Student Information

Name:

Date of Birth:

Home Address:

City, State, Zip:

Home Phone Number:

Email Address:

Organizational Information

Department:

Department Address:

City, State, Zip:

Phone Number:

Contact Person (T.O. or Chief):

Date Started:

Date Completed:

☐ Successful completion of 48 hours (3 classes) of Trench Rescue Technician

1st Class Completion Date: _____
(Copy of Certificate must be attached)
2nd Class Completion Date: _____
(Copy of Certificate must be attached)
3rd Class Completion Date: _____
(Copy of Certificate must be attached)

☐ Successful completion of Instructor I

Date Completed: _____
(Copy of Certificate must be attached)

☐ Successful completion of Trench Rescue Technician T-t-T Task Book

Date Completed: _____

Task Verification

I _____ verify that I have performed all tasks to the mastery level. I am able to complete the tasks without assistance and without error.

Student Signature:

Coordinator Verification

I verify that all tasks have been performed by the instructor to the mastery level. The instructor is able to complete the tasks without assistance and without error.

Coordinator Signature:

This task book has been developed by Oklahoma Fire Service Training for the use with the evaluation and qualification of trench rescue instructors. The task book is used with new instructors wishing to teach Trench Rescue Technician. The skills in the task book correspond to the essential duties and tasks outlined in NFPA 1006 Chapter 5 and Chapter 11 and the OFST Confined Space Rescue Technician program.

Evaluation and confirmation of the students performance is generally accomplished by the program coordinator or lead instructor. The evaluation occurs during classroom instruction, drill ground skills training, student evaluation, or class administrative duties.

It is imperative that all performance be critically evaluated and accurately recorded by the evaluator. All tasks must be performed at the mastery level to demonstrate competence with the task. Mastery requires the student to be able to perform the task with 100% accuracy without coaching or supervision. The task must be performed without hesitation. In other words, when the evaluator initials a task he/she is verifying that he/she directly observed the performance of the task and the student can perform the task without supervision during routine instructional duties.

The responsibilities associated with the task book for the student, lead instructor, and rescue coordinator are summarized below.

The student is responsible for:

- ✓ Contact OFST to notify the Coordinator that you will be attending the class
- ✓ Reviewing and understanding the instructions in the task book,
- ✓ Seeking assistance from the program coordinator, or lead instructor when necessary,
- ✓ Dedicating adequate practice time necessary to master all tasks,
- ✓ And assuring the tasks are completed by the due date.

The program coordinator/lead instructor is responsible for:

- ✓ Ensuring the student understands all the requirements of the Train-the-Trainer,
- ✓ Objectively evaluating the student on each task to determine if mastery of the task has been achieved.
- ✓ Scheduling time to evaluate the performance of the student,
- ✓ Identifying any areas of deficient performance and coaching the student in those areas,
- ✓ Discussing any identified problem areas with the program coordinator and developing a solution,
- ✓ Initialing each task as it is successfully completed by the student,
- ✓ And signing the verification statement when all tasks have been successfully demonstrated by the student.

The program coordinator is responsible for:

- ✓ Reviewing the task book with the student,
- ✓ Cooperating with the lead instructor to ensure all tasks have been properly evaluated.
- ✓ Identifying any additional training needed by the student,
- ✓ Signing the verification statement when all tasks have been successfully demonstrated by the student,

Who can Sign off for credit of completion for each skill?

- ✓ Person must be a certified Oklahoma Fire Service Training Instructor.
  see attached Current Instructor List

Administrative		
Task	Date Completed	Evaluator's Initials
Completes and submits a Course Authorization form for training course ▪ All information provided ▪ Signature provided		
Submits form 10s for training class ▪ One form for each department ▪ Original receipts attached ▪ Form is signed ▪ All information provided		
Prepares for delivery of class ▪ All equipment and materials are identified and obtained ▪ Lesson plan reviewed ▪ Safety issues identified and addressed		
Instruction		
Sets up learning environment for class ▪ Seating identified ▪ Audiovisual equipment placed ▪ Safety issues addressed		
Delivers lesson to class ▪ Instructional methods are appropriate for audience and content ▪ Lesson plan followed ▪ Conclusion provided		
Answers student questions ▪ Question is clarified ▪ Student affirmed ▪ Answer provided		
Facilitates practical skills ▪ Purpose of skill explained ▪ Skill demonstrated ▪ Feedback provided during practice		
Evaluates student learning with written tests ▪ Instructions explained ▪ Directions followed ▪ Security maintained		
Surveys drill ground for hazards ▪ Hazards identified ▪ Hazards corrected ▪ Students briefed on safety issues		

▪ Safety officer identified if appropriate		
Demonstrates confidence and competence with subject matter		
Technical Knowledge		
Knowledge of NFPA 1006 (2003 ed.) Rescue Technician Professional Qualifications		
Knowledge of NFPA 1670 (2004 ed.) Operations and Training on Technical Search and Rescue Incidents		
Knowledge of NFPA 1983 (2006 ed.) Life Safety Rope and Equipment for Emergency Services		
Knowledge of OSHA 29 CFR 1926 Subpart P Excavations		
Define the term technical rescue as it applies to the big three		
Discuss the rescue training cycle as it pertains to specialized operations		
Identify the four service levels associated with all technical rescue operations		
Describe the theory of risk/benefit as it applies to trench rescue		
Determine the difference between a rescue and a recovery		
Understand the F.A.I.L.U.R.E. acronym as it applies to specialized rescue operations		
Discuss the advantages and disadvantages of being self sufficient, community dependent, or regional trench rescue team		
Determine the most advantageous physical and mental characteristics of potential trench team members		
Explain the T.E.A.M. acronym as it applies to trench rescue		
Describe the weight, size, and characteristics of the equipment used in trench rescue		
Understand the need for choosing the most appropriate method to move and store trench rescue equipment		
Explain the advantages and disadvantages of each type of trench apparatus		
Describe the conditions that require compliance with the Excavation Standard, and the emergency service organization's relationship with ASHA pertaining to trench collapse operations.		
Describe the history of the OSHA Standard on Excavations and explain how the current standard is performance based		
Provide an understanding of OSHA's Standard on Excavations, its enforcement role, and subsequent relationship with emergency service organizations		
Explain the reasons for non-compliance with the trench standard based on cost and installation of traditional		

sheeting and shoring		
Discuss trench injury and fatality statistics as they compare to other areas of construction		
Recall from memory trench terminology as identified in the excavation standard		
Explain how cost and demographics play a role in non-compliance		
Describe a way in which machines and rigging can fail and create emergencies at a trench site		
Discuss the potential problems that can occur from below grade atmospheric hazards		
Explain the various components of an Incident Management System for trench emergencies		
Describe the various IMS support functions and their importance to successful trench operations		
Explain how gravity plays a key role in trench failure		
Describe the term “unconfined Compressive Strength” as it applies to trenches and excavations		
Define the terms active and passive soils		
Summarize the effects of water as they apply to soil strength		
Describe how the weight of most soils can be determined mathematically		
Explain how the cubic weight of soil leads to trench failure		
Summarize the most dangerous portion of a un-shored trench, and how a properly shored trench transfers potential energy		
Explain the effects of water as a factor that can lead to a trench collapse		
Describe the consequences that varying soil profiles and previously disturbed soils can have on open trenches		
List some of the causes of potential vibration that can lead to a trench collapse		
Discuss the spoil pile and its relationship to collapse potential		
Describe the difference between a spoil pile slide, slough failure, shear wall collapse, toe failure, wedge failure, and rotational failure		
Describe the four classifications of soil		
Explain the parameters that lead to individual classifications		
Describe the various methods used to perform visual and manual testing		
Explain the proper use of penetrometer, shearvane, and torvane soil testing instruments		
Discuss the advantages and disadvantages of firefighting “turnout” gear, jumpsuits, and regular long sleeve pants and shirts for trench rescue		

Explain the pros and cons of various types of hand protection		
Describe the preferred helmet for trench rescue operations		
Determine the correct type and use of eye protection		
Recite the preferred level of foot and ankle protection for the trench environment		
Describe the specialty equipment that may be required during a trench rescue		
Summarize the benefits of developing a team culture that maintains safety as a top priority		
Explain the use of ground pads fro trench rescue		
Describe how sheeting is used in trench rescue		
Describe how sheeting is used in trench protective systems.		
Identify the various types of shores used in trench rescue and how each works		
Describe the various types of tools used in trench rescue operations		
Explain the use of various trench rescue tools utilized in collapse		
Describe the use and application of high-pressure air bags for trench operations		
Describe the use and application of low-pressure air bags for trench operations		
List the advantages and disadvantages of high and low-pressure air bags		
Specify a method for determining high and low-pressure air bag lifting capacities		
Explain the construction features of high and low-pressure air bags		
Describe the proper procedure for using cribbing to provide stabilization during lifting operations		
Identify those factors that would be pertinent in formulating a trench emergency pal before arriving on the scene		
Describe the appropriate questions to ask about the event after arrival at the scene		
Explain factors to be considered during the incident		
Summarize the steps to consider when looking for buried victims		
Describe the various types of hazards that can be found at a trench rescue		
Identify the five hazard control categories		
Explain the phases of hazard control at a trench emergency		
Describe the two types of situations presented to a rescuer at a trench collapse		
Explain the methods that can be used to uncover trapped or		

buried victims		
Specify the rules to follow when digging for a trapped or covered victim		
Explain the proper use of sheeting for trench rescue operations		
Describe the proper use of shores for trench protective systems		
Describe the techniques for using isolation tunneling for victims trapped in running debris		
Explain the use of shaft tunnels to reach buried victims from remote locations		
Specify the procedures for building a Class C protective system		
Describe the various methods contractors use to stabilize trenches and excavations		
Explain the different components and materials used by contractors to shore a trench		
Explain the consideration for trench victim packaging		
Describe the techniques for victim removal		
Specify the techniques for victim removal		
Specify the various victim packaging equipment utilized n trench rescue operations		
Explain why the termination process can be the most dangerous phase of the operation		
Specify the order in which the trench is dismantled		
Describe the importance of proper clean-up procedures after a trench rescue operation		
Summarize the conditions that may lead to critical incident stress debriefing for your personnel		
List the considerations that apply to trench rescues		
Explain the procedures used for constructing a protective system in Straight Wall, Single Wall Slough, “T”, “L”, and Deep Wall trenches		
Describe various scenarios in which a rescuer could be confronted with an atmospheric problem at a trench rescue		
Recite the definition of a permit required confined space		
Understand the definitions that apply to atmospheric monitoring		
Specify the various action guidelines as they apply to oxygen, flammability, and toxicity		
Summarize the nine rules of atmospheric monitoring at a trench rescue		
Describe the use of ventilation as a hazard control option		

Upon Successful completion of Confined Space Rescue Technician Train-the-Trainer Task Book, Contact:

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