT AGAIN!!!

Dear Editor:

Thank you for your kind letter, relating to the use and value of "snakebite freeze."

I regret that I cannot advocate this approach to the first aid treatment for snake venom poisoning and, thus could not recommend this or any other similar product. Our group feels that we have outlined our recommendations and opinions in the medical literature quite thoroughly and that we do not wish to become involved in such unsolvable problems or opinions relating to first aid.

As I said more than 25 years ago, if the first-aider does nothing more than immobilize the extremity and gets the patient to a physician as quickly as possible he has done nothing wrong. We have outlined various kinds of first aid therapy for different types of bites (throughout the world) but I do not feel strongly about this problem and I doubt the importance put on this matter. I feel that first aid treatment, other than immobilization, reassurance, rest and rapid transportation to a physician, are the only basic procedures of primary value. We will continue to advocate the incision and suction, since our own experience, based on 657 cases, indicates that this first aid measure for rattlesnake bites appears to give the best results. This would seem consistent with the opinions of most of the experienced people who have offered opinions on the matter.

There are those who feel that the use of cold in these injuries, even as a first aid measure, may be dangerous and even contraindicated. I am not talking about the long-term use of ice, that is, as advocated by Stahnke, Lockhart and others, which has resulted in many amputations and deformities, but merely putting the pack on the injured part for a number of hours.

Some biochemists feel that cooling the area and causing mild vasoconstriction, which is just about all that these packs can do, may be contraindicated in that they decrease the body's ability to handle some of the toxic materials, which it can do, as long as the absorption rate is maintained as a steady process. This is all hypothetical, of course, but so is the evidence for using the cold packs. In cases of pain, cold may be of value but in our cases the pain has never been such that the patient requires any medication prior to admission to a hospital. Certainly, keeping an extremity cold while giving antivenin is definitely contraindicated and the only times we have used any cold at all is subsequent to antivenin administration, when there is slight pain or where the packs can help in further immobilizing the extremity. In such cases however, we never allow the temperature to get below 50°F.

Some of our people have been working with warming the extremity and have found that this improves the overall picture. Some of my colleagues in South America have informed me that they often place the injured part in a warm bath during the first 12 hours following envenomation, thus, we have the cold therapist and the hot therapist. As I say, I would just as soon stay clear of this controversy, particularly since I do not feel it would be ethical for our group to become involved with any commercial device for first aid and we would certainly not subscribe to having any paper or book of ours attached to such commercial ventures.

I trust this answers your inquiry but if you have any further questions please do not hesitate to call.

Sincerely,

Findlay E. Russell
Director of Laboratory of Neurological Research
University of California School of Medicine

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MISSED ONE...

Dear Dennis;

As was the case last year at this time, Explorer Post 12 has failed to receive the Fall issue of SAR magazine. Since, our membership with NASAR expires at this time of the year, we suspect that somehow our name gets lost in the shuffle. We are, of course, re-registered thru Sept. '78, therefore, we would greatly appreciate receiving the Fall issue.

By the by, as you are no doubt already aware, Post 359 of Ontario, Ca., was certified as an ESAR Unit on Sept. 24, 1977. A team of three Members from San Mateo ESAR/Post 12 completed the evaluation process on that date. On behalf of the Western Region ESAR Committee, our representatives were pleased to be able to "Certify" Post 359. If you have not already done so, please give Post 359 a plug in the upcoming issue. In view of their long struggle to achieve this end, they deserve recognition.

Sincerely,

**Maurice J. Ducasse, Advisor
Explorer Post 12**

Maurice—

This is a reminder to all Search and Rescue Magazine subscribers to let me know if you miss an issue. We'll make good regardless of who's fault!

Editor

SALT AND FIRST AID.

Dear Lois, Consulting Editor

I just read the Fall, 1977 issue of Search & Rescue Magazine. I missed the initial article by Sandy Bryson on "Salt Intake While Conducting a Rescue Operation." I am not enough of a heat physiologist to get involved in the middle of such a scientific discussion but the opinions expressed by Dr. Knochel and John Lowe in the letters to the editor seem very valid to me.

My concern is that articles published in Search & Rescue Magazine should be well founded, particularly when they are giving out technical information, whether this information be medical, skiing or backwoods rescue. I am not sure if you have an editorial board which reviews all articles or not. If you do not, perhaps you should establish one, or at least get some folks that are knowledgeable in the various fields of search and rescue that can review such articles to make sure that they contain no misinformation. If controversial information is included, both sides of the argument should be presented.

From a medical standpoint, I will be more than happy to assist you in areas of my expertise. I'm sure many other physicians around would also be available to help. You, of course, are aware of those persons who are knowledgeable on skiing and climbing subjects without an ax to grind and who will objectively review articles and critique them prior to the publication. Articles that give poor or misinformation will be picked up by those who are expert in various fields. If presented wrongly, I think it would hurt the credibility of NASAR when it is beginning to grow rapidly.

I started to write a letter regarding the editorial by Stan Bush, which you and I have discussed in the past for publication but unless it is approached exactly right and very tactfully, it would make more enemies than friends for NASAR and its longtime supporters such as Stan Bush.

If you wish me to develop a response, I would be happy to, but *only* with your advise, for I certainly do not want to create any problems. I think possibly what Stan is saying in the editorial as it is written in Search & Rescue is an appeal to teach basic first aid and not to make every rescuer an EMT.

If this is in fact what he is saying, then I think the article is good and appropriate. If he is saying that everyone should be trained at an EMT/A level, but not certified and trained by people (who are not necessarily good instructors and would perhaps give out poor or misinformation) then I think it is a bad approach. Please let me know how you wish to proceed.

I hope the Phoenix meeting was good. I'm sure it was with you running it. Look forward to seeing you soon.

Sincerely,

**Norman E. McSwain, Jr., MD, FACS
Associate Professor of Surgery**

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All present SARM subscribers will continue to receive the balance of your full subscription, but with the added bonus of 7 months FREE NASAR membership. Also the sizable NASAR MEMBERS' reduction in the registration fee for the 10th Annual NASAR Search & Rescue Conference, *will be yours* if you attend this year in Albuquerque, New Mexico, October 5, 6, 7, and 8, 1978.

As a part of this joint effort to identify and recognize the Search and Rescue Sector of Emergency Response, SARM will actively promote membership in the NATIONAL ASSOCIATION for SEARCH AND RESCUE (NASAR). Therefore *SEARCH AND RESCUE MAGAZINE* will no longer accept subscriptions without the inclusion of a NASAR membership.

This dramatic message carries with it our very best wishes for your continued success in 1978 with the helping of suffering victims everywhere.

**Rick LaValla, President,
National Association for
Search and Rescue**

**DENNIS E. KELLEY, PUBLISHER
Search and Rescue Magazine**

SEARCH AND RESCUE TEAM MISSING

JAKARTA, Indonesia (From Reuters) — A search and rescue team looking for a lost mountain-climbing party has been reported missing. The 12-member team was reported lost on 8,700-foot Mt. Semeru in East Java. — *Los Angeles Times*, January 9, 1978.

CHOPPERS RESCUE CLIMBER HILLARY

NEW DELHI, India (UPI) — Indian Air Force helicopters Saturday evacuated an ailing Sir Edmund Hillary, the first man to conquer Mt. Everest, from a 15,000-foot-high village in the Himalayas. But doctors said he could rejoin his expedition today.

"The doctors at Bareilly-Military Hospital have agreed to let Sir Edmund rejoin his expedition mates at Joshimath instead of bringing him to New Delhi," an Indian Air Force spokesman said. Joshimath is about 250 miles north of New Delhi.

The New Zealand-born mountaineer was reported to be suffering from pulmonary edema, or a build-up of fluid in his lungs.

Hillary became sick Friday at Nar Parbhai at the 17,000-foot level. Two rescue attempts Friday by Air Force helicopters failed due to bad weather. — *Albuquerque Journal*, Oct. 17, 1977.

U.S. COAST GUARD JOINS CB RADIO CRAZE

The Commandant has announced that the Coast Guard and Auxiliary will participate to a very limited extent in the use of Citizen Band Radio Service (CB) to enhance marine safety. Coast Guard stations and floating units will probably be equipped with CB equipment. Personnel will guard the CB frequencies on a secondary not to interfere basis with primary voice guards to remain on VHF FM. **No special antennas or remote stations will be employed.**

The Commandant "plans that the Coast Guard Auxiliary will use government call signs on CB". **Please note:** the word "plans". The use of government call signs on CB is **not** yet approved. When the Commandant has approved such a step you will be properly notified.

Upon receipt of this notice you may now start monitoring CB for distress cases. Detailed information about how to use government call signs on CB will be coming soon from Washington. **Do Not** use such call signs on CB at this time!

Please continue to encourage all boaters to utilize VHF FM marine radios as much as possible. Do not encourage installation of CB radios as a primary source for communication equipment.

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Distress Frequencies Channels Monitored By Whom?	Channel 16—international 24-hours a day Coast Guard, Marine Operators, Federal Agencies, Local Rescue Organizations, U.S. Ships, Foreign Vessels, Etc.	Channel 9—voluntary voluntary REACT, Volunteers, Etc.
Signal Characteristics	Straight Line Transmission	Skipping Signal
Interference	FM eliminates atmospheric interferences FM eliminates interference from other transmissions	AM allows atmospheric interference AM allows interference from other transmissions
Penalties for Misuse of Distress Signals	\$10,000 and 1 year imprisonment—maximum	\$500—maximum
Under whose authority?	Communications Act of U.S. Law	FCC Rules and Regulations
Range of Signal Use Designation	20 Miles Professional commercial and maritime	Approximately 2 Miles Private citizen
Proper Usage Enforcement	Strictly regulated	More difficult to control

NINE DIE IN SEPARATE CRASHES OF LIGHT PLANE, ARMY RESCUE COPTER

KNOXVILLE, Tenn. (AP) — Nine persons were killed in the separate crashes of a light plane and an Army helicopter that had been sent to find it in the Great Smoky Mountains National Park, a Civil Air Patrol spokesman said Wednesday.

Capt. Frank Thornburg said ground rescuers reached the site of the plane crash about 12:30 p.m. and found the pilot and all four passengers aboard dead. The Federal Aviation Administration said the plane crashed at 7:20 p.m. Tuesday.

The helicopter, one of four searching for the plane, crashed at 8:30 a.m. about two miles from the site of the plane crash. Thornburg said four of the eight persons aboard the copter were killed in the crash. The four injured survivors were taken to the University of Tennessee hospital, he said.

It was not immediately determined what caused either accident. The plane was on a charter flight from Ft. Lauderdale, Fla., to Chicago, an FAA spokesman said. — *Los Angeles Times*, Jan. 5, 1978.

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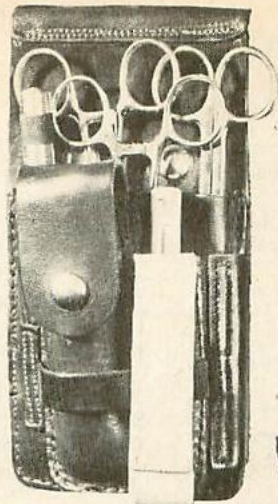


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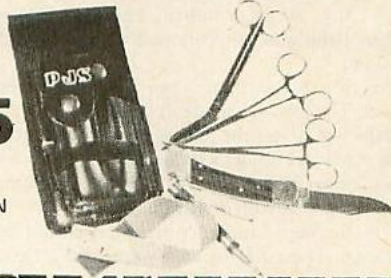
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BOAT TOO SMALL TO TOW, HEARING IN 2 DEATHS TOLD

OXNARD — A 17-foot harpoon boat that capsized while under Coast Guard tow was too small to be towed through rough seas, a Coast Guard inquiry into the deaths of two men on board was told Wednesday.

Two members of the three-man Coast Guard rescue crew said they knew the tow was hazardous but they went along without questioning the decision of their 19-year-old non-commissioned officer in charge.

"I don't think a boat that size should have been towed," Archie Chapman, 22, engineer aboard the cutter, told the hearing in Oxnard. "It's too small."

The petty officer in charge of the rescue, Mark S. Lenassi, declined to testify.

Drowned in the Dec. 15 rescue attempt were Francis W. White, 23 of Port Hueneme and Charles Lang, 20, of Ventura. The pair had been diving for abalone when their fishing boat developed engine trouble in open water off Santa Cruz Island.

Chapman said waves were 6 to 8 feet high when the 41-foot rescue cutter reached the smaller boat. The tow was made in darkness.

Chapman said he warned the two divers the passage would be "a rough ride" and advised them to wear life jackets, which he said they did.

Fellow Coast Guard crew member Ken Mori, 24, said no consideration was given to transferring Land and White on board the cutter.

The bodies of Lang and White were found the next day about seven miles from the harbor entrance. Their life jackets were found floating nearby with other boat gear.

The Coast Guard crew members said they were unaware the boat had capsized until they entered the harbor. They said they periodically turned a spotlight on the trailing boat during the tow and thought it was upright at all times.

The Coast Guard inquiry will continue today under the direction of Comdr. Karl Stansell of the Coast Guard marine office in Long Beach. — *Los Angeles Times*, December 29, 1977.

CAP SAVES 52 PEOPLE IN '77

MAXWELL AFB, Ala. (AFNS) — The Civil Air Patrol, the voluntary civilian auxiliary of the Air Force, saved the lives of 52 people last year. Officials at CAP headquarters called 1977 one of CAP's most successful years.

Officials also said CAP volunteers set a new record in 1977 for the number of "finds" (search objectives located) with 446. The previous record of 395 was set in 1976.

Officials said 52 is the second highest number of lives saved by CAP in the past decade. The highest number of saves — 57 — was recorded in 1975.

While the 57 figure is believed to be the all time CAP high, officials said information on earlier CAP years isn't available to confirm the record.

Other statistics for 1977 showed CAP volunteers involved in 82 missions and flying 16,691 hours.

For the second straight year, the CAP wing in Colorado led in lives saved with 15. Nine of these were accomplished early in 1977 during and following a statewide blizzard. Alaska was next with 10 lives saved.

California flew more sorties — 2,374 — and put in more flying hours — 3,879 — than any other wing. Alaska logged 856 sorties and 2,130 hours flying time.

CAP officials attribute at least two saves to emergency locator transmitters (ELTs), which led searchers to the location. Other saves included ground searches for missing persons and airlift of human blood or blood products. The majority of the saves, however, resulted from aerial search missions.

In addition to its search and rescue operations in 1977, CAP also provided disaster assistance in such areas as the floods in Colorado, Pennsylvania and Georgia.

During these calamity situations CAP supplied emergency communications, helped fill sand bags, assisted in the evacuation of families and household goods from numerous homes, flew surveillance missions over stricken areas and transported supplies and disaster relief officials.

Founded just prior to World War II, CAP gained fame in that conflict for its help in civilian defense. CAP emphasizes emergency service operations today, but is also concerned with other activities.

This includes promotion of aerospace education, the study of aviation and space related subjects and the CAP program.

CAP's 63,000 members are active in the 50 states, the District of Columbia and Puerto Rico.

RESCUERS FREE GIRL, 3, TRAPPED IN PLANE WITH BODIES

KERRVILLE, Texas (AP) — A 3-year-old girl, trapped for 35 hours in the wreckage of a small plane with the bodies of her parents and brother, was rescued Tuesday by searchers who found her "mumbling and groaning."

Rescuers unstrapped Shera Sneed from the back seat of the plane, which had crashed on an 1,800-foot hill about 50 miles northwest of San Antonio, and took her to a nearby hospital where doctors found she had a fractured arm and leg.

The plane had been spotted Tuesday morning by a helicopter, and a rescue team headed for the site in four-wheel drive vehicles.

The searchers also found the bodies of Shera's father, San Antonio attorney Gerald Wayne Sneed, 33; her mother, Susan Parr Sneed, 32; and Shannon, her 5-year-old brother. The family had been returning home from a visit to Shera's grandparents.

"Shera was just mumbling and groaning when we got there," said Dan Waters of First Texas Flying Service, a family friend and the first at the scene. "It was nothing you could understand. She had a few abrasions but other than that she looked pretty good."

Waters said he tried to comfort the girl but she did not recognize him and apparently did not know what had happened.

The plane crashed Sunday night during a persistent drizzle. Air traffic controllers in San Antonio had received a distress signal from a plane reporting that it was low on fuel and was attempting to reach the Kerrville airport.

Spencer Treharne of the First Texas Flying Service said the plane apparently came within about 20 feet short of clearing the hill.

"He knew the Kerrville airport and was trying to get in," Treharne said of Sneed. "When the engine started to sputter he could not get in. The hill is on the boundary of the airport you might say."

The crash site was three miles northeast of the airport.

Air rescue efforts had been hampered by the rain and the aerial search had begun only Tuesday morning.

Sheriff Paul Fields said the nose of the aircraft was buried in the loose dirt.

Justice of the Peace Spencer Brown said Sneed's body was in the pilot's seat. Mrs. Sneed was in the seat next to her husband's and their son was in the back seat.

The Sneed's were on a flight from Winters, Texas, where they had visited Shera's grandparents. The family lived in Boerne, a rural community 25 miles northeast of San Antonio. — *The Patriot*, Harrisburg, Pa., Dec. 14, 1977.

SAR/DISASTER RESEARCH IN WASHINGTON STATE

Washington state will play a major role in a study of search and rescue activities being conducted under the terms of a \$261,300 National Science Foundation grant awarded to the University of Denver.

According to Dr. Thomas Drabek, head of the University's Sociology Department and the project's principal investigator, fragmentary information on these activities does exist, but this is the first large-scale effort to analyze the needs of search and rescue (SAR) policy makers and practitioners.

"Search and rescue activities have remained relatively unstudied," he said. "We feel this study will establish a model of cooperation and interchange between SAR groups more relevant to community needs."

DIRECTOR OF TRAINING NAMED IN FRAUD CASE ON PARAMEDICS' PAY

FRESNO, California — The director of Fresno County's federally-funded paramedic training program has been indicted by a grand jury on charges of conspiracy and falsifying county payroll records, authorities reported Wednesday.

Dr. Robert Daily, was indicted along with five other persons a week ago but his identity was withheld until he returned from a trip.

The defendants are accused of claiming a total of \$4,500 in part-time paramedic pay for hours during which they were paid for regular jobs at the Valley Medical Center or with the fire department. — *Los Angeles Times*, January 26, 1978. ●

THE AMBULANCE IN THE VALLEY

"Twas a dangerous cliff, as they freely confessed,
Though to walk near its crest was so pleasant;
But over its terrible edge there had slipped
A duke, and full many a peasant.
The people said something would have to be done,
But their projects did not at all tally.
Some said "Put a fence 'round the edge of the cliff,"
Some, "An ambulance down in the valley."

The lament of the crowd was profound and was loud,
As their tears overflowed with their pity;
But the cry for the ambulance carried the day
As it spread through the neighbouring city.
A collection was made, to accumulate aid,
And the dwellers in highway and alley
Gave dollars or cents — not to furnish a fence —
But an ambulance down in the valley.

"For the cliff is all right if you're careful," they said;
"And, if folks ever slip and are dropping,
It isn't the slipping that hurts them so much
As the shock down below — when they're stopping."
So for years (we have heard), as these mishaps occurred
Quick forth would the rescuers sally,
To pick up the victims who fell from the cliff,
With the ambulance down in the valley.

Said one, to his plea, "It's a marvel to me
That you'd give so much greater attention
To repairing results than to curing the cause;
You had much better aim at prevention.
For the mischief, of course, should be stopped
at its source;
Come, neighbours and friends, let us rally.
It is far better sense to rely on a fence
Than an ambulance down in the valley."

"He is wrong in his head," the majority said;
"He would end all our earnest endeavour.
He's a man who would shirk this responsible work,
But we will support it forever.
Aren't we picking up all, just as fast as they fall,
And giving them care liberally?
A superfluous fence is of no consequence,
If the ambulance works in the valley."

The story looks queer as we've written it here,
But things oft occur that are stranger.
More humane, we assert, than to succour the hurt
Is the plan of removing the danger.
The best possible course is to safeguard the source
By attending to things rationally.
Yes, build up the fence and let us dispense
With the ambulance down in the valley.

Joseph Malines
1895

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(206) 753-5255**MARCH 4-5, 1978****AATS Conference on EMT Learning: Review and Technique, Steubenville College, Ohio.**Contact: American Association of Trauma Specialists
29 S. LaSalle Street
Chicago, IL 60603
(312) 782-7372**MARCH 4-5, 1978****Eleventh Annual Weirton Heights Rescue School.**Contact: Weirton Heights Rescue School Inc.
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Weirton, WV 26062**MARCH 5-10, 1978****Emergency Department Procedures, Northstar, North Lake Tahoe, California.**Contact: Alison Technical Services
1520 Arizona Ave.
Santa Monica, CA 90404**MARCH 11-12, 1978****Second Annual Mountaineering First Aid Seminar, Salem, Oregon.**Contact: Seminar
P.O. Box 9035
Brooks, OR 97305**MARCH 11-18, 1978****Course on Medical Emergencies, Sun Valley, Idaho.**

Contact: Allison Technical Services (See above)

MARCH 14-16, 1978**Associated Public Safety Communications Officers, 13th Annual Western States Regional Conference, South Coast Plaza Hotel, Orange, California.**Contact: Gary Gray
481 City Drive South
Orange, CA 92668
(714) 834-2137**MARCH 16-19, 1978****WOOF's National Search and Rescue Dog School, Mammoth, California.**Contact: Lt. Larry Kuhl, WOOF
P.O. Box 14304
So. Lake Tahoe, CA 95702
(916) 544-3464**MARCH 20, 1978****Interagency Committee on Search and Rescue (ICSAR)**Contact: Al J. McCullough
ICSAR Secretary
U.S. Coast Guard
SAR Liaison
400 7th St., SW
Washington, DC 20590
(202) 426-1932**MARCH 21-23, 1978****Mid-West Health Congress: Priorities '78, Effective Health Care, Kansas City, Missouri.**Contact: 208 Nichols Road
Kansas City, MO 64112
(816) 561-6202**APRIL 1-2, 1978****California Wing Civil Air Patrol Conference, Fresno, California.**Contact: Captain Margaret Warren, California Wing CAP
Building 834 Naval Supply Center
Oakland, CA 94625
(415) 666-4872**APRIL 3-7, 1978****SSI's Dive Rescue Training School, Idaho.**Contact: Scuba Schools International
1449 Riverside Drive
Ft. Collins, CO 80521
(303) 482-0883**APRIL 6-8, 1978****Illinois Combined Scientific Assembly, Emergency Care: Fighting for Life Symposium, Rosemont, Illinois.**Contact: Illinois Combined Scientific Assembly
O'Hare Office Building, I,
10400 W. Higgins Road
Rosemont, IL 60018**APRIL 28-29, 1978****SSART's Man-tracking Seminar**Contact: David Rudawitz
Saddleback Search and Rescue Team
P.O. Box 5222
Orange, CA 92667
(714) 973-1100, ext. 2439**APRIL 28-30, 1978****10th Washington State SAR Conference, Central Washington University, Ellensburg, Washington State.**Contact: Lora Murphy or Rick LaValla
4220 E. Martin Way
Olympia, WA 98504
(206) 753-5255**MAY 4-6, 1978****National Conference on SEARCH/RESCUE/EMS: The Medical Side of Rescue, Four Seasons Motor Inn, Colorado Springs, Colorado.**Contact: Shirley E. Viall
P.O. Box 21309
Seattle, WA 98111**MAY 7-10, 1978****The Second Mid-Atlantic Regional Congress for Emergency Medicine.**Contact: MARC II, c/o Stanley V. Butler
The American College of Emergency Physicians
3900 Capitol City Boulevard
Lansing, MI 48906
(517) 321-7911**MAY 20-21, 1978****Advanced SAR Management School (Missing Aircraft), West Covina, California.**Contact: Lt. Col. Betty Decker
822A Reeves Place
Pomona, CA 91757
(714) 629-5111 ext. 8607**JUNE 15-18, 1978****National JEEP Search and Rescue Association National Convention, Tonopah, Nevada.**Contact: George Connell, Executive Secretary
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(801) 387-2277**JUNE 2-4, 1978****Iowa Trauma Seminar Planning Committee's 6th Annual Trauma Seminar, Breckenridge Ramada Inn, Waterloo, Iowa.**Contact: Terry McGrane
Triage in Trauma VI Seminar
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1401 21st Street, Suite 405
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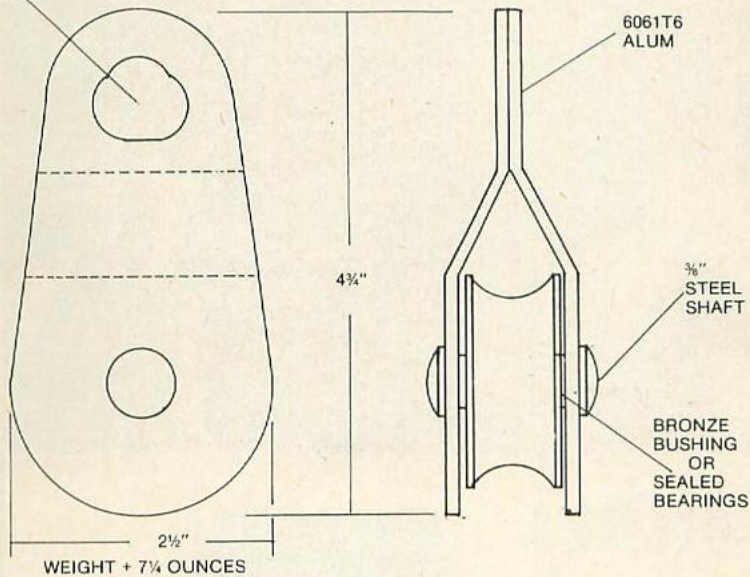
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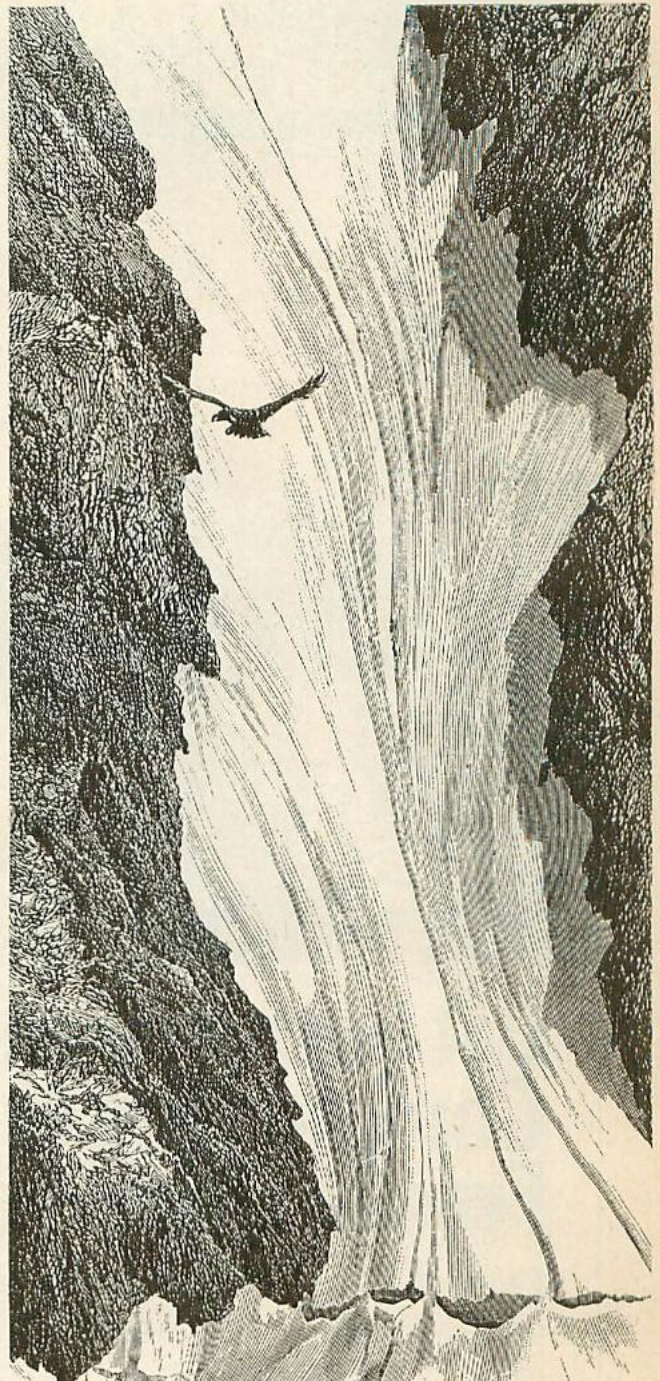
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