

MOUNTAIN SEARCH AND RESCUE (SAR) TEAM

DESCRIPTION	A Mountain Search and Rescue (SAR) Team conducts search, rescue and recovery in one or more of the environments of low mountain, mountain and alpine, in response to natural and human-caused events
RESOURCE CATEGORY	Search and Rescue
RESOURCE KIND	Team
OVERALL FUNCTION	<p>The Mountain SAR Team:</p> <ol style="list-style-type: none"> Conducts search, rescue and recovery in low mountain, mountain and alpine SAR environments through use of aircraft and ground vehicles for support, transportation and evacuation, including technical and non-technical terrain <ol style="list-style-type: none"> Low Mountain: Tract of land characterized by steep slopes and moderate variations in elevation, that requires 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 possibly occasional snow and ice obstacles limits travel, which includes city and county (urban or suburban) parks Mountain: Tract of land characterized by steep slopes and great variations in elevation, that requires the ability to negotiate routes rated 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 Alpine: 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 affect travel; in general, the alpine environment includes all mountainous terrain above 3,500 meters Provides first aid and Cardiopulmonary Resuscitation (CPR) Operates within the Incident Command System (ICS) 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 water Conducts primary rescue of humans and animals and delivers them to safe refuge, but is not intended to perform secondary transport of rescued humans and animals to shelters or other locations
COMPOSITION AND ORDERING SPECIFICATIONS	<ol style="list-style-type: none"> Discuss logistics for deploying this position, such as working conditions, length of deployment, security, lodging, transportation and meals, prior to deployment Discuss the following items prior to deployment: <ol style="list-style-type: none"> Intra-team communications, such as programmable inter-operable communications with Command, General Staff and other supporting resources Presence of contaminated environments and need for related personal protective equipment (PPE), respiratory protection, clothing and equipment Security and force protection needed upon arrival The requestor should specify additional specialized equipment, such as hardware, software, ropes, rescue or evacuation equipment The requestor should specify the mission location and operational environment, such as low mountain, mountain and alpine The requestor should specify the type of animal rescue, such as livestock and equine, companion, avian, non-domestic and exotic animals The requestor should acquire additional specialized personnel, such as advanced medical, Emergency Medical Technician (EMT), paramedic and canine SAR personnel separately The requestor should acquire secondary land or air transport of rescues separately The requestor should specify or separately acquire additional vehicles, trailers, equipment or supplies such as fuel The requestor should consider the need for additional capabilities needed to address hazards that may be encountered during operations in SAR environments, which may be immediately dangerous to life and health (IDLH), as ASTM International (ASTM) F2890 Standard Guide for Hazard Awareness for Search and Rescue Personnel defines The Authority Having Jurisdiction (AHJ) may require additional capability-based training or certification, such as those related to cave, mine, water, hazardous material or higher altitudes

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.

Resource Typing Definition for Mass Search and Rescue Operations

Search and Rescue

COMPONENT	SINGLE TYPE	NOTES
MINIMUM PERSONNEL PER TEAM	11	Not Specified
MANAGEMENT AND OVERSIGHT PERSONNEL PER TEAM	1 - National Incident Management System (NIMS) Type 1 Mountain SAR Strike Team/Task Force Leader 2 - NIMS Type 1 Mountain SAR Team Leader	NIMS Mountain SAR Strike Team/Task Force Leader should have experience in the deployment area's environment
SUPPORT PERSONNEL PER TEAM	8 - NIMS Type 13 Mountain SAR Technician	Requestor may need to order a NIMS Type 1 EMT or Paramedic as a separate resource to supplement the team based on the incident need
ENVIRONMENT CAPABILITY PER TEAM	Alpine	Not Specified
OPERATIONS CAPABILITY PER TEAM	Same as Type 2, PLUS: Performs search, rescue and recovery in alpine environments	YDS classified terrains as classes 1-6: 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-roped 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.
GENERAL EQUIPMENT PER TEAM	Same as Type 2, PLUS: Equipment consistent with this resource's capabilities and needs, that meet or exceed ASTM 3028	Each response or mission may require additional specialized equipment. Requestor and provider should discuss this prior to team's arrival
VICTIM EXTRACTION SYSTEM EQUIPMENT PER TEAM	Same as Type 2	Hypothermia packaging may include blankets or more technical equipment, such as specially designed sleeping bags
PERSONAL PROTECTIVE EQUIPMENT (PPE) EQUIPMENT PER TEAM MEMBER	Same as Type 2, PLUS: PPE as required that meets or exceeds ASTM 3028	PPE is mission specific and may vary by working environment; it includes protective footwear, protective clothing for skin exposure, eye and ear protection, respirators, gloves and masks
COMMUNICATIONS EQUIPMENT PER TEAM MEMBER	Not Applicable	1. Intra-team and inter-team communications should be consistent with National Interoperability Field Operations Guide (NIFOG) 2. Consider alternate forms of communication, such as satellite phones, based on the mission assignment and team needs

NOTES

Nationally typed resources represent the minimum criteria for the associated component and capability.

REFERENCES

1. FEMA, NIMS 509: Emergency Medical Technician
2. FEMA, NIMS 509: Paramedic
3. FEMA, NIMS 509: Mountain Search and Rescue Team (SAR) Leader
4. FEMA, NIMS 509: Mountain Search and Rescue (SAR) Technician
5. FEMA, NIMS 509: Mountain Search and Rescue (SAR) Strike Team/Task Force Leader
6. FEMA, National Incident Management System (NIMS), October 2017
7. ASTM F2209-2014: Standard Guide for Training of Level I Land Search Team Member, 2014
8. ASTM F2751-2009: Standard Guide for Training of Support Level Land Rescue Team Member (LRT-Support) Member, 2009
9. ASTM F2752-2009: Standard Guide for Training for Level I Rope Rescue (R1) Rescuer Endorsement, 2014
10. ASTM F2890-2012: Standard Guide for Hazard Awareness for Search and Rescue Personnel, 2012
11. ASTM WK45629: Training of Non-Wilderness Land Search Team Member
12. ASTM F3027-2013: Standard Guide for Training of Personnel Operating in Mountainous Terrain (Mountain Endorsement), 2013
13. ASTM F3028-2013: Standard Guide for Training of Search and Rescue Personnel Operating in the Alpine Environment (Alpine Endorsement), 2013
14. Mountain Rescue Association (MRA), Policy 105.1: National Compliancy Guideline, 2015
15. U.S. Department of Homeland Security, NIFOG, March 2022
16. Yosemite Decimal System (YDS), Classifications for Terrain