



Position Qualification for Mass Search and Rescue Operations  
Search and Rescue

## SWIFTWATER/FLOOD SEARCH AND RESCUE TECHNICIAN - BOAT BOWMAN

<b>RESOURCE CATEGORY</b>	Search and Rescue
<b>RESOURCE KIND</b>	Personnel
<b>OVERALL FUNCTION</b>	The Swiftwater/Flood Search and Rescue (SAR) Technician - Boat Bowman performs search, rescue and recovery operations in various water environments.
<b>COMPOSITION AND ORDERING SPECIFICATIONS</b>	<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 (Swiftwater/Flood SAR Team).</li> <li>2. 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
<b>DESCRIPTION</b>	<p>The Swiftwater/Flood SAR Technician - Boat Bowman:</p> <ol style="list-style-type: none"> <li>1. Performs in-water, paddle and powered boat operations under the Swiftwater/Flood SAR Technician - Boat Operator's direction</li> <li>2. Performs search, rescue and recovery activities in the following settings:               <ol style="list-style-type: none"> <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 companion animal rescue</li> </ol> </li> <li>3. Provides medical care for self, team members and survivors, including Basic Life Support (BLS) for others</li> <li>4. Reports to the Swiftwater/Flood SAR Technician - Boat Operator</li> <li>5. Operates within the Incident Command System (ICS), in a specialized position within the Swiftwater/Flood SAR Team</li> <li>6. Ensures safety of self and team members</li> <li>7. Coordinates with ground vehicles, watercraft and aircraft for support, transportation and evacuation</li> <li>8. Operates in environments with and without infrastructure, including environments:               <ol style="list-style-type: none"> <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> </ol> </li> </ol>	Not Specified
<b>EDUCATION</b>	Not Specified	Not Specified



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<p><b>TRAINING</b></p>	<p>Completion of the following:</p> <ol style="list-style-type: none"> <li>1. Training outlined for the NIMS Swiftwater/Flood SAR Technician</li> <li>2. Authority Having Jurisdiction (AHJ)-verified GPS land navigation course</li> <li>3. Training in watercraft operations in water with a current of 1 knot or greater</li> <li>4. Training in power and paddle craft use in aquatic environments</li> <li>5. Training in boat support, such as maintenance, trailering and repair</li> </ol> <p>Completion of a National Fire Protection Association (NFPA), ASTM International (ASTM) or equivalent swiftwater SAR training program that the AHJ has verified and that covers the following position-specific skills and aptitudes:</p> <ol style="list-style-type: none"> <li>1. Assisting the Swiftwater/Flood SAR Technician - Boat Operator with boat handling in swiftwater/flood situations:               <ol style="list-style-type: none"> <li>a. Identifying safe launching sites, escape routes and recovery sites</li> <li>b. Executing launch and recovery in swiftwater/flood settings</li> <li>c. Recognizing moving water characteristics and hazards</li> <li>d. Recognizing vessel limitations, hull damage and watertight integrity</li> <li>e. Anchoring</li> <li>f. Holding station and ferry gliding</li> <li>g. Using water features, including eddy currents and wave troughs</li> <li>h. Identifying hazards and operating in shallow water</li> <li>i. Maneuvering in swiftwater/flood situations, including running with the flow</li> <li>j. Making over ground, power turns</li> <li>k. Closing/bearing away</li> <li>l. Coming alongside moving vessels; understanding suction effects</li> <li>m. Demobilization/restoration procedures, including returning equipment and reporting faults and problems</li> </ol> </li> <li>2. Assisting the Swiftwater/Flood SAR Technician - Boat Operator with paddle boat handling:               <ol style="list-style-type: none"> <li>a. Using paddles to maneuver and control the craft in both still and moving water</li> <li>b. Capsize avoidance and recovery</li> </ol> </li> <li>3. Assisting the Swiftwater/Flood SAR Technician - Boat Operator with SAR operations from powered craft:               <ol style="list-style-type: none"> <li>a. Using safety equipment; communicating with team and other agencies</li> <li>b. Search techniques and incident management</li> <li>c. Methods of recovering personnel from water and techniques for lifting</li> <li>d. Extended-reach rescues</li> <li>e. Swimmer operations</li> <li>f. Use of loaded lines</li> <li>g. In-tandem boat operations—side by side, moving a line, survivor/crew/equipment transfer</li> <li>h. Towing and being towed, including length of tow lines, positioning, passing a</li> </ol> </li> </ol> <p>(Continued)</p>	<p>Not Specified</p>



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COMPONENT	SINGLE TYPE	NOTES
<b>TRAINING</b>	(Continued) tow line, using a bridle, towing alongside and casting off a tow line i. Approaching, righting and dealing with entrapments from capsized vessels j. Awareness of rescue from vehicles k. Rescues from shore l. Mass evacuation m. Helicopter rescue procedures n. Use of GPS, maps and compass o. Use of other specialized equipment; boat and motor support, such as maintenance, trailering and repair 4. Assisting the Swiftwater/Flood SAR Technician - Boat Operator with boat handling and SAR during darkness and reduced-visibility conditions: a. Applying skills in darkness and poor light b. Demonstrating ability to keep a proper lookout, and identifying lit and unlit hazards at night c. Conducting night SAR training operations	
<b>EXPERIENCE</b>	Completion of Swiftwater/Flood SAR Technician - Boat Bowman Position Task Book (PTB), or equivalent AHJ documentation	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.
<b>PHYSICAL/MEDICAL FITNESS</b>	1. Arduous 2. Meets minimum physical fitness and swimming standards, in accordance with the AHJ's job-related physical ability test (JRPAT) 3. 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 4. Maintains immunizations in accordance with the U.S. Department of Health and Human Services Centers for Disease Control and Prevention's (CDC) immunization recommendations	The NIMS Guideline for the National Qualification System (NQS) defines physical/medical fitness levels for NIMS positions.
<b>CURRENCY</b>	1. Annual refresher of related SAR skills and abilities in water environments 2. Functions in this position during an operational incident, planned event, exercise, drill or simulation at least once every three years 3. Background checks as applicable law permits or requires 4. Keeps immunizations up to date and commensurate with mission assignment	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.
<b>PROFESSIONAL AND TECHNICAL LICENSES AND CERTIFICATIONS</b>	AHJ-required BLS-level medical care certification or recertification	AHJ determines which emergency medical certifications meet the minimum criteria, which can include first aid, cardiopulmonary resuscitation (CPR) and BLS.



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### NOTES

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

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1. FEMA, NIMS 508: Swiftwater/Flood Search and Rescue Team
2. FEMA, NIMS 509: Swiftwater/Flood Search and Rescue Technician
3. FEMA, NIMS 509: Swiftwater/Flood Search and Rescue Technician – Boat Operator
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 (NSARC), 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), Immunization Recommendations for Disaster Responders, United States, latest edition adopted