Division 12 October 2024 - TRT Drill

Host: Bloomingdale FPD

Date(S): February 10^{th (Red)}, 11^{th (Gold),} 12^{th (Black)}

Time: 0900-1200

Topic: Structural Collapse



Description:

Bloomingdale is hosting structural collapse training focusing reinforced concrete and heavy steal. We will be cutting, breaching and breaking. We will also be doing lift outs and stich cutting of the reinforced concrete and weight calculations of the different materials.

Contact:

Matt Smith – Bloomingdale Fire Contact - (630) 885-2365

Location: Station 22 6N480 Keeney Rd, Keeneyville IL

OSMF JPR Objectives See attached

Apparatus Needed - Structural collapse resources/ division assets, cribbing.

Scheduling Notes:

- 1) TRT training is typically the second Monday, Tuesday, and Wednesday of each month or as modified to address potential or known conflicts in advance.
- 2) The location for the training, when indicated as TBD/ Regional, permits multiple training sessions to occur on the same date and the same topic, however, at a location that better accommodates TRT team members. Locations will be finalized one month prior to the training date.

Lesson Title: Collapse Rescue

Level of Instruction: Technician **Method of Instruction:** Hands on **Learning Objective**: Structural Collapse

References: FEMA FOG; OSFM Structural collapse; Jones & Bartlett Technical Rescue

Location: 6n480 Keeney Rd.

Time / dates: February 10th, 11th, and 12th – 0900-1200

Instructor: Matt Smith (Bloomingdale)

Materials Needed: TRT trailer 49 and necessary equipment.

Safety Hazards / Identification: During the training, you will be participating with heavy structural members. To ensure your safety while working on or around the training site, it is mandatory to wear safety equipment. This includes a helmet, safety glasses, work gloves, N95 mask if breeching, and hearing protection if required for the task at hand.

Step #1 Lesson Preparation:

Students will go through stations to practice skills in the following areas

- Overview the site safety requirements and the necessity of wearing appropriate PPE.
- Weight calculations of concrete
- Breaching and breaking reinforced concrete.
- Discuss the potential of hazards involved in breaking reinforced concrete and moving large blocks and heavy weights.
- Stitch cutting and lift outs of concrete.
- Cutting metal
- Structural assessment
- Assign a safety officer position to mitigate risk of rescuer injury.
- Provide for the safety of all persons operating within the designated training facility.

Step #2 Presentation:

The instructor will discuss the US&R Structures FOG manual procedures for the purpose and application of a structural tie back.

- Students will discuss load path
- Instructor will discuss the significance of accurate calculations of weight and methods to move heavy weights

Step #4 Evaluation: SWBAT (Student will be able to) successfully demonstrate the abovementioned skills. The instructor shall complete a Target Solutions assignment acknowledging that all participants have completed the skills reviewed.

Step # 3 Application:

See attached OSFM objectives.

OSFM Objectives – Select all that apply		
	Rope Operations	
	6.1.01 Direct a team	
	6.1.02 Direct a lowering operation	
	6.1.03 Construct a multiple-point anchor system	
	6.1.04 Construct a compound rope mechanical advantage system	
	6.1.05 Construct a fixed rope system	
	6.1.06 Direct the operation of a compound rope mechanical advantage system	
	6.1.07 Ascend a fixed rope in a high-angle environment	
	6.1.08 Descend a fixed rope in a high-angle environment	
	Rope Technician	
	6.2.01 Complete an assignment	
	6.2.02 Manage the movement of the victim	
	6.2.03 Function as a litter tender	
	6.2.04 Direct a team (victim removal)	
	6.2.05 Direct a team (highline construction)	
	6.2.06 Direct a team (highline operation)	
	6.2.07 Access a victim	
	6.2.08 Isolate and manage potentially harmful energy sources	
	Confined Space Operations	

	7.2.01 Initiate a Search Inside a Confined Space in those Areas Immediately Visible
	7.2.02 Perform Size-up of a Confined Space
	7.2.03 Conduct Monitoring of the Environment
	7.2.04 Assess the Incident
	7.2.05 Control Hazards
	7.2.06 Apply and Use Self-Contained Breathing Apparatus (SCBA) as a Rescue Entrant
	7.2.07 Apply and Atmospheric Respirator to a Victim
	7.2.08 Perform Full Spinal Immobilization of a Victim Inside a Confined Space
	7.2.09 Prepare for Entry into Horizontally Oriented Confined Space
	7.2.10 Enter a Horizontally Oriented Confined Space for Rescue
$ \Box$	7.2.11 Package a Victim in a Liter for Removal from a Horizontally Oriented Confined
Ш	Space
	7.2.12 Assemble a Portable Anchor System for Application of a High Point of
	Attachment
Ш	7.2.13 Prepare for Entry into Vertically Oriented Confined Space
	7.2.14 Enter a Vertically Oriented Confined Space for Rescue
П	7.2.15 Package a victim in a litter for removal from a horizontally oriented confined
	space
	7.2.16 Access and Rapidly Remove a Victim from a Vertically Oriented Confined Space
Щ	7.2.17 Remove Entrants from a Confined Space
	7.2.18 Terminate a Technical Rescue Operation
	Confined Space Technician
Щ	7.3.1 Initiate a Search Inside a Confined Space in those Areas Not Immediately Visible
Щ	7.3.2 Pre-Plan a Confined Space Incident
Щ	7.3.3 Apply and Use Supplied-Air Respirators (SARs) as a Rescue Entrant
	7.3.4 Perform a Short Spinal Immobilization of a Victim Inside a Confined Space
Щ	7.3.5 Prepare for Entry into the Confined Space with a Hazardous Atmosphere
	7.3.6 Enter a Confined Space with Atmospheric Hazards
	Trench Operations
	8.1.01 Conduct a size-up
	8.1.02 Implement a trench emergency action plan
Щ	8.1.03 Implement support operations
	8.1.04 Support a nonintersecting straight wall trench
Щ	8.1.05 Terminate a technical rescue operation
Щ	8.1.06 Remove a victim from a trench
	8.1.07 Disassemble support systems
<u> </u>	Trench Technician
Ш	8.2.01 Support an intersecting trench as a member of a team
	8.2.02 Install supplemental sheeting and shoring for each two feet of depth below a
	shoring system
Ш	8.2.03 Construct load stabilization systems

	8.2.04 Lift a load
	8.2.05 Coordinate the use of heavy equipment
	8.2.06 Release a victim from entrapment by components of a collapsed trench
	Structural Collapse Operations
	6.2.01 Conduct a size-up of a light frame or unreinforced masonry (URM) collapsed
	structure
	6.2.02 Determine potential victim locations in light frame and URM construction collapse
Ш	incidents
	6.2.03 Develop a collapse incident action plan
	6.2.04 Implement a collapse rescue incident action plan
	6.2.05 Search a light frame and URM constructed collapsed structure
	6.2.06 Stabilize a collapsed light frame and URM construction structure
	6.2.07 Release a victim from entrapment
	6.2.08 Remove a victim from a light frame and URM construction collapse incident
	6.2.09 Lift a heavy load as a team member
	6.2.10 Move a heavy load as a team member
	6.2.11 Breach light frame and URM construction structural components
	6.2.12 Construct cribbing systems
\boxtimes	6.2.13 Inspect and maintain hazard-specific PPE
\boxtimes	6.2.14 Inspect and maintain rescue equipment
\boxtimes	6.2.15 Terminate an incident
	Structural Collapse Technician
	6.3.01 Conduct a size-up of a collapsed heavy construction-type structure
	6.3.02 Determine potential victim locations in a heavy construction-type incident
	6.3.03 Develop a collapse rescue incident action plan
	6.3.04 Implement a collapse rescue incident action plan
	6.3.05 Search a heavy construction type collapsed structure
\boxtimes	6.3.06 Stabilize a collapsed heavy construction type structure as a member of a team
	6.3.07 Release a victim from entrapment by components of a heavy construction type
	collapse
Щ	6.3.08 Remove a victim from a heavy construction type collapse incident
\boxtimes	6.3.09 Lift a heavy load as a team member
	6.3.10 Move a heavy load as a team member
	6.3.11 Breach heavy structural components
	6.3.12 Construct cribbing systems
\boxtimes	6.3.13 Stabilize a collapsed heavy construction type structure as a member of a team
	6.3.14 Cut through structural steel
	6.3.15 Coordinate the use of heavy equipment
	Vehicle Machinery Technician (VMT)
Ш	08.3.1 Create an Incident Action Plan for a Commercial or Heavy Vehicle
	08.3.2 Stabilize Commercial / Heavy Vehicle

08.3.3 Determine the Heavy Vehicle Access & Egress Points
08.3.4 Create Access and Egress Points for Heavy Vehicle
08.3.5 Disentangle Victim(s)
08.3.6 Isolate and Mitigate Potentially Harmful Energy Sources
12.3.1 Plan for a large machinery incident
12.3.2 Stabilize large machinery
12.3.3 Determine large machinery access and egress points
12.3.4 Create access and egress openings for rescue from large machi
12.3.5 Disentangle victim(s)