

# Typed Resource Definitions

## Search and Rescue Resources



**FEMA 508-8**

**August 2007**

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Background	The National Mutual Aid and Resource Management Initiative supports the National Incident Management System (NIMS) by establishing a comprehensive, integrated national mutual aid and resource management system that provides the basis to type, order, and track all (Federal, State, and local) response assets.
Resource Typing	For ease of ordering and tracking, response assets need to be categorized via resource typing. Resource typing is the categorization and description of resources that are commonly exchanged in disasters via mutual aid, by capacity and/or capability. Through resource typing, disciplines examine resources and identify the capabilities of a resource's components (i.e., personnel, equipment, training). During a disaster, an emergency manager knows what capability a resource needs to have to respond efficiently and effectively. Resource typing definitions will help define resource capabilities for ease of ordering and mobilization during a disaster. As a result of the resource typing process, a resource's capability is readily defined and an emergency manager is able to effectively and efficiently request and receive resources through mutual aid during times of disaster.
Web Site	For more information, you can also refer to the National Mutual Aid and Resource Management Web site located at:  <a href="http://www.fema.gov/nims/mutual_aid.shtm">http://www.fema.gov/nims/mutual_aid.shtm</a> .

Supersedure	This document replaces Search and Rescue Resources, dated May 2005
Changes	Changed the name of the Swiftwater/Flood Search and Dive Rescue Team to Swiftwater/Flood Search and Rescue Team. Also added a reference source to the Comments section.

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RESOURCE		CANINE SEARCH AND RESCUE TEAM – DISASTER/STRUCTURE COLLAPSE LIVE				
CATEGORY:		Search & Rescue (ESF #9)			KIND:	Team
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	OTHER
COMPONENT	METRIC					
Team	Personnel	1 Dog, 1 Handler (NIMS Credentialed Canine Search Specialist, Disaster/Structural Collapse Live- Heavy)	1 Dog, 1 Handler (NIMS Credentialed Canine Search Specialist, Disaster/Structural Collapse Live- Medium)	1 Dog, 1 Handler (NIMS Credentialed Canine Search Technician, Disaster/Structural Collapse- Light)		
Team	Capabilities	Search for and detect live human scent in failed heavy frame structures and natural debris fields.	Search for and detect live human scent in failed medium frame structures and natural debris fields.	Search for and detect live human scent in failed light frame structures and natural debris fields.		
Team	Operations	Self-sustaining for 24 hours. Capable of 12 hour search operations.	Self-sustaining for 24 hours. Capable of 12 hour search operations.	Self-sustaining for 24 hours. Capable of 12 hour search operations.		
Team	Equipment	Personal Protective Equipment Food and Water Basic First Aid Intra-team communications	Personal Protective Equipment Food and Water Basic First Aid Intra-team communications	Personal Protective Equipment Food and Water Basic First Aid Intra-team communications		
<b>COMMENTS:</b>	<b>Heavy frame</b> includes heavy floor construction, pre-cast concrete construction, and steel frame construction. <b>Medium frame</b> includes heavy wall construction. <b>Light frame</b> includes wood frame construction. A canine search team must operate in conjunction with a support person who is, NIMS Credentialed as a Structural Collapse Search or Rescue Technician or higher either as part of the team or provided by the requesting organization.					

RESOURCE		CANINE SEARCH AND RESCUE TEAM – DISASTER/STRUCTURE COLLAPSE HUMAN REMAINS				
CATEGORY:		Search & Rescue (ESF #9)			KIND:	Team
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	OTHER
COMPONENT	METRIC					
Team	Personnel	1 Dog, 1 Handler (NIMS Credentialed Canine Search Specialist, Disaster/Structure Collapse Human Remains-Heavy)	1 Dog, 1 Handler (NIMS Credentialed Canine Search Specialist, Disaster/Structure Collapse Human Remains-Medium)			
Team	Capabilities	Search for and detect human remains in failed heavy frame structures and natural debris fields.	Search for and detect human remains in failed medium and light frame structures and natural debris fields.			
Team	Operations	Self-sustaining for 24 hours. Capable of 12 hour search operations.	Self-sustaining for 24 hours. Capable of 12 hour search operations.			
Team	Equipment	Personal Protective Equipment Food and Water Basic First Aid Intra-team communications	Personal Protective Equipment Food and Water Basic First Aid Intra-team communications			
<b>COMMENTS:</b>		<b>Heavy frame</b> includes heavy floor construction, pre-cast concrete construction, and steel frame construction. <b>Medium frame</b> includes heavy wall construction. <b>Light frame</b> includes wood frame construction. A canine search team must operate in conjunction with a support person who is, NIMS Credentialed as a Structural Collapse Search or Rescue Technician or higher either as part of the team or provided by the requesting organization.				

RESOURCE		CANINE SEARCH AND RESCUE TEAM – LAND HUMAN REMAINS				
CATEGORY:		Search & Rescue (ESF #9)			KIND:	Team
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	OTHER
COMPONENT	METRIC					
Team	Personnel	1 Dog, 1 Handler (NIMS Credentialed Canine Search Specialist, Land Human Remains, Small Quantity)	1 Dog, 1 Handler (NIMS Credentialed Canine Search Specialist, Land Human Remains, Large Quantity)			
Team	Capabilities	Capable of locating less than 15 grams of human remains outside of the collapsed structure environment.	Capable of locating 15 grams or more of human remains outside of the collapsed structure environment.			
Team	Operations	Self-sustaining for 24 hours. Capable of 12 hour search operations.	Self-sustaining for 24 hours. Capable of 12 hour search operations.			
Team	Equipment	Personal Protective Equipment Food and Water Basic First Aid Intra-team communications	Personal Protective Equipment Food and Water Basic First Aid Intra-team communications			
COMMENTS:		A canine search team must operate in conjunction with a support person who is NIMS Credentialed as a Search and Rescue Technician, Land or higher either as part of the team or provided by the requesting organization.				

RESOURCE		CANINE SEARCH AND RESCUE TEAM – WATER HUMAN REMAINS				
CATEGORY:		Search & Rescue (ESF #9)		KIND:	Team	
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	OTHER
COMPONENT	METRIC					
Team	Personnel	1 Dog, 1 Handler (NIMS Credentialed Canine Search Specialist, Swiftwater)	1 Dog, 1 Handler (NIMS Credentialed Canine Search Specialist, Stillwater)			
Team	Capabilities	Capable of working swiftwater/stillwater environments.  Trained and equipped to perform search ops from shore and from watercraft	Capable of working stillwater environments.  Trained and equipped to perform search ops from shore and from watercraft.			
Team	Operations	Self-sustaining for 24 hours. Capable of 12 hour search operations.	Self-sustaining for 24 hours. Capable of 12 hour search operations.			
Team	Equipment	Personal Protective Equipment, including: Water Helmet; Class V Water Vest; Canine PFD, Throw Rope Food and Water Basic First Aid Intra-team communications	Personal Protective Equipment, including: Class III- V Water Vest; Canine PFD, Throw Rope Food and Water Basic First Aid Intra-team communications			
<b>COMMENTS:</b>	<b>Note:</b> A canine search team must operate in conjunction with a support person. For a Type II team this individual must be NIMS Credentialed as a Search and Rescue Technician, Land or higher. For a Type I team this individual must be NIMS Credentialed as a Swiftwater/Flood Rescue Technician or higher.					

RESOURCE		CANINE SEARCH AND RESCUE TEAM – LAND LIVE				
CATEGORY:		Search & Rescue (ESF #9)		KIND:	Team	
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	OTHER
COMPONENT	METRIC					
Team	Personnel	1 Dog, 1 Handler (NIMS Credentialed Canine Search Specialist, Land Live, Large)	1 Dog, 1 Handler (NIMS Credentialed Canine Search Specialist, Land Live, <i>Small</i> )			
Team	Capabilities	Searching for live subjects within areas of approximately 160 acres in daylight and 40 acres at night.	Searching for live subjects within areas of approximately 40 acres in daylight.			
Team	Operations	Self-sustaining for 24 hours. Capable of 12 hour search operations.	Self-sustaining for 24 hours. Capable of 12 hour search operations.			
Team	Equipment	Personal Protective Equipment Food and Water Basic First Aid Intra-team communications	Personal Protective Equipment Food and Water Basic First Aid Intra-team communications			
<b>COMMENTS:</b>	<b>Note:</b> A canine search team must operate in conjunction with a support person who is NIMS Credentialed as a Search and Rescue Technician, Land or higher either as part of the team or provided by the requesting organization.					



RESOURCE		URBAN SEARCH AND RESCUE TASK FORCE				
CATEGORY:		Search & Rescue (ESF #9)			KIND:	Team
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	OTHER
COMPONENT	METRIC					
Personnel	Training and Certification	70 person  Comply with NFPA 1006 and NFPA 472 requirements for their area of specialization or organization operations level for support personnel as outlined in NFPA 1670.	29 person  Comply with NFPA 1006 and NFPA 472 requirements for their area of specialization or organization operations level for support personnel as outlined in NFPA 1670.	28 person  Comply with NFPA 1006 and NFPA 472 requirements for their area of specialization or organization operations level for support personnel as outlined in NFPA 1670.		
Team	Training	Trained for Heavy Floor Construction, Pre-cast Concrete Construction, Steel Frame Construction, High Angle Rope Rescue (including highline systems), Confined Space Rescue (permit required), and Mass Transportation Rescue	Trained for Heavy Floor Construction, Pre-cast Concrete Construction, Steel Frame Construction, High Angle Rope Rescue (including highline systems), Confined Space Rescue (permit required), and Mass Transportation Rescue	Trained for Light Frame Construction		
Team	Sustained Operations	Capable of continuous 24 hour operations	Capable of heavy operations for 12 hours	Capable of light operations for 12 hours		
Team	Certifications	NIMS credentialed consistent with applicable job requirements	NIMS credentialed consistent with applicable job requirements	NIMS credentialed consistent with applicable job requirements		
Team	Equipment	Consistent with FEMA US&R Standardized Cache List for Type I Task Force	Consistent with FIREScope Standardized Equipment List for Regional Task Forces	Consistent with FEMA US&R Standardized Cache List for Type III Task Force		
<b>COMMENTS:</b>						

RESOURCE		MINE SEARCH AND RESCUE TEAM, ABANDONED MINE				
CATEGORY:		Search & Rescue (ESF #9)			KIND:	Team
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	OTHER
COMPONENT	METRIC					
Team	Capability	Inactive or abandoned mMines	Active mines under construction			
Team	Personnel	Same as Type II	8 members (at least 5 qualified on breathing apparatus)			
Personnel	Training	Same as Type II plus: Understanding forces involved in technical rope systems Proficiency in the selection and set up of rescue anchors Ability to construct and operate simple and compound mechanical advantage systems, belay systems and lowering systems Proficiency in technical litter evacuations in a vertical environment	20 hour MSHA initial training on use of breathing apparatus Refresher training sessions underground with breathing apparatus at least every 6 months Use and care of auxiliary mine rescue equipment Mine searching and mapping Mine ventilation procedures and equipment Mine firefighting Any advanced mine rescue training and procedures, as described by MSHA Basic First Aid/CPR			

RESOURCE		MINE SEARCH AND RESCUE TEAM, ABANDONED MINE				
CATEGORY:		Search & Rescue (ESF #9)			KIND:	Team
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	OTHER
COMPONENT	METRIC					
Equipment	Breathing apparatus	Same as Type II	6 4-hour self-contained oxygen breathing apparatus and any necessary equipment for testing such breathing apparatus before putting it into service  1 extra, fully charged, oxygen bottle  6 spare coolant canisters compatible with the breathing apparatus  1 oxygen pump or cascading system with portable supply of pressurized oxygen to be compatible with the breathing apparatus			
Equipment	Lamps	Same as Type II	10 permissible cap lamps and charging rack			
Equipment	Gas Detectors	Same as Type II	2 gas detectors capable of reading oxygen levels, and any flammable or poisonous gases encountered or anticipated at the rescue location			
Equipment	Communications	Same as Type II	1 portable mine rescue communications system at least 1,000 feet in length			
Equipment	Repair	Same as Type II	Necessary spare parts and tools for repairing the breathing apparatus or communications system			
Equipment	Rigging	Sufficient rope and hardware to support complex rigging				

RESOURCE		MINE SEARCH AND RESCUE TEAM, ABANDONED MINE				
<b>CATEGORY:</b>		Search & Rescue (ESF #9)			<b>KIND:</b>	Team
<b>MINIMUM CAPABILITIES:</b>		<b>TYPE I</b>	<b>TYPE II</b>	<b>TYPE III</b>	<b>TYPE IV</b>	<b>OTHER</b>
<b>COMPONENT</b>	<b>METRIC</b>					
Equipment	Personal	Same as Type II, plus full body harness	Head protection compatible with cap lamps, gloves, flame protective outerwear, footwear appropriate to the environment			
Transportation	Resources	Same as Type II	Transportation for all personnel and equipment to mine site			
<b>COMMENTS:</b>						

RESOURCE		CAVE SEARCH AND RESCUE TEAM				
CATEGORY:		Search & Rescue (ESF #9)			KIND:	Team
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	OTHER
COMPONENT	METRIC					
Team	Personnel	Same as Type III	Same as Type III	Same as Type IV, plus Medical Specialist	Field Team Leader Field Team Members	
Personnel	Cave Training	Same as Type II, plus:  Proficiency in cave and surface search  Proficiency in high- and low-angle technical rescues and evacuations from dry, wet, and multi-drop caves	Same as Type III, plus:  Proficiency in vertical environments greater than 100 feet in depth Ability to safely traverse multi-drop caves  Ability to rapidly ascend a rope next to a litter during a litter raise	Same as Type IV, plus:  Ability to carry additional rescue-related equipment to and through the cave	Basic understanding of the cave environment, including regional differences in ambient cave temperature, normal hazards such as risk of flooding, hypothermia, and potential changes in cave environment because of seasonal variations and outside weather  Proficiency in crawling, climbing and moving over uneven surfaces and breakdown areas covered in mud, sand, or water  Familiarity with chimneying, bridging, and other basic climbing techniques used in moving through caves  Ability to move comfortably and efficiently in small spaces  Ability to rappel and ascend 66' of static line using standard single rope techniques  Proficiency in changing over from ascent to rappel and rappel to ascent  Ability to carry personal equipment to and through the cave	

RESOURCE		CAVE SEARCH AND RESCUE TEAM				
CATEGORY:		Search & Rescue (ESF #9)			KIND:	Team
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	OTHER
COMPONENT	METRIC					
					Ability to identify fragile cave environments and take measures to protect them  Ability to maintain primary light sources	
Personnel	Navigation Training	Same as Type II	Same as Type III, plus:  Proficiency in back-country navigation and route finding with a map and compass, use of GPS and UTM coordinate system	Same as Type IV, plus:  Knowledge of common symbols present on cave maps  Proficiency in reading cave maps  Ability to use topographic maps to locate caves	Familiar with cave maps and topographic maps	
Personnel	Basic Training	Same as Type II, plus;  Ability to plan, organize, and direct cave rescue and search missions using ICS  Experience with ICS Unified Command	Same as Type III, plus:  Ability to direct activities according to ICS  Technical proficiency in single person rope rescue techniques  Proficiency in crack and crevice rescue  Proficiency in creating load distributing and artificial anchors in-cave	Same as Type IV, plus:  Capable of operating within ICS  Proficiency in edge tending for the vertical environment  Proficiency in preparing and rigging basket and flexible litters for haul and lower operations  Proficiency in patient packaging for extrication;  Familiarity with the basic techniques for crack and crevice rescue  Ability to improvise patient packaging	Familiarity with basic cave search techniques  Familiarity with the NIIMS ICS of incident management  Proficiency in establishing simple anchors and fixing lines for personal rappels and ascents  Awareness of the psychological and physical patient considerations in rescue extractions of long duration  Proficiency in basic in-cave litter movement techniques  Ability to assist in patient packaging for extrication  Specialized training required to safely and appropriately use communication and technical	

RESOURCE		CAVE SEARCH AND RESCUE TEAM				
CATEGORY:		Search & Rescue (ESF #9)			KIND:	Team
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	OTHER
COMPONENT	METRIC					
					rescue equipment	
Personnel	Technical Training	Same as Type II, plus:  Proficiency in the use, placement, and analysis of mechanical anchors and anchor systems  Proficiency in use of highlines and guiding lines  Proficiency in the organization and direction of technical cave rescue searches and rescues for regions/caves with swiftwater  Proficiency in working in and around moving water underground  Swiftwater/Flatwater Technician for regions/caves with bad air:  Proficiency in the use of a 3-gas monitor (oxygen, hydrogen sulfide and carbon monoxide) and ability to understand its output	Same as Type III, plus:  Understanding of the mechanical forces involved in technical rescue systems  Proficiency in the selection and setup of rescue anchor systems  Proficiency at estimating component and system load ratios and assessing safety factors  Ability to rig and operate simple and compound 4:1, 6:1, and 9:1 mechanical advantage systems  Proficiency in rigging and use of counterbalance systems  Proficiency in technical litter evacuations and transport including litter raises and lowers on breakdown, in free-fall and other vertical environments, in narrow or waterfall situations, and in multidrop caves	Same as Type IV, plus:  Proficiency in tying common knots and knowledge of their applications and strength efficiencies  Proficiency in establishing simple anchors for haul and lower systems  Ability to establish 2:1 and 3:1 haul systems, fixed brake lowering systems, and belay systems  Familiarity with basic search techniques and nomenclature  Ability to maintain scene integrity in case of crime  Proficiency in establishing and operating in-cave wired communications systems  Ability to operate a handheld radio  Proficiency in choosing appropriate in-cave litter movement techniques	Ability to serve as a member of a haul or lower team and familiarity of appropriate commands  Ability to serve as a member of an evacuation team  Other skills or abilities as identified by the team's operations leader	
Personnel	Survival Training	Same as Type III	Same as Type III	Same as Type IV, plus experience in wet and vertical caves	Operational proficiency in the cave environment for the region	
Personnel	Medical Specialist Training	National Standard EMT-B, with BTLS or PHTLS	National Standard EMT-B, or advanced wilderness first responder; BTLS	Same as Type IV	Basic First Aid/CPR	

RESOURCE		CAVE SEARCH AND RESCUE TEAM				
CATEGORY:		Search & Rescue (ESF #9)			KIND:	Team
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	OTHER
COMPONENT	METRIC					
Team	Sustained Operations	48 hours or more	36 hours	24 hours	24 hours	
Team	Search and Rescue Capabilities	Same as Type II with experience complex rescue environments as appropriate for region of activity	Same as Type III with experience in wet and vertical caves and crack/crevice situations	Same as Type IV	Trained cave rescue and cave search personnel with experience in relatively dry caves with moderate vertical situations	
Equipment	Team Supplies and Materials	Same as Type III, plus: Ability to support more than 2 patients at 2 separate incidents; Sufficient rope and hardware to support complex rigging, multiple drops, highline, etc. In regions/caves with swiftwater: Appropriate floatation equipment for patient(s) and other necessary swiftwater-specific rigging equipment In regions/caves with bad air: 3-gas monitors	Same as Type III, plus: Ability to respond to two in-cave patients simultaneously	Same as Type IV	Harnesses, Helmets; Basic hardware (including: 7/16 or .5" static kernmantle rope, webbing, pulleys, carabineers, lowering devices, etc.) Field telephones and wire Radio communications on a common frequency Patient packaging materials Litters appropriate for situation Entrance control materials; Edge protection	
Equipment	Personal Supplies and materials	Same as Type II, plus food for 48 hours In regions/caves with swiftwater: Appropriate swiftwater gear, PFD, personal throwbags,	Same as Type III, plus food for 36 hours	Same as Type IV, plus wetsuit where appropriate	Personal protective equipment including: Footwear, underwear, and outerwear suited to the particular cave environment Sewn seat harness Personal descending and ascending equipment with 2 points of attachment above the	



RESOURCE		CAVE SEARCH AND RESCUE TEAM				
CATEGORY:		Search & Rescue (ESF #9)			KIND:	Team
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	OTHER
COMPONENT	METRIC					
					waist Helmet (with 3- or 4-point chinstrap suspension system) Gloves with leather palms 3 independent sources of light, each capable of exiting the cave; 2 of which must be helmet-mountable Batteries (carbide if appropriate) Quantity of water appropriate for the conditions Food for 24 hours Knife/multi-tool Personal first aid kit Waterproof pen/pencil and paper Appropriate pack to carry personal gear; food for 24 hours	
Equipment	Medical Supplies and Materials	Same as Type IV	Same as Type IV	Same as Type IV	As appropriate for level of training, as applied in wilderness/cave environment and meeting local protocols and requirements	
<b>COMMENTS:</b>						

RESOURCE	MOUNTAIN & TECHNICAL SEARCH AND RESCUE TEAM; TECHNICAL RESCUE TEAM					
<b>DESCRIPTION</b>	Mountain & Technical SAR Team provides search and rescue in land SAR environments as well as technical rope and rock environments and up to and including alpine environments (generally above 6,000 ft MSL), and severe snow and ice environments.  Technical Rescue Team provides non-technical and technical rescue in urban/suburban and infrastructure "supported" environments.					
<b>CATEGORY:</b>	Search & Rescue (ESF #9)			<b>KIND:</b>	Team	
<b>MINIMUM CAPABILITIES:</b>		<b>TYPE I</b>	<b>TYPE II</b>	<b>TYPE III</b>	<b>TYPE IV</b>	<b>TYPE V</b>
<b>COMPONENT</b>	<b>METRIC</b>					
Team	Prerequisite	Same as Type IV	Same as Type IV	Same as Type IV	Meets all criteria of a Type I Land SAR Team	None
Team	Specific Resource Name	Mountain & Technical SAR Team	Mountain & Technical SAR Team	Mountain & Technical SAR Team	Mountain & Technical SAR Team	Technical Rescue Team
Team	Terrain, Search, and Rescue Capabilities	Type II plus multiple pitches in alpine environment above timberline including glacier, crevasse and vertical ice	Type III plus multiple pitches in mountain environments up to timberline, extreme snow and non-vertical ice conditions, and including avalanche SAR	Type IV plus multiple pitches in remote four season weather, wilderness and unsupported environments (poor or no infrastructure)	Up to and including YDS Class 4 & 5 terrain (steep and high angle and vertical technical search and rescue) in urban/suburban supported environments (with infrastructure). May require multiple pitch capability.	Up to and including YDS Class 4 & 5 terrain (steep and high angle and vertical technical rescue) in urban/suburban supported environments (with infrastructure). May require multiple pitch capability.
Personnel	Length of Team Self-Sustainability	Same as Type IV or as requested by the incident's management team	Same as Type IV or as requested by the incident's management team	Same as Type IV or as requested by the incident's management team	Minimum 72 hours, excluding travel.	Minimum 72 hours, excluding travel.
Personnel	Team Composition	Same as Type III	Same as Type III	Same as Type IV, plus additional Squads as needed by the incident's management team.	Minimum 6 members: At least 1 Mountain SAR Squad Officer and 5 Mountain SAR Technicians, at least 1 of whom shall be a Medical Specialist. Others may also be a Logistics or other Technical Specialist.  For every 2-3 Squads, add 1 Mountain SAR ST/TF Leader and 1 Logistics Specialist.	Minimum 6 members, excluding "search" certification/training requirements, and including at least 1 Technical Rescue Squad Officer and 5 Technical Rescue Technicians, at least 1 of whom shall be a Medical Specialist.

RESOURCE	MOUNTAIN & TECHNICAL SEARCH AND RESCUE TEAM; TECHNICAL RESCUE TEAM					
<b>DESCRIPTION</b>	Mountain & Technical SAR Team provides search and rescue in land SAR environments as well as technical rope and rock environments and up to and including alpine environments (generally above 6,000 ft MSL), and severe snow and ice environments.  Technical Rescue Team provides non-technical and technical rescue in urban/suburban and infrastructure “supported” environments.					
<b>CATEGORY:</b>	Search & Rescue (ESF #9)				<b>KIND:</b>	Team
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	TYPE V
COMPONENT	METRIC					Others may also be a Logistics or other Technical Specialist.  For every 2-3 Squads, add 1 Technical Rescue ST/TF Leader and 1 Logistics Specialist
Personnel	Medical Specialist	Same as Type IV, with preference to EMT-Paramedic level (USDOT)	Same as Type IV.	Same as Type IV.	Minimum of a National Standard First Responder (preferably EMT-Basic) with additional remote or wilderness-type training	Minimum of a National Standard First Responder (preferably EMT-Basic) with additional remote or wilderness-type training
Personnel	Training	Same as Type II, plus glacier, crevasse and vertical ice travel and SAR.	Same as Type III, plus extreme snow and non-vertical ice search and rescue; avalanche safety and SAR.	Same as Type IV, plus backcountry and mountain weather and navigation.	NIMS Mountain/Technical SAR Technician, including: NIMS Land SAR Technician Flat, low, high angle and vertical technical rescue  Ropes, knots, simple through complex mechanical advantage and highline forces and systems including anchors, raising and lowering	NIMS Mountain/Technical Rescue Technician, excluding search requirements, and including:  Flat, low, high angle and vertical technical rescue  Ropes, knots, simple through complex mechanical advantage and highline forces and systems including anchors, raising and

RESOURCE	MOUNTAIN & TECHNICAL SEARCH AND RESCUE TEAM; TECHNICAL RESCUE TEAM					
<b>DESCRIPTION</b>	Mountain & Technical SAR Team provides search and rescue in land SAR environments as well as technical rope and rock environments and up to and including alpine environments (generally above 6,000 ft MSL), and severe snow and ice environments.					
<b>DESCRIPTION</b>	Technical Rescue Team provides non-technical and technical rescue in urban/suburban and infrastructure "supported" environments.					
<b>CATEGORY:</b>	Search & Rescue (ESF #9)			<b>KIND:</b>	Team	
<b>MINIMUM CAPABILITIES:</b>		<b>TYPE I</b>	<b>TYPE II</b>	<b>TYPE III</b>	<b>TYPE IV</b>	<b>TYPE V</b>
<b>COMPONENT</b>	<b>METRIC</b>					
						lowering.
Equipment	Rescue Supplies and Materials	Same as Type II, plus glacier, crevasse and vertical ice travel and SAR equipment, such as ice axes	Same as Type III, plus extreme snow, non-vertical ice and avalanche-specific SAR equipment, such as victim evacuation devices, probe poles and shovels	Same as Type IV, plus additional equipment for anchors, systems, victim evacuation devices and technical operations in this environment and terrain	Hardware, software, ropes, victim evacuation devices as required by AHJ to accomplish the above listed operations	Hardware, software, ropes, victim evacuation devices as required by AHJ to accomplish the above listed operations
Equipment	PPE & Clothing	Same as Type II, plus glacier and vertical ice travel-specific footwear and tools for all field members	Same as Type III, plus avalanche beacon, snow and ice-specific footwear, eyewear and tools for all field members	Same as Type IV, plus additional clothing and safety equipment for this operating environment and terrain	Fair and foul weather personal and team PPE, clothing and SAR equipment, including harnesses, helmets	Fair and foul weather personal and team PPE, clothing and rescue equipment, including harnesses, helmets
Personnel	Overhead Incident Management	The overhead management team must include personnel with, at minimum, search and rescue management experience, as recognized by their AHJ	Same as Type IV	Same as Type IV	An additional Mountain SAR Technical Specialist may be necessary as a technical advisor to the Incident Management Team	An additional Technical Rescue Technical Specialist may be necessary as a technical advisor to the Incident Management Team
Equipment	Communications	Same as Type IV	Same as Type IV	Same as Type IV	Portable and mobile radios for team communications.  Cellular or satellite phone(s)  IMT must address need for interoperability within the incident, including with aircraft	Portable and mobile radios for team communications  Cellular or satellite phone(s).  IMT must address need for interoperability within the incident, including

RESOURCE	MOUNTAIN & TECHNICAL SEARCH AND RESCUE TEAM; TECHNICAL RESCUE TEAM					
<b>DESCRIPTION</b>	Mountain & Technical SAR Team provides search and rescue in land SAR environments as well as technical rope and rock environments and up to and including alpine environments (generally above 6,000 ft MSL), and severe snow and ice environments.					
<b>DESCRIPTION</b>	Technical Rescue Team provides non-technical and technical rescue in urban/suburban and infrastructure "supported" environments.					
<b>CATEGORY:</b>	Search & Rescue (ESF #9)			<b>KIND:</b>	Team	
<b>MINIMUM CAPABILITIES:</b>		<b>TYPE I</b>	<b>TYPE II</b>	<b>TYPE III</b>	<b>TYPE IV</b>	<b>TYPE V</b>
<b>COMPONENT</b>	<b>METRIC</b>					
						with aircraft.
Equipment	Medical Supplies and Materials	Same as Type IV	Same as Type IV	Same as Type IV	As appropriate for level of training, as applied in remote, disaster or incident of national significance environment to support team and survivors	As appropriate for level of training, as applied in remote, disaster or incident of national significance environment to support team and survivors
<b>COMMENTS</b>						
<b>COMMENTS</b>						

RESOURCE		LAND SEARCH AND RESCUE TEAM				
<b>DESCRIPTION</b>		Provides search and rescue in non-technical land-based environments up to and including low angle and possibly scree-type evacuations at lower altitudes (generally considered less than 6,000 ft MSL).				
<b>CATEGORY:</b>		Search & Rescue (ESF #9)		<b>KIND:</b>	Team	
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	COMMENTS
COMPONENT	METRIC					
Team	Terrain, Search, and Rescue Capabilities	Same as Type II	Same as Type III, plus capability in YDS Class 3 terrain (scrambling where rope may be required)	Same as Type IV, plus capability in YDS Class 2 terrain (simple scrambling, possible occasional use of hands, low angle)	NIMS Land SAR Technicians with search and rescue capability in Yosemite Decimal System (YDS) Class 1 terrain (non-technical, flat terrain), including evacuation and carry-outs	
Team	Weather Capabilities	Three season (summer, spring, fall) capabilities  The incident's management team (IMT) shall require a team whose AHJ will attest that they have additional capabilities for incidents involving extreme heat, wet, cold or snow	Three season (summer, spring, fall) capabilities  The incident's management team shall require a team whose AHJ will attest that they have additional capabilities for incidents involving extreme heat, wet, cold or snow	Three season (summer, spring, fall) capabilities  The incident's management team shall require a team whose AHJ will attest that they have additional capabilities for incidents involving extreme heat, wet, cold or snow	Three season (summer, spring, fall) capabilities  The incident's management team shall require a team whose AHJ will attest that they have additional capabilities for incidents involving extreme heat, wet, cold or snow	
Personnel	Team Composition	Same as Type III	Same as Type III	Additional Squads as needed by the incident's management team	At least 1 Land SAR pr Mountain SAR Squad Officer and 5 Land SAR Technicians, at least 1 of whom shall be a Medical Specialist; others may also be a Logistics or other Technical Specialist.  For every 2-3 Squads, add 1 Land SAR or Mountain ST/TF Leader and 1 Logistics Specialist	
Personnel	Length of Team Self-Sustainability	Same as Type IV or as requested by the incident's management team	Same as Type IV or as requested by the incident's management team	Same as Type IV or as requested by the incident's management team	Minimum 72 hours, excluding travel	

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<b>CATEGORY:</b>		Search & Rescue (ESF #9)		<b>KIND:</b>	Team	
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	COMMENTS
COMPONENT	METRIC					
Personnel	Medical Specialist	Same as Type IV	Same as Type IV	Same as Type IV	Minimum of a National Standard First Responder (preferably EMT-Basic) with additional remote or wilderness-type training.	
Personnel	Overhead Incident Management	The overhead management team must include personnel with, at minimum, search and rescue management experience, as recognized by their AHJ	Same as Type IV	Same as Type IV	An additional Land SAR or Mountain SAR Technical Specialist may be necessary as a technical advisor to the Incident Management Team.	

RESOURCE		LAND SEARCH AND RESCUE TEAM				
<b>DESCRIPTION</b>		Provides search and rescue in non-technical land-based environments up to and including low angle and possibly scree-type evacuations at lower altitudes (generally considered less than 6,000 ft MSL).				
<b>CATEGORY:</b>		Search & Rescue (ESF #9)			<b>KIND:</b>	Team
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	COMMENTS
COMPONENT	METRIC					
Personnel	Training	Same as Type IV	Same as Type IV	Same as Type IV	NIMS Land SAR Technician minimum, including: ICS Operating personal and team equipment Individual and team self-sustainability, safety and survival First Aid Basic and remote area land navigation including map and compass Basic helicopter use and safety Clue and tracking awareness Basic search tactics and techniques Water SAR awareness HazMat awareness	
Vehicle	Transportation	Same as Type IV	Same as Type IV	Same as Type IV	Minimum 1 vehicle that can transport the team throughout or at least to the area of operations 4x4 may be required by the incident's management team	
Equipment	PPE & Clothing	Same as Type IV	Same as Type IV	Same as Type IV	Appropriate level of PPE and clothing for working environment	



RESOURCE		LAND SEARCH AND RESCUE TEAM				
<b>DESCRIPTION</b>		Provides search and rescue in non-technical land-based environments up to and including low angle and possibly scree-type evacuations at lower altitudes (generally considered less than 6,000 ft MSL).				
<b>CATEGORY:</b>		Search & Rescue (ESF #9)		<b>KIND:</b>	Team	
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	COMMENTS
COMPONENT	METRIC					
Equipment	Communications	Same as Type IV	Same as Type IV	Same as Type IV	Portable and mobile radios for team communications  Cellular or satellite phone(s)  IMT must address need for interoperability within the incident, including with aircraft	
Equipment	Search & Rescue	Same as Type IV	Same as Type IV	Same as Type IV	Equipment to support remote rescue and recovery (carrying devices such as litters, etc.)	
Equipment	Medical	Same as Type IV	Same as Type IV	Same as Type IV	As appropriate for level of training, as applied in remote, disaster or incident of national significance environment to support team and survivors.	
<b>COMMENTS:</b>						

RESOURCE		STRUCTURE COLLAPSE RESCUE SQUAD				
CATEGORY:		Search & Rescue (ESF #9)			KIND:	Team
MINIMUM CAPABILITIES:		TYPE I (HEAVY)	TYPE II (MEDIUM)	TYPE III (LIGHT)		OTHER
COMPONENT	METRIC					
Team	Number of People	6-person	6-person	3-person		
Team	Capability	Trained for Heavy Floor Construction, Pre-cast Concrete Construction, Steel Frame Construction, High Angle Rope Rescue (including highline systems), Confined Space Rescue (permit required), and Mass Transportation Rescue	Trained for Heavy Wall Construction, High Angle Rope Rescue (not including highline systems), Confined Space Rescue (permit required), and Trench and Excavation Rescue	Light frame construction, low angle rope rescue		
Personnel		1 NIMS Credentialed Rescue Squad Officer and 5 NIMS Credentialed Rescue Technicians	1 NIMS Credentialed Rescue Squad Officer and 5 NIMS Credentialed Rescue Technicians	1 NIMS Credentialed Rescue Squad Officer and 2 NIMS Credentialed Rescue Technicians		
Team	Sustained Operations	Capable of 12 hour operations	Capable of 12 hour operations	Capable of 12 hour operations		
Team	Equipment	Consistent with FIRESCOPE standardized list of equipment	Consistent with FIRESCOPE standardized list of equipment	Consistent with FIRESCOPE standardized list of equipment		
<b>COMMENTS:</b>		Squads come with communications and transportation capability.				

RESOURCE		STRUCTURE COLLAPSE SEARCH SQUAD				
<b>CATEGORY:</b>		Search & Rescue (ESF #9)			<b>KIND:</b>	Team
<b>MINIMUM CAPABILITIES:</b>		<b>TYPE I (HEAVY)</b>	<b>TYPE II (MEDIUM)</b>	<b>TYPE III (LIGHT)</b>		<b>OTHER</b>
<b>COMPONENT</b>	<b>METRIC</b>					
Team	Number of People	5-person	5-person	3-person		
Team	Capability	Trained for Heavy Floor Construction, Pre-cast Concrete Construction, Steel Frame Construction, High Angle Rope Rescue (including highline systems), Confined Space Rescue (permit required), and Mass Transportation Rescue	Trained for Heavy Wall Construction, High Angle Rope Rescue ( not including highline systems), Confined Space Rescue (permit required), and Trench and Excavation Rescue	Light frame construction, low angle rope rescue		
Team	Personnel	1 NIMS Credentialed Search Squad Officer, 2 NIMS Credentialed Search Technicians, and 2 NIMS Canine Search Specialists,, Disaster/Structure Collapse Live, Heavy	1 NIMS Credentialed Search Squad Officer, 2 NIMS Credentialed Search Technicians, and 2 NIMS Canine Search Specialists, Disaster/Structure Collapse Live, Medium	1 NIMS Credentialed Search Squad Officer and 1 NIMS Credentialed Search Squad Officer, and 2 NIMS Canine Search Specialists, Disaster/Structure Collapse Live, Light		
Team	Sustained Operations	Capable of 12 hour operations	Capable of 12 hour operations	Capable of 12 hour operations		
Team	Equipment	Audio and electronic visual search equipment				
<b>COMMENTS:</b>		Squads come with communications and transportation capability.				

RESOURCE		SWIFTWATER/FLOOD SEARCH AND RESCUE TEAM				
CATEGORY:		Search & Rescue (ESF #9)			KIND:	Team
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	OTHER
COMPONENT	METRIC					
Personnel	Team Composition	14 member team 1 Task Force Leader 2 Squad Officers 11 rescue technicians **	14 member team 1 Task Force Leader 2 Squad Officers 11 rescue technicians **	5 member team 1 Squad Officer 4 rescue technicians**	5 member team 1 Squad Officer 4 rescue technicians**	
Personnel	Minimum number Swiftwater/Flood Rescue Technician-Animal Rescue (SAR JT 22)	2	2	1	0	
Personnel	Minimum number Helicopter Rescue Technician (SAR JT 4)	4	0	0	0	
Personnel	Minimum number Boat Operators (SAR JT 20)	4	4	3	5 (endorse vessel operator such as john boat, airboat, PWC) <sup>2</sup>	
Personnel	Minimum number Boat Bowman (SAR JT 19) <sup>1</sup>	4	4	2	0	
	Minimum number Swiftwater/Flood Rescue Technical Specialist (SAR JT 21)	1	1	0	0	
Personnel	Number and level EMTs	2 EMT – P (Medical Specialist; SAR JT 12) 12 EMT-B	1 EMT-P (Medical Specialist; SAR JT 12) 13 EMT-B	1 EMT-B	0	
Personnel	Minimum number Logistics Specialist (SAR JT 11)	2	2	1	1	
Team	Sustained	24-hour operations	24-hour operations	12-hour operations	12-hour operations	

RESOURCE		SWIFTWATER/FLOOD SEARCH AND RESCUE TEAM				
CATEGORY:		Search & Rescue (ESF #9)			KIND:	Team
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	OTHER
COMPONENT	METRIC					
	operations					
Team	Capabilities	Manage search operations Power/paddle vessel operations Helicopter rescue operational Technical rope systems (including high line) HazMat (first responder operations) Animal rescue ALS BLS Communications Logistics Offensive water rescue Flood response management	Manage search operations Power/paddle vessel operations Technical rope systems (including high line) HazMat (first responder operations) Animal rescue ALS BLS Communications Logistics Offensive water rescue Flood response management	Manage search operations Power/paddle vessel operations Low angle rope rescue HazMat (first responder operations) Animal rescue BLS Communications Logistics Offensive water rescue Flood response management	Participate in search, rescue and evacuation operations Power/paddle vessel operations HazMat (first responder operations) Communications Logistics Offensive water rescue	
Team	Training	Search management/operations Class 3 paddle and powerboat skills Helicopter operations Technical rope rescue (high angle) HazMat (first responder operations) Contact and self-rescue skills ICS	Search management/operations Class 3 paddle and powerboat skills Technical rope rescue (high angle) HazMat (first responder operations) Contact and self-rescue skills ICS Swiftwater Rescue Technician	Search management/operations Class 3 paddle and powerboat skills Low angel rope rescue HazMat (first responder operations) Contact and self-rescue skills ICS Swiftwater Rescue Technician	Class 1 paddle/power boat skills Contact and self-rescue skills HazMat (first responder operations) ICS Swiftwater Rescue Technician	

RESOURCE		SWIFTWATER/FLOOD SEARCH AND RESCUE TEAM				
CATEGORY:		Search & Rescue (ESF #9)			KIND:	Team
MINIMUM CAPABILITIES:		TYPE I	TYPE II	TYPE III	TYPE IV	OTHER
COMPONENT	METRIC					
		Swiftwater Rescue Technician Flood response management	Flood response management	Flood response management		
Team	Medical Certification	ALS BLS	BLS	BLS	Advanced First Aid & CPR	
Equipment	Transportation Resources	Equipment trailer Personnel support vehicle	Equipment trailer Personnel support vehicle	Equipment trailer Personnel support vehicle	Equipment trailer Personnel support vehicle	
Equipment	Communication	Cell phone Portable radio Batteries Aircraft radio	Cell phone Portable radio Batteries	Cell phone Portable radio Batteries	Cell phone Portable radios Batteries	
Equipment	Medical	See FIREScope SEL	See FIREScope SEL	See FIREScope SEL	See FIREScope SEL	
Equipment	Personal	See FIREScope SEL	See FIREScope SEL	See FIREScope SEL	See FIREScope SEL	
Vehicle	Rescue Boat	2 - Fueled	2 - Fueled	1 - Fueled	1-Fueled	
<b>COMMENTS:</b>	Conduct search and rescue operations in all water environments including swiftwater and flood conditions. Water rescue teams come with all team equipment required to safely and effectively conduct operations. For a complete listing of recommended training, skills, and equipment, please reference the FIREScope Swiftwater/Flood Search and Rescue definition at: <a href="http://www.firescope.org/ics-usar/ICS-SF-SAR-020-1.pdf">http://www.firescope.org/ics-usar/ICS-SF-SAR-020-1.pdf</a> .  **Some team members will be required to fill more than one Job Title.					
<b>FOOTNOTES:</b>	<sup>1</sup> Boat operators may be sent in lieu of bowman at the discretion of the AHJ. <sup>2</sup> Type IV must specify vessel kind upon request. Ordering shall be Type IV A: John boats; Type IV B: Airboats; Type IV C: PWC					