NFPA 1006: 2021 Edition, Rope Rescue 5.1 Awareness Level

Below please find what has been previously approved by the Committee on Accreditation (COA) for this level of certification. This example does not take into consideration “Document Review”, “Portfolio”, or “Other testing methods.”

If your agency selects completing their online Assessment Methodology Matrix (AMM) utilizing these test methods, our Technical Analysts may place your application under a COA meeting consent agenda bypassing the usual COA review.

The spaces identified below with an “**X**” must be replaced with the appropriate cognitive test item numbers (e.g. Questions 1,4,6,7,9, etc.) or the score sheet numbers under Product, Psychomotor/Process methods as score sheet numbers (e.g.- SS 101, 202, and 304, etc.).

	Knowledge-Based Assessments (graded after submission)		**Performance-Based Assessments** (graded in real-time as they are performed)	
Section	**Cognitive** (e.g. Multiple Choice, Short Answer, Discretionary Time with Resources)	**Product** (e.g., document or develop a budget, proposal, lesson plan)	**Psychomotor** (Primarily an observable physical task. e.g., don, doff)	**Process** (Primarily a mental or verbalized task. e.g., inspect)
5.1.1 Assist a team in operation of the haul line of a rope mechanical advantage system raising operation, given rescue personnel, an established rope rescue system, a load to be moved, and an anchor system, so that the movement is controlled; a reset is accomplished; the load can be held in place when needed; commands are followed in direction of the operation; and potential problems are identified, communicated, and managed.				
5.1.1			**X**	
5.1.1 (A) Requisite Knowledge. Principles of mechanical advantage, operation of a haul line in a raising operation, personnel assignments, and operational commands.				
5.1.1(A)	**X**			
5.1.1 (B) Requisite Skills. The ability to recognize operational commands and identify safety concerns during raising operations.				
5.1.1(B)			**X**	

5.1.2 Size up a rope rescue incident, given background information and applicable reference materials, so that the scope of the rescue is determined, the number of victims is identified, the last reported location of all the victims is established, witnesses and reporting parties are identified and interviewed, resource needs are assessed, primary search parameters are identified, and information required to develop an initial incident action plan is obtained.			
5.1.2			X
5.1.2 (A) Requisite Knowledge. Types of reference materials and their uses, availability and capability of the resources, elements of an incident action plan and related information, relationship of the size-up to the incident management system, information gathering techniques and how that information is used in the size-up process, and basic search criteria for rope rescue incidents.			
5.1.2(A)	X		
5.1.2 (B) Requisite Skills. The ability to read technical rescue reference materials, gather information, use interview techniques, relay information, and use information-gathering sources.			
5.1.2(B)			X
5.1.3 Recognize incident hazards and initiate isolation procedures, given scene control barriers, personal protective equipment (PPE), requisite equipment, and available specialized resources, so that all hazards are identified; resource application fits the operational requirements; hazard isolation is considered; risks to rescuers, bystanders, and victims are minimized; and rescue time constraints are taken into account.			
5.1.3			X
5.1.3 (A) Requisite Knowledge. Resource capabilities and limitations; types and nature of incident hazards; equipment types and their use; isolation terminology, methods, equipment, and implementation; operational requirement concerns; common types of rescuer and victim risks; risk/benefit analysis methods and practices; hazard recognition, isolation methods, and terminology; methods for controlling access to the scene; and types of technical references.			
5.1.3(A)	X		
5.1.3 (B) Requisite Skills. The ability to identify resource capabilities and limitations, identify incident hazards, assess potential hazards to rescuers and bystanders, place scene control barriers, and operate control and mitigation equipment			
5.1.3(B)			X
5.1.4 Recognize the need for technical rescue resources at an operations- or technician-level incident, given AHJ guidelines, so that the need for additional resources is identified, the response system is			

initiated, the scene is secured and rendered safe until additional resources arrive, and awareness-level personnel are incorporated into the operational plan.			
5.1.4			X
5.1.4 (A) Requisite Knowledge. Operational protocols, specific planning forms, types of incidents common to the AHJ, hazards, incident support operations and resources, and safety measures			
5.1.4(A)	X		
5.1.4 (B) Requisite Skills. The ability to apply operational protocols, select specific planning forms based on the types of incidents, identify and evaluate various types of hazards within the AHJ, request support and resources, and determine the required safety measures			
5.1.4(B)			X
5.1.5 Support an operations- or technician-level incident, given an incident, an assignment, an incident action plan, and resources from the tool kit, so that the assignment is carried out, progress is reported to command, environmental concerns are managed, personnel rehabilitation is facilitated, and the incident action plan is supported			
5.1.5			X
5.1.5 (A) Requisite Knowledge. AHJ operational protocols, hazard recognition, incident management, PPE selection, resource selection and use, and scene support requirements.			
5.1.5(A)	X		
5.1.5 (B) Requisite Skills.The ability to apply operational protocols, function within an incident management system, follow and implement an incident action plan, and report the task progress status to a supervisor or incident command.			
5.1.5(B)			X

NFPA 1006: 2021 Edition, Rope Rescue 5.2 Operations Level

	Knowledge-Based Assessments (graded after submission)		Performance-Based Assessments (graded in real-time as they are performed)	
Section	**Cognitive** (e.g. Multiple Choice, Short Answer, Discretionary Time with Resources)	**Product** (e.g., document or develop a budget, proposal, lesson plan)	**Psychomotor** (Primarily an observable physical task. e.g., don, doff)	**Process** (Primarily a mental or verbalized task. e.g., inspect)
5.2.1 Perform size up of a rescue incident, given background information and applicable reference materials, so that the type of rescue is determined, the number of victims is identified, the last reported location of all victims is established, witnesses and reporting parties are identified and interviewed, resource needs are assessed, search parameters are identified, and information required to develop an incident action plan is obtained.				
5.2.1			**X**	
5.2.1 (A) Requisite Knowledge. Types of reference materials and their uses, availability and capability of the resources, elements of an action plan and related information, relationship of size-up to the incident management system, and information gathering techniques and how that information is used in the size-up process.				
5.2.1(A)	**X**			
5.2.1 (B) Requisite Skills. The ability to read technical rescue reference materials, gather information, relay information, and use information gathering sources.				
5.2.1(B)			**X**	
5.2.2 * Maintain hazard-specific PPE, given clothing or equipment for the protection of the rescuers, inspection procedures, cleaning and sanitation supplies, maintenance logs or records, and such tools and resources as are indicated by the manufacturer's guidelines for assembly or disassembly of components during repair or maintenance, so that damage, defects, and wear are identified and reported or repaired, equipment functions as designed, and preventive maintenance has been performed and documented consistent with the manufacturer's recommendations.				
5.2.2		**X**	**X**	
5.2.2 (A) Requisite Knowledge. Functions, construction, and operation of PPE; use of record-keeping systems of the AHJ; requirements and procedures for cleaning, sanitizing, and infectious disease control; use of provided assembly and disassembly tools; manufacturer and department recommendations; pre-use inspection procedures; and ways to determine operational readiness.				
5.2.2(A)	**X**			
5.2.2 (B) Requisite Skills. The ability to identify wear and damage indicators for PPE; evaluate operational readiness of PPE; complete logs and records; use cleaning equipment, supplies, and reference materials; and select and use tools specific to the task.				
5.2.2(B)		**X**	**X**	

5.2.3 * Maintain rescue equipment, given maintenance logs and records, tools, and resources as indicated by the manufacturer's guidelines, inspection procedures, equipment replacement protocol, and organizational standard operating procedure, so that the operational status of equipment is verified and documented, all components are checked for operation, deficiencies are repaired or reported as indicated by standard operating procedure, and items subject to replacement protocol are correctly disposed of and changed.			
5.2.3		**X**	**X**
5.2.3 (A) Requisite Knowledge. Functions and operations of rescue equipment, use of record-keeping systems, manufacturer and organizational care and maintenance requirements, selection and use of maintenance tools, replacement protocol and procedures, disposal methods, and organizational standard operating procedures.			
5.2.3(A)	**X**		
5.2.3(B) Requisite Skills. The ability to identify wear and damage indicators for rescue equipment, evaluate operation readiness of equipment, complete logs and records, and select and use maintenance tools.			
5.2.3(B)		**X**	**X**
5.2.4 * Demonstrate knots, bends, and hitches, given ropes, webbing, and a list of knots used by the agency, so that the knots are dressed, recognizable, and backed up as required.			
5.2.4			**X**
5.2.4 (A) Requisite Knowledge. Knot efficiency, knot utilization, rope construction, and rope terminology.			
5.2.4(A)	**X**		
5.2.4 (B) Requisite Skills. The ability to tie representative knots, bends, or hitches for the following purposes: 1. (1) End-of-line loop 2. (2) Midline loop 3. (3) Securing rope around desired objects 4. (4) Joining rope or webbing ends together 5. (5) Gripping rope			
5.2.4(B)			**X**
5.2.5 Construct a single-point anchor system, given life safety rope and other auxiliary rope rescue equipment, so that the chosen anchor system fits the incident needs, meets or exceeds the expected load, and does not interfere with rescue operations, an efficient anchor point is chosen, the need for redundant anchor points is assessed and used as required, the anchor system is inspected and loaded prior to being placed into service, and the integrity of the system is maintained throughout the operation.			
5.2.5			**X**

5.2.5 (A) Requisite Knowledge. Application of knots, rigging principles, anchor selection criteria, system safety check procedures, rope construction, and rope rescue equipment applications and limitations.			
5.2.5(A)	X		
5.2.5 (B) Requisite Skills. The ability to select rope and equipment; tie knots; rig systems; evaluate anchor points for required strength, location, and surface contour; and perform a system safety check.			
5.2.5(B)			X
5.2.6 Construct a multiple-point anchor system, given life safety rope and other auxiliary rope rescue equipment, so that the chosen anchor system fits the incident needs, the system strength meets or exceeds the expected load and does not interfere with rescue operations, equipment is visually inspected prior to being put in service, the most appropriate anchor points are chosen, the anchor system is system safety checked prior to being placed into service, the integrity of the system is maintained throughout the operation, and the force will be distributed — proportionally or disproportionally — between more than one anchor point.			
5.2.6			X
5.2.6(A) * Requisite Knowledge. Relationship of angles to forces created in the rigging of multiple-point anchor systems, safety issues in choosing anchor points, system safety check methods that allow for visual and physical assessment of system components, methods to evaluate the system during operations, integrity concerns, weight distribution issues and methods, knots and applications, selection and inspection criteria for hardware and software, formulas needed to calculate safety factors for load distribution, and the concepts of static loads versus dynamic loads.			
5.2.6(A)	X		
5.2.6 (B) Requisite Skills. The ability to determine incident needs as related to choosing anchor systems, select effective knots, determine expected loads, evaluate incident operations as related to interference concerns and setup, choose anchor points, perform a system safety check, and evaluate system components for compromised integrity.			
5.2.6(B)			X
5.2.7 Conduct a system safety check, given a rope rescue system and rescue personnel, so that a physical/visual check of the system is made to ensure proper rigging, a load test is performed prior to life-loading the system, and verbal confirmation of these actions is announced and acknowledged before life-loading the rope rescue system.			
5.2.7			X
5.2.7 (A) Requisite Knowledge. System safety check procedures, construction and operation of rope rescue systems and their individual components, use of PPE, equipment inspection criteria, signs of equipment damage, principles of rigging, and equipment replacement criteria.			
5.2.7(A)	X		
5.2.7 (B) Requisite Skills. The ability to apply and use PPE, inspect rope rescue system components for damage, assess a rope rescue system for configuration, secure equipment components, inspect all rigging, and perform a system safety check.			

5.2.7(B)			X
5.2.8 Place edge protection, given life safety rope or webbing traversing a sharp or abrasive edge, edge protection, and other auxiliary rope rescue equipment, so that the rope or webbing is protected from abrasion or cutting, the rescuer is safe from falling while placing the edge protection, the edge protection is secure, and the rope or webbing is securely placed on the edge protection.			
5.2.8			X
5.2.8 (A) Requisite Knowledge. Materials and devices that can be used to protect ropes or webbing from sharp or abrasive edges, fall protection measures, dangers associated with sharp or abrasive edges, and methods for negotiation of sharp or abrasive edges.			
5.2.8(A)	X		
5.2.8 (B) Requisite Skills. The ability to select protective devices for rope and webbing, protect personnel from falls while working near edges, secure edge protection, and secure ropes or webbing in a specific location.			
5.2.8(B)			X
5.2.9 * Construct a system intended to provide belay within a single- or two-tensioned rope system, given life safety rope, anchor systems, PPE, and rope rescue equipment, so that the system is capable of arresting a fall, a fall will not result in system failure, the system is not loaded unless actuated, actuation of the system will not injure or otherwise incapacitate the belay operator, the belay operator is not rigged into the equipment components of the system, and the system is suitable to the site and is connected to an anchor system and the load.			
5.2.9			X
5.2.9 (A) Requisite Knowledge. Principles of belay systems, capabilities and limitations of various devices used to provide belay, application of knots, rigging principles, and system safety check procedures.			
5.2.9(A)	X		
5.2.9 (B) Requisite Skills. The ability to select a system, tie knots, perform rigging, attach to anchor system and load, don and use hazard-specific PPE, and perform a system safety check.			
5.2.9(B)			X
5.2.10 Operate a system intended to provide belay within a single- or two-tensioned rope system during a lowering or raising operation, given an operating lowering or raising mechanical advantage system, a specified minimum travel distance for the load, a system, and a load, so that the potential fall factor is minimized, the belay is not actuated during normal lowering and raising operations, the belay system is prepared for actuation at all times during the operation, the belay operator is attentive at all times during the operation, the load's position is continually monitored, and the belay operator moves rope through the belay device as designed.			
5.2.10			X
5.2.10 (A) Requisite Knowledge. Application and use of belay devices, proper operation of systems in conjunction with normal lowering and raising operations, and operational commands.			
5.2.10(A)	X		

5.2.10 (B) Requisite Skills. The ability to tend a belay device as designed, tie approved knots, assess system effectiveness, properly attach a rope to a belay device, don and use hazard-specific PPE, perform a system safety check, and manage and communicate belay system status effectively.			
5.2.10(B)			X
5.2.11 * Belay a falling load in a high-angle environment, given a belay and a failed line creating a dropped load, so that the belay line is not taut until the load is falling, the belay device is actuated when the load falls, the fall is arrested in a manner that minimizes the force transmitted to the load, the belay operator utilizes the belay device as designed, and the belay operator is not injured or otherwise incapacitated during actuation of the belay system.			
5.2.11			X
5.2.11 (A) Requisite Knowledge. Application and use of belay devices, effective emergency operation of belay devices to arrest falls, use of PPE, and operating procedures.			
5.2.11(A)	X		
5.2.11 (B) Requisite Skills. The ability to operate a belay system as designed, tie approved knots, use hazard-specific PPE, recognize and arrest a falling load, and communicate belay system actuation.			
5.2.11(B)			X
5.2.12 Construct a fixed rope system, given an anchor system, a life safety rope, and rope rescue equipment, so that the system constructed can accommodate the load, is efficient, and is connected to an anchor system and the load, and a system safety check is performed and the results meet the incident requirements for descending or ascending operations.			
5.2.12			X
5.2.12 (A) Requisite Knowledge. Knot selection, calculating expected loads, incident evaluation operations as related to interference concerns and setup, rigging principles, system safety check procedures, and methods of evaluating system components for compromised integrity.			
5.2.12(A)	X		
5.2.12 (B) Requisite Skills. The ability to select effective knots, calculate expected loads, use rigging principles, evaluate incident operations as related to interference concerns and setup, perform a system safety check, and evaluate system components for compromised integrity.			
5.2.12(B)			X
5.2.13 Construct a lowering system, given an anchor system, life safety rope(s), descent control device, and auxiliary rope rescue equipment, so that the system can accommodate the load, is efficient, is capable of controlling the descent, is capable of holding the load in place or lowering with minimal effort over the required distance, and is connected to an anchor system and the load.			
5.2.13			X
5.2.13 (A) Requisite Knowledge. Capabilities and limitations of various descent control devices, capabilities and limitations of various lowering systems, application of knots, rigging principles, and system safety check procedures.			
5.2.13(A)	X		

5.2.13 (B) Requisite Skills. The ability to tie knots; perform rigging; attach to descent control device, anchor system, and load; and perform a system safety check.			
5.2.13(B)			X
5.2.14 * Direct a lowering operation in a high-angle environment, given rescue personnel, an established lowering system, a specified minimum travel distance for the load, and a load to be moved, so that the movement is controlled, the load can be held in place when needed, operating methods do not stress the system to the point of failure, rope commands are used to direct the operation, and potential problems are identified, communicated, and managed.			
5.2.14			X
5.2.14 (A) Requisite Knowledge. Application and use of descent control devices, capabilities and limitations of various lowering systems in a high-angle environment, operation of lowering systems in a high-angle environment, personnel assignments, and operational commands.			
5.2.14(A)	X		
5.2.14 (B) Requisite Skills. The ability to direct personnel, use operational commands, analyze system efficiency, manage movement of the load in a high-angle environment, identify safety concerns in a high-angle environment, and perform a system safety check.			
5.2.14(B)			X
5.2.15 Construct a simple rope mechanical advantage system, given life safety rope, carabiners, pulleys, rope grab devices, and auxiliary rope rescue equipment, so that the system constructed can accommodate the load, is efficient, and is connected to an anchor system and the load.			
5.2.15			X
5.2.15 (A) Requisite Knowledge. Principles of mechanical advantage, capabilities and limitations of various simple rope mechanical advantage systems, application of knots, rigging principles, and system safety check procedures.			
5.2.15(A)	X		
5.2.15 (B) Requisite Skills. The ability to select rope and equipment, tie knots, choose and rig systems, attach the mechanical advantage system to the anchor system and load, and perform a system safety check.			
5.2.15(B)			X
5.2.16 * Direct a team in the operation of a simple rope mechanical advantage system in a high-angle raising operation, given rescue personnel, an established rope rescue system incorporating a simple rope mechanical advantage system, a specified minimum travel distance for the load, a load to be moved, and an anchor system, so that the movement is controlled, a reset is accomplished, the load can be held in place when needed, operating methods do not stress the system to the point of failure, commands are used to direct the operation, and potential problems are identified, communicated, and managed.			
5.2.16			X
5.2.16 (A) Requisite Knowledge. Principles of mechanical advantage, capabilities and limitations of various simple rope mechanical advantage systems and high-angle raising operations, correct operation of simple rope mechanical advantage systems, personnel assignments, and operational commands.			

5.2.16(A)	X		
5.2.16 (B) Requisite Skills. The ability to direct personnel effectively, use operational commands, analyze system efficiency, identify safety concerns, and perform a system safety check.			
5.2.16(B)			X
5.2.17 Construct a compound rope mechanical advantage system, given a load, an anchor system, life safety rope, carabiners, pulleys, rope grab devices, and rope rescue equipment, so that the system constructed accommodates the load and reduces the force required to lift the load, operational interference is factored and minimized, the system is efficient, a system safety check is completed, and the system is connected to an anchor system and the load.			
5.2.17			X
5.2.17 (A) Requisite Knowledge. Determination of incident needs as related to choosing compound rope systems, the elements of efficient design for compound rope systems, knot selection, methods for reducing excessive force to system components, evaluation of incident operations as related to interference concerns and setups, rope commands, rigging principles, system safety check procedures, and methods of evaluating system components for compromised integrity.			
5.2.17(A)	X		
5.2.17 (B) Requisite Skills. The ability to determine incident needs as related to choosing compound rope systems, select effective knots, calculate expected loads, evaluate incident operations as related to interference concerns and setups, perform a system safety check, and evaluate system components for compromised integrity.			
5.2.17(B)			X
5.2.18 * Direct the operation of a compound rope mechanical advantage system in a high-angle environment, given a rope rescue system incorporating a compound rope mechanical advantage system and a load to be moved, and a specified minimum travel distance for the load, so that a system safety check is performed; a reset is accomplished, and the movement is controlled; the load can be held in place when needed; operating methods do not stress the system to the point of failure; operational commands are clearly communicated; and potential problems are identified, communicated, and managed.			
5.2.18			X
5.2.18 (A) Requisite Knowledge. Methods to determine incident needs, types of interference concerns, rope commands, system safety check protocol, procedures for continued evaluation of system components for compromised integrity, common personnel assignments and duties, common commands, methods for controlling a load's movement, system stress issues during operations, and management methods for common problems.			
5.2.18(A)	X		
5.2.18 (B) Requisite Skills. The ability to determine incident needs, evaluate incident operations as related to interference concerns, complete a system safety check, continually evaluate system components for compromised integrity, direct personnel effectively, communicate commands, analyze system efficiency, manage load movement, and identify concerns.			
5.2.18(B)			X

5.2.19 Negotiate an edge while attached to a rope rescue system during a high-angle lowering and raising operation, given a rope rescue system, a specified minimum travel distance for the rescuer, life safety harnesses, an edge to negotiate during the lower and raise, and specialized equipment necessary for the environment, so that risk to the rescuer is minimized; the means of attachment to the rope rescue system is secure; and all projections and edges are negotiated while minimizing risks to the rescuer or equipment.			
5.2.19			**X**
5.2.19 (A) Requisite Knowledge. Techniques and practices for negotiating existing projections and edges along the travel path while suspended from operating rope-based lowering and raising mechanical advantage systems and common hazards imposed by those projections and edges			
5.2.19(A)	**X**		
5.2.19 (B) Requisite Skills. The ability to select and use rescuer harness and PPE for common environments, attach the life safety harness to the rope rescue system, maneuver across existing projections and an edge along the travel path, and evaluate surroundings for potential hazards.			
5.2.19(B)			**X**
5.2.20 Prepare for transfer of victims, given diagnostic and packaging equipment and an actual or simulated EMS agency, so that rescuers and victims are protected from hazards, victim injuries or illnesses are managed, and victims are delivered to the EMS provider with information regarding the history of the rescue activity and victim conditions.			
5.2.20		**X**	**X**
5.2.20 (A) Requisite Knowledge. Victim and scene assessment methods; victim treatment, immobilization, and packaging methods; and medical information management and communication methods.			
5.2.20(A)	**X**		
5.2.20 (B) Requisite Skills.The ability to use victim immobilization, packaging, and treatment methods appropriate to the situation and provide victim transfer reports, both verbally and in written format.			
5.2.20(B)		**X**	**X**
5.2.21 Direct a litter-lowering and litter-raising operation in a low-angle environment, given rescue personnel, litter tender(s), an established lowering/mechanical advantage system, a specified minimum travel distance for the load and a victim packaged in a litter to be moved, so that the litter is attached to the lowering/raising and belay systems, movement is controlled; litter tender(s) are used to manage the litter during the lower and raise, the litter can be held in place when needed; operating methods do not stress the system to the point of failure; rope commands are used to direct the operation; and potential problems are identified, communicated, and managed.			
5.2.21			**X**
5.2.21 (A) Requisite Knowledge. Application and use of lowering and mechanical advantage system in the low-angle environment, capabilities and limitations of various lowering and mechanical advantage systems in a low-angle environment, litter tender functions and limitations in the low-angle environment, management of a litter in a low-angle environment during raises and lowers, personnel assignments, and operational commands.			
5.2.21(A)	**X**		

5.2.21 (B) Requisite Skills. The ability to direct personnel, use operational commands, analyze system efficiency, manage movement of the litter in a high-angle environment, identify safety concerns in a low-angle litter operation, and perform a system safety check.			
5.2.21(B)			X
5.2.22 * Operate as a litter tender in a low-angle lowering or raising operation, given a rope rescue system, a specified minimum travel distance for the litter tender, life safety harnesses, litters, bridles, and specialized equipment necessary for the environment, so that risks to victims and rescuers are minimized; the means of attachment to the rope rescue system is secure; and the terrain is negotiated while minimizing risks to equipment or persons.			
5.2.22			X
5.2.22 (A) Requisite Knowledge. Task-specific selection criteria for life safety harnesses, PPE selection criteria, variations in litter design and intended purpose, low-angle litter attachment principles, techniques and practices for low-angle environments, and common hazards imposed by the terrain.			
5.2.22(A)	X		
5.2.22 (B) Requisite Skills. The ability to select and use rescuer harness and PPE for common environments, attach the life safety harness to the rope rescue system, maneuver across the terrain, manage the litter while suspended from the rope rescue system, and evaluate surroundings for potential hazards.			
5.2.22(B)			X
5.2.23 * Direct a litter-lowering or litter-raising operation in a high-angle environment, given rescue personnel, an established lowering/mechanical advantage system, a specified minimum travel distance for the load, a victim packaged in a litter to be moved, and a means for negotiating edges and projections along the travel path, so that the litter is attached to the lowering/raising and belay systems, an edge is negotiated during a lower and raise; tag lines are used to manage the litter during the lower and raise; the litter can be held in place when needed; operating methods do not stress the system to the point of failure; rope commands are used to direct the operation; and potential problems are identified, communicated, and managed.			
5.2.23			X
5.2.23 (A) Requisite Knowledge. Application and use of lowering and mechanical advantage system in the high-angle environment, capabilities and limitations of various lowering and mechanical advantage systems in a high-angle environment, use of tag lines for management of litter position during high-angle lowers and raises, personnel assignments, and operational commands.			
5.2.23(A)	X		
5.2.23 (B) Requisite Skills. The ability to direct personnel, use operational commands, analyze system efficiency, manage movement of the litter in a high-angle environment, identify safety concerns in a high-angle environment, and perform a system safety check.			
5.2.23(B)			X
5.2.24 * Terminate a technical rescue operation, given an incident scenario, assigned resources, and site safety data, so that rescuer risk and site safety are managed, scene security is maintained and custody transferred to a responsible party, personnel and resources are returned to a state of readiness, record keeping and documentation occur, and post event analysis is conducted.			

5.2.24		X	X
5.2.24 (A) Requisite Knowledge. Incident Command functions and resources, hazard identification and risk management strategies, logistics and resource management, personnel accountability systems, and AHJ-specific procedures or protocols related to personnel rehab.			
5.2.24(A)	X		
5.2.24 (B) Requisite Skills. Hazard recognition, risk analysis, use of site control equipment and methods, use of data collection and management systems, and use of asset and personnel tracking systems.			
5.2.24(B)		X	X

NFPA 1006: 2021 Edition, Rope Rescue 5.3 Technician Level

	Knowledge-Based Assessments (graded after submission)		Performance-Based Assessments (graded in real-time as they are performed)	
Section	**Cognitive** (e.g. Multiple Choice, Short Answer, Discretionary Time with Resources)	**Product** (e.g., document or develop a budget, proposal, lesson plan)	**Psychomotor** (Primarily an observable physical task. e.g., don, doff)	**Process** (Primarily a mental or verbalized task. e.g., inspect)
5.3.1 Direct a team in the operation of a rope rescue system to remove a victim stranded on or clinging to a natural or manmade feature in a high-angle environment, given a victim stranded on or clinging to a feature and a means of removal of the victim to the ground or other safe area, so that risks to victims and rescuers are minimized, injury to the victim is minimized, the means of attachment to the rope rescue system is maintained, the victim is removed and brought to a safe area for transfer to EMS.				
5.3.1				**X**
5.3.1 (A) Requisite Knowledge. Techniques and systems for safe transfer of stranded victims from a natural or man feature, various techniques for handling stranded victims without inducing a fall.				
5.3.1(A)	**X**			
5.3.1 (B) Requisite Skills. Select and construct systems for rapid removal of stranded victims from natural or manmade features, manage operation of the selected system, determine condition of the stranded victim, reduce hazards for rescuers and victims, and determine specialized equipment needs for victim movement.				
5.3.1(B)				**X**
5.3.2 Direct a team in the operation of a rope rescue system to remove a victim suspended from rope or webbing in a high-angle environment, given a victim suspended by a harness attached to anchored rope or webbing, systems for removal of the victim from the rope or webbing, and a means of removal of the victim to the ground or other safe area, so that risks to victims and rescuers are minimized, injury to the victim is minimized, the means of attachment to the rope rescue system is maintained, the victim is removed from the rope or webbing, and the victim is brought to a safe area for transfer to EMS.				
5.3.2				**X**
5.3.2 (A) * Requisite Knowledge. Techniques and systems for safe transfer of suspended victims from an existing anchored rope or webbing to a rope rescue system, various techniques for handling suspended victims, and principles of suspension-induced injuries.				
5.3.2(A)	**X**			
5.3.2 (B) Requisite Skills. Select and construct systems for rapid removal of victims from lanyards or rope or webbing, manage operation of the selected system, determine condition of the suspended victim, reduce hazards for rescuers and victims, and determine specialized equipment needs for victim movement.				
5.3.2(B)				**X**

5.3.3 * While suspended from a rope rescue system, perform the transfer of a victim suspended from rope or webbing in a high-angle environment to a separate rope rescue lowering or mechanical advantage system, given a rope rescue system, a specified minimum travel distance for the victim, victim transfer systems, and specialized equipment necessary for the environment, so that risks to victims and rescuers are minimized, undesirable victim movement during the transfer is minimized, the means of attachment to the rope rescue system is maintained, the victim is removed from the static line and lowered or raised to a stable surface, victim positioning is managed to reduce adverse effects associated with suspension-induced injuries, selected specialized equipment facilitates efficient victim movement, and the victim can be transported to the local EMS provider.			
5.3.3			**X**
5.3.3 (A) Requisite Knowledge. Task-specific selection criteria for victim transfer systems, various physical and psychological victim management techniques, PPE selection criteria, design characteristics and intended purpose of various transfer systems, rigging principles, cause and effects of suspension-induced injuries, methods to minimize common environmental hazards, and hazards created in high-angle environments.			
5.3.3(A)	**X**		
5.3.3 (B) Requisite Skills. The ability to choose victim transfer systems, select and use PPE appropriate to the conditions, perform a transfer of the victim from a static line to the lowering or mechanical advantage system, reduce hazards for rescuers and victims, and determine specialized equipment needs for victim movement.			
5.3.3(B)			**X**
5.3.4 * Perform the activities of a litter tender in a high-angle lowering or raising operation, given a rope rescue system, a specified minimum travel distance for the litter tender, life safety harnesses, litters, bridles, and specialized equipment necessary for the environment, so that risks to victims and rescuers are minimized; the means of attachment to the rope rescue system is secure; and the travel path is negotiated while minimizing risks to equipment or persons.			
5.3.4			**X**
5.3.4 (A) Requisite Knowledge. Task-specific selection criteria for life safety harnesses, PPE selection criteria, variations in litter design and intended purpose, high-angle litter attachment principles, techniques and practices for high-angle environments, and common hazards imposed by the various structures and terrain.			
5.3.4(A)	**X**		
5.3.4 (B) Requisite Skills. The ability to select and use rescuer harness and PPE for common environments, attach the life safety harness to the rope rescue system, maneuver the litter past obstacles or natural structural features, manage the litter while attached to the rope rescue system, and evaluate surroundings for potential hazards.			
5.3.4(B)			**X**
5.3.5 * Participate as a member of a team in the construction of a rope rescue system intended to move a suspended rescue load along a horizontal path to avoid an obstacle, given rescue personnel, life safety rope, rope rescue equipment, and a suitable anchor capable of supporting the load, so that personnel assignments are made and clearly communicated; the system constructed can accommodate the load; tension applied within the system will not exceed the rated capacity of			

any of its components' parts; a system safety check is performed; movement on the load is efficient; and loads can be held in place or moved with minimal effort over the required distance.			
5.3.5			X
5.3.5 (A) Requisite Knowledge. Determination of incident needs as related to operation of a system, capabilities and limitations of various systems (including capacity ratings), methods for limiting excessive force to system components, incident site evaluation as related to interference concerns and obstacle negotiation, rigging principles, system safety check protocol, common personnel assignments and duties, common and critical operational commands, and common problems and ways to minimize these problems during construction.			
5.3.5(A)	X		
5.3.5 (B) Requisite Skills. The ability to determine incident needs as related to construction of a system, evaluate an incident site as related to interference concerns and setup, identify the obstacles or voids to be negotiated, select a system for defined task, perform system safety checks, use rigging principles that will limit excessive force to system components, and communicate with personnel effectively.			
5.3.5(B)			X
5.3.6 * Direct a team in the operation of a rope system to move a suspended rescue load along a horizontal path, given rescue personnel, an established system, a target for the load, a load to be moved, and PPE, so that the movement is controlled; the load is held in place when needed; operating methods do not stress the system to the point of failure; personnel assignments are made; tasks are communicated; and potential problems are identified, communicated, and managed.			
5.3.6			X
5.3.6 (A) Requisite Knowledge. Determination of incident needs as related to the operation of a system, capabilities and limitations of various systems, incident site evaluation as related to interference concerns and obstacle negotiation, system safety check protocol, procedures to evaluate system components for compromised integrity, common personnel assignments and duties, common and critical operational commands, common problems and ways to minimize or manage those problems, and ways to increase the efficiency of load movement.			
5.3.6(A)	X		
5.3.6 (B) Requisite Skills. The ability to determine incident needs, complete a system safety check, evaluate system components for compromised integrity, select personnel, communicate with personnel effectively, manage movement of the load, and evaluate for any potential problems.			
5.3.6(B)			X
5.3.7 Climb and traverse natural features or man-made structures that require the use of climbing aids, positioning equipment, or fall protection systems to prevent the fall or unwanted movement of the rescuer, given the equipment used by the agency, and a task that reflects the anticipated rescue environment so that the objective is achieved, the rescuer can perform the required task, and fall protection is maintained.			
5.3.7			X
5.3.7 (A) * Requisite Knowledge. The application and limitations of climbing, positioning, and fall protection systems and equipment commensurate with the organization's needs.			

5.3.7(A)	X		
5.3.7 (B) Requisite Skills. The ability to climb vertical or near-vertical paths using the surfaces provided by the environment or climbing aids used by the agency and the use of positioning equipment to support the weight of the rescuer in a vertical or near-vertical environment permitting the rescuer to perform a task.			
5.3.7(B)			X
5.3.8 * Interact with a person at height who is in an emotional or psychological crisis given an environment consistent with the mission of the agency, the policies and procedures of the organization, and a person in a crisis scenario so that the condition is recognized and communicated to the team, the rescuer is prevented from harm, and the actions of the rescuer do not escalate the incident.			
5.3.8			X
5.3.8 (A) Requisite Knowledge. Indicators of a person in emotional crisis, typical triggers that can cause individuals to become agitated or anxious, methods of interacting to prevent harm to the rescuer and the subject, and best practices to de-escalate incidents involving persons in crisis.			
5.3.8(A)	X		
5.3.8 (B) Requisite Skills. Methods of approach that minimize the risk to the rescuer from subjects whose psychological or emotional state is unknown, interview techniques that provide insight to the motives and state of mind of the subject, and communicating and interacting with the subject in a manner that does not escalate the incident.			
5.3.8(B)			X
5.3.9 * Ascend a fixed rope in a high-angle environment, given an anchored fixed-rope system, a specified minimum distance for the rescuer, a system to allow ascent of a fixed rope, a structure, a belay system, a life safety harness worn by the person ascending, and PPE, so that the person ascending is secured to the fixed rope in a manner that will not allow him or her to fall, the person ascending is attached to the rope by means of an ascent control device(s) with at least two points of contact, injury to the person ascending is minimized, the person ascending can stop at any point on the fixed rope and rest suspended by his or her harness, the system will not be stressed to the point of failure, the person ascending can convert his or her ascending system to a descending system, obstacles are negotiated, the system is suitable for the site, and the objective is reached.			
5.3.9			X
5.3.9(A) Requisite Knowledge. Task-specific selection criteria for life safety harnesses and systems for ascending a fixed rope, PPE selection criteria, design and intended purpose of ascent control devices utilized, rigging principles, techniques for high-angle environments, converting ascending systems to descending systems, and common hazards posed by maneuvering and harnessing.			
5.3.9(A)	X		
5.3.9 (B) Requisite Skills. The ability to select and use rescuer harness, a system for ascending a fixed rope, and PPE for common environments; attach the life safety harnesses to the rope rescue system; configure ascent control devices to form a system for ascending a fixed rope; make connections to the ascending system; maneuver around existing environment and system-specific obstacles; convert the ascending system to a descending system while suspended from the fixed rope; and evaluate surroundings for potential hazards.			

5.3.9(B)			X
5.3.10 * Descend a fixed rope in a high-angle environment, given an anchored fixed-rope system, a specified minimum travel distance for the rescuer, a system to allow descent of a fixed rope, a belay system, a life safety harness worn by the person descending, and PPE, so that the person descending is attached to the fixed rope in a manner that will not allow him or her to fall, the person descending is attached to the rope by means of a descent control device, the speed of descent is controlled, injury to the person descending is minimized, the person descending can stop at any point on the fixed rope and rest suspended by his or her harness, the system will not be stressed to the point of failure, the system is suitable for the site, and the objective is reached.			
5.3.10			X
5.3.10 (A) Requisite Knowledge. Task-specific selection criteria for life safety harnesses and systems for descending a fixed rope; PPE selection criteria; design, intended purpose, and operation of descent control devices utilized; safe rigging principles; techniques for high-angle environments; and common hazards posed by maneuvering and harnessing.			
5.3.10(A)	X		
5.3.10 (B) Requisite Skills. The ability to select and use rescuer harnesses, a system for descending a fixed rope, and PPE for common environments; attach the life safety harness to the rope rescue system; make attachment of the descent control device to the rope and life safety harness; operate the descent control device; maneuver around existing environment and system-specific obstacles; and evaluate surroundings for potential hazards.			
5.3.10(B)			X
5.3.11 Demonstrate the ability to escape from a jammed or malfunctioning device during a fixed-rope descent in a high-angle environment, given an anchored fixed-rope system with a simulated malfunctioning descent control device, a system to allow escape from the malfunctioning device, a belay system, a life safety harness worn by the person descending, and PPE, so that the person descending is attached to the fixed rope in a manner that will not allow him or her to fall, the person descending is attached to the rope by means of a descent control device, the means for escape will allow the rescuer to escape either upward or downward from the malfunctioning descent control device, injury potential to the rescuer is minimized, the system will not be stressed to the point of failure, the system is suitable for the site, and the objective is reached.			
5.3.11			X
5.3.11(A) Requisite Knowledge. Task-specific selection criteria for escape equipment and methods used for escape from a malfunctioning descent control device; PPE selection criteria; design, intended purpose, and operation of escape systems utilized; safe rigging principles; techniques for high-angle environments; and common hazards posed by malfunctioning descent control devices.			
5.3.11(A)	X		
5.3.11 (B) Requisite Skills. The ability to select and use rescuer harnesses, a system for escaping a malfunctioning descent control device, and PPE for common environments; attach the life safety harness to the rope rescue system; make attachment of the descent control device to the rope and life safety harness; attach and operate the escape system to remove the rescuer from the malfunctioning descent control device while maintaining patent attachment to the fixed rope and belay; use the escape system to maneuver upward or downward from the malfunctioning descent control device; and evaluate surroundings for potential hazards.			

5.3.11(B)			X