

# Basic Search & Rescue Skills



## SAR Skills for the Emergency Responder - Basic Skills and Knowledge -



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## PLAN OF INSTRUCTION

Emergency Response International (ERI) is pleased to provide this Plan of Instruction for a 24+ hour Search and Rescue Basic Skills Course. The course curriculum includes a minimum of 24 hours academic and relevant scenario based practical field training. Maximum number of participants in a training course utilizing two instructors would be 20 students.

### **SAR Skill Training Course Deliverables:**

*“Participants who attend this training will become knowledgeable in practices and techniques used in search and rescue situations. Students will be exposed to the basics of search, lost person behavior, tracking, survival skills, victim packaging, working with aircraft, and other associated search and rescue techniques and procedures in isolated and extreme environments. The following topic areas will be covered:*

- *The local, state and federal SAR system & how it works*
- *Organizational structure for a SAR incident*
- *Legal Issues & Public Expectations*
- *Clothing & personal protection for search & rescue (SAR) operations*
- *Environmental hazards in a SAR environment*
- *SAR travel skills, navigation and personal equipment*
- *How are available SAR resources used on-scene at an incident*
- *Individual and team search techniques for insured complete coverage*
- *Specific SAR tactics and skills*
- *Rope and line skills*
- *Lost person behavior*
- *Short term survival skills*
- *Working SAR with aircraft – Vectoring & mission communications*
- *Procedures to stabilize and package victims during extrication*

The above specified topic areas are all contained within the modules that make up the syllabus for the ERI training course SAR Skills for the Emergency Responder described below. The Unit Module Descriptions in this Plan of Instruction further identify the deliverables covered in the course.

## OVERVIEW

ERI currently provides all of the component modules described here to law enforcement, Coast Guard and volunteers who have responsibilities in local, state or federal SAR operations. ERI's training, as described here, represents a systematic approach to training SAR Team personnel that provides a thorough orientation to the skills and knowledge required by emergency responders during SAR operations in the field.

The basic ERI “SAR Skills for Emergency Responders” is a 3-day (approximately 8 hours per day) course. Our approach to this training provides participants with basic orientation to subject matter followed by direct application of skills and knowledge in a practical setting. The course also provides a comprehensive overview of national, state and local SAR response systems, strategies and tactics used by local and state governments as well as other land management jurisdictions. The training course and its accompanying student textbook conform to a basic SAR training "content standard" advocated across the country. The training provides field skills and an academic foundation for emergency response in general. The skills and knowledge apply in both disaster environments as well as single missing person incidents, which operate within the National Incident Management System and Incident Command Structure (NIMS ICS). The emphasis lays a foundation of skills and knowledge

on how to plan for, organize and respond to any Search and Rescue related effort and do the job in the field regardless of the assignment. Participants in this training will quickly blend into any team effort as a valuable resource that is efficient and productive. Academic and practical field skill split is roughly 55% academic/45% practical throughout the course.

## **Background**

All advanced skills and capabilities stem from a basic foundation of knowledge and training. No matter how large a SAR incident response might eventually grow, it all starts with a first responder who applies fundamental skills and knowledge. Local action correlates directly with what occurs regionally and across the nation. When an EMT rescues a child from an abandoned mine in the South, the skills and attitudes applied form part of the matrix that makes up emergency response everywhere else around the country.

The term SAR really indicates two separate functions; first search and second rescue. Rescue utilizes proven procedures along with a high degree of technical skill for victim retrieval. With known victims in known locations, the principle problem involves devising the quickest method of removing that individual from danger to a place of safety and medical aid. On the other hand, search for missing, lost or injured subjects involves a great deal more. Search and search planning encompass a sophisticated science involving a great many techniques that include: statistics, probability, human behavior, interviewing, and terrain evaluation coupled with track and clue awareness. These represent but a few of the standard tools used in land search strategies.

SAR training enables the first responder to acquire knowledge, skills and self-confidence which produce better results in the field during real operations. The foundation of this training builds on a broad body of information from a wide and unprejudiced variety of sources. No course or text reference provides all the answers unto itself, and omissions will surface over time as rookie responders gather more education and experience. However, Basic Search and Rescue Skills training serves as a standard content base for SAR responder development. It should make up the first link in a continuing chain of SAR education and training.

## **Conduct of the Basic Course**

The first half day of the course sets the academic foundation (*rationale, legal requirements and SAR management structures*) for the subsequent academic and practical modules. During the remainder of the course, participants will be exposed to mixed academic classroom presentations and practical sessions where students practice skills and knowledge in an outdoor learning environment.

Practical course success starts with interaction between participant and instructor. This means that student to instructor ratio is extremely important. During lecture and discussions, the ratio of instructors to students matters less. However, when it comes to the practical side of the course, one instructor usually works most effectively with 8-10 students for the best interactive process. This ratio provides maximum interaction and personal help with the groups. Generally students ask lots of questions and also ask for assistance during this part of training. We try to keep within the ratio of 8 to 10 students per instructor, particularly with some of the skills presented. When teaching field skills, we also find this instructor/student ratio satisfactory to provide good facilitation and interaction between instructors and students. Two instructors will be required for up to 20 students and three instructors will be necessary for any numbers over 20.

One instruction area covered in this training is patient packaging and extrication. We want to be very clear about this component. While all of ERI staff are Wilderness First Responders or higher in certification and each is certainly able to teach a survival medicine component to any level required,

this part of our training has never been intended to be a basic or advanced first aid course. In this case, the contemplated timeframe will not allow the required attention on medical issues to qualify it as such. However, virtually every SAR situation includes a medical component for evacuation. Our wilderness medicine protocols for *“victim packaging and extrication”* is but one component of the first aid continuum.

Our classroom presentations utilize the latest in PowerPoint technology with strategically placed videos and narrative to emphasize true-life case studies and current instruction methods. To the extent possible, the practical field work activities incorporate scenarios and call for both interaction and innovative problem solving by the students. These scenarios require real-world problem solving, and transition into the application of essential skills for body management and personal protection.

### **Objectives**

After successful completion of this training course, the participants will have been exposed to the basic tenets of Search and Rescue for emergency responders and will have the foundational skills necessary to respond effectively at the local level. Participants will be able to:

1. Define the term Search and Rescue and outline what each of the levels, - local, state and federal does in terms of function, responsibilities and response capability to assist individuals in distress.
2. Describe how the electronic distress systems work in the U.S. for emergency beacons to include the commercial beacons (i.e. SPOT), the ELT, EPIRB, and PLB.
3. Discuss and describe the legal responsibilities of both individual emergency responders and the teams or organizations of which they are members.
4. Relate how public expectations about response organizations impacts standards, training and professional capabilities.
5. Describe the minimum categories of contents in a mandatory Ready Pack used by SAR Responders during field operations.
6. List the “Priorities and Necessities of Life” and how they provide guidance and prioritization during a real survival situation.
7. Describe the functions of vision, target orientation, search image and briefing as they relate to search, detection and recognition.
8. Describe the six major functions and responsibilities within the organizational structure of the (NIMS) Incident Command System.
9. Describe the importance of clothing systems and nutritional requirements essential to the responder in hostile, hazardous and extremes of weather or seasonal change.
10. Demonstrate the combined use of a topographical map and compass as both a navigational aid and assistance to searching in the field.
11. List the two most important factors that Lost Person Behavior data gives us to aid in searching for missing people.
12. Describe the Bike Wheel model for Reflex Tasking that initial responders arriving on-scene must use for initial actions in a missing person search.
13. List at least five knots, hitches, and lashes used for immediate action shelter and describe the rationale for them to be quick and easy to tie and quick and easy to untie.
14. Describe a complete method of starting and building a fire under adverse weather conditions and in any environment.
15. Discuss why spacing between searchers in the field should not be used as an indication of coverage or thoroughness.
16. Describe the importance of a comprehensive briefing before deploying to a field assignment and relate the essential elements about that assignment and search effort during a debriefing.
17. Relate why a systematic “Searcher Cube” routine is so important while the searcher is passing through an assigned segment.
18. Describe why numerical assessments are important when using formal search planning to find a lost person.

In addition, each participant should be able to assist his/her local team/organization or jurisdiction in the following areas:

1. Assist local SAR Managers (Incident Commanders) in developing response plans and protocols for all search and rescue operations. (i.e. Reflex tasks, etc.)
2. Provide assistance with necessary training to other agencies, personnel, and volunteers assigned to Search and Rescue operational duties.
3. Assist in the development of “benchmarks” for local search and rescue teams for use during real operations. (*That is to say speed and timing details for search as well as access to specific types of terrain and vegetation coverage*).

## SAR SKILLS FOR EMERGENCY RESPONDERS

-Skills and Knowledge-

### Summary of Basic Course Subject Areas and Times

1. Introductions, handout books, initial admin announcements.....	0.5 Hr
<b>Pre-Operations, Preparedness and Understanding the System</b>	
2. The SAR System – Local, State, Federal, - Air & Ground .....	1.5 Hrs
Electronic systems for emergency beacons – SPOT, ELT, EPIRB, PLB	
3. ICS in SAR: The Organizational Structure.....	1.0 Hr
4. Anatomy of a SAR Mission .....	1.0 Hr
5. Legal Issues, Public Expectations and Handling Evidence.....	1.0 Hr
<b>Operational Response</b> ( <i>Responding when the call comes in</i> )	
6. Survival Basics for SAR Responders .....	1.0 Hr
7. Lost Person Behavior and Reflex Tasking for Team Leaders & Searchers .....	1.5 Hrs
8. Introduction to the Science of Search – ( <i>Search Theory</i> ) .....	1.0 Hr
9. Vision, Target Orientation, Search image & Briefing related to Search.....	1.5 Hr
10. Basic Search Tactics – The Searcher Cube, How to Search, TCA.....	2.0 Hr
11. Map – Compass – GPS & Navigation .....	2.0 Hrs
12. Basic Survival Skills for Self and Taking Care of Others .....	3.0 Hrs
13. Map & Compass Practical Field Exercise .....	2.0 Hrs
14. Average Range of Detection Procedure – Sweep Width and the Clue Walk ....	2.0 Hrs
15. Dressing and Eating to Respond – SAR Ready Pack – Content & Options Kits & Emergency Gear.....	1.0 Hr
16. Aircraft safety and protocols in and around rotor-wing aircraft..... Working aircraft with Ground Resources in SAR (Vectoring, etc) .....	
Procedures for Stabilizing and Packaging Victims for Extrication .....	3.0 Hrs
17. Critique, Closing Comments and Certificates .....	0.5 Hr
<b>TOTAL .....</b>	<b>25+ Hrs</b>

*Add or subtract 1 hour depending upon optional topics and instructional aides.*

## UNITS OF INSTRUCTION

### 1. Introduction, Course Administration, Class Objectives *(0.5 Hr Classroom)*

**Scope:** Welcome, familiarization with the facilities, administrative information, course purpose, objectives, agenda and instructional staff introduction. Class participants establish their primary objectives for attending the course and introduce themselves.

### 2. The SAR System – Local, State, Federal plus Emergency Beacons *(1.5 Hr Classroom)*

**Scope:** A classroom module on how the SAR System functions at local, state and federal levels. Functions, responsibilities and response capabilities are discussed, as well as the basis for the emergency beacon system, who responds and where. The module gives a detailed explanation of how the SAR system works in the U.S. when someone is in distress.

### 3. ICS in SAR: The Organization and Structure: *(1 Hr Classroom)*

**Scope:** We explain how good organizational structure enhances coordination, cooperation and functional positions. The (NIMS) ICS on-scene management system and how the emergency responder fits in; Operational problems and pitfalls as pointed out in case studies and research; Functional management with specific responsibilities is emphasized along with new critical components like Intelligence/Investigation and how that fits into the response system.

### 4. Anatomy of a SAR Mission *(1 Hr Classroom)*

**Scope:** This module takes participants through a step by step look at how a SAR incident will most likely unfold and how the emergency responder fits into both the management structure and the on-scene effort. Initial information gathering starts the process for planning and searching data and moves through call out, check-in, reflex tasking, briefing, task assignment, debriefing, checkout and return to service. All the steps in the process are discussed in detail for maximum retention and understanding. Initial action strategies and searching modes are also reviewed to emphasize what likely team assignments will be encountered.

### 5. Legal Issues, and Public Expectations *(1 Hr Classroom)*

**Scope:** This module discusses the basic issues of liability in SAR response, elements used to prove liability, and the most common causes of lawsuits against emergency responders. Emphasis is placed on understanding the law with regard to trespass on private property, the process and how most lawsuits occur. Volunteer status, Necessity and the Good Samaritan laws are also reviewed. We explain strategies to avoid lawsuits by individuals and how to protect SAR organizations. The final piece in the module deals with handling evidence on-scene.

### 6. Survival Basics for SAR Responders *(1 Hr Classroom)*

**Scope:** This module introduces the broad overview of skills and knowledge about survival that SAR Responders need to possess as a first on-scene responder. This module also sets the stage for the practical portion of the course dealing with survival skills in the field. It provides a quick overview of the evolution of survival training over the last several decades, emphasizing the importance of the psychological and physiological requirements for survival. The module stresses the importance of keeping a person's mind positively engaged at all times, allowing him or her to quickly recognize problems with the situation, find resources, and use these resources to solve problems. This module

will cover the following: Priorities and Necessities of Life; Body Management; the importance of PMA (Positive Mental Attitude); Psychological factors – the will to live, analytical ability and problem solving, fear, anxiety and pre-conceived notions, learned skills; and Physiological factors - serious medical emergencies, Hypothermia, Hyperthermia, Dehydration, etc.

### **7. Dressing and Eating to Respond (.5 Hr Classroom)**

**Scope:** The first half of this module discusses the latest in clothing technology required for SAR responders under a multitude of harsh conditions and weather extremes. We emphasize clothing as a flexible and tough system to meet the rigors of hard use and extreme conditions. We will discuss clothing system tips, jargon and nomenclature for outdoor garments. The second part of the module discusses the nutritional requirements that heavy exertion exacts on the body during prolonged SAR operations. The U.S. Navy Seal nutrition guide is referenced and used to plan balanced meals for outdoor activities. These two sections focus on how to maximize response capability by insuring proper body protection in adverse climatic conditions and consuming the right calories to meet the demand of a tough or long SAR missions.

### **8. The SAR Ready Pack – Minimum content and Options (1 Hr Practical)**

**Scope:** Much of what SAR personnel carry when responding to the field during a SAR incident eventually becomes a personal choice. However, there are a number of essential items for any SAR response. We discuss essential items from a personal prospective and in terms of necessities for rendering assistance to an individual in distress. Personal clothing, shelter, water, food, tools, team gear, first aid and safety considerations are all discussed to give maximum options. The minimum planning time for self-sufficiency for SAR responders will be 24 hours.

### **9. Basic Survival Skills for Self and Taking Care of Others (3 Hrs Practical Lab)**

**Scope:** This module is the practical lab for survival basics. Subjects covered will include, but will not be limited to: tips, tricks and recommendations for immediate action shelter (personal protection for the individual responder and for someone who is injured), Fail proof firecraft for extreme environments (one handed techniques and other tips) will be demonstrated, expedient rope, knot and lash skills, navigation tools, improvised signaling basics and safe handling of pyrotechnic signaling devices.

### **10. Map & Compass – GPS and Supporting Computer Programs (2 Hrs Classroom)**

**Scope:** This module defines and explains the most common terms used in land navigation, common methods for determining distance traveled in the field, and how to plot and follow compass bearings for land navigation. Several methods to keep track of pace or stride in the field will be covered. Everyone will learn how to correctly orient a topographical map using a base plate type compass, and demonstrate the use of the UTM (Universal Transverse Mercator) Grid System and the new National Grid System (USNG) to determine the coordinates for a given point. Everyone will demonstrate in the field how to take a bearing to a location and transfer it correctly to the map and correspondingly how to obtain a bearing on the map and transfer it directly to the field. True north, Grid north, magnetic north as well as contour lines and contour index lines, magnetic declination and isogonic lines, longitude and latitude designations will all be discussed using laminated maps and problem solving scenarios. Demonstrations will also be given for computer mapping programs.

### **11. Map and Compass Practical Field Exercises (2 Hrs Practical)**

**Scope:** This two hour practical field exercise will require every participant to demonstrate proficiency in basic land navigation skills and knowledge. There will be a short exercise navigating through an equilateral triangle followed by a longer problem of navigating point to point from given grid reference points. Students will need to demonstrate proficiency in orienting the map, plotting grid references and keeping track of distances traveled.

### **12. Lost Person Behavior/Reflex Tasking for Team Leaders & Searchers (1.5 Hr Classroom)**

**Scope:** This module describes Lost Person Behavior and how the resource data from ISRID (*International Search and Rescue Incident Database*) can be effectively used on a missing person search for establishing both strategy and tactics. Combining national and international data through the concept of ECO-Regions is also discussed. Other topics will include Lost and missing – the difference, notable behaviors of lost people, common lost person strategies, categories and classifications of missing people, primary differences between adults and children, map interpretation of statistical data, reflex tasking by category and the importance of standard procedures in the initial response phase of a search. Reflex tasks are defined and described along with a useful "Bike Wheel Model" for on-scene initial response; this example uses the analogy of a bike wheel and specific functions are described for each component of the wheel. The logical sequence for planning a search effort is given along with guidelines for developing attainable, verifiable operational period objectives, which may be easily evaluated later. The first arriving resource (SAR responders) will have an idea, based on the subject category, about what needs to be accomplished on every SAR incident.

### **13. Working Aircraft with Ground Resources in SAR (1 Hr Classroom)**

**Scope:** The types of missions where aircraft (both fixed wing and helicopters) will be helpful; Primary functions that aircraft perform in SAR; what are their limitations and what are their attributes? Rescue devices, and safety procedures; Aviation related technology for SAR; Government only accessed resources; Aircraft working with ground teams; Navigational differences between air and ground SAR resources; Communicating with ground teams from the air; Observer techniques and skills; Missing aircraft search strategies, search patterns and visual clues.

### **14. Procedures for Stabilizing and Packaging the Victim for Extrication (1 Hr Practical)**

**Scope:** While there are many commercial devices in use that are designed for packaging and transporting a patient from remote areas, the world standard is still the Stokes basket. The Stokes has been in use for decades and is the most likely device the rescuer will encounter.

This module will concentrate on preparing and rigging the Stokes to receive the patient and the proper packaging of the patient to include accommodating injuries.

### **15. Introduction to the Science of Search- *Search Theory (1 Hr Classroom)***

**Scope:** The history and derivation of search theory dating back to WW II and Operations Research is outlined; We will review current approaches to management and planning of searches; we will emphasize the need for quantification and a detailed explanation of how to use and apply mathematical units of measure; statistical concepts and their application to the problem of search; probability zones and the use of conventional notation for Search Probability Theory plus selected definitions.

### **16. Vision, Target Orientation, Search Image & Briefing/Debriefing related to Search POD (1.5 hrs Classroom)**

**Scope:** This module deals with how and why searchers see clues or even the missing subjects in the environment. Simple explanations do not fit as this is a complex process of sensation (vision) and decision making. Vision, perception and detection versus recognition are discussed with practical examples; Feature integration, form, organization and grouping along with vision basics are all covered. Canonical perspective and visual briefings are covered in summation of this module along with some conclusions about target orientation and POD as they relate to briefings (or programming) before searchers go to the field.

There is a fundamental hypothesis that searchers find what they are briefed to find. This implies a direct correlation between a briefing, how SAR responders train and what their end product probability of detection ends up in the field. This module also discusses the important elements of briefing to include: the function and responsibility of briefing on a field operation, what to look for in the briefing, minimum information that should be given, and some guidelines as to how responders can ask key questions to enhance communication flow. It also highlights debriefing, including the function and responsibility of proper response by field personnel during the debriefing. Who should be debriefed is discussed and when that activity needs to take place is also covered. Finally, we cover specific information that should be gathered and what kind of documentation to keep in writing.

### **17. AROD – Sweep Width and the Clue Walk (2.0 Hrs Practical)**

**Scope:** This module is the practical counterpart to the Search theory module. Operations research is discussed as it relates to determination of Sweep Width and coverage. Primary method of determining Probability of Detection for volunteers using Robert Koester's "Average Range of Detection," ( $R_d$ ) calculations. The shortfall of using spacing for indications of coverage are also explained. We demonstrate sample practical exercises for more accurate probability of detection capabilities. Current research and field exercises are advocated using the model developed by Koester Et al. in the National search and rescue experiments on "Sweep Width conducted across the country.

### **18. Basic Search Tactics – The Searcher Cube / How to Search / Track and Clue Awareness (2 Hrs plus, - Classroom and Practical)**

**Scope:** Virtually all training related to Basic Search and Rescue Skills refers to or references a technique for searchers in the field using what we call the "Searcher Cube." This **module defines that** often referenced "searcher cube" and identifies a training shortfall in the SAR community concerning ways to effectively search in a consistent, reliable way. To understand and improve what really happens in the field on a search: this module looks at both the research and the experiments conducted so far; the searcher errors recorded in those experiments; and finally, the suggested use of

a visual routine very similar to that used by instrument pilots as well as military and police patrols to keep track of very busy and complicated visual environments.

The concept of Track and Clue Awareness (TCA) involves a lot more than expected and requires many more observation and visual skills than normally addressed in a straight forward man tracking course. The skill is used to detect the path (*direction and movement*) of someone or something, but is also the means of discovering what activities occurred at a specific site (*point of departure, crime scene, trail junction, campsite, etc.*) That means processing or examining a site. Being accomplished in track and clue awareness for search operations is a complex skill that requires a keenness of observation, knowledge of where to look and exactly what to look for. Track and clue awareness focuses on interpretation of everything that has been left behind by those we are searching for. The skill is both an investigative (strategy) and an operational (*tactic*) search tool.

**19. Critique, Closing Comments and Certificates (.5 Hr)**

**Scope:** Wrap up and close of the course.

**ACADEMIC CLASSROOM SESSIONS**

1. Intro and Admin	.5 hr
2. The SAR System	1.5 hrs
3. ICS	1 hr
4. Anatomy of a SAR Mission	1 hr
5. Legal Issues & Public Expectations plus Handling Evidence	1 hr
6. Survival Basics for SAR Responders	1 hr
7. Dressing and Eating to Respond	.5 hr
8. Map and Compass, GPS & Navigation	2 hrs
9. Lost Person Behavior/ Reflex Tasking for Team Leaders & Searchers	1.5 hr
10. Working Aircraft with Ground Resources in SAR	1 hr
11. Intro to the Science of Search	1 hr
12. Vision, Target Orientation, Search Image, Briefing/Debriefing in Search	1.5 hrs
13. Wrap up, certificates and critique	.5 hr
<b>Total</b>	<b>14.0 hrs</b>

**PRACTICAL ACTIVITIES**

1. SAR Ready Pack – Dressing and Eating to Respond – Emergency Kits	1 hr
2. Basic Survival skills for self and taking care of others	3 hrs
3. Map & compass	2 hrs
4. AROD – Average Range of Detection & Clue Walk	2 hr
5. Searching the “Searcher Cube” and Track/Clue Awareness	2 hrs
6. Procedures for Stabilizing and Packaging the victim for extrication	1 hr
<b>Total</b>	<b>11 hr</b>

## SAR Skills & Knowledge for Emergency Responders

### Agenda

**The course must have a tentative, flexible agenda based on local needs & tangent discussion topics**

Times for each module are approximate and vary with location and course participant needs.

Depending on start times, modify time hacks as appropriate; Times for each module are approximate.

DAY 1:		INSTRUCTOR
0800 to 0830	Introductions, Handout text, initial Admin.	_____
<b>Pre-Operations Preparedness and Understanding the System</b>		
-55 min	The US SAR System – Local, State, Federal – Air & Ground	_____
	Electronic systems for Emergency Beacons	_____
30 min	ICS in SAR: The Organizational Structure	_____
55 min	Anatomy of a SAR Mission	_____
1000 -1015	<b>Break</b> (coffee/tea)	_____
30 min	Practical Ropes & Knots Lab	_____
55 min	Legal Issues, Public Expectations & Handling Evidence	_____
1215-1315	<b>Lunch</b>	_____
55min	Intro to Survival Basics for SAR Responders	_____
90 min	Lost Person Behavior & Reflexing Tasking for first on-scene	_____
30 min	Practical Ropes & Knots Lab	_____
1700	End of Class day	_____
<b>End of Day 1</b>		

<b>DAY 2:</b>		
0800 -	Class Starts	
0800 - 1000		
45min	Introduction to the Science of Search ( <i>Search Theory</i> )	_____
55min	Vision, Target Orientation, Search Image, Briefing related to Search	_____
1000 -1015	<b>Break</b> (coffee/tea)	_____
55 min	Basic Search Tactics – The Searcher Cube and How to Search	_____
120 min	Navigation – Maps, Point Determination & Use of the Compass –	_____
<b>1315 -1415</b>	<b>Lunch &amp; travel to the field</b>	_____
1415 – 1800		
180 min	Basic Survival Skills for Self and Taking Care of Others	_____
1700	End of Class day	
<b>End of Day 2</b>		

<b>DAY 3:</b>		
0800 -	Class Starts	
0800 - 1000		
30 min	AROD Procedure to determine average range of detection for sweep width calculation – total group exercise	_____
120 min	Clue Walk & Benchmark 100 meter grid search	_____
<b>Swap teams</b>	<b>Two teams of 10</b>	_____
120 min	Map & Compass Practical Field Exercises	_____
45 min	Practical discussion on Dressing/Eating to Respond - SAR Ready Pack – Content & Options - Kits & Emergency Gear	_____
<b>1200 -1300</b>	<b>Lunch</b>	_____
1300 -1700	Working Aircraft with Ground Resources – Vectoring	_____
	Aircraft safety and protocols working with rotor wing aircraft	_____
	Procedures for Stabilizing and Packaging the Victim for Extrication	_____
	Pro-check on individual skills	_____
30min	Critique Closing Comments and Certificates	_____
<b>1700 -</b>	<b>Class ends for 3rd day</b>	

## Plan of Instruction Administrative Details

**CAPABILITY TO PROVIDE TRAINING:** Emergency Response International is exceptionally qualified to present this training which includes providing professional staff, training aids, classroom presentations, field site selection, student supervision, safety briefings, student evaluation of course and managing the numerous other details that result in a successful and productive training experience.

**SITE SELECTION:** ERI understands and acknowledges that the hosting agency or organization will provide classroom facilities for the training, audio visual basic equipment and assistance for logistics and locations for field site practical exercises. In the interest of minimizing transportation time, the field training area should be reasonably close to the classroom facility where we ultimately conduct the academic training. It is important to minimize any transportation time between the classroom facility and the field training site. Unwieldy travel times in the context of the course detract measurably from the continuity of the training modules and also add substantially to the length of the training day.

**DAY OF PREPARATION:** Practical field or lab training must involve a prep (preparation) day onsite to survey facilities, work out logistics, set up demonstrations and practical exercises for participants.

**TRANSPORTATION TO SITE:** ERI will provide transportation to and from the training area only for ERI personnel. Students will transport themselves and their equipment. We recommend carpooling.

**TRAINING MATERIALS:** ERI will provide each student with a text and numerous written materials used throughout the course.

**SAFETY:** Any practical training in the out-of-doors carries with it some inherent risk. ERI will discuss environmental risks throughout the academic portion of the training, in addition to a thorough briefing prior to all practical labs. ERI places a high premium on safety and all instructors have extensive experience conducting high risk training. All staff and students will strictly observe the given safety procedures for each portion of training. (e.g. cutting tool and pyrotechnic safety) ERI instructor cadre maintains, at minimum, Wilderness First Responder certification with several trained to the EMT level. The staff always carries basic first aid equipment. In addition, a medical plan will be developed with the hosting organization to address emergency situations.

**COURSE CRITIQUES:** Each student will be asked to complete a comprehensive ERI critique at the end of the course. This critique allows students to make suggestions on course content and to evaluate instructor performance. Copies will be provided to the Hosting Agency as well as being retained at ERI headquarters.

**CLASS SCHEDULE:** The course occurs over any number of consecutive days, and could include weekends, at the discretion of the contracting agency. Students need to arrive at the designated facility prepared to begin class at 0800 on the first day. Early dismissal or partial attendance is discouraged unless personal emergencies occur.

Our standard academic class day runs approximately from 0800 to 1700 depending on student needs, questions and performance. The field training also normally runs from 0800 to 1700, although we may require earlier departure from a rendezvous location to get to a training area by 0800. **Longer practical field training hours can be arranged to ensure adequate coverage of all desired material with no increase in cost from ERI.** ERI will also, if desired, re-arrange hours (so that the field training portion extends into the hours of darkness to increase the complexity or difficulty of practical field activities).

**INSTRUCTOR STAFF:** ERI will provide two (2) qualified instructors for the course from our cadre of professional instructors (Individual resumes available upon request). The maximum number of students that we accommodate with two (2) instructors is twenty (20). This helps ensure high quality personalized instruction for each student and also allows for instructor supervision and safety.

**GENERAL INSTRUCTIONS AND EQUIPMENT LISTS:** Students will receive a recommended clothing and equipment list prior to the training and are expected to arrive fully prepared.

**CONTINUING TRAINING:** The training course curriculum contains the fundamental elements of both search and rescue skills and knowledge. Both the classroom and the practical instruction emphasize cutting edge information and practice as well as skills to give the best possible chance for success in operational SAR environments. Some of the skills covered in the course are perishable over time and must be renewed or practiced regularly. Participants in the course must count on this and plan accordingly. Participants not active in field operations should be exposed to some form of recurrent training on the basic elements of this training at least once every two to three years.

**QUALIFICATIONS FOR ATTENDANCE:** As stated above, ERI designed this course for those who assume the responsibility (*by volunteering or through paid professional positions*) to prepare for and respond to all field search and rescue operations in wilderness, rural or urban environments. This may include new volunteer SAR personnel from any local SAR organization, or new personnel from law enforcement agencies, or land management agencies, federal reservation employees, fire rescue service personnel, emergency medical group members or anyone wishing to become a SAR emergency responder. While outdoor experience will make the course easier, it is not mandatory that participants be experienced with outdoor skills. The instructor staff will assume participants have little or no background in the areas covered by this course.

**SPECIAL REQUIREMENTS:** During the field practical portions of this training the class will need to have access to field sites that are conducive to land navigation exercises, fire building and emergency action sheltering as well as practice sites for search exercises and tactical search demonstrations. Participants will break up into small working groups to take advantage of instructor to student ratios that insure interaction with instructors.

**STUDENT EVALUATION:** ERI will give feedback and evaluate students in real time as the course progresses. The feedback will consist of measured objectives by various methods and techniques outlined in the lesson plans. The Practical labs also serve as the best indicator for participant understanding of key concepts and practical skills. We also have written tests available for administration at the end of the course. Many law enforcement training academies prefer to use this type of student evaluation.

Specific competencies, knowledge and practical skills introduced in this training course need continuing reinforcement for student retention. Any evaluations will serve the following purposes: to evaluate each participant's comprehension of concepts; to determine the need for revisions in future courses; and to determine the scope of future follow-on refresher courses.

**DEPLOYMENT:** For newly designated local SAR responders and official agency personnel we recommend students attend this course sometime in the first year of assignment. Those with search responsibilities should attend a refresher course on this training biannually or at a minimum every three years.

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