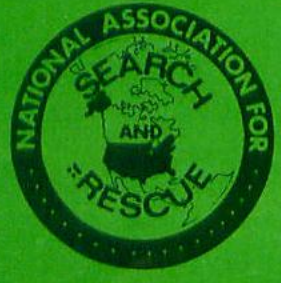


FALL 1977

# Search & Rescue

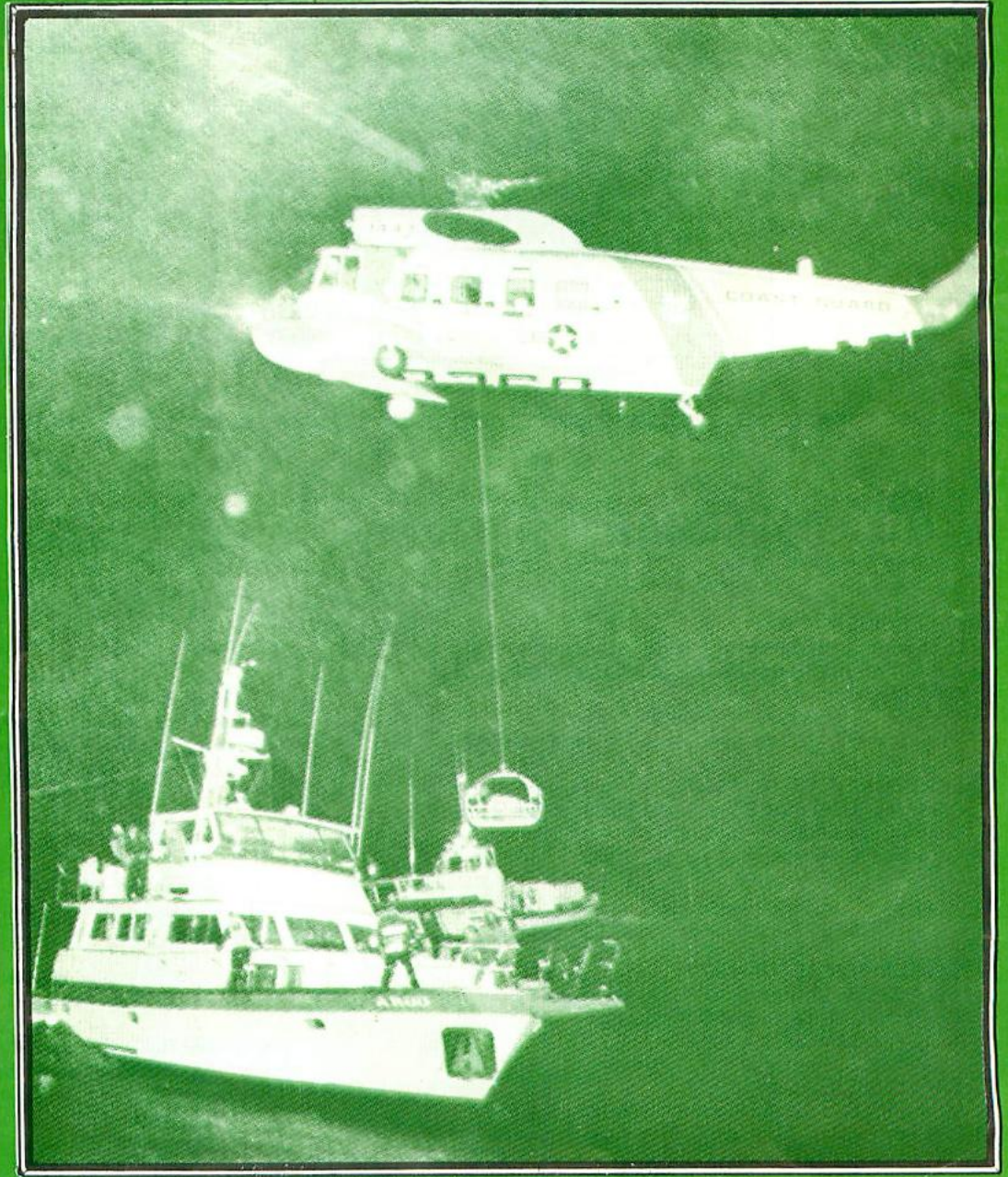
## MAGAZINE

THE OFFICIAL PUBLICATION OF THE NATIONAL ASSOCIATION FOR SEARCH AND RESCUE



### THE BIG FEDERAL SAR SHOWDOWN, GAO vs. SAR

• PAGE 4



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## CALENDAR

### SEPTEMBER 8-10, 1977

**First Annual Symposium on the Management of Acute Trauma, Radisson Muehlebach Hotel, Kansas City, Missouri**

Contact: The American Trauma Society  
875 N. Michigan Ave., Chicago, IL 60611

### SEPTEMBER 13-15, 1977

**California Office of Emergency Services SAR Training Seminar, Fresno, California**

Contact: Wayne Kranig, Chief  
California OES, Law Enforcement Div.  
P.O. Box 9577, Sacramento, CA 95823  
(916) 421-4990

### SEPTEMBER 15-18, 1977

**9th NASAR Conference, Nashville, Tennessee**

Contact: Lois McCoy, P.O. Box 2123  
La Jolla, CA 92038 (714) 276-7228

### SEPTEMBER 22-25, 1977

**Mountain Rescue Association Workshop and Conference, Los Angeles, California, Angeles National Forest**

Contact: Abbey Keith, Mountain Rescue Assn.,  
P.O. Box 396, Altadena, CA 91001  
(213) 791-1731

### OCTOBER 2-6, 1977

**26th Annual National Conference - joint meeting of the California Emergency Services Association and United States Civil Defense Council, Long Beach, California, aboard Queen Mary**

Contact: Evar Peterson  
4040 E. Spring St., Long Beach, CA 90822  
(213) 595-1751

SEARCH AND RESCUE MAGAZINE invites listings of upcoming events pertaining to the rescue and emergency care fields. Please send entries to Calendar, Search and Rescue Magazine, P.O. Box 153, Montrose, CA 91020. (213) 248-3057

### OCTOBER 4-6, 1977

**California Office of Emergency Services SAR Training Seminar, San Bernardino, California**

Contact: Wayne Kranig, Chief  
California OES, Law Enforcement Div.  
P.O. Box 9577, Sacramento, CA 95823  
(916) 421-4990

### OCTOBER 8-9, 1977

**5th Annual Desert Rescue Squad Seminar, Barstow, California, Ft. Irwin**

Contact: P. J. Desjardins, Secretary  
P.O. Box 108, Barstow, CA 92311  
(714) 253-5386

### OCTOBER 20-23, 1977

**Civil Air Patrol National Board Meeting, Marriott Motor Hotel, Atlanta, Georgia**

Contact: Maj. Bob Mattson  
HQ-CAP-USAF, Maxwell AFB,  
Alabama 36112 (205) 293-5310

### OCTOBER 31 - NOVEMBER 4, 1977

**National Avalanche School, Reno, Nevada**

Contact: Maj. Pete Zadra, 555 Wright Way,  
Carson City, NV 89711 (702) 885-5300

### NOVEMBER 18-20, 1977

**Mountain Rescue Association Fall Conference, Tempe, Arizona**

Contact: Abbey Keith, Executive Secretary  
P.O. Box 396, Altadena, CA 91001  
(213) 791-1731



# COMPTROLLER GENERAL'S REPORT TO THE CONGRESS

## DIGEST

Increased coordination is needed among several Federal services in providing assistance to people in distress. This coordination is provided for under the National Search and Rescue Plan. If this plan were sufficiently adhered to, which it is not, substantial savings to American taxpayers could be realized.

This could be done by greater sharing of aircraft and crews and support facilities and equipment, chiefly by the Air Force, the Navy, and the Coast Guard in meeting their cooperative responsibilities under the National Search and Rescue Plan.

In fact, excellent opportunities exist for joint determination of aircraft and personnel requirements and sharing of resources among agencies which, if realized, would result in less total resource requirements and more efficient use of Federal aircraft, ships, and personnel.

## SEARCH AND RESCUE POLICY

The national policy on search and rescue was established in 1954 to provide

- a basic network of facilities,
- an overall plan for effective use of all available people and equipment and provisions for controlling and coordinating search and rescue missions, and
- for use of State and local facilities to the maximum extent possible.

The National Search and Rescue Plan, revised in 1969, implements this policy.

## NETWORK FOR SEARCH AND RESCUE NOT FUNCTIONING PROPERLY

Despite National Search and Rescue Plan guidelines, the Air Force, Navy, and Coast Guard are essentially computing their own search and rescue requirements independently to satisfy their individual needs, without adequately considering available assets of the others in the plan. Also, they were stationing aircraft in some of the same areas without adequately coordinating their use. Result: overabundance of aircraft, people, and equipment.

The objective of the National Search and Rescue Plan is to integrate all facilities into a cooperative network to render aid to distressed civilian and military persons and property, to coordinate the use of facilities, and to promote efficiencies and economies.

But Coast Guard and Department of Defense units are computing requirements and stationing search and rescue aircraft to provide for their peak needs without adequately considering assistance available from other services. This practice has resulted in more aircraft, crews, and supporting services than are needed to provide adequate coverage to both the military and civilian areas.

For example, enough H-3 helicopters capable of performing search and rescue missions are available at the Naval Air Station, Jacksonville, Florida, at all times, to reduce Navy dedicated search and rescue helicopter needs. Some of Jacksonville's helicopters and crews could be reassigned to other missions.

An overabundance of search and rescue aircraft in the Pensacola, Florida, and San Francisco, California, areas also exists.

GAO recommends that the Secretaries of Defense and Transportation direct the military services and the Coast Guard to determine jointly total search and rescue aircraft requirements for both peacetime and wartime.

While the Departments of Defense and Transportation agreed that there are opportunities for increased cooperation, they disagreed with the above recommendation.

## IF DEFENSE AND CIVIL AGENCIES WORK MORE CLOSELY TOGETHER, MORE EFFICIENT SEARCH/RESCUE COULD FOLLOW

Defense said its search and rescue assets are maintained and justified to support military forces, and cooperation in civil search and rescue missions will be done, but on a basis of noninterference with military operations. The Coast Guard disagreed on the basis that they have statutory responsibility for civil maritime search and rescue.

GAO believes that since Defense assets are Federal assets they should be used for civil as well as military search and rescue purposes if physically available and not otherwise actively engaged in critical military operations.

Also, the Coast Guard's statutory responsibility for civil maritime search and rescue does not preclude use of other available Federal assets.

## BETTER USE OF SEARCH AND RESCUE ASSETS

The coordination of resource objectives of the National Search and Rescue Plan were not being met in the maritime regions in fiscal year 1975. The Coast Guard did not adequately use other available resources, choosing instead to fly all but 3 percent of the maritime search and rescue missions that fiscal year. Defense units could have performed many of these missions.

GAO could not determine the precise amount of search and rescue assistance Defense units could annually provide the Coast Guard but believes the amount is substantial.



PHOTO BY W. V. KOHLER

The Air Force, Navy, and Coast Guard flew over 27,800 hours on search and rescue training flights in fiscal year 1975, at an estimated cost of over \$12.4 million. Many of these hours could have been used for such missions. Had this been done, two purposes (search and rescue and training) would have been met and a number of flight-hours could have been eliminated.

Substantial economies of operation would result from greater shared use of search and rescue assets by Defense units and the Coast Guard.

GAO recommends that the Secretaries of Defense and Transportation direct Defense branches and the Coast Guard, respectively, to begin joint effective use of search and rescue aircraft, including stationing, personnel staffing, training, and future deployments. Such use should consider the alternatives GAO suggests.

But the Coast Guard, the Navy, and the Air Force said that Defense facilities are available to meet civil search and rescue needs on a basis that they do not interfere with military missions.

GAO does not believe the intent of the National Search and Rescue Policy or Plan was to place higher priorities on military missions than on civil search and rescue missions. GAO believes more effective use of Federal search and rescue aircraft is needed.

## POSSIBLE REDUCTION OF COAST GUARD AIRCRAFT PURCHASES

The Coast Guard, the Navy, and the Air Force should improve their coordination of operations and joint planning to clarify total requirements for aircraft. This would result in more efficient and effective operations and could reduce the total quantity of aircraft needed.

Currently the Coast Guard is planning to purchase 56 aircraft at a cost of \$287 million. In making its requirements computations, the Coast Guard did not consider the aircraft available from the Air Force and Navy which could satisfy, in part, the Coast Guard's requirements.

The Coast Guard replied that GAO assumes Air Force and Navy aircraft are available for Coast Guard missions on a continuing basis, and because such is not the case, sufficient aircraft must be procured to "satisfactorily meet statutory responsibilities."

GAO does not subscribe to the logic that because Air Force and Navy aircraft are not available for civil search and rescue missions on a continuing basis the Coast Guard must procure sufficient aircraft and equipment to satisfy all civil maritime search and rescue requirements.

GAO recommends that in light of the assistance available from Defense, the Secretary of Transportation require the Coast Guard to reevaluate the number of aircraft it plans to purchase.

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**THE PUBLISHER OF SEARCH AND RESCUE MAGAZINE REMINDS ITS READERS THAT THERE ARE TWO SIDES TO EVERY OPINION AS INDICATED BY THE ARTICLE ON THE FEDERAL AGENCY SAR CONFERENCE IN THIS ISSUE. ORDER A COPY OF THIS REPORT AND GET THE DETAILED STORY. BE SURE THAT YOUR ELECTED REPRESENTATIVE IS AWARE OF YOUR OPINIONS AND EXPERIENCES RELATED TO THIS CONTROVERSIAL TOPIC. WRITE HIM NOW AND INCLUDE A COPY OF THIS ISSUE OF SEARCH AND RESCUE MAGAZINE FOR REFERENCE. MAKE HIM SAR AWARE!**



# STATE OF CALIFORNIA SEARCH AND RESCUE SUPPORT PROGRAM

**By: Wayne A. Kranig, Chief  
Law Enforcement Division  
State Search and Rescue  
Coordinator  
Governor's Office of Emergency  
Services**

What is the State of California doing in the field of search and rescue? What agency of State government, if any, is responsible? What resources and assets are available to local governments for the support of search and rescue operations? These and other questions are periodically propounded by concerned citizens which prompts an attempt to define the role of the Governor's Office of Emergency Services in search and rescue.

**WAYNE A. KRANIG** ➔

The State of California encompasses 158,693 square miles. It is the most populace state in the union where over 22 million people reside. The largest percentage of the State area consists of mountains, deserts, rivers, lakes and rugged terrain which provides excellent recreation areas for visitors and residents alike. In view of this, there is an imperative requirement for a strong, well-organized search and rescue program.

The Governor has designated the State Office of Emergency Services to fulfill the State's responsibility for the coordination of this lifesaving effort, and the Chief of the Law Enforcement Division, with the assistance of a small staff, has been assigned by Charles Manfred, Director of the Office of Emergency Services, to carry out this function. We are proud to state that the members of this division — all professionals — are meeting this challenge to carry out its coordination and support responsibilities in a most exemplary manner.

Accordingly, we have taken certain steps to establish long-range goals in order to carry out our mission of search and rescue support. Basically, our role is one of coordination, planning, training and inventorying to ensure that all human and physical resources available to the Law Enforcement Mutual Aid system are current and can be directed, when necessary, to provide support for search and rescue operations. This division functions on a 24-hour basis seven days a week, whereby professional staff members are on call and available for immediate contact at any time of the day or night.

In order for this system to function properly, it is our policy to maintain a close working relationship with each of the 58 sheriffs and their staff who have the moral and legal responsibility at the local government level for search and rescue responses in the unincorporated areas. This relationship is also maintained with other State agencies that have search and rescue support capabilities and responsibilities. By agreement between the Governor and the United States Air Force, this division coordinates with the Air Force Rescue Coordination Center located at Scott Air Force Base, Illinois, and we also work closely with other United States government agencies such as the United States Department of Forestry, Coast Guard, U. S. Park Service, etc. To further enhance the organizational structure for search and rescue, the Statewide Law Enforcement Mutual Aid Plan is the vehicle into which we have integrated our role. Over the years, this has proven to be an extremely effective and efficient procedure which can bring to bear all



law enforcement resources and services to deal with major emergency situations.

We all know that governmental services are costly. In view of this, it is our feeling that in spite of this ever increasing cost, they never really are totally adequate and citizen participation is necessary. This is particularly true in search and rescue operations. Accordingly, we thoroughly encourage the involvement of search and rescue volunteer groups where there is a vast accumulation of professional field experience available. We also know, by virtue of our many years of association with them, that they are most willing to participate and take an active part in this vital lifesaving effort. In keeping with the Emergency Services Act of 1970, we have established and provided for the State Workmen's Compensation law to cover volunteer search and rescue members who have been properly registered with their respective sheriffs as an auxiliary arm.

Certification by the California Peace Officer Standards

and Training Commission (P.O.S.T.) was recently obtained to financially support attendees at our forthcoming Search and Rescue Management Training seminars. Currently, four have been scheduled at the locations and dates as indicated:

Redding - August 16-18, 1977

Sacramento - August 30-September 1, 1977

Fresno - September 13-15, 1977

Riverside - October 4-6, 1977

These courses, which are 20 hours in length, are designed to provide an instructional analysis of the legal responsibilities, the support available and how it can be obtained, and will include presentations from Federal, State, county and other private entities who are professionals in this field. It is the objective, in this training program, to provide instructional information to key members of sheriff's departments who have search and rescue and/or training responsibilities. A follow-up to these initial courses is also planned in the form

**WAYNE A. KRANIG HAS BEEN CHIEF OF THE LAW ENFORCEMENT DIVISION FOR OVER 16 YEARS AND STATE COORDINATOR FOR SEARCH AND RESCUE FOR THE PAST TWO YEARS. HE WAS CHIEF OF POLICE OF THE CITY OF CORNING, SHERIFF OF TEHAMA COUNTY, AND A CRIMINAL INVESTIGATOR FOR THE STATE DEPARTMENT OF JUSTICE.**

**MR. KRANIG IS AUTHOR OF CALIFORNIA'S MUTUAL AID PLAN, AND FOUNDER OF THE NORTHERN CALIFORNIA IDENTIFICATION OFFICERS' ASSOCIATION. HE SERVES ON SEVERAL EMERGENCY PLANNING COMMITTEES, INCLUDING C.P.O.A.'S, I.A.C.P.'S, AND THE GOVERNOR'S EMERGENCY PLANNING COUNCIL. MR. KRANIG HAS BEEN A MEMBER OF C.P.O.A. SINCE 1951.**

updated bi-annually. In view of the increased emphasis and activity in the field of search and rescue, our latest updating will include a separate listing specifically for the support of search and rescue operations. It will contain valuable information such as the number of certified divers, skiers, trained trackers, registered search and rescue personnel, search dogs, fixed and rotary wing aircraft, snow mobiles, rescue trucks and other equipment and personnel to be called upon when needed.

As a result of the training to be conducted within the next three months, standardized formats will be developed for the statistical reporting of a search and rescue operation after it has been concluded. The Law Enforcement Division will undertake the responsibility of compiling an annual statistical public information report which will be distributed throughout the State. We hope that this will have a significant impact upon the people who use the State's recreation areas so that they might be better prepared



of on-site training and exercises which will address all of the elements of search and rescue operations with a strong emphasis to involve volunteer search and rescue groups.

In order that the Law Enforcement Division can continue to carry out its responsibility in this field in the most effective manner, we are currently planning for a search and rescue operations center here at the Office of Emergency Services headquarters which will provide for improved day-to-day search and rescue coordination. This operation will be supervised by a professional staff analyst.

In order for the Law Enforcement Mutual Aid system to function efficiently, it is necessary that local law enforcement agencies have at their fingertips a ready reference indicating the availability of support resources. The Law Enforcement Division, with the cooperation of all State and local law enforcement agencies, undertook the compilation of resources data which was in turn distributed to all policing agencies throughout the State. This data is

and thus avoid potential dangers.

Search and rescue, as it relates to downed aircraft, brings out this old saying, "There are old pilots and there are bold pilots, but there are no old, bold pilots." Although the search for a commercial or military aircraft crash is primarily a Federal responsibility, State and local agencies become involved on a cooperative basis. Privately-owned aircraft which become lost or crash are also the object of a coordinated search effort by Federal, State and local authorities.

In summing up, we have found that search and rescue involves people, resources, weather, terrain and natural obstacles. The saving of a lost person's life is a serious and demanding task for those who have search and rescue responsibilities. The Law Enforcement Division of the Office of Emergency Services will continue to meet its obligation as the coordinator for State support in this vital function. ©

# SUMMARY OF FEDERAL AGENCY SEARCH AND RESCUE CONFERENCE 25-27 MAY 77

Colonel BRUCE PURVINE, Director Air Force Rescue and Coordination Center.

## THE FEDERAL AGENCY SAR CONFERENCE WAS HELD AT THE AIR FORCE RESCUE COORDINATION CENTER (AFRCC), SCOTT AFB, ILLINOIS. THE INTERFACE ACCOMPLISHED BETWEEN ALL THE AGENCIES REPRESENTED WAS INVALUABLE IN STIMULATING MUTUAL SAR AWARENESS.

1. Command Briefing, Aerospace Rescue and Recovery Service (Briefer: Major Wright, HQ ARRS/DOXF).
2. Command Briefing, Military Airlift Command (Briefers: Lt. Col. Brown and Capt. Bullock, MAC/XPG).
3. Conference Overview (Briefer: Colonel Purvine, Director, AFRCC). An overview was presented stressing the conference objective of improving search and rescue (SAR) awareness among federal agencies. Methods of improving coordination and cooperation between federal agencies relating to SAR matters would also be presented to the attendees. The opening presentation addressed the National Search and Rescue Plan, the Inland SAR Region, ARRS SAR responsibilities within this region, AFRCC SAR responsibilities and mission coordination capabilities, types and frequency of SAR missions, and new techniques and procedures to improve the AFRCC's SAR capabilities. A briefing and tour of the AFRCC facility were accomplished during the second day of the conference.
4. The Search Mission Coordinator (SMC) (Briefer: Lt. Col. Langley, AFRCC). The key individual in any SAR operation is the search mission coordinator. Discussion topics were the SMC's role in mission prosecution, his limits of authority, how he is designated, the mission factors he must consider, and how he interfaces with the appropriate SAR authorities. The AFRCC has developed a management course of instruction for mission coordinators. This course was discussed and all appropriate attending agencies were invited to send representatives to future seminars that the AFRCC will host.
5. USAF Search and Rescue Resources (Briefer: Maj. Farnham, AFRCC). The capabilities of USAF resources to support SAR was presented. An in-depth briefing of ARRS units and fixed and rotary wing aircraft capabilities were highlighted. Command and control of USAF SAR assets and the AFRCC interface within this structuring were discussed. Conference attendees were advised that responses and support using USAF aircraft during a SAR mission are

predicated on the fact that there is no conflict with the primary mission commitments, and that the response is within the capabilities of the aircrew and equipment to be employed.

6. U.S. Coast Guard Resources (Briefer: Commander Crosby, U.S. Coast Guard National SAR School) An in-depth briefing was given showing all U.S. Coast Guard air and vessel SAR resources. Discussion centered upon the Coast Guard's involvement in maritime SAR and the interface between the AFRCC and the Coast Guard RCC's during prosecution of mutually supporting SAR cases.

7. Civil Air Patrol (Briefer: Lt. Col. Moore, HQ CAP-USAF). The Civil Air Patrol (CAP) is the official auxiliary of the USAF. The three missions of CAP are: aerospace education; the cadet program; emergency services. It is within the emergency services mission that the CAP and the AFRCC work most closely. The AFRCC utilizes the CAP to prosecute 45 percent of SAR missions within the Inland SAR Region. When utilizing CAP resources, the CAP corporation annually saves millions of SAR dollars in comparison to employing costly military SAR aircraft. The CAP corporate structure, CAP-USAF Headquarters and liaison officer support, and CAP SAR resources were also discussed.

8. National Association of Search and Rescue (NASAR) (Briefer: Mr. LaValla, President, NASAR). This presentation was given to familiarize the attendees with the involvement, principles, and functions of NASAR as a nationwide SAR coordinating organization. The NASAR goal is to become the focal point in SAR for all state, local, and volunteer groups involved in SAR. (NASAR has received continued support from this Headquarters; the NASAR Advisory Board Annual Conference was held last March at Kirtland AFB and hosted by the 1550 ATTW). NASAR is a valuable source of information concerning SAR operations. NASAR also advocated a SAR coordinator designated in each state to be the single SAR point of contact for that state. An open invitation was made to the conference attendees to attend the NASAR annual convention in Nashville, Tennessee, in September.

9. Nondedicated SAR Resources (Briefer: Captain Larson, AFRCC). Federal and civil nondedicated SAR resources were discussed. Any DOD unit with a SAR capability can be requested by the AFRCC to support a SAR mission in accordance with the provisions of the National SAR Plan. All military agencies render SAR support on a noninterference basis with their primary mission. ARRS Air National Guard and Reserve units were identified and their capabilities presented. Other federal agencies, such as the Department of Agriculture, have aircraft that have been utilized in the past during SAR missions. The Drug Enforcement Agency and the Border Patrol are also valuable assets. Civil nondedicated assets such as sheriff's aero squadrons, search dogs, jeep posses, Alpine Mountain rescue groups, snowmobilers, and citizen band radio groups have also been extensively utilized in the past. Several conference attendees noted they had SAR assets and offered their availability to the AFRCC when



◀ Major General  
RALPH S. SAUNDERS,  
Commander Aerospace Rescue  
and Recovery Service

Headquarters Aerospace Rescue  
and Recovery Service (ARRS)  
Scott AFB, Illinois ▶



required.

10. U.S. Army SAR Capabilities (Briefer: Major Wilkerson, U.S. Army Forces Command). AFRCC requests for U.S. Army aviation SAR assets are made directly to the Forces Command Headquarters Operations Duty Officer. He then selects and tasks the appropriate Army unit to respond to the AFRCC request. As with all DOD assets, responses are predicated on the fact that there are no conflicts with the primary mission commitments. Highlighted also were the capabilities of Army helicopters and the location of Army SAR assets within the Inland SAR Region.

11. U.S. Navy SAR Capabilities (Briefer: Captain Meyer, Chief of Naval Special Missions and Support Aircraft). Capabilities of SAR dedicated and nondedicated Naval and Marine aircraft were presented. The locations of SAR capable units within the Inland SAR Region are predominately along the coasts. These units have often been instrumental in recovering personnel in distress during AFRCC directed SAR missions. Naval and Marine units fully support the National SAR Plan when it is within the capability of the aircrews and equipment and no mission conflicts exist.

12. Strategic Reconnaissance in SAR (Briefer: Lt. Col. Gunther, SAC Headquarters). The organization and functions of SAC Strategic Reconnaissance were presented. Reconnaissance assets are limited in number and committed to high level missions for a variety of governmental and military agencies. The capabilities of SAC SR-71 and U-2 were presented and typical recent SAR and humanitarian missions were discussed.

13. SAR Communications (Briefer: Capt. Mullenix, AFRCC). Effective communications are the lifeblood of a successful SAR mission. To be effective, communications must flow upward, downward, and lateral. AFRCC communications capabilities (Autovon, WATS, FTS, teletype, HF radio patch, commercial telephone) were presented, and examples of how each are employed during a SAR mission were given. One area that is presently being reviewed is the lack of a direct VHF-FM radio communications capability between SAR aircraft and ground SAR teams. This lack of communications capability

also holds true for communicating or monitoring certain marine distress VHF-FM frequencies. (An ARRS ROC is presently being written to highlight this situation).

14. The National Search and Rescue School (Briefer: Commander Crosby, National SAR School). The U.S. Coast Guard National SAR School is located at Governors Island, New York, and is staffed with Coast Guard and two ARRS instructors. The school has a 30-day SAR course to qualify SAR personnel as SAR mission coordinators. The course curriculum is based on proven SAR procedures and techniques taken from the National SAR Manual. It features classroom discussion and practical lab problems in a realistic RCC environment. USAF students are also exposed to the combat SAR situation and the organization and employment of SAR forces in this situation. The National SAR School also has several week long specialized courses annually for groups such as the Coast Guard Auxiliary, Civil Air Patrol, state SAR officials, and senior officers. The school also accepts a limited number of students from nations that are interested in improving their SAR knowledge and capabilities.

15. Military Assistance to Safety and Traffic (MAST) (Briefer: Maj. Gilliam, U.S. Army) The background of the MAST program which employs selected Army and ARRS helicopter units to assist the civilian community with air evacuation of serious auto accident victims was presented. The locations of present and proposed MAST units were given, along with the description of a typical MAST unit's capabilities, equipment, and operational concepts. The federal MAST program has been beneficial to the civilian community and provides a unique life-saving service unmatched by any other resource. Since its inception, the MAST program has been highly effective and has saved hundreds of lives of accident victims who might have otherwise expired.

16. Interagency Committee for Search and Rescue (ICSAR) (Briefer: Commander Cutler, U.S. Coast Guard Headquarters). ICSAR is a standing committee established to oversee the National SAR Plan and coordinate federal interagency SAR matters. ICSAR meets quarterly and is a forum for preliminary development of interagency positions relating to SAR, and provides for an interface with other



← Air Force Rescue and Coordination Center (AFRCC), Inland SAR, ARRS.

Colonel BRUCE PURVINE,  
Director Air Force Rescue and  
Coordination Center →



national agencies involved in emergency services. The committee is made up of representatives of the Departments of Transportation, Defense, Commerce, National Aeronautics and Space Administration and the Federal Communications Commission. The committee chairman is USCG Rear Admiral Venzke who represents the Department of Transportation. There are also numerous advisors and observers to the committee. ARRS is represented as an advisor at the quarterly meetings by the Director of the AFRCC.

17. FAA Radar Analysis in Search and Rescue (Briefer: Mr. MacLennan, FAA Headquarters, Data Automation). The FAA Air Route Traffic Control Centers (ARTCC) are working closely with the AFRCC in the development of procedures to utilize stored radar information to locate missing aircraft. Fifteen of the twenty ARTCCs have this capability today; the remaining five centers will have this capability within two years. Kansas City ARTCC has been recently selected to be the FAA facility to develop the computer standards and provide the nation-wide FAA data automation operator training. During the past six months, the utilization of this historical radar data (D-Pict) has been instrumental in the rapid tracking and subsequent locating of several aircraft that were a significant distance away from their intended flight paths. The benefits of this program will be significant — reduction of search time and SAR man-hours, reduced SAR costs, and the greater possibility of locating survivors immediately after a crash.

18. Emergency Locator Transmitters (ELT) and Satellite Programs in SAR (Briefers: Major Warn, AFRCC; Mr. Trudell and Mr. Ehrlich, NASA). The ELT was designed to be a life-saving device with an emergency radio signal transmitting on 121.5 VHF and 243.0 UHF. It would be activated by a "G" switch upon impact during an aircraft crash. The AFRCC annually receives and processes approximately 6,000 of these ELT signals; only a small percentage are actual distress incidents. Each incident must be treated as an actual distress until the signal source is located. In 1981, NASA is launching a sophisticated ELT signal detecting package (piggyback on a Tiros weather satellite) to test the capability to detect and pinpoint an ELT

transmission from space. The ELT signal collection equipment will have the capability to accurately pinpoint the ELT signal source by doppler shift, and then data link transmit this information to a ground receiving station. By 1984, it is proposed to have four ELT satellite monitoring stations in polar orbit to give nearly continuous U.S. coverage. NASA is also working closely with the FAA and other agencies to develop the standards for a second generation ELT. It is anticipated this research will eliminate many of the present false ELT signal situations.

19. Recovery Operations (Briefer: Lt. Col. Langley, AFRCC). From SAR mission opening, the mission coordinator must have a recovery plan in effect. Recovery forces should be identified and standing by to immediately deploy. Helicopter recovery is usually the most rapid method to recover survivors. Military helicopters usually have specialized equipment and personnel on board to make an immediate extraction and render life-saving first aid while en route to a medical facility. Fixed wing recovery operations are usually the medevac type if a prepared runway is located near the recovery area. Fixed wing aircraft can provide additional recovery support operations such as: overhead communications relay to the on-scene forces, provide night lighting, assist by giving directions to ground forces proceeding to an incident site, airdrop medical or survival equipment, or, in the case of ARRS aircraft, parachute pararescue personnel on an incident area.

20. SAR Agreements (Briefer: Lt. Col. Dugan, AFRCC). ARRS, as the regional SAR Coordinator, has been directed to organize and coordinate all available SAR forces into a viable and efficient organization. This is accomplished by either formal or informal, verbal or written agreements. The agreements between the states and ARRS are formal, being signed by the respective Governor and the Commander ARRS. These agreements are needed to organize and determine the agency responsible for control of SAR missions. Some states have active state agencies which handle SAR within their state. The federal government cannot force the states to conform to a national plan, therefore agreements must be sought. Currently, there are SAR agreements with 30 states, 2 states chose not to sign, and the remainder are still processing the agreement.●

# INTERROGATION: REMEMBER YOUR "P's" AND "Q's"

by Thomas Valenzuela, Jr.

## I. The three "P's"

### A. *Politeness*

Always be polite when interrogating a possible witness. Never allow yourself to respond in a negative manner or become flustered by the witness.

### B. *Perceptiveness*

As the witness answers your questions, listen to what he/she is saying but also take note of his/her physical surroundings and condition as he/she does so. Is he/she extremely nervous; has he/she been taking medication or alcohol; note any physical handicaps; does the witness require glasses for reading or driving; does the witness wear a hearing aid and, if so, was it turned on prior to your approach. Note the physical layout of the residence/building; are there trees to obscure vision; any other buildings in the area which might cause reflections and distortions of view. Etc.

### C. *Persistence*

Once you have found a possible witness, don't be afraid to repeat questions already asked. The answer may be somewhat altered the second time around—memory can play tricks. Make note of all answers as given. Of course if the witness becomes hostile, remember item A (be polite) and handle the situation with tact and finesse. Back off, if necessary, and pursue another tact. As long as the witness is willing to answer, continue on a direct line of questioning to obtain the facts necessary for a "find".

## II. The three "Q's"

### A. *Question 1 — "What"*

Keeping items I.A, B, C in mind, ascertain WHAT the person saw and/or heard. One very important aspect of this phase of interrogation is not to ask leading questions. DO NOT VOLUNTEER INFORMATION. Your job is to ask questions and OBTAIN INFORMATION. Begin on a general note and, as you proceed, if the person being interrogated has what you deem viable and useful information, become more specific in your questioning. However, if your "vibes" tell you that you are barking up the wrong tree, cut the interview short and politely take your leave.

### B. *Question 2 — "When"*

Once you are convinced the subject is in fact a possible witness, attempt to derive a close "time frame" of events as they occurred. If the subject answers vaguely, try to pin him/her down. Ask what he/she was doing at the time—does he/she usually do this at a certain time of day/night. Remember the three "P's".

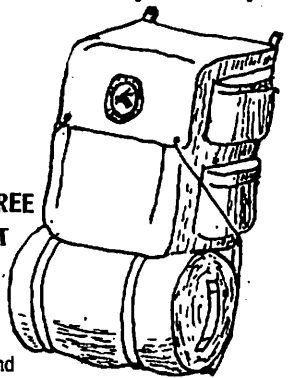

### C. *Question 3 — "Where"*

Now that you have established that the subject did see something which might aid in the search, you are at a very important phase of the interrogation. Again, I repeat, DO NOT ASK LEADING QUESTIONS. Allow the subject to volunteer as much information as he/she is willing or able to give without prodding. Then begin to zero in on the exact locale and verify your written notes with the subject. If he/she is certain of the location, variations in the interrogation notes will be minimal. On the other hand, uncertainties on the part of the witness might cause him/her to make various corrections as you go along. Be alert to such—it may indicate many areas of doubt as to the veracity of statements made previously. You may be getting "the run around" by a well-meaning person who is only "trying to help". These people do not realize that false information is worse than no information at all.

## III. General Notes

Remember to always take proper notes and verify them with the person you are interrogating before leaving the area. Do not be afraid to ask questions which might help to prove the statements of the witness. If, under such questioning, the witness begins to show signs of hostility, back off a bit and then evaluate the reason for the hostility. Was it the subject matter of the question itself or was it some inference in your speech or manner as you posed the question. In a situation of this type, there are generally two reasons for a hostile reaction to the interrogator: (1) the subject feels threatened by your authority; or (2) the subject is not telling the truth and is afraid he will be "found out". It is up to you to determine what is causing the hostility. If the hostility persists, do not antagonize the subject further by continued questioning. When you feel there is no further information forthcoming, terminate the interview in a polite and friendly manner.

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# IMPROVING SAR PROFICIENCY

by Lee Lucas

## A POSITION PAPER OF THE MOUNTAIN RESCUE ASSOCIATION

**ABSTRACT:** The position of the Mountain Rescue Association (MRA) has always been that the local, organized rescue unit should be the building block of SAR. MRA certifies mountain rescue units, as units, rather than individuals. The unit offers advantages of organization, leadership, communications, training, and special equipment not generally available to individuals.

MRA believes that the unit approach, and certification by specialist national associations, may be the optimal approach to improving search and rescue proficiency. But this approach requires acceptance by controlling and coordinating state and local agencies for its best utilization. NASAR provides the ideal forum in which to discuss this approach and other methods for improving SAR proficiency, toward the ultimate goal of saving lives.

### 1. THE NEED FOR SAR PROFICIENCY

Proficiency of search and rescue personnel — in the field, at base camp, and at the coordination center — is the legitimate concern of all involved. The victim and his family, have an obvious concern that the personnel on this mission are the most skilled available. The individual rescuer wants to contribute as much as he can to the success of the mission. His teammates expect him to do his share competently and safely. Indeed, all participating units depend on each other to carry out their assignments skillfully, and not to endanger themselves or other rescuers or the victim. The controlling agency desires all participants to cooperate fully, to contribute positively to the overall success of the mission, and to cause no adverse publicity.

The desire to ensure that high levels of proficiency are possessed by all SAR personnel has led to several approaches by governmental agencies and by SAR associations, such as NASAR, MRA, CAP, NSP, ESAR, and others. The approach presented here is based on the premise that local, organized search and rescue units are the *building blocks* of the SAR system, and offer the best means for achieving high standards of proficiency on SAR missions. Organized units continually face the realities of searching for and rescuing people from wilderness hazards. The need for high standards of proficiency is apparent to these units, and to their parent associations. MRA has had success with this approach over the years, and offers its ideas here for consideration by others concerned with improving SAR proficiency.



LEE LUCAS, Ph.D., Past President, California Region Mountain Rescue Association and China Lake Mountain Rescue Group.

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### 2. DETERMINING SAR PROFICIENCY REQUIREMENTS

Proficiency requirements for SAR personnel can be addressed several ways. (1) Any SAR group or organization can define, document and disseminate guidelines for SAR proficiency — trusting to the motivation for self-improvement of rescuers to meet these guidelines. (2) Guidelines that are endorsed by a sufficiently broad and authoritative segment of the SAR community become standards of proficiency. (3) Standards for which an effective and generally accepted qualifying procedure is developed lead to certification of proficiency. (4) The impact of certification programs can be enhanced by federal, state or county agency recognition of the certified units and certifying organizations. (5) Conceivably, the certification program may be given legal force, resulting in licensing of SAR organizations and personnel.

In mountain search and rescue there has evolved a pattern which works quite well. It involves (1) organized mountain rescue units, (2) a national association that certifies proficiency of member rescue units, and (3) governmental agency utilization of certified units. Thus, proficiency requirements are determined at three levels. Mountain rescue units set local standards for their individual members. The parent association MRA certifies proficiency of qualified units, and federal, state and local agencies accept (and critique) MRA certification standards.

### 3. MOUNTAIN RESCUE UNITS

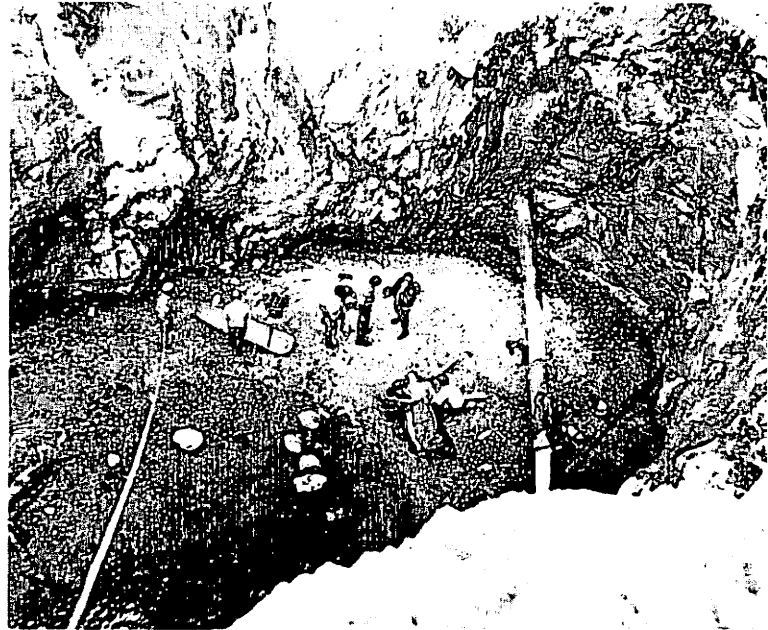
Scattered throughout the mountainous regions of North America are organized mountain rescue units. These units, both volunteer and governmental, are highly motivated to provide effective mountain rescue service to requesting agencies. Many have been functioning continuously for 25 years. During their years of participation on SAR missions, these units have evolved realistic proficiency requirements for their members. Typically, the attributes considered essential for mountain rescue personnel include:

- good aerobic condition
- familiarity with local mountains
- skill in wilderness navigation
- knowledge of survival skills
- route finding and climbing ability
- knowledge of helitac procedures in mountains
- expertise with high-angle rescue procedures and equipment
- current ARC Advanced first aid card, plus CPR (or EMT-I)
- knowledge of wilderness search procedures
- use of communications equipment and ELT DF gear
- proper SAR ethics

Local units enforce their proficiency requirements by permitting only qualified members to participate on SAR missions. New applicants are screened carefully. On-going training programs help to maintain and upgrade group and individual competence. In this way, personnel selection and training take place prior to, rather than during, the SAR mission.

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**PHIL UMHOLTZ, President Mountain Rescue Association**



The Mountain Rescue Association has 25 years of continuous service in many of its units.

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Organized units offer other advantages to the SAR mission coordinator. Experienced leaders know their members' capabilities and limitations, and can suggest useful options to consider. Unit communications gear for use in base camp and in the field can help mission coordination. MRA units can provide specialized rescue equipment such as break-down stretchers, backpack power winches, and cable evacuation systems not otherwise available. Units have established close working relationships with other SAR groups, particularly helicopters. Perhaps the most important factor is that unit organization and leadership structure provide an effective means to carry forward expertise gained during years of participation on SAR missions — even though individual members come and go.

### 4. MOUNTAIN RESCUE ASSOCIATION

The technical rescue proficiency of mountain rescue units is evaluated and certified by their peers through the Mountain Rescue Association. MRA is an association of volunteer and national park rescue teams in the western United States and Canada. Though the principal influence of MRA on member units is education — through conferences, seminars and workshops, MRA also promotes safe and effective mountain rescue service through its membership standards and certification program.

MRA requires that certified units be able to carry out a high-angle rock or snow rescue on the most technical terrain in their area of operations. Usually, nearby MRA units will work with an applicant unit and will set up and grade field tests designed to evaluate the applicant unit's capability. Field test reports are considered together with the applicant's operational experience and rescue equipment inventory in order to determine if the applicant meets MRA requirements for certification. MRA has adopted guidelines for proficiency of individual rescuers which certified member units are expected to meet or exceed. MRA, however, does not certify proficiency of individuals directly.

*(Continued on next page)*



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Mountain Rescue Association CONTINUED

## 5. CONTROLLING AND COORDINATING AGENCIES

The SAR mission coordinator (usually, county sheriff or national park ranger) exercises an indirect, but effective control on SAR proficiency. It is he who decides which resources to call (and which to exclude) on the SAR mission. The resources available typically include his own regular agency personnel, special or reserve deputies, affiliated SAR volunteer units, other organized rescue units, and even casual bystanders. The coordinator's decision is made simpler by the existence of certified SAR units, either within his own jurisdiction or nearby. By utilizing only certified units, the SAR coordinator lends his prestige and that of his agency to the SAR proficiency standards embodied in the certification procedure. He also avoids having to define his own proficiency requirements, which is not easy to do.

An alternative is for the governmental agency to set individual standards for SAR proficiency and then to certify those individuals who qualify. MRA believes this approach will not be as successful. Associations involved in certification of proficiency, such as MRA, NSP, ESAR, CAP, SARDA and others, all have several levels and several types of SAR skills for which certification is done. This wide range of skills required on SAR missions strongly suggests that certification by the respective specialist associations is the better approach.

On a specific SAR mission the on-scene coordinator must make numerous decisions concerning personnel and resources that depend on very specialized knowledge. Which aircraft can operate safely in mountain cirques at 14000 feet. Who can go safely up a sheer rock face, or down a crumbling mineshaft, or out into a winter blizzard. Leaders of certified SAR units know the capabilities and limitations of their own people, and of other units, and can advise the coordinator. It is evident that no government certification or licensing procedure for individuals can be expected to cover the entire range of needed abilities and in fine enough detail to support these operational decisions.

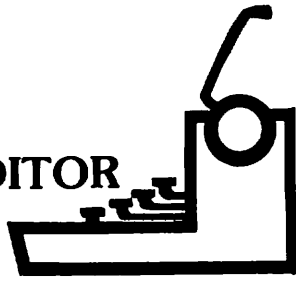
Coordinating agencies, such as state SAR coordinators and federal rescue coordination centers, can assist specialist SAR associations in their efforts to improve SAR proficiency by accepting (and critiquing) their certification programs. For example, in Washington the state SAR coordinator withdraws state benefits (liability coverage, medical insurance, gas expenses, etc.) from any SAR unit that loses its certification by its parent association. This effectively leads SAR units to keep their proficiency high and their certification current. On the other hand, where overall state requirements are set substantially lower than standards of existing, certified SAR units and organizations. This discourages those organizations and encourages poorly qualified people and groups to participate on SAR missions. The net effect is to lower the level of SAR proficiency in the field. Most SAR organizations are volunteer. Their only effective influence on SAR proficiency is to prevent unqualified members from going on SAR missions.

Controlling and coordinating SAR agencies desiring to set their own requirements for SAR proficiency should first inform themselves concerning the proficiency standards of

*(Continued on next page)*



## LETTERS TO THE EDITOR



### SALT TABLETS

Dear Editor:

Sandy Bryson's article "Salt Tablets for SAR?" will serve a useful purpose if it stimulates caution and moderation in the use of salt tablets. Their use can, as she points out, be a distinct danger to those with high blood pressure. I find, though, that I disagree with her on numerous points, most of which are of only academic interest and so don't warrant discussion here. I disagree with two points, however, that I feel should be brought to the attention of *Search and Rescue Magazine* readers.

First, she discusses three disorders that result from excess exposure to heat: 1) heatstroke, 2) heat cramps, and 3) heat exhaustion. She asserts that none of these are salt depletion problems and then concludes that salt tablets are of no value in rectifying the conditions.

Regarding heatstroke, Ms. Bryson is in accord with the opinion of physiologists. The treatment of choice here is simply to lower the patient's temperature. But regarding heat cramps, Bryson is off base. She contends the condition is due to a person who's not used to exercise, exerting himself physically for a day or two. "Salt by mouth is not the cure," she claims. Actually, heat cramps are due to hard work in heat and sweating heavily with inadequate salt intake. According to exercise physiologists, rest is the cure — along with the intake of saline solution (salt and water) and salty foods.

In heat exhaustion, she writes, there may be salt *excess* rather than salt *deficiency*. Right she is, that is if she's talking about *water* depletion heat exhaustion. But if she's talking about the *other* type of heat exhaustion, which is that due to *salt* depletion, then she's dead wrong. In this condition, salt *must* be administered, possibly through intravenous injection. The correctness of my statements on all these conditions can be verified by reviewing any standard textbook that mentions the conditions. Examples of such textbooks are Klafs and Arnheim's *Modern Principles of Athletic Training*, and Morehouse's *Physiology of Exercise*.

Second, Ms. Bryson writes that 50% of water lost from the body is lost during expiration from the lungs. Because this water contains no salt, she argues, the loss of salt from the body is actually insignificant in relation to the loss of water. She writes that "searchers can—for the few days they may be on a mission—eat a normal diet with its regular supply of salt without suffering salt depletion." This may or may not be true, depending upon what the searcher's normal intake of salt is, upon the amount of heat produced by his body, upon the temperature he's working in, and most importantly—whether he normally is exposed to such conditions. According to Guyton in his *Medical Physiology*, for example, if a person has been working in intense heat from at least 4 to 6 weeks, his body will be acclimatized, and he will consequently lose only 3 to 5 grams of salt per day through perspiration. If on the other hand he *isn't* acclimatized, he may sweat *profusely* and lose as much as 15 to 20 grams of salt each day. In this case, he may very well

undergo depletion of the electrolytes of his body fluids, especially salt. Consequently, as Guyton points out, "extra sodium chloride (salt) usually must be supplied."

Perhaps a SAR member working under heat conditions: he's accustomed to doesn't need salt tablets, *per se*; if he neglects to increase his salt intake in *some* form, though, he may find himself wishing he had — and at the same time wishing Ms. Bryson had qualified her advice that he followed!

John C. Lowe, M.A., D.C.  
Glendale, California

Dear Editor:

This letter is written in response to an article in the summer 1977 issue of *Search and Rescue Magazine* entitled, "Take that Tablet With a Grain of Salt" by Sandy Bryson. In my opinion, Ms. Bryson has made some dangerous and potentially disastrous suggestions concerning the use of salt for those involved in search and rescue missions. Furthermore, the article reflects poor understanding of heat stress physiology and underscores the critical importance of having scientific articles reviewed by persons knowledgeable in the field before they are accepted for publication in any form.

The major criticism I have for this article is the unequivocal recommendation that salt supplementation is not necessary for individuals taking part in a two or three day period of "high stress activity" while involved in a search. The example cited to illustrate the potential danger of a salt intake, namely the person with high blood pressure, is difficult to understand. First of all, a person with high blood pressure, especially one who is treated with diuretic or other drugs which directly affect blood pressure, has no business taking part in search and rescue missions. To have such a person collapse because of his illness would do nothing but impair the primary role for which they are there. Secondly, even though such a person may have hypertension, this does not mean that he would not sweat and thereby become salt deficient.

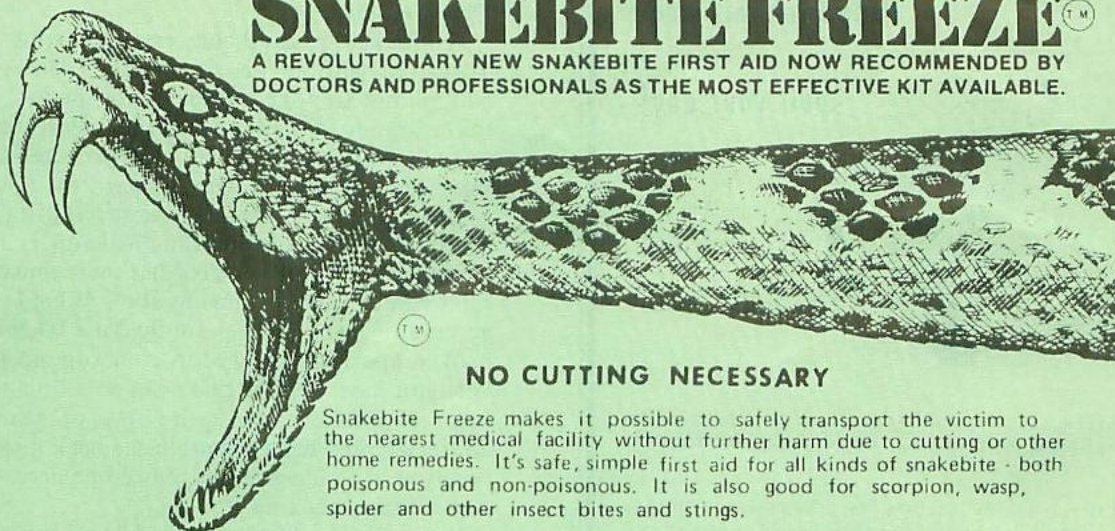
The potential loss of salt by a heat acclimatized, well-conditioned man who works for 3 days in the heat without salt intake can approach that quantity which is present in about 7 liters of the fluid bathing body cells. It is inconceivable that such a person could perform effectively and moreover, his life would be in grave danger.

A healthy, heat-acclimatized and highly conditioned person can sweat more than one who is not heat-acclimatized or in good physical shape. Although the amount of salt in a given volume of sweat becomes less as a person becomes heat-acclimatized, the fact that the total volume of sweat that can be produced is higher than normal imposes the potential to lose more salt than an untrained, unacclimatized person for the same amount of work. This is the reason why men who develop heat cramps are usually those who are in exceptionally good physical condition and who can produce large volumes of sweat during work in the heat. They develop these cramps because they drink large amounts of water to replace their losses but do not consume an adequate amount of salt. Therefore, the salt concentration in their blood falls to abnormally low value and their muscles cramp. In contrast to the statement made by Ms. Bryson, heat cramps produced by salt deficiency do indeed require replacement of salt for relief. Perhaps Ms. Bryson is confusing heat cramps with exercise-induced muscle cramps. The latter may occur in individuals working in the cold or the heat irrespective of salt deficiency and always

CONTINUED ON NEXT PAGE

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## LETTERS TO THE EDITOR, *continuea*

spontaneously disappear, especially if the muscle is stretched.

Every authority in heat stress illness stands firm on the recommendation that all persons who work hard in heat require a generous salt intake. Ideally this should be done by adding salt to food. However, if the dietary intake is inadequate, salt supplements should be provided. Salt is unquestionably a double edged sword in those who work hard in the heat. If too much is consumed along with little or no water, such disastrous consequences as heat stroke or independently, convulsions, coma and even death may occur. However, if a person continues to lose salt by sweating and consumes generous quantities of water, he may likewise develop heat exhaustion, heat cramps, or independently, convulsions, coma and death. *The goal is and must be to provide both salt and water.*

The amount of salt that would provide for sweat losses in an adult performing hard work in the heat would range from about 15 to 25 grams per day (three to five level teaspoons). Most individuals who consume a normal American diet would eat about 10 grams of salt. This means then that a supplement of 5 to 15 grams would be required. The minimum quantity of water necessary to cover this amount of salt will of course depend on volume of sweat produced. For example, suppose a person performs extremely hard work on a given day and produces eight liters of sweat. Besides his 8 liters of water lost as sweat, he would also lose 1 liter of water as vapor in exhaled air and 1 liter of water as urine. The volume of water lost in exhaled air and urine is nearly always about the same when working in the heat. The daily requirement for water by this person will be 10 liters. If the same person works less intensely and produces three liters of sweat per day, he will need five liters of water to

maintain proper hydration.

The issue of whether or not potassium should be supplemented in individuals undergoing work in the heat is much less clear. Current evidence suggests that potassium deficiency will not occur if a person eats a normal diet and if he is in excellent physical condition before hard work in the heat is undertaken. Because of the inherent dangers in the use of chemical potassium supplements if they are taken before a period of hard work, their use would not ordinarily be recommended.

The best advice for persons undertaking search and rescue missions in hot climates would be:

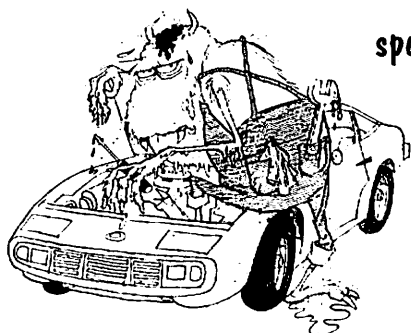
1. Maintain an excellent status of physical conditioning;
2. Insure a good dietary intake during the mission;
3. If dietary intake is normal, between five and ten grams of salt, i.e. 1 to 2 level teaspoons, should be added. This should be taken in very small quantities at frequent intervals so as to prevent nausea;
4. If potassium is to be taken, it is best taken as dried fruit such as figs, raisins or apricots. Thereby one also derives energy from their high content of carbohydrates.
5. Since one never consciously consumes adequate water to completely replace losses in sweat and since we know that maintaining the body in a state of slight overhydration increases work capacity and efficiency, there should be a requirement for periodic rest and forced watering for the purpose of replacing more water than your thirst demands.

James P. Knochel, M.D.

Professor of Internal Medicine  
Associate Chief of Staff for  
Research and

Chief, Renal Section,  
VA Hospital  
Dallas, Texas

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Dear Dennis:

A tracker without his tracking stick is like Arturo Toscanini without his baton. But even Arturo is careful enough not to poke out the eye of the first violinist during the crescendo of the 1812 Overture. With the proliferation of ski-pole tracking sticks not many trackers are showing the same kind of consideration toward their associates.

After having gotten poked in several vital spots by errant tracking sticks while boarding helicopters and other modes of transportation I realized that there must be a better and safer way to carry a tracking stick. What I consider to be an acceptable tracking stick for field use is a device that can be broken apart and stowed in your summit pack.

If you have ever carried a ski pole tracking stick in your hand throughout an entire day of searching you can appreciate just what a pain in the neck it can be. Yet it is a handy tool to have should it become necessary to do some step-by-step tracking.

With a device that can be broken down and even stuffed under your belt there does not have to be any more heart-breaking decisions like; do I carry this "mother" all day on the off chance that I may need it?

Roland W. Robbins  
China Lake Mtn. Rescue  
Group, Ridgecrest, California

Hi Dennis:

Concerning the SAR Management Course at Saratoga, California, I have to say it was one of the most gratifying experiences I have had. As a graduate of the National SAR School at Governors Island, Air Command and Staff College, the Air War College and numerous other SAR and management courses, I feel this one was the one that dealt with the nuts and bolts of SAR. So, I feel that I have to rate it tops.

Thomas Valenzuela, Jr.  
Civil Air Patrol  
Duarte, California

Dear Lois:

Our flights out here in the West cover such varied terrain that a single survival kit is only somewhat better than nothing. Summer and the desert requires plenty of water and space blankets for protection from the sun. A flight over the Sierras might call for a completely different package including a good ax, warm clothing and hiking clothes.

In our old ship, I carry a package from one of our first AOPA survival clinics plus a short-handled ax, trench knife set in the back of the right front seat, 3 flash-lights, at least two water containers and when I'm going over the desert this time of the year I'll have a 5-gallon jerry can of water in the baggage compartment.

Aside from Santa Catalina Island or crossing the Sea of Cortez in Baja, California, we have very little over water flying. If I'm headed for either of these spots, a life preserver (kept in the hangar) goes under each front seat.

It isn't like a trip to the Bahamas where your survival situation is relatively predictable. Survive a ditching, get life raft out and open and protect yourself the best way you can.

Don Downie  
Aircraft Owners & Pilots Assn.  
Glendora, California

# NEWS & rumors

## U.S. COAST GUARD SPECIAL PROJECTS

**Combination Rescue Basket/Litter.** This project has been terminated. Problems encountered with design/performance did not justify continuing this effort. Looks like our present basket and litter will be around for some time.

**Wide Area Illumination System (WAILS).** A Request For Procurement (REP) is being prepared for a prototype system to be used on a HH-3F. Testing of the prototype will take approximately one year.

**Hypothermia.** Funds have been identified for this project and it is finally underway. The objectives are basically the following:

a. To determine the magnitude of the role hypothermia plays in boating accidents and deaths, and, if this role is found to be significant in nature, to develop education requirements and recommendations as to the most efficient means of informing the public.

b. To evaluate the state-of-the-art in protective devices and equipment.

c. To evaluate the thermal protective capacity of survival garments.

d. To investigate all possible emergency treatment methods for use by Coast Guard crews and the public in general.

We could possibly end up with a wet or dry suit. This project will take at least two years to complete.

## EMT JOURNAL DEBUTS

*The EMT Journal*, long-awaited official publication of the National Association of Emergency Medical Technicians, made its debut in March. Published by the C.V. Mosby Company, the new magazine arrived as a polished representative of the emerging paraprofessionals known as "EMTs". Edited by J.D. Farrington, M.D., *The EMT Journal* is guided by an Editorial Board of nationally-recognized EMS authorities.

## HEW EMS GRANTS

Friday, July 8, 1977 — Grants totaling \$32,290,000 to assist States, regional and community organizations to develop or improve emergency medical services systems have been announced by the Department of Health, Education and Welfare.

The funds, awarded under the Emergency Medical Services (EMS) Systems Act of 1973 (Title XII of the Public Health Service Act) went to recipients in 46 states.

(Continued on next page)

# MAN TRACKING

From the publishers of SARM comes the first and only serious attempt at documenting the basics of this important search technique.

By  
Roland Robbins

## INTRODUCTION TO THE STEP-BY-STEP METHOD

If you are in any way involved in Search and Rescue then you should be aware of the latest techniques in Mantracking.

In collaboration with the U.S. Border Patrol at El Cajon, California (most notably our good friends and patient instructors Ab Taylor and Jack Kearney), the China Lake Mountain Rescue Group has compiled and edited a book on this most useful and challenging skill.

Mantracking is a 120 page, soft-bound manual complete with numerous descriptive diagrams and pictures.

What is the success record for these men who so diligently practiced and taught the art of tracking? As of mid-1975, the record stands that on all missions involving children, on which the Border Patrol has been requested, the subjects have been found alive and

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Ab Taylor, U.S. Border Patrol well.

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**ART JONES, NEWLY APPOINTED  
LOUISIANA SAFETY COORDINATOR.**

Art Jones graduated with a BS in Education in 1964 from Northwestern in Natchitoches, Louisiana. He taught and coached at St. John's High School, Plaquemine, Louisiana for one year before entering the Air Force.

Mr. Jones graduated from UPT (Undergraduate Pilot Training) in May 1967 at Craig AFB, Alabama. He entered F-4 training at Homestead, Florida, before going to SEA (Southeast Asia). He accumulated 500 hours of combat time while at Korat, Thailand and spent an additional tour in Japan/Korea before returning to Craig AFB to instruct in the T-38. While there Mr. Jones was on the Wing Accident Board and was also a Flight Commander and later Chief of Check Section. He flew about 2500 hours Military Jet Time and has added another 500 civilian hours, mostly connection with duties involving the Aviation Division.

Noteable schools and related military training include: UPT, Advanced Survival School, Radar Operation Training, Sea Survival, Jungle Survival, Nuc Weapons Delivery, Pilot Instructor School (PIT), SOS (Squadron Officers School), ATC Commanders School, Aircraft Accident Investigation School, U.S. Coast Guard Search & Rescue School and numerous other smaller workshops and seminars related to Airports, Safety and Maintenance.

As Safety Coordinator for the State of Louisiana, Mr. Jones has initiated publication and distribution of the first State Airport Directory and an office newsletter, "Pelican Poop". Additionally, he has established a power line marking program which identifies dangerous lines with Marking Spheres. Presently, attempts are being made to combine the Search and Rescue efforts of the different State Agencies into a single unified office.

As of February 28, 1977, Mr. Jones was selected as an FAA Accident Prevention Counselor. He assumed duties as Assistant Director of Aviation on May 2, 1977 (currently holding both duties). *continued*



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## CAP SUPPORTS DAYTONA!

DAYTONA BEACH, FLORIDA, February 18-20, 1977- According to "Old Hands," aircraft activity during Operation Safeguard at the Daytona Auto Race was slow. Even so it kept approximately 60 Civil Air Patrol members hopping as they recorded the numbers of 2,721 airplanes on 4 airports near the "Birthplace of Speed," in Florida.



**CAPTAIN DEEM** of the Civil Air Patrol watches intently as an airplane lands at the Daytona Regional Airport during Operation Safeguard. CAP members logged 2,721 airplanes during 21.1 hours of the operation.

## MEMORIAL

DOUGLAS CROUCH

Douglas (Doug) Crouch was the fifth man to be honored by receiving the Buckskin into the Buckskin club. He served as National Jeep Search and Rescue Association commander during 1964-65. He was born May 30, 1921 in Morgan, Utah. He took as his wife a lovely lady whose name is Joyce.

He had a most eventful full life. He was a retired chief of police from Hill Air Force Base, Utah. He was a veteran of 25 years of service in law enforcement. He served as a shipfitter 2/c for 20 months in the Navy, served as Military Police Supervisor, Criminal Investigator and Special Agent, Counter Intelligence Corps, for 46 months during the Korean conflict.

He joined Search and Rescue work in 1957, when the Morgan Patrol was formed, after the great need was presented in assisting on a C-119 Aircraft crash. During his years with the posse, he held the offices of Treasurer and was honored by being Commander. After joining the National Jeep Search and Rescue program, he served two terms as National Treasurer, and one as National Commander. He and his wife, Joyce, also had the great privilege of serving as managing editors of the Search and Rescue paper for almost twelve years. He was also a charter member of the National Jeep Search and Rescue Association.

### LARRY ZIMMERMAN

Larry Zimmerman, California Air National Guard Paramedic-jumper (PJ), was killed during a training jump from a C-130 flying near Hayward, California. It was reported that Senior Airman Zimmerman, 26, was unable to open his reserve parachute in time to blunt the impact of the fall after his main chute failed to open fully.

Zimmerman, a student at California State University at San Diego and a past member of the San Diego Mountain Rescue Team, had 57 jumps to his credit. He was a trained pararescue specialist.

(*Los Angeles Times*, Wed. July 13, 1977)

### JOHN ECKHOFF

John Eckhoff, Colorado Civil Air Patrol, was killed in a plane crash while searching for a plane missing since last winter. He was a sincere, devoted, hard-working member of CAP who has worked with Arapahoe Rescue Patrol for many years and was instrumental in getting the local squadron trained in SAR as well as support of the Littleton, Colorado Emergency Plan. We miss him, but the work that he did in 'service and devotion to the welfare of others' will remain forever as a living memorial to a great man.

(From July 8, 1977 *Bulletin of the Arapahoe Rescue Patrol*, Stan Bush, Editor)

### MARK ENGSTROM

Mark Engstrom, Bay Area Mountain Rescue Team, was killed returning to California from a mountain search for a lost girl near Tonopah, Nevada, when the truck in which he was riding rolled. Mark, 24, was a trainee on the San Francisco California Area Team.

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A first! **STAN BUSH**, Colorado Search and Rescue Board President, recently conducted a state level, inland ground search, coordinator's workshop with 70 attendees... A first! Chief **WAYNE KRANIG**, California Office of Emergency Services, Law Enforcement Division has procured Peace Officers Standards and Training (POST) funding for his four SAR training courses... The Interagency Committee on Search and Rescue (ICSAR) held its meeting June 9, 1977 in Washington, D.C. **LOIS CLARK McCOY**, NASAR Executive Secretary attended again as NASAR observer... ICSAR Chairman USCG Rear Admiral **GLENN O. THOMPSON** has transferred to 13th Coast Guard District, Seattle and Rear Admiral **NORM VENZKE** has been appointed to that position... Question! Should NASA's search for extraterrestrial life be within the scope of the National SAR Plan?... At a recent rock rescue test of California Inyo County Sheriff's SAR Team, **NORM MILLERSON** doing the lead climb, the Mountain Rescue Association's one and only President **PHIL UMHOLTZ** was the simulated victim... Rolling Stones Magazine backed Outdoors Magazine is out with **JACK FORD** editor... **BILL FAHEY**, Utah State SAR Coordinator would like to see SAR equipment catalog. **SCOTT RUBY** is working on it for NASAR... South Dakota SAR Coordinator **RICHARD TRANKLE** announced a new state law which now places SAR responsibility with County government... National Park Service Headquarters SAR Liaison Officer **ANDY HUTCHISON** reports that NPS distributed 1½ million survival education pamphlets. In addition, NPS is sponsoring another "Managing the Search Function" at Nashville in September... **SANDY BRYSON** of California WOOF reports that Yosemite NP will have search dogs (German Shepherds) available in the park full time for SAR support as a pilot program this summer... The U.S.C.G. National SAR School staff has changed. Cmdr. **GARY CROSBY** USCG is Commander of the 210 foot vessel "Durable" out of U.S.C.G. Corpus Christi Air Station in Texas. Major **BOB MATTSO** USAF is now SAR Liaison Officer at USAF/Civil Air Patrol Headquarters at Maxwell AFB, Alabama. Cmdr. **BILLY CUNNINGHAM** USCG is now National SAR School Director... The illustrious **BILL WADE** recently of New Zealand is now Assistant Chief Ranger at Great Smokey's NP... **JIM BRADY** of NPS Albright Training Center is planning a 3-day Search Strategy and Tactics Workshop this Winter. Jim estimates annual national SAR activity at 50,000 missions, 1300 SAR deaths of which 300 are search related... **GEORGE SAINSBURY** of Washington State Mountain Rescue Council still attends most MRA meetings as its premier diplomat... Cmdr. **KENN CUTLER** of U.S.C.G. Headquarters, SAR Liaison, reports that the Louisiana Lake Pontchartrain SAR interface plan is an excellent example of government coordination for the public's benefit... **DICK SALAMANDRA** of HEW/EMS has announced three region workshops and five national symposiums for FY 78... U.S. Border Patrol's **AB TAYLOR** has had his leg in a cast from a knee operation. However, he left hospital to teach man-tracking at Saratoga, California... Cmdr. **BILL HAUGEN** of U.S.C.G. 12th District, San Francisco states that all CG helicopters have underwater equivalent of an ELT, in case they crash... Capt. **MARV JACINTO** of Placer County Sheriff reminds us that California Government Code 26615 requires each county Sheriff to maintain a directory of trained SAR dogs. Might it be cost effective to let OES do

it... California OES Director **CHARLES MANFRED** asks volunteer SAR to help spread the earthquake preparedness "word" in California... **ABBE KEITH**, MRA Executive Secretary asks that I list (213) 791-1731 instead of (213) 339-1271 regarding Calendar events... Col. **JOE HENJUM** of Scott AFB ARRS is assuming Director of Operations of 41st Rescue and Weather Wing at McClellan AFB, California... Pennsylvania's Air Safety Officer **SAMMY SNIDER** is working on interface agreements between his State and volunteers. Sammy's assistant, **GEORGE DORN**, reports that six little L-PER ELT DF's are operational around the State... Washington State's **SKIP STOFFEL** has left State OES for Directorship of Shelan County OES... A first! Mt. Rainer NP called in U.S. Border Patrol man-tracker **JOEL HARDIN** to support missing girl search... The Japanese have an innovation in emergency high-rise building escape by inverting the rope rappel concept, sliding down a flexible tube using body friction to descend... **KEN GOSTING**, emergency care consultant, is preparing a report on California for the American Society of Emergency Physicians... Inyo County Sheriff's Posse **BOB PFEIL** and **PAT ELLIOT** survived NPS Helicopter crash recently... **WES PODBOY** reports Ontario, California ESAR Post 359 has achieved provisional certification. An ESAR certification team came all the way from Idaho. Boise ESAR Post 999 members making the drive were: **JIM MONIHAN**, **TONY ENGLEMAN**, **NANCY CLARK** and **BRIAN FUGATE**... **JIM BRADY** is NASAR's awards committee chairman replacing Col. **ROY DREIBELBIS** who gave great stature to the committee before he retired... Utah's **GEORGE CONNELL** is now National Jeep SAR Association's Executive Secretary...

## PUBLISHER'S FORUM

### DENNIS E. KELLEY

... **HATCH GRAHAM** was elected Unit Leader of DOGS, Anchorage, Alaska... The Operations Research Society of America's Lanchester Prize for an outstanding 1975 book or paper has been awarded to **LAWRENCE D. STONE** of Daniel H. Wagner Associates for his "Theory of Optimal Search"... **DARRELL C. THORSETH** and Sault Ste. Marie, Michigan ESAR, discovered searching for a stray cat that bit a nine year old boy as demanding as... Ranger and SAR Officer, **TIMOTHY J. SETNICKA** of Yosemite National Park wrote or phoned all wilderness permit holders and summit register signers seeking the location of a lost hiker or significant clues to his whereabouts... **DON HUBER** was elected President of WOOF... **PAUL SCOTT** of Wolf Creek, Oregon, has been elected National Commander of National Jeep SAR Association... Indiana Governor **OTIS R. BOWEN** has signed measures of interest to Indiana emergency life support agencies... **"FITZ" FITZGERALD**, SAR Coordinator of Arizona State Division of Emergency Services and **"SKIP" CARNE**, SAR Coordinator of Maricopa County Sheriff's Department are both figuring ways to get to the big event at Nashville September 16-18, 1977... New Mexico's Emergency Services Council President **RICK GOODMAN** visited California and us on a recent business trip... ❀



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