



Position Qualification for Mass Search and Rescue Operations  
Search and Rescue

## MOUNTAIN SEARCH AND RESCUE TECHNICIAN

RESOURCE CATEGORY	Search and Rescue
RESOURCE KIND	Personnel
OVERALL FUNCTION	The Mountain Search and Rescue (SAR) Technician performs search, rescue, and recovery efforts in mountainous terrain
COMPOSITION AND ORDERING SPECIFICATIONS	<ol style="list-style-type: none"><li>1. This position can be ordered as a single resource or in conjunction with a NIMS typed team (Mountain Search and Rescue Team).</li><li>2. Discuss logistics for deploying this position, such as security, lodging, transportation, and meals, prior to deployment</li><li>3. This position typically works 12 hours per shift, is self-sustainable for 72 hours, and is deployable for up to 14 days</li><li>4. Mountain SAR involves high-angle operations</li></ol>

Each type of resource builds on the qualifications of the type below it. For example, Type 1 qualifications include the qualifications in Type 2, plus an increase in capability. Type 1 is the highest qualification level.

Superseded

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COMPONENT	TYPE 1	TYPE 2	TYPE 3	NOTES
<b>DESCRIPTION</b>	Same as Type 2, PLUS: Performs search, rescue, and recovery in Alpine environments: Mountainous terrain, typically above tree line, that requires the ability to negotiate routes rated YDS class 2-5, and where any combination of altitude, extreme weather, extensive exposure to snow/ice obstacles, avalanche risk, and crevasses affects travel; in general, the alpine environment includes all mountainous terrain above 3,500 meters	Same as Type 3, PLUS: Performs search, rescue, and recovery in Mountain environments: Tracts of land characterized by steep slopes and great variations in elevation, that require the ability to negotiate routes rated Yosemite Decimal System (YDS) class 2-4, and occasionally class 5, and where steep to vertical rock, steep forested or brush-covered terrain, talus slopes, boulder fields, and occasional snow and ice obstacles limit travel	The National Incident Management System (NIMS) Type 3 Mountain SAR Technician: 1. Reports to the Mountain SAR Team Leader 2. Performs search, rescue, and recovery in: a. Low Mountain environments: Tracts of land characterized by steep slopes and moderate variations in elevation, that require the ability to negotiate routes rated as Yosemite Decimal System (YDS) classes 1-4 and occasionally class 5, where steep to vertical rock, steep forested or brush-covered terrain, talus slopes, boulder fields, and the possibility of occasional snow and ice obstacles limit travel, which includes city and county (urban or suburban) parks 3. Operates within the Incident Command System (ICS) in an entry level position on a Mountain SAR Team 4. Provides first aid and Cardiopulmonary Resuscitation (CPR) 5. Provides: a. Safety of self and team members b. Basic medical care of self, team members, and survivors c. Simple decontamination of self and team members d. Basic ground support capability for helicopter operations 6. Coordinates with ground vehicles, watercraft, and aircraft for support, transportation, and evacuation 7. Operates in environments with and without infrastructure, including those affected by disasters and terrorism; with compromised access to roadways, utilities, and transportation; and with limited availability of shelter, food, and (Continued)	Not Specified
<b>DESCRIPTION</b>			(Continued) water	
<b>EDUCATION</b>	Not Specified	Not Specified	Not Specified	Not Specified

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COMPONENT	TYPE 1	TYPE 2	TYPE 3	NOTES
<b>TRAINING</b>	<p>Same as Type 2, PLUS:</p> <ol style="list-style-type: none"> <li>1. Discipline-specific training for alpine environments, such as those ASTM F3028 defines</li> <li>2. Hazard awareness, survival, navigation, and search, rescue, and recovery operations in: <ol style="list-style-type: none"> <li>a. YDS classes 1-5 in alpine terrain</li> <li>b. Alpine glacier and crevasse</li> <li>c. Non-vertical and vertical ice traveling and climbing</li> <li>d. Alpine weather conditions and extreme snow and ice</li> <li>e. Rock climbing in alpine terrain</li> </ol> </li> </ol>	<p>Same as Type 3, PLUS:</p> <ol style="list-style-type: none"> <li>1. Discipline-specific training for mountain environments, such as those ASTM F3027 defines</li> <li>2. Hazard awareness, survival, navigation, and search, rescue, and recovery operations in: <ol style="list-style-type: none"> <li>a. YDS Classes 1-5 in mountain terrain</li> <li>b. Weather conditions including mountain terrain weather and heavy snow</li> <li>c. Mountaineering, including avalanche, glacier, and crevasse</li> <li>d. Rock climbing in mountain terrain</li> </ol> </li> <li>3. Mountain-alpine interface training</li> </ol>	<p>Completion of the following:</p> <ol style="list-style-type: none"> <li>1. All training identified for the NIMS Type 1 Land SAR Technician</li> <li>2. Hazard awareness, survival, navigation, and search, rescue, and recovery operations in: <ol style="list-style-type: none"> <li>a. YDS classes 1-5 in low mountain terrain</li> <li>b. Rock climbing in low mountain terrain</li> <li>c. High angle rope rescue</li> </ol> </li> </ol>	<p>YDS of classifying walking, hiking and climbing terrain:</p> <ol style="list-style-type: none"> <li>1. Class 1: Walking with a low chance of injury.</li> <li>2. Class 2: Simple scrambling, with the possibility of occasional hand use and little potential danger.</li> <li>3. Class 3: Scrambling on an increased angle with increased exposure and necessary handholds. Falls could easily be fatal.</li> <li>4. Class 4: Simple climbing, with exposure and rope use. Falls may well be fatal.</li> <li>5. Class 5: Technical rock climbing using a rope, specialized equipment and training to protect against a fall. Un-roped falls can result in severe injury or death.</li> <li>6. Class 6: Rock/Ice so shear and smooth that it is unclimbable without the use of aid, such as artificial and other devices: bolts, wedges, rope ladders, etc.</li> </ol>
<b>EXPERIENCE</b>	Same as Type 2	Same as Type 3	<p>Knowledge, Skills, and Abilities:</p> <ol style="list-style-type: none"> <li>1. Knowledge of mountain SAR and associated hazards</li> <li>2. Knowledge of the capabilities of canine search</li> <li>3. Understanding of SAR procedures in the mountain environment during day and night operations</li> <li>4. Ability to identify and use appropriate personal protective equipment (PPE)</li> <li>5. Ability to carry out the following: <ol style="list-style-type: none"> <li>a. Technical rescue operations</li> <li>b. General standards of technical rescue</li> <li>c. Rope rescue</li> <li>d. Mountain SAR</li> </ol> </li> </ol> <p>Experience:</p> <p>Completion of Mountain SAR Technician Position Task Book (PTB) or equivalent Authority Having Jurisdiction (AHJ) documentation</p>	Not Specified

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COMPONENT	TYPE 1	TYPE 2	TYPE 3	NOTES
<b>PHYSICAL/MEDICAL FITNESS</b>	Same as Type 2	Same as Type 3	1. Performs duties under arduous circumstances, characterized by working consecutive 12-hour days under physical and emotional stress for sustained periods of time 2. Meets minimum physical fitness standards, in accordance with the AHJ's Job Related Physical Ability Test (JRPAT) 3. Maintains AHJ-determined medical fitness suitable for the environment and job requirements 4. Maintains immunizations in accordance with the U.S. Department of Health and Human Services Centers for Disease Control's recommended adult immunization schedule for the United States of America	Not Specified
<b>CURRENCY</b>	Same as Type 2	Same as Type 3	1. Annual refresher of related SAR skills and abilities in their specified environments 2. Functions in this position during an operational incident, planned event, participation in exercise, drill, or simulation once every three years or as the AHJ determines 3. Background checks as applicable law permits or requires	Provider must carry out and use any background checks as applicable law specifies. This may include a background check completed within past 12 months; sex-offender registry check; and a local, state, and a local, state, and national criminal history.
<b>PROFESSIONAL AND TECHNICAL LICENSES AND CERTIFICATIONS</b>	Same as Type 2	Same as Type 3	Not Specified	Not Specified

Superseded

## NOTES

Nationally typed resources represent the minimum criteria for the associated category.

## REFERENCES

1. FEMA, NIMS 508: Mountain Search and Rescue Team
2. FEMA, NIMS 509: Land Search and Rescue Technician
3. ASTM International (ASTM) F2209-2014: Standard Guide for Training of Level I Land Search Team Member, 2014
4. ASTM F2751-2009: Standard Guide for Training of Support Level Land Rescue Team Member (LRT-Support) Member, 2009
5. ASTM F2752-2009: Standard Guide for Training for Level I Rope Rescue (R1) Rescuer Endorsement, 2014
6. ASTM F2890-2012: Standard Guide for Hazard Awareness for Search and Rescue Personnel, 2012
7. ASTM WK45629: Training of Non-Wilderness Land Search Team Member
8. ASTM F2954-2012: Standard Guide for Training for Level II Rope Rescue (R2) Rescuer Endorsement, 2012
9. ASTM F3027-2013: Standard Guide for Training of Personnel Operating in Mountainous Terrain (Mountain Endorsement), 2013
10. ASTM F3028-2013: Standard Guide for Training of Search and Rescue Personnel Operating in the Alpine Environment (Alpine Endorsement), 2013
11. Mountain Rescue Association (MRA), Policy 105.1: National Compliancy Guideline, 2006
12. National Fire Protection Association (NFPA) 1006: Standard for Technical Rescuer Professional Qualifications, 2013
13. National Interagency Aviation Committee (NIAC), Interagency Aviation Training Subcommittee, Interagency Aviation Training (IAT) Guide, 2014
14. National Park Service (NPS) RM-59: National Park Service, Search and Rescue Reference Manual, 2011
15. National Wildfire Coordinating Group (NWCG), National Incident Management System (NIMS) Wildland Fire Qualification System Guide PMS 310-1, 2016
16. Yosemite Decimal System (YDS), Classifications for Terrain
17. Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) Part 1910.120: Hazardous Waste Operations and Emergency Response, latest edition adopted
18. OSHA 29 CFR Part 1910.1030: Bloodborne Pathogens, latest edition adopted

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