Utah Fire Service Certification System

TECHNICAL RESCUE CONFINED SPACE RESCUE



CERTIFICATION STANDARD

Approved May 17, 2023

Utah Fire Service Certification Council

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Confined Space Rescue Technical Committee

The Certification Council would like to recognize and extend a voice of appreciation to the following fire service professionals for their work on the Confined Space Rescue certification standard. These individuals devoted many hours to reviewing the National Fire Protection Association (NFPA) 1006 standard, certification test banks, and curriculum textbooks to develop the wording for the skills for each discipline within this standard.

Thank you.

Confined Space Rescue Committee

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Table of Contents

| Introduction | 1 |
|--|------------|
| Technical Rescue Certification Requirements | 2 |
| Entrance Requirements | 2 |
| Physical Fitness Requirements | |
| Department Training Officers | |
| Department Training Officers | |
| Department Training | |
| Written Objectives | |
| Skill Objectives | |
| Department Training Records | |
| Department In-House Skills Examination | |
| Certification Examinations | 5 |
| Written Examinations | |
| Skills Spot Check Examinations | 6 |
| | |
| Technical Rescue Certification | |
| Prerequisites for Confined Space Rescue Certification | |
| Recertification for Technician Levels | 7 |
| Technical Rescue Certification Checklist | |
| Section I. Confined Space Rescue - Awareness | |
| Confined Space Rescue - Awareness Skills | |
| Confined Space Rescue - Awareness Evolution | |
| Confined Space Rescue - Awareness Training Record | |
| Section II. Confined Space Rescue - Operations | |
| Confined Space Rescue - Operations Skill Objectives | 16 |
| Confined Space Rescue - Operations Skin Objectives | |
| Confined Space Rescue - Operations Evolutions | |
| Commed Space Rescue - Operations Training Record | |
| Section III. Confined Space Rescue - Technician | |
| Confined Space Rescue - Technician Skill Objectives | |
| Confined Space Rescue - Technician Evolutions | |
| Confined Space Rescue - Technician Training Record | |
| | |
| Appendix A. | • • |
| Confined Space Photo Example | |
| Appendix B. In-House Proctor Instructions | |
| Proctor Instructions for In-House Comprehensive Examination | |
| Appendix C. Certification Forms | <i>A</i> 1 |
| representation of the second s | ····· |

INTRODUCTION

The Utah Fire & Rescue Academy (UFRA) has evolved into a dynamic organization that provides fire and emergency service related training, professional accredited certification, and resource assistance. The Utah Fire Service Certification System (UFSCS) has been administered by UFRA since the system's inception in the early 1980s. The governing body for the firefighter certification system in the state of Utah is the Utah Fire Service Certification Council (UFSCC). The members of the council represent various areas of the state as well as a variety of department types.

The entire system is based on international professional job performance standards from NFPA and NWCG. Fire service training must be utilized to its maximum potential. Any overlap, fragmentation, and lack of basic structure must be eliminated. Standardization is the natural complement and necessity. Through these national standards and certification, firefighters and fire departments have a tool to measure specific levels of skills, abilities, and knowledge. Testing takes place all over the state of Utah and is usually scheduled by fire department training officers for members of one or more local agencies to test at their own facilities using their own equipment.

The Utah Fire Service Certification System (UFSCS) creates uniformity by certification. Certification allows a fire service professional to be a part of the National Registry (Pro Board and IFSAC), which verifies that a person has been trained at a national standard. Firefighters, hazardous materials responders, and rescue personnel can earn various certifications. Volunteer, part-time, and career firefighters must all meet the same standard to certify. Most fire departments in Utah have certified personnel even though there is no law requiring it. The UFSCC believes that by participating in this certification program firefighters and fire departments will be better prepared to provide safety and fire protection for their communities.

"Certification from an accredited entity is a statement of success, an indisputable mark of performance belonging to individual fire service professionals. Each successful candidate for certification from an accredited entity knows that he or she has been measured against peers and meets rigorous national standards. Certification affords the individual a uniformity and portability of qualifications. In addition, the creditability of an organization is enhanced by having members certified to national consensus standards. "—theproboard.org

IFSAC "provides accreditation to entities that certify the competency of and issue certificates to individuals who pass examinations based on National Fire Protection Association (NFPA) fire service professional qualifications and other standards approved by the Assembly." —IFSAC.org

The following certification requirements are based on the objectives listed in Chapter 7, "Confined Space Rescue," in NFPA 1006, *Standard for Technical Rescue Personnel Professional Qualifications* (National Fire Protection Association, 2021), as verified and adopted by the Utah Fire Service Certification Council (UFSCC).

TECHNICAL RESCUE CERTIFICATION REQUIREMENTS

Entrance Requirements

Certification at the Technical Rescue – Confined Space Rescue: Awareness, Operations, or Technician levels is a unique process. Because of the method and manner in which NFPA has established to become certified, candidates must complete the prerequisites and/or requirements for any of the specialty areas as set forth in Chapter 7 of NFPA 1006 (2021). In order to certify at the Technical Rescue – Confined Space Rescue: Awareness, Operations or Technician levels, candidates must fulfill the following requirements:

- 1. Complete entrance requirements.
- 2. Set up and maintain department records.
- 3. Train on the required written and practical objectives in the specialty areas outlined in Chapter 7, "Confined Space Rescue."
- 4. Pass an in-house practical skills examination for each specialty area.
- 5. Meet any other training requirements/prerequisites as defined by the Certification Council.
- 6. Pass both written and practical skills examinations administered by the Certification Council.
- 7. Request Technical Rescue Certification for each specialty area completed.
- 8. Request recertification at the end of each 3-year certification period.

Physical Fitness Requirements

The UFSCC acknowledges the importance of and need for physical fitness requirements as listed in NFPA 1006. Many agencies and departments have existing policies, regulations, etc. already in place regarding these requirements. The handling of physical fitness requirements is a **LOCAL MATTER**, outside the authority and jurisdiction of the UFSCC. The Council will not check, test, evaluate, or determine how individual agencies meet these requirements. Some departments have found it necessary to waive any type of physical fitness requirements due to their own special needs. As a local decision, this is permitted. However, due to the amount of physical, mental, and emotional stress inherent in this profession, <u>the Utah Fire Service Certification Council strongly recommends careful evaluation before altering or doing away with any existing physical fitness requirements.</u>

"All technical rescue activities should be carried out in the safest possible manner, including the consideration that all risks taken are to benefit the operation. Technical rescue skills require a high degree of physical activity, coordination, operational planning, and a strong knowledge of all applicable protocols" (NFPA 1006, 1.3.9).

Here are the entrance requirements outlined in NFPA 1006 (1.3.9, A.1.3.9):

- 1. Meet the minimum educational requirements established by the authority having jurisdiction.
- 2. The Utah Fire Service Certification Council Policy 11.3 requires that a candidate must be at least 18 years of age to test and be certified.
- 3. Meet the medical requirements of NFPA 1582, *Standard on Comprehensive Occupational Medical Program for Fire Departments*, 2022 edition, as determined by the medical authority of the AHJ.
- 4. Technical rescue operations involve activities that pose great physical and mental challenges requiring the rescuer to perform challenging physical activities in a high-stress environment. Physical fitness requirements for entry-level personnel should be developed and validated by the authority having jurisdiction. Physical fitness requirements should be in compliance with applicable Equal Employment Opportunity regulations and other legal requirements.
- 5. Prior to beginning training as technical rescue personnel, a minimum medical training

requirement should be met.

- 6. People having the potential for encountering hazardous materials on an incident scene should be trained to recognize the hazard and to implement exposure and control methods.
- 7. Meet psychological support/education requirements established by the authority having jurisdiction.

Department Training Officers

For a department to enroll in the certification process, it is necessary for the department to assign training officers. Departments who **do not** have certified personnel to act as training officers for certification training should contact the Utah Fire & Rescue Academy at (801) 863-7709 for assistance in setting up and monitoring certification training.

Department training instructors shall be certified at the level they are teaching. In addition, the Certification Council strongly recommends that training officers and instructors be state certified at the Instructor I level.

Department training officers or instructors will be responsible for certification training. Their primary responsibility will be to teach, evaluate, and in-house test department personnel on the skill and evolution requirements for each level of certification training.

The final entrance requirement is to complete the **Intent to Participate** form provided in Appendix C and return it to the Certification Council. Remember, participation in the certification process is **VOLUNTARY**. Once you have enrolled, you can withdraw if desired.

If a department is already participating in the Utah Fire Service Certification System, it will not be necessary to file another Intent to Participate form.

DEPARTMENT TRAINING

The position of a Confined Space Rescuer is one that requires a high level of skill and knowledge. The training that is given to and received by the candidate should be of the highest quality and degree. All training received must meet the requirements of NFPA 1006 (2021), including the sections regarding technical specialty areas contained in Chapter 7, and cover the skills approved by the UFSCC contained in this Utah certification standard. All training received must be documented and recorded in the Training Record. All testing for Confined Space Rescue will be conducted following the Policies and Procedures of the UFSCC.

Training for Confined Space Rescue can be obtained by completing one of the following training courses or methods in order to qualify to take the state certification examination.

- 1. A Confined Space Rescue course which meets the requirements of NFPA 1006 (2021), Chapter 7. A Training Record, as given in this standard, must be completed for each person.
- 2. Department-Based Training. Departments can create their own Confined Space Rescue course which meets the requirements in NFPA 1006 (2021), Chapter 7. A Training Record, as given in this standard, must be completed for each person involved in the department-based training.

To prepare the candidate to successfully pass the state certification examination, the course material should be based on NFPA 1006 (2021) and the *Confined Space Rescue Technician Manual, revised* 2nd edition (CMC Rescue, Inc., 2017).

Written Objectives

Written objectives for Confined Space Rescue are covered in:

- Chapter 7, "Confined Space Rescue," in NFPA 1006 (2021)
- CMC, Confined Space Entry and Rescue, Revised 2nd edition (2017).

These resources are available from various fire service bookstores or on the Internet. A list of current resources is available online at uvu.edu/ufra.

There are numerous methods departments have used to help prepare their personnel for the written examination. Considering the high level of skill and knowledge that is required of a Confined Space Rescuer, the Council recommends that the candidate participate in a comprehensive course and receive instruction on both skills and written requirements.

Skill Objectives

Each participant <u>must</u> be trained and evaluated in the performance of <u>all</u> skills as found in this Utah certification standard. Each of the skill objectives shall be completed swiftly, safely, and with competence as defined below:

- Swiftly. Each skill objective must be completed within the allotted time.
- **Safely.** Each skill objective must be completed safely. Conduct that could injure an individual or damage equipment is unacceptable. Equipment should be checked prior to skill testing or training to see that it is safe and functional.
- With Competence. Each skill objective must be performed in accordance with this Utah certification standard. This includes performing the proper steps in sequence. Competence will be measured in accordance with the UFSCS skill objectives.

Department Training Records

Each candidate shall have a current, accurate, and complete Training Record on file with the department which indicates that they have been trained on all skill objectives. **The Training Record must be completed in its entirety in order to test.** Training Records may be completed on a computer or by hand. Departments may set up their own Training Records, use the one provided in this standard, or use the fillable Training Record found online on UFRA's website. If a department chooses to set up their own Training Record, it must meet the following requirements:

- 1. Indicate the certification level and its corresponding NFPA standard number and edition.
- 2. Include a signature line for the candidate, which attests that all skills have been trained on and a complete in-house comprehensive exam was administered and passed.
- 3. Include a signature line for the Chief/Training Officer, which attests that the candidate has been trained on all skills and a complete in-house comprehensive exam was administered and passed.
- 4. Include a line to record the date the Training Record was completed.
- 5. List all the skills from this Utah certification standard for this level. Include columns indicating the date of trainings, training instructors, the date of exams, exam instructors, and whether the candidate passed each exam (see the Training Records in this standard).

Department In-House Skills Examination

At the completion of the department's skills training, the department is required to hold an in-house skills examination for the level being trained. This is a comprehensive in-house skills test conducted by the department training officers. This test is to ensure that skill mastery has been maintained from the beginning to the end of the training process, and to prepare candidates for the state examination. Training officers may utilize other personnel to assist in administering the exam; however, they must be certified at the level they are in-house testing.

Proctor instructions for the examination are in Appendix B in this standard. In-house testers shall follow the proctor instruction sheet to provide uniformity and fairness during the exam. It is recommended that candidates be given two attempts at any skill. If they fail on the second try, then they have failed the evaluation and are required to go through additional training by the department trainer. No training, teaching, or coaching is allowed during the test. After the evaluation, using the test to teach and train is recommended.

If skill weaknesses are evident, the department should conduct additional training and hold a new department in-house skills examination to ensure their personnel have fully mastered all required skills. Only those individuals who successfully pass the department skills test will be allowed to participate in the Certification Council's skills spot check examination. Department records must show that all candidates have successfully passed the in-house exam.

CERTIFICATION EXAMINATIONS

After completion of the training process, the Chief/Administrator can request testing for the candidate using the Examination Request form in Appendix C. The candidate will then have three attempts to pass the written examination. A separate request must be sent to the Certification Office for each attempt. Request forms must reach the Certification Office no later than 30 days prior to the examination date. The entire examination process must be completed within one year of the first written exam date.

Written Examinations

The written examination is a randomly generated test covering the written objectives of NFPA 1006 (2021), Chapter 7.

| Chapter 7 Certification Level | # of Questions |
|------------------------------------|----------------|
| Confined Space Rescue - Awareness | 20 |
| Confined Space Rescue - Operations | 30 |
| Confined Space Rescue - Technician | 30 |

A minimum score of 70% is required to pass the certification exam. Firefighters failing the first attempt of the written exam will be permitted to retest no sooner than 30 days from the date of the last exam. Three attempts are allowed to pass the exam. If a candidate fails the written examination three times, they have failed the certification process and must wait one year from the date of the last failed exam before reentering testing. Exam results are forwarded to the Chief/Administrator within 30 days following the receipt of the completed exam.

Skills Spot Check Examinations

This is a two-step examination. The first step is a department records check and the second is the skills spot check examination. A Certification tester appointed by the Utah Fire Service Certification Council conducts the examination.

Training records are checked. If records are inadequate, corrective action must be taken before proceeding to the next step. The records must meet minimum requirements and are checked for the following:

- 1. Candidate has been trained in each skill for the level being evaluated.
- 2. A department training officer has signed off each skill.
- 3. Each candidate has passed a department in-house skills examination.

The skills spot check examination is graded on a 100% pass/fail basis. The test is graded in the following three areas:

- Swiftly. Each skill objective must be completed within the allotted time.
- **Safely.** Each skill objective must be completed safely. Conduct that could injure an individual or damage equipment is unacceptable. Equipment should be checked prior to skill testing or training to see that it is safe and functional.
- With Competence. Each skill objective must be performed in accordance with this Utah certification standard. This includes performing the proper steps in sequence. Competence will be measured in accordance with the UFSCS skill objectives.

Evolution Examinations: Candidates are spot checked on one Evolution Examination for each level (Awareness, Operations, Technician). This is a 100% pass/fail test. If a candidate fails any portion of the skill, then they have failed the evolution and must retest the entire evolution. Candidates who fail the second attempt must wait **30 days** before the third and final attempt. **No training, teaching, or coaching is allowed during this state test.**

- Confined Space Rescue Awareness: one 2-4 member Team Evolution Examination
- Confined Space Rescue Operations: one **Team** Evolution Examination
- Confined Space Rescue Technician: one **Team** Evolution Examination

The skills will be from NFPA 1006 (2021), Chapter 7. Candidates are given two attempts to perform each skill/evolution. If they fail on the second attempt, the applicants must wait 30 days before the third and final attempt. Participants taking third attempts will test on the skill/evolution they missed and one additional skill.

Candidates who have failed the third attempt of the written examination or the skills examination have failed the certification process and must wait **one year** from the date of the failed third attempt to reenter state testing. The candidate will begin testing with a new **first attempt** of the written examination, following a request for examination. If a candidate wishes to enter a new course, the candidate may petition the Certification Office to reenter the certification examination process no sooner than 120 days after their **third attempt** failure. In the petition, candidates must explain the reason(s) behind their request to reenter the process.

TECHNICAL RESCUE CERTIFICATION

When all requirements for certification have been met, applicants are eligible to be certified. The Chief/Administrator may apply to the Utah Fire Service Certification Council for certification for those candidates who have successfully completed the certification training/testing process. Requests for state certification must be submitted to the Council using the Certification/Recertification Request form provided in Appendix C. The names are then checked against the official state records to ensure that each individual listed has met all requirements and prerequisites.

Candidates who have met the requirements are issued a certificate. The Chief/Administrator is then notified that the newly acquired certification will be available to view and print within 10 business days of the issue date via the UFRA Certification and Training Lookup System at https://uvu.edu/ufra/lookup/. Patches are sold at cost. New printed certificates with an original seal attached may be requested from the Certification Department for a fee of \$10 per certificate. Wallet cards are sent to candidates if their photos are five years old or newer. A \$40 testing/certification fee will be assessed if the candidate passes the written exam on the second attempt, and a \$60 fee will be assessed if the candidate passes the written exam on the third attempt.

*The above fee table applies to Utah fire departments only. All other agencies will be assessed a testing/certification fee of \$90 per level.

Prerequisites for Confined Space Rescue Certification

To qualify to train on the NFPA 1006 section listed in the left column, candidates must have completed the prerequisite training indicated in the right column.

| Training | Prerequisites |
|--|---------------------------------|
| Rope Rescue - Technician (5.3)_ | Rope Rescue - Operations (5.2) |
| Hazardous Materials - Operations | Hazardous Materials - Awareness |
| Confined Space Rescue - Awareness (7.1) | |
| Confined Space Rescue - Operations (7.2) | 5.3, 7.1 and HazMat Ops |
| Confined Space Rescue - Technician (7.3) | 5.3, 7.1, 7.2 and HazMat Ops |

Recertification

Certifications are valid for a three-year period. Each certified Technical Rescuer may renew certification by having the Chief/Administrator of the participating agency submit a Certification/Recertification Request (provided in Appendix C of this standard).

Certified candidates should participate in at least 36 hours of structured class and skill training per year to maintain competency and stay current on their skills. This 36 hours is for all certified levels combined, not 36 hours for each individual level. A total of 108 hours of training is required for the previous three-year certification period.

Recertification for Technician Levels

Because of the high level of skills required of a Confined Space Rescue Technician, the Certification Council requires that candidates complete an in-house comprehensive examination evolution—that allows them to demonstrate all the technician-level skills contained in this standard—as part of their recertification process. An original copy of a candidate's Technician Training Record for the previous three-year period must accompany each technician recertification request, verifying the candidate is qualified in all technician level skills.

For more information on Utah firefighter certification, contact the:

Utah Fire Service Certification Council Utah Fire & Rescue Academy 3131 Mike Jense Parkway, Provo, UT 84601 801-863-7709, www.uvu.edu/ufra

TECHNICAL RESCUE CERTIFICATION CHECKLIST

ENTRANCE REQUIREMENTS:

- **□** Each candidate has met the requirements listed in NFPA 1006, 2021 edition.
- **□** Each candidate has trained on the Technical Rescue level written objectives.

DEPARTMENT TRAINING RECORDS:

- □ Each candidate has a training record on file with the department that shows:
 - 1. A learning experience in each skill objective
 - 2. Dates of training
 - 3. Initials of instructors
- **□** Each candidate has trained on the Technical Rescue level written objectives.

DEPARTMENT IN-HOUSE SKILLS EXAMINATION:

- **□** Each candidate has successfully completed an in-house skills and evolution examination.
- **□** Exam results are documented in department training records.

CERTIFICATION EXAMINATIONS:

- **□** Each candidate has passed the UFSCC written examination.
- □ Each candidate has passed the UFSCC skill.
- □ A Spot Check examination was administered by an approved Certification Tester(s).

TECHNICAL RESCUE CERTIFICATION:

□ The Chief/Administrator has requested certification for candidates using the Certification/Recertification Request.

SECTION I CONFINED SPACE RESCUE – AWARENESS

CONFINED SPACE RESCUE – AWARENESS SKILLS

To complete the skills contained in this chapter, the AHJ <u>must</u> be able to provide a safe testing environment for the candidates and accept all liability for candidate safety. Refer to Appendix A for the Confined Space photo examples.

1. Conduct a scene size-up for a confined space rescue incident (including search parameters, risk-benefit analysis, etc.). Identify and mitigate potential hazards and establish control zones and barriers.

| REFERENCE: | NFPA 1006, 2021 edition, 7.1.1, 7.1.5, 7.1.6, 7.1.7 | | | |
|------------------------|---|--|--|--|
| CONDITION: | Given a photo of a scene or an AHJ approved location. Follow AHJ operational protocols. Verbalize | | | |
| SCENARIO: | Given a confined space incident or photo, with a victim having a medical emergency. Perform an effective scene size-up for a confined space rescue incident. | | | |
| COMPETENCE: | Identify existing or potential hazards Identify barriers and control zones (hot, warm, cold) and deny access Identify access point(s) for entry Identify special resources needed for the site being preplanned Identify victim(s) point last seen Request and identify types of additional resources needed (utilities, hazmat, operations or technical rescue, etc.) Relay information to supervisor Complete skill in allotted time | | | |
| TIME: | 5 minutes | | | |
| Identify type of PPE a | nd equipment requirements for a confined space rescue incident. | | | |
| REFERENCE: | NFPA 1006, 2021 edition, 7.1.1, 7.1.2, 7.1.4, 7.1.7 | | | |
| CONDITION: | Given a confined space incident, information (photo), and PPE. Follow AHJ operational protocols. | | | |
| SCENARIO: | Given a confined space incident requiring victim removal. Determine appropriate PPE. | | | |
| COMPETENCE: TIME: | Identify situation hazards (i.e., electrical, hazmat, fire, fall protection, etc.) Identify appropriate PPE (AHJ) Turnouts, eye protection, hearing protection, helmet, gloves, harness, etc. Complete skill in allotted time 1 minute | | | |
| * ********* | 1 mmute | | | |

2.

3. Search the areas adjacent to the confined space and establish search perimeters. Collect documentation, identify needs, request additional resources, and gather information from witnesses.

| | REFERENCE: | NFPA 1006, 2021 edition, 7.1.2, 7.1.3, 7.1.5, 7.1.6 | | |
|----|---|---|--|--|
| | CONDITION: | Given a confined space incident, information (photo/video), wearing appropriate PPE. Follow AHJ operational protocols. | | |
| | SCENARIO: | Given a confined space incident requiring rescue of a victim. | | |
| | COMPETENCE: | Gather information, manage and interview witnesses Identify number of victims Search areas adjacent to the confined space for additional information (access, egress, witnesses, hazards, etc.) Identify need for additional resources Identify type of confined space entry Request additional resources as needed Communicate with victim if possible Report findings to supervisor Complete skill in allotted time | | |
| | TIME: | 5 minutes | | |
| | | | | |
| 4. | Perform a nonentry r | escue with an anchored retrieval system. | | |
| 4. | Perform a nonentry r REFERENCE: | escue with an anchored retrieval system. NFPA 1006, 2021 edition, 7.1.4 | | |
| 4. | | | | |
| 4. | REFERENCE: | NFPA 1006, 2021 edition, 7.1.4 Given a confined space incident, information, and PPE. Follow AHJ | | |
| 4. | REFERENCE: CONDITION: | NFPA 1006, 2021 edition, 7.1.4 Given a confined space incident, information, and PPE. Follow AHJ operational protocols. Given a victim with an anchored retrieval system, located inside a | | |
| 4. | REFERENCE: CONDITION: SCENARIO: | NFPA 1006, 2021 edition, 7.1.4 Given a confined space incident, information, and PPE. Follow AHJ operational protocols. Given a victim with an anchored retrieval system, located inside a confined space requiring rescue. Wear appropriate PPE Identify location of victim(s) Communicate with victim Identify need for fall protection and other safety measures (as needed) Using appropriate retrieval device, without entry, remove victim | | |

| REFERENCE: | NFPA 1006, 2021 edition, 7.1.4 |
|------------|--|
| CONDITION: | Given a confined space incident, information, PPE, and a retrieval |

device. Follow AHJ operational protocols.

COMPETENCE:

| • | Wear | appropriate PPE |
|---|--------|-------------------|
| • | vv car | appropriate I I L |

- Identify location of victim(s)
- Communicate with victim
- Identify need for fall protection and other safety measures (as needed)
- Using appropriate retrieval device without entry remove victim
- Complete skill in allotted time

TIME: 10 minutes

6. Support an operations and technician level confined space incident.

| REFERENCE: | NFPA 1006, 2021 edition, 7.1.1, 7.1.5, 7.1.7 | | | |
|-------------|---|--|--|--|
| CONDITION: | Given a photo of a confined space incident, and an IAP. Follow AHJ operational protocols. (Verbalize) | | | |
| SCENARIO: | Given a photo of a confined space incident. | | | |
| COMPETENCE: | Follow and support an Incident Action Plan (IAP) Identify or describe <i>at least</i> five (5) of the following: Personnel rehabilitation Witness interview Isolation and containment (LOTO) Information collection and dissemination Equipment/tool cache assembly Assist with communications Documentation Assist with ventilation Assist with ventilation Other (support operations, assignments, tasks, roles, etc.) Environmental concerns are managed | | | |

- Report progress to supervisor or command
- Complete skill in allotted time

TIME: 5 minutes

CONFINED SPACE RESCUE – AWARENESS EVOLUTION

For the evolution in this section, the AHJ <u>must</u> be able to provide a safe testing environment for the candidates and accept all liability for candidate safety. Refer to Appendix A for a confined space photo example.

To create a more realistic testing environment, the individual skills have been assembled into this examination evolution. Candidates must train and complete an in-house skills and evolution examination. The evolution will be graded on a 100% pass/fail basis.

| SKILL EXAM EVOLUTION: | Establish command, perform an appropriate scene size-up, and create a corresponding Incident Action Plan for a confined space rescue scenario. | | | | |
|--------------------------|---|--|--|--|--|
| REFERENCE: | NFPA 1006, 2021 edition, 7.1 | | | | |
| CONDITION: | Given a scenario of a confined space rescue incident, a 2-4 member team (with assigned roles: IAP, gather info, zones, rescuer), and an AHJ approved testing location. Detail the issues that should be addressed in the Incident Action Plan (using any AHJ protocols, SOPs or tactical worksheets). | | | | |
| SCENARIO: COMPETENCE: | Your team has been called to a confined space rescue incident for rescue of a victim. | | | | |
| | Establish command Identify type of PPE required (to include fall protection) Conduct a scene size-up and identify additional resources needed and limitations of the current team Secure and interview witnesses: Identify entry point Victim description Hazards Identify location and number of victims Communicate with victim (if possible) Identify and mitigate immediate hazards and establish scene control Remove nonessential personnel and restrict entry Conduct a risk-benefit analysis and determine rescue or recovery operation Rescue victim using nonentry techniques and implementing safety measures Function within an incident management system, implement an Incident Action Plan, and follow ICS and AHJ operational protocols Complete skill in allotted time | | | | |
| TIME: | 20 minutes | | | | |

UTAH FIRE SERVICE CERTIFICATION SYSTEM CONFINED SPACE RESCUE – AWARENESS

NFPA 1006, 2021 Edition 7.1

CONFINED SPACE RESCUE - AWARENESS TRAINING RECORD / IN-HOUSE COMPREHENSIVE FORM

| Candidate Name: | | | | | | Department: |
|--|--|--------------------------------|--------------|---|--------------------------------------|--|
| Candidate Signature: | | | | | Date of Completion: | |
| Chief/Training Officer: | | | | | Chief/Training Officer Signature: | |
| This form may be completed on a computer but must be printed out for the Certification Tester to verify on test day. The date of completion must be filled in and the signatures of the Chief/Training Officer and the candidate must be original signatures. The signatures attest that all skills have been trained on and a complete in-house comprehensive exam was administered and passed. Falsification of signatures or any component of this document may result in the revocation, suspension, or denial of certification. | | | | | | |
| SECTION | | RAINING ECORD INSTRUCTOR | COMP DATE | IN-HOUSE COMPREHENSIVE EXAMS DATE INSTRUCTOR PASS | | SKILL |
| 7.1.1, 7.1.5, 7.1.6, 7.1.7 | | | | | | 1. Conduct a scene size-up for a confined space incident (including search parameters, risk- benefit analysis, etc.). Identify and mitigate potential hazards, establish control zones and barriers. |
| 7.1.1, 7.1.2, 7.1.4, 7.1.7 | | | | | | 2. Identify type of PPE and equipment requirements for a confined space rescue incident. |
| 7.1.2, 7.1.3, 7.1.5, 7.1.6 | | | | | | 3. Search the areas adjacent to the confined space and establish search perimeters. Collect documentation, identify needs, request additional resources, and gather information from witnesses. |
| 7.1.4 | | | | | | 4. Perform a nonentry rescue with an anchored retrieval system. |
| 7.1.4 | | | | | | 5. Perform a nonentry rescue. |
| 7.1.1, 7.1.5, 7.1.7 | | | | | | 6. Support an operations and technician level confined space incident. |
| EVOLUTION | | | | | | Demonstrate Awareness Level Skills for a Confined Space Rescue Incident (2-4 member Team) |

SECTION II CONFINED SPACE RESCUE – OPERATIONS

CONFINED SPACE RESCUE - OPERATIONS SKILL OBJECTIVES

To complete the skills contained in this section, the AHJ <u>must</u> be able to provide a safe testing environment for the candidates and accept all liability for candidate safety. The AHJ must have the capacity to provide a confined space prop/simulator for testing purposes. Refer to Appendix A for more information.

- 1. Demonstrate the correct technique to identify and/or classify materials using a multi-gas meter carbon monoxide, oxygen, or combustible gas indicator (CGI).
 - REFERENCE:NFPA 1006, 2021 edition, 7.2.3, 7.2.4CONDITION:Given confined space incident information, a calibrated carbon monoxide,
oxygen, or CGI meter, an atmosphere with an unknown concentration of gas,
and appropriate PPE.

COMPETENCE:

- Fresh air calibrate the instrument
- Monitor the atmosphere
 - High, medium, low
 - Allow for response time
- Verbalize the results
- Complete skill in allotted time

TIME: 5 minutes (from ready time of meter)

- 2. Conduct a scene size-up for a confined space rescue incident (including search parameters, risk-benefit analysis, etc.). Identify potential hazards and establish control zones and barriers.
 - REFERENCE: NFPA 1006, 2021 edition, 7.2.2, 7.2.4

5 minutes

- CONDITION: Given a confined space (an AHJ approved location). Follow AHJ operational protocols (All answers verbalized).
- SCENARIO: Given a confined space incident, with a victim having a medical emergency. Perform an effective scene size-up for a confined space rescue incident.

COMPETENCE:

- Identify existing or potential hazards
- Identify barriers and control zones (hot, warm, cold) and deny access
- Identify access point(s) for entry
- Identify victim(s) point last seen
- Request and identify types of additional resources needed (utilities, hazmat, operations or technical rescue, etc.)
- Collect documentation and gather information from witnesses (i.e., entry permit, LOTO log, etc.)
- Relay information to supervisor
- Complete skill in allotted time

TIME:

3. Identify appropriate PPE and equipment requirements for a confined space rescue incident.

| REFERENCE: | NFPA 1006, 2021 edition, 7.2.4-7.2.6 |
|------------|--|
| CONDITION: | Given a confined space incident (an AHJ approved location), and PPE. Follow AHJ operational protocols. (Verbalize) |
| SCENARIO: | Given a confined space incident, requiring victim removal, determine appropriate PPE. |

COMPETENCE: • Identify situation haz

- Identify situation hazards (i.e., electrical, hazmat, fire, fall protection, etc.)
- Identify appropriate PPE (AHJ):
 Turnouts, eye protection, hearing protection, helmet, gloves, boots,
 - harness, etc.
- Complete skill in allotted time

TIME: 2 minutes

4. Demonstrate donning a self-contained breathing apparatus (SCBA).

- REFERENCE: NFPA 1006, 2021 edition, 7.2.6
- CONDITION: Given PPE and an SCBA for a confined space incident, follow AHJ protocols.

COMPETENCE:

- Don appropriate PPE
- Crouch or kneel at SCBA
- Check SCBA cylinder pressure gauge (verbalize pressure)
- Open cylinder valve fully
- Check regulator and cylinder gauge (gauges should be within 100 psi of each other)
- Don backpack and fasten/tighten all straps (over-the-head or coat method)
- Don face piece, adjust head harness, check seal and exhalation valve
- Don protective hood
- Attach hose to regulator or face piece
- Turn on PASS or ensure it is active
- Don helmet with chin strap secured
- Don gloves
- Complete skill in allotted time

TIME: 1 minute

5. Control hazards so the rescue area is established, and ventilate so rescuers and victims are protected from further harm.

| REFERENCE: | NFPA 1006, 2021 edition, 7.2.5, 7.2.7 |
|------------|--|
| CONDITION: | Given appropriate PPE, ventilation equipment, a confined space tool kit/lock-out tag-out (LOTO) kit, barrier control devices, a 2-member team, |

and AHJ approved forms. Follow AHJ protocols.

| SCENARIO: | Given a confined space incident that needs LOTO (electrical, valves, etc.), control hazards and ventilate appropriately. |
|-------------|--|
| COMPETENCE: | • Identify safety zones |
| | Establish perimeter using barrier control devices |
| | Control access to the rescue scene |
| | Identify equipment needed to support a rescue situation |
| | Determine location for supply cache |
| | • Determine lighting needs for rescue situation |
| | • Documentation of equipment (LOTO) |
| | • Identify, isolate, and mitigate all hazards (i.e., electrical hazards, hazardous materials, physical or atmospheric hazards) |
| | • Identify proper ventilation techniques and ventilate the confined space |
| | Complete skill in allotted time |
| TIME: | 20 minutes |

- 6. Conduct monitoring of the confined space environment so that a representative sample of the space is obtained.
 - REFERENCE: NFPA 1006, 2021 edition, 7.2.3-7.2.5

CONDITION: Given reference material, PPE, and size-up information, and properly calibrated monitoring equipment for oxygen, LEL, toxicity.

COMPETENCE:

- Identify type of monitoring equipment to be used
- Identify proper PPE for incident
- Confirm fresh air calibration of selected monitoring equipment (if applicable)
- Obtain environmental sample of confined space
- Correctly interpret monitor readings
- Document readings of sample taken
- Determine ventilation effects on the confined space being monitored
- Complete skill in allotted time

TIME: 5 minutes

7. Establish search perimeters and initiate a search for a confined space incident.

- REFERENCE: NFPA 1006, 2021 edition, 7.2.1
- CONDITION: Given a confined space incident (an AHJ approved location), a confined space rescue tool kit/lock-out tag-out (LOTO) kit, documents (AHJ), PPE. Follow AHJ protocols. (Non-IDLH conditions.)

COMPETENCE:

- Wear appropriate PPE
- Determine and mitigate hazards (if possible)
- Establish communications with rescuers/command and with patient if

possible

- Determine entry point and make entry •
- Determine physical and mental status of patient
- Initiate continuous atmospheric monitoring
- Determine and set up evacuation method
- Select entry team member
- Determine methods of self-rescue
- Report to supervisor
- Complete skill in allotted time

TIME: 10 minutes

8. Apply an atmosphere-supplying respirator to a victim in a confined space, then move the victim securely (while monitoring).

- **REFERENCE:** NFPA 1006, 2021 edition, 7.2.7 CONDITION: Given a confined space incident (an AHJ approved location), a manikin, a confined space rescue tool kit/lock-out tag-out (LOTO) kit, AHJ documents, PPE, SCBA or supplied-air respirator (SAR). Follow AHJ protocols. **SCENARIO:** Given a victim located in a confined space needing respiratory protection, apply an atmosphere-supplying respirator to the victim. The victim can easily be seen from the access opening. The confined space is open without entanglement/entrapment possibilities. (Non-IDLH conditions.) COMPETENCE: Wear appropriate PPE • Describe limitations and capabilities of both SCBA and SAR for victims • located in a confined space
 - Determine the correct type of respiratory protection needed SCBA or SAR
 - Describe methods of application of face pieces for victims wearing helmets (considering possible spinal injuries)
 - Secure the SCBA/SAR to the victim or retrieval equipment
 - Move the victim to a safe location. Continually monitor the victim's air supply during movement to ensure there is no interruption of air flow
 - Use appropriate communication methods in/out of the confined space
 - Complete skill in allotted time •

TIME: 10 minutes

9. Package a victim to a spine immobilization device.

REFERENCE: NFPA 1006, 2021 edition, 7.2.8, 7.2.11

- CONDITION: Given a confined space incident (an AHJ approved location), PPE, a spine immobilization device, a cervical spine immobilization device, a manikin, and a 2-member team. Follow AHJ Protocols.
- **SCENARIO**: Given a confined space with a victim inside who has traumatic spinal injuries and needs spinal precautions and packaging. The victim can easily be seen from the access opening. The confined space is open without entanglement/entrapment possibilities. (Non-IDLH conditions.)

COMPETENCE:

- Wear appropriate PPE
- Recognize and perform basic management of traumatic injuries and medical conditions, including spine immobilization
- Demonstrate appropriate spine packaging techniques with minimal spinal movement (roll, slide, etc.) while maintaining cervical spine immobilization (controlling the head).
- Place padding in void spaces (between victim and device)
- Complete skill in allotted time

TIME: 5 minutes

10. Package a victim to a litter for a horizontal movement.

| REFERENCE: | NFPA 1006, 2021 edition, 7.2.11 |
|------------|--|
| CONDITION: | Given a confined space incident (an AHJ approved location), PPE, a low-profile device/litter (AHJ), a rope rescue tool kit, a manikin, and a 4-member (2 rescuers and a 2-member haul team not being tested). Follow AHJ Protocols. |
| SCENARIO: | Given a confined space with a victim inside who can easily be seen from the access opening. The victim in the horizontally configured confined space needs packaging. The confined space is open without entanglement/entrapment possibilities. (Non-IDLH conditions.) |

COMPETENCE:

- Wear appropriate PPE
- Recognize and perform basic management of traumatic injuries and medical conditions, including spine immobilization
- Demonstrate appropriate spine packaging techniques with minimal spinal movement (roll, slide, etc.) place victim in low profile device/litter
- Configure haul system and horizontally move device appropriately (AHJ)
- Identify safety concerns during litter operations
- Remove the victim from the confined space without harm
- Complete skill in allotted time

TIME: 20 minutes

11. Package a victim to a litter for a vertical lift

- REFERENCE: NFPA 1006, 2021 edition, 7.2.15
- CONDITION: Given a confined space incident (an AHJ approved location), PPE, a low-profile device/litter (AHJ), a rope rescue tool kit, a preassembled high-point rope system, a manikin, and a 6-member (2 rescuers and a 4-member haul) team. Follow AHJ Protocols.
- SCENARIO: Given a confined space with a victim inside who can easily be seen from the access opening. The victim in the vertically configured confined space needs packaging. The confined space is open without entanglement/entrapment possibilities. (Non-IDLH conditions.)

COMPETENCE:

- Wear appropriate PPE
- Recognize and perform basic management of traumatic injuries and medical conditions, including spine immobilization and respiratory needs (AHJ)
- Demonstrate appropriate spine packaging techniques and, with minimal spinal movement (roll, slide, etc.), place the victim in a low-profile device/litter
- With a haul system, vertically move the device appropriately (AHJ)
- Identify safety concerns of high-angle environment during litter operations
- Ensure the litter passes through and is raised high enough to clear the portal
- Remove the victim from the confined space without harm
- Complete skill in allotted time

TIME: 20 minutes

12. Perform a rapid rescue in a vertically oriented confined space.

- REFERENCE: NFPA 1006, 2021 edition, 7.2.16, 7.2.17
- CONDITION: Given a confined space incident at an AHJ-approved location that is open without entanglement/entrapment possibilities, information, PPE, a manikin, a confined space rescue tool kit, a victim harness, a rope rescue tool kit, and a 3-4 member team. Follow AHJ operational protocols.
- SCENARIO: Given a confined space with a victim inside who can easily be seen from the access opening, is going into respiratory arrest, and requires rapid rescue. (Non-IDLH conditions.)

COMPETENCE:

- Wear appropriate PPE
- Identify location of victim(s)
- Identify need for rapid rescue of victim
- Communicate with victim
- Identify hazards and conduct air monitoring in the confined space
- Identify need for fall protection and other safety measures (as needed)
- Don SCBA as needed
- Attach tag line rescuer
- Enter confined space
- Attach victim harness and rigging appropriately
- Using appropriate retrieval device, remove victim safely
- Complete skill in allotted time

TIME: 10 minutes

13. Terminate incident. Describe methods to decontaminate PPE, equipment, and describe proper record keeping. Verbalize

- REFERENCE: NFPA 1006, 2021 edition, 7.2.18
- CONDITION: After a confined space incident, specialized tool cache, PPE, patient packaging device. Follow AHJ guidelines.
- SCENARIO: After a confined space incident with a victim that required removal. Describe

the process to terminate the incident.

COMPETENCE:

- Describe appropriate PPE
- Identify the need to rehab/decontaminate any PPE, equipment, and personnel
- Ensure all proper notifications have been made (i.e., medical examiner, law enforcement, etc.)
- Ensure all documentation, personnel accountability, data collection, and management systems are completed.
- Identify any potential need for critical incident stress management
- Remove devices and control zone equipment
- Perform a post incident debriefing and analysis
- Verify all personnel and resources are returned to a state of readiness
- Communicate potential risks or existing hazards to the responsible party
- Transfer scene control to the responsible party
- Terminate command
- Complete skill in allotted time

TIME:

5 minutes

CONFINED SPACE RESCUE – OPERATIONS EVOLUTIONS

For the evolution in this section, the AHJ <u>must</u> be able to provide a safe testing environment for the candidates and accept all liability for candidate safety. The AHJ must have the capacity to provide a confined space prop/simulator, or a location for testing purposes.

To create a more realistic testing environment, the individual skills have been assembled into this examination evolution. Candidates must train and complete an in-house skills and evolution examination. The evolution will be graded on a 100% pass/fail basis.

| SKILL EXAM | |
|----------------------|--|
| EVOLUTION 1 : | Demonstrate operations level skills for a confined space rescue incident (with a victim horizontally oriented). Establish command, perform an appropriate scene size-up and create a corresponding Incident Action Plan for a confined space rescue scenario. |
| REFERENCE: | NFPA 1006, 2021 edition, 7.2.2, 7.2.9-7.2.11, 7.2.17-7.2.18 |
| CONDITION: | Given a confined space rescue incident (an AHJ approved testing location), a manikin, a confined space tool kit (patient packaging), a rope rescue tool kit, an 8-10 member team with assigned roles (rescue Officer, safety officer, rescuers, backup team, attendant, etc.), an IAP, and a permit entry document. Use AHJ approved applicable forms. Follow AHJ protocols. |
| SCENARIO: | Your team has been called to rescue a victim in a horizontally oriented confined space. The victim has a traumatic injury and requires packaging and removal. The victim can easily be seen from the access opening. The confined space is open without entanglement/entrapment possibilities. (Non-IDLH conditions.) |
| TEAM ROLES: | The lead tester will assign team roles (on the exam day). The candidates must not know their "assigned" team roles prior to the evolution exam. Assigned team roles should include, but are not limited to, the following: rescue officer, safety officer, rescuers, backup team, attendant, etc., and other AHJ protocols. The safety officer must be qualified and provided by AHJ. |
| | *The evolution exam is a team evolution but is graded individually; the whole team is not penalized if one or more members do not fulfill their required tasks. Each team member must have the knowledge/skills of each role. |
| COMPETENCE: | Establish command and perform a scene size-up Identify and don PPE required (include fall protection as needed) Conduct a risk-benefit analysis and determine rescue or recovery operation Collect documentation and gather information from witnesses (i.e., entry permit, LOTO log, etc.) Identify existing or potential hazards Identify barriers and control zones (hot, warm, cold) and deny access. Remove nonessential personnel and restrict entry Identify access point(s) for entry |

- Identify victim(s) point last seen.
- Request and identify types of additional resources needed (utilities, hazmat, operations or technical rescue, etc.)
- Identify, isolate, and mitigate all hazards (i.e., electrical hazards, hazardous materials, physical hazards, or atmospheric hazards)
- Conduct monitoring of the confined space environment so that a representative sample of the space is obtained and documented (See Skill 6)
- Identify proper ventilation techniques and ventilate the confined space (as needed)
- Establish communications with rescuers/command and with victim if possible
- Determine physical and mental status of victim
- Initiate continuous atmospheric monitoring
- Determine and set up evacuation methods
- Determine methods of self-rescue
- Conduct a pre-entry medical exam for entry rescuers (verbalize)
- Secure tag lines to the rescuers
- Rescuer enters the confined space at the selected entry point
- Rescuer makes contact with the victim and communicates with the rescue officer/attendant
- Treat medical conditions, as appropriate
- Select and apply appropriate packaging device to the victim
- Safely remove victim without harm
- Transfer victim care to EMS provider, if appropriate

Verbalize the following:

- Identify need to rehab/decontaminate any PPE, equipment, and personnel
- Ensure all proper notifications (AHJ) have been made (i.e., medical examiner, law enforcement, etc.)
- Ensure all documentation, personnel accountability, data collection, and management systems are completed
- Identify any potential need for critical incident stress management
- Perform a post-incident debriefing and analysis
- Ensure all personnel and resources are returned to a state of readiness
- Transfer custody to the responsible party
- Terminate command
- Complete skill in allotted time

TIME:

45 minutes

CONFINED SPACE RESCUE – OPERATIONS EVOLUTION 2

For the evolution in this section, the AHJ <u>must</u> be able to provide a safe testing environment for the candidates and accept all liability for candidate safety. The AHJ must have the capacity to provide a confined space prop/simulator, or a location for testing purposes.

To create a more realistic testing environment, the individual skills have been assembled into this examination evolution. Candidates must train and complete an in-house skills and evolution examination. The evolution will be graded on a 100% pass/fail basis.

| SKILL EXAM EVOLUTION 2: | Demonstrate operations level skills for a confined space rescue incident (with a victim vertically oriented). Establish command, perform an appropriate scene size-up and create a corresponding Incident Action Plan for a confined space rescue scenario. |
|----------------------------|---|
| REFERENCE: | NFPA 1006, 2021 edition, 7.2.2, 7.2.12-7.2.18 |
| CONDITION: | Given a confined space rescue incident (an AHJ approved testing location), a manikin, a confined space tool cache (patient packaging), a high-angle rope rescue tool kit, a portable anchor system, an 8-10 member team with assigned team roles, an IAP, and a permit entry document. Use AHJ approved applicable forms. Follow AHJ protocols. |
| SCENARIO: | Your team has been called to rescue a victim in a vertically oriented confined space. The victim has a traumatic injury and requires packaging and removal. The victim can easily be seen from the access opening. The confined space is open without entanglement/entrapment possibilities. (Non-IDLH conditions.) |
| TEAM ROLES: | Assigned team roles should include, but are not limited to, the following: rescue officer, safety officer, rescuers, rigging team, backup team, attendant, etc. The safety officer must be qualified and provided by AHJ. |
| | *The evolution exam is a team evolution but is graded individually; the whole team is not penalized if one or more members do not fulfill their required tasks. Each team member must have the knowledge/skills of each role. |
| COMPETENCE: | |
| | Establish command and perform a scene size-up Identify and don PPE required (include fall protection as needed) Conduct a risk-benefit analysis and determine rescue or recovery operation Collect documentation and gather information from witnesses (i.e., entry permit, LOTO log, etc.) Identify existing or potential hazards Identify barriers and control zones (hot, warm, cold) and deny access Remove nonessential personnel and restrict entry Identify access point(s) for entry Identify and construct a portable anchor system that will operate safely |
| | |

while lifting the load, without causing further harm to the victim. Keep the anchor stable.

- Construct a rope system using appropriate knots, hardware, and anchor points to lower/raise a rescuer and victim in/out of the confined space safely
- Identify victim(s) point last seen
- Request and identify types of additional resources needed (utilities, hazmat, operations or technical rescue, etc.)
- Identify, isolate, and mitigate all hazards (i.e., electrical hazards, hazardous materials, physical or atmospheric hazards)
- Conduct initial and continuous monitoring of the confined space environment so that samples of the space are obtained and documented. (See skill 6)
- Identify proper ventilation techniques and ventilate the confined space (as needed)
- Establish communications with rescuers/command and with victim if possible
- Determine physical and mental status of victim
- Determine and set up evacuation methods
- Determine methods of self-rescue
- Conduct a pre-entry medical exam for entry rescuers (verbalize)
- Secure tag lines to the rescuers
- Rescuer enters the confined space at the selected entry point.
- Rescuer makes contact with the victim
- Treat medical conditions, as appropriate
- Select and apply appropriate packaging device to the victim
- Safely remove the victim while utilizing the rope system without causing harm to victim and rescuers
- Transfer victim care to EMS provider, if appropriate

Verbalize the following:

- Identify need to rehab/decontaminate any PPE, equipment, and personnel
- Ensure all proper notifications (AHJ) have been made (i.e., medical examiner, law enforcement, etc.)
- Ensure all documentation, personnel accountability, data collection and management systems are completed
- Identify any potential need for critical incident stress management
- Perform a post-incident debriefing and analysis
- Ensure all personnel and resources are returned to a state of readiness
- Transfer custody to the responsible party
- Terminate command
- Complete skill in allotted time

TIME:

1 hour

UTAH FIRE SERVICE CERTIFICATION SYSTEM CONFINED SPACE RESCUE – OPERATIONS

NFPA 1006, 2021 Edition 7.2

CONFINED SPACE RESCUE - OPERATIONS TRAINING RECORD / IN-HOUSE COMPREHENSIVE FORM

| Candidate Name: | | | | | | Department: |
|----------------------|---|-----------------|----------|------------|----------|---|
| Candidate Signature: | | | | | | Date of Completion: |
| | | | | | | Chief/Training Officer |
| Chief/Trainir | - | | | | | Signature: |
| | | | | | | ed out for the Certification Tester to verify on test day. The date of completion must |
| | | | | | | d the candidate must be original signatures. The signatures attest that all skills have |
| | | | | | | was administered and passed. Falsification of signatures or any component of this |
| document ma | iy resul | t in the revoca | tıon, su | | denial o | of certification. |
| SECTION | TRAINING RECORD IN-HOUSE COMPREHENSIV EXAMS | | VE | SKILL | | |
| | DATE | INSTRUCTOR | DATE | INSTRUCTOR | PASS | |
| | | | | | | Confined Space Rescue prerequisites have been met prior to Confined Space Rescue Operations. |
| 7.2.3, 7.2.4 | | | | | | 1. Demonstrate the correct technique to identify and/or classify materials using a multi-gas meter – carbon monoxide, oxygen, or combustible gas indicator (CGI). |
| 7.2.2, 7.2.4 | | | | | | 2. Conduct a scene size-up for a confined space rescue incident (including search parameters, risk- benefit analysis, etc.). Identify potential hazards, establish control zones and barriers. |
| 7.2.4-7.2.6 | | | | | | 3. Identify appropriate PPE and equipment requirements for a confined space rescue incident. |
| 7.2.6 | | | | | | 4. Demonstrate donning a self-contained breathing apparatus (SCBA). |
| 7.2.5, 7.2.7 | | | | | | 5. Control hazards so the rescue area is established, and ventilate so rescuers and victims are protected from further harm. |
| 7.2.3-7.2.5 | | | | | | 6. Conduct monitoring of the confined space environment so that a representative sample of the space is obtained. |
| 7.2.1 | | | | | | 7. Establish search perimeters and initiate a search for a confined space incident. |
| 7.2.7 | | | | | | 8. Apply an atmosphere-supplying respirator to a victim in confined space, then move the victim securely (while monitoring). |
| 7.2.8. 7.2.11 | | | | | | 9. Package a victim to a spine immobilization device |
| 7.2.11 | | | | | | 10. Package a victim to a litter for a horizontal movement |
| 7.2.15 | | | | | | 11. Package a victim to a litter for a vertical lift |
| 7.2.16, 7.2.17 | | | | | | 12. Perform a rapid rescue in a vertical oriented confined space |
| 7.2.18 | | | | | | 13. Terminate the incident. Describe methods to decontaminate PPE, equipment, and describe proper record keeping. Verbalize |

| EVOLUTION 1 | | | Demonstrate Operations Level Skills for a Confined Space Rescue Incident (Horizontal - Certification Exam) |
|----------------|--|--|---|
| EVOLUTION 2 | | | Demonstrate Operations Level Skills for a Confined Space Rescue Incident - Vertical (In-house) |

SECTION III CONFINED SPACE RESCUE – TECHNICIAN

CONFINED SPACE RESCUE - TECHNICIAN SKILL OBJECTIVES

To complete the skills contained in this section, the AHJ <u>must</u> be able to provide a safe testing environment for the candidates and accept all liability for candidate safety. The AHJ must have the capacity to provide a confined space facility/prop for testing purposes. Refer to Appendix A for more information.

1. Identify appropriate PPE and equipment requirements for a confined space rescue incident.

| REFERENCE : | NFPA 1006, 2021 edition, 7.3.6 |
|--------------------|---|
| CONDITION: | Given a confined space incident, PPE, and a supplied air respirator (SAR) system. Follow AHJ operational protocols. (Verbalize) |
| SCENARIO: | Given a confined space incident in an IDLH environment requiring victim removal, determine appropriate PPE. |
| COMPETENCE: | |

- Identify situation hazards (i.e., electrical, hazmat, fire, fall protection, etc.)
- Identify appropriate PPE (AHJ):
 - Turnouts, eye protection, hearing protection, helmet, gloves, boots, harness, etc.
- Respiratory protection (SAR/SCBA)
- Complete skill in allotted time

TIME: 2 minutes

2. Preplan and sketch a confined space incident showing a safe, standard approach that can be used during a confined space rescue.

| REFERENCE : | NFPA 1006, 2021 edition, 7.3.2; OSHA 29 CFR 1910.146 General |
|--------------------|--|
|--------------------|--|

CONDITION: Given a preplan form (CFR 1910.146, provided by the AHJ)

COMPETENCE:

- Identify existing or potential hazards and document them on the preplan
- Identify isolation methods and document them on the preplan
- Identify all access points for entry openings and document them on the preplan
- Identify all types of entry openings and document them on the preplan
- Identify, sketch, and evaluate internal configurations of confined space being preplanned
- Identify isolation procedures and emergency control locations
- Identify special resources needed for site being preplanned (verbalize)
- Apply all regulatory OSHA references (verbalize at least one)
- Complete skill in allotted time

TIME:

20 minutes

3. Demonstrate donning a supplied air respirator (SAR).

| REFERENCE: | NFPA 1006, 2021 edition, 7.3.3 |
|------------|--|
| CONDITION: | PPE for a confined space incident, supplied air respirator (SAR system). Follow AHJ protocols. |
| NOTE: | Steps may vary with different SARs. However, all of the following competence |

items should be covered during the donning process.

COMPETENCE:

- Wear appropriate PPE
- Check SAR cylinders (verbalize pressure)
- Check escape bottle pressure
- Don harness with attached escape bottle
- Correctly connect air hoses and lines
- Attach cylinder to air delivery system
- Open cylinder valve fully (one at a time as needed for continuous air supply)
- Don facepiece, adjust head harness, and check seal and exhalation valve
- Don protective hood (AHJ)
- Attach communication methods/device
- Attach hose to regulator or face piece
- Don helmet with chin strap secured
- Don gloves
- Complete skill in allotted time

TIME: 1 minute

4. Package a victim to a short spine immobilization device.

- REFERENCE: NFPA 1006, 2021 edition, 7.3.4
- CONDITION: Given a confined space incident, PPE, a short spine immobilization device, a cervical spine immobilization device, and a 2-member team. Follow AHJ protocols.
- SCENARIO: A victim with traumatic spinal injuries in a confined space needs spinal precautions and packaging

COMPETENCE:

- Wear appropriate PPE
- Recognize and perform basic management of traumatic injuries and medical conditions, including spine immobilization
- Demonstrate appropriate spine packaging techniques with minimal spinal movement (roll, slide, etc.) while maintaining cervical spine immobilization (controlling the head)
- Place padding in void spaces (between victim and device)
- Complete skill in allotted time

TIME:

5 minutes

CONFINED SPACE RESCUE – TECHNICIAN EVOLUTIONS

For the evolution in this section, the AHJ <u>must</u> be able to provide a safe testing environment for the candidates and accept all liability for candidate safety. The AHJ must have the capacity to provide a confined space prop/simulator, or a location for testing purposes.

To create a more realistic testing environment, the individual skills have been assembled into this examination evolution. Candidates must train and complete an in-house skills and evolution examination. The evolution will be graded on a 100% pass/fail basis.

| SKILL EXAM | |
|----------------------|--|
| EVOLUTION 1 : | Demonstrate technician level skills for a confined space rescue incident (with a victim horizontally oriented). Establish command, perform an appropriate scene size-up and create a corresponding Incident Action Plan for a confined space rescue scenario. |
| REFERENCE: | NFPA 1006, 2021 edition, 7.3.1-7.3.6 |
| CONDITION: | Given a confined space rescue incident (an AHJ approved location), a manikin, a confined space tool kit, a rope rescue tool kit, a short spine board, a supplied air respirator (SAR system), 8-10 member team with assigned roles (rescue officer, safety officer, rescuers, backup, attendant, etc.), an IAP, and a permit entry document. Use AHJ approved applicable forms. Follow AHJ protocols. |
| SCENARIO: | Your team has been called to rescue a victim in a horizontally oriented confined space containing an IDLH environment. The victim is not visible from the access opening and has a traumatic injury requiring packaging and removal. |
| TEAM ROLES: | Assigned team roles should include, but are not limited to, the following: rescue officer, safety officer, rescuers, backup team, attendant, etc., and other AHJ protocols. The safety officer must be qualified and provided by the AHJ. |
| | *The evolution exam is a team evolution but is graded individually; the whole team is not penalized if one or more members do not fulfill their required tasks. Each team member must have the knowledge/skills of each role. |
| COMPETENCE: | |
| | Establish command and perform a scene size-up Identify and don PPE required (include fall protection as needed) Conduct a risk-benefit analysis and determine rescue or recovery operation Collect documentation and gather information from witnesses (i.e., entry permit, LOTO log, etc.) Identify existing or potential hazards Identify barriers and control zones (hot, warm, cold) and deny access. Remove nonessential personnel and restrict entry Identify access point(s) for entry |

- Identify victim(s) point last seen.
- Request and identify types of additional resources needed (utilities, hazmat, technician or technical rescue, etc.)
- Identify, isolate, and mitigate all hazards (i.e., electrical hazard, hazardous material, physical or atmospheric hazards)
- Conduct monitoring of the confined space environment so that a representative sample of the space is obtained and documented
- Identify proper ventilation techniques and ventilate the confined space (as needed)
- Establish communications with rescuers/command and with victim if possible
- Initiate continuous atmospheric monitoring
- Determine and set up evacuation methods
- Determine methods of self-rescue
- Conduct a pre-entry medical exam for entry rescuers (verbalize)
- Secure tag lines to the rescuers
- Rescuer enters confined space at the selected entry point and begins search for the victim
- Rescuer makes contact with the victim and communicates with the rescue officer/attendant
- Determine physical and mental status of the victim
- Secure the SAR to the victim and/or retrieval equipment
- Treat medical conditions, as appropriate
- Move the victim to a safe location. Continually monitor the victim's air supply during movement to ensure no interruption of air flow.
- Use appropriate communication methods in/out of the confined space
- Apply short spine board to the victim
- Safely remove the victim without harm
- Transfer victim care to EMS provider, if appropriate

Verbalize the following:

- Identify need to rehab/decontaminate any PPE, equipment, and personnel
- Ensure all proper notifications (AHJ) have been made (i.e., medical examiner, law enforcement, etc.)
- Ensure all documentation, personnel accountability, data collection, and management systems are completed
- Identify any potential need for critical incident stress management
- Perform a post-incident debriefing and analysis
- Ensure all personnel and resources are returned to a state of readiness
- Transfer custody to the responsible party
- Terminate command
- Complete skill in allotted time

TIME:

1 hour

CONFINED SPACE RESCUE – TECHNICIAN EVOLUTION 2

For the evolution in this section, the AHJ <u>must</u> be able to provide a safe testing environment for the candidates and accept all liability for candidate safety. The AHJ must have the capacity to provide a confined space prop/simulator, or a location for testing purposes.

To create a more realistic testing environment, the individual skills have been assembled into this examination evolution. Candidates must train and complete an in-house skills and evolution examination. The evolution will be graded on a 100% pass/fail basis.

| SKILL EXAM EVOLUTION 2: | Demonstrate technician level skills for a confined space rescue incident (with a victim in a vertical space). Establish command, perform an appropriate scene size-up and create a corresponding Incident Action Plan for a confined space rescue scenario. |
|----------------------------|---|
| REFERENCE: | NFPA 1006, 2021 edition, 7.3.1-7.3.6 |
| CONDITION: | Given a confined space rescue incident (an AHJ approved location), a manikin, a confined space tool cache, a short spine immobilizer, a supplied air respirator (SAR) system, a high angle rope rescue tool kit, a portable anchor system, an 8-10 member team with assigned roles (rescue officer, safety officer, rescuers, rigging team, backup team, attendant, etc.), an IAP, and a permit entry document. Use AHJ approved applicable forms. Follow AHJ protocols. |
| SCENARIO: | Your team has been called to rescue a victim in a vertically oriented confined space containing an IDLH environment. The victim is not visible from the access opening and has a traumatic injury requiring packaging and removal. |
| TEAM ROLES: | The lead tester will assign team roles (on the exam day). The candidates must not know their "assigned" team roles prior to the evolution exam. Assigned team roles should include, but are not limited to, the following: rescue officer, safety officer, rescuers, rigging team, backup team, attendant, etc. The safety officer must be qualified and provided by the AHJ. |
| | *The evolution exam is a team evolution but is graded individually; the whole team is not penalized if one or more members do not fulfill their required tasks. Each team member must have the knowledge/skills of each role. |
| COMPETENCE: | Establish command and perform a scene size-up Identify and don PPE required (include fall protection as needed) Conduct a risk-benefit analysis and determine rescue or recovery operation Collect documentation and gather information from witnesses (i.e., entry permit, LOTO log, etc.) Identify existing or potential hazards Identify barriers and control zones (hot, warm, cold) and deny access Remove nonessential personnel and restrict entry Identify access point(s) for entry |

- Identify and construct a portable anchor system that will operate safely while lifting the load, without causing further harm to the victim. Keep the anchor stable.
- Construct a rope system using appropriate knots, hardware, and anchor points to lower/raise a rescuer and victim in/out of the confined space safely
- Identify victim(s) point last seen
- Request and identify types of additional resources needed (utilities, hazmat, technician or technical rescue, etc.)
- Identify, isolate, and mitigate all hazards (i.e., electrical hazard, hazardous materials, physical hazards or atmospheric hazards)
- Conduct initial and continuous monitoring of the confined space environment so that representative samples of the space are obtained and documented
- Identify proper ventilation techniques and ventilate the confined space (as needed)
- Establish communications with rescuers/command and with victim if possible
- Determine and set up evacuation methods
- Determine methods of self-rescue
- Conduct a pre-entry medical exam for entry rescuers (verbalize)
- Secure tag lines to the rescuers
- Rescuer enters the confined space at selected entry point and begins search for the victim
- Rescuer makes contact with the victim and communicates with the rescue officer/attendant
- Determine physical and mental status of victim
- Secure the SAR to the victim and/or retrieval equipment
- Treat medical conditions, as appropriate
- Move the victim to a safe location. Continually monitor the victim's air supply during movement to ensure no interruption of air flow
- Use appropriate communication methods in/out of the confined space
- Apply short spine board to the victim
- Safely remove victim while utilizing the rope system without causing harm to victim and rescuers
- Transfer victim care to EMS provider, if appropriate

Verbalize the following:

- Identify need to rehab/decontaminate any PPE, equipment, and personnel
- Ensure all proper notifications (AHJ) have been made (i.e., medical examiner, law enforcement, etc.)
- Ensure all documentation, personnel accountability, data collection, and management systems are completed
- Identify any potential need for critical incident stress management
- Perform a post-incident debriefing and analysis
- Ensure all personnel and resources are returned to a state of readiness
- Transfer custody to a responsible party
- Terminate command

1 hour

• Complete skill in allotted time

TIME:

UTAH FIRE SERVICE CERTIFICATION SYSTEM CONFINED SPACE RESCUE – TECHNICIAN

NFPA 1006, 2021 Edition 7.3

2 – Vertical

CONFINED SPACE RESCUE - TECHNICIAN TRAINING RECORD / IN-HOUSE COMPREHENSIVE FORM

| Candidate Na | ame: | | | | | Department: |
|--|--------------------|-----------|---|-----------|-------|---|
| Candidate Signature: | | | | | | Date of Completion: |
| Chief/Trainin | ng Offi | cer: | | | | Chief/Training Officer Signature: |
| This form may be completed on a computer but must be printed out for the Certification Tester to verify on test day. The date of completion must be filled in and the signatures of the Chief/Training Officer and the candidate must be original signatures. The signatures attest that all skills have been trained on and a complete in-house comprehensive exam was administered and passed. Falsification of signatures or any component of this document may result in the revocation, suspension, or denial of certification. | | | | | | |
| SECTION | TRAINING RECORD | | IN-HOUSE COMPREHENSIVE EXAMS DATE INSTRUCTOR PASS | | | SKILL |
| | DATE | norrector | DITE | normoerox | 11100 | Confined Space Rescue prerequisites have been met prior to Confined Space Rescue Technician. |
| 7.3.6 | | | | | | 1. Identify appropriate PPE and equipment requirements for a confined space rescue incident. |
| 7.3.2 | | | | | | 2. Preplan and sketch a confined space incident so that a safe, standard approach is used during a confined space rescue. |
| 7.3.3 | | | | | | 3. Demonstrate donning a supplied air respirator (SAR). |
| 7.3.4 | | | | | | 4. Package a victim to a short spine immobilization device. |
| EVOLUTION 1 - Horizontal | | | | | | Demonstrate Technician Level Skills for a Confined Space Rescue Incident (Victim is horizontal) with atmospheric hazards |
| EVOLUTION | | | | | | Demonstrate Technician Level Skills for a Confined Space Rescue Incident (Victim is vertical) |

with atmospheric hazards (Certification Exam)

APPENDIX A

CONFINED SPACE PHOTO EXAMPLE



APPENDIX B IN-HOUSE PROCTOR INSTRUCTIONS

Proctor Instructions for In-House Comprehensive Examination

As the training officers for your department, you are authorized by the Certification Council to conduct an in-house skills examination (100%) for this level of certification. You must be certified to the level that you are testing. For example, if you're FF II you can test both FF I and II, Awareness and Operations. The in-house skills examination must be completed and signed off prior to the actual certification spot check exam (completed by a UFRA certification tester).

• **Prior to conducting the test, review each candidate's training record** It is important that before doing this in-house training skills test, the candidate has completed training in all areas for the level being tested.

• Select and brief a safety officer

Select a safety officer to assist you during the test. This person is there to protect the candidates from injury during the testing process, is not taking the test, and is not assisting with the testing process. The safety officer must be qualified at the level being tested.

To better evaluate the skills being tested and determine the candidate's readiness for the <u>State</u> <u>Spot Check exam, follow these in-house exam instructions:</u>

- 1. This is a TEST and there should be NO COACHING or TRAINING during the testing process. If a candidate fails to perform a skill, that skill will count as a first attempt failure and they will be given a second attempt. If they fail a second attempt, they need to be retrained on that skill and tested again. Only **qualified** candidates that have passed with **100%** should be allowed to take the State Spot Check exam.
- 2. Before beginning the testing process, conduct a meeting with all candidates and review the testing process. Explain that this is a test and that the same process being used for the in-house exam will be used during the state exam.
- 3. Designate two separate areas for students testing: One area for those who are in the testing process and one area for those who have not yet begun the testing process. If separate areas are not available, make sure someone is in the room to ensure that students do not discuss the testing material. Make sure these areas have no training manuals or other reference materials for students to look at while awaiting testing.
- 4. To evaluate a candidate's performance, use the following as a guide:
 - a. The skill is completed in the allotted time.
 - b. Competence is shown by completing all performance criteria.
 - c. Safety is shown while completing the skill.
- 5. At each test station the tester will read the skill to be demonstrated, the condition to be met and the time limit to complete each skill. This information is contained in the skill section of each standards packet. Do this with each student as they come to each testing station. Ask for any questions. As each skill is tested and completed, sign it off in the section provided on the candidate's training record.

By conducting the in-house skills examination in this manner, you will prepare your candidates to successfully pass the State Spot Check exam. This will also assure that training records are current and that only those who are truly prepared take the Certification Examination.

APPENDIX C CERTIFICATION FORMS

Certification Forms are located on our website at UVU.edu/UFRA under Certification https://www.uvu.edu/ufra/certification/certification_forms.html

> Which includes the following forms: Intent to Participate Examination Request Certification/Recertification Request