APPALACHIAN SEARCH AND RESCUE CONFERENCE, INC.

# S E A R C H  A N D  R E S C U E
# O P E R A T I O N S  P L A N

## (S A R O P)

~~First Edition~~ (Revised)
~~July 1978~~

MAY

Appalachian Search and Rescue Conference, Inc.
~~2617 Jefferson Drive, Alexandria, Va. 22303~~
P.O. Box 440 Newcomb Hall Charlottesville, VA 22903

~~Emergency Contact:~~ University of Virginia Police Department
~~(804) 924-7166~~

POLICE ROUTE ONE FOR ASSISTANCE THROUGH ASRC

VIRGINIA OFFICE OF EMERGENCY AND EMERGENCY SERVICES

24-HOUR EMERGENCY PHONE NUMBER: (804) _____

THE ASRC 24-HOUR DISPATCH SERVICE IS PROVIDED BY:

UNIVERSITY OF VIRGINIA POLICE
(804) 924-7166

ASST. T. LDR

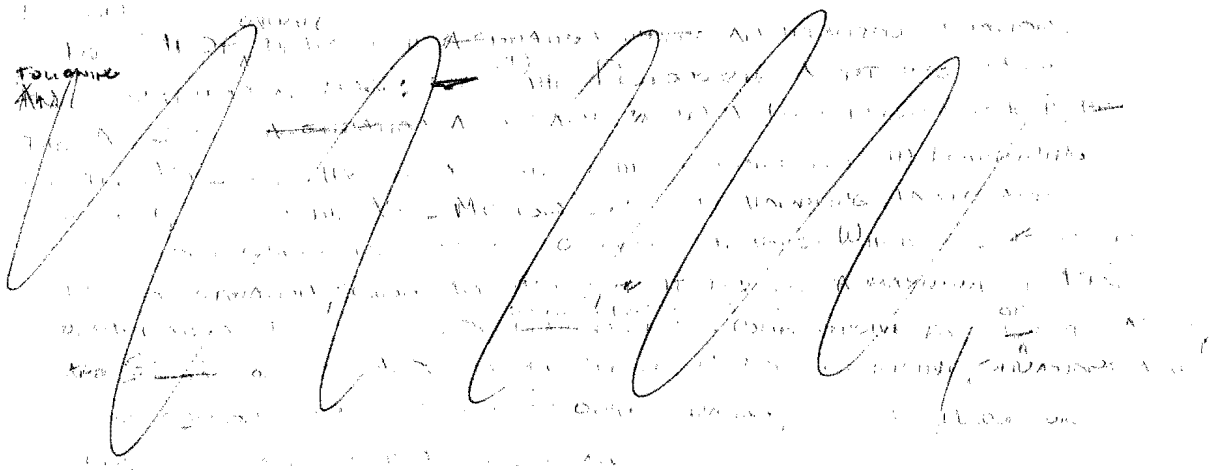
# APPALACHIAN SEARCH AND RESCUE CONFERENCE, INC.
# SEARCH AND RESCUE OPERATIONS PLAN
# (ASRC SAROP)

PURPOSE:

This document is intended to provide a general outline of the procedures to be followed by the ASRC in conducting search or rescue operations. It is for the general information of any interested parties, but is particularly intended for the orientation of ASRC members and members of other organizations with which the ASRC comes in contact.

SCOPE:

The SAROP treats SAR organization and procedures only in a very general way: it neither covers any detailed procedures nor gives any official ASRC standards. These may be found in the ASRC Operations Manual. The SAROP treats elements of search strategy only in an incidental fashion. This material is available in the SAR literature.



FIRST EDITION
SECOND PRINTING, WITH MINOR REVISIONS JULY 1978
SECOND EDITION, APRIL 1982

OUTLINE

ASRC SAROP

I. INTRODUCTION
   - A) Completeness
   - B) Simplicity
   - C) Adaptability
   - D) Clear Delineation of Authority

II. PHASE Ø: Alert and Mobilization
   - A) UVAPD
   - B) AO
   - C) ~~ASRC~~ MC
   - D) DO

III. PHASE 1: The Quick Response
   - A) QRT ORGANIZATION
     1) QRL
     2) MEDIC
     3) RS
     4) RO
     5) BO
   - B) DO
   - C) ~~ASRC~~ MC
     1) QR Support
     2) Mission Planning

IV. PHASE 2: Scratch and ~~Survey~~ Sweep Searching
   - A) MISSION STAFF
     1) ~~ASRC~~ MC
     2) OO
     3) CO
     4) EO
     5) PO
     6) DO

I. INTRODUCTION

In order that a search and rescue operations plan (SAROP) be both effective and practical it must meet four important criteria. The first is

A) Completeness.

The SAROP must anticipate and provide for all aspects of (SAR) operations. Means must be provided to meet the needs of the searchers while simultaneously providing procedures to deal with a multitude of search and rescue contingencies. Although the general problem of SAR is one of considerable complexity, the SAROP, if it is to be practical, must have

B) Simplicity.

The SAROP will be executed by fallible people, often under considerable stress. If the SAROP is as simple as possible, the searchers are less likely to make mistakes which would jeopardize the success of the mission. Furthermore, a complex plan burdens the searchers with its own procedures rather than fulfilling its proper function of freeing their creative powers to attack the mission's more substantial problems.

The SAROP attempts to simplify the conduct of a SAR mission by identifying and standardizing only the most important and general procedures. For each routine function a form is provided which outlines the standard procedure so the searcher doesn't forget anything, provides work space so the searcher gets complete and correct information and can organize his thoughts, and, finally, provides a written record for the accurate information of other searchers and for documentation of the mission afterwards. Completing the paperwork assures that the mechanics of the Plan are executed smoothly and efficiently but with a minimum of effort.

Still, many different situations may arise during a mission, and rigid standardization will impede progress rather than improve it. Hence the importance of

C) Adaptability.

Although the SAROP is intended to provide standard pro-

cedures which may be followed with little thought, it does not ignore the intelligence of the searchers who are using it. It is up to the mission leaders to adapt the Plan to the situation at hand and apply only those procedures which are necessary or useful. It is through adaptability that a simple plan can be complete.

There are two main features of the SAROP which aid its adaptability. The first is the organization of a mission into five phases:

Phase Ø: Alert and Mobilization
Phase 1: The Quick Response
Phase 2: Scratch and ~~Survey~~ SWEEP Searching
Phase 3: Saturation Searching
Phase 4: Withdrawal

Each phase need only be initiated if it is appropriate, and the strategy employed in each phase is based upon need rather than procedure.

The second adaptable feature of the SAROP is the functional organization. The Plan describes many jobs which may need to be performed during a mission. How people are assigned to jobs, or the jobs to people, depends upon the circumstances and is up to the leaders. For example, a Field Team is composed of Leader, Medic, Rescue Specialist, Radio Operator, Driver and Searchers, but on a simple task a team of two people can discharge all of these duties. The titles used in the SAROP are carried by functions, not individual people. THE MAIN REASON FOR ESTABLISHING THESE FUNCTIONS IS TO PROVIDE A QUICK AND SIMPLE MEANS TO ASSIGN AND DIVIDE THE WORK OF THE MISSION STAFF OR FIELD TEAM.

Finally, an effective and practical SAROP must provide

D) Clear Delineation of Authority.

A SAR operation can only be successful if it is a coordinated, unified effort. An operation involving many people of different background, capabilities, and training can only be expected to succeed if the standards of the SAROP are enforced by a unified leadership with a well-defined hierarchy.

Although some sort of para-military chain of command

may be the ideal, ASRC leaders must understand that neither ASRC members nor volunteers will submit to such a system, and it is surely not necessary. Nevertheless, the leaders must be able to expect that their instructions will be followed fully and that all searchers will respect the command hierarchy.

The SAROP provides five distinct levels of authority: Searcher level, Field Team level, Staff level, (ASRC Mission Coordinator and Responsible Agent. It is most important that all ASRC members understand that the ultimate authority during a mission is the Responsible Agent (Sheriff, Park Superintendant or Civil Air Patrol Mission Coordinator)*: the ASRC serves at his pleasure and is failing in its duty if it does not provide the service he wants. (County SAR Coordinator,

---

*Strictly speaking, only the (~~Sheriff~~ County SAR Coordinator) or Park Superintendant may be considered the Responsible Agent. However, for the purpose of the SAROP, the term Responsible Agent is used to denote any person with authority over the ASRC. The CAP Mission Coordinator is a notable example.

## II. PHASE Ø: Alert and Mobilization

During Phase Ø, the ASRC is alerted through the cooperation of the University of Virginia Police Department, and the members of the appropriate ASRC Groups are mobilized. After analysis of the available information, the appropriate action is taken. This may involve the dispatch of a Quick Response Team (QRT) or the planning of a major search effort. Phase Ø is illustrated in figure 1.

### A) ~~(UVAPD)~~ VIRGINIA OFFICE OF ENERGY AND EMERGENCY SERVICES (OEES) EMERGENCY OPERATIONS CENTER (EOC) AND UNIVERSITY OF VIRGINIA POLICE DEPARTMENT (UVAPD)

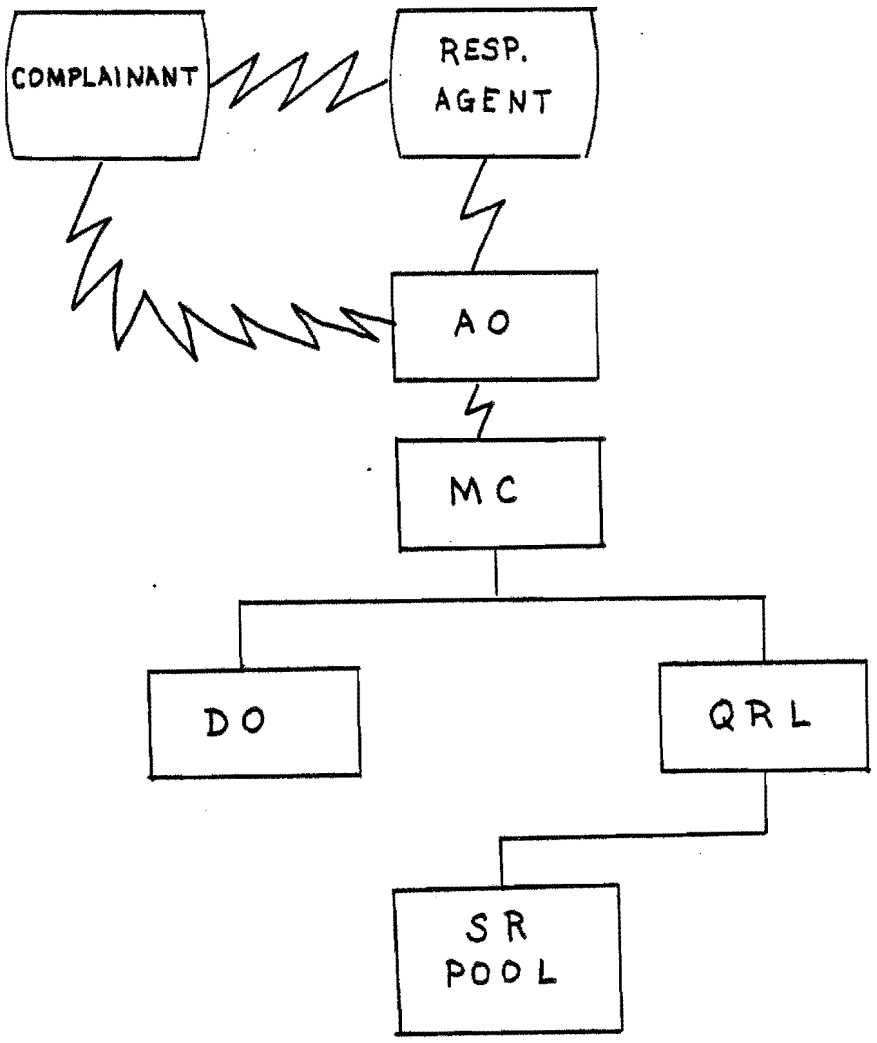
The U.Va. Police Dispatcher is equipped with an ASRC Mission Alert Form (MAF) and an Alert Officer List (AO List). Upon receiving a call for SAR assistance the Dispatcher fills out the MAF getting the complainant's name and telephone number, and instructing him to wait at his telephone for a call from the ASRC. The Dispatcher then calls down the AO List until he locates an Alert Officer and transmits the information on the MAF to him. This completes the Police Dispatcher's duties.

The UVAPD telephone ~~is~~ ARE manned at all times, so that the ASRC can always be reached. However, each Group periodically publishes a list of local contacts so that it may be reached more easily. Each list contains complete alert information.

### B) ALERT OFFICER (AO)

After receiving the MAF information from the Police Dispatcher, the Alert Officer (AO) calls the complainant to get confirmation and enough information to plan an appropriate response. He enters the information on a Mission Data Form (MDF).

From this point, the procedure of the AO is dictated by the situation, but several things must be attended to:




THE VA. DOES; AN OBES OFFICER CALLS

Figure 1. Phase Ø: Alert and Mobilization. The Complainant requests SAR aid from the U.Va. Police Dispatcher. The Dispatcher then contacts an ASRC Alert Officer (AO). The AO gets initial information from the Complainant, selects a Mission Coordinator (MC) from a Group near the mission site, and relays information to him. The MC then organizes the response through a Dispatch Officer (DO) and, if appropriate, a Quick Response Leader (QRL).

1) The AO must decide on an appropriate response (e.g. dispatching a QR Team)

2) Sufficient information must be secured to support the response (the MDF and Missing Person Questionnaire (MPQ) help in this effort).

3) The complainant must be assured that action is being taken.

4) Arrangements for further communication must be made.

5) An ASRC Mission Coordinator (MC) must be appointed and informed (the AO may appoint himself ASRC MC, otherwise he refers to the ASRC MC List in making the appropriate choice).

NORMALLY, THE AO APPOINTS A MC IN THE GROUP NEAREST THE MISSION,

C) APPALACHIAN SEARCH AND RESCUE CONFERENCE ASRC MISSION COORDINATOR (MC)

The ASRC Mission Coordinator's job is to direct all aspects of the ASRC's participation in the operation. The effectiveness of the ASRC is his responsibility.

The ASRC MC's first task is to approve and implement the AO's initial response plan (the AO and the ASRC MC may be the same person). However, no action can be taken in the field until the Responsible Agent has made the original request for help. If not, once the ASRC MC has initiated the appropriate mobilization plan, he must contact the Responsible Agent.

Mobilization plans vary from Group to Group, but three general principles apply.

1) The Group level callout is carried out by a Dispatch Officer (DO) selected by the ASRC MC. The DO is ~~usually~~ often an Amateur Radio Operator (Ham) since his dispatch duties involve radio communication.

2) If a Quick Response (QR) is appropriate, the ASRC MC appoints a Quick Response Leader (QRL) ~~from his Field Team Leader List (FTL List)~~ and the QRL assembles the Team. In a simple rescue situation the ASRC MC may appoint himself QRL.

3) If a Conference-wide callout is appropriate, the ASRC MC alerts DO's in the other Groups, which then follow their own mobilization procedures.

Once the callout procedures are set into motion, the MC begins the tasks of gathering information and planning for the operation. These tasks are not complete until the operation has ended.

D) DISPATCH OFFICER (DO)

The Dispatch Officer (DO) has two main responsibilities. The first is to maintain radio contact with the QR Team and the second is to execute the callout plan according to the ASRC MC's instructions. When the callout is finished, the DO fills out an Alert Summary Form (ASF) which gives the ASRC MC a quick survey of the manpower he has available.

Each ASRC member is equipped with a Searcher Alert Form (SAF) so that he may record his dispatch instructions completely.

## III. PHASE 1: The Quick Response

The primary missions of the Quick Response Team (QRT) are rescue and evacuation. In situations requiring these functions there is no question that a QR is appropriate. Nevertheless a QRT can serve a useful function in a search situation as well. Although the probability of actually finding a lost person with a QRT may be small, the Team can fulfill four important missions in a search.

These are

1) Hasty Search
2) Initial Survey Search
3) Initial Scratch Search
4) Initial Base Operations.

(SEE P. 20 FOR TASK DEFINITIONS)

Even if the QRT fails to find the victim, the information it gathers about terrain, weather, map accuracy, and road conditions may be crucial in the smooth mounting of a large scal search.

The QRT will usually make first contact with the Responsible Agent and others at the site. Good working relationships will depend upon how this contact is made.

QRT organization is illustrated in figure 2.

### A) QRT ORGANIZATION

There are five positions on a QRT, but one person may fill more than one position.

1) Quick Response Team Leader (QRL)

The Team Leader's responsibility is to carry out the mission assigned by the MC, within the constraint that he provide for the safety of his Team. He is the highest authority on the QRT, and he must consider the judgment of the other specialists, particularly the MEDIC. The QRL's specific duties are

a) Mission Planning
b) Navigation
c) Personnel Management

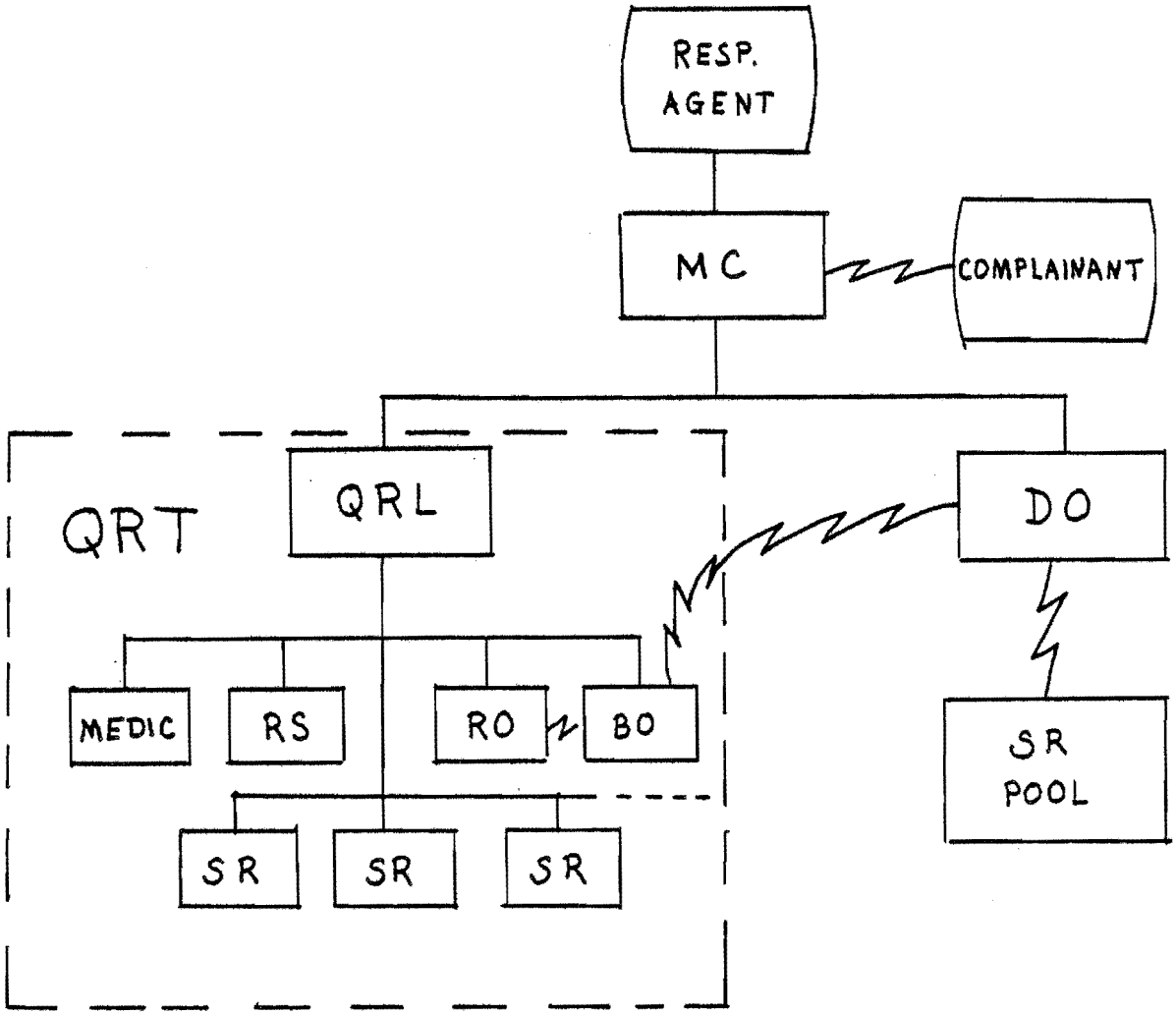



Figure 2. Phase 1: The Quick Response (QR). The QR is organized by the Quick Response Leader (QRL). Meanwhile, the Dispatch Officer (DO) is alerting the rest of the Group. Communication with the Quick Response Team (QRT) in the field is maintained through the Base Officer (BO) and the DO. The MC continues to gather intelligence and plan the operation under the Responsible Agent's direction.

d) Equipment Management
e) Safety
f) Mission Reporting.

2) Medical Officer (MEDIC)

The MEDIC is responsible for the medical care of the victim and incidental medical care of Team members. The MEDIC should be a registered EMT. The MEDIC's specific duties are

a) Assembling necessary medical equipment
b) Medical care of team members
c) Medical care of victim
d) Advising QRL and Rescue Specialist (RS) on medical situation and priorities during rescue and evacuation.

3) Rescue Specialist (RS)

The Rescue Specialist (RS) is responsible for the execution of any technical operations including rescue and evacuation of the victim. His specific duties are

a) Assembling necessary technical equipment including litters and rigging
b) Supervising all roped travel
c) Planning and supervising rescue and evacuation
d) Advising QRL of technical situation and priorities
e) Enforcing safety standards.

4) Radio Operator (RO)

The RO's responsibility is to maintain communication with the Base Officer (BO). His specific duties are

a) Assembling communications equipment (with the BO)
b) Establishing initial contact with the DO and the BO during Phase Ø
c) Maintaining contact with the BO
d) Advising the QRL of the communications situation.

5) Base Officer (BO)

The BO is responsible for securing the QRT's Base (where the vehicles are left) and providing a communications link to the outside world, particularly the DO and the Responsible Agent. The BO remains at the Base and therefore need not be field qualified. However, he should be a Ham. His specific duties are

a) Assembling communications equipment (with the RO).

b) Establishing initial contact with the DO and the RO during Phase Ø

c) Maintaining contact with the RO

d) Advising the QRL and the RO of the communications situation

e) Keeping a Radio Log (the BO will likely become Communications Officer (CO) during Phase 2)

f) Handling inquiries from the public at Base

g) Maintaining liason with the Responsible Agent.

The QRT must be adapted to fit the situation at hand. The number of searchers, the choice of leaders and the equipment taken all depend upon the particular problems the QRT expects to face.

B) DISPATCH OFFICER (DO)

The DO's duties during Phase 1 are essentially the same as during Phase Ø: implementing the callout and establishing and maintaining contact with the QRT through the BO. The BO keeps a Radio Log of all traffic with the QRT.

C) MISSION COORDINATOR (MC)

During Phase 1 the MC is faced with two main problems. First is supporting his QRT. Second is planning for Phases 2, 3 and 4 should the QRT not locate the victim.

1) The support requirements of the QRT are

a) Manpower (if more is needed)

b) Supplies (if the QRT is in the field more than 24 hours)

c) Intelligence

aa) Mission status

bb) Victim information

cc) Weather reports

dd) Maps

d) Medical and evacuation support

aa) Helicopter evacuation

bb) Rescue Squad (ambulance) evacuation

cc) Medical supplies for definitive care (if the MEDIC is capable of it)

e) Communications (if the situation is more difficult than anticipated).

2) Planning for a large scale search depends upon the circumstances, but five general principles apply:

a) All action must be approved by the Responsible Agent

b) Initial intelligence gathering is crucial to success.

c) The Mission Staff should be assembled and briefed early so that they can help in the planning.

d) The DO should be kept informed.

e) The Staff should go to the site as early as possible, but should take care not to leave prematurely.

## IV. PHASE 2: Scratch and ~~Survey~~ Sweep Searching

If the QR is unsuccessful, the ASRC MC will have to initiate a large scale search effort. During Phase 1, he should have made plans for this contingency, so that a Base Camp can be established and Phase 2 can begin as soon as daylight and weather permit. If the ASRC is being called to participate in a search organized by the Responsible Agent and involving other organizations, the procedures of Phase 2 will be followed by the ASRC MC to insure effective participation by ASRC personnel.

During Phase 2, the ASRC MC's strategy will consist mainly in containing the search area (IF POSSIBLE) and in ~~survey~~ SCRATCH and ~~scratch~~ SWEEP searching. The details, of course, depend upon the situation.

The basic tactical unit in an SAR operation is the Field Team; the command and support unit is the Mission Staff. The Staff assembles Field Teams (designated by letters) and deploys them on specific tasks (designated by numbers) in accordance with the ASRC Mission Coordinator's search strategy. The Task Assignment Form (TAF) is used in assembling a Team suitable for a specific task. Figure 3 illustrates Phase 2 organization.

### A) MISSION STAFF

The purpose of the Mission Staff is to provide the MC with enough manpower to meet all his responsibilities in conducting the operation. This frees him to carry out his primary function of strategy planning. On a small operation, the MC may himself discharge some or all of the staff duties. There are six of these:

1) Mission Coordinator (MC)

During Phase 2, the specific duties of the MC are

a) Maintaining liason with the Responsible Agent and leaders of other organizations in the operation
b) Choosing a Base Camp site
c) Debriefing the QRL
d) Continuing intelligence gathering

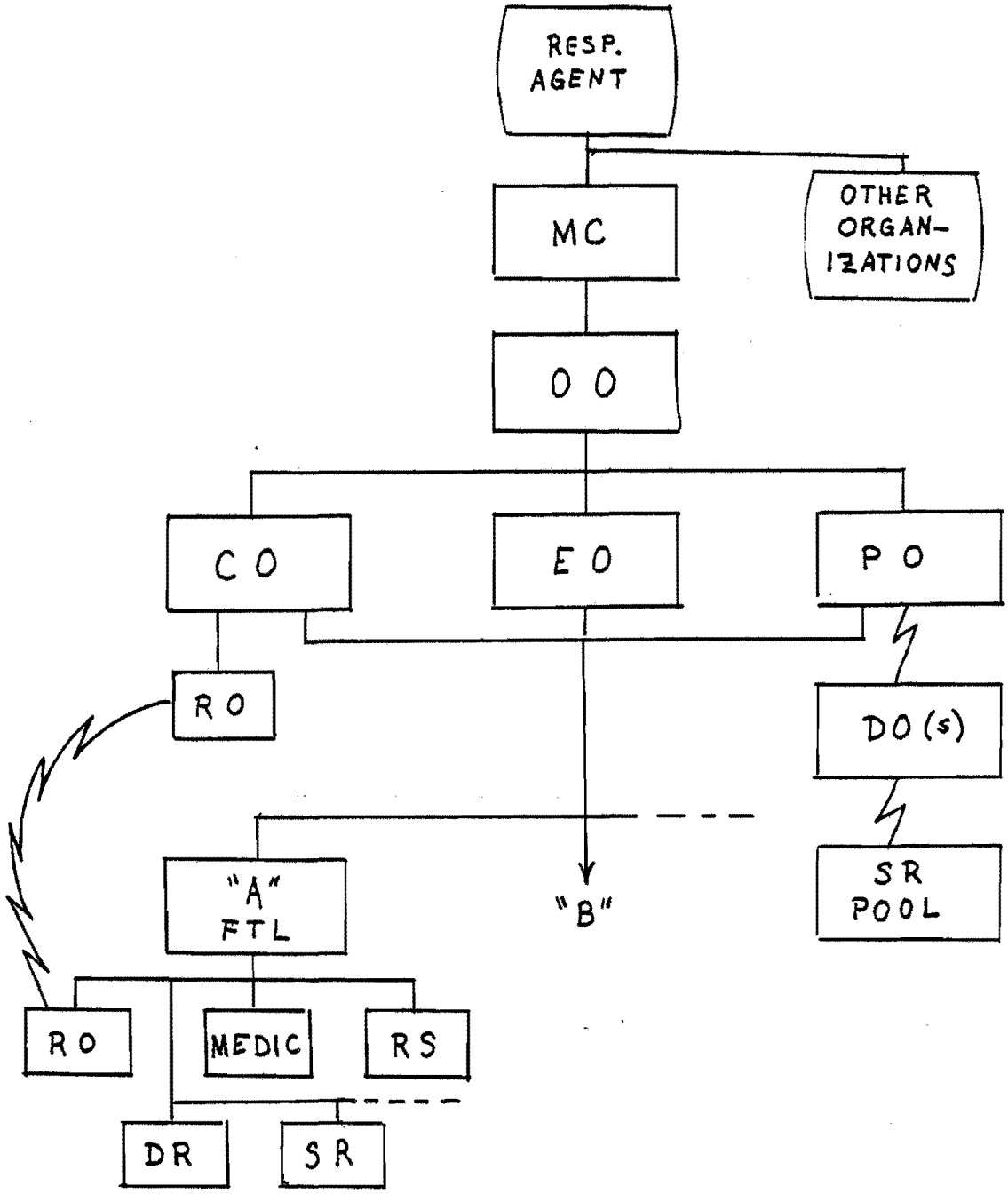



Figure 3. Phases 2, 3, and 4: Large Scale Search
The Mission Staff, under the direction of the Operations Officer (OO), develops Field Teams to execute particular tasks. Logistics is handled by the Communications Officer (CO), Personnel Officer (PO), and Equipment Officer (EO). The Dispatch Officer (DO) manages the personnel still in town. The Field Team is the basic SAR tactical unit. It consists of a Field Team Leader (FTL), Radio Operator (RO), Medical Officer (MEDIC), Rescue Specialist (RS), Driver (DR), and Searchers (SR).

e) Planning strategy (maintaining the Strategy Map)

f) Planning relief and support.

2) Operations Officer (OO)

The Operations Officer (OO) is the MC's lieutenant. He is responsible for executing the MC's strategy and for running the Base Camp and the Operations Center. He supervises all other members of the Mission Staff. His specific duties are

a) General operational planning

b) Supervising task assignment (initiates use of TAF)

c) Maintaining Status Map

d) Briefing and debriefing Field Team Leaders (FTL's)

e) Maintaining Operations Log

f) Enforcing security in Base Camp

g) Supervising Mission Staff.

3) Communications Officer (CO)

The Communications Officer (CO) is responsible for the effectiveness of all ASRC communications. His specific duties are

a) Directing the establishment, maintenance and improvement of the communications network

b) Supervising the Communications Center and Radio Operators

aa) Enforcing SOP

bb) Enforcing security at the Communications Center

cc) Supervising log keeping

dd) Maintaining System Chart

c) Advising Mission Staff on communications matters

d) Advising Equipment Officer (EO) on issue and maintenance of communications equipment

e) Providing communications instructions to Field

Teams (this is accomplished using the TAF).

4) Equipment Officer (EO)

The Equipment Officer (EO) is responsible for the physical needs of the operation:

a) Equipment
b) Transport
c) Shelter
d) Food
e) Water
f) Sanitation.

Some of the EO's specific duties are

a) Maintaining the Equipment Inventory
b) Issuing equipment to Field Teams and collecting it upon return (this is accomplished using the TAF)
c) Scheduling the use of vehicles
d) Coordinating the efforts of relief agencies (e.g. Red Cross) to supply food and shelter
e) Advising Mission Staff on matters under his control.

5) Personnel Officer (PO)

The Personnel Officer (PO) is responsible for managing all the people working with the ASRC in the operation. He should be able, at any time, to say where any particular person is or whether or not a person of certain capabilities and personal equipment is available for team assignment. The PO's specific duties are

a) Registering all incoming searchers
b) Checking out all outgoing searchers
c) Maintaining the Personnel Roster
d) Maintaining the TAF File
e) Coordinating with the DO in executing the MC's dispatch and relief plans
f) Assembling Field Teams (this is accomplished using the TAF).

6) Dispatch Officer (DO)

Each DO's responsibilities during Phase 2 are to provide a communications link to his Group's home town and to execute the MC's dispatch plan. He will work under the direction of the PO. Each DO is responsible for providing his own relief.

B) THE FIELD TEAM

The Field Team is the basic tactical SAR unit. The success of the mission depends entirely upon the intelligence with which Teams are deployed and upon their effectiveness in the field.

A Field Team is organized in essentially the same way as the QR Team. The differences are

1) The leader is called a Field Team Leader (FTL)
2) There is no Base Officer
3) Since the EO endeavors to have vehicles driven only by their owners, appropriate members of the Team are designated Drivers (DRs)
4) The Field Team is designated by a letter (e.g. Team C).

c) OPERATIONAL PROBLEMS

1) Task Assignment

A task is an attempt to solve a particular tactical SAR problem generated by the MC's strategy. There are four basic kinds of tasks:

a) Support task

This is an effort to resupply or add manpower to a Team in the field.

b) Commo Task

aa) Relay: a radio operator who relays messages.

bb) Repeater: an automatic or semi-automatic relay station.

c) Search Task

aa) Scratch: search of a point or linear

CUTTING-FOR-SIGN TASK TRAILING

feature

bb) Survey: search of a large area from a single vantage point.

cc) Sweep: area search by a small team.

dd) Line: saturation area search by a large team (cf. Phase 3).

~~ee) Containment: patrol of the perimeter of the search area in case the victim walks out.~~

d) Rescue Task

aa) Rescue: extrication and medical stabilization.

bb) Evac: transportation of victim to road or heliport.

There are an infinity of variations.

Once a task need has been identified the OO numbers it and enters a description on a Task Assignment Form (TAF). The other staff members then follow the standard task assignment procedure (on the TAF) to assemble a suitable Field Team with proper equipment and communications to execute the task. The FTL is summoned and briefed; he assembles his Team; it gets a final briefing from the OO and departs from Base Camp.

If a task is identified which can be carried out by a team already in the field, a similar (but simpler) procedure is followed and the team is briefed by radio on its new assignment.

When a team returns to Base Camp, the FTL must be debriefed and the team must check all its equipment with the EO before its task is considered complete.

2) Relief

People are fragile machines: a searcher's efficiency and safety consciousness decrease rapidly under stress or after a few hours of searching. The Staff must be very careful not to overextend the operation's manpower capabilities, or mistakes will be made and accidents will

happen.

In a situation where manpower is limited, the MC will probably not want to carry out any night searching, except perhaps for some simple surveys. A single staff can effectively run such a "daylight operation" by sleeping at night.

On the other hand, if it is reasonable to search around the clock, the Base Camp must be manned by relief staffs. Ordinarily this is accomplished with two relief staffs and the regular staff, standing eight hour watches. Each relief watch is led by a Watch Officer (WO) who serves as both MC and OO during his shift. The WO should notify the MC of any major developments.

Relief of searchers in the field is even more important. Exhausted searchers, even if willing, must not be sent out on yet another task: it is bad economics to expend two searchers' lives trying to save one victim. The MC's dispatch plan should allow for staggering of mobilization times so that fresh searchers are always available.

3) Safety

Everyone should be fanatical about safety. An operation involving 100 people for 3 days entails 7200 person-hours of opportunity for disaster.

4) Liason with Other Organizations

The ASRC will seldom, if ever, be operating by itself on a mission. To ensure success, the MC must understand what the Responsible Agent expects of the ASRC and endeavor to fulfill that expectation without interfering with other organizations. Careful coordination by the MC is essential.

5) Communications

Effective communication is extremely important to effective operation. There are two aspects of effective communication:

a) The net must be complete. Traffic cannot be passed to a station that cannot be worked. The CO must endeavor to place relays and repeaters where they are needed and the OO must not send teams where he can't talk to them. ROs must follow their commo instructions.

COMMUNICATIONS CENTER ~~BASE CAMP~~ RADIO OPERATORS SHOULD USE THE STANDARD ICS MESSAGE FORMAT FOR ALL TRAFFIC PASSED.

b) Message handling must be accurate. Every fixed station must maintain a Radio Log. Radio Operators must understand that their job is to pass traffic, not to generate it. Tactical decisions must be left to the leaders. Use of the radio SOP enhances accuracy.

6) Public Relations

Public Relations is the province of the Responsible Agent. All inquiries should be referred to him or his delegate (sometimes the MC). Searchers must be reminded by the PO to be tactful but close-mouthed.

7) Evacuations

Once a victim is located and medically stabilized, the problem remains of removing him to a hospital. The evac is carried out in two stages: transportation by a Field Team to an accessible location such as a road or a helispot, and then transportation by ambulance or helicopter to the appropriate medical facility.

Planning for various evac contingencies must be done well in advance of the find so that no time is lost once the rescue is complete. The MC shoud note on the Strategy Map all usable ~~helispots~~ and passable roads, but the OO should note on the Status Map only those under active consideration for use.

Planning the evac route should be done using all available reconnaissance data, especially the observations of the FTL at the site. Arrangements for ambulances and helicopters will be made by the MC, usually in consultation with the Responsible Agent.

V. PHASE 3: Saturation Searching

Phase 3 begins as soon as the MC decides to begin saturation searching (whether or not scratch ~~and survey~~ sweep searching is terminated). The organization of the operation changes very little at this time; it is the nature of the tasks which is different. The biggest change is the large influx of people (mostly volunteers) and the subsequent dilution of Field Teams with untrained inexperienced searchers.

The ASRC is not large enough to mount a large scale saturation search ~~by itself.~~ Consequently, volunteers will be needed during Phase 3. These are many a mixed blessing. Often local people have more thorough knowledge of the terrain than any ASRC people and the wise MC will exploit this knowledge. He will also be careful of it. The problem with volunteers is that they are inexperienced as searchers and must be taught search techniques on the spot. This teaching makes great demands on the leadership capabilities of ASRC people. During Phase 2, few volunteers should be employed (by the ASRC) except in containment tasks and in those special circumstances where a volunteer has a valuable expertise. During Phase 3, however, volunteers are completely indispensable.

The usual deployment of volunteers is in saturation line searches. ASRC ~~people~~ provide leadership, communications and medical expertise, while ~~the~~ volunteers provide the bulk of the manpower. Specially skilled volunteers, such as Hams and Rescue Squadsmen should be placed in positions where their skills can be utilized. ASRC members must be particularly alert for safety problems.

Each incoming volunteer must register with the PO (using a Searcher Registration Form (SRF)), and be issued a Searcher Information Sheet (SIS) containing line search instructions, operational procedures and safety rules. The PO should endeavor to assign volunteers to Field Teams as soon as possible so as to avoid confusion. Each FTL is then responsible for the welfare and effectiveness of his volunteers.

Volunteers leaving the search must check out with the PO, and each FTL should take care to see that his volunteers do so.

VI. PHASE 4: Withdrawal

Phase 4 begins whenever the search is terminated, either because it has been successful or because it has been abandoned.

An orderly withdrawal is necessary so that no searchers get misplaced and so that the ASRC is ready for mobilization again as soon as possible. The withdrawal is carried out in three stages:

A) WITHDRAWAL OF ~~VOLUNTEERS~~ SEARCHERS UNDER ASRC CONTROL

All ~~volunteers~~ NON-ASRC SEARCHERS must be accounted for and since some can be counted on to fail to check out, ASRC people will be needed to track them down.

B) WITHDRAWAL OF ASRC ~~SEARCHERS~~ MEMBERS

Once the ~~volunteers~~ NON-ASRC SEARCHERS are checked out, the ASRC members begin withdrawing with their equipment. The procedure is the same as for a Field Team returning from a task, except that the Team is released to go home rather than to rest in Base Camp. All searchers must check out with the PO and all equipment must be checked through the EO.

C) ASRC MISSION STAFF WITHDRAWAL

Once all people and equipment are accounted for, the ASRC MC should report to the Responsible Agent that all is well and then withdraw his MISSION Staff. The mission is not completed, however, until all equipment is properly stored.

# GLOSSARY

AO: Alert Officer. II-B

AO List: List of available Alert Officers. II-A

ASRC: Appalachian Search and Rescue Conference

ASF: Alert Summary Form. II-D

Base Camp: The central location from which the mission is conducted. Ordinarily contains an Operations Center, Communications Center and Rest Space. IV

BO: Base Officer. II-A-5

CO: Communications Officer. IV-A-3

Communications Center: Place at Base Camp from which communications are coordinated. Abbreviated COMCTR. IV-A-3

DO: Dispatch Officer. II-C-1, II-D, III-B, IV-A-6

DR: Driver. IV-B-3

EMT: Registered Emergency Medical Technician. IV-A-2

EO: Equipment Officer. IV-A-4

Equipment Inventory: A card file system which lists all equipment available to the ASRC and shows its deployment. IV-A-4-a

Field Team: IV-B

FTL: Field Team Leader. IV-B-1

~~FTL List: List of qualified Field Team Leaders. II-C-2~~

Group: The ASRC is divided into semi-autonomous Groups, each serving a distinct geographical region.

Ham: Amateur Radio Operator. III-A-5

Hasty Search: A ~~search of the area immediately surrounding the place where a missing person was last seen~~, in hopes that ~~he is not really lost.~~ III

MAF: Mission Alert Form. II-A

MC: Mission Coordinator. II-C, III-C, IV-A-1

MDF: Mission Data Form. II-B-2

MEDIC: Medical Officer. III-A-2

Mission Staff: MC, OO, EO, PO, CO, DO. IV-A-2

MPQ: Missing Person Questionnaire. II-B-2

OO: Operations Officer. IV-A-2

Operations Center: Place at Base Camp where strategy is planned and tasks assigned. Abbreviated OPSCTR. IV-A-2

Operations Log: A record of all significant operational events occurring during a mission. Abbreviated OPSLOG. IV-A-2

Personnel Roster: A card file system which lists all personnel available to the ASRC and shows their deployment. IV-A-5-c

Phase Ø: Alert and Mobilization phase. II

Phase 1: Quick Response phase. III

Phase 2: Scratch and Survey Searching phase. IV

Phase 3: Saturation Searching phase. V

Phase 4: Withdrawal phase. VI

PLS: Point Last Seen / the last known position of the search subject

PO: Personnel Officer. IV-A-5

QR: Quick Response. III

QRL: Quick Response Leader. III-A-1

QRT: Quick Response Team. III

Radio Log: A record of all traffic passed by a station. Other notes pertinent to communications may be entered in the log. III-A-5-e, III-B

Reconnaissance: The gathering of information about conditions at a remote location. Not to be confused with Survey. III

Responsible Agent: The person to whom the ASRC is responsible during a mission. I-D

RO: Radio Operator. III-A-4, IV-A-3

RS: Rescue Specialist. III-A-3

SAF: Searcher Alert Form. III-D

SAR: Search and Rescue. I

SAROP: Search and Rescue Operations Plan. I

SIS: Searcher Information Sheet. V

SRF: Searcher Registration Form. V

Status Map: A map of the search area showing what has been done and what is being done. It is continuously updated by the OO to show positions of Field Teams, areas of coverage, clues and reconaissance data. IV-A-2-b

Strategy Map: A map of the search area used by the MC to plan strategy and by the OO to make task assignments. IV-A-1-e

System Chart: A chart used by the CO to schematically represent the communications network. It shows deployment of stations, call signs, frequencies, special instructions and check-in information. IV-A-3-b-bb

TAF: Task Assignment Form. IV-V-1

TAF File: A file of Task Assignment Forms maintained by the PO. The File keeps the TAFs available for reference and modification and is the definitive record of personnel and equipment deployment. IV-A-5-d

Task: IV-C-1

UVAPD: University of Virginia Police Department. II-A

WO: Watch Officer. IV-C-2