

## Resource Typing Definition for Response Mass Search and Rescue Operations

## SWIFTWATER/FLOOD SEARCH AND RESCUE TECHNICIAN

RESOURCE CATEGORY	Search and Rescue
RESOURCE KIND	Personnel
OVERALL FUNCTION	The Swiftwater/Flood Search and Rescue (SAR) Technician performs search, rescue, and recovery operations in various water environments
COMPOSITION AND ORDERING SPECIFICATIONS	<ol> <li>This position can be ordered as a single resource or in conjunction with a National Incident Management System (NIMS) typed team (Swiftwater/Flood SAR Team)</li> <li>Discuss logistics for deploying this position, such as working conditions, length of deployment, security, lodging, transportation, and meals, prior to deployment</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.

COMPONENT	SINGLE TYPE	NOTES
DESCRIPTION	<ol> <li>The Swiftwater/Flood SAR Technician:</li> <li>Performs search, rescue, and recovery activities in the following settings:         <ul> <li>a. Water environments including swiftwater and swiftwater/flood</li> <li>b. Shore, water, and boat-based rescue operations</li> <li>c. Situations involving human or animal rescue</li> </ul> </li> <li>Provides medical care for self, team members, and survivors, including Basic Life Support (BLS) for others</li> <li>Reports to a Swiftwater/Flood SAR Team Leader</li> <li>Operates within the Incident Command System (ICS), in an entry-level position within the Swiftwater/Flood SAR Team</li> <li>Ensures safety of self and team members</li> <li>Provides basic ground support for helicopter operations</li> <li>Coordinates with ground vehicles, watercraft, and aircraft for support, transportation, and evacuation</li> <li>Operates in environments with and without infrastructure, including environments:         <ul> <li>a. Affected by disasters and terrorism</li> <li>b. With disrupted access to roadways, utilities, and transportation</li> <li>c. With limited access to shelter, food, and water</li> </ul> </li> </ol>	Basic ground support for helicopter operations includes safety awareness and Landing Zone (LZ) knowledge.



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COMPONENT	SINGLE TYPE	NOTES
EDUCATION	Not Specified	Not Specified
TRAINING	Completion of the following:  1. Training outlined for the NIMS Type 2 Land SAR Technician  2. Training in water operations in water with a current greater than 1 knot  3. National Fire Protection Association (NFPA), ASTM International (ASTM), or equivalent swiftwater SAR training program that the Authority Having Jurisdiction (AHJ) has verified and that covers the following position-specific skills and aptitudes:  a. Nighttime water SAR operations  b. Search methods in swiftwater and swiftwater/flood environments  c. Water rescue scene management and dynamic risk assessment  d. Basic boat handling with paddle and rope systems  e. Specialized rescue equipment  f. Extrication techniques  g. Animal hazards and safety protocols  h. Use of appropriate Personal Protective Equipment (PPE)	Not Specified



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COMPONENT	SINGLE TYPE	NOTES
EXPERIENCE	<ol> <li>Completion of Swiftwater/Flood SAR Technician Position Task Book (PTB), or equivalent AHJ documentation, including the following tasks:         <ol> <li>Demonstrate a working knowledge of hydrology and associated hazards, including the recognition of water features and their impact</li> <li>Understand search procedures in the water environment</li> <li>Demonstrate swimming and maneuvering skills</li> <li>Understand ferry angle concepts</li> <li>Understand and apply relevant rescue techniques, including Talk, Reach, Throw, Row, Go/Tow, and Helicopter</li> <li>Demonstrate rigging and operating of rope systems</li> <li>Demonstrate awareness of flooding and associated hazards and their impact on medical problems associated with water</li> <li>Identify and explain the hazards and implications of entrapment</li> <li>Demonstrate the use of supporting taglines and of cinches for mud and ice</li> <li>Understand characteristics, medical issues, extrication techniques, and contamination issues for locks, sluices, irrigation ditches, and low-head dams</li> <li>Understand characteristics, design/hydrology, and specific rescue techniques for vehicles and objects (strainers) in water</li> <li>Demonstrate knowledge of behavior, hydrology, access, and stabilization techniques related to helicopters</li> <li>Identify and explain the hazards and difficulties of with working in darkness and reduced-visibility conditions, and explain how to apply suitable control measures</li> </ol> </li> <li>Ability to carry out the following:         <ol> <li>Rescue procedures in a swiftwater and swiftwater/flood environment during day and night operations</li> <li>Technical rescue operations</li> <li>Rope rescue</li> </ol> </li> </ol>	NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications and NFPA 1670: Standard on Operations and Training for Technical Search and Rescue Incidents address additional knowledge, skills, and abilities that apply to this position.
PHYSICAL / MEDICAL FITNESS	<ol> <li>Arduous</li> <li>Meets minimum physical fitness and swimming standards, in accordance with the AHJ's job-related physical ability test (JRPAT)</li> <li>Maintains AHJ-determined physical fitness standards suitable for the environment and typing; NFPA 1582: Standard on Comprehensive Occupational Medical Program for Fire Departments meets or exceeds this physical fitness standard</li> <li>Maintains immunizations in accordance with the U.S. Department of Health and Human Services Centers for Disease Control and Prevention's (CDC) immunization recommendations</li> </ol>	The NIMS Guideline for the National Qualification System (NQS) defines Physical/Medical Fitness levels for NIMS positions.



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COMPONENT	SINGLE TYPE	NOTES
CURRENCY	<ol> <li>Annual refresher of related SAR skills and abilities in water environments</li> <li>Functions in this position during an operational incident, planned event, exercise, drill, or simulation at least once every three years</li> <li>Background checks as applicable law permits or requires</li> <li>Keeps immunizations up to date and commensurate with mission assignment</li> </ol>	Provider must carry out and use any background checks as applicable law specifies. This may include a background check completed within the past 12 months; a sex-offender registry check; and a local, state, and national driving and criminal history.
PROFESSIONAL AND TECHNICAL LICENSES AND CERTIFICATIONS	AHJ-required BLS-level medical care certification or recertification	AHJ determines which emergency medical certifications meet the minimum criteria, which could include first aid, cardiopulmonary resuscitation (CPR), and BLS.



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#### **NOTES**

- 1. Nationally typed resources represent the minimum criteria for the associated component and capability.
- 2. This document contains references to non-Federal resources and materials. Such references do not constitute an endorsement by the U.S. government, or any of its employees, of the information or content which a non-Federal resource or material provides.

#### **REFERENCES**

- 1. FEMA, NIMS 508: Swiftwater/Flood Search and Rescue Team
- 2. FEMA, NIMS 509: Land Search and Rescue Technician
- FEMA, NIMS 509: Swiftwater/Flood Search and Rescue Team Leader
- 4. FEMA, National Incident Management System (NIMS), October 2017
- 5. FEMA, NIMS Guideline for the National Qualification System, November 2017
- 6. FEMA, National Response Framework, October 2019
- 7. ASTM International (ASTM) F2890: Standard Guide for Hazard Awareness for Search and Rescue Personnel, latest edition adopted
- 8. National Fire Protection Association (NFPA) 1006: Standard for Technical Rescue Personnel Professional Qualifications, latest edition adopted
- 9. NFPA 1582: Standard on Comprehensive Occupational Medical Program for Fire Departments, latest edition adopted
- 10. NFPA 1670: Standard on Operations and Training for Technical Search and Rescue Incidents, latest edition adopted
- 11. NFPA 1983: Standard on Life Safety Rope and Equipment for Emergency Services, latest edition adopted
- 12. National Search and Rescue Committee, Catastrophic Incident Search and Rescue (CISAR) Addendum to the National Search and Rescue Supplement to the International Aeronautical and Maritime Search and Rescue Manual, latest edition adopted
- 13. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), Recommended Adult Immunization Schedule, United States, latest edition adopted