EMERGENCY OPERATIONS PLAN

FOR

SHENANDOAH NATIONAL PARK

January 1985

APPROVED: _____
                    Superintendent

EMERGENCY OPERATIONS PLAN

Contents

I. INTRODUCTION

Emergencies involving one or two "incidents" are routinely handled by Shenandoah National Park. Major emergencies, however, begin to strain Park resources, our operational capability and our organization. Examples of these major incidents include catastrophic wildland or structural fire, multiple-injury accidents, or a major plane wreck with survivors. The Park has formulated detailed plans (Standard Operating Procedures) to handle some of these situations (i.e., fire, SAR, mass casualty). However, new types of situations occur annually and not all of the potential types of major emergencies can be foreseen. Therefore, this Emergency Operations Plan has been designed to give some structure to the command, to aid decision making and to ensure efficient allocations of resources. Emergency response will be accomplished using the "Incident Command System."

Priorities in responding to incidents will be set as follows:

1. The saving of human life
2. Caring for the less seriously injured
3. Resource protection
4. Controlling structural and wildland fires
5. Safeguarding property

The primary goal of this Plan is to manage all emergency incidents safely and efficiently while maintaining Park operations and returning to normal resource protection and visitor service as soon as possible.

1/24/85

II. Purpose and Situation Analysis

  A. Purpose

  1. To provide the most effective use of Park and other available resources to mitigate disaster effects.

  2. Establish general guidelines to ensure immediate, effective and safe emergency response to natural or man-caused disasters which may occur in Shenandoah National Park.

  3. To serve as a briefing guide and to provide familiarization for new employees, and to act as a training guide.

  4. To serve as a reference guide for response personnel, dispatch and command management.

  B. Legal Authorities

  1. 16 USC 12, 16 & 17 - The Secretary is authorized to aid park visitors in emergencies; includes purchase of food/supplies.

  2. 16 USC 3 - The Secretary may make and publish such rules and regulations necessary and proper for the use and management of parks.

  3. 36 CFR 1.5 - closures and public use limits. Superintendent can close all or any portion of a park when emergency conditions dictate.

  4. 28 USC 1346 & 2672 - Federal Tort Claims Act.

  5. NPS Management Policy, Chapter VII, Section 24 - Protection of the visitor, and park and concessioner employees from violation of laws and regulations and from hazards inherent in the park environment is a prime responsibility of the National Park Service. The saving and safe-guarding of human life take precedence over all other park management activities. The Service will work closely with other responsible Federal, State, and local agencies in carrying out this responsiblility.

  The NPS will develop and execute a program of emergency preparedness in accordance with the Civil Defense Act of 1950 (64 Stat. 1245) at the WASO, Regional, and park levels. Program requires a systematic method for alerting park visitors to potential disasters and preventive education efforts.

C. Situation

1. Shenandoah National Park is vulnerable to natural and man-caused disasters and emergencies which may result in loss of life, disruption of visitation and property damage.

2. SHENANDOAH NATIONAL PARK is linear in shape and is centered about and divided by 105 miles of THE SKYLINE DRIVE. The Park operates under exclusive jurisdiction. The Park is trisected by two U.S. Highways (U.S. 211 & U.S. 33) cutting across the Park. While the Park Service will be the lead agency in many of the expected emergencies, it is very possible that the nature, scope, or origin of the emergency will involve multi-agency response.

3. Protection of the visitor and Park resources is the prime responsibility of SNP regardless of the source or nature of the emergency or the Park's overall responsibility in resolving that emergency.

4. The Park can request support from NPS - MARO, the Virginia Department of Emergency Services, other Federal agencies and non-Government entities to assist in the performance of its emergency response activities.

D. Analysis of Potential Risk

1. Severe weather in the form of heavy snowfall, ice storms, and thunderstorms with associated severe winds, lightning, and heavy precipitation, are yearly occurrences for the Park. Although less likely, tornados and hurricanes are also possible and have impacted the area. In the event of a severe storm, it is expected that portions of the Park will be without electricity; roads may become hazardous or impassable due to downed electric lines, fallen trees, snow or icy surfaces; and visitors, especially in the backcountry and along the Drive, may become stranded, injured, or endangered.

2. "Lost" person incidents are frequent. The great majority are minor and are resolved when the "lost" person arrives at the trailhead late. More complex searches occur at a frequency of one every 1-3 years.

3. Technical or high angle rescue activities at Shenandoah National Park are very infrequent. Carryouts and backcountry assists occur with a frequency of 15-20 per year. Infrequently, the Park is also requested to assist agencies with rescues in the surrounding area.

4. The potential for structural fire is high. NPS-owned buildings are scattered throughout the Park and include offices, maintenance compounds, visitors centers and employee housing. The Park also has numerous concession-owned buildings including three overnight complexes, four campstores, two restaurants, four waysides, and three gas stations. Of the three districts, only the Central District has structural fire equipment in the form of two fire trucks. Many Park and concession buildings, including housing areas, are more than 45 minutes away (in good weather) from the nearest structural fire equipment.

5. Wildland fires are also common with most occurring in either the spring or the fall. Under normal weather conditions, Park employees respond to ten widfires per season. Almost all are man-caused. Larger fires requiring parkwide or greater NPS response average one each year. The Park works very closely with both the Virginia Department of Natural Resources and the U.S.F.S. as described in cooperative agreements.

6. The Park has direct and full responsibility for all motor vehicle accidents within the Park. Serious MVA's occur at a frequency of 20-25 per year.

7. Environmental emergencies from chemical and hazardous materials spills are a possibility. The Park has two U.S. Highways cutting across it. These types of incidents would usually result from a truck accident.

8. The Park has the potential to be involved in public health threats. With 6 eating establishments and 32 separate water systems, the possibility of food and/or water-related health threats must be considered.

9. Small aircraft accidents have occurred infrequently. There are several small airports within close proximity to the Park. A daily commuter flight crosses the Park in the vicinity of Loft Mountain, and the Park is in the flight patterns for Dulles International and Charlottesville Airports. Military aircraft periodically make low-level-high-speed passes over the Park.

E. Assumptions

1. Many of the emergencies occurring at Shenandoah National Park are short term (several hours or less).

2. Some emergencies may result in multi-agency response. Under these 'emergent' conditions, some degree of confusion as to leadership and assignments can be expected in the initial action. This Plan will alleviate this confusion by specifying an organization for emergencies.

3. Cooperative agreements outlining leadership and responsibilities during wildland fires exist with the U.S.F.S. and the Virginia Department of Natural Resources. An agreement with U.V.A. coordinates medical emergencies.

4. Cooperative agreements outlining leadership and responsibilites for other types of emergencies do not exist.

5. The Virginia Department of Emergency Services is the emergency service agency for the State and is primarily geared and preplanned for performing service functions as well as locating and providing resources.

II. ORGANIZATION AND RESPONSIBILITIES

A. Shenandoah National Park will utilize the Incident Commnd System (ICS) with its associated terminology and organization.

B. At the present time, some cooperating agencies are not familiar with the ICS. However, they have accepted it and will be adopting it in the next two years.

C. Some degree of the Incident Command System, even if it is only filling the Incident Commander position, is to be activated in every Park emergency response.

D. The Incident Commander of an emergency effort at Shenandoah National Park will be responsible for all of the Park's actions relating to that incident and, depending on the situation and other agencies involved, perhaps for the entire effort. The District supervisor, or his designee, who would otherwise be assigned to the mitigation of the major incident, will appoint the Incident Commander for an emergency confined within District limits. The Division Chief, or his designee, will appoint the Incident Commander for inter-district and inter-divisional emergencies, and the Superintendent will appoint the Incident Commander involving multi-agencies.

E. The Incident Commander will manage the incident within the constraints established by the Superintendent, standing orders and regulations pertinent to the incident.

F. The Incident Commander will determine what degree of incident command callout is required or if a unified command is needed.

G. On large incidents, the needed incident command overhead positions will be filled by the Incident Commander by requesting qualified individuals through Dispatch.

H. As the emergency develops, the Incident Commander will expand or decrease the number of incident command positions to fit changing needs.

IV. CONCEPT OF OPERATIONS

A. The protection of the lives of the participants comes before the rescue of the lives of the victims. This philosophy will guide all emergency operations. The Incident Commander is responsible for the health and safety of all persons involved in the operation.

B. National Park Service personnel must meet any established health and fitness standards for the specific emergency operation.

C. When an emergency involves an immediate threat to human life, an emergency operation will have priority over all other Park operations. Each involved division will provide reasonable facilities and resources to the effort and will be notified by Park Dispatch of any division employees already involved in the incident. Divisions can "fill in" behind employees on an emergency and then charge the added cost to the incident.

D. When multiple emergencies occur in the Park, the Superintendent or his designee (usually the Chief Park Ranger) will coordinate the action of the various Incident Commanders.

V. DIRECTION AND CONTROL

A. Chain of Command

1. The first Park employee to arrive at the scene of any emergency is expected to use his/her judgment in appraising the situation and in calling for appropriate action. Once this action is underway, it may be possible to refer to the appendix (S.O.P.'s) to doublecheck himself/ herself, noting whether or not there are additional measures that can be taken.

2. The first RM&VP employee to arrive at the scene will be Incident Commander until relieved by the appropriate District Supervisor or his designee.

3. On any single fire which is burning on both Park and State protection lands, the Incident Commander will be designated by mutual agreement between the Park and the State Division Fire Warden (as per cooperative agreements).

4. As a guideline, incident command personnel will work a maximum of 14 hours for every 24 hours. This will allow 12 hour shifts, with an additional two hours allotted to briefing, debriefing, and travel to and from residence.

5. Park dispatch will notify the Chief Ranger, Superintendent and Regional Office, in that order, as soon as possible after discovery of such occurrences as death, serious fire, natural disaster, major rescue operation, serious or newsworthy incidents, and crimes of unusual significance. This and additional information are incorporated in pertinent appendices.

B. Communications

1. All communication will be coordinated through Park Dispatch until a separate communication unit and location are established (large incidents).

2. An initial report will be made by the Incident Commander to Park Dispatch with an evaluation of the incident and any resources requested.

3. Radio frequency and procedures will be controlled by Park Dispatch.

4. Additional communications (radio, telephone, etc.) will be initiated as needed for the incident.

VI. GENERAL INSTRUCTIONS FOR ALL EMERGENCIES FOR RESPONDING PERSONNEL

The following are general instructions applicable to all emergency operations:

1. Obtain your reporting location and communication channel. Be appropriately dressed, with proper footgear and personal gear with you.

2. Upon arrival at the area, check in at designated check-in location. Check-in locations may be found at:

> Command Post
> Base or Camps
> Staging Areas
> Heliports
> Supervisors

3. Non-NPS personnel should report to the Liaison Officer at the Command Post.

4. All radio communications to Command Post will be addressed "Command Post."

5. Use clear text (no codes) and emergency terminology in all radio transmissions.

6. Receive briefing from immediate supervisor or command staff.

7. Acquire work materials.

8. Organize and brief subordinates.

9. Complete forms and reports required.

10. Respond to demobilization orders.

11. Brief subordinates regarding demobilization.

12. When released from emergency duties, return to regular duties.

STANDARD OPERATING PROCEDURES
FOR SHENANDOAH NATIONAL PARK

1.0 GENERAL

1.1 This document is partially based on the format recommended by NASAR. Revisions of that plan were necessitated by the park's adoption of the Incident Command System and changes in format brought about by the introduction of the new Emergency Operations Plan.

1.2 All operations will be conducted in accordance with the general guidelines outlined in the Emergency Operations Plan.

2.0 INTRODUCTION

2.1 Shenandoah National Park is a mountainous park. The Park boundary encompases approximately 190,000 acres with terrain ranging from thick forested slopes with dense undergrowth to steep cliffs with long talus slopes. Elevations ranges from _____ feet above sea level to more than _____ feet above sea level.

2.2 Popular recreational activities that have potential of generating SAR incidents include hiking, fishing, climbing and cross-country skiing.

2.3 Many of the Park's recreationists are urban and have very little experience or survival knowledge.

2.4 Search and rescue activity is varied and is discussed in the Emergency Operations Plan, Analysis of Potential Risks section.

2.5 Due to the extreme differences in possible SAR incidents, different types of responses will occur. This SAR Plan is not intended to be the "answer to all problems", nor is it intended to be a rigid guideline as to what will be done in every instance. It is, rather, an outline as to the procedures to be followed in various types of situations. Moreover, it is flexible, and is subject to change as circumstances dictate.

3.0 ORGANIZATION

3.1 SNP's emergency operations are managed under the Incident Command System (ICS). In order for any SAR incident to operate smoothly and efficiently it is necessary for certain duties or functions to be delegated to various people. Sar missions can range from a one person operation to a large, multi-divisional effort; many duties may be handled by one person, or in a major operation it may be necessary to assign two or more people to certain functions. Also, as time lapses, operations may expand considerably. The ICS readily accommodates these different and changing needs.

3.2 Refer to the Emergency Operations Plan for a further discussion of organization and to Annex __ for ICS information.

4.0 FIRST NOTICE/CALLOUT

4.1 The individual receiving the initial report of an incident that might necessitate a SAR operation will, after gathering pertinent information, immediately notify his supervisor or the District Ranger in whose area the incident is occurring.

4.2 If the initial report is received by phone or through a third party, and the reporting party is located within or adjacent to the Park, consideration will be given to dispatching a ranger to contact the reporting party in person. Once contacted, the ranger should remain with the person making the report until further directed by the Incident Commander or his designee.

4.3 The Incident Commander will size up the situation and implement a SAR response.

4.4 In the Park, callout will be done by following established organizational channels.

4.5 In order to maintain coordinated efforts, whenever outside resources or personnel are needed, they will always be requested by the Incident Commander, or if he designates, the On-Scene Commander, through the communications center (usually Dispatch). Whenever outside resources call field stations, they must be referred to the communications center.

4.6 Request for assistance from other NPS areas or Scott AFB should be made through the Regional SAR Coordinator, as per the Mid-Atlantic Region Emergency Operations Plan.

4.7 Various Appendices of SNP's Emergency Operations Plan list possible sources of assistance.

4.8 The Regional Office will be notified of any major mission.

4.9 Prior to going out on any SAR operation, all personnel involved will assemble at the location designated by the Incident Commander or On-Scene Commander. Here they will be briefed, equipment issued, and the clothing and personal equipment of each checked for suitability as to the prevailing conditions. Any persons not properly equipped or dressed will not be permitted to enter the field.

4.10 After designation of the team leader(s) and team(s), each team will be dispatched as a unit. All teams will operate as a unit and upon completion of the operation all team members will report as directed prior to returning to normal duties or going off duty.

5.0 SEARCH

5.1 Search is an emergency. Until located, the possibility of the subject being injured or sick must be recognized.

5.2 Some level of response, even if it is as simple as completing a questionnaire, should be made for every missing person report.

5.3 After contact is established with the reporter, and needed information is obtained, the first thing the Incident Commander should do is ascertain whether or not the person reported missing is actually lost. This can be done through such things as:

1. Calling friends, relatives, or neighbors to learn if they know the subject's whereabouts.

2. Careful questioning of the person making the report.

3. Checking parking lots for the subject's vehicle.

4. Checking local attractions on the chance the missing person may have been attracted there.

5. Contacting other visitors and local residents. (This accomplishes two things. It may determine if the person reported missing was seen in the area, and it alerts the public to the fact that a person has been reported missing and they should be on the watch for this person).

5.4 Priorities

If a search condition does exist, the following guide will help determine the relative urgency of the situation. The lower the priority factors, the more urgent the need to respond.

Victim Profile

Age
-Very young. 1
-Very old 1
-Other 2-3

Medical Condition
-Known or suspected injured or ill 1-2
-Healthy 3
-Known fatality 3

Number of Subjects
-One alone 1
-More than one (unless separation suspected) 2-3

Weather Profile
  Existing hazardous weather. 1
  Pedicted hazardous weather (8 hrs. or less . 1-2
  Predicted hazardous weather (more than 8 hrs.) 2
  No hazardous weather predicted. 3

Equipment Profile
  Inadequate for environment. 1
  Questionable for environment. 1-2
  Adequate for environment   3

Victim Experience Profile
  Not experienced, does not know area 1
  Not experienced, knows area 1-2
  Experienced, not familiar with area 2
  Experienced, knows area 3

  NOTE: Elapsed time from when victim "went missing",
  along with the "political" sensitivity of the
  circumstances will have the effect of increasing the
  relative urgency.

5.5 Strategy

If a search is necessary, establish the probable boundaries of the
search area. Factors to take into consideration are:

1. Statistical data (case histories of behavior of lost
persons),

2. History of the area and deductive reasoning;
"reconstruct the circumstances",

3. Intuition,

4. Analysis of time/distance traveled,

5. Terrain idiosyncrasies,

6. Clues,

7. Subject information,

8. Natural routes,

9. Natural barriers,

10. "Put yourself in subject's shoes".

5.6 Investigation

A proper investigation is crucial to good search management. Consideration must be given, in the very early states of a search, to designating someone to carry through with a thorough investigation. This investigation should be continuous for the entire length of SAR effort.

5.7 Clues

Although clues (footprints, items discarded by subject, scent articles) may not lead directly to the subject, their effect can be to eliminate search areas. Every person involved in a search (especially the early phases) must be remirfed constantly to be "clue conscious".)

5.8 Tactics

Initial.actions will have three objectives:

1. Confine the subject(s) travel, prevent the search area from enlarging,

2. Effectively use the resources that are immediately available,

3. Find the subject or clues.

5.9 Confinement and attraction methods:

1. Road or trail patrols,

2. Track traps,

3. Noise,

4. Lights,

5. Road or trail blocks,

6. "Camp-ins",

7. Lookouts,

8. String lines,

9. Smoke.

5.10 Generally, available trained NPS personnel will be dispatched, immediately as hasty teams, to areas of highest probability of detection, to attempt to locate the subject or CLUES. Efforts of this type include:

1. Follow known or suspected route,

2. Trail running,

3. Sign (track) cutting,

4. Areas of attraction,

5. Especially hazardous areas,

6. Roads,

7. Drainages,

8. Ridge tops,

9. The easily forgotten obvious - restrooms, tents, vehicles, homes, etc.

5.11 Clue-finding and/or Clue/Subject-finding resources will be used as early in the search effort as they can be moved to the search area. These resources include:

1. Visual trackers,

2. Tracking dogs,

3. Search dogs (air scent),

4. Trained (clue conscious) hasty teams,

5. Direction finding equipment (to locate operating Emergency Locator Transmitter of plane crash).

Preference for Resources

5.12 The following outlines the order of perference of tactics and resources to be used on a search:

1. Trained (clue conscious) hasty teams,

    visual trackers, (if possible)

    Tracking dogs (IF weather and available clues dictate),

    Confinement and attraction,

    Search dogs,

    Air search,

    DF teams (if active ELT),

NOTE: The above resources will be used concurrently, as available.

2. Untrained hasty teams,

3. Grid (line) searchers.

5.13 Every reasonable effort will be carried out to locate the subject using those methods listed in 5.12.1 before using those methods listed in 5.12.2 and 5.12.3; even though large numbers of searchers might be immediately available. The use of grid or line search techniques must be regarded as a last resort, along with which the efficiency, economy and control of the mission can be expected to substantially diminish. Large numbers of searchers, even when reasonable well trained, virtually obliterate clues. As a result, the effectiveness of those resources that have the highest and quickest probability of detection (dogs and visual trackers) is considerable reduced, or even eliminated.

6.0 **RESCUE AND EVACUATION**

6.1 A rescue, as defined for the purpose of this plan, generally requires the use of specialized equipment such as litter, ropes, etc. to move a person.

6.2 If injuries are known or suspected, a two-man EMS team will be dispatched as quickly as possible. This team should carry enough first aid and emergency equipment to stabilize the victim and keep him comfortable until the arrival of the evacuation team.

6.3 The proper emergency care will be immediately provided to stabilize the injured or ill. When this is accomplished, the Incident Commander will be given all information necessary to plan the evacuation.

6.4 If not on a trail or other easy access, a route to the closest access should be well-marked. This will provide for quicker response by following teams and help determine the evacuation requirements.

6.5 Rescue and Evacuation will be carried out by the most effective and quickest method, but taking into consideration:

    1. Condition of subject,

    2. Safety of the subject and rescuers,

    3. Equipment and human resources available,

    4. Terrain,

    5. Weather,

    6. Resource protection.

6.6 Safety of the subject and rescuers are of paramount importance.

6.7 Upon notification that the subject is being evacuated, the Incident Commander will make arrangements to have transportation at the trailhead. Injured subjects will be transported from the trailhead to the hospital by ambulance.

7.0 SUSPENDING THE OPERATION

7.1 The Sar operation will be suspended only when:

1. The lost or injured person is recovered and all personnel are removed from the field.

2. All reasonable efforts have been expended to locate and/or evacuate the subject without success. The Superintendent, Chief Ranger, and Incident Commander must agree to suspend the operation.

7.2 The following factors should be considered:

1. Weather, age and sex of the subject,

2. Equipment carried by the subject,

3. The reasonable length of time that survival could be expected under the circumstances,

4. Political ramification.

7.3 A deescalated search or patrol will continue on a level determined by the Incident Commander.

8.0 DOCUMENTATION AND REPORTING

8.1 All SAR operation will be reported through the NPS Case Incident System as soon as possible following completion of the operation. A copy of the final report including all maps, logs, recordings, etc., will be retained in central files.

8.2 A report of all manhours, regular time, overtime, and other required costs will be submitted with the final report.

8.3 In the case of a fatality, the Incident Commander is responsible for ensuring that all information needed to conduct a Board of Inquiry is compiled. The Chief Ranger will forward the pertinent information to Region.

8.4 Forms/documents to be completed for all SAR operations are:

1. 10-343, 10-344 - Case Incident Report,

2. DI-134 - Report of Accident/Injury (whenever any injury or a fatality results from the incident),

3. NASAR Mission Report (for searches and major rescues),

9.0 CRITIQUE

9.1 Critiques are required as soon as possible after a major mission, or when deemed necessary for minor SAR operations.

9.2 Outside resources involved in the operation will be urged to participate in the critique.

9.3 An impartial moderator will conduct the critique and will prepare an explicit action plan recommending corrections and identify deficiencies.

10.0 RESCUE CACHE

10.1 Each District will maintain a cache to support SAR operations. These caches should provide the equipment necessary for initial response for up to ten hasty team members and enough equipment to safely carry out one victim.

10.2 See Attachment #___ for minimum equipment standards for SAR caches.

10.3 The equipment in these caches are for emergency use or organized training.

10.4 See Appendix ____ of the Emergency Operation Plan for an inventory of Park SAR gear.

11.0 TRAINING

11.1 It is the District Rangers responsibility to insure that at least two members of his staff have been trained in NASAR, MANAGING THE SEARCH FUNCTION.

11.2 It is the District Ranger's responsibility to assess his District's high angle rescue needs and to train his staff accordingly.

11.3 SNP's frequency rate for high angle rescue is very low. Yet we do have the potential. Thus it is recommended that each District assign one ranger to train with the local SAR teams that train in the Park.

12.0 PREPARDNESS

12.1 Patrol rangers are encouraged to carry a "go" pack at all times while on duty. Packs should contain sufficient gear to allow rangers to immediately respond to any SAR incident. Contents should include proper footwear and clothing for time of year, food, water, compass, maps, headlamp and other items as warrented.

12.2 Each ranger is expected to be physically able to handle the stress and rigor often associated with SAR activities.

12.3. The District Ranger is responsible for assuring that SAR equipment and cache is ready with all known deficiencies reported to the CRO.

13.0 PREVENTION

An analysis of the subject profile, cause of incident, subjects debriefing, etc., should be preformed. If the analysis indicated that corrective actions or precautions could be taken to prevent future incidents, this should be reported by the Chief Ranger to the Park's Safety Committee.