



PENNSYLVANIA STATE FIRE ACADEMY STURCTURAL COLLAPSE RESCUE TECHNICIAN SKILLS

Structural Collapse Rescue Technician I & II Skill Stations

NFPA 1006 – Chapter 9 (2013 Edition)

Structural Collapse Rescue Technician Level I *		
Station A	Scene Size-up and Initial Actions	Mandatory Station
Station B	Search Techniques and Marking	Mandatory Station
Station D	T/Spot Shore	Random Station
Station E	Raker Shore	Random Station
Station F	Vertical/Dead Shore	Random Station
Station H	Door/Window Shore	Random Station
Station K	Support Operations	Random Station
Station L	Victim Evaluation, Release from Entrapment and Packaging/Movement	Mandatory Station
Station M	Heavy Lift and Move	Random Station
Station R	Breaching Light Frame Structural Components	Mandatory Station
Structural Collapse Rescue Technician Level II **		
Station A	Scene Size-up and Initial Actions	Mandatory Station
Station B	Search Techniques and Marking	Mandatory Station
Station C	Expedient and Pneumatic/Mechanical Shores	Random Station
Station E	Raker Shore	Mandatory Station
Station F	Vertical/Dead Shore	Random Station
Station G	Horizontal Shore	Random Station
Station H	Door/Window Shore	Random Station
Station I	Laced Post Shore	Random Station
Station J	Sloped Floor Shore	Random Station
Station K	Support Operations	Random Station
Station L	Victim Evaluation, Release from Entrapment and Packaging/Movement	Mandatory Station
Station M	Heavy Lift and Move	Mandatory Station
Station N	Horizontal Concrete Breaching	Random Station
Station O	Vertical Concrete Breaching	Random Station
Station P	Steel Cutting/Burning	Mandatory Station
Station Q	Heavy Equipment Coordination	Mandatory Station

*** Level I MUST Test 7 Skill Stations**

- 4 Mandatory Stations: A, B, L, R
- 3 Random Stations: (D or F) and (E or H) and (K or M)

**** Level II MUST Test 11 Skill Stations**

- 7 Mandatory Stations: A, B, E, L, M, P, Q
- 4 Random Stations: (C or K) and (F or G) and (H, I or J) and (N or O)

***** Combined Tests (Level I and II) shall use 11 Skill Stations**

- 6 Mandatory Stations: A, B, E, L, P, Q
- 3 Random Shoring Stations (D, F, G, H, I, J)
- 1 Breaching Station (N, O, or R)
- 1 Additional Random Station (K or M)



PENNSYLVANIA STATE FIRE ACADEMY STRUCTURAL COLLAPSE RESCUE TECHNICIAN SKILLS

STATION A – Scene Size-up & Initial Actions		Reference NFPA 1006 (2013 Edition) Chapter 9 Mandatory Station: JPRs 9.1.1, 9.1.2, 9.1.3, 9.1.4, 9.2.1, 9.2.2, 9.2.3, 9.2.4	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Evaluator Note: Please check the level tested. ____ Tech I ____ Tech II ____ Tech I & II

Directions: You are dispatched to the scene of a building collapse. Conduct a size-up of the scene, determine potential victim locations, and develop and implement a collapse rescue Incident Action Plan (IAP) using an ICS 201 Form. Your size-up and IAP should address the following areas: Existing and potential conditions, hazards, construction and occupancy type, type of collapse, need for rescue, scene security, potential victim locations, needed resources, hazard mitigation objectives, and rescue objectives. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **20 of 20** tasks being correctly performed.

No.	Tasks	Yes	No	
1	Establishes and utilizes an Incident Management System			
2	Ensures proper use of Personal Protective Equipment (PPE)			
3	Utilizes a personnel accountability system			
4	Performs size-up (6 sided) using observations, victims, bystanders, witnesses and any other available site information			
5	Establishes safe operating zones and identifies a security perimeter			
6	Places barricades or scene control tape appropriately to limit site access			
7	Ability to determines construction type and categorize light frame construction			
8	Determines building occupancy type			
9	Determines collapse type/pattern			
10	Identifies potential hazards			
11	Prioritizes hazard control objectives			
12	Determines potential victim locations			
13	Performs a risk/benefit analysis and evaluates rescue vs. recovery considerations			
14	Determines rescue objectives and options			
15	Prioritizes rescue options based on size-up information			
16	Identifies and requests needed resources.			
17	Establishes a building evacuation signal/plan			
18	Identifies need for Rapid Intervention Crew/Team			
19	Completes initial IAP utilizing ICS 201 Form			
20	Completes the assignment in a professional manner			
Please indicate skill outcome			PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



PENNSYLVANIA STATE FIRE ACADEMY STRUCTURAL COLLAPSE RESCUE TECHNICIAN SKILLS

STATION B – Search Techniques and Marking		Reference NFPA 1006 (2013 Edition) Chapter 9 Mandatory Station: JPRs 9.1.5, 9.2.5	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Evaluator Note: Please check the level tested. ____ Tech I ____ Tech II ____ Tech I & II

Directions: You have been dispatched to the scene of a building collapse. For this exercise, you can assume that a size-up has already been performed and you have been assigned the responsibility to search the building/area utilizing the tools/equipment provided (visual, physical, audible and seismic/acoustic), determine all potential victim locations, mark those locations on the search grid form provided and mark the building utilizing FEMA standard search marking techniques. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **11 of 11** tasks being correctly performed.

No.	Tasks	Yes	No
1	Implement an Incident Management System (IMS)		
2	Ensures proper/continued use of Personal Protective Equipment (PPE)		
3	Confirms size-up information		
4	Identifies potential hazards		
5	Selects appropriate search equipment and methods given scene and size-up. Check equipment/methods selected: ____ Hailing/audible ____ Physical void search ____ Fiber optic (Search Cam, Mongoose, Snake Eye, etc.) ____ Acoustic/seismic (Delsar or equivalent) ____ Thermal imaging/FLIR ____ Other (List): _____		
6	Checks and assures proper operation of selected equipment prior to beginning search		
7	Utilizes appropriate search techniques for equipment/methods selected		
8	Search is systematic and thorough		
9	Determines and marks all potential victim locations		
10	Properly marks building using standard FEMA building search marking system		
11	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #:** _____



PENNSYLVANIA STATE FIRE ACADEMY STURCTURAL COLLAPSE RESCUE TECHNICIAN SKILLS

STATION C – Expedient and Pneumatic / Mechanical Shores		Reference NFPA 1006 (2013 Edition) Chapter 9 Random Station: JPRs 9.2.6, 9.1.7, 9.2.7	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Directions: You are operating on the scene of a building collapse that involves a heavy construction type structure (i.e., masonry, steel, concrete) and are ordered to shore/stabilize a section of the building (wall or floor) using appropriate equipment including adequate scene lighting. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **9 of 9** tasks being correctly performed.

No.	Tasks	Yes	No
1	Ensures proper/continued use of Personal Protective Equipment (PPE)		
2	Performs a size-up of the collapsed area		
3	Identifies any potential hazards		
4	Performs a structural load calculation		
5	Identifies needed resources		
6	Selects appropriate equipment, including lighting, for the given scenario		
7	Applies selected equipment efficiently and effectively per manufacturers' recommendations		
8	Load effectively transferred, and objective adequately stabilized		
10	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



PENNSYLVANIA STATE FIRE ACADEMY STURCTURAL COLLAPSE RESCUE TECHNICIAN SKILLS

STATION D – T/Spot Shore		Reference NFPA 1006 (2013 Edition) Chapter 9 Random Station: JPR 9.1.6	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Directions: You are operating on the scene of a building collapse involving a light (i.e., wood) frame structure and are ordered to shore/stabilize a section of the building (i.e., floor/ceiling assembly) using a T or spot shore. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **12 of 12** tasks being correctly performed.

No.	Tasks	Yes	No
1	Ensures proper/continued use of Personal Protective Equipment (PPE)		
2	Performs a size-up of the collapsed area		
3	Identifies any potential hazards		
4	Performs a structural load calculation		
5	Selects appropriate equipment and supplies		
6	Obtains measurements in the area where the shoring will be installed		
7	Constructs proper T/spot shore		
8	Places T/spot shore properly under objective to be stabilized		
9	Shore secured in place		
10	Shore provides for adjustability and positive end connections		
11	Load effectively transferred, and objective adequately stabilized		
12	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome			
			PASS FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



PENNSYLVANIA STATE FIRE ACADEMY STURCTURAL COLLAPSE RESCUE TECHNICIAN SKILLS

STATION E – Raker Shore		Reference NFPA 1006 (2013 Edition) Chapter 9 Mandatory (Optional) Station: JPRs 9.1.6, 9.2.6, 9.2.14	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Evaluator Note: You may have the candidate utilize a solid sole, split sole or flying raker shore at either a 45 or 60-degree angle depending on the objective or material/supplies available.

Directions: You are operating on the scene of a building collapse involving an unreinforced masonry structure and have been ordered to shore/stabilize a section of the building’s wall utilizing a raker shore. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **18 of 18** tasks being correctly performed.

No.	Tasks	Yes	No
1	Ensures proper/continued use of Personal Protective Equipment (PPE)		
2	Performs a size-up of the collapsed area		
3	Identifies any potential hazards		
4	Performs a structural load calculation		
5	Selects appropriate equipment and supplies		
6	Obtains measurements in the area where the shoring will be installed		
7	Determines insertion point of shore		
8	Calculates rake length based on insertion point and rake angle		
9	Properly cuts rake to length with appropriate return cuts		
10	Properly assembles shore utilizing wall plate, sole plate, cleats or thrust blocks, wedges, and gusset plates.		
11	Selects cleats of adequate length/size given type of shore		
12	Assures adequate type, number and size of nails in cleats and gusset plates		
13	Shore placed against wall and secured in place		
14	Shore adequately anchored		
15	Shore provides for adjustability and has positive end connections		
16	Adequate horizontal or mid-point bracing provided		
17	Load effectively transferred, and object adequately stabilized		
18	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome			
			PASS FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



PENNSYLVANIA STATE FIRE ACADEMY STURCTURAL COLLAPSE RESCUE TECHNICIAN SKILLS

STATION F – Vertical / Dead Shore		Reference NFPA 1006 (2013 Edition) Chapter 9 Random Station: JPRs 9.1.6, 9.2.6, 9.2.14	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Directions: You are operating on the scene of a building collapse involving an unreinforced masonry structure and are ordered to shore/stabilize a section of the building's floor utilizing a vertical dead shore. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **15 of 15** tasks being correctly performed.

No.	Tasks	Yes	No
1	Ensures proper/continued use of Personal Protective Equipment (PPE)		
2	Performs a size-up of the collapsed area		
3	Identifies any potential hazards		
4	Performs a structural load calculation		
5	Obtains measurements in the area where the shoring will be installed		
6	Selects appropriate equipment and supplies		
7	Assures lumber is cut to length		
8	Properly assembles shore utilizing wall plate, sole plate, cleats or thrust blocks, wedges and gusset plates.		
9	Posts spaced adequately to support calculated load		
10	Shore is placed under load and secured in place		
11	Backfill is provided as necessary		
12	Shore provides for adjustability and has positive end connections		
13	Shore diagonally braced and mid-point brace provided, if needed		
14	Load effectively transferred, and objective adequately stabilized		
15	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome			
			PASS FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



PENNSYLVANIA STATE FIRE ACADEMY STURCTURAL COLLAPSE RESCUE TECHNICIAN SKILLS

STATION G – Horizontal Shore		Reference NFPA 1006 (2013 Edition) Chapter 9 Random Station: JPRs 9.2.6, 9.2.14	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Directions: You are operating on the scene of a building collapse involving an unreinforced masonry structure and are ordered to shore/stabilize a section of the building’s hallway utilizing a horizontal shore. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **13 of 13** tasks being correctly performed.

No.	Tasks	Yes	No
1	Ensures proper/continued use of Personal Protective Equipment (PPE)		
2	Performs a size-up of the collapsed area		
3	Identifies any potential hazards		
4	Performs a structural load calculation		
5	Obtains measurements in the area where the shoring will be installed		
6	Selects appropriate equipment and supplies		
7	Assures lumber is cut to length		
8	Properly assembles shore utilizing wall plate, sole plate, cleats or thrust blocks, wedges and gusset plates		
9	Struts spaced adequately to support calculated load		
10	Shore placed in hallway and secured in place		
11	Shore provides for adjustability and has positive end connections		
12	Load effectively transferred, and objective adequately stabilized		
13	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



PENNSYLVANIA STATE FIRE ACADEMY STURCTURAL COLLAPSE RESCUE TECHNICIAN SKILLS

STATION H – Door / Window Shore		Reference NFPA 1006 (2013 Edition) Chapter 9 Random Station: JPRs 9.1.6, 9.2.6, 9.2.14	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Directions: You are operating on the scene of a building collapse involving an unreinforced masonry structure and are ordered to shore/stabilize a door/window opening utilizing the appropriate shoring method/devices. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **14 of 14** tasks being correctly performed.

No.	Tasks	Yes	No
1	Ensures proper/continued use of Personal Protective Equipment (PPE)		
2	Performs a size-up of the collapsed area		
3	Identifies any potential hazards		
4	Performs a structural load calculation		
5	Obtains measurements in the area where the shoring will be installed		
6	Selects appropriate equipment and supplies		
7	Assures lumber is cut to length		
8	Properly assembles shore utilizing wall plate, sole plate, cleats or thrust blocks, wedges, and gusset plates.		
9	Header thickness adequate for opening being spanned (1” of thickness per foot of opening).		
10	Shore placed in opening and secured in place		
11	Backfill provided as necessary		
12	Shore provides for adjustability and has positive end connections		
13	Load effectively transferred and opening adequately stabilized		
14	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome			
			PASS FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



PENNSYLVANIA STATE FIRE ACADEMY STRUCTURAL COLLAPSE RESCUE TECHNICIAN SKILLS

STATION I – Laced Post Shore		Reference NFPA 1006 (2013 Edition) Chapter 9 Random Station: JPRs 9.2.6, 9.2.14	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Directions: You are operating on the scene of a building collapse involving a heavy construction-type concrete reinforced structure and are ordered to shore/stabilize a section of the building’s floor utilizing a laced post shore. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **15 of 15** tasks being correctly performed.

No.	Tasks	Yes	No
1	Ensures proper/continued use of Personal Protective Equipment (PPE)		
2	Performs a size-up of the collapsed area		
3	Identifies any potential hazards		
4	Performs a structural load calculation		
5	Obtains measurements in the area where the shoring will be installed		
6	Selects appropriate equipment and supplies		
7	Assures lumber is cut to length		
8	Properly assembles shore utilizing wall plate, sole plate, cleats or thrust blocks, wedges and gusset plates.		
9	Posts spaced adequately to support calculated load		
10	Shore placed under load and secured in place		
11	Backfill provided as necessary		
12	Shore provides for adjustability and has positive end connections		
13	Mid-point bracing appropriate for height of shore		
14	Load effectively transferred, and objective adequately stabilized		
15	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



PENNSYLVANIA STATE FIRE ACADEMY STURCTURAL COLLAPSE RESCUE TECHNICIAN SKILLS

STATION J – Sloped Floor Shore		Reference NFPA 1006 (2013 Edition) Chapter 9 Random Station: JPRs 9.2.6, 9.2.14	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Directions: You are operating on the scene of a building collapse involving a heavy construction-type reinforced concrete structure and are ordered to shore/stabilize a section of the building’s floor utilizing a sloped floor shore. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **16 of 16** tasks being correctly performed.

No.	Tasks	Yes	No	
1	Ensures proper/continued use of Personal Protective Equipment (PPE)			
2	Performs a size-up of the collapsed area			
3	Identifies any potential hazards			
4	Performs a structural load calculation			
5	Obtains measurements in the area where the shoring will be installed			
6	Determines appropriate angles for sloped floor shore			
7	Selects appropriate equipment and supplies			
8	Assures lumber is cut to length			
9	Properly assembles shore utilizing header, sole plate, posts, gusset plates, cleats, and wedges			
10	Posts spaced adequately to support calculated load			
11	Shore placed under load and secured in place			
12	Backfill provided as necessary			
13	Shore provides for adjustability and has positive end connections			
14	Diagonal bracing provided			
15	Load effectively transferred, and objective adequately stabilized			
16	Completes all tasks without compromising personal or team safety			
Please indicate skill outcome			PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



PENNSYLVANIA STATE FIRE ACADEMY STRUCTURAL COLLAPSE RESCUE TECHNICIAN SKILLS

STATION K – Support Operations		Reference NFPA 1006 (2013 Edition) Chapter 9 Random Station: JPRs 9.1.7, 9.2.7	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Evaluator Note: Please check the level tested. ____ Tech I ____ Tech II ____ Tech I & II

Directions: You are operating on the scene of a building collapse and are tasked with establishing adequate lighting and a rehab area in support of the rescue operation utilizing the equipment and supplies provided. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **10 of 10** tasks being correctly performed.

No.	Tasks	Yes	No
1	Ensures proper/continued use of Personal Protective Equipment (PPE)		
2	Determines scene lighting resource needs		
3	Assembles appropriate lighting equipment		
4	Connects power cords to electrical source and lights		
5	Starts electrical source and assures scene is adequately illuminated		
6	Selects appropriate area for rehab		
7	Environmental conditions taken into consideration		
8	Resource needs for rehab area identified		
9	Resources effectively managed		
10	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



PENNSYLVANIA STATE FIRE ACADEMY STURCTURAL COLLAPSE RESCUE TECHNICIAN SKILLS

STATION M – Heavy Lift and Move		Reference NFPA 1006 (2013 Edition) Chapter 9 Mandatory Station: JPRs 9.1.10, 9.1.11, 9.1.13, 9.2.10, 9.2.11, 9.2.13	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Directions: You are operating on the scene of a building collapse involving a heavy construction-type steel reinforced concrete structure. Your team is assigned to move a piece of debris to gain access to another portion of the structure. For this exercise, you are to move the identified object throughout an obstacle course utilizing the tools and equipment provided. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **8 of 8** tasks correctly performed.

No.	Tasks	Yes	No
1	Ensures proper/continued use of Personal Protective Equipment (PPE)		
2	Performs load calculation on object to be moved		
3	Assembles appropriate resources		
4	As a team, moves the object throughout identified obstacle course utilizing: <ul style="list-style-type: none"> • Construction of cribbing systems (appropriate for the anticipated load) • Basic principles of leverage (Class I, II, & III) • Mechanical advantage/rigging systems 		
5	Object moved in a controlled manner		
6	All obstacles negotiated without significant difficulty.		
7	Object moved to identified location safely and efficiently		
8	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



PENNSYLVANIA STATE FIRE ACADEMY STURCTURAL COLLAPSE RESCUE TECHNICIAN SKILLS

STATION N – Horizontal Concrete Breaching		Reference NFPA 1006 (2013 Edition) Chapter 9 Random Station: JPR 9.2.12	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Directions: You are operating on the scene of a building collapse involving a heavy construction-type steel reinforced concrete structure. Your team is assigned to breach a wall to gain access to another portion of the structure. For this exercise, you are to breach a hole in the wall utilizing the tools and equipment provided. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **10 of 10** tasks being correctly performed.

No.	Tasks	Yes	No
1	Ensures proper/continued use of Personal Protective Equipment (PPE)		
2	Sizes-up the wall and determines area to be breached		
3	Determines resource needs and assembles appropriate equipment		
4	Core drills the wall to determine concrete thickness and provide for atmospheric monitoring and technical search prior to commencing with breach operations		
5	Utilizes appropriate tools and techniques to breach wall (stitch drill and chip or hydraulic chain saw)		
6	Properly secures section of wall being breached to provide for controlled removal of breached section		
7	Severs any steel reinforcing rod (rebar) in concrete utilizing appropriate tools and equipment		
8	Breached segment removed in a controlled manner		
9	Creates hole of adequate size to pass rescuer through opening		
10	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



PENNSYLVANIA STATE FIRE ACADEMY STURCTURAL COLLAPSE RESCUE TECHNICIAN SKILLS

STATION O – Vertical Concrete Breaching		Reference NFPA 1006 (2013 Edition) Chapter 9 Random Station: JPR 9.2.12	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Directions: You are operating on the scene of a building collapse involving a heavy construction-type steel reinforced concrete structure. Your team is assigned to breach a floor to gain access to another portion of the structure. For this exercise, you are to breach a hole in the floor utilizing the tools and equipment provided. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **10 of 10** tasks being correctly performed.

No.	Tasks	Yes	No
1	Ensures proper/continued use of Personal Protective Equipment (PPE)		
2	Sizes-up the floor and determines area to be breached		
3	Determines resource needs and assembles appropriate equipment		
4	Core drills the floor to determine concrete thickness and provide for atmospheric monitoring and technical search prior to commencing with breach operations		
5	Utilizes appropriate tools and techniques to breach floor		
6	Properly secures section of floor being breached to provide for controlled removal of breached section		
7	Severs any steel reinforcing rod (rebar) in concrete utilizing appropriate tools and equipment.		
8	Breached segment removed in a controlled manner		
9	Hole of adequate size to pass rescuer through opening		
10	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



PENNSYLVANIA STATE FIRE ACADEMY STURCTURAL COLLAPSE RESCUE TECHNICIAN SKILLS

STATION P – Steel Cutting / Burning		Reference NFPA 1006 (2013 Edition) Chapter 9 Mandatory Station: JPR 9.2.15	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Directions: You are operating on the scene of a building collapse involving a heavy construction-type structure. You are assigned the task of cutting and removing a section of steel beam to gain access to another portion of the structure. For this exercise, you are to sever the steel utilizing the tools and equipment provided. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **11 of 11** tasks being correctly performed.

No.	Tasks	Yes	No
1	Identifies and utilizes personal protective equipment specific for cutting and burning operations (heavy leather gloves, flame retardant)		
2	Determines resource needs and assembles appropriate equipment		
3	Stabilizes heavy loads		
4	Provides for adequate fire protection in support of cutting/burning operations		
5	Sets proper pressures on regulators for oxygen and/or fuel gas based on manufacturers recommendations		
6	Properly ignites and sets-up torch for cutting/burning operation		
7	Preheats metal adequately prior to applying oxygen for burning (if using oxyacetylene or Petrogen system)		
8	Performs cut/burning procedure utilizing appropriate techniques		
9	Object severed and completely removed		
10	Torch turned off and regulators bled		
11	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



PENNSYLVANIA STATE FIRE ACADEMY STURCTURAL COLLAPSE RESCUE TECHNICIAN SKILLS

STATION Q – Heavy Equipment Coordination		Reference NFPA 1006 (2013 Edition) Chapter 9 Mandatory Station: JPR 9.2.16	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Directions: You are operating on the scene of a building collapse involving a heavy construction-type steel reinforced concrete structure. Your team has been assigned to sling a piece of debris and remove it utilizing a crane to gain additional access to the structure for rescue operations. For this exercise, you are to attach lifting slings to the object and coordinate the movement of the piece of debris with the crane operator. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **15 of 15** tasks being correctly performed.

No.	Tasks	Yes	No
1	Ensures proper/continued use of Personal Protective Equipment (PPE)		
2	Debris are identified, and load calculation performed		
3	Rigging equipment needed are identified and assembled		
4	Rigging equipment inspected for signs of wear and damage		
5	Tabulated data referenced regarding load carrying capacity of slings		
6	Center of gravity of load is estimated		
7	Utilizes appropriate techniques for the load being rigged		
8	Critical angles are not exceeded in the rigging configuration		
9	Rigging slings protected from abrasion		
10	Load rigging secured to crane hook		
11	Load movement coordinated with crane operator utilizing appropriate crane operations hand signals or radio communication		
12	Load lifted with minimal movement or shifting		
13	Load moved to landing zone safely		
14	Rigging removed from load and returned to state of readiness		
15	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



PENNSYLVANIA STATE FIRE ACADEMY STURCTURAL COLLAPSE RESCUE TECHNICIAN SKILLS

STATION R – Breaching Light Frame Structural Components		Reference NFPA 1006 (2013 Edition) Chapter 9 Mandatory Station: JPRs 9.1.8, 9.1.12	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Directions: You are operating at the scene of a building collapse involving a light frame structure and are tasked with breaching a portion of that structure to conduct search operations. Using the tools and equipment provided, breach an indicated section of the structure to allow access for rescuer entry and void search operations. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **8 of 8** tasks being correctly performed.

No.	Tasks	Yes	No
1	Ensures proper/continued use of Personal Protective Equipment (PPE)		
2	Performs size-up and chooses appropriate area or portion of structure to breach		
3	Selects appropriate tools and equipment to complete the assignment		
4	Uses tools effectively to create an opening in the structure		
5	Structural stability is not compromised during breaching operation		
6	Opening allows for rescuer entry into structure/void		
7	Method(s) utilized is safe and efficient		
8	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____