



# **PENNSYLVANIA STATE FIRE ACADEMY**

## **STRUCTURAL COLLAPSE RESCUE TECHNICIAN SKILL STATIONS**

**\*\*Attention:** All certification candidates are required to have an established and up to date user portal account in the PA State Fire Academy's Acadis Learning Management System prior to participating in **ANY** certification testing opportunity. Please log in to your Acadis portal account and update all personal information before submitting your certification application. (Access can be gained through the OSFC website – [Training and Certification Portal](#)).

### **Skill Stations**

NFPA 1006 Structural Collapse Rescue Technician – Chapter 6 (2021 Edition)

Station A	Collapse Rescue: IAP, S&R, Shoring, & Victim Removal (2 Evaluators)	Mandatory Station
Station B	Structural Collapse Incident Command (1 Evaluator)	Mandatory Station
Station C	Structural Collapse Incident Safety Officer (1 Evaluator)	Mandatory Station
Station D	Heavy Object: Lift & Move (1 Evaluator)	Mandatory Station
Station E	Heavy Equipment Coordination (1 Evaluator)	Mandatory Station
Station F	Cut Structural Steel (1 Evaluator)	Mandatory Station

All skills in the Structural Collapse Rescue Operation Level Skills Menu are Mandatory. All skills in the Rope Rescue Operations level **MUST** be passed with 100% of tasks being checked "YES" Any task checks "NO" in a skill station is a failure of that skill.

HOWEVER, skill A is broken into "SECTIONS." Candidates who are unsuccessful at completing a section of skill A will only have to retest on the section they failed. Candidates who are unsuccessful at two or more sections in Skill Station A, "Collapse Rescue: IAP, S&R, Shoring, & Victim Removal," **WILL HAVE** to retest the entire skill station.

### **Minimum PPE for Structural Collapse Rescue testing:**

- Helmet/hardhat with chinstrap
- ANZI eye protection
- Gloves
- Safety toed footwear



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### STRUCTURAL COLLAPSE RESCUE TECHNICIAN SKILL STATIONS

STATION A – Collapse Rescue: S&R, Shoring, & Victim Removal		Reference NFPA 1006 (2021 Edition), Chapter 6 Mandatory Station: JPRs 6.3.1, 6.3.2, 6.3.3, 6.3.4, 6.3.5, 6.3.6, 6.3.7, 6.3.8, 6.3.11, 6.3.12, 6.3.13, 6.3.14	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

**Evaluator Note:** Station scenario will be a collapsed structure incident with one (1) entrapped/pinned victim, located within a heavy construction/RM structure.

**Evaluator Note:** All skills in the Structural Collapse Rescue Operation Level Skills Menu are Mandatory. All skills in the Rope Rescue Operations level MUST be passed with 100% of tasks being checked “YES” Any task checks “NO” in a skill station is a failure of that skill.

HOWEVER, skill A is broken into “SECTIONS.” Candidates who are unsuccessful at completing a section of skill A will only have to retest on the section they failed. Candidates who are unsuccessful at two or more sections in Skill Station A, “Collapse Rescue: S&R, Shoring, & Victim Removal,” WILL HAVE to retest the entire skill station.

**Evaluator Note:** Each team must build one shore from the following lists. ONE shore from each category MUST be built by each team. At least one shore MUST be made from wood. **MARK SHORES CONSTRUCTED:**

- **ONE VERTICAL SHORE** – Laced Post \_\_\_, Sloped floor type I \_\_\_, or Sloped floor type II \_\_\_ AND
- **ONE HORIZONTAL SHORE** – Window \_\_\_, Door \_\_\_, or Horizontal shore \_\_\_ AND
- **ONE RAKER SHORE SYSTEM** – Flying Raker \_\_\_, Solid Sole Raker \_\_\_, or Split Sole raker shore \_\_\_

**Evaluator NOTE:** Teams will be made up of 10 personnel. Each person MUST perform the duties of one of the Essential Job Positions (EJP) – Either the IC or the SO. At the start of the evolution, each member of the team will choose one card from a deck of cards. Eight of those cards will say “Rescue Team Personnel,” one card will say “Incident Commander,” and one will say “Safety Officer.” Candidates will choose a card and that will be their assignment for the portion of the evolution. Each evolution will be broken into five sections. At each section change, the candidates who did not act as IC or SO will redraw cards from the deck. Candidates who have acted as the IC and SO will be assigned to the Rescue Team Personnel for the rest of the evolution. Card draws will occur at the following times: (1) Start of the evolution, (2) change from raker system to horizontal shore, (3) change from horizontal shore to vertical shore, (4) change from vertical shore to breaching operations, (5) change from breaching operation to patient care, removal and termination of the incident.

**Scenario Information:** The scenario for this evolution will be a collapsed heavy construction/RM structure. Teams will have to start the evolution by (1) building a raker system from the list above, then (2) build a horizontal shore to gain entry into the structure, (3) build a vertical shore from the list above, (4) breach heavy construction/RM building material in such a way as to be able to bring a patient through the breach, and (5), safely remove the patient from entrapment and move the patient out of the collapsed structure and terminate the incident. Candidates who are acting as IC and SO for their portion of the skill will be graded with Skill AB and C respectively. The IC and the ISO must complete the required paperwork for their portion of the evolution.

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STATION A – Collapse Rescue: S&R, Shoring, & Victim Removal		Reference NFPA 1006 (2021 Edition), Chapter 6 Mandatory Station: JPRs 6.3.3, 6.3.4, 6.3.5, 6.3.6, 6.3.7, 6.3.8, 6.3.11, 6.3.12, 6.3.13	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

**Evaluator Note:** Each candidate working as a “Rescue Team Personnel” will be pulled aside and will demonstrate cutting steel to an evaluator. During this evolution, candidates will be graded on Skill F – Cutting Steel

**Directions:** Given a heavy construction/RM structural collapse rescue incident and background information, the candidate, working as a member of a team, will identify incident hazards, initiate isolation and scene control procedures, stabilize/shore a heavy construction/RM structure, search within the structure, locate and free an entrapped victim, and package a victim for removal, so that the incident scene is isolated and controlled, shoring is adequate for the material weight and collapse type, materials are cribbed throughout lifting maneuvers, and the victim is properly freed and packaged for removal.

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

No.	Tasks	Yes	No
<b>Section 1: Shore, Breach, &amp; Search</b>			
1	Select and utilize proper type of PPE and respiratory protection		
2	Continuously assess atmospheric conditions and uses ventilation as required		
3	Stabilizes/shores a heavy construction/RM structure based on incident needs		
4	Identify maximum height and load limits for shore		
5	Strategically breaches heavy construction/RM structural component(s) based on incident needs		
6	Correctly uses the FEMA victim marking system based on discovery		
7	Conducts a search of victims trapped within a heavy construction/RM structure		
8	Provides status reports during tactical operations		
9	All tasks were completed in a safe and controlled manner		
<b>Section 2: Victim Rescue</b>			
10	Ensures rescuers change into proper BSI once patient contact is made		
11	Assesses victim condition and entrapment mechanism		
12	Releases the victim from entrapment by structural debris/components		
13	Cribs and stabilizes throughout all lifting operations		
14	Packages victim(s) for removal from collapse area		
15	Safely removes victim from the collapse area to EMS		
16	Correctly uses the FEMA search and victim marking system based on discovery		
17	All tasks were completed in a safe and controlled manner		
Please indicate skill outcome		<b>PASS</b>	<b>FAIL</b>

**Evaluator Comments:** \_\_\_\_\_

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**Evaluator Signature:** \_\_\_\_\_

**Evaluator #** \_\_\_\_\_



# PENNSYLVANIA STATE FIRE ACADEMY

## STRUCTURAL COLLAPSE RESCUE TECHNICIAN SKILL STATIONS

STATION B – Structural Collapse Incident Command		Reference NFPA 1006 (2021 Edition), Chapter 6 Mandatory Station: JPRs 6.3.1, 6.3.2, 6.3.3, 6.3.4,	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

**Evaluator Note:** Evaluator NOTE: Teams will be made up of 10 personnel. Each person MUST perform the duties of one of the Essential Job Positions (EJP) – Either the IC or the SO. At the start of the evolution, each member of the team will choose one card from a deck of cards. Eight of those cards will say “Rescue Team Personnel,” one card will say “Incident Commander,” and one will say “Safety Officer.” Candidates will choose a card and that will be their assignment for the portion of the evolution. Each evolution will be broken into five sections. At each section change, the candidates who did not act as IC or SO will redraw cards from the deck. Candidates who have acted as the IC and SO will be assigned to the Rescue Team Personnel for the rest of the evolution. Card draws will occur at the following times: (1) Start of the evolution, (2) change from raker system to horizontal shore, (3) change from horizontal shore to vertical shore, (4) change from vertical shore to breaching operations, (5) change from breaching operation to patient care, removal and termination of the incident.

**Scenario Information:** The scenario for this evolution will be a collapsed heavy frame construction/RM structure. Teams will have to start the evolution by (1) building a raker system from the list above, then (2) build a horizontal shore to gain entry into the structure, (3) build a vertical shore from the list above, (4) breach light frame construction/URM building material in such a way as to be able to bring a patient through the breach, and (5), safely remove the patient from entrapment and move the patient out of the collapsed structure and terminate the incident. Candidates who are acting as IC and SO for their portion of the skill will be graded with Skill B and C respectively. The IC and the ISO must complete the required paperwork for their portion of the evolution.

**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 **All** tasks 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	Determines construction type		
7	Determines building occupancy type		
8	Determines collapse type/pattern		
9	Identifies potential hazards		
10	Hazard control objectives are prioritized		
11	Determines potential victim number, condition, and locations based on collapse type		

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STATION B – Structural Collapse Incident Command		Reference NFPA 1006 (2021 Edition), Chapter 6 Mandatory Station: JPRs 6.3.1, 6.3.2, 6.3.3, 6.3.4,	
Test Site	Test Date	Candidate #	Check the Test Type _____Initial _____Retest

No.	Tasks	Yes	No
12	Performs a risk/benefit analysis and evaluates rescue vs. recovery considerations		
13	Determines rescue objectives and options		
14	Identifies and requests additional needed resources		
15	Establishes a building evacuation signal/plan		
16	Identifies need for Rapid Intervention Crew/Team		
17	Completes initial IAP utilizing ICS 201 Form in collaboration with the ISO		
18	Conducts team briefing in collaboration with the ISO		
19	Terminates the incident		
20	Completes all tasks without compromising personal or team safety		
Please indicate skill outcome		<b>PASS</b>	<b>FAIL</b>

**Evaluator Comments:** \_\_\_\_\_

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**Evaluator Signature:** \_\_\_\_\_ **Evaluator #** \_\_\_\_\_



# PENNSYLVANIA STATE FIRE ACADEMY

## STRUCTURAL COLLAPSE RESCUE TECHNICIAN SKILL STATIONS

STATION C – Structural Collapse Safety Officer		Reference NFPA 1006 (2021 Edition), Chapter 6 Mandatory Station: JPRs 6.3.1, 6.3.2, 6.3.3, 6.3.4	
Test Site	Test Date	Candidate #	Check the Test Type _____Initial _____Retest

**Evaluator Note:** Evaluator NOTE: Teams will be made up of 10 personnel. Each person MUST perform the duties of one of the Essential Job Positions (EJP) – Either the IC or the SO. At the start of the evolution, each member of the team will choose one card from a deck of cards. Eight of those cards will say “Rescue Team Personnel,” one card will say “Incident Commander,” and one will say “Safety Officer.” Candidates will choose a card and that will be their assignment for the portion of the evolution. Each evolution will be broken into five sections. At each section change, the candidates who did not act as IC or SO will redraw cards from the deck. Candidates who have acted as the IC and SO will be assigned to the Rescue Team Personnel for the rest of the evolution. Card draws will occur at the following times: (1) Start of the evolution, (2) change from raker system to horizontal shore, (3) change from horizontal shore to vertical shore, (4) change from vertical shore to breaching operations, (5) change from breaching operation to patient care, removal and termination of the incident.

**Scenario Information:** The scenario for this evolution will be a collapsed heavy frame construction/RM structure. Teams will have to start the evolution by (1) building a raker system from the list above, then (2) build a horizontal shore to gain entry into the structure, (3) build a vertical shore from the list above, (4) breach light frame construction/URM building material in such a way as to be able to bring a patient through the breach, and (5), safely remove the patient from entrapment and move the patient out of the collapsed structure and terminate the incident. Candidates who are acting as IC and SO for their portion of the skill will be graded with Skill B and C respectively. The IC and the ISO must complete the required paperwork for their portion of the evolution.

**Directions:** The candidate will be given a part of the scenario to act as the safety officer. Using forms and tactical worksheets, the candidate will evaluate the situation and make changes as appropriate to ensure the safety of the members operating. In addition, will communicate with the IC to collaborate on any situation and safety changes to be made. A formal announcement will be made when the Safety officer changes.

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

No.	Tasks	Yes	No
1	Works within the Incident Command System		
2	Identifies any additional safety requirements or information needed from size-up		
3	Conduct safety briefing		
4	Briefs audible emergency alerting: Evacuate- 3 short blasts (1 second each), Cease operations- 1 Long blast (3 Second duration), Resume operations – 1 Long and 1 Short blast		
5	Identifies hazardous that can harm rescuers		
6	Limits accessibility by setting up control zones		
7	Ensures entry control points are established		
8	Ensures readiness of rapid intervention crew		
9	Identifies conditions that would require the incident to stop, alter, or suspend operations based on imminent threats/danger to responders		
10	Identifies secondary collapse potential		

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<b>STATION C – Structural Collapse Safety Officer</b>		<b>Reference NFPA 1006 (2021 Edition), Chapter 6 Mandatory Station: JPRs 6.3.1, 6.3.2, 6.3.3, 6.3.4</b>	
<b>Test Site</b>	<b>Test Date</b>	<b>Candidate #</b>	<b>Check the Test Type</b> ____ Initial ____ Retest

  

No.	Tasks	Yes	No
11	Ensures shoring is within design load and applicable standards		
12	Establishes a monitoring system to ensure structural stability throughout		
13	Ensures rescue team members continually check shoring for stability and makes adjustments for tightness and contact		
14	Ensures atmospheric monitoring is in place as applicable to the situation		
15	Monitors weather conditions		
16	Ensures proper respiratory protection is used based on the operation		
17	Ensures rehab area is set up and operating, and monitors work/rest cycles		
18	Ensures that RIT is in place and understands their duties		
19	Ensures face to face communication for relief		
20	All tasks were completed safely		
<b>Please indicate skill outcome</b>		<b>PASS</b>	<b>FAIL</b>

**Evaluator Comments:** \_\_\_\_\_

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**Evaluator Signature:** \_\_\_\_\_ **Evaluator #** \_\_\_\_\_



# PENNSYLVANIA STATE FIRE ACADEMY

## STRUCTURAL COLLAPSE RESCUE TECHNICIAN SKILL STATIONS

<b>STATION D – Heavy Object: Lift &amp; Move</b>		<b>Reference NFPA 1006 (2021 Edition), Chapter 6 Mandatory Station: JPRs 6.3.9, 6.3.10, 6.3.12</b>	
<b>Test Site</b>	<b>Test Date</b>	<b>Candidate #</b>	<b>Check the Test Type</b> ____ Initial ____ Retest

**Evaluator Note:** Station scenario will be lifting, cribbing, and moving a heavy object at a collapsed structure incident. Object will be moved utilizing an A-Frame horizontally along a path at least 10 feet in length. Then the object will be returned to the starting point.

**Directions:** Given a structural collapse rescue incident, structural collapse equipment, and a heavy object to lift, crib, and move, the candidate, working as a member of a team, will assess the task, identify incident hazards, estimate the objects weight, select and utilize required resources and equipment, develop and implement a plan to lift, crib, and move a heavy object, so that the object is safely lifted, cribbed throughout the lifting and moving maneuver, and controlled and stable during the move.

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

No.	Tasks	Yes	No
1	Identify resource needs and required equipment for the lifting maneuver		
2	Develop and implement a plan for lifting, cribbing, and moving a heavy object		
3	Estimates the weight of the object to be moved		
4	Object is lifted and moved in a safe and controlled manner		
5	Object is cribbed and stabilized as required		
6	Object is moved using an A-frame		
7	Object move speed and stability is maintained		
8	Object is safely positioned and secured at the designated resting site		
9	Assignment completed in a safe and controlled manner		
<b>Please indicate skill outcome</b>		<b>PASS</b>	<b>FAIL</b>

**Evaluator Comments:** \_\_\_\_\_

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**Evaluator Signature:** \_\_\_\_\_ **Evaluator #** \_\_\_\_\_





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## STRUCTURAL COLLAPSE RESCUE TECHNICIAN SKILL STATIONS

STATION E – Heavy Equipment Coordination		Reference NFPA 1006 (2021 Edition), Chapter 6 Mandatory Station: JPRs 6.3.15	
Test Site	Test Date	Candidate #	Check the Test Type _____Initial _____Retest

**Evaluator Note:** Station scenario will focus on coordination of heavy equipment with an operator for the purpose of moving debris.

**Directions:** Given structural collapse rescue PPE, collapse rescue equipment, and heavy construction debris, the candidate will pin/rig heavy construction debris and coordinate with the operator to strategically move debris in a specified direction, so that the debris is rigged to avoid dropped objects, the rescuer effectively signals the operator on lifting and moving maneuvers and direction, and safe lifting considerations are considered.

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

No.	Tasks	Yes	No
1	Reviews signals with heavy equipment operator		
2	Inspects lifting straps/cables/chains prior to lifting		
3	Inspects lifting hardware/shackles		
4	Debris is identified and load calculations performed		
5	Pins/rigs debris to be lifted and moved		
6	Signals the operator for lifting and moving maneuvers		
7	Rigging did not allow objects to be dropped		
8	Debris was safely moved to designated resting area		
9	Rigging is removed from load and returned to a state of readiness		
10	All maneuvers were completed in a safe and controlled manner		
Please indicate skill outcome		<b>PASS</b>	<b>FAIL</b>

**Evaluator Comments:** \_\_\_\_\_

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**Evaluator Signature:** \_\_\_\_\_ **Evaluator #** \_\_\_\_\_



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## STRUCTURAL COLLAPSE RESCUE TECHNICIAN SKILL STATIONS

STATION F – Cut Structural Steel		Reference NFPA 1006 (2021 Edition), Chapter 6 Mandatory Station: JPRs 6.3.14	
Test Site	Test Date	Candidate #	Check the Test Type _____Initial _____Retest

**Directions:** Given structural collapse rescue PPE, collapse rescue equipment, cutting torch, and structural steel to cut, the candidate will inspect the cutting torch and components, assemble, don cutting and burning PPE, cut structural steel in a controlled manner while stabilizing heavy loads, protecting the victim and rescuer, fire control measures are in place, and the objective is accomplished. Do you have any questions?

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

No.	Tasks	Yes	No
1	Selects and utilizes PPE for cutting and burning operations		
2	Inspect all portions of cutting torches		
3	Cutting torches assembled correctly		
4	Adequate ventilation is provided		
5	Cylinder stored upright		
6	Startup procedures for torches is followed		
7	Structural steel is efficiently cut in a smooth and steady manner		
8	Tip is not touched to the molten steel		
9	Victim and rescuer are protected from cutting operation		
10	Fire control measures are in place		
11	Structural steel is controlled in the cutting process		
12	Torch is turned off correctly		
13	Disassemble and stow the torch correctly		
Please indicate skill outcome		<b>PASS</b>	<b>FAIL</b>

**Evaluator Comments:** \_\_\_\_\_

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**Evaluator Signature:** \_\_\_\_\_ **Evaluator #** \_\_\_\_\_