



MOUNTAIN SEARCH AND RESCUE (SAR) 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	1. This position can be ordered as a single resource or in conjunction with a NIMS typed team (Mountain Search and Rescue Team). 2. Discuss logistics for deploying this position, such as working conditions, length of deployment, security, lodging, transportation, and meals, prior to deployment 3. Mountain SAR involves high-angle operations

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.



Position Qualification for Mass Search and Rescue Operations Search and Rescue

COMPONENT	TYPE 1	TYPE 2	TYPE 3	NOTES
DESCRIPTION	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
DESCRIPTION			(Continued) water	
EDUCATION	Not Specified	Not Specified	Not Specified	Not Specified



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COMPONENT	TYPE 1	TYPE 2	TYPE 3	NOTES
TRAINING	Same as Type 2, PLUS: 1. Discipline-specific training for alpine environments, such as those ASTM F3028 defines 2. Hazard awareness, survival, navigation, and search, rescue, and recovery operations in: a. YDS classes 1-5 in alpine terrain b. Alpine glacier and crevasse c. Non-vertical and vertical ice traveling and climbing d. Alpine weather conditions and extreme snow and ice e. Rock climbing in alpine terrain	Same as Type 3, PLUS: 1. Discipline-specific training for mountain environments, such as those ASTM F3027 defines 2. Hazard awareness, survival, navigation, and search, rescue, and recovery operations in: a. YDS Classes 1-5 in mountain terrain b. Weather conditions including mountain terrain weather and heavy snow c. Mountaineering, including avalanche, glacier, and crevasse d. Rock climbing in mountain terrain 3. Mountain-alpine interface training	Completion of the following: 1. All training identified for the NIMS Type 1 Land SAR Technician 2. Hazard awareness, survival, navigation, and search, rescue, and recovery operations in: a. YDS classes 1-5 in low mountain terrain b. Rock climbing in low mountain terrain c. High angle rope rescue	YDS of classifying walking, hiking and climbing terrain: 1. Class 1: Walking with a low chance of injury. 2. Class 2: Simple scrambling, with the possibility of occasional hand use and little potential danger. 3. Class 3: Scrambling on an increased angle with increased exposure and necessary handholds. Falls could easily be fatal. 4. Class 4: Simple climbing, with exposure and rope use. Falls may well be fatal. 5. Class 5: Technical rock climbing using a rope, specialized equipment and training to protect against a fall. Un-rope falls can result in severe injury or death. 6. Class 6: Rock/Ice so sheer and smooth that it is unclimbable without the use of aid, such as artificial and other devices: bolts, wedges, rope ladders, etc.
EXPERIENCE	Same as Type 2	Same as Type 3	Knowledge, Skills, and Abilities: 1. Knowledge of mountain SAR and associated hazards 2. Knowledge of the capabilities of canine search 3. Understanding of SAR procedures in the mountain environment during day and night operations 4. Ability to identify and use appropriate personal protective equipment (PPE) 5. Ability to carry out the following: a. Technical rescue operations b. General standards of technical rescue c. Rope rescue d. Mountain SAR Experience: Completion of Mountain SAR Technician Position Task Book (PTB) or equivalent Authority Having Jurisdiction (AHJ) documentation	Not Specified



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COMPONENT	TYPE 1	TYPE 2	TYPE 3	NOTES
PHYSICAL/MEDICAL FITNESS	Same as Type 2	Same as Type 3	<ol style="list-style-type: none">1. Arduous2. 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 requirements4. 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	The NIMS Guideline for the National Qualification System (NQS) defines Physical/Medical Fitness levels for NIMS positions.
CURRENCY	Same as Type 2	Same as Type 3	<ol style="list-style-type: none">1. Annual refresher of related SAR skills and abilities in their specified environments2. Functions in this position during an operational incident, planned event, exercise, drill, or simulation at least once every three years3. 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.
PROFESSIONAL AND TECHNICAL LICENSES AND CERTIFICATIONS	Same as Type 2	Same as Type 3	Not Specified	Not Specified

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. FEMA, National Incident Management System (NIMS), October 2017
4. FEMA, NIMS Guideline for the National Qualification System (NQS), November 2017
5. ASTM International (ASTM) F2209-2014: Standard Guide for Training of Level I Land Search Team Member, 2014
6. ASTM F2751-2009: Standard Guide for Training of Support Level Land Rescue Team Member (LRT-Support) Member, 2009
7. ASTM F2752-2009: Standard Guide for Training for Level I Rope Rescue (R1) Rescuer Endorsement, 2014
8. ASTM F2890-2012: Standard Guide for Hazard Awareness for Search and Rescue Personnel, 2012
9. ASTM WK45629: Training of Non-Wilderness Land Search Team Member
10. ASTM F2954-2012: Standard Guide for Training for Level II Rope Rescue (R2) Rescuer Endorsement, 2012
11. ASTM F3027-2013: Standard Guide for Training of Personnel Operating in Mountainous Terrain (Mountain Endorsement), 2013
12. ASTM F3028-2013: Standard Guide for Training of Search and Rescue Personnel Operating in the Alpine Environment (Alpine Endorsement), 2013
13. Mountain Rescue Association (MRA), Policy 105.1: National Compliancy Guideline, 2006
14. National Fire Protection Association (NFPA) 1006: Standard for Technical Rescuer Professional Qualifications, 2013
15. National Interagency Aviation Committee (NIAC), Interagency Aviation Training Subcommittee, Interagency Aviation Training (IAT) Guide, 2014
16. National Park Service (NPS) RM-59: National Park Service, Search and Rescue Reference Manual, 2011
17. Yosemite Decimal System (YDS), Classifications for Terrain
18. Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) Part 1910.120: Hazardous Waste Operations and Emergency Response, latest edition adopted
19. OSHA 29 CFR Part 1910.1030: Bloodborne Pathogens, latest edition adopted