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**NATIONAL ASSOCIATION FOR
SEARCH AND RESCUE**

CRITERIA FOR SEARCH PERSONNEL

**SAR TECH™ III
And
SAR TECH™ II**

INTRODUCTION

On September 10, 1997, the NASAR Education Committee approved the first revision of the "NASAR SAR TECH III and II Criteria of Performance" and the implementation of revised testing procedures for those Criteria. This revision was performed as mandated by the Education Committee to revise and update the Criteria each five years. This procedure assures that the Criteria may reflect advances in search technology and theory as well as the input based on the experience of those coordinators and evaluators who have administered the exams. NASAR would like to recognize the following people who gave input and spent many hours contributing to the revisions of the Criteria:

Matt Ashley, Strike Team Leader, Black Mountain Fire Department SAR
Craig Bannerman, Strike Team Leader, Black Mountain Fire Department SAR
Carl Barrett, Washoe County Sheriff's Department
Mark Clippinger, Benton County SAR
David Cook, NC State Parks
William Fertig, San Bernardino County Sheriffs Department
Steve Foster - Incident Commander, Burke County SAR
Mike Goodson - Crewleader, Black Mountain Fire Department SAR
William Johnson, Strike Team Leader, Randolph County SAR
Bruce Keever, Planning Section Chief Burke County SAR
Kenneth Laidlaw, East Bay Regional PD
Melody Martinez, Strike Team Leader, Randolph County SAR
Tom Millen, ZULU Land SAR Association
Larry Pugh, Incident Commander, Randolph County SAR
Kevin Rolfe, South East SAR Team
Jim Taylor, Strike Team Leader, Burke County SAR
Susan Thrasher, Madison County SAR
Mylea Wade, NASAR
Gary Williams, Strike Team Leader, Randolph County SAR

There has been and still is a desperate need for national criteria for the minimum knowledge and performance of persons involved in search and rescue operations. Many questions are asked by individuals and teams becoming involved in SAR knowledge skills, performance skills, and equipment necessary to be adequately prepared for SAR operations. SAR Incident Commanders, local SAR authorities, national, and international SAR committees are asking for help to assure that SAR resources can perform as they say they can. Many SAR organizations across the nation have developed their own criteria in this area, but to date, no national governmental agency or national volunteer organization has adopted or developed such a set of CRITERIA.

Other emergency service groups (fire, law enforcement, EMS) have developed and adopted national knowledge and performance criteria for their services. These emergency services groups recognized that their services had become more specialized and that the public expected consistent levels of professional performance. SAR in the last ten years has advanced to the point where the needs are the same.

In 1989, NASAR appointed Steve Foster as project Chairman, to gather information from agencies, organizations, and individuals across the country concerning SAR CRITERIA.

During 1989, 1990, and most of 1991 over forty different individuals, agencies, and organizations were asked to send copies of any of their SAR criteria and/or their views on what SAR criteria should contain. NASAR would like to recognize the following people who gave input to the development process and spent many hours reviewing the seven draft revisions of the CRITERIA:

Paul Anderson, Assistant Superintendent, Shenandoah National Park
Craig Bannerman, Black Mountain Fire Department
David A. Carter, President, Search and Rescue Training Associates, Inc.
Don Cooper, President, National Rescue Consultants
Bryan Christy, Burke County SAR Team
Steve Foster, Assistant Director, Burke County Emergency Services
D. R. Freezer, Chief, Search and Rescue Division, U.S. Coast Guard
Guy R. Howe, Assistant Unit Leader, Benton County Search and Rescue
Bruce Keever, Burke County SAR Team
Randy McKinney, EMS Manager, Burke County Emergency Services
Jim O'Brien, President, National Association for Search and Rescue
Edward Pontbriand, SAR Dog Handler, Wind Cave National Park
Kelly Pontbriand, SAR Dog Handler, Wind Cave National Park
Larry Pugh, Chief, Randolph County Search and Rescue Team
Jerry Rogers, Training Officer, Burke County Emergency Services
Billy Smithwick, Director, Bertie County Emergency Services
Jim Taylor, Burke County SAR Team
Bill Wade, Superintendent, Shenandoah National Park
Ralph E. Wilfong, Search and Rescue Coordinator, Department of Emergency Services,
Commonwealth of Virginia
Lamar Womack, Dean of Continuing Education, Western Piedmont Community College
T.O. Wright, Training Officer, Guilford County Emergency Services

On February 16, 1991 the Board of Directors of the National Association for Search and Rescue unanimously approved a certification program to be administered by the Education Committee. Any individual who successfully meets the requirements for any scope of performance as approved by the Education Committee shall be certified by NASAR.

On December 20, 1991 the Education Committee approved the "NASAR SAR TECH III and II Criteria of Performance" and the implementation of the testing procedures for those criteria.

The Commonwealth of Virginia had adopted a comprehensive program of training, knowledge skills, and performance skills resulting in all persons involved in SAR being certified by the state at the appropriate levels. The "Virginia Search and Rescue Training Program" was developed by Search and Rescue Training Associates and approved by the Virginia Department of Emergency Services. The state of Virginia's program was used as a guide for the following document because many of the Standards it contained were similar to the Criteria NASAR was considering.

SCOPE

The SAR knowledge skills and performance skills needed in and wilderness environments normally are not taught to any other emergency service personnel.

To effectively work and survive during a SAR emergency requires a knowledge of the environment, the ability to navigate, a knowledge of specialized search skills, the ability to manage the injured or distressed person distant from normal care services, and the endurance to successfully move persons safely through often hostile terrain.

These criteria address common minimum levels of knowledge and performance skills needed by personnel on SAR operations. To date, only three levels of the basic searcher position have been developed. Further development of all positions within the SAR operations organization chart is continuing. All positions are based on SAR skills needed for that position under the Incident Command System (NIIMS) position guidelines.

INCIDENT COMMAND SYSTEM SAR POSITION DESCRIPTIONS

SAR TECH™- TYPE I

Has advanced knowledge and field performance competence. Has knowledge and field performance skills of tracking, the use of SAR dogs in conjunction with a search crew, and advanced land navigation skills.

SAR TECH™- TYPE II

Has basic knowledge skills and field performance competence.

SAR TECH™- TYPE III

Has basic knowledge skills.



NASAR CERTIFICATION CRITERIA FOR SAR TECH™

- TYPE III

(Effective April 1, 1998)

PURPOSE

- I. The SAR TECH™- TYPE III CRITERIA are designed to define the minimum knowledge skills and some performance skills needed by an individual to perform as a member of a SAR CREW or SAR PATROL during land search operations. They can also be used as a guide for any member of a SAR Group or Team. They may be considered as a guide for other emergency service personnel who are used during SAR operations.
- II. These CRITERIA recognize the need for further training to acquire the knowledge skills, performance skills, and experience needed to become a fully competent member of a SAR CREW during land search operations.

REFERENCES

- I. Some of these criteria have been developed by Search and Rescue Training Associates, Inc. of Richmond, Virginia for the Department of Emergency Services.
- II. Some of these criteria have been adopted for the Search and Rescue Training and Certification Program, Department of Emergency Services, Commonwealth of Virginia.
- III. “Search and Rescue Fundamentals”, by Cooper, LaValla, and Stoffel, Third Edition, 1990.

QUALIFICATIONS

- I. Physically and mentally capable of performing the functions of the certification functions. Other agencies, organizations, and/or SAR authorities may have an age requirement for their members to apply for certification or perform the functions of these criteria.

EQUIPMENT REQUIREMENTS FOR CERTIFICATION

- I. None

CERTIFICATION PROCEDURES

- I. The following criteria must be met in order to qualify for certification as a SAR TECH™ III.
 - A. Obtain training and/or experience that includes the necessary knowledge and performance skills. Such training and experience must be documented. Any individual meeting these requirements may be permitted to challenge the written and practical exams.
 - B. Pass a written test within the limits defined for each knowledge and performance skill, with a score of at least 70%.

II. Certification

- A. Upon successful completion of requirements a certificate will be issued to the person by NASAR. This certificate does not constitute a license to practice the skills taught in the training program or practice the knowledge and performance skills that have been evaluated. The certification does signify that the person holding the certificate has met the requirements of an established criteria of knowledge and/or performance skill on the date indicated on the certificate.
- B. SAR TECH™ III certification indicates that at the time of certification the individual possesses the required basic understanding of personal survival and basic SAR skills. It does not indicate that the individual has demonstrated any of these skills in a field situation.

TEST METHODS

I. Written test

- A. The test shall consist of at least 75 multiple choice questions based on the SAR TECH™ III knowledge and performance objectives. Passing score is 70%.
- B. Practical Test - None

II. Re-testing

- A. Applicants who fail the written test are eligible for re-testing.
- B. Each applicant is responsible for making arrangements for re-testing with the test director.
- C. If an applicant fails the retest, appropriate training courses will be recommended and possibly required by the test coordinator before allowing the candidate to retest again.

KNOWLEDGE AND PERFORMANCE OBJECTIVES

I. Introduction to Search and Rescue

- A. The candidate will be able to define the following:
 - 1. Search
 - 2. Rescue
 - 3. (LAST) Locate, Access, Stabilize, Transport
- B. The candidate will be able to define the following components of SAR operations:
 - 1. Preplanning
 - 2. Notification
 - 3. Planning/Strategy
 - 4. Tactics/Operations
 - 5. Suspension

6. Critique

- C. The candidate will be able to list the major responsibilities for search and rescue for the following:
 - 1. U.S. Air Force
 - 2. U.S. Coast Guard
 - 3. Federal Aviation Administration
 - 4. Civil Air Patrol
 - 5. State SAR Authorities
 - 6. Local SAR Authorities
- D. The candidate will be able to list the six expected qualities of a SAR responder.

II. SAR Management System

- A. The Candidate shall be able to:
 - 1. List the five major organizational activities within the Incident Command System and explain their primary functions.
 - 2. Give the titles, and explain the duties of Command and General Staff members.
 - 3. Match organizational units to appropriate Operations, Planning, Logistics or Finance/Administration sections.
 - 4. Match supervisory titles with appropriate levels within the organization.
 - 5. Describe the, terms used to name major incident facilities, and state the function of each.
 - 6. Describe what an Incident Action Plan is and how it is used at an incident.
 - 7. Describe how the span of control functions within the incident organization and in the use of resources.
 - 8. Describe the common responsibilities (general instructions) associated with incident or event assignments.
 - 9. Describe several applications for the use of ICS.

III. Land Navigation and Orienteering

- A. The candidate will be able to list and differentiate between at least three types of maps used in SAR.
- B. Given five topographical map symbols, the candidate will be able to identify, define, and state the color of each symbol.
- C. Given five types of topographical border information, the candidate will be able to identify the information and define its use.
- D. The candidate will be able to identify, define, and demonstrate the use of the following terms or concepts:
 - 1. Contour lines
 - 2. True north and magnetic north
 - 3. Determining distances

- E. The candidate will be able to define the following plotting methods or grid systems.
 - 1. Geographic Coordinate System - Latitude/Longitude
 - 2. UTM (Universal Transverse Mercator System)
 - 3. SDMRTS (San Diego Mountain Rescue Team System)
- F. The candidate will be able to describe at least five parts of the compass.
- G. The candidate will be able to describe the following navigational functions:
 - 1. Orientating a map and compass to terrain
 - 2. Obtain and follow a simple compass bearing
 - 3. Measure distance by pacing

IV. SAR Resources

- A. The candidate will be able to list at least five types of operational resources that may be used for SAR.

V. Search Philosophy

- A. The candidate will be able to explain the different motivation factors found in SAR responders.
- B. The candidate will be able to list the six crucials for SAR management.
- C. The candidate will be able to define:
 - 1. Probability of Area
 - 2. Probability of Detection
 - 3. $POA \times POD = POS$
 - 4. Last Known Point (LKP)
 - 5. Point Last Seen (PLS)
 - 6. Initial Planning Point
- D. The candidate will be able to explain the need for practicing POD estimation at the crew level.

VI. Search Tactics

- A. The candidate will be able to differentiate between the two basic categories of search tactics (Passive and Active).
- B. The candidate will be able to list at least three passive search tactics.
- C. The candidate will be able to list at least three active search tactics.
- D. The candidate will be able to describe the following primary types of active search tactics:
 - 1. Hasty Search Tactics

2. Efficient Search Tactics
 3. Thorough Search Tactics
- E. The candidate will be able to describe the techniques and methods used for the following search tactics:
1. Attraction
 2. Confinement/Containment
 3. Hasty Search
 - a. Route
 - b. Area
 4. Sign Cutting
 5. Open Line or Grid Search (spacing over 100 ft.)
 6. Closed Line or Grid Search (spacing under 100 ft.)
 7. Tracking
 8. Critical Space
- F. The candidate will be able to list at least five of the searching or tactical skills needed by field searchers.

VII. Clue Consciousness

- A. The candidate will be able to explain why SAR personnel search for clues not subjects.
- B. The candidate will be able to describe the elements of clue orientation theory and describe the procedures used upon locating a clue.

VIII. Search Operations

- A. The candidate will be able to list searcher pre-planning and preparation procedures.
- B. The candidate will be able to list the information needed by the searcher when alerted.
- C. The candidate will be able to list procedures and information needed for:
 1. Checking in at the incident
 2. Crew mission briefing
 3. Crew mission debriefing
 4. Departing the incident
- D. The candidate will be able to define the functions of these search crew positions:
 1. Radio Operator
 2. Navigator
 3. Pacer
 4. Search Crew Member

IX. Lost Person Behavior

- A. The candidate will be able to explain why knowledge of lost person behavior can be an advantage to the searcher.
- B. The candidate shall describe the use of searcher data on a search and how this relates to the outcome of a mission or a search.

X. Helicopter Operations

- A. The candidate will be able to list at least ten of the safety rules for personnel during helicopter operations.
- B. The Candidate shall be able to describe the site and setup requirements for a helispot.

XI. Communications

- A. The candidate will be able to list at least five common radio procedures and guidelines.
- B. The candidate will be able to list at least five portable radio procedures and guidelines.



NASAR CERTIFICATION CRITERIA FOR SAR TECH™ - TYPE II (Effective April 1, 1998)

PURPOSE

- I. The SAR TECH™ - TYPE II CRITERIA are designed to define the minimum knowledge skills and performance skills needed by an individual to perform as a member of a SAR CREW during land search operations.
- II. The SAR TECH™ - TYPE II should be able to perform these functions anytime of the year, day or night, and in all weather conditions experienced in his/her community or jurisdiction.

REFERENCES

- I. Some of these CRITERIA have been developed by Search and Rescue Training Associates, Inc. of Richmond, Virginia for the Department of Emergency Services.
- II. Some of these CRITERIA have been adopted for the Search and Rescue Training and Certification Program, Department of Emergency Services, Commonwealth of Virginia.
- III. "Search and Rescue Fundamentals", by Cooper, LaValla, and Stoffel, Third Edition, 1990.

QUALIFICATIONS

- I. Physically and mentally capable of performing the functions of the certification CRITERIA. Other agencies, organizations, and/or SAR authorities may have an age requirement for their members to apply for certification or perform the functions of these CRITERIA.

EQUIPMENT REQUIREMENTS

- I. Possess proper equipment as outlined in Attachment I, "SAR TECH™ - Type II Minimum Personal Equipment List."

CERTIFICATION PROCEDURES

- I. The following criteria must be met in order to qualify for certification as a SAR TECH™ - TYPE II:
 - A. Obtain training and/or experience that includes the necessary knowledge and performance skills. Any individual meeting these requirements may be permitted to challenge the written and practical exams.
 - B. Pass a written test within the limits defined for each knowledge and performance skill, with a score of at least 70%.
 - C. Pass a practical test within the limits defined for each performance objective.

- D. Obtaining a SAR TECH™ III certification is not required to challenge the SAR TECH™ II examinations. The knowledge and skill objectives of the SAR TECH™ III are included within the SAR TECH™ II examinations.

II. Certification

Upon successful completion of the requirements a certificate will be issued to the person by NASAR. This certificate does not constitute a license to practice the skills taught in the training program or practice the knowledge and performance skills that have been evaluated. The certification does signify that the person holding the certificate has met the requirements of an established criteria of knowledge and/or performance skill on the date indicated on the certificate.

TEST METHODS

I. Written test

- A. The test shall consist of at least 160 multiple choice questions based on the Type II SAR TECH™ knowledge and performance objectives. Passing score is 70%.

II. Practical Test

- A. The practical test consists of six “Performance Evaluation Stations” based on the performance objectives. These stations are Land Navigation, Tracking, 24-Hour Pack, Rope Skills, Route Search and Area Search. Applicants must perform these skills in the presence of an approved evaluator.
- B. Each performance skill has specific requirements and well-defined criteria for either a pass or fail score.
- C. A candidate who fails a station may repeat that station (ONCE) on the same day.

III. Re-testing

- A. Applicants who fail either the written or practical test are eligible for re-testing.

KNOWLEDGE AND PERFORMANCE OBJECTIVES

(References to Objectives related to these Sections are listed under each Section heading)

I. Introduction to Search and Rescue

(SAR TECH™ III Objectives Section I: Paragraph A-D)

- A. The candidate will be able to describe four parts of physical conditioning for the SAR responder.
- B. The candidate will be able to describe his or her personal limitations, strengths as a member of a search crew and their importance to SAR personnel.

II. SAR Management System

(SAR TECH™ III Objectives Section II: Paragraph A)

III. Basic Survival

- A. The candidate will be able to list and prioritize the necessities of life.
- B. The candidate will be able to describe the four parts of the initial response to a life-threatening situation.
- C. The candidate will be able to define a “comfort zone expander” (to increase one’s ability to react positively to stress).
- D. The candidate will be able to list at least five ways to control fear.
- E. The candidate will be able to explain the survival situation plan (STOP), Stay, Think, Observe, and Plan.
- F. The candidate will be able to define “Positive Mental Attitude”.
- G. The candidate will be able to differentiate between the requirements for short-term survival vs. long-term survival.
- H. The candidate will be able to define “Defensive Living” (being prepared for today’s emergencies) and describe the need for the public to be aware of the concept.
- I. The candidate will be able to list three situations commonly encountered on SAR missions that may lead to a survival situation.
- J. The candidate will be able to describe how, in each of the following processes, the human body loses heat:
 - 1. Radiation
 - 2. Conduction
 - 3. Convection
 - 4. Evaporation
 - 5. Respiration
- K. The candidate will be able to describe the heat production and heat loss balance equation of the human body.
- L. The candidate will be able to describe the basic water and chemical needs of the human body.
- M. The candidate will be able to list the average daily food and water requirements of the human body in average, cold, and hot environments.

IV. SAR Clothing

- A. The candidate will be able to list at least three similarities or differences and at least three advantages or disadvantages of the different natural and synthetic materials used for SAR clothing.

- B. The candidate will be able to list at least three of the factors concerning heat transfer of clothing due to clothing construction and/or design.
- C. The candidate will be able to describe the function of each of the following layers of clothing:
 - 1. Underwear layer
 - 2. Clothing layer
 - 3. Insulation layer
 - 4. Shell layer
- D. The candidate will be able to describe the advantages and disadvantages of the use of clothing that traps and repels vapors.
- E. The candidate will be able to describe the advantages and disadvantages of the use of constriction in outdoor clothing.
- F. The candidate will be able to describe the proper clothing to be used in desert and hot environments.
- G. The candidate will be able to describe the advantages and disadvantages of outdoor footwear.
- H. The candidate will be able to describe the proper water proofing techniques for footwear.

V. Improvising

- A. The candidate will be able to list at least three basic considerations for shelters.
- B. The candidate will be able to list at least three basic considerations for firecraft.
- C. The candidate will be able to list at least three basic considerations for signals.
- D. The candidate will be able to list at least three methods of water purification.
- E. The candidate will be able to describe the criteria used in personal waste disposal.
- F. The candidate will be able to describe the methods used for personal cleanliness in the outdoors.
- G. The candidate will be able to construct a fire.
- H. The candidate will be able to demonstrate the use of signaling using a whistle.
- I. The candidate will be able to construct a cat hole.

VI. Environmental Hazards and First Aid

- A. The candidate will be able to list at least five safety rules for lightning protection.
- B. The candidate will be able to list at least three safety procedures used during rural or suburban SAR operations.

- C. The candidate will be able to define, describe the causes, identify at least three of the signs and symptoms, describe the basic treatment procedures, and list the preventive measures for the following:
1. Hypothermia
 2. Frostbite
 3. Trench foot (immersion foot)
 4. Heat cramps
 5. Heat exhaustion
 6. Heat-stroke
 7. Dehydration
 8. Blisters
 9. Snake bites
 10. Insect bites
 11. Tick bites
 12. Poisonous plants

VII. SAR Ready Pack (See Attachment I, "SAR TECH™ - Type II Minimum Personal Equipment List")

- A. The candidate will be able to construct a 24-hour ready pack and demonstrate its use.
- B. The candidate will be able to explain the difference between a 24-hour ready pack and rural or suburban ready pack.
- C. The candidate will be able to describe the importance of adequate pack for SAR.
- D. The candidate will be able to list the general contents of a 24-hour ready pack.

VIII. Personal Equipment

- A. The candidate will be able to describe importance of body protection equipment.
- B. The candidate will be able to describe advantages and disadvantages of the following equipment used for SAR:
1. Ground pads
 2. Sleeping bags
 3. Shelters
 4. Water containers and systems
 5. Boots
 6. Walking/tracking stick
 7. Flashlight/headlight
 8. Knife

- C. The candidate will be able to demonstrate the use of the following:
 - 1. Ground pads
 - 2. Sleeping bags
 - 3. Shelters
 - 4. Water containers
 - 5. Boots
 - 6. Walking/tracking stick
 - 7. Flashlight/headlight
- D. The candidate will be able to construct a shelter using a plastic tarp.

IX. Travel Skills

- A. The candidate will be able to describe the components of the general travel skills used for his/her environment during SAR operations.
- B. The candidate will be able to demonstrate traveling skills used for his/her environment during SAR operations.
- C. The candidate will be able to describe the preparation and conditioning needed to perform while wearing a SAR ready pack

X. Land Navigation and Orienteering

(SAR TECH™ III Objectives Section III: Paragraph A-G)

- A. The candidate will be able to demonstrate the use of the following terms or concepts:
 - 1. Contour lines
 - 2. True north, grid and magnetic north
 - 3. Declination
 - 4. Determining distances
- B. The candidate will be able to demonstrate the UTM (Universal Transverse Mercator) Grid System to determine the coordinates for a given point.
- C. The candidate will be able to demonstrate the ability to obtain a back azimuth
- D. The candidate will be able to take bearing in the field and transfer it correctly to the map and obtain a bearing on the map and transfer it correctly to the field.
- E. The candidate will be able to demonstrate the ability to navigate during daylight hours while wearing a 24-hour pack.
- F. The candidate shall be able to list three advantages and three disadvantages of using a personal GPS (Global Positioning System) unit during search operations.

XI. SAR Resources

(SAR TECH™ III Objectives Section IV: Paragraph A-D)

- A. The candidate will be able to list at least three advantages and three disadvantages of five types of operational resources that may be used for SAR.

XII. Search Philosophy

(SAR TECH™ III Objectives Section V: Paragraph A-D)

- A. The candidate will be able to demonstrate the process of estimating POD during search operations.

XIII. Search Tactics

(SAR TECH™ III Objectives Section VI: Paragraph A-C, E&F)

- A. The candidate will be able to differentiate between the two basic categories of search tactics (Passive and Active).
- B. The candidate will be able to list at least three passive search tactics.
- C. The candidate will be able to demonstrate at least two of the following primary types of active search tactics:
 - 1. Hasty Search Tactics
 - 2. Efficient Search Tactics
 - 3. Thorough Search Tactics
- E. The candidate will be able to demonstrate the techniques for at least five of the following methods used for search tactics:
 - 1. Confinement/Containment
 - 2. Hasty Search
 - a. Route
 - b. Area
 - 3. Sign Cutting
 - 4. Open Line or Grid Search (spacing over 100 ft.)
 - 5. Closed Line or Grid Search (spacing under 100 ft.)
 - 6. Tracking
 - 7. The technique of obtaining one (1) Critical Space
- F. The candidate will be able to demonstrate the following techniques of searching as a crewmember either during daylight or nighttime hours:
 - 1. Hasty search
 - 2. Sign cutting
 - 3. Open line search (spacing over 100 ft.)
 - 4. Route search
- G. The candidate will be able to define the following:
 - 1. Control line
 - 2. Guide line

3. Guide right/left
 4. Guide person
 5. Trail tape/ribbon guide
- H. The candidate will be able to describe and demonstrate the use of the line search naming systems.
- I. The candidate will be able to describe and demonstrate at least five searching and tactical skills used by field searchers.
- J. The candidate will be able to describe the concept and use of Critical Space as a search tool.

XIV. Handling Evidence

- A. The candidate will be able to describe the four procedures for documenting evidence.
- B. The candidate will be able to describe the considerations for handling evidence associated with the following situations:
1. Crash scenes
 2. Dead bodies
 3. Injuries
- C. The candidate will be able to describe and demonstrate the considerations for handling evidence associated with the following situations:
1. Crash scenes
 2. Dead bodies
 3. Injuries

XV. Clue Consciousness

(SAR TECH™ III Objectives Section VII: Paragraph A-B)

- A. The candidate will demonstrate the ability to locate clues during a simulated search mission.

XVI. Search Operations

- A. The candidate will be able to demonstrate searcher preplanning and preparation procedures.
- B. The candidate will be able to demonstrate the use of procedures and information needed for:
1. Checking in at the incident
 2. Crew mission briefing
 3. Crew mission debriefing
 4. Checking-out of the incident

- C. The candidate will be able to demonstrate the functions of these search crew positions:
 - 1. Radio Operator
 - 2. Navigator
 - 3. Pacer
 - 4. Search Crew Member

XVII. Tracking

- A. The candidate will be able to define:
 - 1. Track or print
 - 2. Sign
 - 3. Step - by - Step tracking
- B. The candidate will be able to demonstrate the use of a tracking stick.
- C. The candidate will be able to demonstrate the method of labeling a track.
- D. The candidate will be able to demonstrate the procedures used by a tracking crew.

XVIII. Ropes and Rescue Equipment

- A. The candidate will be able to list at least two materials used in rope manufacture.
- B. The candidate will be able to list at least two types of design used in rope.
- C. The candidate will be able to define the following:
 - 1. Dynamic rope
 - 2. Static rope
 - 3. Lifeline
 - 4. Tubular webbing
 - 5. Flat webbing
- D. The candidate will be able to list at least five rules of rope etiquette.
- E. The candidate will be able to list at least two performance CRITERIA of a harness.
- F. The candidate will be able to demonstrate the ability to correctly tie these knots:
 - 1. Figure 8 on a bight
 - 2. Figure 8 bend (follow through) around an object, joining to ropes together
 - 3. Water knot (overhand bend)
- G. The candidate will be able to list the different advantages and disadvantages of materials used in carabiners.
- H. The candidate will be able to list the functions of least two different types of carabiners.

- I. The candidate will be able to list the procedures used in caring for carabiners.
- J. The candidate will be able to describe the advantages and disadvantages of at least two types of stretchers or litters.
- K. The candidate will be able to demonstrate the tying of an improvised harness.
- L. The candidate should be able to describe the procedures for lifting, lowering, and carrying a litter:

XIX. Legal Aspects for the Searcher

- A. The candidate will be able to describe the basic legal philosophy concerning searcher knowledge, training, physical abilities, equipment, discipline, and control.
- B. The candidate will be able to describe the legal philosophy of searchers entering private property within his or her community.

ATTACHMENT I
SAR TECH™ - TYPE II MINIMUM PERSONAL EQUIPMENT LIST
(Effective April 1, 1998)

The following equipment is commonly compiled to form what is referred to as a "24-hour ready pack". Such a pack holds those items that would allow the holder to function in a safe, effective, and efficient manner during a SAR incident. Some items may be carried on a belt, in pockets, or strapped to the person. This equipment should be carried on all missions in rural or wilderness areas and is considered the minimum amount. This equipment list may not be adequate for the candidate's response area and team guidelines must be followed. Consult a physician for recommendations about analgesics and other drugs that you may carry in the SAR pack.

I. EVERY ITEM ON THIS LIST MUST BE PRESENT FOR THE CANDIDATE TO PASS THIS STATION. THERE ARE NO EXCEPTIONS.

Personal First Aid and Survival Kit

- | | |
|---------------------------------------|---|
| 4 - Acetaminophen or aspirin tablets | 1 - Plastic bag, zip lock, qt. size, for kit |
| 4 - Antacid tablets | 2 - Quarters for phone call |
| 2 - Antiseptic cleansing pads | 1 - Razor blade, single edge safety type |
| 1 - Antiseptic ointment | 1 - Roller Gauze Bandage |
| 6 - Band aids, various sizes | 2 - Safety pins, large |
| 1 - Candle, long burning | 1 - Splinter forceps, tweezers |
| 2 - Cotton swabs, non sterile | 1 - Space type blanket or space type sleeping bag |
| 1 - Duct tape, 5-10 ft. | 1 - Towelette, clean |
| 1 - Leaf bag, large | 1 - Whistle |
| 8 - Matches in a waterproof container | |
| 1 - Moleskin | |

Personal SAR Equipment

- | | |
|--|---|
| 4 - Bags, various sizes, zip locked | 1 - Pack, 1800 cubic inch (minimum) |
| 1 - Bandanna, handkerchief | 1 - Pad and pencil |
| 1 - Cap or other headgear | 2 - Prusik slings (suitable for 9mm to 11mm rope) |
| 2 - Carabiners (locking) | 1 - Rainwear, durable |
| 1 - Clothes bag, waterproof | 1 - SAR personal identification |
| 1 - Clothing, adequate for climate | 1 - Shelter Material, 8x10 plastic or coated nylon |
| 1 - Clothing, extra set, suitable for climate | 1 - Scissors, multi-purpose |
| 1 - Compass, orienteering | 1 - Socks, extra pair |
| 1 - Flagging tape, roll | 1 - Sunscreen lotion |
| 1 - Flashlight or lantern | 1 - Tissue papers or baby wipes (recommended) |
| 1 - Flashlight extra, extra batteries and bulb | 1 - Tracking stick, minimum of 42" long |
| 1 - Footwear, sturdy, adequate for climate | 1 - Watch |
| 1 - Gloves, durable, even in summer | 2 - Water containers, at least liter size |
| 1 - Goggles, or eye protection, clear | 1 - Webbing, 1" tubular - length suitable for harness |
| 1 - Insect repellent | 1 - Wire, 5-10 ft., woven steel. |
| 1 - Knife, multi-purpose | 8 - Wire ties, plastic, self locking |
| 1 - Lip balm, with sunscreen | |
| 1 - Measuring device, 18 in. minimum | |
| 1 - Metal cup or pot | |
| 1 - Mirror, small | |
| 1 - Nylon twine or small rope, 50 feet | |

Optional Personal Support Equipment Recommended by Not Required

- | | |
|----------------------------------|------------------------------------|
| 2 - Antihistamine, 25mg Benadryl | 1 - Rain cover, pack |
| 2- Extra leaf bags | 1 - Sterno or stove |
| 1 - Extra water container | 1 - Sun glasses, 97% UV protection |
| 1 - Foam pad | 1 - Trail snacks |
| 2 - Food, nonperishable | 1 - Water purification tabs |
| 1 - Gaiters | |

II. The following requirements are for an urban SAR pack. This should only be carried when the Incident Commander approves its use.

*** Personal First Aid and Survival Kit (Same as in the 24-hour pack.)**

(Urban) Personal SAR Equipment

- | | |
|--|---|
| 4 - Bags, various sizes, zip locked | 1 - Pack, fanny pack, 600-1200 cubic inch |
| 1 - Bandanna, handkerchief | |
| 1 - Cap | 1 - Raincoat & pants durable |
| 1 - Clothing, adequate for climate | 1 - SAR personal identification |
| 1 - Compass, orienteering | 1 - Small pad and pencil |
| 1 - Flagging tape, roll | 1 - Sunglasses, 97% UV protection |
| 1 - Flashlight or lantern | 1 - Sunscreen lotion |
| 1 - Footwear, sturdy, adequate for climate | 1 - Tissue paper |
| 1 - Knife, multi-purpose | 1 - Tracking stick, 48" long |
| 1 - Map | 1 - Watch |
| 1 - Mirror, small | 1 - Water container, at least liter size |

ATTACHMENT II
PROCEDURES FOR CERTIFICATION / SAR TECH™ II AND III
(Effective April 1, 1998)

- A. *Certification cost for SAR TECH™ II and III examinations will be determined by the NASAR Education Committee submitted within the budget and approved by NASAR Board of Directors for each fiscal year.*
1. The certification cost will be due each time a person takes a certification exam or any part of the exam.
 2. Candidates must pay the certification fee before beginning any portion of the exam.
- B. SAR TECH™ III exam may be taken by the students at the end of an Introduction to Search and Rescue course instead of the ISAR written exam.
1. If a student scores better than 60% on the SAR TECH™ III exam the student will receive credit for successfully completing the ISAR course. If the student fails to score 60% or better, he or she will have to successfully pass the ISAR exam to receive credit for the course.
 2. The student who fails the SAR TECH™ III exam will have one year to re-take and successfully pass the exam limited to one retest annually.
 3. It will be the student's responsibility to make arrangements to retest.
- C. Students successfully completing a FUNSAR course may elect to pay a certification fee and become certified as a SAR TECH™ III.
1. Upon successfully passing the FUNSAR course exam (70% required) the student will become certified as a SAR TECH™ III and will receive credit for successfully completing the FUNSAR course.
- D. A SAR TECH™ II examination may be scheduled by anyone wishing to sponsor or host an exam. The expenses incurred by the Coordinator and Evaluators conducting the exam including the NASAR certification fee will determine the cost of the certification fee.
1. Persons failing the practical exam but passing the written exam will be certified as a SAR TECH™ III.
 2. Persons who fail the SAR TECH™ II exam will have one year to re-take and successfully pass the exam.
 3. It will be the candidate's responsibility to make arrangements to retest.
 4. Persons who fail the written part of the exam and pass the skill part of the exam will only be required to retake the written exam, but not on the same day the exam was given.
 5. Persons only failing one or two skill stations may retake those stations on the same day the stations were failed. Only the failed portion of those stations must be re-tested at that time.
 6. Persons failing one or two stations during a retest will only be required to retake those stations failed within one year. Persons must retest the all components of the failed practical station when re-testing during another exam.

7. Persons failing more than two stations of the practical exam may not re-take any stations on the same day they were failed. Persons failing more than two stations will be required to retake all the stations of the practical skills test during another exam.

E. General Guideline for Conducting SAR TECH™. II Test

1. Registration

- a. Equipment and supplies

- (1) Registration forms (include 6 stations)

- (2) Receipt book (paid amount)

- (3) Test roster

- b. Have all candidates complete registration forms.

- (1) Please have them print.

- (2) This name will appear on the certificate.

2. Establish a staging area.

3. Have the candidates' report to a staging area.

4. Brief the candidates on how the test will be given.

5. Candidates taking the practical will report back to the staging area and check in with the Staging Area Manager. The Staging Area Manager will check off each candidate upon completion of each station. Each candidate must insure that the Staging Area Manager checks off all six stations.

6. There are options for conducting an examination. The examination procedure does allow for the exam to be given over a period of time as well as during one continuous session. The examination may be given in small components on different dates. In this instance no documentation shall be submitted to NASAR until the examination is complete.

ATTACHMENT III
SAR TECH™ II SKILLS TEST

STATION # 1 - LAND NAVIGATION

I. EQUIPMENT AND SUPPLIES

- A. Topographical maps of the area in which the test is given
- B. Letters that are six (6) inches tall and highly visible, on (8 x 11) inches cardboard, to mark all navigation points and flagging tape to mark highly obscured points.
- C. Course sheets that give the candidate the azimuths for each leg of the course (see attached example)
- D. Station evaluation sheets

II. SITUATION

- A. The terrain shall be consistent with the terrain normally found in the community in which the test is being given.
- B. A navigation course shall be established by the test coordinator using the following criteria:
 - 1. The total distance for the course shall be between six hundred (600) and seven hundred (700) meters.
 - 2. The course shall contain six (6) points.
 - 3. Different azimuths shall be established from each point.
 - 4. All distances from and to each point shall be measured with a measuring tape.
 - 5. Six (6) inch letters shall identify all points.
 - 6. The courses shall have different starting and ending points.
 - 7. All courses shall be accurate.
 - 8. There shall be one different course for each two (2) candidates.

III. SCENARIO

- A. This is a map of the area where we are located. I would like you to orient the map to the terrain without using a compass. When you have oriented the map, please point out three (3) features that you see on the map and the terrain. Do you have any questions?
- B. Please orient this map to your compass. Do you have any questions?
- C. You will need to wear your SAR ready pack for this portion of the exam. You need to have a compass and a pencil to fill out your course sheet. You will start a course _____. You will be given an azimuth to follow for each of the six (6) points on the course. As you travel the course you must also pace and record your distances between the points. THERE IS NO LEG OF THE COURSE OVER 200 METERS. You will have _____ minutes to complete the course. Do you have any questions?

IV. EVALUATION OBJECTIVES

- A. The candidate will orient a map to the terrain using a map given to them by the evaluator.
- B. The candidate will orient a map to a compass using his/her own compass and a map given to them by the evaluator.
- C. The candidate will provide and wear a SAR ready pack for the land navigation exam.
- D. The candidate will be given azimuths by the evaluator to follow. The candidate must obtain all the identification points correctly.
- E. The candidate will determine distances between points by pacing. The candidate must determine all the distances between points within plus or minus 10 % (in meters) of the length of each leg.

V. EVALUATOR INSTRUCTIONS

- A. Ensure that all equipment and supplies are available.
- B. Lay courses (one per two (2) candidates) as per instructions.
- C. Introduce yourself to the candidate. Enter candidate's name on station evaluation sheet. Have the candidate fill out the required information on the course evaluation sheet.

- D. Read the scenario to each candidate and answer any questions for each part of the station. Ensure each candidate understands the requirement for each objective.
- E. Ensure each candidate is read the same scenario.
- F. Place a “x” in the appropriate column on the station evaluation sheet if a candidate fails to perform the skill properly. If the candidate partially performs a skill, the candidate has not performed the skill properly and should receive a “x”.
- G. Place a “P” or “F” in the appropriate pass-fail column to indicate the candidates final grade for the station. A candidate with a “x” on any skill is an automatic station failure. Provide a written explanation indicating the candidate’s name and specific reasons for failure of the station on the back of the station evaluation sheet.
- H. Thank the candidate for the participation and have them return to the Staging Area. DO NOT indicate to the candidate that he/she has passed or failed the skills or station.
- I. Under no circumstances should the evaluator leave the examination area or be distracted while evaluating a candidate.
- J. The maximum number of candidates to be evaluated at a time by one evaluator is one candidate per skill, except on the orienteering course, which will be one candidate per course.

VI. EVALUATION SHEET

Station #1 - Land Navigation Evaluator _____ Location _____ Date _____ * = automatic failure		Please indicate final grade with a "P" or "F"																
		MAP TO TERRAIN	*															
		MAP TO COMPASS	*															
		ID ALL POINTS	*															
		DETERMINING DISTANCE	*															
Final Grade	Name																	
	P	F	Last	First														

VII. CANDIDATE LAND NAVIGATION COURSE WORKSHEET

TEST LOCATION: _____

CANDIDATE'S NAME: _____

DATE: _____

EVALUATOR'S NAME: _____

THERE IS NO LEG OF THE COURSE OVER 200 METERS.

COURSE CONTROL NUMBER _____

BEGIN YOUR COURSE AT LETTER _____

1. From your first starting point travel on a _____ degree azimuth to point _____ which is _____ meters from the starting point.
2. From the point you just found travel on a _____ degree azimuth to point _____ which is _____ meters from the last point found.
3. From the point you just found travel on a _____ degree azimuth to point _____ which is _____ meters from the last point found.
4. From the point you just found travel on a _____ degree azimuth to point _____ which is _____ meters from the last point found.
5. From the point you just found travel on a _____ degree azimuth to point _____ which is _____ meters from the last point found.
6. From the point you just found travel on a _____ degree azimuth to point _____ which is _____ meters from the last point found.

STATION # 2 - TRACKING

I. EQUIPMENT AND SUPPLIES

- A. Sign cutting or tracking stick
- B. Some type of measurement device
- C. Station Evaluation Sheets

II. SITUATION

- A. The soil consistency will be of the same nature of the area that the test will be given.
- B. The course will consist of a set of identifiable tracks, in a reasonably straight line, with a defined beginning and end, ten (10) tracks in length.

III. SCENARIO

- A. Starting with this defined starting point, you will be expected to properly indicate ten (10) out of ten tracks utilizing a tracking stick, properly measure and properly mark ten (10) out of ten tracks.
- B. You will have (15) minutes to complete this station.

IV. EVALUATION OBJECTIVES

- A. The candidate will demonstrate the skill of indicating succeeding tracks.
- B. The candidate will demonstrate the skill of marking a track.
- C. The candidate will demonstrate the skill of properly using a tracking stick.
- D. The candidates will have fifteen (15) minutes to complete this station.

V. EVALUATOR INSTRUCTIONS

- A. Ensure that all equipment and supplies are available.
- B. Lay course as per instructions.
- C. Introduce yourself to the candidate. Enter candidate's name on station evaluation sheet. Have the candidate fill out the required information on the course evaluation sheet.

- D. Read the scenario to each candidate and answer any questions for each part of the station. Ensure each candidate understands the requirement for each objective.
- E. Ensure each candidate is read the same scenario.
- F. Place an “x” in the appropriate column on the station evaluation sheet if a candidate fails to perform the skill properly. If the candidate partially performs a skill, the candidate has not performed the skill properly and should receive an “x”.
- G. Place a “P” or “F” in the appropriate pass-fail column to indicate the candidates final grade for the station. A candidate with a “x” on an automatic failure skill or two (2) cumulative skills would fail this station. Provide written explanation indicating the candidate’s name and specific reasons for failure of the station on the back of the station evaluation sheet.
- H. Thank the candidate for the participation and have them return to the Staging Area. DO NOT indicate to the candidate that he/she has passed or failed the skills or station.
- I. Under no circumstances should the evaluator leave the examination area or be distracted while evaluating a candidate.
- J. The maximum number of candidates to be evaluated at one time by one evaluator is three candidates.

VI. EVALUATION SHEET

Station #2 - Mantracking Evaluator _____ Location _____ Date _____ * = automatic failure		Please indicate final grade with a "P" or "F"																					
		INDICATES 10 OF 10 TRACKS																					
		PROPER SEARCH FOR NEXT TRACK	*																				
		WIDTH AT INSTEP																					
		WIDTH AT HEEL																					
		WIDTH AT BALL																					
		LENGTH OF PRINT																					
		INDICATES STRIDE	*																				
Final Grade	Name																						
P	Last	First																					
F																							

STATION # 3 - 24-HOUR PACK

I. EQUIPMENT AND SUPPLIES

- A. Equipment checklist
- B. Station evaluation sheets

II. SITUATION

- A. Evaluator will instruct candidate to remove the listed items from his/her pack and arrange on the shelter material.
- D. Evaluator will call out each item, the candidate will hold up the item, and the candidate will check that each item is present.
- E. Evaluator will inspect the candidate's pack to determine it is of the type suitable for SAR operations.

III. SCENARIO

- A. You are to remove all the items in your pack and display them on the shelter material. As I call out each item, hold it up and show it to me.

IV. EVALUATION OBJECTIVES

- A. To determine if the candidate's pack is suitable for SAR operations.
- B. To determine if the candidate has all required items on checklist.

V. EVALUATOR INSTRUCTIONS

- A. Ensure all materials are available.
- B. Introduce yourself to candidates. Enter candidate's name on station evaluation sheet.
- C. Read the scenario to the candidate and answer any question he/she may have.
- D. Candidate will have 5 minutes to lie out his/her display for inspection.
- E. Every item on the checklist must be displayed in order to obtain a passing score on the equipment list.

- F. The pack must be at least 1800 cu. in. or large enough to hold all the listed items either on the inside, or in pockets on outside of pack, or fastened securely to outside of pack.
- G. Place an “x” in the appropriate column on the station evaluation sheet if a candidate fails to perform the skill properly. If the candidate partially performs a skill, the candidate has not performed the skill properly and should receive an “x”.
- H. Place a “P” or “F” in the appropriate pass-fail column to indicate the candidate's final grade for the station. A candidate with an “x” on any skill would fail this station. Provide written explanation indicating the candidate’s name and specific reasons for failure of the station on the back of the station evaluation sheet.
- I. Thank the candidate for the participation and have them return to the Staging Area. DO NOT indicate to the candidate that he/she has passed or failed the skills or station.
- J. Under no circumstances should the evaluator leave the examination area or be distracted while evaluating a candidate.
- K. The candidates should be arranged so the evaluator can easily see each candidate hold up the pack items.

VI. EVALUATION SHEET

<p>Station #3 - 24 Hour Pack</p> <p>Evaluator _____</p> <p>Location _____</p> <p>Date _____</p> <p>* = automatic failure</p>				Please indicate final grade with a "P" or "F"																	
Final Grade	Name	Last	First	*	*																
P				*																	
F				*																	

VII. EVALUATOR EQUIPMENT CHECK LIST

SAR TECH™ - TYPE II MINIMUM PERSONAL EQUIPMENT LIST

EVERY ITEM ON THIS LIST MUST BE PRESENT FOR THE CANDIDATE TO PASS THIS STATION,
THERE ARE NO EXCEPTIONS.

Personal First Aid and Survival Kit

- | | |
|---|---|
| <input type="checkbox"/> 4 - Antacid tablets | <input type="checkbox"/> 4 - Acetaminophen or aspirin tablets |
| <input type="checkbox"/> 2 - Antiseptic cleansing pads | <input type="checkbox"/> 2 - Quarters, for phone call |
| <input type="checkbox"/> 1 - Antiseptic ointment | <input type="checkbox"/> 1 - Razor blade, single edge safety type |
| <input type="checkbox"/> 6 - Band aids, various sizes | <input type="checkbox"/> 1 - Roller Gauze Bandage |
| <input type="checkbox"/> 1 - Candle, long burning | <input type="checkbox"/> 2 - Safety pins, large |
| <input type="checkbox"/> 2 - Cotton swabs, non sterile | <input type="checkbox"/> 1 - Splinter forceps, tweezers |
| <input type="checkbox"/> 1 - Duct tape, 5-10 ft. | <input type="checkbox"/> 1- Space type blanket or space type sleeping bag |
| <input type="checkbox"/> 1 - Leaf bag, large | <input type="checkbox"/> 1 - Towelette, clean |
| <input type="checkbox"/> 8 - Matches in a waterproof container | <input type="checkbox"/> 1 - Whistle |
| <input type="checkbox"/> 1 - Moleskin | |
| <input type="checkbox"/> 1 - Plastic bag, zip lock, qt. size, for kit | |

Personal SAR Equipment

- | | |
|---|--|
| <input type="checkbox"/> 4 - Bags, various sizes, zip locked | <input type="checkbox"/> 1 - Mirror, small |
| <input type="checkbox"/> 1 - Bandanna, handkerchief | <input type="checkbox"/> 1 - Nylon twine or small rope, 50 feet |
| <input type="checkbox"/> 1 - Cap or other headgear | <input type="checkbox"/> 1 - Pack, 1800 cubic inch (minimum) |
| <input type="checkbox"/> 2 - Carabiners (locking) | <input type="checkbox"/> 1 - Pad and pencil |
| <input type="checkbox"/> 1 - Clothes bag, waterproof | <input type="checkbox"/> 2- Prusik slings (suitable for 9mm to 11mm rope) |
| <input type="checkbox"/> 1 - Clothing, adequate for climate | <input type="checkbox"/> 1 - Rainwear, durable |
| <input type="checkbox"/> 1 - Clothing, extra set, suitable for climate | <input type="checkbox"/> 1 - SAR personal identification |
| <input type="checkbox"/> 1 - Compass, orienteering | <input type="checkbox"/> 1 - Shelter Material, 8x10 plastic or coated nylon |
| <input type="checkbox"/> 1 - Flagging tape, roll | <input type="checkbox"/> 1 - Scissors, multi-purpose |
| <input type="checkbox"/> 1 - Flashlight or lantern | <input type="checkbox"/> 1 - Socks, extra pair |
| <input type="checkbox"/> 1 - Flashlight extra, extra batteries and bulb | <input type="checkbox"/> 1 - Sunscreen lotion |
| <input type="checkbox"/> 1 - Footwear, sturdy, adequate for climate | <input type="checkbox"/> 1 - Tissue papers or baby wipes (recommended) |
| <input type="checkbox"/> 1 - Gloves, durable, even in summer | <input type="checkbox"/> 1 - Tracking stick, minimum of 42" long |
| <input type="checkbox"/> 1 - Goggles, or eye protection, suitable for environment | <input type="checkbox"/> 1 - Watch |
| <input type="checkbox"/> 1 - Insect repellent | <input type="checkbox"/> 2 - Water containers, at least liter size |
| <input type="checkbox"/> 1 - Knife, multi-purpose folding | <input type="checkbox"/> 1 - Webbing, 1" tubular - length suitable for harness |
| <input type="checkbox"/> 1 - Lip balm, with sunscreen | <input type="checkbox"/> 1 - Wire, 5-10 ft., woven steel. |
| <input type="checkbox"/> 1 - Measuring device, 18 in. minimum | <input type="checkbox"/> 8- Wire ties, plastic self locking |
| <input type="checkbox"/> 1 - Metal cup or pot | |

STATION # 4 - ROPE SKILLS

I. EQUIPMENT AND SUPPLIES

- A. Practice rope, 3/8 diameter or greater and 8' minimum in length
- B. Piece of 1" tubular webbing 20 ft. long
- C. Station evaluation sheets

II. SITUATION

- A. Candidates shall tie each knot in the presence of the evaluator.
- B. Candidates shall be given a length of rope.
- C. Candidates shall be given a piece of webbing.

III. SCENARIO

- A. I will give you a piece of rope and a piece of webbing. You will tie four (4) knots and a harness. As I ask for you to tie each knot, you will tie the knot and dress it for inspection. I will tell you to tie the knot with the rope or webbing. I will also ask for a harness to be tied. A knot may need to be backed up with a safety knot; if so, be sure to do so. Do you have any questions?
- B. Please tie a double figure eight knot with a bight using this rope.
- C. Please join the two ends of this rope using a figure eight bend (follow through).
- D. Please tie a figure eight bend (follow through) around your waist using this piece of rope.
- E. Please tie a water knot (overhand bend, follow through) using this piece of webbing.
- F. Please tie an improvised harness using this piece of webbing.

IV. EVALUATION OBJECTIVES

- A. The candidate shall tie a double figure eight knot with a bight.

- B. The candidate shall join two ends of rope using a figure eight bend (follow through).
- C. The candidate shall tie the water knot (overhand bend, follow through) using a piece of webbing.
- D. The candidate shall tie an improvised harness using a piece of webbing.
- E. The candidate shall tie a figure eight bend (follow through) around the waist.

V. EVALUATOR INSTRUCTIONS

- A. Ensure that all equipment and supplies are available.
- B. Introduce yourself to the candidate. Enter candidate's name on station evaluation sheet.
- C. Read the scenario to each candidate and answer any questions for each part of the station. Ensure each candidate understands the requirement for each objective.
- D. Ensure each candidate is read the same scenario.
- E. Place an "x" in the appropriate column on the station evaluation sheet if a candidate fails to perform the skill properly. If the candidate partially performs a skill, the candidate has not performed the skill properly and should receive an "x".
- F. Place a "P" or "F" in the appropriate pass-fail column to indicate the candidates final grade for the station. A candidate with an "x" on an automatic failure skill or four (4) cumulative skills would fail this station. Provide written explanation indicating the candidate's name and specific reasons for failure of the station on the back of the station evaluation sheet.
- G. The figure eight on a bight shall be dressed with all bends parallel. No safety is required.
- H. The joining of two ends of a rope with a figure eight shall be tied with the running ends opposing each other. The knot shall be dressed with all bends parallel. No safety is required.
- I. The water knot shall be tied with webbing. The knot shall have two opposing running ends. The knot shall be dressed with all bends parallel.

Each side of the knot shall be backed up with a safety knot. The safety knot shall be an overhand knot.

- J. The harness should be tied with webbing. The harness should be a Swiss seat, an inverted Swiss seat, or a military style seat. The ending knot shall be a square knot backed up with a safety knot on each side. The safety knot shall be an overhand knot. The seat shall be dressed for a proper fit and knots shall be dressed with bends parallel.
- K. The figure eight shall be tied in the rope and followed through from around the waist with the running end returning through the knot parallel with the standing end. The knot shall be dressed to ensure proper fit. No safety is required.
- L. Thank the candidate for the participation and have them return to the Staging Area. DO NOT indicate to the candidate that he/she has passed or failed the skills or station.
- M. Under no circumstances should the evaluator leave the examination area or be distracted while evaluating a candidate.
- N. The maximum number of candidates to be evaluated at one time by one evaluator is one candidate.

VI. EVALUATION SHEET

Station #4 - Rope Skills Evaluator _____ Location _____ Date _____ * = automatic failure																						
			ENDING KNOT DRESSED / OVERHAND SAFETY (2)																			
			IMPROVISED HARNESS	*																		
			WATER KNOT W/ OVERHAND SAFETY (2) (DRESSED)	*																		
			FIGURE EIGHT AROUND WAIST (STANDIND ENDS ALIKE / DRESSED)	*																		
			FIGURE EIGHT BEND (FOLLOW THRU) (STANDIND ENDS OPPOSED / DRESSED)	*																		
		FIGURE EIGHT ON BIGHT (DRESSED)	*																			
Final Grade		Name																				
P	F	Last	First																			

STATION # 5 - ROUTE SEARCH

I. EQUIPMENT AND SUPPLIES

- A. Trail or road bed
- B. Compass
- C. Markers for starting points
- D. 10 playing cards, used for clues, per course
- E. Master list for checking clues
- F. Station evaluation sheets
- G. Course sheets

II. SITUATION

- A. Crews shall be established to perform a route search. Odd numbers of crewmembers (3-5-7) are required. The crew size for each test should be the same.
- B. Crews shall be given a route to guide on. The guide person shall be identified.
- C. The POD (50%) and a time limit (15 minutes) shall be defined for crews before starting courses.

III. SCENARIO

I want you to perform route search, guiding on the trail, (road, path, etc.). I will space you _____ meters apart (CS=1) and you must maintain this spacing. You will search this route for one hundred (100) meters. You must determine when you have covered this distance. The clues you are searching for are playing cards and you need to find as many as possible. Maintain your spacing and use proper search techniques for searching. Your individual POD shall be at least (50%). You have fifteen (15) minutes to accomplish this search. Do you have any questions?

IV. EVALUATION OBJECTIVES

- A. The candidates shall perform a route search of a 100 meter road or trail, using spacing of CS=1. The candidates shall demonstrate searching skills and techniques during this search. Fifty percent (50%) of the clues should be found in the candidate's lane for the individual to pass. Cards found outside the candidate's lane shall not count against the candidate's score. Cards shall be left in their original location. Time limit for this search shall be fifteen (15) minutes. All candidates must return to the starting area using a path outside of the search lanes.

V. EVALUATOR INSTRUCTIONS

- A. Ensure that all equipment is available.
- B. Lay out the route search. The evaluator shall establish course boundaries and establish candidate lane spacing based on CS = 1 (one critical space) at starting points and continuing to the end of each lane.
- C. Evaluator shall randomly distribute clues in the search area and record the numerical value and suit of the cards left in each individual lane.
- D. Introduce yourself to the candidate. Enter candidate's name on station evaluation sheet. Have the candidate fill out the required information on the course evaluation sheet.
- E. Read the scenario to each candidate and answer any questions for each part of the station. Ensure each candidate understands the requirement for each objective.
- F. Ensure each candidate is read the same scenario.
- G. The Evaluator shall record the numbers of clues found by each candidate as they complete the station. Place an "x" in the appropriate column on the station evaluation sheet if a candidate fails to perform the skill properly. If the candidate partially performs a skill, the candidate has not performed the skill properly and should receive an "x".
- H. Place a "P" or "F" in the appropriate pass-fail column to indicate the candidate's final grade for the station. A candidate with an "x" on an automatic failure skill or two (2) cumulative skills would fail this station. Provide written explanation indicating the candidate's name and specific reasons for failure of the station on the back of the station evaluation sheet.

- I. Thank the candidate for the participation and have them return to the Staging Area. DO NOT indicate to the candidate that he/she has passed or failed the skills or station.
- J. Under no circumstances should the evaluator leave the examination area or be distracted while evaluating a candidate.
- K. The maximum number of candidates to be evaluated simultaneously is seven (7) candidates per evaluator.

VI. EVALUATION SHEET

Station #5 - Route Search Evaluator _____ Location _____ Date _____ * = automatic failure		Please indicate final grade with a "P" or "F"																			
		50% OF CLUES *																			
		PROPER SEARCH TECHNIQUES																			
		MAINTAIN PROPER SPACING																			
Final Grade	Name																				
P	Last	First																			
F																					

VII. ROUTE SEARCH COURSE SHEET

CANDIDATE'S NAME: _____

TEST LOCATION: _____

DATE: _____

EVALUATOR'S NAME: _____

Suits of Playing Cards



Hearts



Clubs



Spades



Diamonds

LIST OF ROUTE SEARCH COURSE CLUES FOUND:

STATION # 6 - AREA SEARCH

I. EQUIPMENT AND SUPPLIES

- A. Area 500 meters x 1000 meters (approximately)
- B. Compass
- C. Markers for starting points
- D. 10 Clues (playing cards are recommended) per course
- E. Master list for checking clues
- F. Station evaluation sheets
- G. Course sheets

II. SITUATION

- A. Crews shall be established to perform an open line search. Odd numbers of crewmembers (3-5-7) are preferred. The crew size for each test should be the same.
- B. Each candidate shall be given compass bearing to guide on.
- C. The POD (50%) and a time limit (15 minutes) shall be defined for crews before starting courses.

III. SCENARIO

- A. I will give you bearing in degrees to follow. I will space you ___ meters apart (CS=1). You will search the area ahead of you for one hundred (100) meters. You must determine when you have covered this distance. The clues you are searching for are playing cards and you need to find as many as possible and document the suit and value of the card on the course sheet. Maintain your spacing, compass heading, and use proper search techniques for searching. Your individual POD shall be at least (50%). You have fifteen (15) minutes to accomplish this search. Do you have any questions?

IV. EVALUATION OBJECTIVES

- A. The candidate shall perform an open line search with spacing based on CS=1 for 100 meters. The candidate shall maintain a degree of bearing and perform all searching skills and techniques for this type of search. Fifty (50%) percent of the clues should be found in the candidate's lane for the individual to pass. Cards found outside the candidate's lane shall not count against the candidate's score. Cards must be left in their original location. Time limit for this search shall be fifteen (15) minutes. All candidates must return to the starting area using a path outside of the search lanes.

V. EVALUATOR INSTRUCTIONS

- A. Ensure that all equipment is available.
- B. Lay out the area search. The evaluator shall establish course boundaries and establish candidate lane spacing based on CS = 1 (one critical space) at starting points and continuing to the end of each lane.
- C. Evaluator shall randomly distribute clues in the search area and record the numerical value and suit of the cards left in each individual lane.
- D. Evaluator shall establish a compass bearing for the open line area search.
- E. Introduce yourself to the candidate. Enter candidate's name on station evaluation sheet. Have the candidate fill out the required information on the course evaluation sheet.
- F. Read the scenario to each candidate and answer any questions for each part of the station. Ensure each candidate understands the requirement for each objective.
- G. Ensure each candidate is read the same scenario.
- H. Place an "x" in the appropriate column on the station evaluation sheet if a candidate fails to perform the skill properly. If the candidate partially performs a skill, the candidate has not performed the skill properly and should receive an "x".
- I. Place a "P" or "F" in the appropriate pass-fail column to indicate the candidate's final grade for the station. A candidate with an "x" on an automatic failure skill or two (2) cumulative skills would fail this station. Provide written explanation indicating the candidate's name and specific reasons for failure of the station on the back of the station evaluation sheet.

- J. Thank the candidate for the participation and have them return to the Staging Area. DO NOT indicate to the candidate that he/she has passed or failed the skills or station.
- K. Under no circumstances should the evaluator leave the examination area or be distracted while evaluating a candidate.
- L. The maximum number of candidates to be evaluated simultaneously is seven (7) candidates per evaluator.

VI. EVALUATION SHEET

Please indicate final grade with a "P" or "F"																				
	MAINTAINS DEGREE OF BEARING																			
	50% OF CLUES		*																	
PROPER SEARCH TECHNIQUES																				
MAINTAIN PROPER SPACING																				
<p style="text-align: center;">Station #6 - Area Search</p> <p>Evaluator _____</p> <p>Location _____</p> <p>Date _____</p> <p>* = automatic failure</p>			Name																	
			Last	First																
Final Grade	P	F																		

VII. AREA SEARCH COURSE SHEET

CANDIDATE'S NAME: _____

TEST LOCATION: _____

DATE: _____

EVALUATOR'S NAME: _____

Suits of Playing Cards



H hearts



C clubs



S spades



D diamonds

LIST OF AREA SEARCH COURSE CLUES FOUND:
