



TEXAS VOLUNTEER FIREFIGHTERS' AND FIRE MARSHALS'
CERTIFICATION BOARD

SFFMA CERTIFICATION PROGRAM

Effective March 2024

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STATE FIREFIGHTERS' AND FIRE MARSHALS' ASSOCIATION OF TEXAS

Promote, Unify, Represent, and Educate The Fire Service of Texas

TO: Texas Fire Chiefs and Certification Coordinators

FROM: Texas Volunteer Firefighters' and Fire Marshals' Certification Board

RE: SFFMA Firefighter Certification Program

The Texas Volunteer Firefighters' and Fire Marshals' Certification Board recommends that your department initiate this program and join the volunteer firefighters of Texas in upgrading our training standards. In order to maintain the integrity of this program, it is strongly recommended that the Chief attend a Certification Workshop once every three years. These workshops are held monthly via Zoom and free to the public for anyone interested in learning more about the Certification Program.

Each of the Association's member departments has access to SFFMA's Portal system which enables the department to: maintain current contact information and membership rosters, and track/report training. Access information can be obtained by contacting the Austin office.

If you have any questions regarding any of these programs, contact your Area Board Member or the Austin office at the address below.

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RECOMMENDATION

Available Certifications

That Certification Programs for volunteer firefighters be established in the state of Texas on a voluntary basis and said programs be administered through the State Firefighters' and Fire Marshals' Association (SFFMA) office:

1. NFPA Firefighter I & II programs updated effective January 1, 2023;
2. HazMat Awareness & Operations programs effective January 1, 2023;
3. Master Firefighter program effective July 1, 1990;
4. Volunteer Investigation Personnel programs updated effective January 29, 2005;
5. Fire Officer I & II programs effective January 28, 2006;
6. Fire Officer III & IV programs effective January 1, 2015;
7. Driver/Operator programs updated effective January 1, 2020;
8. Fire Inspector program updated effective February 1, 2020;
9. Wildland Fire Fighting program updated effective June 10, 2020;
10. Fire & Life Safety Educator, Public Information Officer, Telecommunicator programs effective November 15, 2023.
11. Instructor and Rescue programs updated effective January 1, 2024;
12. Industrial Firefighter program updated effective January 1, 2023.

The Certification Board will implement additional programs as deemed necessary.

Physical Fitness

The very nature of a firefighter's actions is hazardous and extremely physically exhausting while on the fire scene. In order to render proper service to his/her department, and in keeping with this concept, a firefighter must be physically sound and free from any defect which may adversely affect his/her performance of duty. His/her personal safety and the lives of others will be endangered if the firefighter lacks the necessary physical abilities.

Emergency Medical Care

Minimum emergency medical care performance capabilities for entry-level personnel shall be developed and validated by the AHJ to include infection control, CPR, bleeding control, and shock management.

CERTIFICATION BOARD

Composition

That a Board of no more than twenty-five (25) members, appointed by the President of the State Firefighters' and Fire Marshals' Association of Texas (SFFMA) and known as the Texas Volunteer Firefighters' and Fire Marshals' Certification Board, administer the program.

Appointments

- a. Board Members will be appointed to serve four-year terms on the board.
- b. Vacancies of the Board will be filled by the President of the SFFMA to fill unexpired terms caused by any reason.
- c. No two Board Members are to be from the same Zone area.
- d. Prospective new Board Member's name and resume must be submitted in writing by the SFFMA District to the President and Executive Director of the SFFMA.
- e. One Board Member shall represent Texas A&M Engineering Extension Service (TEEX) as a voting liaison.
- f. One Board Member shall represent Texas A&M Forest Service (TFS) as a voting liaison.

Individual Requirements

- a. Board Member must:
 - i. reside in the Zone to be represented, and be active in that District;
 - ii. be an active, retired or honorary life member of a regularly organized volunteer or combination fire department that holds current membership in the SFFMA;
 - iii. maintain a current individual membership in the SFFMA;
 - iv. have at least eight (8) years of experience with a recognized fire department or combination of recognized fire departments;
 - v. hold at least an SFFMA Firefighter I certification;
 - vi. meet the instructional criteria for Certification Coordinator; and
 - vii. attend a majority of meetings and teleconferences each year.
 - viii. Be a proponent of the SFFMA, both for participating in the certification program but also selling the benefits of the SFFMA member.
 - ix. Be a promoter of the items our program has by educating the members at workshops.
 - x. Be aware of what cooperative agencies do. What can TEEX do, what can TFS do, TDEM, etc. What kind of training they offer.
 - xi. Represent your Zone/District and be the Primary contact for certification questions.
 - xii. Attend scheduled Certification Board Meetings and conference calls.
 - xiii. Deliver SFFMA Certification workshops at least twice a year throughout the Zone.
 - xiv. Assist Fire Departments with training documentation needs so they can ensure the delivery of training records to the SFFMA in a timely manner.
 - xv. Assist Fire Departments with certification needs so that they can ensure their members are receiving the proper training to achieve certifications via SFFMA.
 - xvi. Maintain formal lines of communications with Fire Departments regarding Certification news or issues.
 - xvii. Maintain performance standards for the Certification Program.
 - xviii. Become active with the different committees of the SFFMA Certification Board.
 - xix. Review Masters Applications on our Board use only page before any Board meeting.
 - xx. Stay up to date and informed on certification issues.
 - xxi. The Board shall maintain strict confidentiality of all complaints, allegations and actions with the exceptions of proper notifications made to the Executive Board.
 - xxii. Encourage your zone departments to participate in the certification program / assist them when they may need.
 - xxiii. Help the meetings be productive, if you have a relevant concern express it but do not beat a dead horse.
 - xiv. Learn the mission and history of the Board.

Assistants

- a. There may be up to two (2) assistants per Zone, designated by the Board Member from that Zone.
- b. One assistant may cast a proxy vote, only in the absence of the Board member.
- c. Assistants should
 - i. be named from departments outside the Board member's county;
 - ii. Reside in the Zone to be represented, and be active in that District;
 - iii. Be an active, retired or honorary life member of a regularly organized volunteer or combination fire department that holds current membership in the SFFMA;
 - iv. Maintain a current individual membership in the SFFMA.

Procedures

Meetings

- a. The Board shall meet at such times and places in the state of Texas as it deems necessary.
- b. Meetings shall be called by the Chairman upon his/her own motion, or upon the written request of five members.
- c. Quorum – A majority of members shall constitute a quorum.
- d. Orders of Business – Robert’s Rules of Order shall prevail for all meetings.

Officers

- a. Officers of the Board shall consist of a Chairman, Vice Chairman, Secretary, and Assistant Secretary.
- b. The Board shall elect its officers from the appointed members at its first meeting succeeding the June State Convention.

Objectives

1. The Board is to raise the level of competence of volunteer firefighting and prevention personnel by establishing and maintaining minimum standards in accordance with NFPA standards.
2. The Board has the authority to certify volunteer fire protection training and educational programs as having attained the minimum required standards established by the Board.

Duties

1. The Board has the power to revoke any certificate issued in the certification program, if the Board determines that:
 - a. the program is not being conducted properly within the member department;
 - b. the program is being abused in the department;
 - c. a certificate was wrongly issued or fraudulently obtained; or
 - d. a person’s criminal conviction of a felony or misdemeanor directly relates to the duties and responsibilities of the holder of a certificate issued by the Board.
2. The Board may, if malfeasance or clerical error is determined:
 - a. deny to a person the opportunity to be examined for a certificate;
 - b. deny the application for a certificate;
 - c. suspend or revoke an existing certificate; or
 - d. limit the terms or practice of a certificate to areas prescribed by the Board.
3. The methods and procedures for any revocation herein shall be established at the discretion of the Board.

Grievance Procedure

1. All grievances shall be initiated by a written complaint submitted to the Certification Administrator in the Austin Office alleging malfeasance regarding a department’s training program.
2. The written complaint shall be signed, notarized and specify the nature of the complaint.
3. Upon receipt of a properly submitted complaint, the Certification Administrator shall notify the Board of the complaint.
4. Under the instruction of the Chairman, the Zone Representative of the department in question, shall conduct a preliminary inquiry to determine the validity of the complaint and if further action is warranted. In the event the allegation involves the Zone Representative’s department, a Board Member representing a different zone shall conduct the inquiry.
5. The findings of the inquiry shall be presented to the Board which will determine:
 - a. the complaint lacks the merit for further action
 - b. the issue may be resolved within the department in question
 - c. the issues may be addressed by administrative education
 - d. an audit of the department’s training program and records are in order
6. In the event any audit is warranted, the Chairman shall appoint a committee to conduct the audit. The audit committee shall report its findings and recommendations to the Board which will determine the action to be taken.
7. Zone representative shall notify the Chief and Certification Coordinator of the department in question of all allegations, findings and actions taken by the Board.
8. Full documentation of the process shall be maintained in the Austin Office.
9. The Board shall maintain strict confidentiality of all complaints, allegations and actions with the exceptions of proper notifications made to the Executive Board.

CERTIFICATION IMPLEMENTATION METHOD

General Statement

1. It shall be understood that the suggested minimum standards herein described are designated as minimum programs. Participating Fire Departments are encouraged to exceed the minimum programs wherever possible. Continuous training beyond the minimum standards and testing on a regular basis for volunteer firefighters is strongly recommended. Nothing in these regulations shall limit or be construed as limiting the powers of the fire department or other agency or department of any city, town, county, parish, or municipal corporation to enact rules and regulations which establish a higher standard of training above the minimum.

Although the Board strongly endorses and supports adequate physical ability and good moral character as entrance requirements into a fire department, the matter of establishing entrance requirements is left to the respective local department.
2. Each participating fire department must have access to a current set of training materials from the library of any of the approved publishers, and must maintain current editions as they become available. Contact the SFFMA office for a current list of manuals required, or refer to our website at www.sffma.org.

Lesson plans, binders, and all approved training materials and current prices are available from the SFFMA office in Austin at discounted prices. Purchase programs may be arranged on an individual need basis.
3. Training provided under this program should include facilities, apparatus, equipment, reference materials, and records to support a quality volunteer firefighter education and training program. The resources should provide for classroom instruction, demonstrations and practical exercises for trainee to develop the knowledge and skills required for volunteer firefighter certification.
4. Applicants for all certifications must complete “Courage to be Safe” coursework and provide documentation at the time of application. A permanent record of the coursework completion will be maintained at the Austin Office.
5. Effective January 1, 2019 applicants for NFPA 1001: Firefighter I (or certifications that list this as a prerequisite) must complete “Traffic Incident Management” coursework and provide documentation at the time of application. A permanent record of the coursework completion will be maintained at the Austin Office.
6. Effective January 1, 2025 applicants for all certifications must complete the IAFC endorsed or SFFMA approved Cancer Awareness course.

Definitions

Certain definitions are used in describing the minimum standards and related requirements as suggested by the Board, including but not limited to:

1. Volunteer – a non-career professional
2. Board – The Texas Volunteer Firefighters’ and Fire Marshals’ Certification Board
3. Chairman – the presiding officer of the Board
4. Department – a fire department that utilizes fire suppression and/or prevention personnel and/or search and rescue personnel
5. Fire Chief – the head of the fire department
6. Certification Coordinator – the official person in charge of setting up, maintaining and validating all of the certification records
7. Austin Office – certification department of SFFMA
8. Active Firefighter – an individual 18 years of age or older who participates in a minimum of 20 clock hours of training (including Continuing Education) per year, response participation required by the AHJ
9. Trainee – a member of the fire department who has not satisfied the requirements of the certification in question
10. School – any school, college, university, academy, or local training program which offers fire service training and includes within its meaning the combination of course curriculum, instructors and facilities
11. Requirement – a description of a provision, which relates to suggested minimum standards
12. Specification – a description of a requirement supplementing a section of the regulations
13. Examination – a Board-approved test administered by the Board and/or a Board-approved examiner, which an individual must pass as one of the requirements for accredited certification
14. Curriculum – the objectives established by the Board as a minimum requirement for certification
15. Objective – the numbered criteria required for mastery of each numbered statement
16. Eligibility – a determination of whether or not an individual has met the requirements set by the Board and would therefore be allowed to take a Board examination(s)
17. Eligibility Endorsement – a signed statement testifying to the fact that an individual has met the required training objectives of a Board-approved curriculum and is qualified to take a Board-approved examination of such level
18. Examinee – an individual who has met the Board requirements and therefore qualifies to take a Board-approved examination
19. Examiner – an individual appointed and/or approved by the Board or Board member to administer a Board-approved examination(s)
20. Certificate of Successful Completion – a document supplied by the SFFMA which identifies and shall be used as proof that an individual has completed the required training and has successfully passed the Board-approved examination(s) for certification.
21. AHJ – authority having jurisdiction
22. FEMA – Federal Emergency Management Agency
23. ICS – Incident Command System
24. IFSTA – International Fire Service Training Association
25. NFIRS – National Fire Incident Reporting System
26. NIMS – National Incident Management System

27. NFA – National Fire Academy
28. NFPA – National Fire Protection Association
29. NWCG – National Wildfire Coordinating Group
30. TCFP – Texas Commission on Fire Protection
31. IFSAC – International Fire Service Accreditation Congress
32. Pro Board – Pro Board Fire Service Professional Qualifications System
33. IAFC – International Association of Fire Chiefs

PARTICIPATION REQUIREMENTS

For the Individual

Any participating individual must have and maintain a current individual membership in the SFFMA

For the Department

When participating through a department, the department MUST:

1. maintain a current membership in the SFFMA (participation at the district association level is strongly encouraged);
2. appoint through the Portal website a Certification Coordinator who meets and maintains participation and workshop attendance requirements;
3. report training received by participating members to the Austin office by updates to the online database;
4. departments which do not meet the participation requirements will have applications held until such time as requirements are met.

For Individuals unable to volunteer with a Department

Individuals participating as Honorably Separated/Retired MUST:

1. maintain a current membership in the SFFMA (Participation at the district association level is strongly encouraged);
2. submit all certifications and/or training records to their Zone Representative for verification.

CREDIT FOR VOLUNTEER CERTIFICATION TRAINING

Sources

Any course taught by a local fire department, an accredited college, university, or other agency is acceptable provided that the Certification Coordinator and the Fire Chief attest that the course meets the minimum requirements as set forth by the Certification Board.

Fire Scene

In no case shall fire scene or response to actual alarms apply towards volunteer certification. All training shall be in a controlled environment.

Electronic Media (CD/DVD)

Any course taught by means of electronic media may be approved on the following basis:

1. each training program topic must receive the approval of the Fire Chief and Certification Coordinator for the fire department utilizing the program.
2. the responsibility of documentation, review and testing of the program topics will be that of the Fire Chief and Certification Coordinator of said department. All courses must be taught in a controlled classroom environment.
3. approval of training credit will be based on the Fire Chief's and Certification Coordinator's assessment of each program topic, review and testing as well as the Austin Office Certification Administrator's assessment of the program topic.

Outside Entities

SFFMA recognizes any:

1. training conducted by an individual possessing an instructor's certificate granted by the TCFP and its approved programs;
2. training meeting the most current standards set by NFPA; or
3. testing accredited by IFSAC or ProBoard.

Older Training Records

The Certification Board accepts training with the proper verification, meeting all requirements of this program, from January 1, 1975, to the present.

1. For standard participation, all training must be attested to by the Certification Coordinator who must meet the criteria of the Board and who has been either elected by his or her department or appointed by the Fire Chief of that department.
2. For Honorably Retired/Separated participation, all training must be attested to by the Individual and the Zone Representative.

CERTIFICATION PROCESS

Effective dates based on documentation of all requirements including prerequisites, training, fees, and examinations (if required). For a list of prerequisites, see *CERTIFICATION IMPLEMENTATION METHOD* (Page 6).

For Individuals

To file for any certification as an Honorably Separated/Retired:

1. Trainee may upload course completion documentation to their own record in the Portal system at any time.
2. Upload Review
 - a. All documents submitted by a trainee must receive review by a second party
 - b. If affiliated with a department:
 - i. Upon upload the Portal system will notify the department's Certification Coordinator.
 - ii. Coordinator will have 30 days to review and either accept or reject any given submission.
 - a) If approved, training will be marked as complete
 - b) If rejected, individual may request additional review by Zone Representative.
 - c) If no action taken within 30-day review period, Portal system will notify Zone Representative of delay.
 - d) If no action taken by Zone Representative within second 30-day review window, Portal system will notify SFFMA Office staff.
 - c. If not affiliated with a department (including honorably separated and retired):
 - i. Upon upload the Portal system will notify the Zone Representative for the area within which the individual resides.
 - ii. Zone Representative will have 30 days to review and either accept or reject any given submission.
 - a) If approved, training will be marked as complete
 - b) If rejected, individual may request additional review by SFFMA Office staff.
 - c) If no action taken by Zone Representative within second 30-day review window, Portal system will notify SFFMA Office staff.

Through a Department

To file for any certification through a Fire Department:

1. Objective completion entered by the department's Certification Coordinator will immediately credit toward individual records.
2. Objective completion entered by individuals granted "Instructor" administrative level in a department follows these steps:
 - a. Upon entry the Portal system will notify the department's Certification Coordinator.
 - b. If approved, training will be marked as complete
 - c. If rejected, Coordinator must indicate reason for rejection, allowing Instructor to correct and resubmit.

Fees

1. Fees are set at twenty-five dollars (\$25.00).
2. Upon completion of training objectives, the Portal system will indicate fee payment availability.
3. Fees are payable by either the department or the individual.
4. For certifications requiring examination:
 - a. Payment of the fee allows for one (1) written examination registration.
 - b. Each additional written examination registration (if necessary) will require an additional fee payment.
 - c. Failure to appear at a scheduled examination session without notice requires an additional fee payment to reschedule.
5. For certifications not requiring examination payment of the fee allows for certification issuance.

Patches

Certificate holders may purchase replacement certificates for \$5.00 each and/or additional shoulder patches for \$3.00 each from the Austin Office.

CERTIFICATION TESTING

Examination Requirement

1. The Board shall prescribe the content of any certification examination that tests knowledge and/or skills of the examinee concerning the discipline addressed by the examination.
2. The Certification Board may amend existing certifications to require examination.
3. Procedures for conducting written and skills examinations are determined by the Board.

Grading

The minimum passing score of each written or skill examination shall be seventy percent (70%).

Minimum Requirements

1. For the trainee
In order to qualify to take a Board-approved examination, the individual must:
 - a. receive notice of eligibility from the Portal system;
 - b. schedule exam session attendance through the Portal system;
 - c. bring to the test site and display upon request a valid Texas Driver's License or Texas Identification Card which contains a photograph of the examinee; and
 - d. comply with all written and verbal instructions of the examiner.
2. For Skills Evaluators/Coordinators:
 - a. Skills Evaluators/Coordinators must:
 - i. meet the SFFMA instructional standards for full department Certification Coordinator; and/or
 - ii. have completed a Board-approved skills proctor course; and/or
 - iii. be a credentialed proctor of an approved emergency services certifying entity.
 - b. Skills Evaluators/Coordinators must be certified at or above the skill level they are evaluating.
 - c. Skills Evaluators/Coordinators shall be approved by the Zone Representative and Austin Office.
 - d. Board Members may, at their discretion, monitor any skills tests.

Reciprocity

1. Individuals requesting reciprocity must provide verifiable documentation from one of the following sources towards written and skill examinations:
 - a. Texas Commission on Fire Protection (TCFP);
 - b. IFSAC; or
 - c. ProBoard
2. Acceptance of documents for exam reciprocity consumes fee.

Procedures

1. An examinee who fails to pass an examination shall be given additional opportunities to pass the examination.
 - a. Upon failure of each examination, the Certification Coordinator will be notified as to the applicant's failure and the specific area(s) in which the applicant did not qualify.
2. Each written examination must be administered by SFFMA or by an SFFMA-approved examiner.
3. The examiner(s) shall:
 - a. ensure that the examination remains secure and is conducted under conditions warranting honest results;
 - b. collect all examination materials from any examinee who is dismissed;
 - c. record the fact of examination on the endorsement of eligibility; and
 - d. collect any fraudulent or questionable endorsements.
4. The monitor(s) shall:
 - a. monitor the examination while in progress;
 - b. control the entrance and exit from the test site;
 - c. permit no one in the room while the written test is in progress except examiner(s), examinee(s), and Board member(s);
 - d. assign or re-assign seating;
 - e. ensure all cell phones and/or pagers are turned off prior to examination; and
 - f. bar admission to or dismiss any examinee who fails to comply with any of the provisions relating to eligibility.
5. All official grading and notification shall come from the Austin Office. SFFMA shall inform the examinee of the test results as soon as reasonably possible after completion of the examination.
6. Upon successful completion of the Board-approved written and performance (skills) examinations, SFFMA shall provide the appropriate Firefighter certificate. A permanent record of the Firefighter certification will be maintained in the Austin Office.

Skill Examinations

1. The skills examination shall consist of three (3) practical skills which must be physically demonstrated by each examinee before an examiner.
2. Objectives for Firefighter I shall consist of one (1) skill pertaining to SCBA, and two (2) other skills which are randomly selected by the Austin office prior to the examination.
3. Objectives for Firefighter II shall consist of three (3) skills which are randomly selected by the Austin office prior to the examination.
4. An examinee shall not be notified of the specific skills objectives to be tested until the time of the examination.
5. Failure of any part of the performance skill portion of the examination requires the re-testing of that particular skill.

Expiration

SFFMA Certification examinations that receive a passing grade shall expire two years from the date of the examination if all steps of certification issuance have not been met.

MINIMUM STANDARDS FOR CERTIFICATION COORDINATOR

Individual Requirements

Individuals selected as Certification Coordinator must meet the definition of an active firefighter. The Certification Coordinator and the Fire Chief CANNOT be one in the same person and there can be only one Certification Coordinator per department. The Fire Chief may appoint/re-appoint a Certification Coordinator at any time by adjusting the individual's access level through the Portal Database.

Training requirements

For full status, the applicant must hold an SFFMA Firefighter I certificate; and have successfully completed one of the following:

1. 40-Hour Methods of Teaching course;
2. Instructional Techniques for Company Officers;
3. NFPA 1041: Instructor I; or
4. Any Board-approved comparable educational instructional course

Provisional Coordinator Status

Individuals not meeting both of the above training requirements may serve on a provisional basis as follows:

1. Must complete ALL of the training requirements within five (5) years.
2. If all requirements are not met by the end of the five (5) year period, a new individual must be named to the position.
3. Upon completion of the required training, personnel MUST submit appropriate documentation to the Austin office. This documentation will then become be attached to the original application. Additional fees are not required.
4. After verification of completion of required training, the Austin office will amend any records to reflect changes.

Continuing Education

To maintain participation status, the Certification Coordinator MUST:

1. attend a Certification Workshop within one (1) year of their appointment date.
2. attend at least one (1) Certification Workshop every five (5) years.

MINIMUM STANDARDS FOR FIREFIGHTER CERTIFICATION

REFERENCE MATERIALS

The jurisdictional entity in which the Firefighter Personnel serves must have access to the most current editions of the following training manuals:

IFSTA

Essentials of Firefighting

Jones & Bartlett

Fire Fighter Skills and Hazardous Materials Response

NFPA

NFPA 1001: *Standard for Fire Fighter Professional Qualifications*

The Certification Program offers two (2) levels of fully accredited Firefighter certification.

NFPA 1001: Firefighter I

1. Firefighter I Training completion
 - a. Minimum Requirements – Applicant must:
 - i. complete and report ‘Courage to be Safe’ coursework;
 - ii. complete and report ‘Traffic Incident Management’ coursework;
 - iii. complete and report all objectives from the 1001: Firefighter I objectives including those recommended prior to beginning live fire training;
 - iv. Applicants must hold, or apply concurrently for, the following SFFMA certifications:
 - a) 1072: HazMat Awareness
 - b) 1072: HazMat Operations
 - b. Previously issued certifications are “grandfathered” to test for the Firefighter I training completion level as follows:
 - i. Intermediate Firefighter certifications with an effective date prior to January 1, 2012; or
 - ii. Module 3: Firefighter I (Completion) certifications with an effective date prior to January 1, 2015.
 - c. The Austin office will issue an Eligibility Endorsement letter stating that the trainee is qualified to take the Board-approved examination.
 - d. Trainees should complete all objectives from the Firefighter I curriculum marked with an asterisk (*) prior to beginning actual live fire training.
2. Full Firefighter I Certification
 - a. Minimum Requirements – Applicant must:
 - i. successfully complete the required Board-approved written and skill examinations (HazMat and Firefighter I).
 - b. Previously issued certifications are “grandfathered” to the full Firefighter I level as follows:
 - i. Accredited Intermediate Firefighter certifications with an effective date prior to January 1, 2012; or
 - ii. Firefighter I certifications with an effective date prior to January 1, 2015.
 - c. The Austin office will:
 - i. issue a full Firefighter I certificate and shoulder patch; and
 - ii. maintain a permanent record of the certification.

NFPA 1001: Firefighter II

1. Firefighter II Training completion
 - a. Minimum Requirements – Applicant must:
 - i. complete and report ‘Courage to be Safe’ coursework;
 - ii. complete and report ‘Traffic Incident Management’ coursework;
 - iii. complete and report all objectives from the 1001: Firefighter I objectives including those recommended prior to beginning live fire training.;
 - v. complete and report all 1001: Firefighter II objectives;
 - vi. Applicants must hold, or apply concurrently for, the following SFFMA certifications:
 - a) 1072: HazMat Awareness
 - b) 1072: HazMat Operations
 - c) 1001: Firefighter I
 - b. Previously issued certifications are “grandfathered” to test for the Firefighter II training completion level as follows:
 - i. Advanced Firefighter certifications with an effective date prior to January 1, 2012; or
 - ii. Module 4: Firefighter II (Advanced) certifications with an effective date prior to January 1, 2015.
 - c. The Austin office will issue an Eligibility Endorsement letter stating that the trainee is qualified to take the Board-approved examination.
2. Full Firefighter II Certification
 - a. Minimum Requirements:
 - i. SFFMA Firefighter I certificate; and
 - ii. successfully complete the required Board-approved written and skill examinations (HazMat, Firefighter I, and Firefighter II).
 - b. Previously issued certifications are “grandfathered” to the full Firefighter II level as follows:
 - i. Accredited Advanced Firefighter certifications with an effective date prior to January 1, 2012; or
 - ii. Firefighter II certifications with an effective date prior to January 1, 2015.
 - c. The Austin office will:
 - i. issue a full Firefighter II certificate and shoulder patch; and
 - ii. maintain a permanent record of the certification.

SECTION 1 ORIENTATION & FIRE SERVICE HISTORY

Firefighter I – Objectives marked with an asterisk (*) should be completed before beginning live fire training.

- 01-I.01* Trainee shall identify the organizational structure of the fire department and his/her role in it.
NFPA 1001 4.1.1
- 01-I.02* Trainee shall identify the size of the fire department, the scope of its operation, and the Standard Operational Procedures (SOPs).
NFPA 1001 4.1.1
Department can use FD Organization and Standards FF I - 1 Skill Sheet to document
- 01-I.03* Trainee shall identify the fire department rules and regulations as they apply to all members of the department.
NFPA 1001 4.1.1 A-B
- 01-I.04* Trainee shall identify the mission of the fire service
NFPA 1001 4.1.1
- 01-I.05* Trainee shall identify the role of other agencies as they relate to the fire department.
NFPA 1001 4.1.1
- 01-I.06* Trainee shall describe the components of the department's member assistance program.
NFPA 1001 4.1.1
- 01-I.07* Trainee shall identify the importance of physical fitness and a healthy lifestyle to the performance of duties of a firefighter
NFPA 1001 4.1.1
- 01-I.08* Trainee shall identify the critical aspects of NFPA 1500: Standard on Fire Department Occupational Safety and Health Program.
NFPA 1001 4.1.1
- 01-I.09* Trainee shall identify activities on a national level required by FEMA to meet its responsibilities to establish and maintain comprehensive and coordinated emergency management in the United States.
Completion of ICS-700 meets the requirements of this objective.
NFPA 1001 4.1.1
- 01-I.10* Trainee shall identify, by title, the official responsible for emergency management in the state.
Completion of ICS-800 meets the requirements of this objective.
NFPA 1001 4.1.1
- 01-I.11* Trainee shall identify, by title, the official responsible for emergency management in a county or parish.
Completion of ICS-800 meets the requirements of this objective.
NFPA 1001 4.1.1
- 01-I.12* Trainee shall identify, by title, the city official who is responsible for emergency management in a city.
Completion of ICS-800 meets the requirements of this objective.
NFPA 1001 4.1.1
- 01-I.13* Trainee shall identify department procedures for potential disasters in the area of their response.
Completion of ICS-800 meets the requirements of this objective.
NFPA 1001 4.1.1
- 01-I.14* Trainee shall have knowledge of the Incident Management System
NFPA 1001 4.1.1

Firefighter II

- 01-II.01 Trainee shall identify and describe the purposes of an Incident Command System (ICS).
Completion of ICS-100 meets the requirements of this objective.
NFPA 1001 5.1.1
- | | |
|------------------------------|---------------------------------------|
| A. Common terminology | E. Consolidated action plans |
| B. Modular organization | F. Manageable span of control |
| C. Integrated communications | G. Pre-designated incident facilities |
| D. Unified command structure | H. Comprehensive resource management |
- 01-II.02 Trainee shall describe the procedure for implementing the Incident Management System
Department can use Incident Management System FF II - 1 Skill Sheet to document
Completion of ICS-200 meets the requirements of this objective.
NFPA 1001 5.1.1
- | |
|---|
| A. Hazard and risk analysis |
| 1. What has occurred? |
| 2. What is the current status of the emergency? |
| 3. Is anyone trapped or injured? |
| 4. Can the emergency be handled with the resources on scene or en route? |
| 5. Does the emergency fall within the scope of the individual's training? |
| B. Risk vs. benefit |

01-II.03 Trainee shall define the functions necessary to manage an incident effectively and the responsibilities within the Incident Management System

Completion of ICS-200 meets the requirements of this objective.

NFPA 1001 5.1.2

- | | |
|----------------|---------------------------|
| A. Command | E. Operations |
| B. Safety | F. Planning |
| C. Liaison | G. Logistics |
| D. Information | H. Finance/Administration |

01-II.04 Trainee shall list components and functional areas of the operations section within Incident Management System.

Completion of ICS-200 meets the requirements of this objective.

NFPA 1001 5.1.1

- A. Incident Command
- B. Staging
- C. Branches
- D. Divisions and Groups
- E. Strike Teams and Task Forces
- F. Single Resources

01-II.05 Trainee shall describe the procedure for establishing command and the transfer of command Completion of ICS-200 meets the requirements of this objective.

NFPA 1001 5.1.1

- A. First on scene
 - 1. Investigation
 - 2. Command
 - 3. Pass command for fast attack/rescue
- B. Considerations for transfer of command
 - 1. Arrival of senior staff
 - 2. Specialized incident
 - 3. Resource requirements
 - 4. Time restraints
 - 5. Demobilization
- C. Methods of transferring command
 - 1. Face-to-face
 - 2. Via radio

01-II.06 Trainee shall demonstrate the procedure for Transferring command

Completion of ICS-200 meets the requirements of this objective.

NFPA 1001 5.1.1

- A. Situation status report (Sit Stat)
- B. Communicating transfer of command

SECTION 2 FORCIBLE ENTRY

Firefighter I – Objectives marked with an asterisk (*) should be completed before beginning live fire training.

02-I.01* Trainee shall identify and demonstrate the use of various types of manual and/or powered forcible entry tools used in the AHJ

Department can use Forcible Entry FF I - 4 Skill Sheet to document

NFPA 1001 4.3.4.A-B

- A. Cutting tools
- B. Prying tools
- C. Pushing/Pulling tools
- D. Striking tools

02-I.02* Trainee shall identify the method and procedure of proper cleaning, maintenance and inspection of various types of the following forcible entry tools and equipment.

Department can use Ropes FF I - 1 Skill Sheet to document

NFPA 1001 4.5.1.A-B

- A. Axe heads and cutting edges
- B. Wooden handles
- C. Fiberglass handles
- D. Plated surfaces
- E. Unprotected metal surfaces
- F. Power equipment

02-I.03* Trainee shall identify basic construction of typical doors, windows, and walls within the AHJ.

NFPA 1001 4.3.4.A

- A. Doors
 - 1. Swinging doors
 - a. Inward opening
 - b. Outward opening
 - c. Double swing
 - 2. Wooden doors
 - 3. Metal doors
 - 4. Tempered plate glass doors
 - 5. Revolving doors
 - 6. Sliding doors
 - 7. Overhead doors
 - 8. Fire doors
- B. Windows
 - 1. Checkrail windows (double-hung)
 - 2. Casement windows (hinged)
 - 3. Projected windows (factory)
 - 4. Awning and jalousie windows
 - 5. Plastic windows (high security)
 - 6. Screened or barred windows
- C. Walls
 - 1. Masonry and veneered walls
 - 2. Metal walls
 - 3. Wood frame walls
 - 4. Partition walls

02-I.04* Trainee shall demonstrate operation of doors, windows, and locks;

NFPA 1001 4.3.4.A

- A. Doors
 - 1. Swinging doors
 - 2. Wooden doors
 - 3. Metal doors
 - 4. Tempered plate glass doors
 - 5. Revolving doors
 - 6. Sliding doors
 - 7. Overhead doors
 - 8. Fire doors
- B. Windows
 - 1. Checkrail windows (double-hung)
 - 2. Casement windows (hinged)
 - 3. Projected windows (factory)
 - 4. Awning and jalousie windows
 - 5. Plastic windows (high security)
 - 6. Screened or barred windows
- C. Locks
 - 1. door locking devices
 - 2. window locking devices

02-I.05* Trainee shall identify and the dangers associated with forcing entry through doors, windows, and walls.

NFPA 1001 4.3.4.A, 4.3.10.A

02-I.06* Trainee shall identify the method and technique of forcible entry through any door, window, ceiling, roof, floor and vertical barrier.

NFPA 1001 4.3.4.B

Department can use Forcible Entry FF I - 1 Skill Sheet to document

Department can use Forcible Entry FF I - 2 Skill Sheet to document

Department can use Forcible Entry FF I - 3 Skill Sheet to document

Firefighter II – There are no objectives required for this certification level.

SECTION 3 FIRE SERVICE LADDER PRACTICES

Firefighter I – Objectives marked with an asterisk (*) should be completed before beginning live fire training.

03-I.01* Trainee shall identify each type of ladder and define its use.

NFPA 1001 4.3.6.A-B

- A. Single ladders
- B. Roof ladders
- C. Folding ladders
- D. Extension ladders
- E. Pole ladders
- F. Combination ladders

03-I.02* Trainee, operating as an individual and as a member of a team, shall demonstrate or explain properly picking-up, carrying, raising, and lowering a ladder using the following methods:

Department can use Ladders FF I - 8 Skill Sheet to document
Department can use Ladders FF I - 9 Skill Sheet to document
Department can use Ladders FF I - 10 Skill Sheet to document
Department can use Ladders FF I - 11 Skill Sheet to document
Department can use Ladders FF I - 12 Skill Sheet to document
Department can use Ladders FF I - 13 Skill Sheet to document
Department can use Ladders FF I - 14 Skill Sheet to document

NFPA 1001 4.3.6, 4.3.6.A-B, 4.3.12.A-B

- A. One-firefighter carry
 - 1. 10' collapsible
 - 2. 14' combination
 - a. Low-shoulder
 - b. Flat-Shoulder
 - 3. 14' with folding hooks
 - a. Low-shoulder
 - b. Flat-Shoulder
 - 4. 14' with folding hooks, for carrying up a ladder
 - a. Low-shoulder
- B. Two-firefighter carry
 - 1. 24' 2-section extension ladder
 - a. Low-shoulder
 - b. Arm's length on-edge
- C. Three-firefighter carry
 - 1. 35' or extension ladder
 - a. Flat-shoulder
 - b. Flat arm's length
- D. Four-firefighter carry
 - 1. 35' or extension ladder
 - a. Flat carry
- E. Roof
- F. Attic

03-I.03* Trainee shall identify the load capacities for ground ladders, according to NFPA 1931.

NFPA 1001 4.3.6, 4.3.6.A

- A. Trainee shall identify the load capacities for folding ladders, pompier ladders, single roof ladders, all extension ladders, and combination ladders, according to NFPA 1931.
- B. Trainee shall identify "ladder load."

03-I.04* Trainee shall mount, ascend, dismount, and descend each of the following types of ground ladder:

NFPA 1001 4.3.6, 4.3.12, 4.3.12.B

- A. 10' folding ladder
- B. 14' combination ladder
- C. 14' with folding hooks
- D. 24' extension ladder
- E. 35' extension ladder

03-I.05* Trainee shall identify, describe, and demonstrate the techniques of cleaning ladders.

Department can use Ladders FF I - 2 Skill Sheet to document

NFPA 1001 4.5.1, 4.5.1.A-B

- A. Trainee shall identify the requirements pertaining to the frequency for cleaning ground ladders.
- B. Trainee shall describe and demonstrate the procedures for cleaning ground ladders.

03-I.06* Trainee shall identify and name the parts of various fire service ladders.

NFPA 1001 4.3.6.A

- | | | |
|----------------|----------------------|-------------|
| A. Beam | G. Halyard | M. Rail |
| B. Bed Section | H. Heat sensor label | N. Rung |
| C. Butt | I. Hooks | O. Staypole |
| D. Butt Spur | J. Pawls (dogs) | P. Stops |
| E. Fly section | K. Protection plates | Q. Tie rod |
| F. Guides | L. Pulley | R. Tip |

03-I.07* Trainee shall identify the safety aspects of handling, raising, and climbing techniques for mounting, ascending, dismounting, and descending ladders:

NFPA 1001 4.3.6

A. Trainee shall describe the following hazards associated with carrying a ground ladder:

1. moving/guiding
2. other personnel
3. obstacles

B. Trainee shall describe the following hazards associated with raising a ground ladder:

1. exposure to heat or flame
2. stability of building
3. uneven terrain
 - a. Flat, stable surface
 - b. Non-skid surface
 - c. Soft Spots
4. overhead obstruction(s):
 - a. electricity
 - b. windows
 - c. falling debris
 - d. overhangs
5. High traffic areas (doorways)

C. Raising and Climbing

1. full protective equipment
2. proper lifting methods
3. ladder angle and spacing
4. pawls locked and halyard tied
5. heel person and tying ladder
6. hand placement and positioning
7. climbing techniques to mount, ascend, dismount, and descend with same hand and foot

D. Trainee shall describe and demonstrate the following techniques of working from ground ladders with tools and equipment

Department can use Ladders FF I - 7 Skill Sheet to document

NFPA 1001 4.3.12

1. working off a ladder with a pike pole using a leg lock.
2. working off a ladder with an axe using a leg lock.
3. working off a ladder with a pike pole using a safety harness.
4. working off a ladder with an axe using a safety harness.
5. deployment of a roof ladder on a pitched roof.
6. climbing techniques to mount, ascend, dismount and descend with and using hoses.

E. Aerial Ladders (if found in AHJ)

1. overhead obstacles
2. zone of collapse
3. proper placement

03-I.08* Trainee shall identify how to select the proper ladder for the job to be done, and the maximum working heights for fire service ladders.

A. Trainee shall identify and select the appropriate length ladder for a given task.

NFPA 1001 4.3.6.A-B

B. Trainee shall identify the reach for the following ground ladders set at the proper climbing angle.

NFPA 1001 4.3.6, 4.3.6.A-B, 4.3.9, 4.3.10

- | | |
|---------------------------|-------------------------|
| 1. 10' folding ladder | 4. 24' extension ladder |
| 2. 14' combination ladder | 5. 35' extension ladder |
| 3. 14' with folding hooks | |

- 03-I.09* Trainee shall identify the proper placement and positioning of each type of fire service ladder for different types of jobs.
- A. Trainee, given intended use, shall describe and demonstrate the proper placement of a ground ladder.
- NFPA 1001 4.3.6, 4.3.12**
- | | |
|------------------|------------------|
| 1. Ventilation | 4. Roof |
| 2. Rescue | 5. Other factors |
| 3. Vantage Point | |
- B. Trainee shall identify the proper “angle of inclination” for climbing techniques for mounting, ascending, dismounting, and descending ground ladders.
- Department can use Ladders FF I - 15 Skill Sheet to document
- NFPA 1001 4.3.6**
1. Roof
 2. Window
 - a. Entry
 - b. Ventilation or working
 - c. Rescue set
- 03-I.10* Trainee shall identify the materials used in ladder construction and list the advantages and disadvantages of each type of material.
- NFPA 1001 4.3.6**
- A. Metal ladder construction
 - B. Wooden ladder construction
 - C. Fiberglass ladder construction
- 03-I.11* Trainee shall identify, describe, and demonstrate inspection and maintenance procedures for different types of ground ladders.
- Department can use Ladders FF I - 1 Skill Sheet to document
- NFPA 1001 4.5.1**
- A. Trainee shall identify the requirements pertaining to the frequency of inspection and maintenance of ground ladders.
 - B. Trainee shall describe and demonstrate the inspection and maintenance procedures for ground ladders, according to NFPA 1932.
 1. Metal ground ladders
 2. Wood ground ladders
 3. Fiberglass ground ladders
- 03-I.12* Trainee shall identify and explain the annual service test for ground ladders.
- NFPA 1001 4.5.1**
- 03-I.13* Trainee shall, with or without a safety harness, climb the usable length of each type of ground and aerial ladder available to the AHJ and demonstrate:
- Department can use Ladders FF I - 3 Skill Sheet to document
- Department can use Ladders FF I - 4 Skill Sheet to document
- Department can use Ladders FF I - 5 Skill Sheet to document
- Department can use Ladders FF I - 6 Skill Sheet to document
- NFPA 1001 4.3.10, 4.3.12**
- A. Carrying fire fighting tools or equipment, while ascending or descending.
 - B. Bringing an injured person down.
 - C. The techniques of working from ground and aerial ladders with tools and appliances.

Firefighter II - There are no objectives required for this certification level.

SECTION 4 FIRE HOSE PRACTICES

Firefighter I – Objectives marked with an asterisk (*) should be completed before beginning live fire training.

04-I.01* Trainee shall identify the sizes, types, amounts, and use of hose carried on fire apparatus.

NFPA 1001 4.3.10

04-I.02* Trainee shall demonstrate the use of nozzles, hose adapters, and hose appliances carried on the local fire apparatus.

NFPA 1001 4.3.10.A-B

- A. Nozzles
 - 1. Solid stream nozzle
 - 2. Fog nozzle
 - 3. Cellar nozzle
 - 4. Applicator nozzle
 - 5. Master stream device (Playpipe)
- B. Water Valves
 - 1. Gate
 - 2. Ball
 - 3. Butterfly
 - 4. Clapper
 - 5. Piston
- C. Hose Adapters
 - 1. Double male
 - 2. Double female
 - 3. Reducers
 - 4. Increases
 - 5. Elbows
 - 6. Caps
 - 7. Plugs
 - 8. Blindcaps
- D. Hose Appliances
 - 1. Manifold
 - 2. Water thief
 - 3. Wye
 - 4. Siamese
 - 5. In-line relay valve
 - 6. Intake relief valve
- E. Hose Tools
 - 1. Spanner wrench
 - 2. Hydrant wrench
 - 3. Hose strap
 - 4. Hose rope
 - 5. Hose chain
 - 6. Hose roller
 - 7. Hose jacket
 - 8. Hose clamp
 - 9. Suction hose strainer
 - 10. Hose bridges
 - 11. Hose wringers

04-I.03* Trainee, given the necessary equipment and operating as an individual and as a member of a team, shall advance dry and charged hose lines of two different sizes, both 1½" or larger, from fire apparatus:

Department can use Hose FF I - 6 Skill Sheet to document

NFPA 1001 4.3.10.A-B, 4.3.13.A-B

- A. into a structure
- B. up a ladder into an upper floor window
- C. up an inside stairway to an upper floor
- D. up an outside stairway to an upper floor
- E. down an inside stairway to a lower level
- F. down an outside stairway to a lower level
- G. to an upper floor by hoisting

04-I.04* Trainee shall demonstrate the techniques for cleaning fire hose, couplings, and nozzles; and inspecting for damage.

NFPA 1001 4.5.2

04-I.05* Trainee shall connect a fire hose to a hydrant, and fully open and close the hydrant.

NFPA 1001 4.3.15.A-B

04-I.06* Trainee shall demonstrate the loading of fire hose on fire apparatus and identify the purpose of at least three types of hose loads and finishes.

Department can use Hose FF I - 9 Skill Sheet to document

NFPA 1001 4.5.2.A-B

04-I.07* Trainee shall demonstrate three (3) types of hose rolls.

Department can use Hose FF I - 10 Skill Sheet to document

NFPA 1001 4.5.2.A-B

- A. Straight roll
- B. Donut roll
- C. Twin donut roll
 - 1. Method one
 - 2. Method two
- D. Self-locking twin donut roll

- 04-I.08* Trainee shall demonstrate two (2) types of hose carries.
Department can use Hose FF I - 4 Skill Sheet to document
NFPA 1001 4.3.10.A-B, 4.5.2
- | | |
|--------------------------------------|-----------------------------|
| A. Working line drag | E. Minuteman load |
| B. Wyed lines | F. Triple layer load |
| C. Accordion or flat shoulder method | G. Horseshoe shoulder carry |
| D. Pre-connected flat load | |
- 04-I.09* Trainee shall demonstrate coupling and uncoupling fire hose.
Department can use Hose FF I - 1 Skill Sheet to document
NFPA 1001 4.3.10.A-B
- A. Trainee, given fire hose used for fire attack, 1½" or larger, and water supply hose, 2½" or larger, shall describe and demonstrate the one-person methods of connecting hose lines.
 1. One firefighter foot-tilt method
 2. Between-the-feet method
 3. Across-the-leg method
 - B. Trainee, operating as a member of a team, given fire hose used for fire attack, 1½" or larger, and water supply hose, 2½" or larger, shall describe and demonstrate the two person methods of connecting hose lines.
 - C. Trainee, operating as an individual or a member of a team, shall describe and demonstrate the methods of breaking a tight screw-thread connection.
 1. One firefighter knee-press method
 2. Two firefighter stiff arm method
 3. Spanner wrench
- 04-I.10* Trainee shall work from a ladder with a charged attack line, 1½" or larger.
Department can use Hose FF I - 5 Skill Sheet to document
NFPA 1001 4.3.10.A-B
- 04-I.11* Trainee, given fire hose used for fire attack, 1½" or larger, and water supply, 2½" or larger, shall demonstrate the method for extending a hose line.
Department can use Hose FF I - 3 Skill Sheet to document
NFPA 1001 4.3.10.A-B
- 04-I.12* Trainee shall demonstrate the techniques of carrying hose into a building to be connected to a standpipe, and of advancing a hose line from a standpipe (if found in AHJ).
Department can use Hose FF I - 7 Skill Sheet to document
NFPA 1001 4.3.10.B
- 04-I.13* Trainee, given fire hose used for fire attack, 1½" or larger, and water supply, 2½" or larger, shall describe and demonstrate replacing a burst section of hose line.
Department can use Hose FF I - 2 Skill Sheet to document
NFPA 1001 4.3.10.A-B
- 04-I.14* Trainee shall demonstrate all hand hose lays.
Department can use Hose FF I - 9 Skill Sheet to document
NFPA 1001 4.3.15.B
- 04-I.15* Trainee shall demonstrate inspection and maintenance of fire hose, couplings, and nozzles, and recommend replacement or repair as needed.
Department can use Hose FF I - 8 Skill Sheet to document
NFPA 1001 4.5.2.A-B
- 04-I.16* Trainee shall demonstrate all hydrant-to-fire apparatus hose connections.
Department can use Water Source FF I - 1 Skill Sheet to document
NFPA 1001 4.3.15
- 04-I.17* Trainee shall select the proper adapters, appliances, nozzles, and hose, given different fire situations.
NFPA 1001 4.3.10

04-I.18* Trainee shall identify hose classifications by use and construction.

NFPA 1001 4.3.8, 4.3.10

A. Use

1. Attack hose
2. Relay-supply hose
3. Intake hose
4. Extinguisher hose

B. Construction

1. Woven-jacket hose
2. Rubber-covered hose
3. Braided hose
4. Wrapped hose

04-I.19* Trainee shall identify types of fire hose couplings.

NFPA 1001 4.3.10.B

A. Threaded couplings

B. Storz-type couplings (Sexless couplings)

04-I.20* Trainee shall identify the methods of constructing fire hose couplings.

NFPA 1001 4.3.10

04-I.21* Trainee shall identify the methods of attaching couplings to fire hose.

NFPA 1001 4.3.10.B

Firefighter II

04-II.01 Trainee shall select the proper adapters, appliances, nozzles, and hose, given different fire situations.

NFPA 1001 5.3.1.A, 5.3.2.A, 5.3.3

A. Simulated ignitable liquid fire

B. Simulated residential structure fire

C. Simulated flammable gas cylinder fire

04-II.02 Trainee shall conduct an annual service test for fire hose.

Department can use Hose FF II - 1 Skill Sheet to document

NFPA 1001 5.5.5.A-B

SECTION 5 SALVAGE & OVERHAUL

Firefighter I – Objectives marked with an asterisk (*) should be completed before beginning live fire training.

05-I.01* Trainee shall identify the purpose of salvage, and its value to the public and the fire department.

NFPA 1001 4.3.14

05-I.02* Trainee, as an individual and as a member of a team, shall demonstrate folds and rolls of salvage covers.

Department can use Salvage FF I - 3 Skill Sheet to document

Department can use Salvage FF I - 4 Skill Sheet to document

Department can use Salvage FF I - 5 Skill Sheet to document

NFPA 1001 4.3.14

- | | |
|--------------------------------|--|
| A. one-firefighter roll | E. one-firefighter accordion fold |
| B. one-firefighter double roll | F. two-firefighter accordion counter-payoff fold |
| C. one-firefighter fold | G. two-firefighter fold |
| D. one-firefighter donut roll | |

05-I.03* Trainee, as an individual and as a member of a team, shall demonstrate salvage cover throws.

Department can use Salvage FF I - 6 Skill Sheet to document

Department can use Salvage FF I - 7 Skill Sheet to document

NFPA 1001 4.3.14

- A. balloon throw
- B. single-edge snap throw
- C. double-edge snap throw

05-I.04* Trainee shall demonstrate the techniques of inspection, cleaning, and maintaining salvage equipment.

Department can use Salvage FF I - 1 Skill Sheet to document

Department can use Hand Tools FF I - 1 Skill Sheet to document

NFPA 1001 4.5.1

- A. Salvage covers
- B. Hand tools

05-I.05* Trainee shall identify the purpose of overhaul.

NFPA 1001 4.3.13

05-I.06* Trainee shall demonstrate searching for hidden fires.

NFPA 1001 4.3.13

05-I.07* Trainee shall demonstrate exposure of hidden fires by opening ceilings, walls, floors, and pulling apart burned materials.

Department can use Overhaul FF I - 1 Skill Sheet to document

NFPA 1001 4.3.13

05-I.08* Trainee shall demonstrate how to separate and remove charred material from unburned material.

NFPA 1001 4.3.13

05-I.09* Trainee shall define and describe the following duties of firefighters left at the scene for fire and security surveillance, and identify the proper procedures for restoration of the premises after a fire.

NFPA 1001 4.3.14

- | | |
|--------------------------------------|-------------------------------|
| A. Making the building safe | E. Restoring utility services |
| B. Making the contents safe | F. Securing the building |
| C. Making the area safe | G. Deodorizing the premises |
| D. Restoring fire protection systems | H. Releasing the premises |

05-I.10* Trainee, given salvage equipment, operating as an individual and as a member of a team, shall demonstrate the following skills:

Department can use Salvage FF I - 2 Skill Sheet to document

Department can use Salvage FF I - 10 Skill Sheet to document

NFPA 1001 4.3.14

- | | |
|----------------------------------|-------------------------------------|
| A. use of a water chute | C. use of a water catchall |
| B. construction of a water chute | D. construction of a water catchall |

05-I.11* Trainee shall demonstrate the removal of debris, and removal and routing of water from a structure using the following techniques.

Department can use Salvage FF I - 8 Skill Sheet to document

NFPA 1001 4.3.13, 4.3.14

- | | |
|--------------------|-------------------------------|
| A. Water vacuums | D. Brooms and squeegees |
| B. Existing drains | E. Buckets, mops, and shovels |
| C. Portable pumps | |

05-I.12* Trainee shall demonstrate and describe the covering or closing of the following building openings made during fire fighting operations.

Department can use Salvage FF I - 9 Skill Sheet to document

NFPA 1001 4.3.13

- A. Roofs
- B. Doors
- C. Windows
- D. Floors

05-I.13* Trainee shall list the procedures to follow during overhaul.

NFPA 1001 4.3.13

05-I.14* Trainee shall identify precautions to be followed when overhauling targeted hazards.

NFPA 1001 4.3.13

- A. Trainee shall identify and describe the necessary precautions to maintain safety of firefighters and others during overhaul.
- B. Trainee shall describe appropriate safety equipment and clothing for performing overhaul activities.
- C. Trainee shall describe hazards associated with overhaul operations.

05-I.15* Trainee shall list four (4) indicators of fire in walls or ceilings.

NFPA 1001 4.3.13

- A. Sight
- B. Touch
- C. Sound
- D. Electronic instruments

05-I.16* Trainee shall demonstrate restoration of the premises after a fire.

NFPA 1001 4.3.14

- A. Restoring fire protection systems
- B. Restoring utility services
- C. Deodorizing the premises
- D. Releasing the premises

Firefighter II - There are no objectives required for this certification level.

SECTION 6 FIRE STREAMS

Firefighter I – Objectives marked with an asterisk (*) should be completed before beginning live fire training.

- 06-I.01* Trainee shall define a fire stream.
NFPA 1001 4.3.10
- 06-I.02* Trainee shall manipulate a nozzle so as to attack a Class A and a Class B fire.
NFPA 1001 4.3.10
- 06-I.03* Trainee shall define water hammer and at least one method for its prevention.
NFPA 1001 4.3.10
- 06-I.04* Trainee shall demonstrate how to open and close a nozzle and how to adjust its stream pattern and flow setting when applicable.
NFPA 1001 4.3.10
- 06-I.05* Trainee shall define the following methods of water application:
NFPA 1001 4.3.10
- A. direct
 - B. indirect
 - C. combination
- 06-I.06* Trainee, given specific fire situations, shall select the proper nozzle and hose size for each.
NFPA 1001 4.3.10
- 06-I.07* Trainee shall identify characteristics of all types of fire streams.
NFPA 1001 4.3.10
- 06-I.08* Trainee shall identify precautions to be followed while advancing hose lines to a fire.
NFPA 1001 4.3.10
- 06-I.09* Trainee shall identify three (3) conditions that result in pressure losses in a hose line.
NFPA 1001 4.3.10
- 06-I.10* Trainee shall describe the operating principles of fog and solid stream nozzles.
NFPA 1001 4.3.10
- 06-I.11* Trainee shall describe the advantages and disadvantages of solid and fog streams.
NFPA 1001 4.3.10
- 06-I.12* Trainee shall identify four (4) special stream nozzles and demonstrate at least two (2) uses or applications for each.
NFPA 1001 4.3.10
- 06-I.13* Trainee shall identify three (3) observable results that are obtained when proper application of a fire stream is accomplished.
NFPA 1001 4.3.10
- 06-I.14* Trainee shall identify three (3) types of fire streams and shall demonstrate each.
NFPA 1001 4.3.10
- A. Solid
 - B. Fog
 - C. Broken
- 06-I.15* Trainee shall diagram the types of fog nozzles, identify the major parts, and trace water flow through each.
NFPA 1001 4.3.10
- 06-I.16* Trainee, given a selection, pictures or diagrams, of nozzles and tips, shall identify the type, design, operation, nozzle pressure, and flow of each.
NFPA 1001 4.3.10
- 06-I.17* Trainee shall identify, select, and demonstrate the use of any nozzle.
NFPA 1001 4.3.10.A-B
- A. Solid stream nozzle
 - B. Fog nozzle
 - C. Cellar nozzle
 - D. Applicator nozzle
 - E. Master stream device (Playpipe)

Firefighter II

- 06-II.01 Trainee shall identify and define foam making appliances and shall demonstrate a foam stream from each (if available in AHJ)
Department can use Fire Streams FF II - 1 Skill Sheet to document
Department can use Fire Streams FF II - 2 Skill Sheet to document
NFPA 1001 5.3.1
- 06-II.02 Trainee shall define the methods by which foam prevents or controls a hazard.
NFPA 1001 5.3.1

- 06-II.03 Trainee shall define the principle by which foam is generated.
NFPA 1001 5.3.1
- 06-II.04 Trainee shall define common causes for the poor generation of foam and identify the procedures for correcting each.
NFPA 1001 5.3.1
- 06-II.05 Trainee shall define the difference between hydrocarbon and polar solvent fuels and identify the type of foam concentrate required for each fuel.
NFPA 1001 5.3.1
- 06-II.06 Trainee shall define the advantages, characteristics, and precautions for use of the following types of foam:
NFPA 1001 5.3.1
- A. protein
 - B. fluoroprotein
 - C. film forming fluoroprotein (FFFP)
 - D. aqueous film forming foam (AFFF)
 - E. hazardous materials vapor mitigating foam
 - F. medium- and high-expansion foam
 - G. Class A foams
 - H. Alcohol Type Concentrate (ATC)
- 06-II.07 Trainee, given the size of the fuel surface, the types of fuel involved, and the type of foam concentrate being used, shall determine the minimum application rate necessary for extinguishment of a fire.
NFPA 1001 5.3.1
- 06-II.08 Trainee shall define the precautions that must be taken when using high expansion foam to attack structural fires.
NFPA 1001 5.3.1

SECTION 7 VENTILATION PRACTICES

Firefighter I – Objectives marked with an asterisk (*) should be completed before beginning live fire training.

- 07-I.01* Trainee shall define the principles of ventilation, and identify the advantages and effects of proper ventilation.
NFPA 1001 4.3.11
- 07-I.02* Trainee shall identify the dangers present, and the precautions to be taken in performing ventilation.
- A. Trainee shall describe the considerations involving basic size-up.
NFPA 1001 4.3.11, 4.3.12.A-B
1. Life safety hazards
 2. Determining the location and extent of the fire
 3. Identifying building construction features
- B. Trainee shall describe the considerations affecting the decision to ventilate.
NFPA 1001 4.3.11
1. Assessing the need for ventilation
 2. Deciding where ventilation is needed
 3. Deciding how ventilation should be accomplished
- 07-I.03* Trainee shall demonstrate opening various types of windows from inside and outside, with and without fire department tools.
Department can use Ventilation FF I - 1 Skill Sheet to document
NFPA 1001 4.3.11
- 07-I.04* Trainee shall demonstrate breaking window or door glass, and removing obstructions.
Department can use Ventilation FF I - 1 Skill Sheet to document
NFPA 1001 4.3.11
- 07-I.05* Trainee shall describe and safely demonstrate, using both hand and power tools, the ventilation of a roof and a floor.
Department can use Ventilation FF I - 1 Skill Sheet to document
NFPA 1001 4.3.12
- 07-I.06* Trainee shall identify and describe the signs, causes, and effects of a back draft explosion.
NFPA 1001 4.3.11
- 07-I.07* Trainee shall demonstrate ventilation using a water fog.
NFPA 1001 4.3.11
- 07-I.08* Trainee shall identify characteristics of a flashover.
NFPA 1001 4.3.11
- 07-I.09* Trainee shall identify the characteristics of and describe the necessary precautions when ventilating the following roof types.
NFPA 1001 4.3.12
- A. Pitched
1. Hip
 2. Lantern
 3. Shed
 4. Mansard
 5. Gambrel
 6. Butterfly
- B. Flat
- C. Arched
- 07-I.10* Trainee shall identify the size and location of an opening for ventilation, and the precautions to be taken during ventilation.
NFPA 1001 4.3.11, 4.3.12
- A. Existing roof openings
- B. Location of the fire
- C. Direction in which the fire will be drawn
- D. Type of building construction
- E. Wind direction
- F. Progress of the fire
- G. Condition of the building
- H. Safety precautions
- I. Relative efficiency of large vs. small openings
- 07-I.11* Trainee shall identify and demonstrate natural and mechanical methods for horizontal ventilation of a structure.
Department can use Ventilation FF I - 2 Skill Sheet to document
NFPA 1001 4.3.11, 4.3.12
- A. Trainee shall identify horizontal ventilation tools and equipment.
- B. Trainee shall describe structural characteristics of buildings which aid in natural or mechanical ventilation.
1. Scuttle hatches
 2. Bulkheads
 3. Skylights
 4. Monitors
 5. Light and ventilation shafts
- C. Trainee shall identify and describe obstructions to horizontal ventilation.
NFPA 1001 4.3.11
- D. Trainee shall describe weather conditions which affect horizontal ventilation.
NFPA 1001 4.3.11

07-I.12* Trainee shall demonstrate the removal of skylights, scuttle covers, and other covers on rooftops.

NFPA 1001 4.3.11

07-I.13* Trainee shall demonstrate the types of equipment used for forced mechanical ventilation.

NFPA 1001 4.3.11

A. Trainee shall identify fire ground situations where forced ventilation procedures may be required.

1. Positive pressure method

2. Negative pressure method

B. Trainee shall describe and demonstrate the use and proper placement of gasoline or electric powered fans to effect positive pressure ventilation.

C. Trainee shall describe and demonstrate the use and proper placement of gasoline or electric powered fans to effect negative ventilation.

07-I.14* Trainee shall identify the location of the opening, the method to be used, and the precautions to be taken when ventilating a basement.

NFPA 1001 4.3.11

Firefighter II - There are no objectives required for this certification level.

SECTION 8 RESCUE OPERATIONS

The Trainee is not expected to be proficient in technical rescue skills. The Trainee should be able to help technical rescue teams in their efforts to safely manage structural collapses, trench collapses, cave and tunnel emergencies, water and ice emergencies, elevator and escalator emergencies, energized electrical line emergencies, and industrial accidents

Firefighter I

08-I.01 Trainee shall, given victims and the proper equipment, demonstrate the proper techniques for removal of injured person(s) from hazards by the use of the following carries, drags and stretchers:

Department can use Search and Rescue FF I - 4 Skill Sheet to document

NFPA 1001 4.3.9.A

- | | |
|-----------------------------------|-----------------------|
| A. one/two person victim standing | E. three-person carry |
| B. seat carry | F. lift and carry |
| C. extremities carry | G. blanket drag |
| D. chair carry | |

08-I.02 Trainee shall demonstrate searching for victims in burning, smoke-filled buildings, or other hostile environments:

Department can use Search and Rescue FF I - 3 Skill Sheet to document

NFPA 1001 4.3.9.B

- A. given the proper information, shall list two (2) objectives to be achieved while searching for victims in a building on fire:
 1. Finding victims
 2. Obtaining information on the extent of the fire
- B. given a small one-story building filled with simulated smoke, shall demonstrate the establishing of a search pattern for the building and multiple rooms that are involved:
 1. With a rope or hose line
 2. Without a rope or hose line

08-I.03 Trainee, given the proper information, shall list the life threatening injuries that need to be observed in the proper order of priority.

NFPA 1001 4.3.9

08-I.04 Trainee shall demonstrate the techniques of packaging a victim for emergency transportation by:

NFPA 1001 4.3.9.B

- A. given a short/long spine board and wrapping materials, demonstrate the stabilizing of a victims spine and cervical area of the body, and
- B. given a packaged victim and stretcher, demonstrate the transfer procedures of victims from their rescue scene.

08-I.05 Trainee, given a 20' length of ½" rope, shall demonstrate the following knots as used in repelling:

NFPA 1001 4.3.21

- | | |
|--------------------------------|----------------|
| A. figure-eight | D. clove-hitch |
| B. figure-eight follow through | E. half-hitch |
| C. bowline | |

Firefighter II

08-II.01 Trainee shall define safety procedures as they apply to rescue.

NFPA 1001 5.4.1.A

08-II.02 Trainee shall define the uses of a lifeline.

NFPA 1001 5.4.2

08-II.03 Trainee shall explain search and rescue procedures for safe rescue of open water and swift water victims.

NFPA 1001 5.4.2

08-II.04 Trainee shall describe or demonstrate the use of water rescue tools including:

NFPA 1001 5.4.2

- | | |
|-------------------------------|---------------------|
| A. personal flotation devices | E. rescue tube |
| B. pike poles | F. towel reach |
| C. shepherd's hook | G. ladders |
| D. ring buoy | H. dragging devices |

08-II.05 Trainee shall assist rescue team with the techniques and safety procedures as they apply to the following rescue activities:

Department can use Rescue FF II - 4 Skill Sheet to document

NFPA 1001 5.4.2

- A. structural collapses
- B. trench collapses
- C. caves and tunnels
- D. water and ice emergencies
- E. elevators and escalators
- F. emergencies involving energized electrical lines
- G. industrial accidents
- H. motor vehicle accidents
- I. other hazards particular to the local jurisdiction

08-II.06 Trainee shall demonstrate the use and care of the following rescue tools:

NFPA 1001 5.4.1

- A. cribbing and shoring material
- B. block and tackle
- C. hydraulic devices
- D. pneumatic devices
- E. trench jacks
- F. water rescue devices
- G. ratchet device

08-II.07 Trainee shall raise and lower a simulated victim 20 vertical feet (6m) using a rope rescue system.

NFPA 1001 5.4.2

08-II.08 Trainee shall demonstrate extricating a victim entrapped in a motor vehicle as part of a team, given stabilization and extrication tools, so that the vehicle is stabilized, the victim is disentangled without further injury, and hazards are managed.

Department can use Rescue FF II - 1 Skill Sheet to document

Department can use Rescue FF II - 2 Skill Sheet to document

Department can use Rescue FF II - 3 Skill Sheet to document

NFPA 1001 5.4.1

08-II.09 Trainee shall demonstrate inspection and don a life safety harness.

NFPA 1001 5.4.2

SECTION 9 FIRE & LIFE SAFETY INITIATIVES

A fire safety survey is intended to be a basic survey of the property to identify major hazards such as locked exits, nonoperational fire protection and detection systems, a lack of smoke alarms in residential occupancies, non-operational water supplies, hazardous interior finishes, hazardous storage, and other items identified on the survey form. It is not intended to be a fire inspection conducted to the job performance requirements of a Fire Inspector as identified in NFPA 1031.

Firefighter I

- 09-I.01 Trainee shall explain steps taken during fire and life safety program development.
NFPA 1001 4.5.1
- 09-I.02 Trainee shall describe the components involved in fire and life safety program delivery.
NFPA 1001 4.5.1
- 09-I.03 Trainee shall explain the impact of safety hazards, messages, and target audiences on creating fire and life safety education programs.
NFPA 1001 4.5.1
- 09-I.04 Trainee shall indicate ways to identify and prevent firesetter development.
NFPA 1001 4.5.1

Firefighter II

- 09-II.01 Trainee shall identify the common causes of fires and their prevention.
NFPA 1001 5.5.1
 - A. Housekeeping practices
 - B. Smoking
 - C. Open burning
 - D. Electrical sources of ignition
- 09-II.02 Trainee shall identify life safety programs for the home.
NFPA 1001 5.5.1
- 09-II.03 Trainee shall identify local and state fire codes concerning subjects to be noted in the fire company inspection.
NFPA 1001 5.5.1
- 09-II.04 Trainee shall identify the fire hazards commonly found in manufacturing, commercial, residential, and public assembly occupancies.
NFPA 1001 5.5.1
 - A. Common Hazards
 - 1. Fuel Supply
 - 2. Heat Source
 - B. Special Hazards
 - C. Target Hazards
- 09-II.05 Trainee shall identify common deficiencies in electrical services and equipment.
NFPA 1001 5.5.1
- 09-II.06 Trainee shall identify local code requirements covering the proper storage and use of flammable liquids and gases.
NFPA 1001 5.5.1
- 09-II.07 Trainee shall identify storage codes and practices contributing to fire safety in buildings, including proper piling, aisles, clearances, access to fire equipment and exits.
NFPA 1001 5.5.1
- 09-II.08 Trainee shall identify proper outside storage and how it affects fire fighting, including aisles, roadways, access to hydrants, access to buildings, and exposure hazards.
NFPA 1001 5.5.1
- 09-II.09 Trainee shall identify water and smoke damage potential to goods, to office and manufacturing machinery, and other valuable objects.
NFPA 1001 5.5.1
- 09-II.10 Trainee shall identify legal issues concerning fire prevention inspections.
NFPA 1001 5.5.1
 - A. Trainee shall identify and define the authorities and conditions giving fire service personnel the right to enter a property and perform fire prevention inspections.
 - B. Trainee shall identify and define conditions or circumstances that would limit the right of fire service personnel to enter a property and perform fire prevention inspections.
 - C. Trainee shall identify and define proper procedures for gaining code compliance.
 - D. Trainee shall define the legal liability of fire service personnel when conducting fire prevention inspections
- 09-II.11 Trainee shall identify the fire inspection procedures.
NFPA 1001 5.5.1
- 09-II.12 Trainee shall define the importance of public relations relative to inspection programs.
NFPA 1001 5.5.1

- 09-II.13 Trainee shall define dwelling inspection procedures.
NFPA 1001 5.5.1
 A. Scheduling
 B. Approach and introduction
 C. Conducting the inspection
 D. Final interview
 E. Follow-up
 F. Inspection report and map
- 09-II.14 Trainee shall identify the procedure for preparing a pre-fire plan.
NFPA 1001 5.5.3, 5.5.4
- 09-II.15 Trainee shall prepare diagrams or sketches of buildings to record the locations of items of concern during pre-incident planning operations.
Department can use Prefire Plan FF II - 1 Skill Sheet to document
NFPA 1001 5.5.1
 A. Trainee, when given examples of map symbols, shall be able to identify the meaning of symbols.
 B. Trainee, when preparing a sketch of a facility, shall draw the standard map symbol for:
 1. Single hydrant
 2. Double hydrant
 3. Triple hydrant
 4. Sprinkler riser
 5. Fire Department Connection
 6. Automatic sprinklers
 7. Not sprinklered
 8. Vertical pipe or standpipe
 9. Public water service
 10. Private water service
 11. Fire escape
 12. Skylight
 13. Automatic fire alarm
 14. Fire pump
 15. Stairs
 C. Trainee shall identify and define the types of diagrams or sketches used in pre-incident planning and prepare a pre-incident plan from information gathered in a survey.
 1. Plot plan
 2. Floor plan
 3. Elevation drawing
- 09-II.16 Trainee shall collect and record in writing, information required for the purpose of preparing a report on a building inspection or survey.
Department can use Fire Safety Survey FF II - 1 Skill Sheet to document
NFPA 1001 5.5.3
- 09-II.17 Trainee shall identify common fire hazards and make recommendations for correction.
NFPA 1001 5.5.1
- 09-II.18 Trainee shall complete a building inspection report.
NFPA 1001 5.5.1
- 09-II.19 Trainee shall identify the types of fire extinguishers in an occupancy and ensure that they conform to the fire prevention requirements for that occupancy.
NFPA 1001 5.5.1
- 09-II.20 Trainee shall identify the procedures to be used whenever fire hazards, or suspected fire hazards, are encountered during inspections.
NFPA 1001 5.5.1
- 09-II.21 Trainee shall identify the fire exit requirements for different types of occupancies.
NFPA 1001 5.5.2
- 09-II.22 Trainee shall inspect standpipe systems for fire protection, including visual inspection of the following equipment:
NFPA 1001 5.5.1
 A. Standpipe systems
 B. Hose and hose threads
 C. Nozzles
 D. Fire Department Connections
- 09-II.23 Trainee shall identify a private water system for fire protection, including fire pumps, yard hydrants, hose houses, gravity and pressure types of water storage tanks, reservoirs, and draft sources.
NFPA 1001 5.5.1
- 09-II.24 Trainee shall identify smoke, flame, and heat-detection alarm systems.
NFPA 1001 5.5.1
- 09-II.25 Trainee shall identify standard types of chimneys and flues, and recognize deficiencies likely to cause fires.
NFPA 1001 5.5.1
- 09-II.26 Trainee shall identify five (5) common causes of fire and their prevention.
NFPA 1001 5.5.1
- 09-II.27 Trainee shall define the importance of public fire education and inspection programs as they relate to the fire department public relations and to the community.
NFPA 1001 5.5.1

- 09-II.28 Trainee shall identify and demonstrate procedures for conducting a fire station tour.
Department can use Fire Safety Survey FF II - 1 Skill Sheet to document
NFPA 1001 5.5.2
- 09-II.29 Trainee shall identify and demonstrate the “Stop, Drop and Roll” technique for extinguishing clothing fires.
NFPA 1001 5.5.2
- 09-II.30 Trainee shall identify and demonstrate inspection procedures for private dwellings.
NFPA 1001 5.5.1
- 09-II.31 Trainee shall identify and demonstrate the proper placement, testing and maintenance of smoke detectors in private dwellings.
NFPA 1001 5.5.2
- 09-II.32 Trainee shall identify the elements of a home fire escape plan.
NFPA 1001 5.5.2

SECTION 10 WATER SUPPLIES

Firefighter I – Objectives marked with an asterisk (*) should be completed before beginning live fire training.

- 10-I.01* Trainee shall identify the water distribution system, and other alternate water sources in the area of responsibility.
NFPA 1001 4.3.15.A
- 10-I.02* Trainee shall identify a:
NFPA 1001 4.3.15.A
- A. dry-barrel hydrant
 - B. wet-barrel hydrant
- 10-I.03* Trainee shall demonstrate hydrant to pumper hose connections for forward and reverse hose lays.
Department can use Water Source FF I - 2 Skill Sheet to document
NFPA 1001 4.3.15.B
- A. Forward hose lay
 - B. Reverse hose lay
 - C. Split hose lay
- 10-I.04* Trainee shall define, explain, and demonstrate where applicable, the use of a rural dry fire hydrant system and static water supply source.
NFPA 1001 4.3.15.A-B
- 10-I.05* Trainee shall define a tanker shuttle.
NFPA 1001 4.3.15
- 10-I.06* Trainee shall identify the apparatus, equipment, and appliances required to provide water at rural locations by relay pumping, large diameter hose, or a tanker shuttle.
NFPA 1001 4.3.15.A
- 10-I.07* Trainee shall demonstrate deployment of a portable water tank.
Department can use Water Source FF I - 3 Skill Sheet to document
NFPA 1001 4.3.15.B
- 10-I.08* Trainee shall identify the following parts of a water distribution system:
NFPA 1001 4.3.15
- A. distributors
 - B. primary feeders
 - C. secondary feeders
- 10-I.09* Trainee shall identify the following terms as they relate to water supply:
NFPA 1001 4.3.15
- A. normal operating pressure of a water distribution system
 - B. residual pressure of a water distribution system
 - C. the flow pressure from an opening that is flowing water
 - D. static pressure
- 10-I.10* Trainee shall identify the following types of water main valves:
NFPA 1001 4.3.15
- A. indicating
 - B. non-indicating
 - C. post indicator valve (P.I.V.)
 - D. outside screw and yoke (O.S. & Y.)
- 10-I.11* Trainee shall identify and explain the four (4) fundamental components of a modern water system.
NFPA 1001 4.3.15
- A. Sources of supply
 - 1. Surface water
 - 2. Ground water
 - B. Means of moving water
 - 1. Direct pumping system
 - 2. Gravity system
 - 3. Combination system
 - C. Treatment facilities
 - D. Storage facilities and distribution systems
- 10-I.12* Trainee, given a pitot tube and gauge, shall use, read, and record several flow pressures.
NFPA 1001 4.3.15

10-I.13* Trainee shall identify the recommended minimum pipe sizes used in the following areas:

NFPA 1001 4.3.15

- A. Residential
- B. Business
- C. Industrial

10-I.14* Trainee shall identify two (2) causes of increased resistance or friction loss in water mains.

NFPA 1001 4.3.15

- A. Mineral encrustation or tuberculation
- B. Sedimentation

Firefighter II - There are no objectives required for this certification level.

SECTION 11 FIRE PROTECTION SYSTEMS

Firefighter I - There are no objectives required for this certification level.

Firefighter II

- 11-II.01 Trainee shall identify a fire department sprinkler connection and water motor alarm.
NFPA 1001 5.5.3
- 11-II.02 Trainee shall connect hose line(s) to a fire department connection of a sprinkler or standpipe system.
NFPA 1001 5.5.3
- 11-II.03 Trainee shall define how the automatic sprinkler activates and releases water.
NFPA 1001 5.5.3
A. Fusible Link
B. Glass (Frangible) Bulb
C. Chemical Pellet
- 11-II.04 Trainee shall temporarily stop the flow of water from a sprinkler head.
Department can use Fire Protection Systems FF I - 2 Skill Sheet to document
NFPA 1001 5.5.3
- 11-II.05 Trainee shall identify the main control valve on the system.
Department can use Fire Protection Systems FF I - 1 Skill Sheet to document
NFPA 1001 5.5.3
- 11-II.06 Trainee shall operate a main control valve on the system from open to closed and back to open.
Department can use Fire Protection Systems FF I - 1 Skill Sheet to document
NFPA 1001 5.5.3
- 11-II.07 Trainee shall define the value of automatic sprinklers in providing safety to the occupants in a structure.
NFPA 1001 5.5.3
- 11-II.08 Trainee shall identify and define the dangers of premature closure of sprinkler main control valve, and of using hydrants to supply hose streams when the same water system is supplying the automatic sprinkler system.
NFPA 1001 5.5.3
- 11-II.09 Trainee shall identify the difference between an automatic sprinkler system that provides complete coverage and a partial sprinkler system.
NFPA 1001 5.5.3
- 11-II.10 Trainee shall identify at least three sources of water for supply to an automatic sprinkler system.
NFPA 1001 5.5.3
- 11-II.11 Trainee shall identify the following:
NFPA 1001 5.5.3
A. wet sprinkler system
B. dry sprinkler system
C. deluge sprinkler system
D. residential sprinkler system
- 11-II.12 Trainee, given an alarm valve of an automatic sprinkler system, shall identify the operation of the valve.
NFPA 1001 5.5.3
- 11-II.13 Trainee shall identify the types, components and operation of standpipe systems.
NFPA 1001 5.5.3
- 11-II.14 Trainee shall identify various types of special extinguishing systems.
NFPA 1001 5.5.3
- 11-II.15 Trainee shall identify various types of supervisory circuits.
NFPA 1001 5.5.3
- 11-II.16 Trainee shall identify the function of a fire annunciator panel.
NFPA 1001 5.5.3
- 11-II.17 Trainee shall identify various alarm initiating devices.
NFPA 1001 5.5.3

SECTION 12 FIRE BEHAVIOR (FIRE SCIENCE)

Firefighter I – Objectives marked with an asterisk (*) should be completed before beginning live fire training.

- 12-I.01* Trainee shall define heat and fire.
NFPA 1001 4.3.10, 4.3.11, 4.3.12
- 12-I.02* Trainee shall define the fire triangle and tetrahedron.
NFPA 1001 4.3.10, 4.3.11, 4.3.12
- 12-I.03* Trainee shall identify two (2) chemical, mechanical, and electrical energy heat sources.
NFPA 1001 4.3.10, 4.3.11, 4.3.12
- 12-I.04* Trainee shall define the following:
NFPA 1001 4.3.10, 4.3.11, 4.3.12
- | | |
|-------------------|--------------------------|
| A. incipient | E. steady state |
| B. flame spread | F. clear or free burning |
| C. hot smoldering | G. back draft explosion |
| D. flashover | |
- 12-I.05* Trainee shall define the four (4) methods of heat transfer.
NFPA 1001 4.3.10, 4.3.11, 4.3.12
- A. Conduction
 - B. Convection
 - C. Radiation
 - D. Direct Flame Impingement
- 12-I.06* Trainee shall define the three (3) physical states of matter in which fuels are commonly found.
NFPA 1001 4.3.10, 4.3.11, 4.3.12
- A. solid
 - B. liquid
 - C. gaseous
- 12-I.07* Trainee shall define the hazard of finely divided fuels as they relate to the combustion process.
NFPA 1001 4.3.10, 4.3.11, 4.3.12
- 12-I.08* Trainee shall define:
NFPA 1001 4.3.10, 4.3.11, 4.3.12
- A. flash point
 - B. fire point
 - C. ignition temperature
 - D. upper and lower explosive limits
- 12-I.09* Trainee shall define concentrations of oxygen in air as it affects combustion.
NFPA 1001 4.3.10, 4.3.11, 4.3.12
- 12-I.10* Trainee shall identify three (3) products of combustion commonly found in structural fires which create a life hazard.
NFPA 1001 4.3.10, 4.3.11, 4.3.12
- 12-I.11* Trainee shall identify characteristics of water as it relates to its fire extinguishing potential.
NFPA 1001 4.3.10, 4.3.11, 4.3.12
- 12-I.12* Trainee shall define the following units of measurements:
NFPA 1001 4.3.10, 4.3.11, 4.3.12
- A. British Thermal Unit (BTU)
 - B. Fahrenheit (F°)
 - C. Celsius (C°)
 - D. Calorie (C)
 - E. Joule, the SI unit for energy
- 12-I.13* Trainee shall define thermal balance and imbalance.
NFPA 1001 4.3.10, 4.3.11, 4.3.12
- 12-I.14* Trainee shall identify chemical by-products of combustion.
NFPA 1001 4.3.10, 4.3.11, 4.3.12
- 12-I.15* Trainee shall define the fire extinguishment theory.
NFPA 1001 4.3.10, 4.3.11, 4.3.12
- 12-I.16* Trainee shall identify pressure and velocity.
NFPA 1001 4.3.10, 4.3.11, 4.3.12

Firefighter II - There are no objectives required for this certification level.

SECTION 13

FIRE DEPARTMENT COMMUNICATIONS

Firefighter I

- 13-I.01 Trainee shall define the procedure for a citizen to report a fire or other emergency.
NFPA 1001 4.2.1.A
- 13-I.02 Trainee shall demonstrate receiving an alarm or a report of an emergency and initiate action.
Department can use Communication FF I - 1 Skill Sheet to document
NFPA 1001 4.2.1.B
- 13-I.03 Trainee shall define the purpose and function of all alarm-receiving instruments and personnel- alerting equipment provided in the fire station.
NFPA 1001 4.2.1, 4.2.3.A
- 13-I.04 Trainee shall identify traffic control devices installed in the fire station to facilitate the response of apparatus.
NFPA 1001 4.2.1
- 13-I.05 Trainee shall identify procedures required for receipt and processing of emergency and non-emergency calls.
Department can use Communication FF I - 2 Skill Sheet to document
NFPA 1001 4.2.2
- 13-I.06 Trainee shall define and demonstrate prescribed fire department radio procedures including:
Department can use Communication FF I - 3 Skill Sheet to document
NFPA 1001 4.2.1
A. routine traffic
B. emergency traffic
C. emergency evacuation signals
- 13-I.07 Trainee shall define policy and procedures concerning the ordering and transmitting of multiple alarms of fire and calls for special assistance from the emergency scene.
NFPA 1001 4.2.1, 4.2.1.A
- 13-I.08 Trainee shall define all fire alarm signals, including multiple alarms and special signals, governing the movements of fire apparatus, and the action to be taken upon the receipt of each signal.
NFPA 1001 4.2.1.A

Firefighter II

- 13-II.01 Trainee shall identify areas assigned for first-alarm response.
NFPA 1001 5.2.2
- 13-II.02 Trainee shall demonstrate both mobile and portable radio equipment.
NFPA 1001 5.2.2
- 13-II.03 Trainee shall demonstrate the ordering of multiple alarms and other calls for assistance from the fire ground, (i.e., mutual aid).
NFPA 1001 5.2.2
- 13-II.04 Trainee shall identify the fire incident reporting systems: NFIRS and TEXFIRS.
NFPA 1001 5.2.1
- 13-II.05 Trainee shall identify the scope, purpose and benefits of the Texas and National Fire Incident Reporting Systems.
NFPA 1001 5.2.1
- 13-II.06 Trainee shall identify the three (3) elements of a fire reporting system.
NFPA 1001 5.2.1
- 13-II.07 Trainee shall identify report forms used by the local AHJ: incident report form and casualty report form.
NFPA 1001 5.2.1

SECTION 14 FIRE CAUSE & ORIGIN

Firefighter I

- 14-I.01 Trainee shall explain the ways to recognize obvious signs of the area of origin.
NFPA 1001 4.3.8, 4.3.14
- 14-I.02 Trainee shall describe the relationship between the fire cause classifications and cause determination.
NFPA 1001 4.3.8, 4.3.13
- 14-I.03 Trainee shall identify factors indicating arson.
NFPA 1001 4.3.13
- 14-I.04 Trainee shall identify the importance of protecting evidence and explain the different techniques of protecting evidence at a fire scene.
Department can use Overhaul FF II - 1 Skill Sheet to document
NFPA 1001 4.3.8, 4.3.14

Firefighter II

- 14-II.01 Trainee shall identify the roles and responsibilities of a firefighter in determining point of origin.
NFPA 1001 5.3.4
- 14-II.02 Trainee shall identify factors indicating fire cause.
NFPA 1001 5.3.4
- 14-II.03 Trainee shall identify observations important to determining events of a fire.
NFPA 1001 5.3.4
- 14-II.04 Trainee shall define the importance of securing a fire scene to prevent unwarranted access.
NFPA 1001 5.3.4

SECTION 15 FIRE CONTROL

These live fire training evolutions should consist of a combination of various stages of hose handling, fire streams, ventilation, etc., necessary in the actual extinguishment of a fire. The training conducted under this section must be carried out as a preplanned operation with reference to the standards of NFPA 1403: Standard on Live Fire Training Evolutions. Under no circumstances shall response to actual alarms be counted as training.

Firefighter I – Objectives marked with an asterisk (*) should be completed before beginning live fire training.

15-I.01* Trainee shall identify the current edition of NFPA 1403: Standard on Live Fire Training Evolutions and shall:

NFPA 1403

- A. identify the purpose of NFPA 1403
- B. define evolution
- C. define student
- D. define instructor
- E. define training center burn building
- F. identify subjects required prior to participating in live fire training
- G. identify the minimum flow, in gallons per minute, required by each hose line used in live fire training
- H. identify the protective equipment required during live fire training

15-I.02 Trainee, operating as the nozzle person and as a member of a team, shall control and/or extinguish the following live fires using appropriate protective equipment, fire fighting tools, and extinguishing agents:

Department can use Live Fire FF I - 1 Skill Sheet to document

Department can use Live Fire FF I - 2 Skill Sheet to document

Department can use Live Fire FF I - 3 Skill Sheet to document

Department can use Live Fire FF I - 4 Skill Sheet to document

Department can use Live Fire FF I - 5 Skill Sheet to document

Department can use Live Fire FF I - 6 Skill Sheet to document

Department can use Live Fire FF I - 7 Skill Sheet to document

NFPA 1001 4.3.7

- A. a one (1) room fire
- B. a two (2) room fire
- C. piles/stacks of Class A combustible materials (exterior)
- D. open pans of combustible materials (exterior)
- E. vehicle fires
- F. ground cover fire

15-I.03 Trainee, operating as a member of a team, shall perform vertical ventilation during live fire training.

NFPA 1001 4.3.12

15-I.04 Trainee, operating as a member of a team, shall perform horizontal ventilation during live fire training.

NFPA 1001 4.3.11

15-I.05 Trainee, operating as an individual or a member of a team, shall carry and raise ladders during live fire training.

NFPA 1001 4.3.6

15-I.06 Trainee shall extinguish a Class B fire with a portable fire extinguisher.

NFPA 1001 4.3.16

Firefighter II

15-II.01 Trainee shall describe the considerations to be taken when coordinating fire ground operations

NFPA 1001 5.1.1, 5.1.2, 5.3.2

15-II.02 Trainee shall explain fire ground roles and responsibilities a firefighter II may need to coordinate

NFPA 1001 5.1.1, 5.1.2, 5.3.2

15-II.03 Trainee shall discuss the process of establishing and transferring command

NFPA 1001 5.1.1, 5.1.2, 5.3.2

15-II.04 Trainee shall describe the hazards that may be present at fires in underground spaces

NFPA 1001 5.3.2

15-II.05 Trainee shall list the safety precautions to be taken at Flammable/Combustible liquid fires incidents

NFPA 1001 5.3.1, 5.3.3

15-II.06 Trainee shall recognize methods used when coordinating operations at a property protected by a fire suppression system

NFPA 1001 5.3.2

15-II.07 Trainee shall explain how to use water to control Class B fires

NFPA 1001 5.3.1

15-II.08 Trainee shall compare methods used to suppress bulk transport vehicle fires and flammable gas incidents

NFPA 1001 5.3.3

15-II.09 Trainee shall establish incident command and coordinate interior attack of a structure fire

Department can use Live Fire FF II - 2 Skill Sheet to document

NFPA 1001 5.1.2, 5.3.2

15-II.10 Trainee shall control a pressurized flammable gas container fire

Department can use Live Fire FF II - 1 Skill Sheet to document

NFPA 1001 5.3.3

THESE LIVE FIRE TRAINING EVOLUTIONS SHOULD CONSIST OF A COMBINATION OF VARIOUS STAGES OF HOSE HANDLING, FIRE STREAMS, VENTILATION, ETC., NECESSARY IN THE ACTUAL EXTINGUISHMENT OF A FIRE. THE TRAINING CONDUCTED UNDER THIS SECTION MUST BE CARRIED OUT AS A PREPLANNED OPERATION WITH REFERENCE TO THE STANDARDS OF NFPA 1403: *STANDARD ON LIVE FIRE TRAINING EVOLUTIONS*. UNDER NO CIRCUMSTANCES SHALL RESPONSE TO ACTUAL ALARMS BE COUNTED AS TRAINING.

SECTION 16 FIREFIGHTER SAFETY & HEALTH

Firefighter I – Objectives marked with an asterisk (*) should be completed before beginning live fire training.

- 16-I.01* Trainee shall identify dangerous building conditions created by fire.
NFPA 1001 4.3.10
- 16-I.02* Trainee shall define fire service lighting equipment.
NFPA 1001 4.3.17.A
- 16-I.03* Trainee shall identify and describe safety procedures given the following fire service lighting equipment:
NFPA 1001 4.3.17.A
A. Power supply (portable or mounted)
B. Lights
C. Auxiliary equipment
- 16-I.04* Trainee given fire service lighting equipment, power supply, and an assignment, shall operate emergency scene lighting equipment so that designated areas are illuminated.
Department can use Safety FF I - 5 Skill Sheet to document
NFPA 1001 4.3.17.B
- 16-I.05* Trainee shall define safety procedures as they apply to emergency operations, specifically:
NFPA 1001 4.1.2, 4.3.2.A-B, 4.1.1
A. protective equipment
B. team concept
C. portable tools and equipment
D. riding on apparatus
E. hazardous materials incidents
- 16-I.06* Trainee shall identify the safety purpose of the 2 in 2 out rule per NFPA 1403.
NFPA 1403
- 16-I.07* Trainee shall identify the safety procedures and precautions during fire apparatus operations:
NFPA 1001 4.3.2.A
A. attire to be worn while riding on apparatus responding to an alarm and,
B. describe/list safety precautions required while riding fire apparatus.
- 16-I.08* Trainee shall define techniques for action when trapped or disoriented in a fire situation or in a hostile environment.
Department can use Safety FF I - 2 Skill Sheet to document
Department can use Safety FF I - 3 Skill Sheet to document
NFPA 1001 Annex 5.3.9
- 16-I.09* Trainee shall identify the elements and purpose of a Rapid Intervention Team/Crew per NFPA 1407
NFPA 1407
- 16-I.10* Trainee shall define procedures to be used in electrical emergencies.
NFPA 1001 4.3.3, 4.3.18
A. identifying four (4) agents for extinguishing fires in electrically energized equipment.
B. identifying minimum safe distances from which he can apply water fog pattern to electrically energized equipment as determined by the voltage.
C. identifying safe and unsafe areas for the placement of ground ladders near electrically energized wires.
D. identifying types of conductive vs. non-conductive ladder construction materials.
E. explaining the safest action to be taken when aerial apparatus may come into contact with electrically energized overhead wires.
F. defining procedures for extinguishing transformer fires on utility poles.
G. identifying photovoltaic power systems, battery storage systems.
- 16-I.11* Trainee shall identify the 16 life safety initiatives.
NFPA 1001 4.1.1
Completion of "Courage to be Safe" meets the requirements of this objective.
- 16-I.12* Trainee shall identify the signs and symptoms of behavioral and emotional distress
NFPA 1001 4.1.1

Firefighter II - There are no objectives required for this certification level.

SECTION 17 GROUND COVER FIRE FIGHTING

Please note: it is recommended that the Texas A&M Forest Service course "Wildland Fire Suppression for Volunteer Departments", or its equivalent, is used as reference materials in meeting the objectives of this section.

Firefighter I

17-I.01 Trainee shall correctly define wildfire terms as used in the fire service:

NFPA 1001 4.3.19

- | | |
|---------------------------|-------------------------------------|
| A. mop-up | K. fire behavior |
| B. direct attack | L. incident commander |
| C. indirect attack | M. incendiary fire |
| D. fuel N. | mutual aid |
| E. backfire/burnout | O. fire season |
| F. barrier | P. convection column |
| G. topography | Q. tools used in ground cover fires |
| H. suppression | R. crown fires |
| I. ground fires | S. surface fires |
| J. parts of wildland fire | |

17-I.02 Trainee shall, given a specific wildland fire situation, describe the effect of fuel, weather and topography on wildland fire, and predict the direction and speed of the fire spread.

NFPA 1001 4.3.19

17-I.03 Trainee shall, given a specific wildland fire situation, construct hand and wet fire lines using safe and effective both direct and indirect line construction techniques to control the fire within less than 10% increase in the perimeter.

NFPA 1001 4.3.19

17-I.04 Trainee shall, given a specific wildland fire situation as reported, locate the fire relative to his present location and describe the factors involved to respond safely to that location within the response time standards of the department.

NFPA 1001 4.3.19

17-I.05 Trainee shall, given a specific wildland fire situation, analyze (size up) the situation and using proper procedures, shall organize this information into a clear, concise report of conditions necessary to develop an initial plan of action to control the fire within 2 hours.

NFPA 1001 4.3.19

17-I.06 Trainee shall, given a specific wildland fire situation with control lines established, insure complete extinguishment of the fire by employing recognized mop-up techniques.

NFPA 1001 4.3.19

17-I.07 Trainee shall, given a residence within a wildland area, identify typical fire hazards and recommend corrective actions which are within his authority and ability to do.

NFPA 1001 4.3.19

17-I.08 Trainee shall, given a specific wildland fire situation, list and describe recognized safety practices and corrective actions to be taken to ensure that the department does not have any injuries due to the wildfire suppression effort.

NFPA 1001 4.3.19

Firefighter II - There are no objectives required for this certification level.

SECTION 18 FIREFIGHTER PPE & SCBA

Firefighter I – Objectives marked with an asterisk (*) should be completed before beginning live fire training.

- 18-I.01* Trainee shall identify the various types of fire service protective clothing such as structural, wildland, and ARFF. Trainee shall also identify their components:
NFPA 1001 4.1.2, 4.3.9
A. turnouts
B. helmets
C. gloves
D. boots
E. SCBA
- 18-I.02* Trainee shall identify procedures for inspecting, cleaning, and maintaining the components of a personal protective ensemble after each use.
Department can use PPE FF I - 3 Skill Sheet to document
NFPA 1001 4.1.2
- 18-I.03* Trainee shall describe the limitations of personnel working in a personal protective ensemble.
NFPA 1001 4.3.1.A
- 18-I.04* Trainee shall identify at least four (4) hazardous respiratory environments encountered in fire fighting.
NFPA 1001 4.3.1.A
- 18-I.05* Trainee shall demonstrate the use of SCBA in conditions of obscured visibility.
NFPA 1001 4.3.5, 4.3.5.A-B, 4.3.9
- 18-I.06* Trainee shall identify the physical requirements of the wearer, the limitations of the SCBA, and the safety features of types of SCBA available to local AHJ.
NFPA 1001 4.3.1.A-B
- 18-I.07* Trainee shall demonstrate donning SCBA while wearing protective clothing:
Department can use PPE FF I - 2 Skill Sheet to document
Department can use SCBA FF I - 4 Skill Sheet to document
Department can use SCBA FF I - 5 Skill Sheet to document
Department can use SCBA FF I - 7 Skill Sheet to document
Department can use SCBA FF I - 8 Skill Sheet to document
NFPA 1001 4.3.2.A-B
A. in a seated position on an apparatus with a seat belt on
B. Compartment Method
C. Overhead Method
D. Coat Method
- 18-I.08* Trainee shall demonstrate that the SCBA is in a safe condition for immediate use.
NFPA 1001 4.3.1
- 18-I.09* Trainee shall perform field reduction of contaminants.
NFPA 1001 4.5.1
- 18-I.10* Trainee shall demonstrate the use of SCBA in conditions of restricted passage.
Department can use SCBA FF I - 9 Skill Sheet to document
NFPA 1001 4.3.1.A-B
- 18-I.11* Trainee shall demonstrate replacement of an expended cylinder on an SCBA assembly with a full cylinder.
Department can use SCBA FF I - 1 Skill Sheet to document
NFPA 1001 4.3.1.B
- 18-I.12* Trainee shall identify the procedure for daily inspections and maintenance of SCBA.
Department can use PPE FF I - 1 Skill Sheet to document
Department can use SCBA FF I - 2 Skill Sheet to document
NFPA 1001 4.3.9.A, 4.5.1, 4.5.1.A-B
- 18-I.13* Trainee, given each type of SCBA, shall demonstrate the correct procedure for recharging.
NFPA 1001 4.3.1.A-B
- 18-I.14* Trainee shall demonstrate the following emergency techniques using SCBA to:
Department can use SCBA FF I - 6 Skill Sheet to document
Department can use SCBA FF I - 10 Skill Sheet to document
NFPA 1001 4.3.5.B
A. Emergency Preparedness
B. Control Breathing Techniques
C. Communications Procedures

18-I.15* Trainee shall identify and define the operational components of all types of SCBA.

NFPA 1001 4.3.1, 4.3.1.A

18-I.16* Trainee, without compromising the rescuers respiratory protection, shall demonstrate rescue procedures for the following:

Department can use Search and Rescue FF I - 1 Skill Sheet to document

Department can use Search and Rescue FF I - 2 Skill Sheet to document

NFPA 1001 4.3.9.B

- A. a firefighter with functioning respiratory protection
- B. a firefighter without functioning respiratory protection
- C. a civilian without respiratory protection

18-I.17* Trainee shall demonstrate the operation of a Personal Alert Safety System (PASS) device.

Department can use Safety FF I - 1 Skill Sheet to document

NFPA 1001 4.3.1.B

Firefighter II - There are no objectives required for this certification level.

SECTION 19

ROPES

Firefighter I

19-I.01 Trainee, when given name, picture, or actual knot used by the AHJ, shall identify it and describe the purpose for which it would be used:

NFPA 1001 4.3.20.A

- | | |
|------------------------|--------------------------------|
| A. Becket (sheet) bend | E. half hitch |
| B. bowline | F. figure-eight |
| C. clove hitch | G. figure-eight on a bight |
| D. bowline on a bight | H. figure-eight follow through |

19-I.02 Trainee shall identify rope safety procedures.

NFPA 1001 4.1.2

19-I.03 Trainee shall identify and/or demonstrate the terms used when tying a knot or hitch used by the AHJ:

NFPA 1001 4.1.2, 4.3.20.A

- A. standing part when tying a knot or hitch
- B. running part when tying a knot or hitch
- C. a bight when tying a knot or hitch
- D. a loop when tying a knot or hitch
- E. a round turn when tying a knot or hitch
- F. half hitch when tying a knot or hitch

19-I.04 Trainee shall identify the construction characteristics and appropriate uses of both natural and synthetic fiber ropes:

NFPA 1001 4.1.2, 4.3.20.A

- A. Characteristics of natural fiber (manila) ropes for utility use only:
 - 1. moisture retention
 - 2. floatability
 - 3. resistance to rot, mildew and attack by marine organisms
 - 4. resistance to surface abrasion
 - 5. resistance to acids, alkalis and solvents
 - 6. safe working strength of new rope: 3/8" manila, 1/2" manila, 5/8" manila, 3/4" manila
- B. Characteristics of synthetic ropes:
 - 1. moisture retention
 - 2. floatability
 - 3. resistance to rot, mildew and attack by marine organisms
 - 4. resistance to surface abrasion
 - 5. resistance to acids, alkalis and solvents
 - 6. safe working strength of new rope of:
 - a. 1/2" nylon, Dacron, polypropylene, braided nylon cover with nylon core;
 - b. 5/8" nylon, Dacron, polypropylene, braided nylon cover with nylon core;
 - c. 3/4" nylon, Dacron, polypropylene, braided nylon cover with nylon core
- C. Uses of ropes:
 - 1. hoisting tools and equipment
 - 2. securing tools and equipment to immovable objects
 - 3. rescue

19-I.05 Define a life safety rope and one and two-person life safety rope including:

NFPA 1001 4.1.2, 4.3.20.A

- A. maximum working load
- B. safety factor
- C. minimum breaking strength

19-I.06 Trainee, when given the proper size and amount of rope, shall demonstrate tying the following knots used by the AHJ:

Department can use Ropes FF I - 2 Skill Sheet to document

Department can use Ropes FF I - 3 Skill Sheet to document

Department can use Ropes FF I - 4 Skill Sheet to document

Department can use Ropes FF I - 5 Skill Sheet to document

NFPA 1001 4.1.2, 4.3.20.A

- | | |
|------------------------|--------------------------------|
| A. Becket (sheet) bend | E. half hitch |
| B. bowline | F. figure-eight |
| C. clove hitch | G. figure-eight on a bight |
| D. bowline on a bight | H. figure-eight follow through |

- 19-I.07 Trainee, using an approved knot, shall hoist any selected forcible entry tool, ground ladder, or appliance to a height of at least 20':
Department can use Ropes FF I - 2 Skill Sheet to document
Department can use Ropes FF I - 3 Skill Sheet to document
Department can use Ropes FF I - 4 Skill Sheet to document
Department can use Ropes FF I - 5 Skill Sheet to document
NFPA 1001 4.1.2; 4.3.20.A
- A. a 1½" or 1¾" dry hose with nozzle attached
 - B. a 2½" or 3" dry hose with nozzle attached
 - C. a 1½" or 1¾" charged hose
 - D. an axe
 - E. a 6' or 8' pike pole
 - F. a single 14' or 16' (wall) ladder
 - G. a 10' collapsible ladder
 - H. a 14' combination ladder
 - I. working as a member of a team, a 24' extension ladder
 - J. a 15 lb. CO₂ fire extinguisher
 - K. a 20 lb. dry chemical fire extinguisher
 - L. an electric smoke ejector
 - M. a pair of bolt cutters
- 19-I.08 Trainee shall demonstrate the technique of inspection, cleaning, maintaining, storage, safety procedures, and reasons for placing a rope out of service.
NFPA 1001 4.1.1, 4.3.20.A
- 19-I.09 Trainee shall use a rope to tie ladders, hose, and other equipment so as to secure them to immovable objects as follows:
NFPA 1001 4.1.1; 4.3.20.A
- A. secure a ladder tip to a building,
 - B. secure a 1½" or larger charged line to a ladder
 - C. secure a hose roller
- 19-I.10 Trainee shall select and tie a rope between two objects at least 15' (4.6m) apart, which will support the weight of a firefighter on the rope.
NFPA 1001 4.3.20.A
- 19-I.11 Trainee, given 20' tubular webbing, shall demonstrate the proper tying of a Swiss seat.
NFPA 1001 4.3.20
- 19-I.12 Trainee, given the proper information, shall list the equipment needed to complete rappelling procedure.
NFPA 1001 4.3.20

Firefighter II - There are no objectives required for this certification level.

SECTION 20 PORTABLE EXTINGUISHERS

Firefighter I – Objectives marked with an asterisk (*) should be completed before beginning live fire training.

20-I.01* Trainee shall identify the classification of types of fires as they relate to the use of portable extinguishers as follows:

NFPA 1001 4.3.16.A

- A. Identify the five (5) classes of fire:
 - 1. Class A
 - 2. Class B
 - 3. Class C
 - 4. Class D
 - 5. Class K
- B. Identify examples of fuels for each class of fire:
 - 1. Class A
 - 2. Class B
 - 3. Class C
 - 4. Class D
 - 5. Class K

20-I.02* Trainee, given a group of differing extinguishers, shall identify the appropriate extinguishers for each class of fire as follows:

NFPA 1001 4.3.16.A

- A. Class A fire:
 - 1. pump tank water extinguisher
 - 2. stored-pressure water
 - 3. foam
 - 4. dry chemical (multi-purpose agent)
- B. Class B fire:
 - 1. dry chemical (ordinary base)
 - 2. dry chemical (multi-purpose)
 - 3. CO₂ (carbon dioxide)
 - 4. foam
 - 5. Halon 1211
- C. Class C fire:
 - 1. dry chemical (ordinary base)
 - 2. dry chemical (multi-purpose)
 - 3. CO₂ (carbon dioxide)
 - 4. Halon 1211
- D. Class D fire:
 - 1. powder extinguishing agents for metal fires.
- E. Class K
 - 1. wet chemical systems

20-I.03* Trainee shall identify the portable fire extinguisher rating system (Underwriters Laboratories, Inc.):

NFPA 1001 4.3.16.A

- A. the basic symbols for the classes of fires
- B. the picture-symbol labeling system for the selection of fire extinguishers
- C. the numerical rating system for Class A & B fire extinguishers
- D. the test procedure for rating Class C portable extinguishers
- E. the test procedure for rating Class D portable extinguishers
- F. portable extinguishers suitable for more than one class of fire
- G. the test procedure for rating Class K portable extinguishers

20-I.04* Trainee shall demonstrate the use of portable extinguishers for each class of fire as follows:

NFPA 1001 4.3.16.B

- A. extinguish a class A fire using a pump tank water extinguisher
Department can use Extinguishers FF I - 1 Skill Sheet to document
- B. extinguish a class B fire using a dry chemical extinguisher
Department can use Extinguishers FF I - 2 Skill Sheet to document
- C. extinguish a class B fire using a CO₂ extinguisher
Department can use Extinguishers FF I - 3 Skill Sheet to document

20-I.05* Trainee shall identify and explain the extinguishing effect needed for each class of fire as follows:

NFPA 1001 4.3.16.B

- A. Class A fire:
 - 1. cooling
 - 2. smothering
- B. Class B fire:
 - 1. smothering
 - 2. blanketing
- C. Class C fire:
 - 1. smothering & non-conductive
- D. Class D fire:
 - 1. must be non-reactive with burning material
- E. Class K fire:
 - 1. oxygen depletion & vapor suppression

20-I.06* Trainee shall identify and explain fire extinguisher characteristics and operations of:

NFPA 1001 4.3.16

- A. Pump tank water extinguishers, stored-pressure water extinguishers, aqueous film forming foam extinguishers, Halon 1211 extinguishers, CO₂ extinguishers, dry chemical extinguishers (ordinary base agent), and dry chemical extinguishers (multi-purpose base) as to their:
 - 1. size
 - 2. applicable to what class of fires
 - 3. stream reach under normal conditions
 - 4. discharge time under normal conditions
 - 5. protection from freezing
 - 6. methods of operation

Firefighter II - There are no objectives required for this certification level.

SECTION 21 BUILDING CONSTRUCTION

Firefighter I – Objectives marked with an asterisk (*) should be completed before beginning live fire training.

21-I.01* Trainee shall describe the relationship of building construction to fire behavior by:

NFPA 1001 4.3.4.A, 4.3.12.A

- A. identifying the types of loads placed on a structure
- B. identifying loads as to the direction in which they are placed on structural members
- C. describing the effect of loads on various materials
- D. identifying terms associated with building construction

21-I.02* Trainee shall identify the various types of building construction characteristics:

NFPA 1001 4.3.12.A

- A. Type 1 – Fire Resistive
- B. Type 2 – Noncombustible or limited combustible
- C. Type 3 – Ordinary
- D. Type 4 – Heavy Timber
- E. Type 5 – Wood

21-I.03* Trainee shall describe the various structural elements in building construction by:

NFPA 1001 4.3.4.A, 4.3.12.A

- A. defining fire resistance
- B. identifying foundation assemblies, foundation walls, floor assemblies, ceilings and ceiling assemblies, various types of wall construction, roof types, roof coverings, roof supports
- C. identifying potential hidden spaces in structural elements that would allow for communication of fire and smoke

21-I.04* Trainee shall identify the various building services for:

NFPA 1001 4.3.4.A, 4.3.12.A

- A. movement of people throughout a structure; elevators and stairways
- B. mechanical operations of a building; heating, ventilating and air conditioning systems, utility chases and vertical shafts
- C. emergency accessibility in buildings; windowless walls, access panels, roof hatches, smoke and heat vents, and skylights

21-I.05* Trainee shall identify door and window assemblies by:

NFPA 1001 4.3.4

- A. various types
- B. describing fire doors and their method of operation
- C. identifying typical types of door construction
- D. identifying various window assemblies
- E. identifying types of windows

21-I.06* Trainee shall identify signs of potential collapse of a structure:

NFPA 1001 4.3.12.A

- A. cracks in walls
- B. sagging roof
- C. walls out of line

21-I.07* Trainee shall define the following terms as they relate to building construction:

NFPA 1001 4.3.4

- | | |
|---------------------------|-----------------------------------|
| A. veneer wall (exterior) | D. partition wall |
| B. party wall | E. cantilever or unsupported wall |
| C. fire wall | F. load bearing |

Firefighter II

21-II.01 Trainee shall identify causes of potential collapse in buildings:

NFPA 1001 5.3.2

- A. deterioration
- B. forces associated with the violence of a fire
- C. structural modifications found during pre-fire planning

21-II.02 Trainee shall describe at least three (3) hazards associated with light-weight truss construction.

NFPA 1001 5.3.2

21-II.03 Trainee shall describe the effects of fire and fire suppression activities on the following building materials:

NFPA 1001 5.3.2

- | | |
|--------------------------------------|------------------------|
| A. wood | E. reinforced concrete |
| B. masonry, i.e. brick, block, stone | F. gypsum wall board |
| C. cast iron | G. glass |
| D. steel | H. plaster on lathe |

MINIMUM STANDARDS FOR MASTER FIREFIGHTER CERTIFICATION

Minimum Requirements

1. Applicant must have:
 - a. ten (10) years of fire fighting service; and
EITHER
 - b. a minimum of forty (40) hours from five (5) categories of training; and
 - c. a minimum of four hundred (400) total hours above NFPA 1072: HazMat Awareness & Operations and NFPA 1001: Firefighter I & II
OR
 - d. provide documentation of TCFP Master Firefighter certification.
2. Applicants must hold, or apply concurrently for an SFFMA-issued NFPA 1001: Firefighter II or (Accredited Advanced Firefighter certification issued prior to January 1, 2012).
3. Applicant **MUST** provide a photocopy of every training course taken.

Application Notes

1. Each course taken must be successfully completed; and only forty (40) hours per course will be applicable toward the four hundred (400) hours. Attendance certificates are not accepted toward certification.

Example: "Information Management System" is an eighty (80) hour course. Only forty (40) hours of this course can be used towards one category credit. Three hundred sixty (360) additional hours must be obtained from other courses in a minimum of four (4) other categories.
2. If there is no listing for a college or national-level course, or a course with multiple subject areas, a breakdown of the number of hours applicable toward the Master certification **MUST** accompany the application in the form of a course outline, syllabus or summary.

Courses for Master Firefighter – includes, but is not limited, to the following list of EXAMPLES:

CATEGORY 1 MEDICAL

- 1-01 Management of Emergency Medical Services
- 1-02 Texas Department of State Health Services (DSHS): ECA, EMT, EMT Specialized/EMT Intermediate, Paramedic
- 1-03 American Red Cross: First Aid, CPR, Water Safety, Instructors Courses and Basic Life Support

CATEGORY 2 MANAGEMENT/SUPERVISION OPERATIONS

- 2-01 Fire Service Officer Development II - 30 Hours
The course must cover:

2-01.01 Public Relations	2-01.05 Public Fire Education
2-01.02 Stress and Stress Management	2-01.06 Safety
2-01.03 Problem Solving	2-01.07 Physical Fitness
2-01.04 Pre-Planning	
- 2-02 Fire Service Officer Development III - 30 Hours
The course must cover:

2-02.01 Fire Ground Safety	2-02.04 Standard Operations Procedures
2-02.02 Multiple Company Operations	2-02.05 Public Information Officers
2-02.03 Functions of Command	2-02.06 Fire Stream Management
- 2-03 Fire Service Officer Development IV - 30 Hours
The course must cover:

2-03.01 Fire Department Governments	2-03.10 Procurement
2-03.02 Fire Department Organization	2-03.11 Specifications
2-03.03 Internal and External Policies	2-03.12 Research and Development
2-03.04 Recruitment and Retention	2-03.13 Key Rate
2-03.05 Substance Abuse	2-03.14 Intergovernmental Relations
2-03.06 Officer Selection and Ethics	2-03.15 Documentation
2-03.07 Budgets	2-03.16 SOPs Rules, Regulations, and Policies
2-03.08 Funding Sources	2-03.17 Legal Problems
2-03.09 Planning - Short and Long Range	
- 2-04 Fire Service Officer Development V - 30 Hours
The course must cover:

2-04.01 Analyzing Behavior	2-04.06 MBOs and MBEs
2-04.02 Objective Task Needs	2-04.07 Policies
2-04.03 Information Assimilation	2-04.08 Instructional Techniques for Company Officers
2-04.04 Planning, Organizing, and Controlling	
2-04.05 Writing Objectives	

- 2-05 Advanced Fire Service Supervision Phase I - 20 Hours
The course must cover:
 - 2-05.01 How to Improve Professional Effectiveness
 - 2-05.02 Management Styles
 - 2-05.03 Time Management
 - 2-05.04 Professional Development
- 2-06 Fire Service Supervision Phase II - 20 Hours
The course must cover:
 - 2-06.01 Interpersonal Communication
 - 2-06.02 Counseling
 - 2-06.03 Conflict Resolution
- 2-07 Executive Development
- 2-08 Strategic Analysis of Fire Department Operations
- 2-09 Executive Leadership
- 2-10 Fire Service Leadership and Communications
- 2-11 Command & Control of Fire Department Major Operations
- 2-12 Command & Control of Fire Department Operations at Catastrophic Disasters
- 2-13 Interpersonal Dynamics in Fire Service Organizations
- 2-14 Fire Service Financial Management
- 2-15 Fire Service Information Management
- 2-16 Fire Command Operations
- 2-17 Community Fire Protection: Master Planning
- 2-18 Advanced Techniques in Recruiting, Training & Maintaining Volunteer Firefighters - 16 Hrs.
- 2-19 Advanced Fire Fighting Training
- 2-20 Human Relations
- 2-21 Training Center & Classroom Organization & Management
- 2-22 Staff and Command
- 2-23 Company Officer Training
- 2-24 Volunteer Fire Service Management
- 2-25 Command & Control of Wildland/Urban Interface Operations for the Structural Chief Officer
- 2-26 Community Risk Issues & Prevention Interventions
- 2-27 Cooperative Leadership Issues in Wildland/Urban Interface
- 2-28 Emergency Response to Terrorism: Basic Concepts
- 2-29 Emergency Response to Terrorism: Strategic Considerations for Command Officers
- 2-30 Emergency Response to Terrorism: Tactical Considerations – Company Officer
- 2-31 Emergency Response to Terrorism: Tactical Considerations – Emergency Medical Services
- 2-32 Emergency Response to Terrorism: Tactical Considerations – Hazardous Materials
- 2-33 Health and Safety Officer (Revised Course)
- 2-34 Incident Command for High Rise Operations
- 2-35 Incident Command System for Emergency Medical Services
- 2-36 Incident Command System for Structural Collapse Incidents
- 2-37 Incident Safety Officer
- 2-38 Introduction to Unified Command for Multiagency and Catastrophic Incidents
- 2-39 Introduction to Wildland and Wildland/Urban Interface Firefighting for the Structural Company Officer
- 2-40 Leadership I: Strategies for Company Success
- 2-41 Leadership II: Strategies for Personal Success
- 2-42 Leadership III: Strategies for Supervisory Success
- 2-43 Managing Company Tactical Operations: Preparation
- 2-44 Managing Company Tactical Operations: Decision-making
- 2-45 Managing Company Tactical Operations: Simulations
- 2-46 Managing a Changing Environment
- 2-47 Shaping the Future
- 2-48 Strategy and Tactics for Initial Company Operations
- 2-49 Training Operations in Small Departments
- 2-50 Firefighter Health & Safety: Program Implementation & Management

- 2-51 Firefighter Safety and Survival: Company Officer's Responsibility
- 2-52 Infection Control for Emergency Response Personnel: The Supervisor's Role & Responsibility
- 2-53 ICS-300: Intermediate ICS
- 2-54 ICS-400: Advanced ICS
- 2-55 IS-701: NIMS Multiagency Coordination System
- 2-56 IS-702: NIMS Public Information Systems
- 2-57 IS-703: NIMS Resource Management
- 2-58 IS-704: NIMS Communication and Information Management
- 2-59 IS-705: NIMS Preparedness
- 2-60 IS-706: NIMS Intrastate Mutual Aid
- 2-61 IS-707: NIMS Resource Typing
- 2-62 P-400: All-Hazards Incident Commander
- 2-63 P-430: All-Hazards Operations Sector Chief
- 2-64 P-440: All-Hazards Planning Section Chief
- 2-65 P-450: All-Hazards Logistics Section Chief
- 2-66 P-460: All-Hazards Finance Section Chief
- 2-67 P-480: All-Hazards Intelligence/Investigations Function
- 2-68 P-402: All-Hazards Liaison Chief
- 2-69 P-403: All-Hazards Public Information Officer
- 2-70 P-404: All-Hazards Safety Officer

CATEGORY 3 RESCUE/HAZARDOUS MATERIALS

- 3-01 Agro-Rescue Practices - 30 Hours
The course must cover:

3-01.01	Basic Safety	3-01.04	Emergency Shut Down Procedures
3-01.02	Lifting and Cribbing Techniques	3-01.05	Rescue Procedures
3-01.03	Cutting Techniques	3-01.06	Victim Care
- 3-02 Rope Rescue - 40 Hours
The course must cover:

3-02.01	Basic Rope Characteristics	3-02.06	Hauling Systems
3-02.02	Knot Tying	3-02.07	Rappelling
3-02.03	Rescue Equipment	3-02.08	Rope Ascension
3-02.04	Anchor System Construction & Placement	3-02.09	Traverse Systems
3-02.05	Lowering Systems	3-02.10	Confined Space Rescue
- 3-03 Agricultural Chemical Fire and Spill Control - 15 Hours
The course must cover:

3-03.01	Hazard Recognition	3-03.04	Fire Control Tactics
3-03.02	Information Resources	3-03.05	Post Incident Operation
3-03.03	Command Post Operations	3-03.06	Emergency Planning
- 3-04 Mass Casualty-Transportation Emergencies (Rescue III) - 30 Hours
- 3-05 High Rise Rescue - 30 Hours
- 3-06 Chemistry of Hazardous Materials
- 3-07 Hazardous Materials Operating Site Practices
- 3-08 Hazardous Waste Site Personal Protection & Safety Training EmTech Environmental Services (OSHA 29CFR1910.120) - 40 Hours
- 3-09 Vertical Rescue
- 3-10 On-Site Basic Vertical Rescue
- 3-11 Confined Space Rescue
- 3-12 Swift Water Rescue - 30 Hours
- 3-13 Industrial Rescue Course II
- 3-14 Industrial Hazardous Material Control Course II
- 3-15 Hazardous Materials: The Pesticide Challenge

CATEGORY 4 FIRE PREVENTION

- 4-01 Fire Prevention III - 30 Hours
The course must cover:
- | | | | |
|---------|---------------------------------------|---------|------------------------------------|
| 4-01.01 | Visual Aids | 4-01.07 | Key Rates |
| 4-01.02 | Fire Protection Systems | 4-01.08 | Interviewing and Interrogation |
| 4-01.03 | Fixed Systems and Sprinklers | 4-01.09 | Arson Investigation |
| 4-01.04 | Court Demeanor | 4-01.10 | Hazardous Materials Transportation |
| 4-01.05 | Building Codes | 4-01.11 | Fire Inspection Practices |
| 4-01.06 | Tank Vehicle Operation and Inspection | | |
- 4-02 Public Relations - 12 Hours
The course must cover:
- | | | | |
|---------|---|---------|-------------------------------|
| 4-02.01 | What is Public Relations? | 4-02.05 | General Public |
| 4-02.02 | Why Public Relations | 4-02.06 | Role of Publicity |
| 4-02.03 | Public Opinion and Persuasion | 4-02.07 | Other Tools of Communications |
| 4-02.04 | Formula for Successful Public Relations Practices | | |
- 4-03 Fire Prevention VII - 30 Hours
The course must cover:
- | | | | |
|---------|--------------------------------------|---------|--------------------------------|
| 4-03.01 | Public Fire Prevention Education | 4-03.06 | Program Design |
| 4-03.02 | Role of Public Fire Safety Education | 4-03.07 | Field Program Presentation |
| 4-03.03 | Overview of Fire Programs | 4-03.08 | Classroom Program Presentation |
| 4-03.04 | Audio Visual Resources | 4-03.09 | Resource Networking |
| 4-03.05 | Public Education Resource Books | | |
- 4-04 Fire Prevention VIII - 30 Hours
The course must cover:
- | | | | |
|---------|--|--|--|
| 4-04.01 | Management of Public Education | | |
| 4-04.02 | Community Support of Fire Prevention | | |
| 4-04.03 | Identifying Local Fire and Burn Problems | | |
| 4-04.04 | Selecting Fire Prevention Programs | | |
| 4-04.05 | Designing Fire Prevention Programs | | |
| 4-04.06 | Implementing Fire Prevention Programs in Your City | | |
| 4-04.07 | Shriner Burn Prevention Programs | | |
| 4-04.08 | Electrical Fire Safety | | |
| 4-04.09 | Working with the Media | | |
- 4-05 Fire Prevention VI: Phase I, II, or III - 30 Hours
- 4-06 Strategic Analysis of Fire Prevention Programs
- 4-07 Management of Fire Prevention Programs
- 4-08 Texas A&M Fire & Arson Investigation
- 4-09 Code Management: A Systems Approach
- 4-10 Plans Review for Inspectors
- 4-11 Developing Fire & Life Safety Strategies
- 4-12 State Agency Fire Prevention & Control
- 4-13 Advanced Fire Prevention Training
- 4-14 Fire Prevention Inspection Training
- 4-15 Fire Prevention Inspection "C" Certification
- 4-16 Fire Prevention Inspection "B" Certification
- 4-17 Fire Prevention Inspection "A" Certification
- 4-18 Life Safety Code
- 4-19 Marketing Fire Prevention in your Community
- 4-20 Prevention and Mitigation Advocacy for Small Department Responders

CATEGORY 5 EDUCATIONAL/INSTRUCTIONAL

5-01 Methods of Teaching Fire Service Subjects - 40 Hours

The course must cover:

5-01.01	Introduction to Training	5-01.06	The Four Stage Plan of Instruction
5-01.02	The Instructor	5-01.07	Instructions Aids
5-01.03	The Learner	5-01.08	The Lesson
5-01.04	How We Learn	5-01.09	Writing the Lesson Plan
5-01.05	Methods and Techniques of Instruction	5-01.10	Practice Teaching

5-02 Public Speaking - 18 Hours

The course must cover:

5-02.01	Selecting the Subject	5-02.05	Image Transfer to the Audience
5-02.02	Organizing Subject Matter	5-02.06	Voice Control
5-02.03	Knowledge of Subject to be Presented	5-02.07	Ability to Convey Thoughts
5-02.04	Proper Attitude	5-02.08	Clarity of Presentation

5-03 Organizational Theory & Practice

5-04 Instructor Program: Chemistry of Hazardous Materials

5-05 Fire Service Instructional Methodology

5-06 Fire Service Course Development

5-07 Organization & Use of Instructional Material

5-08 Analysis & Course-making

5-09 Instructional Aids

5-10 Instructional Techniques for Company Officers

5-11 Methods of Enhancing Safety Education

CATEGORY 6 OTHER

6-01 Fire Department Pump Maintenance - 30 Hours

The course must cover:

6-01.01	Pump Theory	6-01.05	Service Test
6-01.02	Pump Maintenance and Repairs	6-01.06	Determining Net Pump or Engine Pressures
6-01.03	Special Problems		
6-01.04	Pump Test		

6-02 Breathing Apparatus Specialist - 40 Hours

The course must cover:

6-02.01	Use, Care, Maintenance, and Inspection	6-02.05	Cascade Systems
6-02.02	Toxicology	6-02.06	Emergency Procedures
6-02.03	Donning Drills	6-02.07	Confined Space Entry Procedures with SCBA
6-02.04	Time vs. Consumption Test		

6-03 Building Construction: Wood and Ordinary Construction - 12 Hours

The course must cover:

6-03.01	Basic Construction Principles
6-03.02	Common Causes and Indicators of Failure
6-03.03	Hazards Related to Building Construction

6-04 Building Construction: Non-Combustible and Fire Resistive Construction - 12 Hours

The course must cover:

6-04.01	Basic Construction Principles
6-04.02	Common Causes and Indicators of Failure
6-04.03	Hazards Related to Building Construction

6-05 Public Safety Emergency Service Dispatcher - 30 Hours

The course must cover:

6-05.01	Role of the Dispatcher	6-05.07	History of Public Safety Communication
6-05.02	Dispatcher Work Environment	6-05.08	Communication Systems
6-05.03	Telephone Usage	6-05.09	FCC Rules and Regulations
6-05.04	Telephone Techniques	6-05.10	Communication Operations
6-05.05	Disaster Communications	6-05.11	Dispatching Practices
6-05.06	Records		

6-06 Advanced Self-Contained Breathing Apparatus - 30 Hours

6-07 Protective Equipment & Practices

6-08 Annual International Aircraft Rescue & Fire Fighting Academy

- 6-09 Firefighter Safety & Survival
- 6-10 Firefighter Health & Safety
- 6-11 Computer Literacy, Fire Service Related
- 6-12 Fire Department Finance
- 6-13 Industrial Fire Protection Course
- 6-14 Industrial API Storage Tank Fire Fighting Course
- 6-15 Marine Fire Fighting & Emergency Training
- 6-16 Marine Fire Fighting Strategy & Tactics
- 6-17 LNG Fire Fighting
- 6-18 Shipboard Fire Fighting for Land Based Firefighters
- 6-19 Public Safety Emergency Dispatcher – Basic Concepts

MINIMUM STANDARDS FOR INSTRUCTORS

Reference Materials

The jurisdictional entity in which the Fire Instructor Personnel serves must have access to the most current editions of the following training manuals:

IFSTA

Fire and Emergency Services Instructor

NFPA

NFPA 1041: Standard for Fire Service Instructor Professional Qualifications

Jones & Bartlett

Fire Service Instructor: Principles and Practice

Minimum Requirements

Individuals with SFFMA Instructor I, II, III, Live Fire Instructor, Live Fire Instructor in Charge, or Master Instructor certification are approved by the Certification Board to teach other departments' personnel as well as within the certifying department.

The certification Program offers six (6) levels of Instructor Certification:

Instructor I

- i. Applicants must have served a minimum of three (3) years in a fire department, state or federal agency, educational institute, or a public or private entity devoted to fire service training and related responsibilities.
- ii. Applicants must complete one (1) of the following:
 - a) 40-Hour Methods of Teaching course;
 - b) NFPA 1041: Instructor I;
 - c) Bachelor's Degree in any field;
 - d) Texas Teaching Certification; or
 - e) Any Board-approved comparable educational instructional course
- iii. Applicants **must hold, or apply concurrently for**, the following SFFMA certifications:
 - a) Firefighter I or Industrial Firefighter I;
- iv. Level II Instructor certifications with an effective date prior to June 1, 2008 are grandfathered into the Instructor I certification.

Instructor II

- i. Applicants must complete one (1) of the following:
 - a) NFPA 1041: Instructor II;
 - b) TCFP Instructor II certification;
 - c) Bachelor's Degree in Education; or
 - d) Texas Teaching Certification
- ii. Applicants **must hold, or apply concurrently for**, the following SFFMA certifications:
 - a) Firefighter I or Industrial Firefighter I; and
 - b) Instructor I

Instructor III

- i. Applicants must complete one (1) of the following:
 - a) NFPA 1041: Instructor III;
 - b) TCFP Instructor III certification;
 - c) Bachelor's Degree in Education; or
 - d) Texas Teaching Certification
- ii. Applicants **must hold, or apply concurrently for**, the following SFFMA certifications:
 - a) Firefighter I or Industrial Firefighter I; and
 - b) Instructor I; and
 - c) Instructor II.

Live Fire Instructor

- i. Applicants must complete one (1) of the following:
 - a) NFPA 1041: Live Fire Instructor
- ii. Applicants **must hold, or apply concurrently for**, the following SFFMA certifications:
 - a) Firefighter II or Industrial Firefighter II; and
 - b) Instructor I

Live Fire Instructor in Charge

- i. Applicants must complete one (1) of the following:
 - a) NFPA 1041: Live Fire Instructor in Charge
- ii. Applicants **must hold, or apply concurrently for**, the following SFFMA certifications:
 - a) Firefighter II or Industrial Firefighter II; and
 - b) Instructor I;
 - c) Instructor II; and
 - d) Live Fire Instructor

Master Instructor

- i. Applicants **must hold, or apply concurrently for**, the following SFFMA certifications:
 - a) Firefighter I or Industrial Firefighter I;
 - b) Firefighter II;
 - c) Master Firefighter;
 - d) Instructor I;
 - e) Instructor II; and
 - f) Instructor III

Roles and Responsibilities

The following are roles and responsibilities of the Fire Instructor, divided by the three certification levels. Each list is not all inclusive and additional roles and responsibilities may be added or omitted by the Authority Having Jurisdiction (AHJ). Each instructor certification will require the ability to perform the roles and responsibilities of the previous certification levels (i.e., An Instructor III should possess the abilities of both the Instructor I and Instructor II levels).

Instructor I

- i. Delivers instruction from a prepared lesson plan;
- ii. Assembles course materials;
- iii. Reviews and adapts lesson plans to meet the needs of individual students, groups, and the AHJ
- iv. Organizes the instructional environment to maximize the learning experience while maintaining a safe learning environment;
- v. Ability to adjust the prepared lesson plan presentation as required to ensure that objectives are attained; and
- vi. Prepares and maintains training records in accordance to the AHJ requirements.

Instructor II

- i. Manages instructional resources to include facilities, personnel, time, funding, and records;
- ii. Schedules training sessions based on federal, state, local, and/or AHJ requirements;
- iii. Supervises and coordinates the activities of other instructors;
- iv. Evaluates subordinate instructors for training program improvement;
- v. Develops instructional materials to include the creation of a new or original lesson plan or the modification of existing plans;
- vi. Develops student, course, and instructor evaluation instruments; and
- vii. Analyzes the results of student evaluations to determine test validity.

Instructor III

- i. Administers organizational policy and procedures;
- ii. Administers a training record system;
- iii. Creates a selection process and management process for instructional staff;
- iv. Creates an instructor evaluation plan;
- v. Conducts organizational needs analysis;
- vi. Develops organizational training goals and implementation strategies;
- vii. Creates or modifies programs, curricula, and course requirements to fulfill the organizational training needs; and
- viii. Creates a program evaluation plan.

Curriculum for Instructor I

- FSI-01.01 Trainee shall assemble course materials, given a specific topic, so that the lesson plan and all materials, resources, and equipment needed to deliver the lesson are obtained.
NFPA 1041 4.2.2
(FD can document with Fire Instructor Skill Sheet 1-1 found in appendix and retain on file)
- FSI-01.02 Trainee shall prepare requests for resources, given training goals and current resources, so that the resources required to meet training goals are identified and documented.
NFPA 1041 4.2.3
(FD can document with Fire Instructor Skill Sheet 1-2 found in appendix and retain on file)
- FSI-01.03 Trainee shall schedule single instructional sessions, given a training assignment, department scheduling procedures, instructional resources, facilities and timeline for delivery, so that the specified sessions are delivered according to department procedure.
NFPA 1041 4.2.4
(FD can document with Fire Instructor Skill Sheet 1-3 found in appendix and retain on file)
- FSI-01.04 Trainee shall complete training records and report forms, given policies and procedures and forms, so that required reports are accurate and submitted in accordance with the procedures.
NFPA 1041 4.2.5
(FD can document with Fire Instructor Skill Sheet 1-4 found in appendix and retain on file)
- FSI-01.05 Trainee shall review instructional materials, given the materials for a specific topic, target audience, and learning environment, so that elements of the lesson plan, learning environment, and resources that need adaptation are identified.
NFPA 1041 4.3.2
(FD can document with Fire Instructor Skill Sheet 1-5 found in appendix and retain on file)
- FSI-01.06 Trainee shall adapt a prepared lesson plan, given course materials and an assignment, so that the needs of the student and the objectives of the lesson plan are achieved.
NFPA 1041 4.3.3
(FD can document with Fire Instructor Skill Sheet 1-5 found in appendix and retain on file)
- FSI-01.07 Trainee shall organize the classroom, laboratory, or outdoor learning environment, given a facility and an assignment, so that lighting, distractions, climate control or weather, noise control, seating, audiovisual equipment, teaching aids, and safety are considered.
NFPA 1041 4.4.2
(FD can document with Fire Instructor Skill Sheet 1-6 found in appendix and retain on file)
- FSI-01.08 Trainee shall present prepared lessons, given a prepared lesson plan that specifies the presentation method(s), so that the method (s) indicated in the plan are used and the stated objectives or learning outcomes are achieved, applicable safety standards and practices are followed, and risks are addressed.
NFPA 1041 4.4.3
(FD can document with Fire Instructor Skill Sheet 1-6 found in appendix and retain on file)
- FSI-01.09 Trainee shall adjust presentation, given a lesson plan and changing circumstances in the class environment, so that class continuity and the objectives or learning outcomes are achieved.
NFPA 1041 4.4.4
(FD can document with Fire Instructor Skill Sheet 1-6 found in appendix and retain on file)
- FSI-01.10 Trainee shall adjust to differences in learning styles, abilities, cultures, and behaviors, given the instructional environment, so that lesson objectives are accomplished, disruptive behavior is addressed, and a safe and positive learning environment is maintained.
NFPA 1041 4.4.5
(FD can document with Fire Instructor Skill Sheet 1-6 found in appendix and retain on file)
- FSI-01.11 Trainee shall operate audiovisual equipment and demonstration devices, given a learning environment and equipment, so that the equipment functions properly.
NFPA 1041 4.4.6
(FD can document with Fire Instructor Skill Sheet 1-6 found in appendix and retain on file)
- FSI-01.12 Trainee shall utilize audiovisual materials, given prepared topical media and equipment, so that the intended objectives are clearly presented, transitions between media and other parts of the presentation are smooth, and media are returned to storage.
NFPA 1041 4.4.7
(FD can document with Fire Instructor Skill Sheet 1-6 found in appendix and retain on file)
- FSI-01.13 Trainee shall administer oral, written, and performance tests, given the lesson plan, evaluation instruments, and evaluation procedures of the agency, so that bias or discrimination is eliminated the testing is conducted according to procedures, and the security of the materials is maintained.
NFPA 1041 4.5.2
(FD can document with Fire Instructor Skill Sheet 1-7 found in appendix and retain on file)
- FSI-01.14 Trainee shall grade student oral, written, or performance tests, given class answer sheets or skills checklists and appropriate answer keys, so the examinations are accurately graded and properly secured.
NFPA 1041 4.5.3
(FD can document with Fire Instructor Skill Sheet 1-8 found in appendix and retain on file)

- FSI-01.15 Trainee shall report test results, given a set of test answer sheets or kills checklists, a report form, and policies and procedures for reporting, so that the results are accurately recorded, the forms are forwarded according to procedure, and unusual circumstances are reported.
NFPA 1041 4.5.4
(FD can document with Fire Instructor Skill Sheet 1-9 found in appendix and retain on file)
- FSI-01.16 Trainee shall provide evaluation feedback to students, given evaluation data, so that the feedback is timely; specific enough for the student to make efforts to modify behavior; and objective, clear, and relevant; also include suggestions based on the data.
NFPA 1041 4.5.5
(FD can document with Fire Instructor Skill Sheet 1-10 found in appendix and retain on file)
- Curriculum for Instructor II**
- FSI-02.01 Trainee shall schedule instructional sessions, given department scheduling policy, instructional resources, staff, facilities, and timeline for delivery, so that the specified sessions are delivered according to department policy.
NFPA 1041 5.2.2
(FD can document with Fire Instructor Skill Sheet 2-1 found in appendix and retain on file)
- FSI-02.02 Trainee shall formulate budget needs, given training goals, agency budget policy, and current resources, so that the resources required to meet training goals are identified and documented.
NFPA 1041 5.2.3
(FD can document with Fire Instructor Skill Sheet 2-2 found in appendix and retain on file)
- FSI-02.03 Trainee shall acquire training resources, given an identified need, so that the resources are obtained within established timelines, budget constraints, and according to agency policy.
NFPA 1041 5.2.4
(FD can document with Fire Instructor Skill Sheet 2-2 found in appendix and retain on file)
- FSI-02.04 Trainee shall coordinate training record-keeping, given training forms, department policy, and training activity, so that all agency and legal requirements are met.
NFPA 1041 5.2.5
(FD can document with Fire Instructor Skill Sheet 2-3 found in appendix and retain on file)
- FSI-02.05 Trainee shall evaluate instructors, given an evaluation form, department policy, and JPRs, so that the evaluation identifies areas of strengths and weaknesses, recommends changes in instructional style and communication methods, and provides opportunity for instructor feedback to the evaluator.
NFPA 1041 5.2.6
(FD can document with Fire Instructor Skill Sheet 2-4 found in appendix and retain on file)
- FSI-02.06 Trainee shall create a lesson plan, given a topic, audience characteristics, and a standard lesson plan format, so that the JPRs or learning objectives for the topic are addressed, and the plan includes learning objectives, a lesson outline, course materials, instructional aids, and an evaluation plan.
NFPA 1041 5.3.2
(FD can document with Fire Instructor Skill Sheet 2-5 found in appendix and retain on file)
- FSI-02.07 Trainee shall modify an existing lesson plan, given a topic, audience characteristics, and a lesson plan, so that the JPRs or learning objectives for the topic are addressed and the plan includes learning objectives, a lesson outline, course materials, instructional aids, and an evaluation plan.
NFPA 1041 5.3.3
(FD can document with Fire Instructor Skill Sheet 2-6 found in appendix and retain on file)
- FSI-02.08 Trainee shall conduct a class using a lesson plan that the instructor has prepared and that involves the utilization of multiple teaching methods and techniques, given a topic and a target audience, so that the lesson objectives are achieved.
NFPA 1041 5.4.2
(FD can document with Fire Instructor Skill Sheet 2-7 found in appendix and retain on file)
- FSI-02.09 Trainee shall supervise other instructors and students during training, given a training scenario with increased hazard exposure, so that applicable safety standards and practices are followed, and instructional goals are met.
NFPA 1041 5.4.3
(FD can document with Fire Instructor Skill Sheet 2-8 found in appendix and retain on file)
- FSI-02.10 Trainee shall develop student evaluation instruments, given learning objectives, audience characteristics, and training goals, so that the evaluation instrument determines if the student has achieved the learning objectives; the instrument evaluates relevant performance in an objective, reliable, and verifiable manner; and the evaluation instrument is bias-free to any audience or group.
NFPA 1041 5.5.2
(FD can document with Fire Instructor Skill Sheet 2-9 found in appendix and retain on file)
- FSI-02.11 Trainee shall develop a class evaluation instrument, given agency policy and evaluation goals, so that students have the ability to provide feedback to the instructor on instructional methods, communication techniques, learning environment, course content, and student materials.
NFPA 1041 5.5.3
(FD can document with Fire Instructor Skill Sheet 2-10 found in appendix and retain on file)

Curriculum for Instructor III

- FSI-03.01 Trainee shall administer a training record system, given agency policy and type of training activity to be documented, so that the information captured is concise, meets all agency and legal requirements, and can be readily accessed.
NFPA 1041 6.2.2
(FD can document with Fire Instructor Skill Sheet 3-1 found in appendix and retain on file)
- FSI-03.02 Trainee shall develop recommendations for policies to support the training program, given agency policies and procedures and the training program goals, so that the training and agency goals are achieved.
NFPA 1041 6.2.3
(FD can document with Fire Instructor Skill Sheet 3-2 found in appendix and retain on file)
- FSI-03.03 Trainee shall select instructional staff, given personnel qualifications, instructional requirements, and agency policies and procedures, so that staff selection meets agency policies and achievement of agency and instructional goals.
NFPA 1041 6.2.4
(FD can document with Fire Instructor Skill Sheet 3-3 found in appendix and retain on file)
- FSI-03.04 Trainee shall construct a performance-based instructor evaluation plan, given agency policies and procedures and job requirements, so that instructors are evaluated at regular intervals, following agency policies.
NFPA 1041 6.2.5
(FD can document with Fire Instructor Skill Sheet 3-4 found in appendix and retain on file)
- FSI-03.05 Trainee shall write equipment purchasing specifications, given curriculum information, training goals, and agency guidelines, so that the equipment is appropriate and supports the curriculum.
NFPA 1041 6.2.6
(FD can document with Fire Instructor Skill Sheet 3-5 found in appendix and retain on file)
- FSI-03.06 Trainee shall present evaluation findings, conclusions, and recommendations to agency administrator, given data summaries and target audience, so that recommendations are unbiased, supported, and reflect agency goals, policies, and procedures.
NFPA 1041 6.2.7
(FD can document with Fire Instructor Skill Sheet 3-6 found in appendix and retain on file)
- FSI-03.07 Trainee shall conduct an agency needs analysis, given agency goals, so that instructional needs are identified and solutions are recommended.
NFPA 1041 6.3.2
(FD can document with Fire Instructor Skill Sheet 3-7 found in appendix and retain on file)
- FSI-03.08 Trainee shall design programs or curricula, given needs analysis and agency goals, so that the agency goals are supported, the knowledge and skills are job-related, the design is performance-based, adult learning principles are utilized, and the program meets time and budget constraints.
NFPA 1041 6.3.3
(FD can document with Fire Instructor Skill Sheet 3-8 found in appendix and retain on file)
- FSI-03.09 Trainee shall modify an existing curriculum, given the curriculum, audience characteristics, learning objectives, instructional resources, and agency training requirements, so that the curriculum meets the requirements of the agency, and the learning objectives are achieved.
NFPA 1041 6.3.4
(FD can document with Fire Instructor Skill Sheet 3-9 found in appendix and retain on file)
- FSI-03.10 Trainee shall write program and course goals, given JPRs and needs analysis information, so that the goals are clear, concise, measurable, and correlate to agency goals.
NFPA 1041 6.3.5
(FD can document with Fire Instructor Skill Sheet 3-10 found in appendix and retain on file)
- FSI-03.11 Trainee shall write course objectives, given JPRs, so that objectives are clear, concise, measurable, and reflect specific tasks.
NFPA 1041 6.3.6
(FD can document with Fire Instructor Skill Sheet 3-11 found in appendix and retain on file)
- FSI-03.12 Trainee shall construct a course content outline, given course objectives, reference sources, functional groupings and the agency structure, so that the content supports the agency structure and reflects current acceptable practices.
NFPA 1041 6.3.7
(FD can document with Fire Instructor Skill Sheet 3-12 found in appendix and retain on file)
- FSI-03.13 Trainee shall develop a system for the acquisition, storage, and dissemination of evaluation results, given agency goals and policies, so that the goals are supported and so that those affected by the information receive feedback consistent with agency policies and federal, state, and local laws.
NFPA 1041 6.5.2
(FD can document with Fire Instructor Skill Sheet 3-15 found in appendix and retain on file)
- FSI-03.14 Trainee shall develop course evaluation plan, given course objectives and agency policies, so that objectives are measured and agency policies are followed.
NFPA 1041 6.5.3
(FD can document with Fire Instructor Skill Sheet 3-13 found in appendix and retain on file)

FSI-03.15 Trainee shall create a program evaluation plan, given agency policies and procedures, so that instructors, course components, and facilities are evaluated and student input is obtained for course improvement.

NFPA 1041 6.5.4

(FD can document with Fire Instructor Skill Sheet 3-14 found in appendix and retain on file)

FSI-03.16 Trainee shall analyze student evaluation instruments, given test data, objectives, and agency policies, so that validity is determined and necessary changes are made.

NFPA 1041 6.5.5

(FD can document with Fire Instructor Skill Sheet 3-16 found in appendix and retain on file)

Curriculum for Live Fire Instructor

FSI-05.01 Trainee, given participants and PPE and SCBA, shall inspect live fire participants' PPE and SCBA so that equipment is determined to be serviceable and worn in accordance with manufacturer's instructions.

NFPA 1041 7.2.1

FSI-05.02 Trainee, given a live fire evolution, shall predict stages of fire growth in a compartment, flow path, flashover, rollover, and backdraft so that a safe environment is maintained.

NFPA 1041 7.3.1

FSI-05.03 Trainee, given a live fire structure or prop and a group of participants, shall supervise a group during a live fire evolution so that instructional objectives are met, crew integrity is maintained, the instructor maintains a position to supervise the crew, fire conditions are monitored, and emergency actions are taken as necessary.

NFPA 1041 7.3.2

FSI-05.04 Trainee, given a group of participants in a live fire evolution, shall conduct a personnel accountability report (PAR) upon entering and exiting a live fire structure or prop, so that all participants are accounted for and safety is ensured and maintained.

NFPA 1041 7.3.3

FSI-05.05 Trainee, given a live fire evolution, shall monitor live fire participants to safeguard participants so that signs and symptoms of fatigue and distress are recognized and action is taken to prevent injury.

NFPA 1041 7.3.4

Curriculum for Live Fire Instructor in Charge

FSI-06.01 Trainee, given the AHJ policy and procedures for live fire training evolutions, the facility policies applicable to evolutions, learning objectives, and all conditions affecting the evolution, shall prepare a pre-burn plan in compliance with NFPA 1403 so that learning objectives are developed, the plan meets all AHJ requirements, existing conditions are identified, and the plan meets the developed learning objectives.

NFPA 1041 8.2.1

FSI-06.02 Trainee, given a structure or prop for live fire training, shall conduct a pre-burn inspection of the structure or prop so that structural damage is identified, structural preparation is determined, and safety concerns are identified and addressed prior to the live fire evolution.

NFPA 1041 8.2.2

FSI-06.03 Trainee, given a structure or prop so that the required minimum water supply is determined, shall calculate the minimum water supply required for a live fire evolution in compliance with NFPA 1403, Section 4.12.

NFPA 1041 8.2.3

FSI-06.04 Trainee, given a structure or prop so that the required minimum water flow application rate is determined, shall calculate the minimum water flow application rate for a live fire evolution in compliance with NFPA 1403, Section 4.12.

NFPA 1041 8.2.4

FSI-06.05 Trainee, given staffing assignments, learning objectives, and instructor capabilities, shall identify and assign instructional tasks and duties in compliance with NFPA 1403 so that safety officer(s), ignition officer, and crew/functional lead(s) are designated and rotated through duty assignments, instructor(s) implement participant accountability, proper instructor/student ratios are maintained, instructor(s) monitor and supervise all participants during evolutions, and awareness of changing conditions that impact training is maintained.

NFPA 1041 8.3.1

FSI-06.06 Trainee, given the pre-burn plan, shall conduct a pre-burn briefing session so that all facets of the evolution(s) are identified, training objectives are covered, a walk-through of the structure or prop with all participants is performed and established safeguards and emergency procedures are identified.

NFPA 1041 8.3.2

FSI-06.07 Trainee, given participants in a live fire training evolution, shall maintain the training environment to safeguard participants so that signs and symptoms of fatigue and distress are recognized, action is taken to prevent injuries, and actions are documented.

NFPA 1041 8.3.3

FSI-06.08 Trainee, given the learning objectives of the evolution, shall conduct a post-burn briefing session so that feedback on each learning objective is provided to each participant, and any needed corrective actions are identified.

NFPA 1041 8.4.1

- FSI-06.09 Trainee, given a structure or prop for live fire training, shall conduct a post-burn inspection of the structure or prop so that structural damage is identified, safety concerns are identified, and necessary corrective actions are taken.
NFPA 1041 8.4.2
- FSI-06.10 Trainee, given a live fire evolution, shall complete records and reports in accordance with NFPA 1403 so that all required reports are completed.
NFPA 1041 8.4.3

MINIMUM STANDARDS FOR FIRE INSPECTOR

Reference Materials

The jurisdictional entity in which the Fire Inspector Personnel serves must have access to the most current editions of the following training manuals:

U.S. Department of Transportation

Emergency Response Guidebook

IFSTA

Fire Inspection and Code Enforcement

Plans Examiner for Fire and Emergency Services

NFPA

NFPA 1072: Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications

NFPA 1031: Standard for Professional Qualifications for Fire Inspector and Plan Examiner

Minimum Requirements

The certification Program offers three (3) levels of Fire Inspector Certification:

Fire Inspector I

Applicants must complete one (1) of the following:

- a) NFPA 1031: Inspector I; or
- b) TCFP Fire Inspector I curriculum; or
- c) All required objectives from the SFFMA Fire Inspector I curriculum.

Fire Inspector II

Applicants must complete one (1) of the following:

- a) NFPA 1031: Inspector II; or
- b) TCFP Fire Inspector II curriculum; or
- c) All required objectives from the SFFMA Fire Inspector II curriculum.

Applicants must also hold, or apply concurrently for, the following SFFMA certifications:

- a) Inspector I

Plans Examiner I

Applicants must complete one (1) of the following:

- a) NFPA 1031: Plans Examiner I; or
- b) TCFP Plans Examiner I curriculum; or
- c) All required objectives from the SFFMA Plans Examiner I curriculum.

Applicants must also hold, or apply concurrently for, the following SFFMA certifications:

- a) Inspector I; and
- b) Inspector II.

SFFMA Fire Inspector certifications with an effective date prior to February 1, 2020 are grandfathered to the Inspector I, Inspector II, and Plans Examiner I certifications.

Curriculum for Fire Inspector I

SECTION 1 GENERAL

- FI1-01.01 Trainee shall identify the definitions of both hazardous material (or dangerous goods, in Canada) and WMD
- FI1 01.02 Trainee shall identify the UN/DOT hazard classes and divisions of hazardous materials/WMD and identify common examples of materials in each hazard class or division
- FI1 01.03 Trainee shall identify the primary hazards associated with each UN/DOT hazard class and division
- FI1 01.04 Trainee shall identify the difference between hazardous materials/WMD incidents and other emergencies
- FI1 01.05 Trainee shall identify typical occupancies and locations in the community where hazardous materials/WMD are manufactured, transported, stored, used, or disposed of.
- FI1 01.06 Trainee shall identify typical container shapes that can indicate the presence of hazardous materials/WMD
- FI1 01.07 Trainee shall identify facility and transportation markings and colors that indicate hazardous materials/WMD, including the following:
- A. Transportation markings, including UN/NA identification number marks, marine pollutant mark, elevated temperature (HOT) mark, commodity marking, and inhalation hazard mark
 - B. NFPA 704: Standard System for the Identification of the Hazards of Materials for Emergency Response, markings
 - C. Military hazardous materials/WMD markings
 - D. Special hazard communication markings for each hazard class
 - E. Pipeline markings
 - F. Container markings
- FI1 01.08 Trainee, given an NFPA 704 marking, shall describe the significance of the colors, numbers, and special symbols
- FI1 01.09 Trainee shall identify U.S. and Canadian placards and labels that indicate hazardous materials/WMD
- FI1 01.10 Trainee shall identify the following basic information on material safety data sheets (MSDS) and shipping papers for hazardous materials:
- A. Identify where to find MSDS
 - B. Identify major sections of an MSDS
 - C. Identify the entries on shipping papers that indicate the presence of hazardous materials
 - D. Match the name of the shipping papers found in transportation (air, highway, rail, and water) with the mode of transportation
 - E. Identify the person responsible for having the shipping papers in each mode of transportation
 - F. Identify where the shipping papers are found in each mode of transportation
 - G. Identify where the papers can be found in an emergency in each mode of transportation
- FI1 01.11 Trainee shall identify examples of clues (other than occupancy/location, container shape, markings/color, placards/labels, MSDS, and shipping papers) to include sight, sound, and odor of which indicate hazardous materials/WMD
- FI1 01.12 Trainee shall describe the limitations of using the senses in determining the presence or absence of hazardous materials/WMD
- FI1 01.13 Trainee shall identify at least four types of locations that could be targets for criminal or terrorist activity using hazardous materials/WMD
- FI1 01.14 Trainee shall describe the difference between a chemical and a biological incident
- FI1 01.15 Trainee shall identify at least four indicators of possible criminal or terrorist activity involving chemical agents
- FI1 01.16 Trainee shall identify at least four indicators of possible criminal or terrorist activity involving biological agents
- FI1 01.17 Trainee shall identify at least four indicators of possible criminal or terrorist activity involving radiological agents
- FI1 01.18 Trainee shall identify at least four indicators of possible criminal or terrorist activity involving illicit laboratories (clandestine laboratories, weapons lab, ricin lab)
- FI1 01.19 Trainee shall identify at least four indicators of possible criminal or terrorist activity involving explosives
- FI1 01.20 Trainee shall identify at least four indicators of secondary devices

SECTION 2 SURVEYING HAZARDOUS MATERIALS/WMD INCIDENTS

- FI1 02.01 Trainee shall identify difficulties encountered in determining the specific names of hazardous materials/WMD at facilities and in transportation
- FI1 02.02 Trainee shall identify sources for obtaining the names of, UN/NA identification numbers for, or types of placard associated with hazardous materials/WMD in transportation
- FI1 02.03 Trainee shall identify sources for obtaining the names of hazardous materials/WMD at a facility

SECTION 3 COLLECTING HAZARD INFORMATION

- FI1 03.01 Trainee shall identify the three methods for determining the guidebook page for a hazardous material/WMD
- FI1 03.02 Trainee shall identify the two general types of hazards found on each guidebook page

SECTION 4 ADMINISTRATION

- FI1 04.01 Trainee shall prepare inspection reports, given agency policy and procedures, and observations from an assigned field inspection, so that the report is clear and concise and reflects the findings of the inspection in accordance with the applicable codes and standards and the policies of the jurisdiction.

- FI1 04.02 Trainee shall recognize the need for a permit, given a situation or condition, so that requirements for permits are communicated in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 04.03 Trainee shall recognize the need for plan review, given a situation or condition, so that requirements for plan reviews are communicated in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 04.04 Trainee shall investigate common complaints, given a reported situation or condition, so that complaint information is recorded, the AHJ-approved process is initiated, and the complaint is resolved.
- FI1 04.05 Trainee shall identify the applicable code or standard, given a fire protection, fire prevention, or life safety issue, so that the applicable document, edition, and section are referenced.
- FI1 04.06 Trainee shall participate in legal proceedings, given the findings of a field inspection or a complaint and consultation with legal counsel, so that all information is presented and the inspector's demeanor is professional.

SECTION 5 FIELD INSPECTION

- FI1 05.01 Trainee shall identify the occupancy classification of a single-use occupancy, given a description of the occupancy and its use, so that the classification is made according to the applicable codes and standards.
- FI1 05.02 Trainee shall compute the allowable occupant load of a single-use occupancy or portion thereof, given a detailed description of the occupancy, so that the calculated allowable occupant load is established in accordance with applicable codes and standards.
- FI1 05.03 Trainee shall inspect means of egress elements, given observations made during a field inspection of an existing building, so that means of egress elements are maintained in compliance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 05.04 Trainee shall verify the type of construction for an addition or remodeling project, given field observations or a description of the project and the materials being used, so that the construction types identified and recorded in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 05.05 Trainee shall determine the operational readiness of existing fixed fire suppression systems, given test documentation and field observations, so that the systems are in an operational state, maintenance is documented, and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 05.06 Trainee shall determine the operational readiness of existing fire detection and alarm systems, given test documentation and field observations, so that the systems are in an operational state, maintenance is documented, and deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.
- FI1 05.07 Trainee shall Determine the operational readiness of existing portable fire extinguishers, given field observations and test documentation, so that the equipment is in an operational state, maintenance is documented, and deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.
- FI1 05.08 Trainee shall recognize hazardous conditions involving equipment, processes, and operations, given field observations, so that the equipment, processes, or operations are conducted and maintained in accordance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 05.09 Trainee shall compare an approved plan to an existing fire protection system, given approved plans and field observations, so that any modifications to the system are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 05.10 Trainee shall verify that emergency planning and preparedness measures are in place and have been practiced, given field observations, copies of emergency plans, and records of exercises, so that plans are prepared and exercises have been performed in accordance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 05.11 Trainee shall inspect emergency access for an existing site, given field observations, so that the required access for emergency responders is maintained and deficiencies are identified, documented, and corrected in accordance with the applicable codes, standards, and policies of the jurisdiction.
- FI1 05.12 Trainee shall verify code compliance for incidental storage, handling, and use of flammable and combustible liquids and gases, given field observations and inspection guidelines from the AHJ, so that applicable codes and standards are addressed and deficiencies are identified, documented, in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 05.13 Trainee shall verify code compliance for incidental storage, handling, and use of hazardous materials, given field observations, so that applicable codes and standards for each hazardous material encountered are addressed and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 05.14 Trainee shall recognize a hazardous fire growth potential in a building or space, given field observations, so that the hazardous conditions are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI1 05.15 Trainee shall determine code compliance, given the codes, standards, and policies of the jurisdiction and a fire protection issue, so that the applicable codes, standards, and policies are identified and compliance is determined.
- FI1 05.16 Trainee shall verify fire flows for a site, given fire flow test results and water supply data, so that required fire flows are in accordance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.

SECTION 6 PLAN REVIEW - There are no objectives required for this certification level.

No requirements at this level per NFPA

Curriculum for Fire Inspector II

SECTION 1 COMPETENCIES — ANALYZING THE INCIDENT

No requirements at this level per NFPA

SECTION 2 SURVEYING HAZARDOUS MATERIALS/WMD INCIDENTS

No requirements at this level per NFPA

SECTION 3 COLLECTING HAZARD INFORMATION

No requirements at this level per NFPA

SECTION 4 ADMINISTRATION

- FI2 04.01 Trainee shall process a permit application, given a specific request, so that the application is evaluated and a permit is issued or denied in accordance with the applicable codes, standards, policies, and procedures of the jurisdiction.
- FI2 04.02 Trainee shall process a plan review application, given a specific request, so that the application is evaluated and processed in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI2 04.03 Trainee shall investigate complex complaints, given a reported situation or condition, so that complaint information is recorded, the investigation process is initiated, and the complaint is resolved in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI2 04.04 Trainee shall recommend modifications to the adopted codes and standards of the jurisdiction, given a fire safety issue, so that the proposed modifications address the problem, need, or deficiency.
- FI2 04.05 Trainee shall recommend policies and procedures for the delivery of inspection services, given management objectives, so that inspections are conducted in accordance with the policies of the jurisdiction and due process of the law is followed.

SECTION 5 FIELD INSPECTION

- FI2 05.01 Trainee shall compute the maximum allowable occupant load of a multi-use building, given field observations or a description of its uses, so that the maximum allowable occupant load calculation is in accordance with applicable codes and standards.
- FI2 05.02 Trainee shall identify the occupancy classifications of a mixed-use building, given a description of the uses, so that each area is classified in accordance with applicable codes and standards.
- FI2 05.03 Trainee shall evaluate a building's area, height, occupancy classification, and construction type, given an approved set of plans and construction features, so that it is verified that the building is in accordance with applicable codes and standards.
- FI2 05.04 Trainee shall evaluate fire protection systems and equipment provided for life safety and property protection, given field observations of the facility and documentation, the hazards protected, and the system specifications, so that the fire protection systems provided are approved for the occupancy or hazard being protected.
- FI2 05.05 Trainee shall analyze the egress elements of a building or portion of a building, given observations made during a field inspection, so that means of egress elements are provided and located in accordance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.
- FI2 05.06 Trainee shall evaluate hazardous conditions involving equipment, processes, and operations, given field observations and documentation, so that the equipment, processes, or operations are installed in accordance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.
- FI2 05.07 Trainee shall evaluate emergency planning and preparedness procedures, given existing or proposed plans and procedures and applicable codes and standards, so that compliance is determined.
- FI2 05.08 Trainee shall verify code compliance for storage, handling, and use of flammable and combustible liquids and gases, given field observations and inspection guidelines from the authority having jurisdiction, so that deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI2 05.09 Trainee shall evaluate code compliance for the storage, handling, and use of hazardous materials, given field observations, so that deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI2 05.10 Trainee shall determine fire growth potential in a building or space, given field observations or plans, so that the contents, interior finish, and construction elements are evaluated for compliance, and deficiencies are identified, documented, and corrected in accordance with the applicable codes and standards and the policies of the jurisdiction.

- FI2 05.11 Trainee shall verify compliance with construction documents, given a performance-based design, so that life safety systems and building services equipment are installed, inspected, and tested to perform as described in the engineering documents and the operations and maintenance manual that accompanies the design, so that deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI2 05.12 Trainee shall verify code compliance of heating, ventilation, air conditioning, and other building service equipment and operations, given field observations, so that the systems and other equipment are maintained in accordance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.

SECTION 6 PLANS REVIEW

- FI2 06.01 Trainee shall classify the occupancy, given a set of plans, specifications, and a description of a building, so that the classification is made in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI2 06.02 Trainee shall compute the maximum allowable occupant load, given a floor plan of a building or portion of the building, so that the calculated occupant load is in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI2 06.03 Trainee shall review the proposed installation of fire protection systems, given shop drawings and system specifications for a process or operation, so that the system is reviewed for code compliance and installed in accordance with the approved drawings, and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI2 06.04 Trainee shall review the installation of fire protection systems, given an installed system, shop drawings, and system specifications for a process or operation, so that the system is reviewed for code compliance and installed in accordance with the approved drawings, and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- FI2 06.05 Trainee shall verify that means of egress elements are provided, given a floor plan of a building or portion of a building, so that all elements are identified and checked against applicable codes and standards and deficiencies are discovered and communicated in accordance with the policies of the jurisdiction.
- FI2-6.06 Trainee shall verify the construction type of a building or portion thereof, given a set of approved plans and specifications, so that the construction type complies with the approved plans and applicable codes and standards.

Curriculum for Plans Examiner I

SECTION 1 COMPETENCIES — ANALYZING THE INCIDENT

No requirements at this level per NFPA

SECTION 2 SURVEYING HAZARDOUS MATERIALS/WMD INCIDENTS

No requirements at this level per NFPA

SECTION 3 COLLECTING HAZARD INFORMATION

No requirements at this level per NFPA

SECTION 4 ADMINISTRATION

- PE1 04.01 Trainee shall prepare reports, given observations from a plan review, so that the report is clear and concise, and reflects the findings of the plan review in accordance with applicable codes and standards and the policies and procedures of the jurisdiction.
- PE1 04.02 Trainee shall facilitate the resolution of deficiencies identified during the plan review, given a submittal and the established policies and procedures of the jurisdiction, so that deficiencies are identified, documented, and reported to the plan submitter with applicable references to codes and standards.
- PE1 04.03 Trainee shall process plan review documents, given a set of plans and specifications, so that required permits are issued in accordance with the policies of the jurisdiction.
- PE1 04.04 Trainee shall determine the applicable code or standard, given a fire protection issue, so that the proper document, edition, and section are referenced.

SECTION 5 FIELD INSPECTION

No requirements at this level per NFPA

SECTION 6 PLANS REVIEW

- PE1 06.01 Trainee shall identify the requirements for fire protection or a life safety system, given a set of plans, so that deficiencies are identified, documented, and reported in accordance with the policies and procedures of the jurisdiction.

- PE1 06.02 Trainee shall verify the occupancy classification, given a set of plans, specifications, and a description of a building and its intended use, so that the classification is made in accordance with the applicable codes and standards and the policies of the jurisdiction.
- PE1 06.03 Trainee shall verify the construction type, given a set of plans, including the occupancy classification area, height, number of stories, and location, so that the building is in accordance with applicable codes and standards and deficiencies are identified, documented, and reported.
- PE1 06.04 Trainee shall verify the occupant load, given a set of plans, so that the maximum allowable occupant load is in accordance with applicable codes and standards.
- PE1 06.05 Trainee shall verify that required egress is provided, given a set of plans and an occupant load, so that all required egress elements are provided and deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.
- PE1 06.06 Trainee shall evaluate code compliance for required fire flow and hydrant location and spacing, given a plan, codes and standards, and fire flow test results, so that hydrants are correctly located, required fire flow is determined, and deficiencies are identified, documented, and reported in accordance with the policies and procedures of the jurisdiction.
- PE1 06.07 Trainee shall evaluate emergency vehicle access, given a plan, so that emergency access is provided in accordance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.
- PE1 06.08 Trainee shall recommend policies and procedures for the delivery of plan review services, given management objectives, so that plan reviews are conducted in accordance with the policies of the jurisdiction and due process of the law is followed.
- PE1 06.09 Trainee shall participate in legal proceedings, given the findings of a plan review and consultation with legal counsel, so that testimony is accurate and the plan reviewer's demeanor is appropriate to the proceeding.
- PE1 06.10 Trainee shall evaluate plans for the installation of fire protection and life safety systems, given a plan submittal, so that the fire protection systems, including pre-engineered systems, and equipment are reviewed and deficiencies are identified, documented, and reported in accordance with the policies and procedures of the jurisdiction.

MINIMUM STANDARDS FOR FIRE/ARSON INVESTIGATOR

Fire Investigation Personnel who have received training prior to passage of this program may, upon proof to the Board member and his approval, apply the training for certification. Any training received prior to January 1, 1993 must be approved by the Board.

Reference Materials

The jurisdictional entity in which the Fire Investigation Personnel serves must have access to the most current editions of the following training manuals:

US Department of Transportation
Emergency Response Guidebook

IFSTA
Fire Inspection and Code Enforcement
Fire Investigator
Delmar
Fire Investigation

NFPA
NFPA 921: Guide for Fire and Explosion Investigations
NFPA 1033: Standard for Professional Qualifications for Fire Investigator

Texas Statutes
Texas Family Code
Texas Insurance Code
Texas Penal Code
Texas Public Information Act Handbook

Minimum Requirements

The Certification Program offers two (2) levels of Investigator Certification.

NFPA 1033: Fire Investigator

Applicants must complete one (1) of the following:

- i. Fire Investigator coursework meeting the requirements of NFPA 1033;
- ii. TCFP Fire Investigation curriculum; or
- iii. All required objectives from the SFFMA Fire Investigator curriculum

NFPA 1033: Arson Investigator

Applicants must complete the minimum requirements for Fire Investigator above;

AND

Hold a current Basic Peace Officer license from the Texas Commission on Law Enforcement (TCOLE) or documentation that the individual is a federal law enforcement officer.

Curriculum for Fire Investigator

SECTION 1 GENERAL

IF-01.01 Trainee shall employ all elements of the scientific method as the operating analytical process throughout the investigation and for the drawing of conclusions.

NFPA 1033 4.1.2

IF-01.02 Because fire investigators are required to perform activities in adverse conditions, site safety assessments shall be completed on all scenes and regional and national safety standards shall be followed and included in organizational policies and procedures.

NFPA 1033 4.1.3

IF-01.03 Trainee shall maintain necessary liaison with other interested professionals and entities.

NFPA 1033 4.1.4

IF-01.04 Trainee shall adhere to all applicable legal and regulatory requirements.

NFPA 1033 4.1.5

IF-01.05 Trainee shall understand the organization and operation of the investigative team within an incident management system.

NFPA 1033 4.1.6

- IF-01.06 Trainee, in order to successfully complete the tasks identified in the objectives of Sections 2 through 7, shall remain current in the subjects listed as “requisite knowledge” as they relate to fire investigations, which include the following:
NFPA 1033 4.1.7
- A. Fire Science
 - 1. Fire Chemistry
 - 2. Thermodynamics
 - 3. Fire Dynamics
 - 4. Explosion Dynamics
 - B. Fire Investigation
 - 1. Fire Analysis
 - 2. Fire investigation methodology
 - 3. Fire investigation technology
 - 4. Evidence documentation, collection, and preservation
 - 5. Failure analysis and analytical tools
 - C. Fire scene safety
 - 1. Hazard recognition, evaluation, and basic mitigation procedures
 - 2. Hazardous materials
 - 3. Safety regulations
 - D. Building Systems
 - 1. Types of construction
 - 2. Fire protection systems
 - 3. Electricity and electrical systems
 - 4. Fuel gas systems
- IF-01.07 Trainee shall remain current in the subjects listed as “requisite knowledge” for the JPRs and as summarized in 4.1.7.
NFPA 1033 4.1.7.1
- IF-01.08 Trainee shall remain current by attending formal education courses, workshops, in-person or online seminars, and/or through professional publications, journals, and treatises.
NFPA 1033 4.1.7.2
- IF-01.09 Trainee shall complete and document a minimum of 40 hours of continuing education training every five years by attending formal education courses, workshops, and seminars.
NFPA 1033 4.1.7.3

SECTION 2 SCENE EXAMINATION

- IF-02.01 Trainee, given marking devices, sufficient personnel, and special tools and equipment, shall secure the fire ground so that unauthorized persons can recognize the perimeters of the investigative scene and are kept from restricted areas, and all evidence or potential evidence is protected from damage or destruction.
NFPA 1033 4.2.1
- IF-02.02 Trainee, given standard equipment and tools, shall conduct an exterior survey so that evidence is identified and preserved, fire damage is interpreted and analyzed, hazards are identified to avoid injuries, accessibility to the property is determined, and all potential means of ingress and egress are discovered.
NFPA 1033 4.2.2
- IF-02.03 Trainee, given standard equipment and tools, shall conduct an interior survey so that areas of potential evidentiary value requiring further examination are identified and preserved, the evidentiary value of contents is determined, and hazards are identified in order to avoid injuries.
NFPA 1033 4.2.3
- IF-02.04 Trainee, given standard equipment and tools and some structural or content remains, shall interpret and analyze fire patterns so that each pattern is identified and analyzed with respect to the burning characteristics of the material involved, the stage of fire development, the effects of ventilation within the context of the scene, the relationship with all patterns observed, and the understanding of the methods of heat transfer that led to the formation of the patterns identified and analyzed, and the sequence in which the patterns were produced is determined.
NFPA 1033 4.2.4

- IF-02.05 Trainee, given standard equipment and tools and some structural or content remains, shall interpret and analyze fire patterns so that fire development, fire spread, and the sequence in which fire patterns were developed (i.e., sequential pattern analysis) are determined; methods and effects of suppression are analyzed; fire patterns and effects indicating a hypothetical area or areas of origin are recognized and tested; false or refuted hypothetical areas of origin are eliminated; and all fire patterns are tested against the data, such that the area(s) of origin is correctly identified.
NFPA 1033 4.2.5
- IF-02.06 Trainee, given standard or, if necessary, special equipment and tools, shall examine and remove fire debris so that fire patterns and fire effects concealed by debris are discovered and analyzed; all debris within the potential area(s) of origin is checked for fire cause evidence; potential ignition source(s) is identified; and evidence is preserved without investigator-inflicted damage or contamination.
NFPA 1033 4.2.6
- IF-02.07 Trainee, given standard and, if needed, special equipment and tools as well as sufficient personnel, shall reconstruct potential area(s) of origin so that all protected areas and fire patterns are identified and correlated to contents or structural remains; and items potentially critical to cause determination are returned to their prefire location as a means of hypothesis testing, such that the area(s) or point(s) of origin is discovered.
NFPA 1033 4.2.7
- IF-02.08 Trainee, given standard and special equipment and tools, shall inspect and analyze the performance of building systems, including fire protection, detection and suppression systems, HVAC, electricity and electrical systems, fuel gas systems, and building compartmentation so that a determination can be made as to the need for expert resources; an operating system's impact on fire growth and spread is considered in identifying origin areas; defeated and failed systems are identified; and the system's potential as a fire cause is recognized.
NFPA 1033 4.2.8
- IF-02.09 Trainee, given standard equipment and tools, shall discriminate the effects of explosions from other types of damage so that an explosion is identified and its evidence is preserved.
NFPA 1033 4.2.9

SECTION 3 DOCUMENTING THE SCENE

- IF-03.01 Trainee, given standard tools and equipment, shall diagram the scene so that the scene is accurately represented and evidence, pertinent contents, significant patterns, and area(s) or point(s) of origin are identified.
NFPA 1033 4.3.1
- IF-03.02 Trainee, given standard tools and equipment, shall photographically document the scene so that the scene is accurately depicted and the photographs support scene findings.
NFPA 1033 4.3.2
- IF-03.03 Trainee, given a fire scene, available documents (e.g., prefire plans and inspection reports), and interview information, shall construct investigative notes so that the notes are accurate, provide further documentation of the scene, and represent complete documentation of the scene findings.
NFPA 1033 4.3.3

SECTION 4 EVIDENCE COLLECTION/PRESERVATION

- IF-04.01 Trainee, given a protocol and appropriate personnel, shall utilize proper procedures for managing victims and fatalities so that all evidence is discovered and preserved and the protocol procedures are followed.
NFPA 1033 4.4.1
- IF-04.02 Trainee, given standard or special tools and equipment and evidence collection materials, shall locate, document, collect, label, package, and store evidence so that evidence is properly identified, preserved, collected, packaged, and stored for use in testing, legal, or other proceedings and examinations; ensuring cross-contamination and investigator-inflicted damage to evidentiary items are avoided; and the chain of custody is established.
NFPA 1033 4.4.2
- IF-04.03 Trainee, given all information from the investigation, shall select evidence for analysis so that items for analysis support specific investigation needs.
NFPA 1033 4.4.3
- IF-04.04 Trainee, given standard investigative tools, marking tools, and evidence tags or logs, shall maintain a chain of custody so that written documentation exists for each piece of evidence and evidence is secured.
NFPA 1033 4.4.4

- IF-04.05 Trainee, given jurisdictional or agency regulations and file information, shall dispose of evidence so that the disposal is timely, safely conducted, and in compliance with jurisdictional or agency requirements.
NFPA 1033 4.4.5

SECTION 5 INTERVIEW

- IF-05.01 Trainee, given no special tools or equipment, shall develop an interview plan so that the plan reflects a strategy to further determine the fire cause and affix responsibility and includes a relevant questioning strategy for each individual to be interviewed that promotes the efficient use of the investigator's time.
NFPA 1033 4.5.1
- IF-05.02 Trainee, given incident information, shall conduct interviews so that pertinent information is obtained, follow-up questions are asked, responses to all questions are elicited, and the response to each question is documented accurately.
NFPA 1033 4.5.2
- IF-05.03 Trainee, given interview transcripts or notes and incident data, shall evaluate interview information so that all interview data is individually analyzed and correlated with all other interviews, corroborative and conflictive information is documented, and new leads are developed.
NFPA 1033 4.5.3

SECTION 6 POST-INCIDENT INVESTIGATION

- IF-06.01 Trainee, given no special tools, equipment, or materials, shall gather reports and records so that all gathered documents are applicable to the investigation, complete, and authentic; the chain of custody is maintained; and the material is admissible in a legal proceeding.
NFPA 1033 4.6.1
- IF-06.02 Trainee, given all available file information, shall evaluate the investigative file so that areas for further investigation are identified, the relationship between gathered documents and information is interpreted, and corroborative evidence and information discrepancies are discovered.
NFPA 1033 4.6.2
- IF-06.03 Trainee, given the investigative file, reports, and documents, shall coordinate expert resources so that the expert's competencies are matched to the specific investigation needs, financial expenditures are justified, and utilization clearly furthers the investigative goals of determining cause or affixing responsibility.
NFPA 1033 4.6.3
- IF-06.04 Trainee, given an incendiary fire, shall establish evidence as to motive and/or opportunity so that the evidence is supported by documentation and meets the evidentiary requirements of the jurisdiction.
NFPA 1033 4.6.4
- IF-06.05 Trainee, given all investigative findings, shall formulate an opinion concerning origin, cause, or responsibility for the fire so that the opinion regarding origin, cause, or responsibility for a fire is supported by the data, facts, records, reports, documents, scientific references, and evidence.
NFPA 1033 4.6.5

SECTION 7 PRESENTATIONS

- IF-07.01 Trainee, given investigative findings, shall prepare a written report so that the report accurately reflects the facts, data, and scientific principles on which the investigator relied; clearly identifies and expresses the investigator's opinions and conclusions; and contains the reasoning by which each opinion or conclusion was reached in order to meet the requirements of the intended audience(s).
NFPA 1033 4.7.1
- IF-07.02 Trainee, given investigative findings, notes, a time allotment, and a specific audience, shall express investigative findings verbally so that the information is accurate, the presentation is completed within the allotted time, and the presentation includes only need-to-know information for the intended audience.
NFPA 1033 4.7.2
- IF-07.03 Trainee, given investigative findings, shall testify during legal proceedings so that the testimony accurately reflects the facts, data, and scientific principles on which the investigator relied; clearly identifies and expresses the investigator's opinions and conclusions; and contains the reasoning by which each opinion or conclusion was reached.
NFPA 1033 4.7.3

MINIMUM STANDARDS FOR DRIVER/OPERATOR

Reference Materials

The jurisdictional entity in which the Driver/Operator Personnel serves must have access to the most current editions of following training manuals:

NFPA

NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications

NFPA 1451: Standard for a Fire Service Vehicle Operations Training Program

NFPA 1500: Standard on Fire Department Occupational Safety and Health Program

Minimum Requirements

The Certification Program offers four (4) different of certifications for Driver/Operator:

Driver/Operator – Pumper

The applicant must:

- a. Complete one (1) of the following:
 - i. TCFP Driver/Operator – Pumper certification; or
 - ii. NFPA 1002: General Requirements (Ch 4) and Apparatus Equipped with Fire Pump (Ch 5); or
 - iii. SFFMA Driver/Operator – Pumper curriculum
- b. SFFMA Driver/Operator certifications with an effective date prior to January 1, 2019 are grandfathered into the Driver/Operator – Pumper certification.

Driver/Operator – Aerial

The applicant must:

- a. hold or apply concurrently for **SFFMA Firefighter I**
- b. complete one (1) of the following:
 - i. TCFP Driver/Operator-Aerial Apparatus certification; or
 - ii. NFPA 1002: General Requirements (Ch 4) and Apparatus Equipped with an Aerial Device (Ch 6); or
 - iii. SFFMA Driver/Operator – Aerial curriculum

Driver/Operator – Wildland

The applicant must:

- a. Complete one (1) of the following:
 - i. NFPA 1002: General Requirements (Ch 4) and Wildland Fire Apparatus (Ch 8); or
 - ii. SFFMA Driver/Operator – Wildland curriculum

Driver/Operator – Tender

The applicant must:

- a. Complete one (1) of the following:
 - i. NFPA 1002: General Requirements (Ch 4) and Mobile Water Supply Apparatus (Ch 10); or
 - ii. SFFMA Driver/Operator – Mobile Water Supply Apparatus curriculum

Curriculum for Driver/Operator - Pumper

- DO-P.01 Trainee shall perform visual and operational checks on the systems and components specified in the following list, given a fire department pumper vehicle, its manufacturer's specifications, and policies and procedures of the jurisdiction, so that the operational status of the vehicle is verified:
NFPA 1002 – 4.2.1
- | | |
|----------------------|-------------------------------------|
| A. Battery(ies) | G. Oil |
| B. Braking system | H. Tires |
| C. Coolant system | I. Steering system |
| D. Electrical system | J. Belts |
| E. Fuel | K. Tools, appliances, and equipment |
| F. Hydraulic fluids | L. Built-in safety features |
- DO-P.02 Trainee shall document the visual and operational checks, given a fire department pumper vehicle, its maintenance and inspection forms, so that all items are checked for operation and deficiencies are reported.
NFPA 1002-4.2.2
- DO-P.03 Trainee shall operate a fire apparatus, given a fire department pumper vehicle and a predetermined route on a public way that incorporates the maneuvers and features that the driver/operator is expected to encounter during normal operations, so that the vehicle is operated in compliance with all applicable state and local laws and departmental rules and regulations.
NFPA 1002-4.3.1
- DO-P.04 Trainee shall back a fire department pumper vehicle from a roadway into restricted spaces on both the right and left sides of the vehicle, given a fire apparatus; a spotter where the spotter assists the driver in performing the maneuver; and restricted spaces 12' (3.7m) in width, requiring 90-degree right-hand and left-hand turns from the roadway, so that the vehicle is parked within the restricted areas without having to stop and pull forward and without striking obstructions.
NFPA 1002-4.3.2
- DO-P.05 Trainee shall maneuver a fire department pumper vehicle around obstructions on a roadway while moving forward and in reverse, given a fire apparatus; a spotter where the spotter assists the driver in performing the maneuver; and a roadway with obstructions, so that the vehicle is maneuvered through the obstructions without stopping to change the direction of travel and without striking the obstructions.
NFPA 1002 – 4.3.3
- DO-P.06 Trainee shall turn a fire apparatus 180 degrees within a confined space, given a fire department pumper vehicle, a spotter for backing up, and an area in which the vehicle cannot perform a U-turn without stopping and backing up, so that the vehicle is turned 180 degrees without striking obstructions within the given space.
NFPA 1002-4.3.4
- DO-P.07 Trainee shall maneuver a fire apparatus in areas with restricted horizontal and vertical clearances, given a fire department pumper vehicle and a course that requires the operator to move through areas of restricted horizontal and vertical clearances, so that the operator judges the ability of the vehicle to pass through the openings and so that no obstructions are struck.
NFPA 1002 – 4.3.5
- DO-P.08 Trainee shall operate a vehicle using defensive driving techniques, given an assignment and a fire department pumper vehicle, so that control of the vehicle is maintained.
NFPA 1002 – 4.3.6
- DO-P.09 Trainee, given a fire department pumper vehicle, shall operate all fixed systems and equipment on the vehicle not addressed elsewhere in this standard, given systems and equipment, manufacturer's specifications and instructions, and departmental policies and procedures for the systems and equipment, so that each system or piece of equipment is operated in accordance with the applicable instructions and policies.
NFPA 1002 – 4.3.7
- DO-P.10 Trainee shall initiate the response to a reported emergency, given the report of an emergency, fire department SOPs, and communications equipment, so that all necessary information is obtained, communications equipment is operated correctly, and the information is relayed promptly and accurately to the dispatch center.
NFPA 1002 – 4.4.1
- DO-P.11 Trainee shall receive a telephone call, given a fire department phone, so that procedures for answering the phone are used and the caller's information is relayed.
NFPA 1002 – 4.4.2
- DO-P.12 Trainee shall transmit and receive messages via the fire department radio, given a fire department radio and operating procedures, so that the information is accurate, complete, clear, and relayed within the time established by the AHJ.
NFPA 1002 – 4.4.3
- DO-P.13 Trainee shall activate emergency procedures, given an emergency situation and department SOPs, so that emergency actions can be initiated.
NFPA 1002 – 4.4.4

- DO-P.14 Trainee shall perform the visual and operational checks on the systems and components specified in the following list in addition to those in 4.2.1, given a fire department pumper, its manufacturer's specifications, and policies and procedures of the jurisdiction, so that the operational status of the pumper is verified:
NFPA 1002-5.1.2
 A. Water tank and other extinguishing agent levels (if applicable)
 B. Pumping systems
 C. Foam systems
- DO-P.15 Trainee shall respond on apparatus to an emergency scene, given safety equipment as provided by the AHJ, so that the apparatus is correctly mounted and dismounted and seat belts are used while the vehicle is in motion.
NFPA 1002-5.2.1
- DO-P.16 Trainee shall establish and operate in work areas at emergency and nonemergency scenes, given safety equipment, traffic and scene control devices, emergency and nonemergency scenes, traffic and other hazards, an assignment, and SOPs, so that procedures are followed, safety equipment is utilized, protected work areas are established as directed using traffic and scene control devices, and the driver/operator performs assigned tasks only in established, protected work areas.
NFPA 1002 – 5.2.2
- DO-P.17 Trainee shall connect a fire department pumper to a water supply as a member of a team, given supply or intake hose, hose tools, and a fire hydrant or static water source, so that connections are tight and water flow is unobstructed.
NFPA 1002 – 5.2.3
- DO-P.18 Trainee shall produce effective hand or master streams, given the sources specified in the following list, so that the pump is engaged, all pressure control and vehicle safety devices are set, the rated flow of the nozzle is achieved and maintained, and the apparatus is monitored for potential problems:
NFPA 1002 – 5.2.4
 A. Internal tank
 B. Pressurized source
 C. Static source
 D. Transfer from internal tank to external source
- DO-P.19 Trainee shall pump a supply line of 2½" (65 mm) or larger, given a relay pumping evolution the length and size of the line and the desired flow and intake pressure, so that the correct pressure and flow are provided to the next pumper in the relay.
NFPA 1002 – 5.2.5
- DO-P.20 Trainee shall produce a foam fire stream, given foam-producing equipment, so that proportioned foam is provided.
NFPA 1002 – 5.2.6
- DO-P.21 Trainee shall supply water to fire sprinkler and standpipe systems, given specific system information and a fire department pumper, so that water is supplied to the system at the correct volume and pressure.
NFPA 1002 – 5.2.6

Curriculum for Driver/Operator - Aerial

- DO-A.01 Trainee shall perform visual and operational checks on the systems and components specified in the following list, given a fire department aerial vehicle, its manufacturer's specifications, and policies and procedures of the jurisdiction, so that the operational status of the vehicle is verified:
NFPA 1002 – 4.2.1
- | | |
|----------------------|-------------------------------------|
| A. Battery(ies) | G. Oil |
| B. Braking system | H. Tires |
| C. Coolant system | I. Steering system |
| D. Electrical system | J. Belts |
| E. Fuel | K. Tools, appliances, and equipment |
| F. Hydraulic fluids | L. Built-in safety features |
- DO-A.02 Trainee shall document the visual and operational checks, given a fire department aerial vehicle, its maintenance and inspection forms, so that all items are checked for operation and deficiencies are reported.
NFPA 1002-4.2.2
- DO-A.03 Trainee shall operate a fire apparatus, given a fire department aerial vehicle and a predetermined route on a public way that incorporates the maneuvers and features that the driver/operator is expected to encounter during normal operations, so that the vehicle is operated in compliance with all applicable state and local laws and departmental rules and regulations.
NFPA 1002-4.3.1
- DO-A.04 Trainee shall back a fire department aerial vehicle from a roadway into restricted spaces on both the right and left sides of the vehicle, given a fire apparatus; a spotter where the spotter assists the driver in performing the maneuver; and restricted spaces 12' (3.7m) in width, requiring 90-degree right-hand and left-hand turns from the roadway, so that the vehicle is parked within the restricted areas without having to stop and pull forward and without striking obstructions.
NFPA 1002-4.3.2

- DO-A.05 Trainee shall maneuver a fire department aerial vehicle around obstructions on a roadway while moving forward and in reverse, given a fire apparatus; a spotter where the spotter assists the driver in performing the maneuver; and a roadway with obstructions, so that the vehicle is maneuvered through the obstructions without stopping to change the direction of travel and without striking the obstructions.
NFPA 1002 – 4.3.3
- DO-A.06 Trainee shall turn a fire apparatus 180 degrees within a confined space, given a fire department aerial vehicle, a spotter for backing up, and an area in which the vehicle cannot perform a U-turn without stopping and backing up, so that the vehicle is turned 180 degrees without striking obstructions within the given space.
NFPA 1002-4.3.4
- DO-A.07 Trainee shall maneuver a fire apparatus in areas with restricted horizontal and vertical clearances, given a fire department aerial vehicle and a course that requires the operator to move through areas of restricted horizontal and vertical clearances, so that the operator judges the ability of the vehicle to pass through the openings and so that no obstructions are struck.
NFPA 1002 – 4.3.5
- DO-A.08 Trainee shall operate a vehicle using defensive driving techniques, given an assignment and a fire department aerial vehicle, so that control of the vehicle is maintained.
NFPA 1002 – 4.3.6
- DO-A.09 Trainee, given a fire department aerial vehicle, shall operate all fixed systems and equipment on the vehicle not addressed elsewhere in this standard, given systems and equipment, manufacturer’s specifications and instructions, and departmental policies and procedures for the systems and equipment, so that each system or piece of equipment is operated in accordance with the applicable instructions and policies.
NFPA 1002 – 4.3.7
- DO-A.10 Trainee shall perform the visual and operation checks on the systems and components specified in the following list in addition to those specified in DO-A.01, given a fire department aerial apparatus, and policies and procedures of the jurisdiction, so that the operational readiness of the aerial apparatus is verified:
NFPA 1002 – 6.1.1
- | | |
|------------------------------------|---------------------------------|
| A. Cable systems (if applicable) | F. Aerial device safety systems |
| B. Aerial device hydraulic systems | G. Breathing air systems |
| C. Slides and rollers | H. Communication systems |
| E. Stabilizing systems | |
- DO-A.11 Trainee shall maneuver and position an aerial apparatus, given an aerial apparatus, an incident location, a situation description, and an assignment, so that the apparatus is positioned for correct aerial device deployment.
NFPA 1002 – 6.2.1
- DO-A.12 Trainee shall stabilize aerial apparatus, given a positioned vehicle and the manufacturer’s recommendations, so that power can be transferred to the aerial device hydraulic system and the device can be deployed.
NFPA 1002 – 6.2.2
- DO-A.13 Trainee shall maneuver and position the aerial device from each control station, given an incident location, a situation description, and an assignment, so that the aerial device is positioned to accomplish the assignment.
NFPA 1002 – 6.2.3
- DO-A.14 Trainee shall lower an aerial device using the emergency operating system, given an aerial device, so that the aerial device is lowered to its bedded position.
NFPA 1002 – 6.2.4
- DO-A.15 Trainee shall deploy and operate an elevated master stream, given an aerial device, a master stream device, and a desired flow, so that the stream is effective.
NFPA 1002 – 6.2.5

Curriculum for Driver/Operator - Wildland

- DO-W.01 Trainee shall perform visual and operational checks on the systems and components specified in the following list, given a fire department wildland vehicle, its manufacturer’s specifications, and policies and procedures of the jurisdiction, so that the operational status of the vehicle is verified:
NFPA 1002 – 4.2.1
- | | |
|----------------------|-------------------------------------|
| A. Battery(ies) | G. Oil |
| B. Braking system | H. Tires |
| C. Coolant system | I. Steering system |
| D. Electrical system | J. Belts |
| E. Fuel | K. Tools, appliances, and equipment |
| F. Hydraulic fluids | L. Built-in safety features |

- DO-W.02 Trainee shall document the visual and operational checks, given a fire department wildland vehicle, its maintenance and inspection forms, so that all items are checked for operation and deficiencies are reported.
NFPA 1002-4.2.2
- DO-W.03 Trainee shall operate a fire apparatus, given a fire department wildland vehicle and a predetermined route on a public way that incorporates the maneuvers and features that the driver/operator is expected to encounter during normal operations, so that the vehicle is operated in compliance with all applicable state and local laws and departmental rules and regulations.
NFPA 1002-4.3.1
- DO-W.04 Trainee shall back a fire department wildland vehicle from a roadway into restricted spaces on both the right and left sides of the vehicle, given a fire apparatus; a spotter where the spotter assists the driver in performing the maneuver; and restricted spaces 12' (3.7m) in width, requiring 90-degree right-hand and left-hand turns from the roadway, so that the vehicle is parked within the restricted areas without having to stop and pull forward and without striking obstructions.
NFPA 1002-4.3.2
- DO-W.05 Trainee shall maneuver a fire department wildland vehicle around obstructions on a roadway while moving forward and in reverse, given a fire apparatus; a spotter where the spotter assists the driver in performing the maneuver; and a roadway with obstructions, so that the vehicle is maneuvered through the obstructions without stopping to change the direction of travel and without striking the obstructions.
NFPA 1002 – 4.3.3
- DO-W.06 Trainee shall turn a fire apparatus 180 degrees within a confined space, given a fire department wildland vehicle, a spotter for backing up, and an area in which the vehicle cannot perform a U-turn without stopping and backing up, so that the vehicle is turned 180 degrees without striking obstructions within the given space.
NFPA 1002-4.3.4
- DO-W.07 Trainee shall maneuver a fire apparatus in areas with restricted horizontal and vertical clearances, given a fire department wildland vehicle and a course that requires the operator to move through areas of restricted horizontal and vertical clearances, so that the operator judges the ability of the vehicle to pass through the openings and so that no obstructions are struck.
NFPA 1002 – 4.3.5
- DO-W.08 Trainee shall operate a vehicle using defensive driving techniques, given an assignment and a fire department wildland vehicle, so that control of the vehicle is maintained.
NFPA 1002 – 4.3.6
- DO-W.09 Trainee, given a fire department wildland vehicle, shall operate all fixed systems and equipment on the vehicle not addressed elsewhere in this standard, given systems and equipment, manufacturer's specifications and instructions, and departmental policies and procedures for the systems and equipment, so that each system or piece of equipment is operated in accordance with the applicable instructions and policies.
NFPA 1002 – 4.3.7
- DO-W.10 Perform the visual and operational checks on the systems and components specified in the following list, in addition to those in DO-W.01, given a wildland fire apparatus, its manufacturer's specifications, and policies and procedures of the jurisdiction, so that the operational status is verified:
NFPA 1002-8.1.1
A. Water tank and other extinguishing agent levels (if applicable)
B. Pumping systems
C. Foam systems
- DO-W.11 Trainee shall maneuver a wildland fire apparatus off of a public roadway, around obstructions on a roadway while moving forward and in reverse, given a fire apparatus; a spotter where the spotter assists the driver in performing the maneuver; and a roadway with obstructions, so that the vehicle is maneuvered through the obstructions without stopping to change the direction of travel and without striking the obstructions.
NFPA 1002 – 8.1.2
- DO-W.12 Trainee shall produce a foam fire stream, given the sources specified in the following list, so that the pump is engaged, all pressure-control and vehicle safety devices are set, the rated flow of the nozzle is achieved, and the apparatus is monitored for potential problems:
1. Water tank
2. * Pressurized source
3. Static source
NFPA 1002 – 8.2.1
- DO-W.13 Trainee, given a relay pumping evolution the length and size of the line and the desired flow and intake pressure, so that the correct pressure and flow are provided to the next pumper in the relay.
NFPA 1002 – 8.2.2
- DO-W.14 Trainee shall produce a foam fire stream, given foam-producing equipment, so that proportioned foam is provided.
NFPA 1002 – 8.2.3

Curriculum for Driver/Operator - Mobile Water Supply Apparatus

- DO-T.01 Trainee shall perform visual and operational checks on the systems and components specified in the following list, given a fire department mobile water supply vehicle, its manufacturer's specifications, and policies and procedures of the jurisdiction, so that the operational status of the vehicle is verified:
NFPA 1002 – 4.2.1
- | | |
|----------------------|-------------------------------------|
| A. Battery(ies) | G. Oil |
| B. Braking system | H. Tires |
| C. Coolant system | I. Steering system |
| D. Electrical system | J. Belts |
| E. Fuel | K. Tools, appliances, and equipment |
| F. Hydraulic fluids | L. Built-in safety features |
- DO-T.02 Trainee shall document the visual and operational checks, given a fire department mobile water supply vehicle, its maintenance and inspection forms, so that all items are checked for operation and deficiencies are reported.
NFPA 1002-4.2.2
- DO-T.03 Trainee shall operate a fire apparatus, given a fire department mobile water supply vehicle and a predetermined route on a public way that incorporates the maneuvers and features that the driver/operator is expected to encounter during normal operations, so that the vehicle is operated in compliance with all applicable state and local laws and departmental rules and regulations.
NFPA 1002-4.3.1
- DO-T.04 Trainee shall back a fire department mobile water supply vehicle from a roadway into restricted spaces on both the right and left sides of the vehicle, given a fire apparatus; a spotter where the spotter assists the driver in performing the maneuver; and restricted spaces 12' (3.7m) in width, requiring 90-degree right-hand and left-hand turns from the roadway, so that the vehicle is parked within the restricted areas without having to stop and pull forward and without striking obstructions.
NFPA 1002-4.3.2
- DO-T.05 Trainee shall maneuver a fire department mobile water supply vehicle around obstructions on a roadway while moving forward and in reverse, given a fire apparatus; a spotter where the spotter assists the driver in performing the maneuver; and a roadway with obstructions, so that the vehicle is maneuvered through the obstructions without stopping to change the direction of travel and without striking the obstructions.
NFPA 1002 – 4.3.3
- DO-T.06 Trainee shall turn a fire apparatus 180 degrees within a confined space, given a fire department mobile water supply vehicle, a spotter for backing up, and an area in which the vehicle cannot perform a U-turn without stopping and backing up, so that the vehicle is turned 180 degrees without striking obstructions within the given space.
NFPA 1002-4.3.4
- DO-T.07 Trainee shall maneuver a fire apparatus in areas with restricted horizontal and vertical clearances, given a fire department mobile water supply vehicle and a course that requires the operator to move through areas of restricted horizontal and vertical clearances, so that the operator judges the ability of the vehicle to pass through the openings and so that no obstructions are struck.
NFPA 1002 – 4.3.5
- DO-T.08 Trainee shall operate a vehicle using defensive driving techniques, given an assignment and a fire department mobile water supply vehicle, so that control of the vehicle is maintained.
NFPA 1002 – 4.3.6
- DO-T.09 Trainee, given a fire department mobile water supply vehicle, shall operate all fixed systems and equipment on the vehicle not addressed elsewhere in this standard, given systems and equipment, manufacturer's specifications and instructions, and departmental policies and procedures for the systems and equipment, so that each system or piece of equipment is operated in accordance with the applicable instructions and policies.
NFPA 1002 – 4.3.7
- DO-T.10 Perform the visual and operational checks on the systems and components specified in the following list, in addition to those in DO-T.01, given a wildland fire apparatus, its manufacturer's specifications, and policies and procedures of the jurisdiction, so that the operational status is verified:
NFPA 1002 10.1.1
- | |
|--|
| A. Water tank and other extinguishing agent levels (if applicable) |
| B. Pumping system (if applicable) |
| C. Rapid dump system (if applicable) |
| D. Foam system (if applicable) |
- DO-T.11 Trainee, given a fill site location and one or more supply hose, shall maneuver a mobile water supply apparatus at a water shuttle fill site, around obstructions while moving forward and in reverse, so that the apparatus is positioned, supply hose are attached to the intake connections without having to stretch additional hose, and no objects are struck at the fill site.
NFPA 1002 – 10.2.1

- DO-T.12 Trainee, given a dump site and a portable water tank, shall maneuver a mobile water supply apparatus at a water shuttle dump site, around obstructions while moving forward and in reverse, so that all of the water being discharged from the apparatus enters the portable tank and no objects are struck at the dump site, and operate the fire pump or rapid water dump system.
NFPA 1002 – 10.2.2
- DO-T.13 Trainee shall establish a water shuttle dump site, given two or more portable water tanks, low-level strainers, water transfer equipment, fire hose, and a fire apparatus equipped with a fire pump, so that the tank being drafted from is kept full at all times, the tank being dumped into is emptied first, and the water is transferred from one tank to the next
NFPA 1002 – 10.2.3

MINIMUM STANDARDS FOR FIRE OFFICER

Reference Materials

The jurisdictional entity in which the Fire Officer Personnel serves must have access to the most current editions of the following training manuals:

IFSTA

Fire and Emergency Services Company Officer

Jones & Bartlett

Fire Officer Principles and Practice

NFPA

NFPA 921: Guide for Fire and Explosion Investigations

NFPA 1021: Standard for Fire Officer Professional Qualifications

Minimum Requirements

The certification Program offers four (4) levels of Fire Officer Certification:

Fire Officer I

- i. Applicants must complete one (1) of the following:
 - a) TCFP Fire Officer I curriculum; or
 - b) All required objectives from the SFFMA Fire Officer I curriculum
- ii. Applicants **must hold, or apply concurrently for**, the following SFFMA certifications:
 - a) Firefighter II; and
 - b) Instructor I
- iii. Applicants must be a first-line supervisory officer, and must meet all the job performance and certification requirements of Fire Officer I as defined in NFPA 1021, as follows:
 - a) Uses human resources to accomplish assignments in accordance with safety plans in an efficient manner and evaluates member task performance and supervises personnel during emergency and non-emergency work periods
 - b) Deals with inquiries from the community and projects the role of the department to the public and delivers safety, injury, and fire prevention education programs
 - c) Performs general administrative functions and implements departmental policies and procedures at the unit/company level
 - d) Performs a fire investigation to determine preliminary cause, secures the incident scene, and preserves evidence
 - e) Supervises emergency operations, conducts pre-incident planning, and deploys assigned resources in accordance with the local emergency plan
 - f) Integrates safety plans, policies, and procedures into the daily activities as well as on the emergency scene, including the donning of appropriate levels of PPE to ensure a work environment, in accordance with health and safety plans, for all assigned members

Fire Officer II

- i. Applicants must complete one (1) of the following:
 - a) TCFP Fire Officer II curriculum; or
 - b) All required objectives from the SFFMA Fire Officer II curriculum
- ii. Applicants **must hold, or apply concurrently for**, the following SFFMA certifications:
 - a) Firefighter II; and
 - b) Instructor I; and
 - c) Fire Officer I
- iii. Applicant must be a midlevel supervisor, and must meet all the job performance and certification requirements of Fire Officer II as defined in NFPA 1021, as follows:
 - a) Evaluates member job performance
 - b) Prepares a project or divisional budget, news releases, and/or new policy or changes in existing policies
 - c) Conducts inspections to identify hazards and addresses violations and conducts fire investigations to determine origin and preliminary causes
 - d) Supervises multi-unit emergency operations, deploys assigned resources, and develops and conducts post-incident analysis
 - e) Reviews injury, accident, and health exposure reports, identifies unsafe work environments or behaviors, and takes approved action to prevent their reoccurrence

Fire Officer III

- i. Applicants must complete one (1) of the following:
 - a) TCFP Fire Officer III curriculum; or
 - b) All required objectives from the SFFMA Fire Officer III curriculum

- ii. Applicants **must hold, or apply concurrently for**, the following SFFMA certifications:
 - a) Firefighter II; and
 - b) Instructor I; and
 - c) Fire Officer I; and
 - d) Fire Officer II

Fire Officer IV

- i. Applicants must complete one (1) of the following:
 - a) TCFP Fire Officer IV curriculum; or
 - b) All required objectives from the SFFMA Fire Officer IV curriculum
- ii. Applicants **must hold, or apply concurrently for**, the following SFFMA certifications:
 - a) Firefighter II; and
 - b) Instructor I; and
 - c) Fire Officer I; and
 - d) Fire Officer II; and
 - e) Fire Officer III

Equivalent Training

SECTION	SUBJECT	OFFICER I	OFFICER II
1	General	4	1
2	Human Resources Management	6	10
3	Community and Government Relations	6	
4	Administration	4	10
5	Inspection and Investigation	4	10
6	Emergency Service Delivery	10	8
7	Health and Safety	8	9
	Performance Skills *	18	12
	TOTAL RECOMMENDED HOURS	60	60

* The recommended hours for skills evaluation is based on 12 students. Actual hours needed depends on the number of students, number of examiners, availability of equipment, and student skill level

Curriculum for Fire Officer I

SECTION 1 GENERAL

The Certification Board suggests it will take a class of 12 individuals 4 hours to cover the following objective in this section (actual time may vary based on class size).

- 01-01.01 Trainee shall have knowledge of the following
- A. The organizational structure of the department
 - B. Geographical configuration and characteristics of response districts
 - C. Departmental operating procedures for administration, emergency operations, incident management systems, and safety
 - D. Departmental budget process
 - E. Information management and record keeping
 - F. The fire prevention and building safety codes and ordinances applicable to the jurisdiction
 - G. Current trends, technologies, and socioeconomic and political factors that impact the fire service
 - H. Cultural diversity
 - I. Methods used by supervisors to obtain cooperation within a group of subordinates
 - J. The rights of management and members
 - K. Agreements in force between the organization and members
 - L. Generally accepted ethical practices, including a professional code of ethics
 - M. Policies and procedures regarding the operation of the department as they involve supervisors and members
- 01-01.02 Trainee shall be able to:
- A. Effectively communicate in writing utilizing technology provided by the AHJ
 - B. Write reports, letters, and memos utilizing word processing and spreadsheet programs
 - C. Operate in an information management system
 - D. Effectively operate at all levels in the incident management system utilized by the AHJ

SECTION 2 HUMAN RESOURCE MANAGEMENT

The Certification Board suggests it will take a class of 12 individuals 6 hours to cover the following objective in this section (actual time may vary based on class size).

- 01-02.01 Trainee shall utilize human resources to accomplish assignments in accordance with safety plans and in an efficient manner.
- 01-02.02 Trainee shall evaluate member performance and supervising personnel during emergency and non-emergency work periods, according to the following job performance requirements.
- A. Assign tasks or responsibilities to unit members
 - B. Give an assignment at an emergency operation, so that the instructions are complete, clear, and concise; safety considerations are addressed; and the desired outcomes are conveyed.
- 01-02.03 Trainee shall have the knowledge required to be able to perform/apply the following:
- A. Verbal communications during emergency situations utilizing the NIMS standards including but not limited to the following:
 1. Command presence
 2. Calm
 3. Clear
 4. Concise
 5. Accurate
 6. Clear text (no ten codes)
 7. Standard resource typing
 8. Standard terminology for facilities, equipment and resources
 9. State the desired outcome
 - B. Techniques used to make assignments under stressful situations
 1. SOPs/guidelines
 2. Maintain span of control
 3. Safety considerations
 4. Accountability
 5. Develop an incident action plan
 6. Establish tactical priorities considering, Life safety, Incident stabilization, Environmental conservation, and Property conservation
 - C. Methods of confirming understanding
 1. Feedback (repeat message)
 2. Ask for any questions/clarifications

- 01-02.04 Trainee shall assign tasks or responsibilities to unit members, given an assignment under non-emergency conditions at a station or other work location, so that the instructions are complete, clear, and concise; safety considerations are addressed; and the desired outcomes are conveyed. Firefighter shall have the knowledge to be able to perform/apply the following:
- A. Verbal communications under non-emergency situations
 1. Calm
 2. Clear
 3. Concise
 4. Accurate
 5. State the desired outcome
 - B. Techniques used to make assignments under routine situations
 1. Verbal
 2. Written
 - C. Methods of confirming comprehension
 1. Feedback (repeat message)
 2. Ask for any questions/clarifications
- 01-02.05 Trainee shall be able to direct unit members during a training evolution, given a company training evolution and training policies and procedures, so that the evolution is performed in accordance with safety plans, efficiently, and as directed. Trainee shall have the knowledge to be able to perform/apply the following:
- A. Verbal communication techniques to facilitate learning
 1. Communication model consisting of:

a. Sender	d. Receiver
b. Message	e. Feedback
c. Instructional medium	f. Environment
 2. Factors in effective delivery:

a. Voice inflection	d. Body language
b. Eye contact	e. Facial expressions
c. Common/appropriate terminology	f. Tone of voice
d. Appropriate terminology	g. Appropriate appearance
 3. Basic rules of effective spoken communication:

a. Be adaptive to audience	c. Be clear and concise
b. Have a specific purpose	d. Be focused
- 01-02.06 Trainee shall recommend action for member-related problems, given a member with a situation requiring assistance and the member assistance policies and procedures, so that the situation is identified and the actions taken are within the established policies and procedures. Trainee shall have the knowledge to be able to recognize the following:
- A. The signs and symptoms of member-related problems
 1. Substance abuse
 2. Health problems
 - a. Mental
 - b. Physical
 3. Financial problems
 4. Personal/family problems
 5. Behavioral problems
 - B. Causes of stress in emergency services personnel
 1. Environmental
 - a. Weather
 - b. Workplace conditions/expectations
 - c. Emergency scenes
 2. Physiological
 - a. Interrupted meals/sleep
 - b. Shift work
 - c. Constant heightened sense of awareness
 3. Psychological

a. Multiple casualty incidents	c. Co-worker injuries or deaths
b. Gruesome injuries	d. Injuries or deaths involving children
 4. Cultural

a. Age	c. Ethnicity
b. Gender	d. Religion
 5. Personal
 - a. Financial
 - b. Issues outside of work

C. Adverse effects of stress on the performance of emergency service personnel

1. Failure to meet job performance requirements
2. Injuries/illnesses
3. Death

- 01-02.07 Trainee shall apply human resource policies and procedures, given an administrative situation requiring action, so that policies and procedures are followed.
- 01-02.08 Trainee should be able to deal with administrative procedures that might include transfers, promotions, compensation/member benefits, sick leave, vacation, requests for pay or benefits while acting in a temporary position, change in member benefits, commendations, disciplinary actions, and grievances.
- 01-02.09 Trainee shall have the knowledgeable of human resource policies and procedures
- A. Federal laws
 - B. State laws
 - C. Local AHJ (e.g. Employee Assistance Program)
 - D. Departmental (e.g. Wellness/fitness program)
- 01-02.10 Trainee shall coordinate the completion of assigned tasks and projects by members, given a list of projects and tasks and the job requirements of subordinates, so that the assignments are prioritized, a plan for the completion of each assignment is developed, and members are assigned to specific tasks and supervised during the completion of the assignments.
- 01-02.11 Trainee shall be knowledgeable of:
- A. Principles of supervision
 1. Delegate responsibility
 2. Consistent management
 3. Motivate
 4. Communicate
 5. Train
 6. Decision making
 7. Resource management
 8. Time management
 9. Coach/counsel
 10. Discipline (positive and negative)
 11. Accountability
 12. Employee performance appraisals
 13. Conflict resolution
 14. Risk management
 15. Leadership styles
 - a. Autocratic
 - b. Democratic
 - c. Laissez-faire
 - B. Basic human resource management
 1. Managerial theories
 2. Human resource planning
 3. Employee relations
 4. Staffing
 5. Performance management
 6. Human resource development
 7. Compensation and benefits
 8. Employee health, safety and security
 9. Risk benefit analysis

SECTION 3 COMMUNITY AND GOVERNMENT RELATIONS

The Certification Board suggests it will take a class of 12 individuals 6 hours to cover the following objective in this section (actual time may vary based on class size).

- 01-03.01 Trainee shall be able deal with inquiries of the community and projecting the role of the department to the public and delivering safety, injury, and fire prevention education programs. Initiate action on a community need, given policies and procedures, so that the need is addressed.
- 01-03.02 Trainee shall be knowledgeable about community demographics and service organizations:
- A. Statistical analysis
 1. Age
 2. Income
 3. Ethnicity
 4. Sex
 5. Educational level
 6. Special needs
 - B. Service organizations
 1. Civic (e.g. Lions, Rotary)
 2. Religious (e.g. Knights of Columbus, Salvation Army)
 3. Volunteer (e.g. Red Cross, Community Emergency Response Team (CERT), Fire Corps)
- 01-03.03 Trainee shall initiate action to a citizen's concern, given policies and procedures, so that the concern is answered or referred to the correct individual for action and all policies and procedures are complied with.
- 01-03.04 Trainee shall be knowledgeable of the following:
- A. Interpersonal relationships
 1. Blake and Mouton's Managerial Grid
 2. Maslow's Hierarchy of Needs

- B. Verbal and nonverbal communication
 - 1. Verbal communication
 - a. Voice inflection
 - b. Appropriate/common terminology
 - c. Tone of voice
 - d. Have a specific purpose
 - e. Be clear and concise
 - f. Be focused
 - 2. Nonverbal communication
 - a. Eye contact
 - b. Body language
 - c. Facial expressions
 - d. Appropriate appearance

01-03.05 Trainee shall respond to a public inquiry, given policies and procedures, so that the inquiry is answered accurately, courteously, and in accordance with applicable policies and procedures.

01-03.06 Trainee shall be knowledgeable of the following:

- A. Written communication techniques
 - 1. Consider the reader
 - 2. Emphasis
 - 3. Concise
 - 4. Simplicity
 - 5. Summarize
- B. Oral communication techniques
 - 1. Voice inflection
 - 2. Appropriate/common terminology
 - 3. Tone of voice
 - 4. Have a specific purpose
 - 5. Be clear and concise
 - 6. Be focused

01-03.07 Trainee shall deliver a public education program, given the target audience and topic, so that the intended message is conveyed clearly.

01-03.08 Trainee shall be knowledgeable of fire department's public education program as it relates to the target audience according to the AHJ.

SECTION 4 ADMINISTRATION

The Certification Board suggests it will take a class of 12 individuals 4 hours to cover the following objective in this section (actual time may vary based on class size).

01-04.01 Trainee shall recommend changes to existing departmental policies and/or implement a new departmental policy at the unit level, given a new departmental policy, so that the policy is communicated to and understood by unit members.

01-04.02 Trainee shall have knowledge of the following:

- A. Written communication techniques
 - 1. Consider the reader
 - 2. Emphasis
 - 3. Concise
 - 4. Simplicity
 - 5. Summarize
- B. Oral communication techniques
 - 1. Voice inflection
 - 2. Appropriate/common terminology
 - 3. Tone of voice
 - 4. Have a specific purpose
 - 5. Be clear and concise
 - 6. Be focused

01-04.03 Trainee shall execute routine unit-level administrative functions, given forms and record-management systems, so that the reports and logs are complete and files are maintained in accordance with policies and procedures.

01-04.04 Trainee shall be knowledgeable of the following:

- A. Administrative policies and procedures
 - 1. AHJ
- B. Records management
 - 1. Paper-based
 - 2. Electronic
 - 3. Record retention requirements
 - 4. Storage and security

01-04.05 Trainee shall prepare a budget (purchase) request, given a need and budget (purchase) forms, so that the request is in the proper format and is supported with data.

- 01-04.06 Trainee shall be knowledgeable of policies and procedures and the revenue sources and budget process.
- A. Policies and procedures of the AHJ
 - B. Revenue sources
 - 1. Operating Budget (e.g. program, line item)
 - C. Budget process of the AHJ

SECTION 5 INSPECTION AND INVESTIGATION

The Certification Board suggests it will take a class of 12 individuals 4 hours to cover the following objective in this section (actual time may vary based on class size).

- 01-05.01 Trainee shall be able to perform a fire investigation to determine preliminary cause, securing the incident scene, and preserving evidence, according to the following job performance requirements.
- A. The NFPA's intent is to instill an awareness of those areas that officers might address in the performance of their duties. Organizations that desire higher levels of competency in these areas should refer to the applicable NFPA professional qualifications standards: NFPA 1031 and NFPA 1033.
 - B. Evaluate available information, given a fire incident, observations, and interviews of first-arriving members and other individuals involved in the incident, so that a preliminary cause of the fire is determined, reports are completed, and, if required, the scene is secured and all pertinent information is turned over to an investigator.
- 01-05.02 Trainee shall have knowledge of the following:
- A. Common causes of fire
 - 1. Accidental
 - 2. Natural
 - 3. Incendiary/Suspicious
 - 4. Undetermined
 - B. Fire growth and development
 - 1. Basic fire chemistry/sciences
 - 2. Area of origin
 - C. Policies and procedures for calling for investigators
 - 1. AHJ
- 01-05.03 Trainee shall secure an incident scene, given rope or barrier tape, so that unauthorized persons can recognize the perimeters of the scene and are kept from restricted areas, and all evidence or potential evidence is protected from damage or destruction.
- 01-05.04 Trainee shall have knowledge of the following:
- A. Types of evidence
 - 1. Demonstrative
 - 2. Documentary/circumstantial
 - 3. Testimonial
 - B. The importance of fire scene security
 - 1. Evidence protection
 - 2. Public safety
 - C. Evidence preservation
 - 1. Chain of custody
 - 2. Contributes to prosecution
 - 3. Use of caution during salvage and overhaul

SECTION 6 EMERGENCY SERVICE DELIVERY

The Certification Board suggests it will take a class of 12 individuals 10 hours to cover the following objective in this section (actual time may vary based on class size).

- 01-06.01 Emergency service delivery is the component of fire department organization providing mitigation of responses to emergency incidents, such as those involving fires, emergency medical situations, mass casualties, hazardous materials, weapons of mass destruction, and terrorism, as well as other emergency events. Trainee shall be trained to supervise emergency operations, conduct pre-incident planning, and deploy assigned resources in accordance with the local emergency plan and according to job performance requirements.
- 01-06.02 Trainee shall develop a pre-incident plan, given an assigned facility and preplanning policies, procedures, and forms, so that all required elements are identified and the approved forms are completed and processed in accordance with policies and procedures.
- 01-06.03 Trainee shall be knowledgeable of the following
- A. Elements of the local emergency plan
 - 1. AHJ
 - B. A pre-incident plan
 - C. Basic building construction
 - 1. Construction type
 - 2. Occupancy type

- D. Basic fire protection systems and features
 - 1. Sprinkler systems
 - 2. Standpipe systems
 - 3. Alert/detection systems
 - 4. Other special extinguishing systems
- E. Basic water supply
 - 1. Determine location(s) of water supplies
 - 2. Fire Department Connections (FDC)
 - 3. Determine required fire flow
- F. Basic fuel loading
 - 1. Based on hazard class
- G. Fire growth and development
 - 1. Basic fire chemistry/science

01-06.04 Trainee shall develop an initial action plan, given size-up information for an incident and assigned emergency response resources, so that resources are deployed to control the emergency.

01-06.05 Trainee shall be knowledgeable of the following:

- A. Elements of a size-up including the many variables that the officer observes from the time of the alarm, during response, and upon arrival, in order to develop an initial action plan to control an emergency incident.
 - 1. Size up processes
 - a. Layman's 5-step process
 - b. NFA size-up system
 - 2. Size-up elements
 - a. Building type and occupancy
 - b. Demographics
 - c. Fire and smoke conditions
 - d. Materials spilled or involved in fire
 - e. Modes of action
 - i. Defensive
 - ii. Offensive
 - iii. Transition
 - f. Number of occupants
 - g. Time of day
 - h. Water supply
 - i. Weather
 - j. Other hazards
- B. Standard operating procedures for emergency operations
 - 1. AHJ
- C. Fire behavior
 - 1. Basic fire chemistry/science

01-06.06 Trainee shall implement an action plan at an emergency operation, given assigned resources, type of incident, and a preliminary plan, so that resources are deployed to mitigate the situation.

This requirement takes into consideration the officer's ability to give orders, direct personnel, evaluate information, and allocate resources to respond to the wide variety of emergency situations the fire service encounters.

01-06.07 Trainee shall have knowledge of the following:

- A. Standard operating procedures
 - 1. AHJ
- B. Resources available for the mitigation of fire and other emergency incidents
 - 1. Single company
 - 2. One alarm
 - 3. Multiple alarm
 - 4. Mutual/automatic aid
- C. An incident management system
 - 1. NIMS
 - 2. ICS
- D. Scene safety
 - 1. Rapid intervention/backup team
 - 2. Two-in/two-out
 - 2. Incident safety officer
- E. Personnel accountability system

- 01-06.08 Trainee shall develop and conduct a post-incident analysis, given a single unit incident and post-incident analysis policies, procedures, and forms, so that all required critical elements are identified and communicated and the approved forms are completed and processed in accordance with policies and procedures.
- 01-06.09 Trainee shall have knowledge of the following:
- A. Elements of a post-incident analysis
 - 1. Reconstruct the incident to establish a clear picture of the events surrounding the incident
 - 2. Non-punitive
 - 3. Focus on improving emergency response
 - B. Basic building construction
 - 1. Construction type
 - 2. Occupancy type
 - C. Basic fire protection systems and features
 - 1. Sprinkler systems
 - 2. Standpipe systems
 - 3. Alert/detection systems
 - 4. Other special extinguishing systems
 - D. Basic water supply
 - 1. Determine location(s) of water supplies
 - 2. Fire Department Connections (FDC)
 - 3. Determine required fire flow
 - E. Basic fuel loading
 - 1. Based on hazard class
 - F. Fire growth and development
 - 1. Basic fire chemistry/science
 - G. Departmental procedures relating to dispatch response tactics and operations
 - 1. AHJ
 - H. Customer service
 - 1. AHJ

SECTION 7 HEALTH AND SAFETY

The Certification Board suggests it will take a class of 12 individuals 8 hour to cover the following objective in this section (actual time may vary based on class size).

- 01-07.01 Trainee shall be able to integrate safety plans, policies, and procedures into the daily activities as well as the emergency scene, including the donning of appropriate levels of PPE to ensure a work environment, in accordance with health and safety plans, for all assigned members, according to the following job performance requirements
- A. Apply safety regulations at the unit level, given safety policies and procedures, so that required reports are completed, in-service training is conducted, and member responsibilities are conveyed.
- 01-07.02 Trainee shall have knowledge of the following:
- A. The most common causes of personal injury and accident to members
 - B. Safety policies and procedures
 - C. Basic workplace safety
 - D. The components of an infectious disease control program.
- 01-07.03 Trainee shall be able to identify safety hazards and to communicate orally and in writing.
- 01-07.04 Trainee shall conduct an initial accident investigation, given an incident and investigation forms, so that the incident is documented and reports are processed in accordance with policies and procedures.
- 01-07.05 Trainee shall have knowledge of the following:
- A. Procedures for conducting an accident investigation
 - B. Safety policies and procedures.
- 01-07.06 Trainee shall be able to communicate orally and in writing and to conduct interviews.

SECTION 8 EMERGENCY MANAGEMENT

No requirements at this level per NFPA

Curriculum for Fire Officer II

SECTION 1 GENERAL

The Certification Board suggests it will take a class of 12 individuals 1 hour to cover the following objective in this section (actual time may vary based on class size).

- O2-01.01 Trainee shall have knowledge of the organization of local government
- O2-01.02 Trainee shall have knowledge of enabling and regulatory legislation and the law-making process at the local, state, and federal levels
- O2-01.03 Trainee shall have knowledge of the functions of other bureaus, divisions, agencies, and organizations and their roles and responsibilities that relate to the fire service
 - A. Intergovernmental and interagency cooperation

SECTION 2 HUMAN RESOURCE MANAGEMENT

The Certification Board suggests it will take a class of 12 individuals 10 hours to cover the following objective in this section (actual time may vary based on class size).

- O2-02.01 This function involves evaluating member performance, according to the following job performance requirements. Initiate actions to maximize member performance and/or to correct unacceptable performance, given human resource policies and procedures, so that member and/or unit performance improves or the issue is referred to the next level of supervision.

- O2-02.02 Trainee shall have knowledge of the following:

- A. Human resource evaluation policies and procedures in reference to;
 - 1. Federal (e.g. Americans with Disabilities Act)
 - 2. State (e.g. Local Government Code)
 - 3. Local/AHJ (e.g. city policies)
 - 4. Departmental (e.g. departmental policies)
- B. Problem identification
 - 1. Performance
 - 2. Behavior
- C. Organizational behavior
 - 1. Acceptable/unacceptable job performance
 - 2. Acceptable/unacceptable behavior
 - 3. Culture
 - 4. Change/status quo
- D. Group dynamics
 - 1. Common binding interest
 - 2. Vital group image
 - 3. Sense of continuity
 - 4. Shared set of values
 - 5. Different roles within the group
- E. Leadership styles
 - 1. Autocratic
 - 2. Democratic
 - 3. Laissez-faire
- F. Types of power
 - 1. Reward
 - 2. Coercive
 - 3. Identification
 - 4. Expert
 - 5. Legitimate
 - 6. Informal
- G. Interpersonal dynamics
 - 1. Blake and Mouton's Managerial Grid
 - 2. Maslow's Hierarchy of Needs
 - 3. Other

- O2-02.03 Trainee shall evaluate the job performance of assigned members, given personnel records and evaluation forms, so each member's performance is evaluated accurately and reported according to human resource policies and procedures.

- O2-02.04 Trainee shall be knowledgeable of the following:

- A. Human resource evaluation policies and procedures in reference to;
 - 1. Federal (e.g. Fair Labor Standards Act)
 - 2. State (e.g. Local Government Code)
 - 3. Local/ AHJ (e.g. city policies)
 - 4. Departmental (e.g. departmental policies)
- B. Job descriptions
 - 1. General description of work
 - 2. Typical tasks
 - 3. Knowledge, skills and abilities
 - 4. Education and Experience
 - 5. Special Requirements
 - 6. Future Requirements
- C. Objectives of a member evaluation program
 - 1. Accuracy
 - 2. Fairness
 - 3. Consistency
 - 4. Thoroughness
 - 5. Identify areas of excellence or improvement
 - 6. Document member's work history

- D. Common errors in evaluating
 - 1. Halo/Horn effect
 - 2. Central tendency
 - 3. Contrast effect
 - 4. Leniency or severity
 - 5. Personal Bias
 - 6. Recency
 - 7. Frame of Reference

SECTION 3 COMMUNITY AND GOVERNMENT RELATIONS

No requirements at this level per NFPA

SECTION 4 ADMINISTRATION

The Certification Board suggests it will take a class of 12 individuals 10 hours to cover the following objective in this section (actual time may vary based on class size).

- O2-04.01 This section involves preparing a project or divisional budget, news releases, and policy changes, according to the following job performance requirements.
- O2-04.02 Trainee shall develop a policy or procedure, given an assignment, so that the recommended policy or procedure identifies the problem and proposes a solution.
- O2-04.03 Trainee shall be knowledgeable of the following:
 - A. Policies and procedures
 - 1. Develop policies/procedures
 - 2. Train members
 - 3. Implement policies/procedures
 - 4. Evaluate/revise policies/procedures
 - B. Problem identification
 - 1. Be attentive
 - 2. Ask questions
 - 3. Encourage subordinates to report problems
- O2-04.04 Trainee shall develop a project or divisional budget, given schedules and guidelines concerning its preparation, so that capital, operating, and personnel costs are determined and justified.
- O2-04.05 Trainee shall have knowledge of the following:
 - A. The supplies and equipment necessary for ongoing or new projects
 - B. Repairs to existing facilities
 - C. New equipment
 - D. Apparatus maintenance
 - E. Personnel costs
 - F. Appropriate budgeting system
- O2-04.06 Trainee shall describe the process of purchasing, including soliciting and awarding bids, given established specifications, in order to ensure competitive bidding.
- O2-04.07 Trainee shall have knowledge of the following:
 - A. Purchasing laws
 - 1. AHJ
 - 2. State laws
 - B. Policies and procedures
 - 1. AHJ
- O2-04.08 Trainee shall prepare a news release, given an event or topic, so that the information is accurate and formatted correctly.
- O2-04.09 Trainee shall have knowledge of the following:
 - A. Policies and procedures for news releases
 - 1. AHJ
 - B. Format used for news releases
 - 1. Oral interview
 - a. Be prepared
 - b. Stay in control
 - c. Look and act the part
 - d. It is not over until it is over
 - 2. Written
 - a. Formulate a plan
 - b. Develop a concept and write the release
 - c. Make it unique
 - d. Well organized
 - e. Department letterhead
 - f. Release news to the media
- O2-04.10 Trainee shall prepare a concise report for transmittal to a supervisor, given fire department record(s) and a specific request for details such as trends, variances, or other related topics.
- O2-04.11 Trainee shall have knowledge of the following:
 - A. The data processing system
 - 1. Word processing software
 - 2. Spreadsheet software
 - 3. Presentation software
 - 4. Database software

SECTION 5 INSPECTION AND INVESTIGATION

The Certification Board suggests it will take a class of 12 individuals 10 hours to cover the following objective in this section (actual time may vary based on class size).

This section involves conducting inspections to identify hazards and address violations and conducting fire investigations to determine origin and preliminary cause, according to the following job performance requirements.

- O2-05.01 Trainee shall describe the procedures for conducting fire inspections, given any of the following occupancies, so that all hazards, including hazardous materials, are identified, approved forms are completed, and approved action is initiated:
- A. Assembly
 - B. Educational
 - C. Health care
 - D. Detention and correctional
 - E. Residential
 - F. Mercantile
 - G. Business
 - H. Industrial
 - I. Storage
 - J. Unusual structures
 - K. Mixed occupancies
- O2-05.02 Trainee shall have knowledge of:
- A. Inspection procedures
 - B. Fire detection, alarm, and protection systems
 - C. Identification of fire and life safety hazards
 - D. Marking and identification systems for hazardous materials
- O2-05.03 Trainee shall determine the point of origin and preliminary cause of a fire, given a fire scene, photographs, diagrams, pertinent data and/or sketches, to determine if arson is suspected.
- O2-05.04 Trainee shall have knowledge of the following:
- A. Methods used by arsonists
 - 1. Disabling built-in fire protection
 - 2. Delaying notification/making access difficult
 - 3. Using accelerants and trailers
 - 4. Setting multiple points of origin
 - 5. Tampering or altering equipment
 - B. Common causes of fire
 - 1. Accidental
 - 2. Natural
 - 3. Incendiary/Suspicious
 - 4. Undetermined
 - C. Basic cause and origin determination
 - 1. Basic fire chemistry/sciences
 - 2. Area of origin
 - 3. Fire patterns
 - D. Fire growth and development
 - E. Documentation of preliminary fire investigative procedures
 - 1. AHJ
 - 2. NFIRS
 - 3. NFPA 921

SECTION 6 EMERGENCY SERVICE DELIVERY

The Certification Board suggests it will take a class of 12 individuals 8 hours to cover the following objective in this section (actual time may vary based on class size).

- O2-06.01 This duty involves supervising multi-unit emergency operations, conducting pre-incident planning, and deploying assigned resources, according to the following job requirements.
- O2-06.02 Trainee shall produce operational plans, given an emergency incident requiring multiunit operations, so that required resources and their assignments are obtained and plans are carried out in compliance with approved safety procedures resulting in the mitigation of the incident.
- O2-06.03 Trainee shall have knowledge of the following:
- A. Standard operating procedures
 - 1. AHJ
 - B. National, state/provincial, and local information resources available for the mitigation of emergency incidents
 - C. An incident management system
 - 1. NIMS
 - 2. Incident Command System
 - D. A personnel accountability system
- O2-06.04 Trainee shall develop and conduct a post-incident analysis, given multi-unit incident and post-incident analysis policies, procedures, and forms, so that all required critical elements are identified and communicated and the approved forms are completed and processed.

- O2-06.05 Trainee shall have knowledge of the following:
- A. Elements of a post-incident analysis
 - 1. Reconstruct the incident to establish a clear picture of the events surrounding the incident
 - 2. Non-punitive
 - 3. Focus on improving emergency response
 - B. Basic building construction
 - 1. Construction type
 - 2. Occupancy type
 - C. Basic fire protection systems and features
 - 1. Sprinkler systems
 - 2. Standpipe systems
 - 3. Alert/detection systems
 - 4. Other special extinguishing systems
 - D. Basic water supply
 - 1. Pressurized sources
 - 2. Drafting points
 - 3. Fire department connections (FDC)
 - E. Basic fuel loading
 - 1. Based on hazard class
 - F. Fire growth and development
 - 1. Basic fire chemistry/science
 - G. Departmental procedures relating to dispatch response tactics and operations
 - 1. AHJ
 - H. Customer service
 - 1. AHJ

SECTION 7 HEALTH AND SAFETY

The Certification Board suggests it will take a class of 12 individuals 9 hours to cover the following objective in this section (actual time may vary based on class size).

- O2-07.01 Trainee shall review injury, accident, and health exposure reports, identifying unsafe work environments or behaviors, and taking approved action to prevent reoccurrence, according to the following job requirements.
- O2-07.02 Trainee shall analyze a member's accident, injury, or health exposure history, given a case study, so that a report including action taken and recommendations made is prepared for a supervisor.
- O2-07.03 Trainee shall have knowledge of the causes of unsafe acts, health exposures, or conditions that result in accidents, injuries, occupational illnesses, or deaths.

SECTION 8 EMERGENCY MANAGEMENT

No requirements at this level per NFPA

SECTION 1 GENERAL

03-01.01 Trainee shall have knowledge of the current national and international trends and developments related to fire service organization, management, and administrative principles, as well as public and private organizations that support the fire and emergency services and the functions of each.

NFPA 1021 6.1

SECTION 2 HUMAN RESOURCE MANAGEMENT

03-02.01 Trainee shall identify the duty involves for establishing procedures for hiring, assigning, promoting, and encouraging professional development of members, according to the following job performance requirements.

NFPA 1021 6.2

03-02.02 Trainee shall establish personnel assignments to maximize efficiency, given knowledge, training, and experience of the members available in accordance with policies and procedures, so that human resources are used in an effective manner for minimum staffing requirements, available human resources, and policies and procedures.

NFPA 1021 6.2.1

03-02.03 Trainee shall develop procedures for hiring members, given policies of the AHJ and legal requirements, so that the process is valid and reliable and applicable federal, state/ provincial, and local laws; regulations and standards; and policies and procedures.

NFPA 1021 6.2.2

03-02.04 Trainee shall develop procedures and programs for promoting members, given applicable policies and legal requirements, so that the process is valid and reliable, job-related, and nondiscriminatory and by applicable federal, state/ provincial, and local laws; regulations and standards; and policies and procedures.

NFPA 1021 6.2.3

03-02.05 Trainee shall describe methods to facilitate and encourage members to participate in professional development, given a professional development model, so that members achieve their personal and professional goals and interpersonal and motivational techniques, professional development model, goal setting, and personal and organizational goals.

NFPA 1021 6.2.4

03-02.06 Trainee shall develop a proposal for improving an employee benefit, given a need in the organization, so that adequate information is included to justify the requested benefit improvement.

NFPA 1021 6.2.5

03-02.07 Trainee shall develop a plan for providing an employee accommodation, given an employee need, the requirements, and applicable law, so that adequate information is included to justify the requested change(s) using agency's policies and procedures, and legal requirements or reasonable accommodations.

NFPA 1021 6.2.6

03-02.08 Trainee shall develop an ongoing education training program, given organizational training requirements, so that members of the organization are given appropriate training to meet the mission of the organization.

NFPA 1021 6.2.7

SECTION 3 COMMUNITY AND GOVERNMENT RELATIONS

03-03.01 Trainee shall develop a community risk reduction program, given risk assessment data, so that program outcomes are met using community demographics, resource availability, community needs, customer service principles, and program development.

NFPA 1021 6.3.1

SECTION 4 ADMINISTRATION

03-04.01 Trainee shall develop a divisional or departmental budget, given schedules and guidelines concerning its preparation, so that capital, operating, and personnel costs are determined and justified making sure the supplies and equipment necessary for existing and new programs; repairs to existing facilities; new equipment, apparatus maintenance, and personnel costs; and approved budgeting system.

NFPA 1021 6.4.1

03-04.02 Trainee shall develop a budget management system, given fiscal and financial policies, so that the division or department stays within the budgetary authority identifying revenue to date, anticipated revenue, expenditures to date, encumbered amounts, and anticipated expenditures.

NFPA 1021 6.4.2

03-04.03 Trainee shall describe the agency's process for developing requests for proposal (RFPs) and soliciting and awarding bids, given established specifications and the agency's policies and procedures, so that competitive bidding is ensured along with purchasing laws, policies, and procedures.

NFPA 1021 6.4.3

03-04.04 Trainee shall direct the development, maintenance, and evaluation of a department record and management system, given policies and procedures, so that completeness and accuracy are achieved to include the principles involved in the acquisition, implementation, and retrieval of information by data processing as it applies to the record and budgetary processes and the capabilities and limitations of information management systems.

NFPA 1021 6.4.4

03-04.05 Trainee shall analyze and interpret records and data, given a fire department records system, so that validity is determined and improvements are recommended and the principles involved in the acquisition, implementation, and retrieval of information and data.

NFPA 1021 6.4.5

03-04.06 Trainee shall develop a model plan for continuous organizational improvement, given resources for an area to be protected, so that resource utilization is maximized utilizing policies and procedures, physical and geographic characteristics and hazards, demographics, community plan, staffing requirements, response time benchmarks, contractual agreements, recognized best practice assessment programs, and local, state/provincial, and federal regulations.

NFPA 1021 6.4.6

SECTION 5 INSPECTION AND INVESTIGATION

03-05.01 Trainee shall evaluate the inspection program of the AHJ, given current program goals, objectives, performance data, and resources so that the results are evaluated to determine effectiveness according to policies and procedures, accepted inspection practices, program evaluation, and applicable codes, standards, and laws.

NFPA 1021 6.5.1

03-05.02 Trainee shall develop a plan, given an identified fire safety problem, so that the approval for a new program, piece of legislation, form of public education, or fire safety code is facilitated according to policies and procedures and applicable codes, ordinances, and standards and their development process.

NFPA 1021 6.5.2

SECTION 6 EMERGENCY SERVICE DELIVERY

03-06.01 Trainee shall prepare an action plan, given an emergency incident requiring multiple agency operations, so that the required resources are determined and the resources are assigned and placed to mitigate the incident according to policies, procedures, and standards, including the current edition of NFPA 1600, and resources, capabilities, roles, responsibilities, and authority of support agencies.

NFPA 1021 6.6.1

03-06.02 Trainee shall develop and conduct a post-incident analysis, given a multi-agency incident and post-incident analysis policies, procedures, and forms, so that all required critical elements are identified and communicated and the appropriate forms are completed and processed in accordance with policies and procedures and insure elements of a post-incident analysis, emergency management plan, critical issues, involved agencies' resources and responsibilities, procedures relating to dispatch response, strategy tactics and operations, and customer service.

NFPA 1021 6.6.2

03-06.03 Trainee shall develop a plan for the agency, given an unmet need for resources that exceed what is available in the organization, so that the mission of the organization is capable of being performed in times of extraordinary need and complete a needs assessment and planning.

NFPA 1021 6.6.3

SECTION 7 HEALTH AND SAFETY

03-07.01 Trainee shall develop a measurable accident and injury prevention program, given relevant local and national data, so that the results are evaluated to determine effectiveness of the program in accordance with policies and procedures, accepted safety practices, and applicable codes, standards, and laws.

NFPA 1021 6.7.1

SECTION 8 EMERGENCY MANAGEMENT

03-08.01 Trainee shall develop a plan for the integration of fire services resources in the community's emergency management plan, given the requirements of the community and the resources available in the fire department, so that the role of the fire service is in compliance with local, state/provincial, and national requirements in accordance with role of the fire service; integrated emergency management system; preparedness-emergency management planning; emergency operations centers; and roles of local, state/provincial, and national emergency management agencies.

NFPA 1021 6.8.1

Curriculum for Fire Officer IV

SECTION 1 GENERAL

No requirements at this level per NFPA

SECTION 2 HUMAN RESOURCE MANAGEMENT

- 04-02.01 Trainee shall appraise the department's human resource demographics, given appropriate community demographic data, so that the recruitment, selection, and placement of human resources is effective and consistent with law and current best practices in accordance with policies and procedures; local, state/provincial, and federal regulations; community demographics; community issues; and formal and informal community leaders.
NFPA 1021 7.2.1
- 04-02.02 Trainee shall initiate the development of a program, given current member/management relations, so that a positive and participative member/management program exists in accordance with policies and procedures, contractual agreements, and local, state/provincial, and federal regulations.
NFPA 1021 7.2.2
- 04-02.03 Trainee shall establish and evaluate a list of education and in-service training goals, given a summary of the job requirements for all positions within the department, so that all members can achieve and maintain required proficiencies while utilizing training resources, community needs, internal and external customers, policies and procedures, contractual agreements, and local, state/provincial, and federal regulations.
NFPA 1021 7.2.3
- 04-02.04 Trainee shall appraise a member assistance program, given data, so that the program, when used, produces stated program outcome in accordance with policies and procedures, available assistance programs, contractual agreements, and local, state/provincial, and federal regulations.
NFPA 1021 7.2.4
- 04-02.05 Trainee shall evaluate an incentive program, given data, so that a determination is made regarding achievement of the desired results in accordance with policies and procedures, available incentive programs, contractual agreements, and local, state/provincial, and federal regulations.
NFPA 1021 7.2.5

SECTION 3 COMMUNITY AND GOVERNMENT RELATIONS

- 04-03.01 Trainee shall attend, participate in, and assume a leadership role in community functions, in given community needs, so that the image of the organization is enhanced utilizing community demographics, community and civic issues, effective customer service methods, and formal and informal community leaders.
NFPA 1021 7.3.1

SECTION 4 ADMINISTRATION

- 04-04.01 Trainee shall develop a comprehensive long-range plan, given community requirements, current department status, and resources, so that the projected needs of the community are met in accordance with policies and procedures, physical and geographic characteristics, demographics, community plan, staffing requirements, response time benchmarks, contractual agreements, and local, state/provincial, and federal regulations.
NFPA 1021 7.4.1
- 04-04.02 Trainee shall evaluate and project training requirements, facilities, and buildings needs, given data that reflect community needs and resources, so that departmental training goals are met in accordance with policies and procedures, physical and geographic characteristics, building and fire codes, departmental plan, staffing requirements, training standards, needs assessment, contractual agreements, and local, state/provincial, and federal regulations.
NFPA 1021 7.4.2
- 04-04.03 Trainee shall complete a written comprehensive risk, hazard, and value analysis of the community, given the appropriate features of the service area of the organization, so that an accurate evaluation is made for service delivery decision-making utilizing risk, hazard, and value analysis methods and process, as well as community development features, community demographics, and assessed valuation of properties in the community.
NFPA 1021 7.4.3
- 04-04.04 Trainee shall develop a plan for a capital improvement project or program, given an unmet need in the community, so that there is adequate information to educate citizens about the needs of the department utilizing strategic planning, capital improvement planning and budgeting, and facility planning.
NFPA 1021 7.4.4

SECTION 5 INSPECTION AND INVESTIGATION

No requirements at this level per NFPA

SECTION 6 EMERGENCY SERVICE DELIVERY

- 04-06.01 Trainee shall develop a comprehensive disaster plan that integrates other agencies' resources, given risk, vulnerability, and capability data, so that the organization can mitigate the impact to the community in utilizing major incident policies and procedures, physical and

geographic characteristics, demographics, target hazards, incident management systems, communications systems, intelligence data, contractual and mutual-aid agreements, and local, state/provincial, and federal regulations and resources.

NFPA 1021 7.6.1

- O4-06.02 Trainee shall develop a comprehensive plan, given data (including agency data), so that the agency operates at a civil disturbance, integrates with other agencies' actions, and provides for the safety and protection of members utilizing major incident policies and procedures, physical and geographic characteristics, demographics, incident management systems, communications systems, contractual and mutual-aid agreements, and local, state/ provincial, and federal regulations and resources.

NFPA 1021 7.6.2

SECTION 7 HEALTH AND SAFETY

- O4-07.01 Trainee shall maintain, develop, and provide leadership for a risk management program, given specific data, so that injuries and property damage accidents are reduced utilizing risk management concepts, retirement qualifications, occupational hazards analysis, and disability procedures, regulations, and laws.

NFPA 1021 7.7.1

SECTION 8 EMERGENCY MANAGEMENT

No requirements at this level per NFPA

MINIMUM STANDARDS FOR INCIDENT SAFETY OFFICER

A fire department Incident Safety Officer shall recuse themselves from any investigatory process where a conflict of interest exists.

Reference Materials

The jurisdictional entity in which the Incident Safety Officer serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1521: Standard for Fire Department Safety Officer

Minimum Requirements

1. Applicants must complete one (1) of the following:
 - a. Incident Safety Officer coursework meeting the requirements of NFPA 1521; or
 - b. TCFP Incident Safety Officer curriculum; or
 - c. All required objectives from the SFFMA Incident Safety Officer curriculum

AND

2. Applicants must hold, or apply concurrently for, the following SFFMA certifications:
 - a. Fire Officer I

Curriculum for Incident Safety Officer

SECTION 1 GENERAL

- ISO-01.01 Trainee, given an incident or planned event, an ICS structure, a command post, a briefing from an incident commander (IC) or outgoing ISO, SOP related to health and safety, an incident action plan (IAP), applicable protective clothing and protective equipment, and communications and information recording equipment, shall perform the role of ISO within an incident command system (ICS) at an incident or planned event, so that the assignment is received and understood; situational information about the incident or planned event is received; incident priorities, goals, and objectives are transferred; action is taken to mitigate any immediate life safety threats; and applicable communication means are employed.
NFPA 1026 5.2.1
- ISO-01.02 Trainee, given an incident or planned event, an IAP, and risk management assessment criteria, shall monitor the IAP, conditions, activities, and operations so that activities and operations that involve an unacceptable level of risk can be altered, terminated, or suspended to protect members' health and safety.
NFPA 1026 5.2.2
- ISO-01.03 Trainee, given an incident or planned event, an established command structure and ISO, an IAP, an incident safety plan, a current situation status, incident resources, a command post, incident documentation, and communications equipment, shall manage the transfer of ISO duties so that incident information is exchanged, reports and plans for the subsequent operational period are completed, continuity of authority and situational awareness are maintained, changes in incident or planned event complexity are accounted for, the new ISO is briefed on the incident or planned event, and the new ISO is identified.
NFPA 1026 5.2.3
- ISO-01.04 Trainee shall stop, alter, or suspend operations based on imminent threats posed to firefighter safety, given an incident or planned event that contains threats to firefighter safety, an incident management structure, risk management criteria, and applicable SOP/SOGs, so that the hazard is identified, notice to suspend operations is communicated, action is taken to protect firefighter safety, and this information is communicated to the IC.
NFPA 1026 5.2.4
- ISO-01.05 Trainee, given an incident or planned event, shall monitor and determine the incident scene conditions so that the ISO can report to the IC on the status of hazards and risks to members.
NFPA 1026 5.2.5
- ISO-01.06 Trainee, given an incident or planned event, an IMS, personal identification devices, radios, and applicable SOP/SOGs, shall monitor the accountability system so that it can be determined that the accountability system is being utilized as designed, all relevant positions and functions are implemented, and any noted deficiencies are communicated to the IC.
NFPA 1026 5.2.6
- ISO-01.07 Trainee, given an incident, shall determine hazardous incident conditions and advise the IC to establish or modify control zones so that the incident control zones are communicated to members and entry into the hazardous area is controlled.
NFPA 1026 5.2.7
- ISO-01.08 Trainee, given an apparatus and temporary traffic control devices, an incident or planned event, shall identify motor vehicle incident scene hazards so that actions to mitigate the hazards as de-scribed in Section 8.7 of NFPA 1500 are taken to protect member safety.
NFPA 1026 5.2.8
- ISO-01.09 Trainee, given an incident or planned event with radio transmissions, shall monitor radio transmissions so that communication barriers are identified and the possibility for missed, unclear, or incomplete communications is corrected.
NFPA 1026 5.2.9

- ISO-01.10 Trainee, given an incident or planned event, an IMS, and applicable SOP/SOGs, shall identify the incident strategic requirements (e.g., fire, technical search and rescue, hazmat), the corresponding hazards, the size, complexity, and anticipated duration of the incident, including the associated risks, so that the ISO can determine the need for assistant ISOs and/or technical specialists and make the recommendations to the IC.
NFPA 1026 5.2.10
- ISO-01.11 Trainee, given an incident or planned event that requires the use of a helicopter and landing zone, shall determine the hazards associated with the designation of a landing zone and interface with helicopters, so that the IC can be informed of special requirements and the landing can be executed in a safe manner.
NFPA 1026 5.2.11
- ISO-01.12 Trainee, given an incident or planned event and an awareness of incidents that can cause incident stress, shall notify the IC of the need for intervention resulting from an occupational exposure to atypical stressful events, so that members' psychological health and safety can be protected.
NFPA 1026 5.2.12
- ISO-01.13 Trainee, given an incident or planned event, an active IAP with assigned responders, and an opportunity to perform environmental and operational reconnaissance, shall determine hazardous energy sources that can affect responder health and safety, so that risks to personnel are identified, reduced, or eliminated; hazard information is relayed to IC staff and ancillary agencies responsible for the hazardous energy source; appropriate zones are established and marked; and personnel operating at the scene are briefed on the hazardous energy control zone.
NFPA 1026 5.2.13
- ISO-01.14 Trainee, given an incident or planned event, shall monitor conditions, including weather, firefighter activities, and work cycle durations, so that the need for rehabilitation can be determined, communicated to the IC, and implemented to ensure firefighter health and safety.
NFPA 1026 5.2.14
- ISO-01.15 Trainee, given an incident or planned event, shall identify incident environmental conditions and contaminants, so that identified hazards can be communicated to the IC and division and/or group supervisors, and the need for contamination control procedures for PPE, personnel hygiene, and utilized equipment can be determined and implemented, prior to incident departure, to help prevent continued exposure and cross contamination from known and potential contaminants.
NFPA 1026 5.2.15

SECTION 2 FIRE SUPPRESSION OPERATIONS

- ISO-02.01 Trainee, given an incident or planned event that includes one or more immediately dangerous to life and health (IDLH) elements, responders engaged in tactical operations, a pre-assigned RIC, and an IAP, shall determine incident environmental and operational factors and confirm the establishment of rapid intervention crew (RIC) and evaluate the need to increase RIC capability, so that a recommendation is offered to the IC.
NFPA 1026 5.3.1
- ISO-02.02 Trainee, given an incident or planned event, shall communicate fire behavior, building access/egress issues, collapse, and hazardous energy issues to established RICs, so that RIC team leaders are aware of the observations and concerns of the ISO.
NFPA 1026 5.3.2
- ISO-02.03 Trainee, given a building fire incident, a building collapse incident, reconnaissance opportunity, and established AHJ pre-incident building plan information, shall identify and estimate building/structural collapse hazards, so that the identified collapse hazard can be communicated to the IC and tactical-level management units; judgment is offered to the IC for the establishment of control zone(s); personnel are removed from collapse zone dangers; and appropriate adjustments are made to the IAP by the IC to improve member safety.
NFPA 1026 5.3.3
- ISO-02.04 Trainee, given an incident, shall determine flashover and hostile fire event potential at building fires, so that risks are identified and communicated to the incident commander and tactical-level management units, and adjustments are made to strategy and tactics to improve safety.
NFPA 1026 5.3.4
- ISO-02.05 Trainee, given wildland and cultivated vegetation fires, shall determine fire growth and blow up, so that information can be communicated to the IC and tactical-level management components, and adjustments made to the IAP to improve member safety.
NFPA 1026 5.3.5
- ISO-02.06 Trainee, given various building fire incidents, shall determine the suitability of building entry and egress options at building fires, so that entry and egress options are optimized through communication with the IC and tactical-level management components.
NFPA 1026 5.3.6

SECTION 3 TECHNICAL SEARCH AND RESCUE OPERATIONS

- ISO-03.01 Trainee, given a technical search and rescue incident; CFR 1910.146; NFPA 1006; and AHJ SOP/SOGs for technical search and rescue operations, shall determine the need for a search and rescue technician–trained ISO or assistant ISO, so that the IC can appoint an assistant ISO or a search and rescue technician.
NFPA 1026 5.4.1
- ISO-03.02 Trainee, given a technical search and rescue incident, an IAP that includes situation and resource status information, an incident safety analysis form (ICS form 215A or its equivalent), weather condition information, special technical data (e.g., safety data sheets and topographical information, blueprints, and building drawings), and predetermined incident information, shall prepare a safety plan that identifies corrective or preventive actions so that safety data are obtained, an incident safety plan is developed with coordinating documentation, elements of the plan are incorporated in the IAP, changes in incident safety conditions are noted and reported, judgment is offered to the IC for the establishment of control zone(s) and exclusion zone(s), safety and appropriate PPE elements are met, and assistant ISOs are appointed as necessary.
NFPA 1026 5.4.2
- ISO-03.03 Trainee, given a technical search and rescue incident, shall deliver a safety briefing for technical search and rescue incident response members so that critical information such as expected hazards, PPE requirements, established zones, emergency procedures, air monitoring, medical surveillance, and chain-of-command elements are communicated.
NFPA 1026 5.4.3

SECTION 4 HAZARDOUS MATERIALS OPERATIONS

- ISO-04.01 Trainee, given a hazardous materials incident, 29 CFR 1910.120; NFPA 472 and NFPA 1072; and AHJ SOP/SOGs for hazardous materials operations, shall determine the need for a hazardous materials technician-trained ISO or assistant ISO, so that the IC can appoint an assistant ISO or a hazardous materials technician.
NFPA 1026 5.5.1
- ISO-04.02 Trainee, given a hazmat incident, IAP that includes situation and resource status information, an incident safety analysis form (ICS form 215A or its equivalent), weather condition information, special technical data (e.g., safety data sheets and topographical information, blueprints, and building drawings), and predetermined incident information, shall prepare a safety plan that identifies corrective or preventive actions so that safety data are obtained, an incident safety plan is developed with coordinating documentation, elements of the plan are incorporated in the IAP, changes in incident safety conditions are noted and reported, judgment is offered to the IC for the establishment of control zone(s) and exclusion zone(s), safety and PPE elements of 29 CFR 1910.120 are met, and assistant ISOs are appointed as necessary.
NFPA 1026 5.5.2
- ISO-04.03 Trainee, given a hazmat incident or scenario, shall deliver a safety briefing for hazardous materials incident response members so that critical information such as expected hazards, PPE requirements, established zones, decontamination procedures, emergency procedures, air monitoring, medical surveillance, and chain-of-command elements are communicated.
NFPA 1026 5.5.3
- ISO-04.04 Trainee, given a hazardous materials incident and SOP/SOGs, shall identify that hazardous materials incident control zones have been established and communicated to personnel on the scene so that responders can identify marked control zones, which must be inclusive of no-entry zones, hot zones, hazard reduction zones, support zones, and corridors.
NFPA 1026 5.5.4

SECTION 5 ACCIDENT INVESTIGATIONS AND REVIEW

- ISO-05.01 Trainee, given an incident or planned event, using applicable documents and techniques, shall conduct a safety and health investigative process so that the chain of evidence is started and maintained, critical incident data elements are collected, potential witnesses are identified, applicable SOP/SOGs are identified for review, and gathered information is documented and prepared for the HSO or investigative continuance as established by the AHJ policies and SOP/SOGs.
NFPA 1026 5.6.1

SECTION 6 POST-INCIDENT ANALYSIS (PIA)

- ISO-06.01 Trainee, given a witnessed incident, exercise, or planned event, shall prepare a written post-incident analysis (PIA) from the ISO perspective so that safety and health issues, best safety practices, deviations from SOP/SOGs established by the AHJ, and recommendations for future events are documented.
NFPA 1026 5.7.1
- ISO-06.02 Trainee, given a witnessed incident or planned event and PIA group setting, shall report observations, concerns, and recommendations so that that safety and health issues, best safety practices, deviations from SOP/SOGs established by the AHJ, and recommendations for future events are communicated to the AHJ.
NFPA 1026 5.7.2

MINIMUM STANDARDS FOR PUBLIC INFORMATION OFFICER

Reference Materials

The jurisdictional entity in which the Public Information Officer serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1035: *Professional Qualifications for Public Fire and Life Safety Educator*

Minimum Requirements

Applicants must complete one (1) of the following:

- a. Public Information Officer coursework meeting the requirements of NFPA 1035; or
- b. TCFP Public Information Officer certification; or
- c. SFFMA Public Information Officer curriculum.

Curriculum for Public Information Officer

PIO 01.01 Trainee, given incident information, PIO worksheets, and organizational policies, shall conduct media interviews so that all information compiled on worksheets is accurate and disseminated in a specified time to the media.

NFPA 7.2.1

PIO 01.02 Trainee, given incident or event information, organizational policies, and types of media present, shall establish a media area, so that the area provides for the safety of all media and facilitates effective communication.

NFPA 7.2.2

PIO 01.03 Trainee, given organizational policies and methods for contacting other groups and organizations, shall coordinate dissemination of information to specific community groups, so that the information is communicated to the groups accurately and in a timely manner.

NFPA 7.2.3

PIO 01.04 Trainee, given an incident, a situation, or event information and organizational policies, shall prepare a news release, so that the news release is pertinent, on time, concise, and accurate.

NFPA 7.2.4

PIO 01.05 Trainee, given an incident, a situation, or event information and organizational policy, shall prepare a media advisory, so that the media advisory is pertinent, on time, concise, and accurate.

NFPA 7.2.5

PIO 01.06 Trainee, given a PIO worksheet; news release or media advisory; the characteristics of the local media, including deadlines, organizational policies; and methods available to reach the media, shall disseminate information to the media, so that information is on time and accurate.

NFPA 7.2.6

PIO 01.07 Trainee, given an incident, a situation, or event information; organizational policies, and methods and time frame for releasing information, shall disseminate information to an internal target audience, so that the information is on time and accurate.

NFPA 7.2.7

PIO 01.08 Trainee, given information on an incident, a situation, an event, or issue; media characteristics and methods available for reaching the media; and organizational policies, shall coordinate a news conference, so that a site is obtained, desired media are notified, a news conference agenda is established, a media information package is created, and participants in the news conference are notified.

NFPA 7.2.8

PIO 01.09 Trainee, given an incident, a situation, or event information; organizational policies; and methods and time frame for releasing that information, shall disseminate information through applicable electronic forms of communication, including social media, so that the information is on time, accurate, and accessible to all audiences.

NFPA 7.2.9

MINIMUM STANDARDS FOR FIRE & LIFE SAFETY EDUCATOR

Reference Materials

The jurisdictional entity in which the Public Information Officer serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1035: Professional Qualifications for Public Fire and Life Safety Educator

Minimum Requirements

The Certification Program offers two levels of Public Fire Educator Certification:

Public Fire Educator I

Applicants must complete one (1) of the following:

- a. Public Fire Educator I coursework meeting the requirements of NFPA 1035; or
- b. SFFMA Public Fire Educator I curriculum.

Public Fire Educator II

Applicants must complete one (1) of the following:

- a. Public Fire Educator II coursework meeting the requirements of NFPA 1035; or
- b. SFFMA Public Fire Educator II curriculum.

AND

Applicants must hold, or apply concurrently for Public Fire Educator I

Curriculum for Fire & Life Safety Educator I

SECTION 1 ADMINISTRATION

FLSE1 01.01 Trainee, given specific forms or formats, shall document fire and life safety educational activities, so that all activities are recorded and each component of the form or format is completed with the correct information.

NFPA 1035 4.2.1

FLSE1 01.02 Trainee, given specific forms or formats and information on activities, shall prepare activity reports so that all components of the forms or formats are completed with the correct information.

NFPA 1035 4.2.2

FLSE1 01.03 Trainee, given a list of events, activity requests, pre-activity requirements, and time allotments, shall maintain a work schedule so that all activities are scheduled and completed without conflict.

NFPA 1035 4.2.3

FLSE1 01.04 Trainee, given a current list of resources, organizations, and identified need(s), shall identify community resources, services, and organizations so that the public is referred to the applicable resource(s).

NFPA 1035 4.2.4

SECTION 2 PLANNING AND DEVELOPMENT

FLSE1 02.01 Trainee, given current fire and life safety issues, community resources, services, and organizations, shall identify partners to address current fire and life safety issues so that information and resources are shared.

NFPA 1035 4.3.1

SECTION 3 EDUCATION AND IMPLEMENTATION

FLSE1 03.01 Trainee, given a subject, learning objectives, the intended audience, and related resources, shall select instructional materials so that the materials are specific to the audience and activity objectives and are congruent with nationally standardized campaign themes and messages reflecting current best practices.

NFPA 1035 4.4.1

FLSE1 03.02 Trainee, given a lesson plan and a list of equipment, shall practice safety during fire and life safety education activities so that fire and life safety activities are conducted without injury to educator or participants.

NFPA 1035 4.4.2

FLSE1 03.03 Trainee, given a lesson plan with multiple presentation methods, evaluation instruments, time allotment, setting, and identified audience, shall present a lesson so that the lesson plan is followed and the objectives are met.

NFPA 1035 4.4.3

FLSE1 03.04 Trainee, given the lesson content and information on the audience, shall adapt a lesson plan so that the material presented meets the needs of the audience.

NFPA 1035 4.4.4

FLSE1 03.05 Trainee, given a scheduled event, shall notify the public so that the location, date, time, topic, and sponsoring agency are conveyed.

NFPA 1035 4.4.5

FLSE1 03.06 Trainee, given information and/or materials, a specified audience, and time frame, shall disseminate educational information so that the information reaches the audience within the specified time.

NFPA 1035 4.4.6

FLSE1 03.07 Trainee, given an incident, a situation, or event information, organizational policies, and methods and time frame for releasing that information, shall disseminate information through applicable electronic forms of communication, including social media so the information is on time and accurate.

NFPA 1035 4.4.7

SECTION 4 EVALUATION

FLSE1 04.01 Trainee, given the appropriate evaluation instrument and testing policies and procedures, shall administer an evaluation instrument so that lesson outcomes are measured.

NFPA 1035 4.5.1

FLSE1 04.02 Trainee, given the scoring procedures and grading scale, shall score an evaluation instrument so that lesson outcomes are known.

NFPA 1035 4.5.2

Curriculum for Fire & Life Safety Educator II

SECTION 1 ADMINISTRATION

FLSE2 01.01 Trainee, given budgetary guidelines, program needs, and delivery expense projections, shall prepare a written budget proposal for a specific program or activity so that all guidelines are followed and the budget identifies all program needs.

NFPA 1035 5.2.1

FLSE2 01.02 Trainee, given program needs, past expenditures, current materials, personnel cost, and guidelines, shall project program budget income/expenditures so that projections are within accepted guidelines and program needs are addressed in the projected income/expenditures.

NFPA 1035 5.2.2

FLSE2 01.03 Trainee, given a fire or injury issue and policy development guidelines, shall develop a public policy recommendation for management so that justification for the policy is provided, the issue is explained, the policy identifies solutions, and the impact or benefit from adopting the policy is stated.

NFPA 1035 5.2.3

FLSE2 01.04 Trainee, given written performance criteria, organizational policies on performance evaluations, and evaluation forms, shall evaluate subordinate performance so that the employee is evaluated objectively, feedback is provided to the employee, and the evaluation is completed according to organizational policy and procedures.

NFPA 1035 5.2.4

SECTION 2 PLANNING AND DEVELOPMENT

FLSE2 02.01 Trainee, given relevant local loss and injury data, shall establish fire and life safety education priorities within a program so that local fire and life safety education activities address identified risk priorities.

NFPA 1035 5.3.1

FLSE2 02.02 Trainee, given information about the organizations in the partnership, the goals of the partnership, and organizational guidelines, shall facilitate a fire and life safety collaborative partnership within the organization and with external partners so that fire and life safety education objectives for the partnership are achieved.

NFPA 1035 5.3.2

FLSE2 02.03 Trainee, given department/agency policies on requesting resources and a description of the resources needed, shall prepare a request for resources from an external organization so that the request identifies needed resources and conforms to department/agency policies and the requirements of the resource provider.

NFPA 1035 5.3.3

SECTION 3 EDUCATION

FLSE2 03.01 Trainee, given an identified fire or life safety objective and characteristics of the target audience, shall develop informational material so that information provided is accurate, relevant to the objective, and specific to the characteristics and needs of the target audience.

NFPA 1035 5.4.1

FLSE2 03.02 Trainee, given learning objectives and a specified audience(s), shall develop a lesson plan so that the objectives are met and the needs of the target audience are addressed.

NFPA 1035 5.4.2

FLSE2 03.03 Trainee, given a lesson plan and a specified audience, shall develop educational materials so that the materials support the lesson plan, are specific to the audience, and are congruent with nationally standardized campaign themes and messages reflecting current best practices.

NFPA 1035 5.4.3

FLSE2 03.04 Trainee, given a comprehensive educational strategy, a target audience, and its characteristics, shall design a fire and life safety education program so that the goals of the given strategy are addressed.

NFPA 1035 5.4.4

FLSE2 03.05 Trainee, given results of an evaluation process and program objectives, shall revise an educational program so that the program is modified and objectives are achieved.

NFPA 1035 5.4.5

SECTION 4 EVALUATION

FLSE2 04.01 Trainee, given educational program goals and objectives and evaluation instrument(s), shall develop an evaluation strategy so that program outcomes are measured.

NFPA 1035 5.5.1

FLSE2 04.02 Trainee, given educational program goals and objectives and an evaluation strategy, shall design an evaluation instrument so that the evaluation instrument measures the program outcome.

NFPA 1035 5.5.2

FLSE2 04.03 Trainee, given educational program goals and objectives and evaluation instrument(s), shall implement an evaluation strategy so that educational program outcomes are measured.

NFPA 1035 5.5.3

MINIMUM STANDARDS FOR WILDLAND FIRE FIGHTING

Reference Materials

The jurisdictional entity in which the Wildland Fire Fighting Personnel serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1051: Standard for Wildland Fire Fighter Professional

NWCG

Firefighter Training (S-130);

Introduction to Wildland Fire Behavior Systems (S-190);

Human Factors on the Fireline (L-180);

Introduction to Incident Command System (I-100)

Minimum Requirements

Applicants must complete one (1) of the following:

- i. SFFMA Wildland Fire Fighting Curriculum; or
- ii. Wildland Fire Fighting coursework meeting the requirements of NWCG S-130, S-190, L-180, and I-100 (online coursework accepted if effective on or after June 1, 2020); or
- iii. Texas Forest Service 40-Hour Wildland Fire Fighting course or equivalent; or
- iv. TCFP Basic Wildland Fire Protection certification or higher.

Curriculum for Wildland Fire Fighting

SECTION 1 BASIC CONCEPTS

Upon the successful completion of this section, participants will be able to recognize basic wildland fire concepts and identify the similarities and differences between structural and wildland fire fighting.

- WF-01.01 Trainee shall define basic terminology used in wildland fire. (25-I.01)
- WF-01.02 Trainee shall identify the parts of a wildland fire.
- WF-01.03 Trainee shall describe the ICS and how the incident management structure is organized. (1-II.01)
- WF-01.04 Trainee shall describe the general responsibilities of each section in the ICS. (1-II.03)
- WF-01.05 Trainee shall explain the benefits to crew organizations and describe the different types of crew organizations commonly used in initial attack and extended attack.
- WF-01.06 Trainee shall describe frequencies and how they affect radio communications.
- WF-01.07 Trainee shall identify the types of radios used in wildland fire fighting operations and explain the purpose/function of the basic parts and controls.
- WF-01.08 Trainee shall list the elements of proper radio use procedures and describe how to transmit a radio message correctly.
- WF-01.09 Trainee shall describe radio troubleshooting practices used to improve radio reception or transmission.
- WF-01.10 Trainee shall describe precautions and care to protect the radio from damage.

SECTION 2 WILDLAND FIRE BEHAVIOR

Upon the successful completion of this section, participants will be able to recognize the factors that affect a wildland fire environment.

- WF-02.01 Trainee shall identify the elements of the fire triangle. (25-I.02)
- WF-02.02 Trainee shall describe the methods of heat transfer. (25-I.05)
- WF-02.03 Trainee shall identify the fuel characteristics that influence the behavior of wildland fire. (25-I.02)
- WF-02.04 Trainee shall demonstrate the ability to apply the major fuel types to a specific geographic area, and explain why they are of concern to firefighters.
- WF-02.05 Trainee shall demonstrate the ability to determine fuel characteristics based on illustrations and descriptions.
- WF-02.06 Trainee shall describe how weather influences wildland fire behavior. (25-I.02)
- WF-02.07 Trainee shall describe the effect of temperature and Relative Humidity (RH), precipitation, atmospheric stability/instability, winds and wind systems, and critical fire weather conditions on wildland fire behavior.
- WF-02.08 Trainee shall identify the resources used to aid in the management of wildland fires.
- WF-02.09 Trainee shall list the basic characteristics of topography and describe how they affect wildland fire behavior.
- WF-02.10 Trainee shall identify indicators that fire behavior may be increasing and influences that may cause extreme fire behavior.
- WF-02.11 Trainee shall list fire environment factors to be aware of while monitoring fire behavior.
- WF-02.12 Trainee shall discuss and predict the outcomes of factors influencing fire behavior.

SECTION 3 WILDLAND FIRE FIGHTING SAFETY

Upon the successful completion of this section, participants will be able to analyze and safely apply accepted strategies and tactics in the wildland fire environment.

- WF-03.01 Trainee shall define safety and describe the importance of the steps of the risk management process. (25-I.08)
- WF-03.02 Trainee shall define situational awareness and describe its importance.
- WF-03.03 Trainee shall identify potential hazards in the wildland fire environment.
- WF-03.04 Trainee shall identify the common denominators of fire behavior on tragedy fires.
- WF-03.05 Trainee shall describe the communication responsibilities of the wildland firefighter.
- WF-03.06 Trainee shall describe actions that foster teamwork.
- WF-03.07 Trainee shall discuss and apply the appropriate "Watch-Out" situations and Standard Firefighting Orders to minimize the potential for serious injury or death. (25-I.08)
- WF-03.08 Trainee shall describe the relationship between Lookouts, Communications, Escape routes, and Safety Zones (LCES) and the Standard Firefighting Orders. (25-I.08)
- WF-03.09 Trainee shall analyze video presentations of incident situations where LCES was misapplied and determine what should have been done.
- WF-03.10 Trainee shall determine the minimum safety zone for a given set of incident facts.
- WF-03.11 Trainee shall describe the difference between deployment sites and safety zones.
- WF-03.12 Trainee shall explain the purpose of an After Action Review (AAR) and the role of the firefighter in the review process.

SECTION 4 FIREFIGHTER AND EQUIPMENT PREPAREDNESS

Upon the successful completion of this section, participants will be able to identify the requirements of the individual's preparedness and demonstrate the readiness of all tools, equipment and vehicles utilized on a wildland fire assignment.

- WF-04.01 Trainee shall list the benefits of maintaining a high level of physical fitness and health.
- WF-04.02 Trainee shall develop a list and describe types of personal gear needed for an extended period away from the wildland firefighter's W Home station.
- WF-04.03 Trainee shall explain the importance of keeping personal gear and assigned area clean and organized.
- WF-04.04 Trainee shall explain the importance of the proper use, maintenance, inspection, and accountability of assigned PPE.
- WF-04.05 Trainee shall explain the functions of the fire shelter.
- WF-04.06 Trainee shall discuss the inspection and care of the fire shelter.
- WF-04.07 Trainee shall describe and demonstrate the correct deployment procedures for the fire shelter in twenty-five (25) seconds or less.
- WF-04.08 Trainee shall discuss commonly used hand tools in wildland fire fighting, and describe the function of each and how to inspect, maintain, and sharpen them. (25-I.01 O.)
- WF-04.09 Trainee shall describe the proper carrying, passing, spacing, and storing techniques for commonly used hand tools.
- WF-04.10 Trainee shall, given a description of fireline jobs and a choice of hand tools, select the hand tool that would be used for each job.
- WF-04.11 Trainee shall describe and demonstrate the safe operation of firing devices commonly used in wildland fire suppression.
- WF-04.12 Trainee shall discuss safety procedures to follow when traveling by:
 - A. vehicle;
 - B. helicopter; or
 - C. on foot
- WF-04.13 Trainee shall discuss and demonstrate the safety inspection of a crew transport vehicle.
- WF-04.14 Trainee shall explain the importance of respecting cultural differences while on a fire assignment.

SECTION 5 WILDLAND SUPPRESSION STRATEGIES AND TACTICS

Upon the successful completion of this section, participants will be able to demonstrate proper wildland suppression activities including initial size-up, recognition of strategies, and application of tactics.

- WF-05.01 Trainee shall describe and perform the initial at-the-scene size-up process for wildland fire suppression. (25-I.05)
- WF-05.02 Trainee shall identify the information needed for successful size-up reporting. (25-I.05)
- WF-05.03 Trainee shall explain procedures for designating and protecting the area of fire origin for follow-up investigation.
- WF-05.04 Trainee shall describe three (3) methods for breaking the fire triangle.
- WF-05.05 Trainee shall describe the three (3) strategies of attack on a fire. (25-I.01)
- WF-05.06 Trainee shall describe various fire suppression techniques and their uses. (25-I.01)
- WF-05.07 Trainee shall describe types of firelines and the effective standards for fireline construction.
- WF-05.08 Trainee shall describe the threats and hazards to control lines.
- WF-05.09 Trainee shall describe two kinds of coordinated crew techniques used for fireline construction.

- WF-05.10 Trainee shall describe the proper follow-up procedures for a dozer or tractor plow fireline.
- WF-05.11 Trainee shall describe safety procedures to follow when working around engines, tractor plows, and dozers.
- WF-05.12 Trainee shall describe safety procedures to follow in an area where retardant or water drops are being made.
- WF-05.13 Trainee shall identify and describe common water-handling devices and delivery systems used during wildland fire suppression, and demonstrate the application of each.
- WF-05.14 Trainee shall identify and describe the operation of the most common type of pump used in wildland fire suppression.
- WF-05.15 Trainee shall identify the responsibilities and PPE of the portable pump operator.
- WF-05.16 Trainee shall describe safe brush truck operation techniques used in fire suppression.
- WF-05.17 Trainee shall describe and demonstrate how to properly retrieve, clean, inspect, and store deployed hose, fittings and accessories.
- WF-05.18 Trainee shall describe the hazards to hose lays and how to mark non-serviceable sections of hose and couplings.

SECTION 6 WILDLAND/URBAN INTERFACE

Upon the successful completion of this section, participants will be able to recognize the wildland/urban interface, the special considerations associated with that environment, and appropriate safety practices when responding to wildland/urban interface fires.

- WF-06.01 Trainee shall discuss the challenges associated with wildland/urban interface fires. (25-I.07)
- WF-06.02 Trainee shall discuss personnel safety concerns and the associated "Watch-Out" Situations in wildland/urban interface fires. (25-I.07)
- WF-06.03 Trainee shall define hazardous materials and explain the general guidelines when reacting to a possible hazardous material emergency.
- WF-06.04 Trainee shall list and describe the six (6) steps in the D.E.C.I.D.E. process.
- WF-06.05 Trainee shall list and explain the six (6) clues for detecting the presence of hazardous materials.

SECTION 7 MOP UP AND PATROLING

Upon the successful completion of this section, participants will be able to recognize the importance of effective mop-up and patrol activities on wildland fire.

- WF-07.01 Trainee shall describe how to extinguish burning materials during mop-up activities. (25-I.06)
- WF-07.02 Trainee shall describe systematic methods of mop up.
- WF-07.03 Trainee shall explain how four (4) of the senses aid in detecting burning materials.
- WF-07.04 Trainee shall discuss the technique of cold trailing on a fire perimeter and the importance of breaking up and dispersing machine piles and berms adjacent to the control line.
- WF-07.05 Trainee shall discuss the factors that determine the amount of additional work required for a water or retardant line and the associated safety concerns.
- WF-07.06 Trainee shall describe the process of strengthening the fire control line to facilitate holding.
- WF-07.07 Trainee shall describe factors to consider when patrolling a fire, such as looking for spot fire conditions and responding to them.

SECTION 8 FIELD EXERCISE

Upon the successful completion of this section, participants will be able to apply the knowledge and skills associated with wildland fire suppression to safely respond to wildland fire incidents.

- WF-08.01 Trainee shall demonstrate proper travel procedures en route to and from a fire. (25-I.03)
- WF-08.02 Trainee shall demonstrate the proper use and maintenance of appropriate hand tools and equipment during fire suppression activities.
- WF-08.03 Trainee shall, using appropriate PPE, demonstrate the proper inspection, maintenance, sharpening, carrying, passing, and spacing techniques for commonly used hand tools.
- WF-08.04 Trainee shall construct progressive and leap frog firelines.
- WF-08.05 Trainee shall demonstrate the ability to choose escape routes to promptly retreat to a safety zone.
- WF-08.06 Trainee shall demonstrate the ability to apply clear and concise communications on the fire ground.
- WF-08.07 Trainee shall demonstrate how to properly operate and maintain the backpack pump.
- WF-08.08 Trainee shall select, prepare, and demonstrate the safe use of the appropriate firing device for a given situation.
- WF-08.09 Trainee shall construct simple and progressive hose lays.
- WF-08.10 Trainee shall select and operate the appropriate system for the delivery of water on a wildland fire.
- WF-08.11 Trainee shall demonstrate the proper mop-up and patrol techniques.
- WF-08.12 Trainee shall participate in an After Action Review (AAR).

MINIMUM STANDARDS FOR PUBLIC SAFETY TELECOMMUNICATOR

Reference Materials

The jurisdictional entity in which the Public Safety Telecommunicator serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1061: Professional Qualifications for Public Safety Telecommunicator

Minimum Requirements

The Certification Program offers two (2) levels of Public Safety Telecommunicator Certification:

Public Safety Telecommunicator I

Applicants must complete one (1) of the following:

- i. Public Safety Telecommunicator I coursework meeting the requirements of NFPA 1061; or
- ii. SFFMA Public Safety Telecommunicator I course.

Public Safety Telecommunicator II

Applicants must complete one (1) of the following:

- i. Public Safety Telecommunicator II coursework meeting the requirements of NFPA 1061; or
- ii. SFFMA Public Safety Telecommunicator II course.

AND

Applicants must hold or apply concurrently for the following SFFMA certification:

- i. Public Safety Telecommunicator I

Curriculum for Public Safety Telecommunicator I

SECTION 1 RECEIVE REQUESTS FOR SERVICE

TEL1-01.01 Trainee, given a communication device, a means of collecting information, and a work station, shall secure communications with the service requester so that a communication link with the requester is achieved.

NFPA 1061 4.2.2

TEL1-01.02 Trainee, given a request for service, shall collect pertinent information, so that accurate information regarding the request is obtained.

NFPA 1061 4.2.3

TEL1-01.03 Trainee, given a request for service through a communications device, shall utilize nonverbal communications so that accurate information regarding the request is obtained.

NFPA 1061 4.2.3

SECTION 2 PROCESS REQUESTS FOR SERVICE

TEL1-02.01 Trainee shall prepare data for dispatch or referral by evaluating, categorizing, formatting, and documenting the incident per established policies, procedures, or protocols.

NFPA 1061 4.3.1

TEL1-02.02 Trainee shall prepare records of public safety services requests, given agency policies, procedures, guidelines, and resources, so that the record is correct, complete, and concise.

NFPA 1061 4.3.2

TEL1-02.03 Trainee, given the policies, procedures, and guidelines of the agency, shall utilize information provided by a service requester so that the request is accurately categorized and prioritized.

NFPA 1061 4.3.3

TEL1-02.04 Trainee shall determine incomplete, conflicting, or inconclusive information or data, given agency policies, procedures, guidelines, protocols, and resources, so that an allocation of resources is selected.

NFPA 1061 4.3.4

TEL1-02.05 Trainee shall notify correct personnel about addition, deletion, and correction of data, given agency policies, procedures, guidelines, and protocols, so that documents, files, databases, maps, and resource lists are accurately maintained.

NFPA 1061 4.3.5

SECTION 3 DISSEMINATE REQUESTS FOR SERVICE

TEL1-03.01 Trainee, given agency policies, procedures, guidelines, and protocols, shall relay instructions, information, and directions to the service requester so that information appropriate to the incident is consistent with agency policies, procedures, guidelines, and protocols, and results in resolution, referral, or response.

NFPA 1061 4.4.1

TEL1-03.02 Trainee, given processed data, shall relay information to other public safety telecommunications personnel or entities so that accurate information regarding the request for service is provided.

NFPA 1061 4.4.2

TEL1-03.03 Trainee, given an inquiry from the public or the media, shall respond to requests for information so that the policies, procedures, and guidelines are followed.

NFPA 1061 4.4.3

SECTION 4 FELLOW EMPLOYEE EXHIBITING SIGNS AND SYMPTOMS OF EMOTIONAL AND BEHAVIORAL DISTRESS

TEL1-04.01 Trainee, given an individual exhibiting signs and symptoms of emotional and behavioral health distress in a peer setting, policies and procedures to be initiated with an awareness level education in emotional and behavioral health distress, shall identify signs and symptoms of emotional and behavioral health distress so that the issue is recognized, confidentiality is maintained within the guidance of the AHJ, communication is open, nonjudgmental awareness is retained, department or community-based program is made accessible, and assistance is offered or an appropriate referral is initiated.

NFPA 1061 4.5

Curriculum for Public Safety Telecommunicator II

SECTION 1 RECEIVE REQUESTS FOR SERVICE

TEL2-01.01 Trainee, given equipment used by the agency, shall monitor public safety radio systems so that information requiring action by the Public Safety Telecommunicator is identified.

NFPA 1061 5.2.2

TEL2-01.02 Trainee, given equipment used by the agency, shall monitor electronic data systems so that information requiring action by the Public Safety Telecommunicator is identified.

NFPA 1061 5.2.2

TEL2-01.02 Trainee, given equipment used by the agency, shall monitor alarm systems so that information requiring action by the Public Safety Telecommunicator is identified.

NFPA 1061 5.2.2

SECTION 2 PROCESS REQUESTS FOR SERVICE

TEL2-02.02 Trainee, given a request for service, available resources, and agency policies, procedures, guidelines, and protocols, shall validate incident information so that an appropriate response is determined and a resource allocation prepared.

NFPA 1061 5.3.2

TEL2-02.03 Trainee, given the resources available to the agency and utilizing the systems and equipment in the public safety communications center, shall maintain location and status of units so that the current availability, status, and safety of all deployable resources is known.

NFPA 1061 5.3.3

TEL2-02.04 Trainee, given signals, messages, codes, and data, shall categorize alarm information so that the information is properly interpreted in preparation for the allocation of resources.

NFPA 1061 5.3.4

TEL2-02.05 Trainee, given information provided by other telecommunicators or field units and the agency policies, procedures, guidelines, and protocols, shall determine the priority of a service request so that the priority of the request is defined.

NFPA 1061 5.3.5

TEL2-02.06 Trainee, given the validated and prioritized request for service and the availability of deployable resources, shall formulate a response so that the most appropriate response is selected and the safety of responders is considered.

NFPA 1061 5.3.6

SECTION 3 DISSEMINATE REQUESTS FOR SERVICE

TEL2-03.01 Trainee, given the validated and prioritized request for service and the agencies' telecommunications equipment, shall initiate deployment of response units so that service request information is conveyed to units designated for response.

NFPA 1061 5.4.2

TEL2-03.02 Trainee, given available resources and telecommunications equipment, shall relay service request information so that all pertinent information is communicated to all responding units and agencies.

NFPA 1061 5.4.3

TEL2-03.03 Trainee, given a service request, shall gather supplemental information so that current information is evaluated, prioritized, and relayed to response units or other personnel and agencies as needed.

NFPA 1061 5.4.4

TEL2-03.04 Trainee, given data indicating the likelihood or onset of a critical situation beyond the normal scope of operations, shall activate the community emergency action plan so that the implementation is timely and in accordance with agency policies, procedures, guidelines, and protocols.

NFPA 1061 5.4.5

TEL2-03.05 Trainee, given internal emergency and agency policies, procedures, guidelines, and protocols, shall activate the public safety communication center emergency action plan so that the integrity of the communications system is maintained and the safety of center personnel is achieved.

NFPA 1061 5.4.6

MINIMUM STANDARDS FOR SUPPORT PERSONNEL

Reference Materials

The jurisdictional entity in which the Support Personnel serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1584: *Standard on the Rehabilitation Process for Members During Emergency Operations and Training Exercises*

Minimum Requirements

Applicants must complete each of the following:

1. the most current version of FEMA NIMS IS-100: Introduction to ICS;
2. the most current version of FEMA NIMS IS-700: Introduction to NIMS;
3. Emergency Vehicle Operator Course (EVOC) or Emergency Vehicle Driver Training (EVDT);
4. Traffic Safety or Traffic Management; and
5. First Aid including CPR and AED

MINIMUM STANDARDS FOR ROPE RESCUE

This program is designed to provide specialty certification and training for Volunteer Firefighters, Volunteer Search & Rescue Technicians, Volunteer Emergency Medical Technicians and others as the Board may determine.

Technical Search & Rescue Personnel who have received training prior to passage of this program may, upon providing proof to a Board member and receiving approval, apply the training hours for certification. Any training hours earned prior to January 1, 2015 must be approved by the Board.

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following reference materials:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

NFPA 1670: Standard on Operations and Training for Technical Search and Rescue Incidents

IFSTA

Fire Service Technical Search and Rescue

Principles of Vehicle Extrication

Other

Jurisdictionally developed codes and protocols

Minimum Requirements

The Certification Program offers three (3) levels of Rope Rescue Certification:

Rope Rescue Awareness

Applicants must:

1. have completed and documented one of the following:
 - a. Rope Rescue Awareness as defined by NFPA 1006;
 - b. SFFMA Rope Rescue Awareness coursework

Rope Rescue Operations

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Rope Rescue Awareness

AND

2. have completed and documented one of the following:
 - a) Rope Rescue Operations as defined by NFPA 1006;
 - b) SFFMA Rope Rescue Operations coursework

Rope Rescue Technician

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Rope Rescue Awareness
 - b. Rope Rescue Operations

AND

2. have completed and documented one of the following:
 - a) Rope Rescue Technician as defined by NFPA 1006;
 - b) SFFMA Rope Rescue Technician coursework

Curriculum for Rope Rescue Awareness

RR-01.01 Trainee shall direct a team in the operation of a simple rope mechanical advantage system in a high-angle raising operation, given rescue personnel, an established rope rescue system incorporating a simple rope mechanical advantage system, a specified minimum travel distance for the load, a load to be moved, and an anchor system, so that the movement is controlled, a reset is accomplished, the load can be held in place when needed, operating methods do not stress the system to the point of failure, commands are used to direct the operation, and potential problems are identified, communicated, and managed.

NFPA 1006 6.1.1

RR 01.01 Trainee, given rescue personnel, an established rope rescue system, a load to be moved, and an anchor system, shall assist a team in operation of the haul line of a rope mechanical advantage system raising operation so that the movement is controlled; a reset is accomplished; the load can be held in place when needed; commands are followed in direction of the operation; and potential problems are identified, communicated, and managed.

NFPA 1006 5.1.1

RR 01.02 Trainee, given background information and applicable reference materials, shall size up a rope rescue incident so that the scope of the rescue is determined, the number of victims is identified, the last reported location of all the victims is established, witnesses and reporting parties are identified and interviewed, resource needs are assessed, primary search parameters are identified, and information required to develop an initial incident action plan is obtained.

NFPA 1006 5.1.2

- RR 01.03 Trainee, given scene control barriers, PPE, requisite equipment, and available specialized resources, shall recognize incident hazards and initiate isolation procedures so that all hazards are identified; resource application fits the operational requirements; hazard isolation is considered; risks to rescuers, bystanders, and victims are minimized; and rescue time constraints are taken into account.
NFPA 1006 5.1.3
- RR 01.04 Trainee, given AHJ guidelines, shall recognize the need for technical rescue resources at an operations- or technician-level incident so that the need for additional resources is identified, the response system is initiated, the scene is secured and rendered safe until additional resources arrive, and awareness-level personnel are incorporated into the operational plan.
NFPA 1006 5.1.4
- RR 01.05 Trainee, given an incident, an assignment, an incident action plan, and resources from the tool kit, shall support an operations- or technician-level incident so that the assignment is carried out, progress is reported to command, environmental concerns are managed, personnel rehabilitation is facilitated, and the incident action plan is supported.
NFPA 1006 5.1.5

Curriculum for Rope Rescue Operations

- RR 02.01 Trainee, given background information and applicable reference materials, shall perform size up of a rescue incident so that the type of rescue is determined, the number of victims is identified, the last reported location of all victims is established, witnesses and reporting parties are identified and interviewed, resource needs are assessed, search parameters are identified, and information required to develop an incident action plan is obtained.
NFPA 1006 5.2.1
- RR 02.02 Trainee, given clothing or equipment for the protection of the rescuers, inspection procedures, cleaning and sanitation supplies, maintenance logs or records, and such tools and resources as are indicated by the manufacturer's guidelines for assembly or disassembly of components during repair or maintenance, shall maintain hazard-specific PPE so that damage, defects, and wear are identified and reported or repaired, equipment functions as designed, and preventive maintenance has been performed and documented consistent with the manufacturer's recommendations.
NFPA 1006 5.2.2
- RR 02.03 Trainee, given maintenance logs and records, tools, and resources as indicated by the manufacturer's guidelines, inspection procedures, equipment replacement protocol, and organizational standard operating procedure, shall maintain rescue equipment so that the operational status of equipment is verified and documented, all components are checked for operation, deficiencies are repaired or reported as indicated by standard operating procedure, and items subject to replacement protocol are correctly disposed of and changed.
NFPA 1006 5.2.3
- RR 02.04 Trainee, given ropes, webbing, and a list of knots used by the agency, shall demonstrate knots, bends, and hitches so that the knots are dressed, recognizable, and backed up as required.
NFPA 1006 5.2.4
- RR 02.05 Trainee, given life safety rope and other auxiliary rope rescue equipment, shall construct a single-point anchor system so that the chosen anchor system fits the incident needs, meets or exceeds the expected load, and does not interfere with rescue operations, an efficient anchor point is chosen, the need for redundant anchor points is assessed and used as required, the anchor system is inspected and loaded prior to being placed into service, and the integrity of the system is maintained throughout the operation.
NFPA 1006 5.2.5
- RR 02.06 Trainee, given life safety rope and other auxiliary rope rescue equipment, shall construct a multiple-point anchor system so that the chosen anchor system fits the incident needs, the system strength meets or exceeds the expected load and does not interfere with rescue operations, equipment is visually inspected prior to being put in service, the most appropriate anchor points are chosen, the anchor system is system safety checked prior to being placed into service, the integrity of the system is maintained throughout the operation, and the force will be distributed — proportionally or disproportionately — between more than one anchor point.
NFPA 1006 5.2.6
- RR 02.07 Trainee, given a rope rescue system and rescue personnel, shall conduct a system safety check so that a physical/visual check of the system is made to ensure proper rigging, a load test is performed prior to life-loading the system, and verbal confirmation of these actions is announced and acknowledged before life-loading the rope rescue system.
NFPA 1006 5.2.7
- RR 02.08 Trainee, given life safety rope or webbing traversing a sharp or abrasive edge, edge protection, and other auxiliary rope rescue equipment, shall place edge protection so that the rope or webbing is protected from abrasion or cutting, the rescuer is safe from falling while placing the edge protection, the edge protection is secure, and the rope or webbing is securely placed on the edge protection.
NFPA 1006 5.2.8
- RR 02.09 Trainee, given life safety rope, anchor systems, PPE, and rope rescue equipment, shall construct a system intended to provide belay within a single- or two-tensioned rope system so that the system is capable of arresting a fall, a fall will not result in system failure, the system is not loaded unless actuated, actuation of the system will not injure or otherwise incapacitate the belay operator, the belay operator is not rigged into the equipment components of the system, and the system is suitable to the site and is connected to an anchor system and the load.
NFPA 1006 5.2.9

- RR 02.10 Trainee, given an operating lowering or raising mechanical advantage system, a specified minimum travel distance for the load, a system, and a load, shall operate a system intended to provide belay within a single- or two-tensioned rope system during a lowering or raising operation so that the potential fall factor is minimized, the belay is not actuated during normal lowering and raising operations, the belay system is prepared for actuation at all times during the operation, the belay operator is attentive at all times during the operation, the load's position is continually monitored, and the belay operator moves rope through the belay device as designed.
NFPA 1006 5.2.10
- RR 02.11 Trainee, given a belay and a failed line creating a dropped load, shall belay a falling load in a high-angle environment so that the belay line is not taut until the load is falling, the belay device is actuated when the load falls, the fall is arrested in a manner that minimizes the force transmitted to the load, the belay operator utilizes the belay device as designed, and the belay operator is not injured or otherwise incapacitated during actuation of the belay system.
NFPA 1006 5.2.11
- RR 02.12 Trainee, given an anchor system, a life safety rope, and rope rescue equipment, shall construct a fixed rope system so that the system constructed can accommodate the load, is efficient, and is connected to an anchor system and the load, and a system safety check is performed and the results meet the incident requirements for descending or ascending operations.
NFPA 1006 5.2.12
- RR 02.13 Trainee, given an anchor system, life safety rope(s), descent control device, and auxiliary rope rescue equipment, shall construct a lowering system so that the system can accommodate the load, is efficient, is capable of controlling the descent, is capable of holding the load in place or lowering with minimal effort over the required distance, and is connected to an anchor system and the load.
NFPA 1006 5.2.13
- RR 02.14 Trainee, given rescue personnel, an established lowering system, a specified minimum travel distance for the load, and a load to be moved, shall direct a lowering operation in a high-angle environment so that the movement is controlled, the load can be held in place when needed, operating methods do not stress the system to the point of failure, rope commands are used to direct the operation, and potential problems are identified, communicated, and managed.
NFPA 1006 5.2.14
- RR 02.15 Trainee, given life safety rope, carabiners, pulleys, rope grab devices, and auxiliary rope rescue equipment, shall construct a simple rope mechanical advantage system so that the system constructed can accommodate the load, is efficient, and is connected to an anchor system and the load.
NFPA 1006 5.2.15
- RR 02.16 Trainee, given rescue personnel, an established rope rescue system incorporating a simple rope mechanical advantage system, a specified minimum travel distance for the load, a load to be moved, and an anchor system, shall direct a team in the operation of a simple rope mechanical advantage system in a high-angle raising operation so that the movement is controlled, a reset is accomplished, the load can be held in place when needed, operating methods do not stress the system to the point of failure, commands are used to direct the operation, and potential problems are identified, communicated, and managed.
NFPA 1006 5.2.16
- RR 02.17 Trainee, given a load, an anchor system, life safety rope, carabiners, pulleys, rope grab devices, and rope rescue equipment, shall construct a compound rope mechanical advantage system so that the system constructed accommodates the load and reduces the force required to lift the load, operational interference is factored and minimized, the system is efficient, a system safety check is completed, and the system is connected to an anchor system and the load.
NFPA 1006 5.2.17
- RR 02.18 Trainee, given a rope rescue system incorporating a compound rope mechanical advantage system and a load to be moved, and a specified minimum travel distance for the load, shall direct the operation of a compound rope mechanical advantage system in a high-angle environment so that a system safety check is performed; a reset is accomplished, and the movement is controlled; the load can be held in place when needed; operating methods do not stress the system to the point of failure; operational commands are clearly communicated; and potential problems are identified, communicated, and managed.
NFPA 1006 5.2.18
- RR 02.19 Trainee, given a rope rescue system incorporating a compound rope mechanical advantage system and a load to be moved, and a specified minimum travel distance for the load, shall negotiate an edge while attached to a rope rescue system during a high-angle lowering and raising operations so that risk to the rescuer is minimized; the means of attachment to the rope rescue system is secure; and all projections and edges are negotiated while minimizing risks to the rescuer or equipment.
NFPA 1006 5.2.19
- RR 02.20 Trainee, given diagnostic and packaging equipment and an actual or simulated EMS agency, shall prepare for transfer of victims so that rescuers and victims are protected from hazards, victim injuries or illnesses are managed, and victims are delivered to the EMS provider with information regarding the history of the rescue activity and victim conditions.
NFPA 1006 5.2.20
- RR 02.21 Trainee, given rescue personnel, litter tender(s), an established lowering/mechanical advantage system, a specified minimum travel distance for the load and a victim packaged in a litter to be moved, shall direct a litter-lowering and litter-raising operation in a low-angle environment so that the litter is attached to the lowering/raising and belay systems, movement is controlled; litter tender(s) are used to manage the litter during the lower and raise, the litter can be held in place when needed; operating methods do not stress the system to the point of failure; rope commands are used to direct the operation; and potential problems are identified, communicated, and managed.
NFPA 1006 5.2.21

RR 02.22 Trainee, given a rope rescue system, a specified minimum travel distance for the litter tender, life safety harnesses, litters, bridles, and specialized equipment necessary for the environment, shall operate as a litter tender in a low-angle lowering or raising operation so that risks to victims and rescuers are minimized; the means of attachment to the rope rescue system is secure; and the terrain is negotiated while minimizing risks to equipment or persons.

NFPA 1006 5.2.22

RR 02.23 Trainee, given rescue personnel, an established lowering/mechanical advantage system, a specified minimum travel distance for the load, a victim packaged in a litter to be moved, and a means of negotiating edges and projections along the travel path, shall direct a litter-lowering or litter-raising operation in a high-angle environment so that the litter is attached to the lowering/raising and belay systems, an edge is negotiated during a lower and raise; tag lines are used to manage the litter during the lower and raise; the litter can be held in place when needed; operating methods do not stress the system to the point of failure; rope commands are used to direct the operation; and potential problems are identified, communicated, and managed.

NFPA 1006 5.2.23

RR 02.24 Trainee, given an incident scenario, assigned resources, and site safety data, shall terminate a technical rescue operation so that rescuer risk and site safety are managed, scene security is maintained and custody transferred to a responsible party, personnel and resources are returned to a state of readiness, record keeping and documentation occur, and post event analysis is conducted.

NFPA 1006 5.2.24

Curriculum for Rope Rescue Technician

RR 03.01 Trainee, given a victim stranded on or clinging to a feature and a means of removal of the victim to the ground or other safe area, shall direct a team in the operation of a rope rescue system to remove a victim stranded on or clinging to a natural or manmade feature in a high-angle environment so that risks to victims and rescuers are minimized, injury to the victim is minimized, the means of attachment to the rope rescue system is maintained, the victim is removed and brought to a safe area for transfer to EMS.

NFPA 1006 5.3.01

RR 03.02 Trainee, given a victim suspended by a harness attached to an anchored rope or webbing, systems for removal of the victim from the rope or webbing, and a means of removal of the victim to the ground or other safe area, shall direct a team in the operation of a rope rescue system to remove a victim suspended from rope or webbing in a high-angle environment so that risks to victims and rescuers are minimized, injury to the victim is minimized, the means of attachment to the rope rescue system is maintained, the victim is removed from the rope or webbing, and the victim is brought to a safe area for transfer to EMS.

NFPA 1006 5.3.02

RR 03.03 Trainee, given a rope rescue system, a specified minimum travel distance for the victim, victim transfer systems, and specialized equipment necessary for the environment, shall while suspended from a rope rescue system, perform the transfer of a victim suspended from rope or webbing in a high-angle environment to a separate rope rescue lowering or mechanical advantage system so that risks to victims and rescuers are minimized, undesirable victim movement during the transfer is minimized, the means of attachment to the rope rescue system is maintained, the victim is removed from the static line and lowered or raised to a stable surface, victim positioning is managed to reduce adverse effects associated with suspension-induced injuries, selected specialized equipment facilitates efficient victim movement, and the victim can be transported to the local EMS provider.

NFPA 1006 5.3.03

RR 03.04 Trainee, given a rope rescue system, a specified minimum travel distance for the litter tender, life safety harnesses, litters, bridles, and specialized equipment necessary for the environment, shall perform the activities of a litter tender in a high-angle lowering or raising operation so that risks to victims and rescuers are minimized; the means of attachment to the rope rescue system is secure; and the travel path is negotiated while minimizing risks to equipment or persons.

NFPA 1006 5.3.04

RR 03.05 Trainee, given rescue personnel, life safety rope, rope rescue equipment, and a suitable anchor capable of supporting the load, shall participate as a member of a team in the construction of a rope rescue system intended to move a suspended rescue load along a horizontal path to avoid an obstacle so that personnel assignments are made and clearly communicated; the system constructed can accommodate the load; tension applied within the system will not exceed the rated capacity of any of its components' parts; a system safety check is performed; movement on the load is efficient; and loads can be held in place or moved with minimal effort over the required distance.

NFPA 1006 5.3.05

RR 03.06 Trainee, given rescue personnel, an established system, a target for the load, a load to be moved, and PPE, shall direct a team in the operation of a rope system to move a suspended rescue load along a horizontal path so that the movement is controlled; the load is held in place when needed; operating methods do not stress the system to the point of failure; personnel assignments are made; tasks are communicated; and potential problems are identified, communicated, and managed.

NFPA 1006 5.3.06

RR 03.07 Trainee, given the equipment used by the agency, and a task that reflects the anticipated rescue environment, shall climb and traverse natural features or man-made structures that require the use of climbing aids, positioning equipment, or fall protection systems to prevent the fall or unwanted movement of the rescuer so that the objective is achieved, the rescuer can perform the required task, and fall protection is maintained.

NFPA 1006 5.3.07

RR 03.08 Trainee, given an environment consistent with the mission of the agency, the policies and procedures of the organization, and a person in a crisis scenario, shall interact with a person at height who is in an emotional or psychological crisis so that the condition is recognized and communicated to the team, the rescuer is prevented from harm, and the actions of the rescuer do not escalate the incident.

NFPA 1006 5.3.08

RR 03.09 Trainee, given an anchored fixed-rope system, a specified minimum distance for the rescuer, a system to allow ascent of a fixed rope, a structure, a belay system, a life safety harness worn by the person ascending, and PPE, shall ascend a fixed rope in a high-angle environment so that the person ascending is secured to the fixed rope in a manner that will not allow him or her to fall, the person ascending is attached to the rope by means of an ascent control device(s) with at least two points of contact, injury to the person ascending is minimized, the person ascending can stop at any point on the fixed rope and rest suspended by his or her harness, the system will not be stressed to the point of failure, the person ascending can convert his or her ascending system to a descending system, obstacles are negotiated, the system is suitable for the site, and the objective is reached.

NFPA 1006 5.3.09

RR 03.10 Trainee, given an anchored fixed-rope system, a specified minimum travel distance for the rescuer, a system to allow descent of a fixed rope, a belay system, a life safety harness worn by the person descending, and PPE, shall descend a fixed rope in a high-angle environment so that the person descending is attached to the fixed rope in a manner that will not allow him or her to fall, the person descending is attached to the rope by means of a descent control device, the speed of descent is controlled, injury to the person descending is minimized, the person descending can stop at any point on the fixed rope and rest suspended by his or her harness, the system will not be stressed to the point of failure, the system is suitable for the site, and the objective is reached.

NFPA 1006 5.3.10

RR 03.11 Trainee, given an anchored fixed-rope system with a simulated malfunctioning descent control device, a system to allow escape from the malfunctioning device, a belay system, a life safety harness worn by the person descending, and PPE, shall demonstrate the ability to escape from a jammed or malfunctioning device during a fixed-rope descent in a high-angle environment so that the person descending is attached to the fixed rope in a manner that will not allow him or her to fall, the person descending is attached to the rope by means of a descent control device, the means for escape will allow the rescuer to escape either upward or downward from the malfunctioning descent control device, injury potential to the rescuer is minimized, the system will not be stressed to the point of failure, the system is suitable for the site, and the objective is reached.

NFPA 1006 5.3.11

MINIMUM STANDARDS FOR CONFINED SPACE RESCUE

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

NFPA 1670: Standard on Operations and Training for Technical Search and Rescue Incidents

IFSTA

Fire Service Technical Search and Rescue

Other

Jurisdictionally developed codes and Protocols

Minimum Requirements

The Certification Program offers three (3) levels of Rope Rescue Certification:

Rope Rescue Awareness

Applicants must:

1. have completed and documented one of the following:
 - a. Confined Space Rescue Awareness as defined by NFPA 1006;
 - b. SFFMA Confined Space Rescue Awareness coursework

Rope Rescue Operations

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Confined Space Rescue AwarenessAND
2. have completed and documented one of the following:
 - a) Confined Space Rescue Operations as defined by NFPA 1006;
 - b) SFFMA Confined Space Rescue Operations coursework

Rope Rescue Technician

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Confined Space Rescue Awareness
 - b. Confined Space Rescue OperationsAND
2. have completed and documented one of the following:
 - a) Confined Space Rescue Technician as defined by NFPA 1006;
 - b) SFFMA Confined Space Rescue Technician coursework

Curriculum for Confined Space Rescue Awareness

CS 01.01 Trainee, given scene control barriers, PPE, requisite equipment, and available specialized resources, shall initiate isolation procedures for a specific confined space incident so that all hazards are identified; unauthorized entry to the confined space and adjacent areas are controlled; resource application fits the operational requirements; hazard isolation is considered; risks to rescuers, bystanders, and victims are minimized; and rescue time constraints are taken into account.

NFPA 1006 7.1.1

CS 01.02 Trainee, given hazard-specific PPE, equipment pertinent to search mission, a confined space incident location, and victim investigative information, shall initiate a search in areas immediately adjacent to the confined space so that search parameters are established, the victim survival profile is established, the access and egress of all people either involved in the search or already within the search area are questioned and the information is updated and relayed to command, the personnel assignments match their expertise, all victims in the adjacent areas to the confined space are located as quickly as possible, applicable technical rescue concerns are managed, risks to searchers are minimized, and all searchers are accounted for.

NFPA 1006 7.1.2

CS 01.03 Trainee, given a clear environment and a confined space, shall communicate with victim(s) so that victim communication is established when possible and information relative to patient condition is documented and conveyed to incoming confined space rescue resources.

NFPA 1006 7.1.3

CS 01.04 Trainee, given PPE; an anchored retrieval system attached to a victim located inside a confined space with a clear interior; safety, communication, and operational protocols; and a confined space rescue tool kit, shall perform nonentry rescue so that the retrieval system is operated to extract the victim, the rescuer is protected from fall hazards when working near unprotected edges, victim communication is established and maintained, the victim is managed through the portal and patient care is initiated on extraction.

NFPA 1006 7.1.4

- CS 01.05 Trainee, given background information and applicable reference materials, shall size up a confined space rescue incident so that the scope of the rescue is determined, the number of victims is identified, the last reported location of all the victims is established, witnesses and reporting parties are identified and interviewed, resource needs are assessed, primary search parameters are identified, and information required to develop an initial incident action plan is obtained.
NFPA 1006 7.1.5
- CS 01.06 Trainee, given AHJ guidelines, shall recognize the need for technical rescue resources at an operations- or technician-level (confined space) incident so that the need for additional resources is identified, the response system is initiated, the scene is secured and rendered safe until additional resources arrive, and awareness-level personnel are incorporated into the operational plan.
NFPA 1006 7.1.6
- CS 01.07 Trainee, given an incident, an assignment, an incident action plan, and resources from the tool kit, shall support an operations- or technician-level incident so that the assignment is carried out, progress is reported to command, environmental concerns are managed, personnel rehabilitation is facilitated, and the incident action plan is supported.
NFPA 1006 7.1.7

Curriculum for Confined Space Rescue Operations

- CS 02.01 Trainee, given hazard-specific PPE, equipment pertinent to search mission, a confined space, and victim investigative information, shall initiate a search inside a confined space in those areas immediately visible from the confined space entry portal so that search parameters are established; the victim profile is established; the people in or around the search area are questioned and the information is updated and relayed to command; the personnel assignments match their expertise; all victims inside the space that are immediately visible from outside the portal are located and identified quickly; applicable technical rescue concerns are managed; risks to searchers are minimized; and all searchers are accounted for.
NFPA 1006 7.2.1
- CS 02.02 Trainee, given background information and applicable reference materials, shall perform size-up of a confined space rescue incident so that the type of rescue is determined, the number of victims is identified, the last reported location of all victims is established, witnesses and reporting parties are identified and interviewed, resource needs are assessed, search parameters are identified, and information required to develop an incident action plan is obtained.
NFPA 1006 7.2.2
- CS 02.03 Trainee, given monitoring equipment reference material, PPE, accurately calibrated detection and monitoring equipment, and size-up information, shall conduct monitoring of the environment so that a representative sample of the space is obtained, accurate readings are made, readings are documented, and effects of ventilation in determining atmospheric conditions and the conditions of the space have been determined for exposures to existing or potential environmental hazards.
NFPA 1006 7.2.3
- CS 02.04 Trainee, given size-up information, information from technical resources, monitoring equipment, and PPE required to perform the assessment, shall assess the incident so that general area and space-specific hazards are identified, bystanders and victims are interviewed, immediate and ongoing monitoring of the space is performed, the victims' conditions and location are determined, a risk/benefit analysis is performed, methods of ingress and egress for rescuer and victims are identified, rescue systems for victim removal are determined, and an emergency means of retrieval for rescue entrants is established.
NFPA 1006 7.2.4
- CS 02.05 Trainee, given PPE and a confined space tool kit, shall control hazards so that the rescue area is established; access to the incident scene is controlled; rescuers are protected from exposure to hazardous materials and atmospheres, all forms of harmful energy releases, and physical hazards; and victims are protected from further harm.
NFPA 1006 7.2.5
- CS 02.06 Trainee, given a confined space incident requiring respiratory protection, a rescue assignment, a means of entry into and exit from the space, a rescue attendant outside the space, SCBA, breathing apparatus cylinders, and a confined space, shall apply and use SCBA as a rescue entrant so that the internal configuration of the space is clear and unobstructed so retrieval systems can be utilized for rescuers without possibility of entanglement, the victim can be seen easily from the outside of the space's primary access opening, rescuers can pass easily through the access/egress opening(s) with room to spare when PPE is worn in the manner recommended by the manufacturer, the space can accommodate two or more rescuers in addition to the victim, all hazards in and around the confined space have been identified and can be mitigated by using respiratory protection, the rescue entrant passes through the portal without removal of the SCBA, the assigned rescue duty is performed, the rescue entrant frequently assesses the level of air remaining in the cylinder and communicates this level to rescuers outside of the space, and the rescue entrant exits the space prior to activation of the low-pressure alarm on the SCBA.
NFPA 1006 7.2.6

- CS 02.07 Trainee, given a confined space incident requiring respiratory protection, a live victim, an atmosphere-supplying respirator and associated equipment, and a confined space, shall apply an atmosphere-supplying respirator to a victim so that the internal configuration of the space is clear and unobstructed so retrieval systems can be utilized for rescuers without possibility of entanglement; the victim can be easily seen from the outside of the space's primary access opening; rescuers can pass easily through the access/egress opening(s) with room to spare when PPE is worn in the manner recommended by the manufacturer; the space can accommodate two or more rescuers in addition to the victim; all hazards in and around the confined space have been identified and can be mitigated by using respiratory protection; the apparatus face piece is applied rapidly, positioned properly on the face and without air leakage; application of the face piece can be performed simultaneously with spinal precautions; the breathing apparatus unit is securely placed during victim movement so the face piece will not be pulled from the victim's face during movement; the level of air remaining in the victim's breathing apparatus is frequently accessed and communicated; and the victim is removed from the space without interruption of the air supply.
NFPA 1006 7.2.7
- CS 02.08 Trainee, given a confined space incident requiring spinal precautions, a victim, full spinal immobilization equipment, a second rescuer to assist, and a confined space, shall perform full spinal immobilization of a victim inside a confined space so that the internal configuration of the space is clear and unobstructed so retrieval systems can be utilized for rescuers without possibility of entanglement, the victim can be easily seen from the outside of the space's primary access opening, rescuers can pass easily through the access/egress opening(s) with room to spare when PPE is worn in the manner recommended by the manufacturer, the space can accommodate two or more rescuers in addition to the victim, all hazards in and around the confined space have been identified and can be mitigated by using respiratory protection so that the victim's cervical spine is manually maintained in a neutral position immediately on contact and maintained until the body and head are completely immobilized and secure, victim movement onto the spinal immobilization device creates minimal manipulation of the spine, void spaces between the victim and immobilization device are padded as appropriate, victim securement to the immobilization device will prevent spinal manipulation during movement, and applicable local treatment protocols are followed.
NFPA 1006 7.2.8
- CS 02.09 Trainee, given a confined space rescue tool kit and a confined space, shall prepare for entry into horizontally oriented confined space so that the internal configuration of the space is clear and unobstructed so retrieval systems can be utilized for rescuers without possibility of entanglement, the victim can be easily seen from the outside of the space's primary access opening, rescuers can pass easily through the access/egress opening(s) with room to spare when PPE is worn in the manner recommended by the manufacturer, the space can accommodate two or more rescuers in addition to the victim, all hazards in and around the confined space have been identified and can be mitigated by using respiratory protection so that victim communication is established when possible, continuous atmospheric monitoring is initiated, rescuer readiness is verified, rescuers' limitations are identified and evaluated, rescuers unsuitable to confined space entry operations are reassigned and replaced, route and methods of entry are determined, and rescuer evacuation is planned.
NFPA 1006 7.2.9
- CS 02.10 Trainee, given PPE; safety, communication, and operational protocols; portable lighting; and a confined space rescue tool kit; a retrieval system; and a confined space, shall enter a horizontally oriented confined space for rescue so that the internal configuration of the space is clear and unobstructed so retrieval systems can be utilized for rescuers without possibility of entanglement, the victim can be easily seen from the outside of the space's primary access opening, rescuers can pass easily through the access/egress opening(s) with room to spare when PPE is worn in the manner recommended by the manufacturer, the space can accommodate two or more rescuers in addition to the victim, all hazards in and around the confined space have been identified and can be mitigated by using respiratory protection so that the victim is contacted, controlled confined space entry is established and maintained, atmosphere is monitored continuously, the victim's mental and physical conditions are assessed further, the rescue entrant is aided by portable lighting, rescue entrants are attached to retrieval lines at all times, patient care is initiated, the patient is packaged to restrictions of the space, and patient removal can be initiated.
NFPA 1006 7.2.10
- CS 02.11 Trainee, given a confined space rescue tool kit, a litter and associated rigging equipment, a space that provides enough internal and external clearance to maneuver a litter in and around the space, shall package the victim in a litter for removal from a horizontally oriented confined space so that the victim is secured to the litter, the litter is secured to the rescue system if needed, the litter will pass through the portal, the victim is protected during the extraction, and further harm to the victim is minimized.
NFPA 1006 7.2.11
- CS 02.12 Trainee, given a portable anchor device, additional rescuers to assist in the assembly, and a vertically oriented space with a portal above which to set the portable anchor, shall assemble a portable anchor system for application of a high point of attachment to a confined space rescue system so that the portable anchor is assembled in accordance with the manufacturer's recommendations, rescue systems are attached and secured to the anchor device and the portable anchor provides enough clearance above the portal to fully extract a victim packaged in a vertically oriented litter.
NFPA 1006 7.2.12

CS 02.13 Trainee, given a confined space rescue tool kit and a confined space, shall prepare for entry into vertically oriented confined space so that the internal configuration of the space is clear and unobstructed so retrieval systems can be utilized for rescuers without possibility of entanglement, the victim can be easily seen from the outside of the space's primary access opening rescuers can pass easily through the access/egress opening(s) with room to spare when PPE is worn in the manner recommended by the manufacturer, the space can accommodate two or more rescuers in addition to the victim, all hazards in and around the confined space have been identified and can be mitigated by using respiratory protection so that victim communication is established when possible, continuous atmospheric monitoring is initiated, rescuer readiness is verified, rescuers' limitations are identified and evaluated, rescuers unsuitable to entry operations are reassigned and replaced, route and methods of confined space entry are determined, and rescuer evacuation is planned.

NFPA 1006 7.2.13

CS 02.14 Trainee, given PPE; safety, communication, operational protocols; a confined space rescue tool kit; and a confined space, shall enter a vertically oriented confined space for rescue so that the internal configuration of the space is clear and unobstructed so retrieval systems can be utilized for rescuers without possibility of entanglement, the victim can be easily seen from the outside of the space's primary access opening, rescuers can pass easily through the access/egress opening(s) with room to spare when PPE is worn in the manner recommended by the manufacturer, the space can accommodate two or more rescuers in addition to the victim, all hazards in and around the confined space have been identified and can be mitigated by using respiratory protection so that the victim is contacted, controlled confined space entry is established and maintained, atmosphere is continuously monitored, the victim's mental and physical conditions are further assessed, patient care is initiated, the patient is packaged to restrictions of the space, and patient removal can be initiated.

NFPA 1006 7.2.14

CS 02.15 Trainee, given a confined space rescue tool kit, a vertically oriented litter and associated rigging equipment, a work area that provides enough vertical clearance to extract a vertically oriented litter and a victim, shall package the victim in a litter for removal from a vertically oriented confined space so that the victim is secured to the litter, the litter is secured to the rescue system in a vertically configuration, the litter will pass through the portal, the litter can be raised high enough to clear the portal, the victim is protected during the extraction, and further harm to the victim is minimized.

NFPA 1006 7.2.15

CS 02.16 Trainee, given a confined space rescue tool kit, victim harnesses and rigging, a victim who has been discovered to be in respiratory arrest, and conditions inside the space requiring immediate extraction to prevent imminent death of the victim, shall remove a victim from a vertically oriented confined space so that the victim is rapidly secured in an extraction harness, the harness is secured to the rescue system, and the victim is removed from the space.

NFPA 1006 7.2.16

CS 02.17 Trainee, given PPE, rope and related rescue and retrieval systems, personnel to operate rescue and retrieval systems, and a confined space rescue tool kit, shall remove all entrants from a confined space so that internal obstacles and hazards are negotiated, all persons are extricated from a space in the selected transfer device, the victim and rescuers are decontaminated as necessary, and the victim is delivered to the EMS provider.

NFPA 1006 7.2.17

CS 02.18 Trainee, given an incident scenario, assigned resources, and site safety data, shall terminate a technical rescue operation so that rescuer risk and site safety are managed, scene security is maintained and custody transferred to a responsible party, personnel and resources are returned to a state of readiness, record-keeping and documentation occur, and post-event analysis is conducted.

NFPA 1006 7.2.18

Curriculum for Confined Space Rescue Technician

CS 03.01 Trainee, given hazard-specific PPE, confined space rescue entrant(s) to perform the search, equipment pertinent to search mission, a confined space, and victim investigative information, shall initiate a search inside a confined space in those areas not immediately visible from the confined space entry portal so that search parameters are established; the victim profile is established; search result information is acquired and relayed to command; the personnel assignments match their expertise; all victims inside the space are located and identified quickly; applicable technical rescue concerns are managed; risks to searchers are minimized; and all searchers are accounted for.

NFPA 1006 7.3.1

CS 03.02 Trainee, given applicable guidelines and regulations and a preplan form, shall preplan a confined space incident so that a standard approach is used during a confined space rescue emergency, hazards are recognized and documented, isolation methods are identified and documented, all accesses to the location of the confined space entry opening are identified and documented, all types of confined space entry openings are identified and documented, and internal configurations and special resource needs are documented for future rescuer use.

NFPA 1006 7.3.2

- CS 03.03 Trainee, given a confined space incident requiring respiratory protection, a rescue assignment, a means of entry into and exit from the space, a rescue attendant outside the space, personnel to manage air lines outside of the space, a supplied-air respirators (SAR), a breathing air supply system with air lines to supply the SAR, breathing apparatus cylinders, personnel to monitor and maintain the air supply system, and a confined space, shall apply and use SARs as a rescue entrant so that the internal configuration of the space will not create entanglement hazards when using air lines, the victim cannot be seen from the outside of the space's primary access opening, the portal size and configuration will not allow a rescuer to pass through the access/egress opening(s) using SCBA when worn in the manner recommended by the manufacturer, all hazards in and around the confined space have been identified and might be mitigated by using respiratory protection so that the rescue entrant passes through the portal without removal of the SAR and the assigned rescue duty is performed.
NFPA 1006 7.3.3
- CS 03.04 Trainee, given a confined space incident requiring spinal precautions, a stable victim, a short spinal immobilization device, a second rescuer to assist, and a confined space, shall perform short spinal immobilization of a victim inside a confined space so that the portal size or internal configuration will not allow the application of a full spine immobilization device, all hazards in and around the confined space have been identified and might be mitigated by using respiratory protection so that the victim's cervical spine is manually maintained in a neutral position immediately on contact and maintained until the short immobilization device is completely applied and secure, victim movement onto the spinal immobilization device creates minimal manipulation of the spine, void spaces between the victim and immobilization device are padded as appropriate, victim securement to the immobilization device will reduce spinal manipulation during movement, and applicable local treatment protocols are followed.
NFPA 1006 7.3.4
- CS 03.05 Trainee, given a confined space with a hazardous atmosphere, atmosphere-supplied respirators, and a confined space tool kit, shall prepare for entry into the confined space with a hazardous atmosphere so that entry can be made into a confined space that contains one or more of the following characteristics: the internal configuration of the space could create entanglement hazards and retrieval might not be effective, the victim cannot be seen from the outside of the space's primary access opening, the portal size and configuration will not allow a rescuer to pass through the access/egress opening(s) using SCBA when worn in the manner recommended by the manufacturer, all hazards in and around the confined space have been identified and can be mitigated by using respiratory protection so that continuous atmospheric monitoring is initiated, the atmosphere is assessed to be manageable with atmosphere-supplying respirators, victim communication is established when possible, atmosphere-supplying respirators are used by rescue entrants while within the space, atmosphere-supplying respirators are rapidly applied to the victim, rescuer readiness is verified, rescuers' limitations are identified and evaluated, rescuers unsuitable to entry operations are reassigned and replaced, route and methods of confined space entry are determined, and rescuer evacuation is planned.
NFPA 1006 7.3.5
- CS 03.06 Trainee, given hazard-specific PPE; safety, communication, and operational protocols; a confined space with a hazardous atmosphere; a confined space rescue tool kit so that the victim is contacted; and a confined space, shall enter a confined space with atmospheric hazards, given hazard-specific PPE; safety, communication, and operational protocols; a confined space with a hazardous atmosphere; a confined space rescue tool kit so that the victim is contacted; and a confined space, so that the internal configuration of the space could create entanglement hazards and retrieval might not be effective, the victim cannot be seen from the outside of the space's primary access opening, the portal size and configuration will not allow a rescuer to pass through the access/egress opening(s) using SCBA when worn in the manner recommended by the manufacturer, all hazards in and around the confined space have been identified and can be mitigated by using respiratory protection so that a controlled confined space entry is established and maintained, the atmosphere is continuously monitored, the rescuers and patient(s) are protected from the hazards, the victim's mental and physical conditions are further assessed, patient care is initiated, the patient is packaged to restrictions of the space, and patient removal can be initiated.
NFPA 1006 7.3.6

MINIMUM STANDARDS FOR TRENCH RESCUE

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

NFPA 1670: Standard on Operations and Training for Technical Search and Rescue Incidents

IFSTA

Fire Service Technical Search and Rescue

Other

Jurisdictionally developed codes and Protocols

Minimum Requirements

The Certification Program offers three (3) levels of Trench Rescue Certification:

Trench Rescue Awareness

Applicants must:

1. have completed and documented one of the following:
 - a. Trench Rescue Awareness as defined by NFPA 1006;
 - b. SFFMA Trench Rescue Awareness coursework

Trench Rescue Operations

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Trench Rescue Awareness
- AND
2. have completed and documented one of the following:
 - a) Trench Rescue Operations as defined by NFPA 1006;
 - b) SFFMA Trench Rescue Operations coursework

Trench Rescue Technician

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Trench Rescue Awareness
 - b. Trench Rescue Operations
- AND
2. have completed and documented one of the following:
 - a) Trench Rescue Technician as defined by NFPA 1006;
 - b) SFFMA Trench Rescue Technician coursework

Curriculum for Trench Rescue Awareness

- TR 01.01 Trainee, given a specific trench collapse incident, shall interview any witness or "competent person" so that potential for rapid, nonentry rescue or victim self-rescue is recognized.
NFPA 1006 12.1.1
- TR 01.02 Trainee, given a trench collapse incident, tools used for self-rescue, and the rescue area and general area are made safe, shall facilitate a nonentry rescue or victim self-rescue so that the nonentry and self-rescue tactics can be initiated.
NFPA 1006 12.1.2
- TR 01.03 Trainee, given a trench collapse incident, shall identify hazardous areas specific to a trench environment so that the scene is secured, hazards are managed, and an approach path to the trench is identified.
NFPA 1006 12.1.3
- TR 01.04 Trainee, given background information and applicable reference materials, shall size up a trench rescue incident so that the scope of the rescue is determined, the number of victims is identified, the last reported location of all the victims is established, witnesses and reporting parties are identified and interviewed, resource needs are assessed, primary search parameters are identified, and information required to develop an initial incident action plan is obtained.
NFPA 1006 12.1.4
- TR 01.05 Trainee, given scene control barriers, PPE, requisite equipment, and available specialized resources, shall recognize incident hazards and initiate isolation procedures so that all hazards are identified; resource application fits the operational requirements; hazard isolation is considered; risks to rescuers, bystanders, and victims are minimized; and rescue time constraints are taken into account.
NFPA 1006 12.1.5
- TR 01.06 Trainee, given AHJ guidelines, shall recognize the need for technical rescue resources at an operations- or technician-level (trench rescue) incident so that the need for additional resources is identified, the response system is initiated, the scene is secured and rendered safe until additional resources arrive, and awareness-level personnel are incorporated into the operational plan.
NFPA 1006 12.1.6

TR 01.07 Trainee, given an incident, an assignment, an incident action plan, and resources from the tool kit, shall support an operations- or technician-level incident so that the assignment is carried out, progress is reported to command, environmental concerns are managed, personnel rehabilitation is facilitated, and the incident action plan is supported.

NFPA 1006 12.1.7

Curriculum for Trench Rescue Operations

TR 02.01 Trainee, given a trench collapse incident and a trench rescue toolkit, shall identify potential hazards to victims and rescuers in and around a trench excavation so that potential areas of additional collapse in the trench are identified, utility lines are located, spoil piles are monitored, additional superimposed weight is identified, sources of atmospheric contamination are assessed, sources of water are identified, and environmental hazards are considered.

NFPA 1006 12.2.1

TR 02.02 Trainee, given a trench collapse incident, hazard control plan and trench rescue tool kit, shall implement a hazard control plan so that provisions for ventilation, dewatering, energy control, air monitoring; and falls, and prevention of unplanned soil movement are accomplished.

NFPA 1006 12.2.2

TR 02.03 Trainee, given a trench collapse incident and trench rescue tool kit, shall develop a shoring plan for a nonintersecting trench no more than 8 ft (2.4 m) deep so that the methods of potential collapse are recognized, the mechanisms of entrapment are identified, areas of the trench that are blown out or undercut are addressed, related tabulated data is consulted, the weights and hazards associated with the soils are considered, and the location of the victim and projected path for removal are incorporated.

NFPA 1006 12.2.3

TR 02.04 Trainee, given a trench collapse incident, trench shoring plan, and a trench rescue tool kit, shall implement a trench shoring plan for a nonintersecting trench no more than 8 ft (2.4 m) deep so that the victim is protected from additional collapse, the trench walls are supported, prior areas of collapse are addressed, shoring team members work from protected areas, and shoring systems are installed so they perform their intended function.

NFPA 1006 12.2.4

TR 02.05 Trainee, given a trench collapse incident and a trench rescue tool kit, shall release a victim from soil entrapment in a nonintersecting trench of 8 ft (2.4 m) or less in depth so that hazards to rescue personnel and victims are minimized; considerations are given to the victim's injuries, crush injuries related to compartment syndrome, and other injuries; techniques are used to enhance patient survivability; and techniques do not compromise the integrity of the existing trench shoring system.

NFPA 1006 12.2.5

TR 02.06 Trainee, given a disentangled victim, a basic first aid kit, and victim packaging resources, shall remove a victim from a trench so that basic life functions are supported as required; the victim is evaluated for signs of compartment syndrome; methods and packaging devices selected are compatible with intended routes of transfer; universal precautions are employed to protect personnel from blood-borne pathogens; and extraction times meet time constraints for medical management.

NFPA 1006 12.2.6

TR 02.07 Trainee, given PPE, trench tool kit, and removal of victim(s), shall disassemble support systems at a trench emergency incident so that soil movement is minimized, all rescue equipment is removed from the trench, sheeting and shoring are removed in the reverse order of their placement, emergency protocols and safe zones in the trench are adhered to, rescue personnel are removed from the trench, the last supporting shores are pulled free with ropes, equipment is cleaned and serviced, reports are completed, and a post-briefing is performed.

NFPA 1006 12.2.7

TR 02.08 Trainee, given an incident scenario, assigned resources, and site safety data, shall terminate a technical rescue operation so that rescuer risk and site safety are managed; scene security is maintained and custody transferred to a responsible party; personnel and resources are returned to a state of readiness; record-keeping and documentation occur; and post-event analysis is conducted.

NFPA 1006 12.2.8

Curriculum for Trench Rescue Technician

TR 03.01 Trainee, given a trench collapse incident and trench rescue tool kit, shall develop a shoring plan for an intersecting trench so that the methods of potential collapse are recognized, the mechanisms of entrapment are identified, areas of the trench that are blown out or undercut are addressed, related tabulated data is consulted, the weights and hazards associated with the soils are considered, and the location of the victim and projected path for removal are incorporated.

NFPA 1006 12.3.1

TR 03.02 Trainee, given a trench collapse incident, trench shoring plan, and a trench rescue tool kit, shall implement a trench shoring plan for intersecting trench so that the victim is protected from additional collapse, the trench walls are supported, prior areas of collapse are addressed, shoring team members work from protected areas, and shoring systems are installed so they perform their intended function.

NFPA 1006 12.3.2

TR 03.03 Trainee, given a trench collapse incident, and trench rescue tool kit, shall develop a shoring plan for a trench more than 8 ft (2.4 m) deep so that the methods of potential collapse are recognized, the mechanisms of entrapment are identified, areas of the trench that are blown out or undercut are addressed, related tabulated data is consulted, the weights and hazards associated with the soils are considered, the location of the victim and projected path for removal are incorporated.

NFPA 1006 12.3.3

- TR 03.04 Trainee, given a trench collapse incident, trench shoring plan, and a trench rescue tool kit, shall implement a trench shoring plan for a trench more than 8 ft (2.4 m) deep so that the victim is protected from additional collapse, the trench walls are supported, prior areas of collapse are addressed, shoring team members work from protected areas, and shoring systems are installed so they perform their intended function.
NFPA 1006 12.3.4
- TR 03.05 Trainee, given size-up information and an action plan, a trench tool kit, and an assignment, shall support an intersecting trench as a member of a team so that strategies to minimize the further movement of soil are implemented effectively; trench walls, lip, and spoil pile are monitored continuously; rescue entry team(s) in the trench remains in a safe zone; any slough-in and wall shears are mitigated; emergency procedures and warning systems are established and understood by participating personnel; incident-specific PPE is utilized; physical hazards are identified and managed; victim protection is maximized; victim extrication methods are considered; and a rapid intervention team is staged.
NFPA 1006 12.3.5
- TR 03.06 Trainee, given size-up information, an action plan, and a trench tool kit, shall install supplemental sheeting and shoring for each 2 ft (0.61 m) of depth dug below an existing approved shoring system so that the movement of soil is minimized effectively, initial trench support strategies are facilitated, rescue entry team safe zones are maintained, excavation of entrapping soil is continued, victim protection is maximized, victim extrication methods are considered, and a rapid intervention team is staged.
NFPA 1006 12.3.6
- TR 03.07 Trainee, given a trench incident, trench rescue toolbox, tabulated data, and trench shoring plan, shall utilize spot shoring techniques to support soil without incorporating uprights or panels as part of the shoring plan so that the soil is prevented from collapse.
NFPA 1006 12.3.7
- TR 03.08 Trainee, given an assignment, PPE, and a trench tool kit, shall construct load stabilization systems so that the stabilization system will support the load safely, the system is stable, and the assignment is completed.
NFPA 1006 12.3.8
- TR 03.09 Trainee, given a trench tool kit, shall lift a load so that the load is lifted the required distance to gain access; settling or dropping of the load is prevented; control and stabilization are maintained before, during, and after the lift; and operational objectives are attained.
NFPA 1006 12.3.9
- TR 03.10 Trainee, given PPE, means of communication, equipment, operator, and an assignment, shall coordinate the use of heavy equipment so that operator capabilities and limitations for task are evaluated, common communications are maintained, equipment usage supports the operational objectives, and hazards are avoided.
NFPA 1006 12.3.10
- TR 03.11 Trainee, given PPE, a trench rescue tool kit, and specialized equipment, shall release a victim from entrapment by components of a collapsed trench so that hazards to rescue personnel and victims are minimized, considerations are given to compartment syndrome related to crush injuries and other injuries, techniques are used to enhance patient survivability, tasks are accomplished within projected time frames, and techniques do not compromise the integrity of the existing trench shoring system.
NFPA 1006 12.3.11

MINIMUM STANDARDS FOR STRUCTURAL COLLAPSE RESCUE

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

NFPA 1670: Standard on Operations and Training for Technical Search and Rescue Incidents

IFSTA

Fire Service Technical Search and Rescue

Other

Jurisdictionally developed codes and Protocols

Minimum Requirements

The Certification Program offers three (3) levels of Structural Collapse Rescue Certification:

Structural Collapse Rescue Awareness

Applicants must:

1. have completed and documented one of the following:
 - a. Structural Collapse Rescue Awareness as defined by NFPA 1006;
 - b. SFFMA Structural Collapse Rescue Awareness coursework

Structural Collapse Rescue Operations

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Structural Collapse Rescue Awareness

AND
2. have completed and documented one of the following:
 - a) Structural Collapse Rescue Operations as defined by NFPA 1006;
 - b) SFFMA Structural Collapse Rescue Operations coursework

Structural Collapse Rescue Technician

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Structural Collapse Rescue Awareness
 - b. Structural Collapse Rescue Operations

AND
2. have completed and documented one of the following:
 - a) Structural Collapse Rescue Technician as defined by NFPA 1006;
 - b) SFFMA Structural Collapse Rescue Technician coursework

Curriculum for Structural Collapse Awareness

- SC 01.01 Trainee, given a specific type of collapse incident, shall identify incident hazards so that construction type is determined, all associated hazards are identified, and rescue time constraints are taken into account.
NFPA 1006 6.1.1
- SC 01.02 Trainee, given PPE, an incident location, and victim investigative information, shall initiate a search so that search parameters are established and include surface and nonentry void search, the information found is updated and relayed to command, the personnel assignments match their expertise, all victims are located as quickly as possible, risks to searchers are minimized, and accountability is achieved.
NFPA 1006 6.1.2
- SC 01.03 Trainee, given a structural collapse incident, shall apply the building marking system so that the search phase of the floor or structure is marked, victim locations and condition are applied to the area, hazards are noted on the structure, and the access and egress points are marked.
NFPA 1006 6.1.3
- SC 01.04 Trainee, given victim transport equipment, litters, other specialized equipment, and victim removal systems specific to the rescue environment, shall move a victim so that the victim is moved without further injuries, risks to rescuers are minimized, the victim is secured to the transfer device, and the victim is removed from the hazard.
NFPA 1006 6.1.4
- SC 01.05 Trainee, given an assignment and available resources, shall perform collapse support operations at a rescue incident so that scene lighting is provided for the tasks to be undertaken, environmental concerns are addressed, personnel rehabilitation is facilitated, and the support operations facilitate rescue operational objectives.
NFPA 1006 6.1.5

SC 01.06 Trainee, given background information and applicable reference materials, shall size up a structural collapse rescue incident so that the scope of the rescue is determined, the number of victims is identified, the last reported location of all the victims is established, witnesses and reporting parties are identified and interviewed, resource needs are assessed, primary search parameters are identified, and the information required to develop an initial incident action plan is obtained.

NFPA 1006 6.1.6

SC 01.07 Trainee, given AHJ guidelines, shall recognize the need for technical rescue resources at an operations- or technician-level (structural collapse) incident so that the need for additional resources is identified, the response system is initiated, the scene is secured and rendered safe until additional resources arrive, and Awareness-level personnel are incorporated into the operational plan.

NFPA 1006 6.1.7

Curriculum for Structural Collapse Operations

SC 02.01 Trainee, given an incident and specific incident information, shall conduct a size-up of a light frame or unreinforced masonry (URM) collapsed structure so that existing and potential conditions within the structure and the immediate periphery are evaluated, needed resources are defined, hazards are identified, construction and occupancy types are determined, collapse type is identified if possible, the need for rescue is assessed, a scene security perimeter is established, and the size-up is conducted within the scope of the incident management system.

NFPA 1006 6.2.1

SC 02.02 Trainee, given size-up information, a structural collapse tool kit, the type of construction and occupancy, time of day, and collapse pattern, shall determine potential victim locations in light frame and URM construction collapse incidents so that search areas are established and victims can be located.

NFPA 1006 6.2.2

SC 02.03 Trainee, given size-up information and a light frame and URM construction collapsed structure, shall develop a collapse rescue incident action plan so that initial size-up information is utilized, an incident management system is incorporated, existing and potential conditions within the structure and the immediate periphery are included, specialized resource needs are identified, work perimeters are determined, collapse type/category and associated hazards are identified, construction and occupancy types are determined, incident objectives are established, and scene security measures are addressed.

NFPA 1006 6.2.3

SC 02.04 Trainee, given an action plan and a light frame and URM construction collapsed structure, shall implement a collapse rescue incident action plan so that pertinent information is used, an incident management system is established and implemented, monitoring of dynamic conditions internally and externally is established, specialized resources are requested, hazards are mitigated, victim rescue and extraction techniques are consistent with collapse and construction type, and perimeter security measures are established.

NFPA 1006 6.2.4

SC 02.05 Trainee, given PPE, the structural collapse tool kit, an assignment, operational protocols, and size-up information, shall search a light frame and URM construction collapsed structure so that all victim locations and potential hazards are identified, marked, and reported; protocols are followed; the mode of operation can be determined; and rescuer safety is maintained. (See also Annex G.)

NFPA 1006 6.2.5

SC 02.06 Trainee, given size-up information, a specific pattern of collapse, a basic structural collapse tool kit, and an assignment, shall stabilize a collapsed light frame and URM construction structure as a member of a team so that strategies to effectively minimize the movement of structural components are identified and implemented; hazard warning systems are established and understood by participating personnel; hazard-specific PPE is identified, provided, and utilized; physical hazards are identified; confinement, containment, and avoidance measures are discussed; and a rapid intervention team is established and staged.

NFPA 1006 6.2.6

SC 02.07 Trainee, given PPE and resources for breaching, breaking, lifting, prying, shoring, and/or otherwise moving or penetrating the offending structural component, shall release a victim from entrapment by components of a light frame and URM construction collapsed structure so that hazards to rescue personnel and victims are minimized, considerations are given to compartment syndrome due to crush injuries, techniques enhance patient survivability, tasks are accomplished within projected time frames, and techniques do not compromise the integrity of the existing structure or structural support systems.

NFPA 1006 6.2.7

SC 02.08 Trainee, given a disentangled victim, a basic first aid kit, and victim packaging resources, shall remove a victim from a light-frame and URM construction collapse incident so that basic life functions are supported as required, victim is evaluated for signs of compartment syndrome due to crush injuries, advanced life support is called if needed, methods and packaging devices selected are compatible with intended routes of transfer, universal precautions are employed to protect personnel from blood-borne pathogens, and extraction times meet time constraints for medical management.

NFPA 1006 6.2.8

SC 02.09 Trainee, given (an operations-level structural collapse incident or simulation), a structural collapse tool kit and a load to be lifted, shall lift a heavy load as a team member so that the load is lifted; control and stabilization are maintained before, during, and after the lift; and access can be gained.

NFPA 1006 6.2.9

SC 02.10 Trainee, given (an operations-level structural collapse incident or simulation), a structural collapse tool kit, shall move a heavy load as a team member so that the load is moved the required distance to gain access and so that control is constantly maintained.

NFPA 1006 6.2.10

SC 02.11 Trainee, given an assignment, PPE, various types of construction materials, and a structural collapse tool kit, shall breach light frame and URM construction structural components so that the opening supports the rescue objectives, the necessary tools are selected, structural stability is maintained, and the methods utilized are safe and efficient.

NFPA 1006 6.2.11

SC 02.12 Trainee, given an assignment, PPE, a structural collapse tool kit, various lengths and dimensions of lumber, wedges, and shims, shall construct cribbing systems so that the cribbing system will safely support the load, the system is stable, and the assignment is completed.

NFPA 1006 6.2.12

SC 02.13 Trainee, given clothing or equipment for the protection of the rescuers, including respiratory protection, cleaning and sanitation supplies, maintenance logs or records, inspection procedures, and such tools and resources as are indicated by the manufacturer's guidelines for assembly or disassembly of components during repair or maintenance, shall maintain hazard-specific PPE so that damage, defects, and wear are identified and reported or repaired; equipment functions as designed; and preventive maintenance has been performed and documented consistent with the manufacturer's recommendations.

NFPA 1006 6.2.13

SC 02.14 Trainee, given maintenance logs and records, tools, and resources as indicated by the manufacturer's guidelines, inspection procedures, equipment replacement protocol, and organizational standard operating procedure, shall maintain rescue equipment so that the operational status of equipment is verified and documented, all components are checked for operation, deficiencies are repaired or reported as indicated by standard operating procedure, and items subject to replacement are correctly disposed of and changed out.

NFPA 1006 6.2.14

SC 02.15 Trainee, given PPE specific to the incident, isolation barriers, and tool kit, shall terminate an incident so that rescuers and bystanders are protected and accounted for during termination operations; the party responsible is notified of any modification or damage created during the operational period; documentation of loss or material use is accounted for, scene documentation is performed, scene control is transferred to a responsible party; potential or existing hazards are communicated to that responsible party; debriefing and post-incident analysis and critique are considered, and command is terminated.

NFPA 1006 6.2.15

Curriculum for Structural Collapse Technician

SC 03.01 Trainee, given an incident and specific incident information, shall conduct a size-up of a collapsed heavy construction-type structure so that existing and potential conditions within the structure and the immediate periphery are evaluated, needed resources are defined, hazards are identified, construction and occupancy types are determined, collapse type is identified if possible, the need for rescue is assessed, a scene security perimeter is established, and the size-up is conducted within the scope of the incident management system.

NFPA 1006 6.3.1

SC 03.02 Trainee, given size-up information, a structural collapse tool kit, the type of construction and occupancy, time of day, and collapse pattern, shall determine potential victim locations in a heavy construction-type incident so that search areas are established and victims can be located.

NFPA 1006 6.3.2

SC 03.03 Trainee, given size-up information and a heavy collapsed structure, shall develop a collapse rescue incident action plan so that initial size-up information is utilized, an incident management system is incorporated, existing and potential conditions within the structure and the immediate periphery are included, specialized resource needs are identified, work perimeters are determined, collapse type/category and associated hazards are identified, construction and occupancy types are determined, incident objectives are established, and scene security measures are addressed.

NFPA 1006 6.3.3

SC 03.04 Trainee, given an action plan and a heavy construction-type collapsed structure, shall implement a collapse rescue incident action plan so that pertinent information is used, an incident management system is established and implemented, monitoring of dynamic conditions internally and externally is established, specialized resources are requested, hazards are mitigated, victim rescue and extraction techniques are consistent with collapse and construction type, and perimeter security measures are established.

NFPA 1006 6.3.4

SC 03.05 Trainee, given PPE, the structural collapse tool kit, an assignment, operational protocols, and size-up information, shall search a heavy construction-type collapsed structure so that all victim locations and potential hazards are identified, marked, and reported; protocols are followed; the mode of operation can be determined; and rescuer safety is maintained.

NFPA 1006 6.3.5

SC 03.06 Trainee, given size-up information, a specific pattern of collapse, a basic structural collapse tool kit, and an assignment, shall stabilize a collapsed heavy construction-type structure as a member of a team so that strategies to effectively minimize the movement of structural components are identified and implemented; hazard warning systems are established and understood by participating personnel; hazard-specific PPE is identified, provided, and utilized; physical hazards are identified; confinement, containment, and avoidance measures are discussed; and a rapid intervention team is established and staged.

NFPA 1006 6.3.6

SC 03.07 Trainee, given PPE and resources for breaching, breaking, lifting, prying, shoring, and/or otherwise moving or penetrating the offending structural component, shall release a victim from entrapment by components of a heavy construction-type collapsed structure so that hazards to rescue personnel and victims are minimized, considerations are given to compartment syndrome due to crush injuries, techniques enhance patient survivability, tasks are accomplished within projected time frames, and techniques do not compromise the integrity of the existing structure or structural support systems.

NFPA 1006 6.3.7

- SC 03.08 Trainee, given a disentangled victim, a basic first aid kit, and victim packaging resources, shall remove a victim from a heavy construction-type collapse incident so that basic life functions are supported as required, victim is evaluated for signs of compartment syndrome, advanced life support is called if needed, methods and packaging devices selected are compatible with intended routes of transfer, universal precautions are employed to protect personnel from blood-borne pathogens, and extraction times meet time constraints for medical management.
NFPA 1006 6.3.8
- SC 03.09 Trainee, given (a technician-level structural collapse incident or simulation), a structural collapse tool kit and a load to be lifted, shall lift a heavy load as a team member so that the load is lifted; control and stabilization are maintained before, during, and after the lift; and access can be gained.
NFPA 1006 6.3.9
- SC 03.10 Trainee, given (a technician-level structural collapse incident or simulation), a structural collapse tool kit, shall move a heavy load as a team member so that the load is moved the required distance to gain access and so that control is constantly maintained.
NFPA 1006 6.3.10
- SC 03.11 Trainee, given an assignment, PPE, various types of construction materials, and a structural collapse tool kit, shall breach heavy structural components so that the opening supports the rescue objectives, the necessary tools are selected, structural stability is maintained, and the methods utilized are safe and efficient.
NFPA 1006 6.3.11
- SC 03.12 Trainee, given an assignment, PPE, a structural collapse tool kit, various lengths and dimensions of lumber, wedges, and shims, shall construct cribbing systems so that the cribbing system will safely support the load, the system is stable, and the assignment is completed.
NFPA 1006 6.3.12
- SC 03.13 Trainee, given size-up information, hazard-specific PPE, an assignment, a specific pattern of collapse, a structural collapse tool kit, specialized equipment necessary to complete the task, and engineering resources if needed, shall stabilize a collapsed heavy construction-type structure as a member of a team so that hazard warning systems are established and understanding by team members is verified, all unstable structural components that can impact the work and egress routes are identified, alternative egress routes are established when possible, expert resource needs are determined and communicated to command, load estimates are calculated for support system requirements, all shoring systems meet or exceed load-bearing demands, shoring systems are monitored continuously for integrity, safety protocols are followed, a rapid intervention crew (RIC) is established and staged to aid search and rescue personnel in the event of entrapment, an accountability system is established, atmospheric monitoring is ongoing, and progress is communicated as required.
NFPA 1006 6.3.13
- SC 03.14 Trainee, given a structural collapse tool kit, PPE, and an assignment, shall cut through structural steel so that the steel is efficiently cut, the victim and rescuer are protected, fire control measures are in place, and the objective is accomplished.
NFPA 1006 6.3.14
- SC 03.15 Trainee, given PPE, means of communication, equipment and operator, and an assignment, shall coordinate the use of heavy equipment so that common communications are established, equipment usage supports the operational objective, hazards are avoided, and rescuer and operator safety protocols are followed.
NFPA 1006 6.3.15

MINIMUM STANDARDS FOR COMMON VEHICLE RESCUE

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following reference materials:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

NFPA 1670: Standard on Operations and Training for Technical Search and Rescue Incidents

IFSTA

Fire Service Technical Search and Rescue

Principles of Vehicle Extrication

Other

Jurisdictionally developed codes and protocols

Minimum Requirements

The Certification Program offers three (3) levels of Common Vehicle Rescuer Certification:

Common Vehicle Rescue Awareness

Applicants must:

1. have completed and documented one of the following:
 - a. Common Vehicle Rescue Awareness as defined by NFPA 1006;
 - b. SFFMA Common Vehicle Rescue Awareness coursework

Common Vehicle Rescue Operations

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Common Vehicle Rescue Awareness

AND
2. have completed and documented one of the following:
 - a) Common Vehicle Rescue Operations as defined by NFPA 1006;
 - b) SFFMA Common Vehicle Rescue Operations coursework

Common Vehicle Rescue Technician

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Common Vehicle Rescue Awareness
 - b. Common Vehicle Rescue Operations

AND
2. have completed and documented one of the following:
 - a) Common Vehicle Rescue Technician as defined by NFPA 1006;
 - b) SFFMA Common Vehicle Rescue Technician coursework

Curriculum for Common Vehicle Rescue Awareness

- CV 01.01 Trainee, given a common passenger vehicle incident, scene security barriers, incident location, incident information, and PPE, shall establish scene safety zones so that the scene and responders are visible to approaching common passenger vehicles, safety zones are designated, zone perimeters are consistent with incident requirements, perimeter markings can be recognized and understood by others, zone boundaries are communicated to incident command, and traffic flow is controlled.
NFPA 1006 8.1.1
- CV 01.02 Trainee, given an incident, background information and applicable reference materials, shall size up an incident so that the operational mode is defined, resource availability and response time, types of rescues are determined, the number of victims are identified, the last reported location of all victims are established, witnesses and reporting parties are identified and interviewed, resource needs are assessed, search parameters are identified, and information required to develop an incident action plan is obtained.
NFPA 1006 8.1.2
- CV 01.03 Trainee, given scene control barriers, PPE, requisite equipment, and available specialized resources, shall recognize incident hazards and initiate isolation procedures so that all hazards are identified; resource application fits the operational requirements; hazard isolation is considered; risks to rescuers, bystanders, and victims are minimized; and rescue time constraints are taken into account.
NFPA 1006 8.1.3
- CV 01.04 Trainee, given AHJ guidelines, shall recognize the need for technical rescue resources at an operations- or technician-level (common vehicle) incident so that the need for additional resources is identified, the response system is initiated, the scene is secured and rendered safe until additional resources arrive, and awareness-level personnel are incorporated into the operational plan.
NFPA 1006 8.1.4
- CV 01.05 Trainee, given an incident, an assignment, an incident action plan, and resources from the tool kit, shall support an operations- or technician-level incident so that the assignment is carried out, progress is reported to command, environmental concerns are managed, personnel rehabilitation is facilitated, and the incident action plan is supported.
NFPA 1006 8.1.5

Curriculum for Common Vehicle Rescue Operation

- CV 02.01 Trainee, given agency guidelines, planning forms, and an operations-level common passenger vehicle incident or simulation, shall create an incident action plan for a common passenger vehicle incident so that a standard approach is used during training and operational scenarios, emergency situation hazards are identified, isolation methods and scene security measures are considered, fire suppression and safety measures are identified, common passenger vehicle stabilization needs are evaluated, and resource needs are identified and documented for future use.
NFPA 1006 8.2.1
- CV 02.02 Trainee, given an extrication incident and fire control support, shall establish fire protection so that fire and explosion potential is managed and fire hazards and rescue objectives are communicated to the fire support team.
NFPA 1006 8.2.2
- CV 02.03 Trainee, given a common passenger vehicle tool kit and PPE, shall stabilize a common passenger vehicle that has come to rest on its wheels on the road surface or similar flat stable environment so that the common passenger vehicle is prevented from moving during the rescue operations; entry, exit, and tool placement points are not compromised; anticipated rescue activities will not compromise common passenger vehicle stability; selected stabilization points are structurally sound; stabilization equipment can be monitored; and the risk to rescuers is minimized.
NFPA 1006 8.2.3
- CV 02.04 Trainee, given a common passenger vehicle, common passenger vehicle tool kit, and PPE, shall manage potentially harmful energy sources, including propulsion power, restraint systems, and construction materials so that all hazards are identified and isolated, systems are managed, beneficial system use is evaluated, and hazards to rescue personnel and victims are minimized.
NFPA 1006 8.2.4
- CV 02.05 Trainee, given the structural and damage characteristics and potential victim location(s), shall determine the common passenger vehicle access and egress points so that the victim location(s) is identified; access and egress points for victims, rescuers, and equipment are designated; flows of personnel, victim, and equipment are identified; existing entry points are used; time constraints are factored; selected entry and egress points do not compromise vehicle stability; chosen points can be protected; equipment and victim stabilization are initiated; and AHJ safety and emergency procedures are enforced.
NFPA 1006 8.2.5
- CV 02.06 Trainee, given a vehicle tool kit, specialized tools and equipment, PPE, and an assignment, shall create access and egress openings for rescue from a common passenger vehicle on its wheels so that the movement of rescuers and equipment complements victim care and removal, an emergency escape route is provided, the technique chosen is expedient, victim and rescuer protection is afforded, and vehicle stability is maintained.
NFPA 1006 8.2.6
- CV 02.07 Trainee, given an operations-level extrication incident, a vehicle tool kit, PPE, and specialized equipment, shall disentangle victim(s) so that undue victim injury is prevented; victim protection is provided; and stabilization is maintained.
NFPA 1006 8.2.7
- CV 02.08 Trainee, given a victim transfer device, a designated egress route, and PPE, shall remove a packaged victim to a designated safe area, as a member of a team so that the team effort is coordinated, the designated egress route is used, the victim is removed without compromising victim packaging, undue injury is prevented, and stabilization is maintained.
NFPA 1006 8.2.8
- CV 02.09 Trainee, given PPE specific to the incident, isolation barriers, and an extrication tool kit, shall terminate a vehicle incident so that rescuers and bystanders are protected during termination operations; the party responsible for the operation, maintenance, or removal of the affected vehicle is notified of any modification or damage created during the extrication process; scene control is transferred to a responsible party; potential or existing hazards are communicated to that responsible party; and command is terminated.
NFPA 1006 8.2.9

Curriculum for Common Vehicle Rescue Technician

- CV 03.01 Trainee, given agency guidelines, planning forms, and a technician-level vehicle incident or simulation, shall create an incident action plan for an incident where a common passenger vehicle has come to rest **on its roof** so that a standard approach is used during training and operational scenarios, emergency situation hazards are identified, isolation methods and scene security measures are considered, fire suppression and safety measures are identified, vehicle stabilization needs are evaluated, and resource needs are identified and documented for future use.
NFPA 1006 8.3.1
- CV 03.02 Trainee, given a common passenger vehicle, a technician-level common passenger vehicle incident or simulation, a common passenger vehicle tool kit and PPE, shall stabilize a common passenger vehicle that has come to rest on its roof so that the common passenger vehicle is prevented from moving during the rescue operations; entry, exit, and tool placement points are not compromised; anticipated rescue activities will not compromise common passenger vehicle stability; selected stabilization points are structurally sound; stabilization equipment can be monitored; and the risk to rescuers is minimized.
NFPA 1006 8.3.2
- CV 03.03 Trainee, given a technician-level common passenger vehicle incident or simulation, a common passenger vehicle tool kit, specialized tools and equipment, PPE, and an assignment, shall create access and egress openings for rescue from a common passenger vehicle that has come to rest on its roof so that the movement of rescuers and equipment complements victim care and removal, an emergency escape route is provided, the technique chosen is expedient, victim and rescuer protection is afforded, and common passenger vehicle stability is maintained.
NFPA 1006 8.3.3

- CV 03.04 Trainee, given agency guidelines, planning forms, and a technician-level common passenger vehicle incident or simulation, shall create an incident action plan for an incident where a common passenger vehicle has come to rest **on its side**, so that a standard approach is used during training and operational scenarios, emergency situation hazards are identified, isolation methods and scene security measures are considered, fire suppression crew and safety measures are identified, common passenger vehicle stabilization needs are evaluated, and resource needs are identified and documented for future use.
NFPA 1006 8.3.4
- CV 03.05 Trainee, given a common passenger vehicle tool kit and PPE, shall stabilize a common passenger vehicle that has come to rest on its side so that the common passenger vehicle is prevented from moving during the rescue operations; entry, exit, and tool placement points are not compromised; anticipated rescue activities will not compromise common passenger vehicle stability; selected stabilization points are structurally sound; stabilization equipment can be monitored; and the risk to rescuers is minimized.
NFPA 1006 8.3.5
- CV 03.06 Trainee, given a common passenger vehicle tool kit, specialized tools and equipment, PPE, and an assignment, shall create access and egress openings for rescue from a common passenger vehicle that has come to rest on its side so that the movement of rescuers and equipment complements victim care and removal, an emergency escape route is provided, the technique chosen is expedient, victim and rescuer protection is afforded, and common passenger vehicle stability is maintained.
NFPA 1006 8.3.6
- CV 03.07 Trainee, given agency guidelines, planning forms, and a technician-level common passenger vehicle incident or simulation, shall create an incident action plan for an incident where a common passenger vehicle has come to rest in a configuration or environment where multiple concurrent hazards must be managed to access or remove the occupants, so that a standard approach is used during training and operational scenarios, emergency situation hazards are identified, isolation methods and scene security measures are considered, fire suppression and safety measures are identified, common passenger vehicle stabilization needs are evaluated, and resource needs are identified and documented for future use.
NFPA 1006 8.3.7
- CV 03.08 Trainee, given a vehicle tool kit and PPE, shall stabilize a common passenger vehicle that has come to rest in a configuration or environment where multiple concurrent hazards must be managed to access or remove the occupants so that the vehicle is prevented from moving during the rescue operations; entry, exit, and tool placement points are not compromised; anticipated rescue activities will not compromise vehicle stability; selected stabilization points are structurally sound; stabilization equipment can be monitored; and the risk to rescuers is minimized.
NFPA 1006 8.3.8
- CV 03.09 Trainee, given an extrication incident, a vehicle tool kit, PPE, and specialized equipment, shall disentangle victim(s) so that undue victim injury is prevented, victim protection is provided, and stabilization is maintained.
NFPA 1006 8.3.9

MINIMUM STANDARDS FOR SURFACE WATER RESCUE

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

NFPA 1670: Standard on Operations and Training for Technical Search and Rescue Incidents

IFSTA

Fire Service Technical Search and Rescue

Other

Jurisdictionally developed codes and Protocols

Minimum Requirements

The Certification Program offers three (3) levels of Surface Water Rescue Certification:

Surface Water Rescue Awareness

Applicants must:

1. have completed and documented one of the following:
 - a. Surface Water Rescue Awareness as defined by NFPA 1006;
 - b. SFFMA Surface Water Rescue Awareness coursework

Surface Water Rescue Operations

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Surface Water Rescue Awareness

AND

2. have completed and documented one of the following:
 - a) Surface Water Rescue Operations as defined by NFPA 1006;
 - b) SFFMA Surface Water Rescue Operations coursework

Surface Water Rescue Technician

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Surface Water Rescue Awareness
 - b. Surface Water Rescue Operations

AND

2. have completed and documented one of the following:
 - a) Surface Water Rescue Technician as defined by NFPA 1006;
 - b) SFFMA Surface Water Rescue Technician coursework

Curriculum for Surface Water Rescue Awareness

SUR 01.01 Trainee, given an incident, shall size up a surface water incident so that the scope of the rescue is determined, the number of victims is identified, the last reported location of all the victims is established, witnesses and reporting parties are identified and interviewed, and search parameters are identified.

NFPA 1006 17.1.1

SUR 01.02 Trainee, given scene control barriers, PPE, requisite equipment, and available specialized resources, shall recognize incident hazards and initiate isolation procedures so that all hazards are identified; resource application fits the operational requirements; hazard isolation is considered; risks to rescuers, bystanders, and victims are minimized; and rescue time constraints are taken into account.

NFPA 1006 17.1.2

SUR 01.03 Trainee, given AHJ guidelines, shall recognize the need for technical rescue resources at an operations- or technician-level (surface water) incident so that the need for additional resources is identified, the response system is initiated, the scene is secured and rendered safe until additional resources arrive, and awareness-level personnel are incorporated into the operational plan.

NFPA 1006 17.1.3

SUR 01.04 Trainee, given an incident, an assignment, an incident action plan, and resources from the tool kit, shall support an operations- or technician-level incident so that the assignment is carried out, progress is reported to command, environmental concerns are managed, personnel rehabilitation is facilitated, and the incident action plan is supported.

NFPA 1006 17.1.4

Curriculum for Surface Water Rescue Operations

SUR 02.01 Trainee, given historical data, specific PPE for conducting site inspections, flood insurance rate maps, tide tables, and meteorological projections, shall develop a site survey for an existing water hazard so that life safety hazards are anticipated, risk/benefit analysis is included, site inspections are completed, water conditions are projected, site-specific hazards are identified, routes of access and egress are identified, boat ramps (put-in and take-out points) are identified, the method of entrapment is considered, and areas with a high probability for victim location are determined.

NFPA 1006 17.2.1

- SUR 02.02 Trainee, given a water rescue assignment and assorted items of personal protective and life-support equipment, shall select water rescue PPE so that the rescuer is protected from temperature extremes and environmental hazards, correct buoyancy is maintained, AHJ protocols are complied with, swimming ability is maximized, routine and emergency communications are established between components of the team, self-rescue needs have been evaluated and provided for, and preoperation safety checks have been conducted.
NFPA 1006 17.2.2
- SUR 02.03 Trainee, given topographical maps of a search area; descriptions of all missing persons and incident history; and hydrologic data, including speed and direction of current or tides, shall define search parameters for a water rescue incident so that areas with high probability of detection are differentiated from other areas, witnesses are interviewed, critical interview information is recorded, passive and active search tactics are implemented, personnel resources are considered and used, and search parameters are communicated.
NFPA 1006 17.2.3
- SUR 02.04 Trainee, given an operational plan and a water rescue tool kit, shall develop an action plan for a shore-based rescue of a single or multiple water-bound victim(s) so that all information is factored, risk/benefit analysis is conducted, protocols are followed, hazards are identified and minimized, personnel and equipment resources will not be exceeded, assignments are defined, consideration is given to evaluating changing conditions, and the selected strategy and tactics fit the conditions.
NFPA 1006 17.2.4
- SUR 02.05 Trainee, given required equipment and PPE, shall deploy a water rescue reach device to a water-bound victim so that the deployed equipment reaches the victim(s), the rescue equipment does not slip through the rescuer's hands, the victim is moved to the rescuer's shoreline, the victim is not pulled beneath the surface by rescuer efforts, the rescuer is not pulled into the water by the victim, and neither the rescuer nor the victim is tied to or entangled in the device.
NFPA 1006 17.2.5
- SUR 02.06 Trainee, given a water rescue rope in a throw bag, a coiled water rescue rope 50 ft to 75 ft (15.24 m to 22.86 m) in length, and PPE, shall deploy a water rescue rope to a water-bound victim so that the deployed rope lands within reach of the victim, the rescue rope does not slip through the rescuer's hands, the victim is moved to the rescuer's shoreline, the victim is not pulled beneath the surface by rescuer efforts, the rescuer is not pulled into the water by the victim, and neither the rescuer nor the victim is tied to or entangled in the throw line.
NFPA 1006 17.2.6
- SUR 02.07 Trainee, given watercraft, operator(s), and policies and procedures used by the AHJ, shall develop and implement an action plan for the use of watercraft to support the rescue of a single or multiple water-bound victims so that watercraft predeployment checks are completed; watercraft launch or recovery is achieved; rescuers are deployed and recovered; both onboard and rescue operations conform with watercraft operational protocols and capabilities; communications are clear and concise; and the candidate is familiar with watercraft nomenclature, operational protocols, design limitations, and launch/recovery site issues.
NFPA 1006 17.2.7
- SUR 02.08 Trainee, given a helicopter service, operational protocols, helicopter capabilities and limitations, water rescue procedures, and risk factors influencing helicopter operations, shall define procedures to provide support for helicopter water rescue operations within the area of responsibility for the AHJ so that air-to-ground communication is established and maintained, applications are within the capabilities and skill levels of the helicopter service, the applications facilitate victim extraction from water hazards that are representative of the bodies of water existing or anticipated within the geographic confines of the AHJ, air crew and ground personnel safety are not compromised, landing zones are designated and secured, and fire suppression resources are available at the landing zone.
NFPA 1006 17.2.8
- SUR 02.09 Trainee, given a water hazard that is representative of the anticipated rescue environment watercraft that is available to the team (if applicable), designated victim packaging and management equipment, and water rescue PPE, shall implement procedures for performing watercraft-based rescue of an incapacitated, water-bound victim, as a member of a team so that the control and stability of the watercraft is maintained, risks to the victim and rescuers are minimized, and the victim is removed from the hazard.
NFPA 1006 17.2.9
- SUR 02.10 Trainee, given safety equipment, props, and a controlled setting representative of the anticipated rescue environment, shall demonstrate fundamental survival swimming and self-rescue skills so that the risk of injury is minimized, flotation is maintained, available PPE is utilized, and egress is accomplished.
NFPA 1006 17.2.10
- SUR 02.11 Trainee, given rescue personnel, an established rope system, a load to be moved, and PPE, shall identify procedures for operation of rope systems particular to the water rescue needs of the AHJ so that the movement is controlled, the load is held in place when needed, and operating methods do not stress the system.
NFPA 1006 17.2.11
- SUR 02.12 Trainee, given a designated mission, safety equipment, props, and water body, shall support operations so that skills are demonstrated in a controlled environment, performance parameters are achieved, hazards are continually assessed, correct buoyancy control is maintained, and emergency procedures are demonstrated.
NFPA 1006 17.2.12

SUR 02.13 Trainee, given PPE specific to the incident, isolation barriers, and a tool kit, shall terminate an incident so that rescuers and bystanders are protected and accounted for during termination operations; the party responsible is notified of any modifications or damage created during the operational period; documentation of loss or material use is accounted for, scene documentation is performed, and scene control is transferred to a responsible party; potential or existing hazards are communicated to that responsible party; debriefing and postincident analysis and critique are considered; and command is terminated.

NFPA 1006 17.2.13

Curriculum for Surface Water Rescue Technician

SUR 03.01 Trainee, given a course designated by the AHJ as demonstrating the capabilities necessary to operate in the anticipated rescue environment, water rescue PPE, and swim aids as required, shall swim a designated water course so that the specified objective is reached, all performance parameters are achieved, movement is controlled, hazards are continually assessed, distress signals are communicated, and rapid intervention for the rescuer has been staged for deployment.

NFPA 1006 17.3.1

SUR 03.02 Trainee, given a simulated victim, water rescue PPE, conditions representative of the anticipated rescue environment, swim aids as required, flotation aids for victims, and reach/extension devices, shall perform a swimming surface water rescue so that victim contact is maintained, the rescuer maintains control of the victim, the rescuer and the victim reach safety at a predetermined area, and medical conditions and treatment options are considered.

NFPA 1006 17.3.2

SUR 03.03 Trainee, given a water-bound victim in a stressed or panicked situation, shall demonstrate defensive tactics in the water rescue environment so that the rescuer can maintain separation from the victim to create or maintain personal safety and can perform self-defense techniques to prevent rescuer submersion if direct contact is made between a panicked victim and the rescuer.

NFPA 1006 17.3.3

SUR 03.04 Trainee, given a course that is representative of the bodies of surface water existing or anticipated within the geographical confines of the AHJ, water rescue PPE, and swim aids, shall perform an entry surface rescue from a rescue platform (such as a vessel, boat, watercraft, or other waterborne transportation aid) while negotiating a designated surface course so that the specific objective is reached, the victim is retrieved, movement is controlled, hazards are continually assessed, distress signals are demonstrated, and rapid intervention for the rescuer has been staged for deployment.

NFPA 1006 17.3.4

SUR 03.05 Trainee, given incident checklists, maps, topographic surveys, and charts, shall direct a rescue team during operations so that teams are managed, personnel are supervised, hazards are assessed and identified, safety and health of the team is ensured, qualifications/abilities of rescuers are verified, pre-entry briefing is conducted, and debriefing is performed.

NFPA 1006 17.3.5

MINIMUM STANDARDS FOR SWIFTWATER RESCUE

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

NFPA 1670: Standard on Operations and Training for Technical Search and Rescue Incidents

IFSTA

Fire Service Technical Search and Rescue

Other

Jurisdictionally developed codes and Protocols

Minimum Requirements

The Certification Program offers three (3) levels of Swiftwater Rescue Certification:

Swiftwater Rescue Awareness

1. have completed or hold one of the following:
 - a. Swiftwater Rescue Awareness as defined by NFPA 1006; or
 - b. SFFMA Swiftwater Rescue Awareness coursework

Swiftwater Rescue Operations

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Rope Rescue Awareness;
 - b. Rope Rescue Operations;
 - c. Surface Water Rescue Awareness;
 - d. Surface Water Rescue Operations; and
 - e. Swiftwater Rescue Awareness

AND

2. have completed or hold one of the following:
 - a. Swiftwater Rescue Operations as defined by NFPA 1006; or
 - b. SFFMA Swiftwater Rescue Operations coursework

Swiftwater Rescue Technician

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Rope Rescue Awareness;
 - b. Rope Rescue Operations;
 - c. Surface Water Rescue Awareness;
 - d. Surface Water Rescue Operations;
 - e. Swiftwater Rescue Awareness;
 - e. Swiftwater Rescue Operations; and

AND

2. have completed or hold one of the following:
 - a. Swiftwater Rescue Technician as defined by NFPA 1006; or
 - b. SFFMA Swiftwater Rescue Technician coursework

Curriculum for Swiftwater Rescue Awareness

SWI 01.01 Trainee, given background information and applicable reference materials, shall size up a swiftwater rescue incident so that the scope of the rescue is determined, the number of victims is identified, the last reported location of all the victims is established, witnesses and reporting parties are identified and interviewed, resource needs are assessed, primary search parameters are identified, and information required to develop an initial incident action plan is obtained.

NFPA 1006 18.1.1

SWI 01.02 Trainee, given scene control barriers, PPE, requisite equipment, and available specialized resources, shall recognize incident hazards and initiate isolation procedures so that all hazards are identified; resource application fits the operational requirements; hazard isolation is considered; risks to rescuers, bystanders, and victims are minimized; and rescue time constraints are taken into account.

NFPA 1006 18.1.2

SWI 01.03 Trainee, given AHJ guidelines, shall recognize the need for technical rescue resources at an operations- or technician-level (swiftwater) incident so that the need for additional resources is identified, the response system is initiated, the scene is secured and rendered safe until additional resources arrive, and awareness-level personnel are incorporated into the operational plan.

NFPA 1006 18.1.3

SWI 01.04 Trainee, given an incident, an assignment, an incident action plan, and resources from the tool kit, shall support an operations- or technician-level incident so that the assignment is carried out, progress is reported to command, environmental concerns are managed, personnel rehabilitation is facilitated, and the incident action plan is supported.

NFPA 1006 18.1.4

Curriculum for Swiftwater Rescue Operations

- SWI 02.01 Trainee, given rescue personnel, rope equipment, a load to be moved, and PPE, shall construct rope systems particular to the swiftwater rescue needs of the AHJ so that the movement is controlled, the load is held in place when needed, and operating methods do not stress the system.
NFPA 1006 18.2.1
- SWI 02.02 Trainee, given a designated mission, safety equipment, props, and water body, shall support swiftwater operations so that skills are demonstrated in a controlled environment, performance parameters are achieved, hazards are continually assessed, personnel accountability is maintained, and emergency procedures are demonstrated.
NFPA 1006 18.2.2
- SWI 02.03 Trainee, given an incident scenario and swiftwater tool kit, shall assess moving water conditions, characteristics, and features in terms of hazards to the rescuer and victims so that the flow and conditions are estimated accurately, mechanisms of entrapment are considered, hazards are assessed, the depth and surrounding terrain are evaluated, and findings are documented.
NFPA 1006 18.2.3
- SWI 02.04 Trainee, given an incident scenario, PPE, and swiftwater rescue tool kit, shall perform a non-water entry rescue in the swiftwater and flooding environment so that rescue is accomplished, and adopted policies and safety procedures are followed.
NFPA 1006 18.2.4
- SWI 02.05 Trainee, given PPE specific to the incident, isolation barriers, and a tool kit, shall terminate an incident so that rescuers and bystanders are protected and accounted for during termination operations; the party responsible is notified of any modifications or damage created during the operational period; documentation of loss or material use is accounted for; scene documentation is performed; and control is transferred to a responsible party; potential or existing hazards are communicated to that responsible party; debriefing, postincident analysis, and critique are conducted; and command is terminated.
NFPA 1006 18.2.5

Curriculum for Swiftwater Rescue Technician

- SWI 03.01 Trainee, given an incident scenario, PPE, and swiftwater rescue tool kit, shall perform an entry rescue in the swiftwater and flooding environment so that rescue is accomplished and adopted policies and safety procedures are followed.
NFPA 1006 18.3.1
- SWI 03.02 Trainee, given a course that is representative of the bodies of swiftwater existing or anticipated within the geographic confines of the AHJ, water rescue PPE, and swim aids as required, shall negotiate a designated swiftwater course so that the specified objective is reached, all performance parameters are achieved, movement is controlled, hazards are continually assessed, distress signals are demonstrated, and rapid intervention for the rescuer has been staged for deployment.
NFPA 1006 18.3.2
- SWI 03.03 Trainee, given a course that is representative of the bodies of swiftwater existing or anticipated within the geographical confines of the AHJ, water rescue PPE, and swim aids as required, shall perform an entry swiftwater rescue from a rescue platform such as a vessel, boat, watercraft, or other waterborne transportation aid while negotiating a designated swiftwater course so that the specific objective is reached, all performance parameters are achieved, movement is controlled, hazards are continually assessed, distress signals are demonstrated, personnel accountability is implemented, and rapid intervention for the rescuers has been staged for deployment.
NFPA 1006 18.3.3

MINIMUM STANDARDS FOR WILDERNESS SEARCH & RESCUE

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

NFPA 1670: Standard on Operations and Training for Technical Search and Rescue Incidents

IFSTA

Fire Service Technical Search and Rescue

Other

Jurisdictionally developed codes and Protocols

Minimum Requirements

The Certification Program offers two (2) levels of Wilderness Search & Rescue Certification:

Wilderness Search & Rescue Awareness

Applicants must:

1. have completed and documented one of the following:
 - a. Wilderness Search & Rescue Awareness as defined by NFPA 1006;
 - b. SFFMA Wilderness Search & Rescue Awareness coursework

Wilderness Search & Rescue Operations

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Wilderness Search & Rescue Awareness
- AND
2. have completed and documented one of the following:
 - a) Wilderness Search & Rescue Operations as defined by NFPA 1006;
 - b) SFFMA Wilderness Search & Rescue Operations coursework

Wilderness Search & Rescue Technician

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Wilderness Search & Rescue Awareness
 - b. Wilderness Search & Rescue Operations
- AND
2. have completed and documented one of the following:
 - a) Wilderness Search & Rescue Technician as defined by NFPA 1006;
 - b) SFFMA Wilderness Search & Rescue Technician coursework

Curriculum for Wilderness Search & Rescue Awareness

WSR 01.01 Trainee, given the environment, terrain, and hazards involved in the incident, shall identify the environment, type of terrain, and associated hazards involved in a wilderness incident so that the personnel and equipment match the environment and terrain.

NFPA 1006 11.1.1

WSR 01.02 Trainee, given background information and applicable reference materials, shall size up a wilderness search and rescue incident so that the scope of the rescue is determined, the number of victims is identified, the last reported location of all the victims is established, witnesses and reporting parties are identified and interviewed, resource needs are assessed, primary search parameters are identified, and information required to develop an initial incident action plan is obtained.

NFPA 1006 11.1.2

WSR 01.03 Trainee, given scene control barriers, PPE, requisite equipment, and available specialized resources, shall recognize incident hazards and initiate isolation procedures so that all hazards are identified; resource application fits the operational requirements; hazard isolation is considered; risks to rescuers, bystanders, and victims are minimized; and rescue time constraints are taken into account.

NFPA 1006 11.1.3

WSR 01.04 Trainee, given AHJ guidelines, shall recognize the need for technical rescue resources at an operations- or technician-level (wildland search and rescue) incident so that the need for additional resources is identified, the response system is initiated, the scene is secured and rendered safe until additional resources arrive, and awareness-level personnel are incorporated into the operational plan.

NFPA 1006 11.1.4

WSR 01.05 Trainee, given an incident, an assignment, an incident action plan, and resources from the tool kit, shall support an operations- or technician-level incident so that the assignment is carried out, progress is reported to command, environmental concerns are managed, personnel rehabilitation is facilitated, and the incident action plan is supported.

NFPA 1006 11.1.5

Curriculum for Wilderness Search & Rescue Operations

WSR 02.01 Trainee, given the response area as defined by the AHJ, shall identify environmental and incident conditions so that operations-level search and rescue functions and the need for additional resources are established.

NFPA 1006 11.2.1

- WSR 02.02 Trainee, given existing and potential conditions, shall implement a wilderness search and rescue preplan so that wilderness search and rescue is performed.
NFPA 1006 11.2.2
- WSR 02.03 Trainee, given the AHJ's wilderness environment, PPE, and equipment, shall identify factors affecting the preparation, selection, and use of PPE and equipment so that rescuer safety is maintained and the hazards are mitigated.
NFPA 1006 11.2.3
- WSR 02.04 Trainee, given an available wilderness search and rescue resource list, shall interface with wilderness search and rescue resources so that the resources are requested and employed.
NFPA 1006 11.2.4
- WSR 02.05 Trainee, given interview recording forms, shall interview reporting parties so that available information in regard to the potential location of the subject and other factors affecting the incident are documented.
NFPA 1006 11.2.5
- WSR 02.06 Trainee, given various items of evidence, collection and documentation equipment, and wilderness tool kit, shall collect evidence to determine subject's potential location so that the scene (i.e., area) is searched and evidence is protected, documented, cataloged, and collected.
NFPA 1006 11.2.6
- WSR 02.07 Trainee, given personal support equipment, shall prepare to work in a wilderness environment for an assigned operational period so that the rescuer can be self-sustaining in the wilderness environment.
NFPA 1006 11.2.7
- WSR 02.08 Trainee, given a location with directions from reporting parties, nontechnical terrain, and maps and trail guides, shall navigate in a wilderness environment so that the rescuer arrives at the destination to locate the subject.
NFPA 1006 11.2.8
- WSR 02.09 Trainee, given aircraft, watercraft, or specialized vehicles and operators, as well as operational protocols and specialized vehicle resources, shall establish the need for specialized resources in wilderness search and rescue operations so that resources are allocated and utilized during the operation to locate and/or remove the subject.
NFPA 1006 11.2.9
- WSR 02.10 Trainee, given basic life support equipment and a wilderness tool kit, shall manage a subject in a wilderness environment so that the basic medical care of the subject is managed during transport and the potential for further injury is minimized.
NFPA 1006 11.2.10
- WSR 02.11 Trainee, given subject transport equipment, litters, other specialized equipment, and subject removal systems specific to the search and rescue environment, shall move a subject in a wilderness environment a minimum of 0.25 mi (0.4 km) so that the subject is moved without further injuries, risks to rescuers are minimized, the integrity of the subject's packaging within the transfer device is established and maintained, and the subject is removed from the hazard.
NFPA 1006 11.2.11
- WSR 02.12 Trainee, given PPE specific to the environment, shall terminate an incident so that rescuers and bystanders are protected and accounted for during termination operations; the AHJ is notified of any modification or damage created during the operational period; damaged or lost equipment is assessed and documented; scene documentation is performed; scene control is transferred to a responsible party; remaining potential or existing hazards are communicated to that responsible party; debriefing and postincident analysis and critique are considered; and command is terminated.
NFPA 1006 11.2.12
- WSR 02.13 Trainee, given an off-road trail or nontechnical terrain typical of the response area of the AHJ, shall traverse through a wilderness environment by foot so that the rescuer demonstrates the ability to reach the subject and maintain personal safety.
NFPA 1006 11.2.13
- [Curriculum for Wilderness Search & Rescue Technician](#)
- WSR 03.01 Trainee, given the response area of the AHJ, shall identify environment- and incident-specific conditions so that the technician-level search and rescue functions are identified and the need for additional resources is established.
NFPA 1006 11.3.1
- WSR 03.02 Trainee, given subject information and collected evidence, shall develop profile(s) for the subject(s) in a wilderness environment so that a search plan can be developed and implemented.
NFPA 1006 11.3.2
- WSR 03.03 Trainee, given a natural source of water in the wilderness environment, shall collect and purify water so that the rescuer can have potable water.
NFPA 1006 11.3.3
- WSR 03.04 Trainee, given an incident, size-up information, and local weather forecasts and current conditions, shall develop a wilderness search and rescue incident action plan so that the IMS is utilized, communication needs are addressed, existing and potential conditions are identified, the search area is designated, operational periods are identified, safety plans are developed, and objectives are established.
NFPA 1006 11.3.4
- WSR 03.05 Trainee, given standard search tactics, lost-person profile, lost-person behavior statistics, reporting party interviews, and available resources, shall develop a search plan, and revise the search plan based on clues identified by search teams, so that resources can be deployed and managed, and the plan continually updated.
NFPA 1006 11.3.5

- WSR 03.06 Trainee, given navigation equipment, topographical maps of the area to be navigated, and communication equipment, shall navigate in the wilderness to a specified location so that the specified location is identified and reached, search patterns are conducted, teams are guided to the desired location, and all clues relative to the location of the subject are identified and communicated to the incident commander.
NFPA 1006 11.3.6
- WSR 03.07 Trainee, given search and rescue personnel, capabilities and limitations of search and rescue members, and incident and site information, shall manage a team at a wilderness search and rescue incident so that an IMS is established, direction is given, needed support resources are identified, the incident action plan is communicated, tasks are communicated, resources are allocated, the incident is stabilized, personnel assignments are made, potential problems are identified and managed, and accountability is provided.
NFPA 1006 11.3.7
- WSR 03.08 Trainee, given a lost person profile, established search area, navigation equipment, topographical maps, and communication equipment, shall locate a subject in a wilderness environment so that the subject's location is determined.
NFPA 1006 11.3.8
- WSR 03.09 Trainee, given supplies in the search and rescue response pack, shall construct an emergency shelter in a wilderness environment so that the rescuer is protected from the elements.
NFPA 1006 11.3.9
- WSR 03.10 Trainee, given the technical wilderness travel equipment used by the responders, shall negotiate technical terrain typical of the response area so that technical terrain access skills can be assessed.
NFPA 1006 11.3.10

MINIMUM STANDARDS FOR MACHINERY RESCUE

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following training manuals:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

NFPA 1670: Standard on Operations and Training for Technical Search and Rescue Incidents

IFSTA

Fire Service Technical Search and Rescue

Other

Jurisdictionally developed codes and Protocols

Minimum Requirements

The Certification Program offers three (3) levels of Machinery Rescue Certification:

Machinery Rescue Awareness

Applicants must:

1. have completed and documented one of the following:
 - a. Machinery Rescue Awareness as defined by NFPA 1006;
 - b. SFFMA Machinery Rescue Awareness coursework

Common Vehicle Rescue Operations

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Machinery Rescue Awareness

AND
2. have completed and documented one of the following:
 - a) Machinery Rescue Operations as defined by NFPA 1006;
 - b) SFFMA Machinery Rescue Operations coursework

Common Vehicle Rescue Technician

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Machinery Rescue Awareness
 - b. Machinery Rescue Operations

AND
2. have completed and documented one of the following:
 - a) Machinery Rescue Technician as defined by NFPA 1006;
 - b) SFFMA Machinery Rescue Technician coursework

Curriculum for Machinery Rescue Awareness

MAC 01.01 Trainee, given background information and applicable reference materials, shall size up a machinery rescue incident so that the scope of the rescue is determined, the number of victims is identified, the last reported location of all the victims is established, witnesses and reporting parties are identified and interviewed, resource needs are assessed, primary search parameters are identified, and information required to develop an initial incident action plan is obtained.

NFPA 1006 13.1.1

MAC 01.02 Trainee, given scene control barriers, PPE, requisite equipment, and available specialized resources, shall recognize incident hazards and initiate isolation procedures so that all hazards are identified; resource application fits the operational requirements; hazard isolation is considered; risks to rescuers, bystanders, and victims are minimized; and rescue time constraints are taken into account.

NFPA 1006 13.1.2

MAC 01.03 Trainee, given AHJ guidelines, shall recognize the need for technical rescue resources at an operations- or technician-level (machinery) incident so that the need for additional resources is identified, the response system is initiated, the scene is secured and rendered safe until additional resources arrive, and awareness-level personnel are incorporated into the operational plan.

NFPA 1006 13.1.3

MAC 01.04 Trainee, given an incident, an assignment, an incident action plan, and resources from the tool kit, shall support an operations- or technician-level incident so that the assignment is carried out, progress is reported to command, environmental concerns are managed, personnel rehabilitation is facilitated, and the incident action plan is supported.

NFPA 1006 13.1.4

Curriculum for Machinery Rescue Operations

MAC 02.01 Trainee, given agency guidelines, planning forms, and an operations-level machinery incident or simulation, shall preplan for a small machinery incident so that a standard approach is used during training and operational scenarios; initial and ongoing size-ups are being completed; emergency situation hazards are identified; isolation methods and scene security measures are considered; fire suppression and safety measures are identified; machinery stabilization needs are evaluated; and resource needs are identified and documented for future use.

NFPA 1006 13.2.1

- MAC 02.02 Trainee, given scene security barriers, incident location, incident information, and PPE, shall establish “scene” safety zones so that hot, warm, and cold safety zones are designated; zone perimeters are consistent with incident requirements; perimeter markings can be recognized and understood by others; zone boundaries are communicated to incident command; and only authorized personnel are allowed access to the rescue scene.
NFPA 1006 13.2.2
- MAC 02.03 Trainee, given an extrication incident and fire control support, shall establish fire protection so that fire and explosion potential is managed and fire hazards and rescue objectives are communicated to the fire suppression crew.
NFPA 1006 13.2.3
- MAC 02.04 Trainee, given a machinery tool kit and PPE, shall stabilize a small or simple machine so that the machinery is prevented from moving during the rescue operations; entry, exit, and tool placement points are not compromised; anticipated rescue activities will not compromise machinery stability; selected stabilization points are structurally sound; stabilization equipment can be monitored; and the risk to rescuers is minimized.
NFPA 1006 13.2.4
- MAC 02.05 Trainee, given machinery tool kit and PPE, shall isolate potentially harmful energy sources so that all hazards are identified; systems are managed; beneficial system use is evaluated; and hazards to rescue personnel and victims are minimized.
NFPA 1006 13.2.5
- MAC 02.06 Trainee, given the structural and damage characteristics and potential victim location(s), shall determine small machinery access and egress points so that victim location(s) is identified; access and egress points for victims, rescuers, and equipment are designated; flows of personnel, victims(s), and equipment are identified; existing entry points are used; time constraints are factored; selected entry and egress points do not compromise stability; chosen points can be protected; equipment and victim stabilization are initiated; and AHJ safety and emergency procedures are enforced.
NFPA 1006 13.2.6
- MAC 02.07 Trainee, given a machinery tool kit, specialized tools and equipment, PPE, and an assignment, shall create access and egress openings for rescue from a small or simple machine so that the movement of rescuers and equipment complements victim care and removal; the technique chosen is expedient; victim and rescuer protection is afforded; and stability is maintained.
NFPA 1006 13.2.7
- MAC 02.08 Trainee, given an extrication involving a small or simple machine, a machinery tool kit, PPE, and specialized equipment, shall disentangle victim(s) so that undue victim injury is prevented; victim protection is provided; and stabilization is maintained.
NFPA 1006 13.2.8
- MAC 02.09 Trainee, given the associated structural and damage characteristics, shall identify potential emergency incidents involving mechanical equipment so that incident-specific resources are identified and hazard control plans are developed.
NFPA 1006 13.2.9
- MAC 02.10 Trainee, given a machinery rescue tool kit and hazard-specific PPE, shall designate access and egress points for victim(s) and rescuer(s) so that all machinery involved is stabilized and isolated, and chosen points can be protected.
NFPA 1006 13.2.10
- MAC 02.11 Trainee, given an entrapment within machinery, shall control the hazards presented by the release of fluids or mechanical release devices so that mechanical processes are secured, the position of machinery is determined to optimize the removal of victim(s), and chosen points do not compromise the removal of a victim or rescuer.
NFPA 1006 13.2.11
- MAC 02.12 Trainee, given an entrapment within machinery, shall initiate stabilization of energized equipment so that undue injury is prevented and safety guideline points are followed.
NFPA 1006 13.2.12
- MAC 02.13 Trainee, given a machinery rescue event and an SME capable of supplying event- or system-specific technical guidance, shall utilize specific information from a subject matter expert (SME) so that the technical guidance supports decision making and operational considerations applied during the event.
NFPA 1006 13.2.13
- MAC 02.14 Trainee, given a victim transfer device, a designated egress route, and PPE, shall remove a packaged victim to a designated safe area, as a member of a team so that the team effort is coordinated, the designated egress route is used, the victim is removed without compromising victim packaging, undue injury is prevented, and stabilization is maintained.
NFPA 1006 13.2.14
- MAC 02.15 Trainee, given PPE specific to the incident, isolation barriers, and tool kit, shall terminate an incident so that rescuers and bystanders are protected and accounted for during termination operations, the party responsible is notified of any modification or damage created during the operational period, documentation of loss or material use is accounted for, scene documentation is performed, scene control is transferred to a responsible party, potential or existing hazards are communicated to that responsible party, debriefing and postincident analysis and critique are considered, and command is terminated.
NFPA 1006 13.2.15

Curriculum for Machinery Rescue Technician

- MAC 03.01 Trainee, given agency guidelines, planning forms, and operations-level machinery incident or simulation, shall plan for a large machinery incident, and conduct initial and ongoing size-up so that a standard approach is used during training and operational scenarios; emergency situation hazards are identified; isolation methods and scene security measures are considered; fire suppression and safety measures are identified; machinery stabilization needs are evaluated; and resource needs are identified and documented for future use.
NFPA 1006 13.3.1

- MAC 03.02 Trainee, given a machinery tool kit and PPE, shall stabilize large machinery so that the machinery is prevented from moving during the rescue operations; entry, exit, and tool placement points are not compromised; anticipated rescue activities will not compromise machinery stability; selected stabilization points are structurally sound; stabilization equipment can be monitored; and the risk to rescuers is minimized.
NFPA 1006 13.3.2
- MAC 03.03 Trainee, given the structural and damage characteristics and potential victim location(s), shall determine large machinery access and egress points so that victim location(s) is identified; access and egress points for victims, rescuers, and equipment are designated; flows of personnel, victim(s), and equipment are identified; existing entry points are used; time constraints are factored; selected entry and egress points do not compromise machinery stability; chosen points can be protected; equipment and victim stabilization are initiated; and AHJ safety and emergency procedures are enforced.
NFPA 1006 13.3.3
- MAC 03.04 Trainee, given a machinery tool kit, specialized tools and equipment, PPE, and an assignment, shall create access and egress openings for rescue from large machinery so that the movement of rescuers and equipment complements victim care and removal; an emergency escape route is provided; the technique chosen is expedient; victim and rescuer protection is afforded; and stability is maintained.
NFPA 1006 13.3.4
- MAC 03.05 Trainee, given an extrication incident, a machinery tool kit, PPE, and specialized equipment, shall disentangle victim(s) so that undue victim injury is prevented; victim protection is provided; and stabilization is maintained.
NFPA 1006 13.3.5

MINIMUM STANDARDS FOR HEAVY VEHICLE RESCUE

Reference Materials

The jurisdictional entity in which the rescue personnel serves must have access to the most current editions of the following reference materials:

NFPA

NFPA 1006: Standard for Technical Rescuer Professional Qualifications

NFPA 1670: Standard on Operations and Training for Technical Search and Rescue Incidents

IFSTA

Fire Service Technical Search and Rescue

Principles of Vehicle Extrication

Other

Jurisdictionally developed codes and protocols

Minimum Requirements

The Certification Program offers three (3) levels of Heavy Vehicle Rescuer Certification:

Common Vehicle Rescue Awareness

Applicants must:

1. have completed and documented one of the following:
 - a. Heavy Vehicle Rescue Awareness as defined by NFPA 1006;
 - b. SFFMA Heavy Vehicle Rescue Awareness coursework

Common Vehicle Rescue Operations

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Common Vehicle Rescue Awareness;
 - b. Common Vehicle Rescue Operations;
 - c. Common Vehicle Rescue Technician; and
 - d. Heavy Vehicle Rescue Awareness

AND

2. have completed and documented one of the following:
 - a) Heavy Vehicle Rescue Operations as defined by NFPA 1006;
 - b) SFFMA Heavy Vehicle Rescue Operations coursework

Common Vehicle Rescue Technician

Applicant must:

1. meet all qualifications for, **and hold or apply concurrently for** the following SFFMA certificates:
 - a. Common Vehicle Rescue Awareness;
 - b. Common Vehicle Rescue Operations;
 - c. Common Vehicle Rescue Technician;
 - d. Heavy Vehicle Rescue Awareness; and
 - e. Heavy Vehicle Rescue Operations

AND

2. have completed and documented one of the following:
 - a) Heavy Vehicle Rescue Technician as defined by NFPA 1006;
 - b) SFFMA Heavy Vehicle Rescue Technician coursework

Curriculum for Heavy Vehicle Rescue Awareness

HV 01.01 Trainee, given background information and applicable reference materials, shall size up a heavy vehicle rescue incident so that the scope of the rescue is determined, the number of victims is identified, the last reported location of all the victims is established, witnesses and reporting parties are identified and interviewed, resource needs are assessed, primary search parameters are identified, and information required to develop an initial incident action plan is obtained.

NFPA 1006 9.1.1

HV 01.02 Trainee, given scene control barriers, PPE, requisite equipment, and available specialized resources, shall recognize incident hazards and initiate isolation procedures so that all hazards are identified; resource application fits the operational requirements; hazard isolation is considered; risks to rescuers, bystanders, and victims are minimized; and rescue time constraints are taken into account.

NFPA 1006 9.1.2

HV 01.03 Trainee, given AHJ guidelines, shall recognize the need for technical rescue resources at an operations- or technician-level (heavy vehicle) incident so that the need for additional resources is identified, the response system is initiated, the scene is secured and rendered safe until additional resources arrive, and awareness-level personnel are incorporated into the operational plan.

NFPA 1006 9.1.3

HV 01.04 Trainee, given an incident, an assignment, an incident action plan, and resources from the tool kit, shall support an operations- or technician-level incident so that the assignment is carried out, progress is reported to command, environmental concerns are managed, personnel rehabilitation is facilitated, and the incident action plan is supported.

NFPA 1006 9.1.4

Curriculum for Heavy Vehicle Rescue Operations

- HV 02.01 Trainee, given agency guidelines, planning forms, and an operations-level vehicle incident or simulation, shall create an incident action plan for a heavy vehicle incident, and conduct an initial and ongoing size-up so that a standard approach is used during training and operational scenarios, emergency situation hazards are identified, isolation methods and scene security measures are considered, fire suppression and safety measures are identified, vehicle stabilization needs are evaluated, and resource needs are identified and documented for future use.
NFPA 1006 9.2.1
- HV 02.02 Trainee, given an extrication incident and fire control support, shall establish fire protection so that fire and explosion potential is managed and fire hazards and rescue objectives are communicated to the fire suppression crew.
NFPA 1006 9.2.2
- HV 02.03 Trainee, given a vehicle tool kit and PPE, shall stabilize a heavy vehicle that has come to rest in its position of use on the road or other stable surface so that the vehicle is prevented from moving during the rescue operations; entry, exit, and tool placement points are not compromised; anticipated rescue activities will not compromise vehicle stability; selected stabilization points are structurally sound; stabilization equipment can be monitored; and the risk to rescuers is minimized.
NFPA 1006 9.2.3
- HV 02.04 Trainee, given a heavy vehicle, vehicle tool kit, and PPE, shall isolate potentially harmful energy sources, including propulsion power, restraint systems, and construction materials so that all hazards are identified, systems are managed, beneficial system use is evaluated, and hazards to rescue personnel and victims are minimized.
NFPA 1006 9.2.4
- HV 02.05 Trainee, given the structural and damage characteristics and potential victim location(s), shall determine the heavy vehicle access and egress points so that the victim location(s) is identified; access and egress points for victims, rescuers, and equipment are designated; flows of personnel, victims, and equipment are identified; existing entry points are used; time constraints are factored; selected entry and egress points do not compromise vehicle stability; chosen points can be protected; equipment and victim stabilization are initiated; and AHJ safety and emergency procedures are followed.
NFPA 1006 9.2.5
- HV 02.06 Trainee, given a vehicle tool kit, specialized tools and equipment, PPE, and an assignment, shall create access and egress openings for rescue from a heavy vehicle on its wheels so that the movement of rescuers and equipment complements victim care and removal, an emergency escape route is provided, the technique chosen is expedient, victim and rescuer protection is afforded, and vehicle stability is maintained.
NFPA 1006 9.2.6
- HV 02.07 Trainee, given an extrication incident, a vehicle tool kit, PPE, and specialized equipment, shall disentangle victim(s) so that undue victim injury is prevented, victim protection is provided, and stabilization is maintained.
NFPA 1006 9.2.7
- HV 02.08 Trainee, given a victim transfer device, a designated egress route, and PPE, shall remove a packaged victim to a designated safe area, as a member of a team so that the team effort is coordinated, the designated egress route is used, the victim is removed without compromising victim packaging, undue injury is prevented, and stabilization is maintained.
NFPA 1006 9.2.8
- HV 02.09 Trainee, given PPE specific to the incident, isolation barriers, and an extrication tool kit, shall terminate a heavy vehicle incident so that rescuers and bystanders are protected during termination operations; the party responsible for the operation, maintenance, or removal of the affected vehicle is notified of any modification or damage created during the extrication process; scene control is transferred to a responsible party; potential or existing hazards are communicated to that responsible party; and command is terminated.
NFPA 1006 9.2.9

Curriculum for Heavy Vehicle Rescue Technician

- HV 03.01 Trainee, given agency guidelines, planning forms, and a technician-level vehicle incident or simulation, shall create an incident action plan for an incident where a heavy vehicle has come to rest in a configuration or environment where multiple concurrent hazards must be managed to access or remove the occupants so that a standard approach is used during training and operational scenarios, emergency situation hazards are identified, isolation methods and scene security measures are considered, fire suppression and safety measures are identified, vehicle stabilization needs are evaluated, and resource needs are identified and documented for future use.
NFPA 1006 9.3.1
- HV 03.02 Trainee, given a vehicle and machinery tool kit and PPE, shall stabilize a heavy vehicle that has come to rest in a configuration or environment where multiple concurrent hazards must be managed to access or remove the occupants so that the vehicle is prevented from moving during the rescue operations; entry, exit, and tool placement points are not compromised; anticipated rescue activities will not compromise vehicle stability; selected stabilization points are structurally sound; stabilization equipment can be monitored; and the risk to rescuers is minimized.
NFPA 1006 9.3.2
- HV 03.03 Trainee, given a heavy vehicle incident, a vehicle tool kit and PPE, shall lift a heavy vehicle so that unanticipated movement is prevented during the rescue operations; entry, exit, and tool placement points are not compromised; anticipated rescue activities will not compromise vehicle stability; selected lift points are structurally sound; lifting equipment can be monitored; and the risk to rescuers is minimized.
NFPA 1006 9.3.3

- HV 03.04 Trainee, given a heavy vehicle incident, heavy equipment and an operator, a vehicle tool kit, and PPE, shall coordinate the use of heavy equipment as a part of a plan to lift, move, or stabilize a heavy vehicle so that the objective is met and the risks to the responders are minimized.
NFPA 1006 9.3.4
- HV 03.05 Trainee, given a vehicle tool kit, specialized tools and equipment, PPE, and an assignment, shall create access and egress openings for rescue from a heavy vehicle that has come to rest in a configuration or environment where multiple concurrent hazards must be managed to access or remove the occupants so that the movement of rescuers and equipment complements victim care and removal, an emergency escape route is provided, the technique chosen is expedient, victim and rescuer protection is afforded, and vehicle stability is maintained.
NFPA 1006 9.3.5
- HV 03.06 Trainee, given a heavy vehicle extrication incident, a vehicle tool kit, PPE, and specialized equipment, shall disentangle victim(s) from a heavy vehicle that has come to rest in a configuration or environment where multiple concurrent hazards must be managed to access or remove the occupants so that undue victim injury is prevented, victim protection is provided, and stabilization is maintained.
NFPA 1006 9.3.6
- HV 03.07 Trainee, given a victim transfer device, a designated egress route, and PPE, shall remove a packaged victim to a designated safe area, as a member of a team from a heavy vehicle that has come to rest in a configuration or environment where multiple concurrent hazards must be managed to access or remove the occupants so that the team effort is coordinated, the designated egress route is used, the victim is removed without compromising victim packaging, undue injury is prevented, compartment syndrome due to crush injuries is managed, and stabilization is maintained.
NFPA 1006 9.3.7

MINIMUM STANDARDS FOR HAZARDOUS MATERIALS

Reference Materials

The jurisdictional entity in which the Hazardous Material Personnel serves must have access to the most current editions of the following training manuals:

IFSTA

Essentials of Firefighting

Jones & Bartlett

Fire Fighter Skills and Hazardous Materials Response

Hazardous Materials Awareness and Operations

NFPA

NFPA 1072: Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications

Minimum Requirements

The Certification Program offers two (2) levels of fully accredited Hazardous Materials certification.

NFPA 1072: Hazardous Materials Awareness

1. Awareness Training completion
 - a. Minimum Requirements – Applicant must:
 - i. complete and report ‘Courage to be Safe’ coursework;
 - ii. complete and report all objectives from the SFFMA Hazardous Materials Awareness curriculum; and
 - b. The Austin office will issue an Eligibility Endorsement letter stating that the trainee is qualified to take the Board-approved examination.
2. Awareness Certification
 - a. Minimum Requirements – Applicant must:
 - i. successfully complete the required Board-approved written and skill examinations.
 - b. Previously issued certifications are “grandfathered” to the Hazardous Materials Awareness & Operations training completion as follows:
 - i. Firefighter I training completion with an effective date prior to January 1, 2020.
 - ii. Individuals who previously passed the Awareness portion of the 1072: Hazardous Materials Awareness/Operations written and skill exams prior to January 1, 2023.
 - c. The Austin office will:
 - i. issue a full Hazardous Materials Awareness certificate and shoulder patch; and
 - ii. maintain a permanent record of the certification.

NFPA 1072: Hazardous Materials Operations

1. Operations Training completion
 - a. Minimum Requirements – Applicant must:
 - i. complete and report ‘Courage to be Safe’ coursework;
 - ii. complete and report all objectives from the SFFMA Hazardous Materials Awareness curriculum;
 - iii. complete and report all objectives from the SFFMA Hazardous Materials Operations curriculum;
 - iv. Applicants must hold, or apply concurrently for, the following SFFMA certifications:
 - a) 1072: HazMat Awareness
 - b. The Austin office will issue an Eligibility Endorsement letter stating that the trainee is qualified to take the Board-approved examination.
2. Operations Certification
 - a. Minimum Requirements – Applicant must:
 - i. successfully complete the required Board-approved written and skill examinations (Awareness AND operations)
 - b. Previously issued certifications are “grandfathered” to the Hazardous Materials Awareness & Operations training completion as follows:
 - i. Firefighter I training completion with an effective date prior to January 1, 2020.
 - ii. Individuals who previously passed the Operations portion of the 1072: Hazardous Materials Awareness/Operations written and skill exams prior to January 1, 2023.
 - c. The Austin office will issue an Eligibility Endorsement letter stating that the trainee is qualified to take the Board-approved examination.

Curriculum for Hazardous Materials Awareness

HMA-01.01 Trainee shall define the following terms:

NFPA 1072 4.2.1

- A. hazardous materials
- B. WMD

HMA-01.02 Trainee shall identify basic hazards associated with classes and divisions.

NFPA 1072 4.2.1

HMA-01.03 Trainee shall identify indicators to the presence of hazardous materials including

NFPA 1072 4.2.1

- A. Container shapes
- B. NFPA 704 Markings
- C. Globally harmonized systems (GHS) markings,

- D. Placards
- E. Labels
- F. Pipeline markings
- G. Other transportation markings
- H. Shipping papers with emergency response information
- I. Other indicators

HMA-01.04 Trainee shall access information from the Emergency Response Guidebook (ERG) current edition using:

NFPA 1072 4.2.1

- A. Name of the material
- B. UN/NA Identification number
- C. Placard applied
- D. Container identification charts

HMA-01.05 Trainee shall identify types of hazard information available from the following:

NFPA 1072 4.2.1

- A. ERG
- B. Safety Data Sheets
- C. Shipping papers with emergency response information
- D. Other approved reference sources

HMA-01.06 Trainee shall recognize indicators to the presence of hazardous materials/WMD.

NFPA 1072 4.2.1

HMA-01.07 Trainee shall identify hazardous materials/WMD by:

NFPA 1072 4.2.1

- A. Name
- B. UN/NA identification number
- C. Placard applied
- D. Container identification charts

HMA-02.01 Trainee shall use of the ERG, SDS, shipping papers with emergency response information, and other approved reference sources to:

NFPA 1072 4.3.1

- A. Identify precautions to be taken to protect responders and the public.
- B. Policies and procedures for isolating the hazard area and denying entry.
- C. The purpose of and methods for isolating the hazard area and denying entry.

HMA-02.02 Trainee shall recognize precautions for protecting responders and the public.

NFPA 1072 4.3.1

HMA-02.03 Trainee shall identify isolation area.

NFPA 1072 4.3.1

HMA-02.04 Trainee shall demonstrate denying entry.

NFPA 1072 4.3.1

HMA-02.05 Trainee shall demonstrate avoiding minimizing hazards.

NFPA 1072 4.3.1

HMA-03.01 Trainee shall identify policies and procedures for:

NFPA 1072 4.4.1

- A. Notification
- B. Reporting
- C. Communications

HMA-03.02 Trainee shall identify types of approved communications equipment.

NFPA 1072 4.4.1

HMA-03.03 Trainee shall describe operations of that communications equipment.

NFPA 1072 4.4.1

HMA-03.04 Trainee shall demonstrate operation of approved communications equipment.

NFPA 1072 4.4.1

HMA-03.05 Trainee shall conduct communication in accordance with policies and procedures.

NFPA 1072 4.4.1

Curriculum for Hazardous Materials Operations

HMO-01.01 Trainee shall define the following terms:

NFPA 1072 5.2.1

- A. hazard classes
- B. hazard divisions

HMO-01.02 Trainee shall identify types of containers.

NFPA 1072 5.2.1

HMO-01.03 Trainee shall identify container identification markings.

NFPA 1072 5.2.1

HMO-01.04 Trainee shall identify piping and pipeline markings and contacting information.

NFPA 1072 5.2.1

HMO-01.05 Trainee shall identify types of information to be collected during the hazardous materials/WMD incident survey.

NFPA 1072 5.2.1

HMO-01.06 Trainee shall identify availability of shipping papers in transportation.

NFPA 1072 5.2.1

HMO-01.07 Trainee shall identify Safety Data Sheets (SDS) at facilities.

NFPA 1072 5.2.1

HMO-01.08 Trainee shall identify types of hazard information available from and how-to contact:

NFPA 1072 5.2.1/5.3.1

- A. CHEMTREC
- B. CANUTEC
- C. SETIQ
- D. Governmental Authorities
- E. Manufactures
- F. Shippers
- G. Carriers (e.g., Highway, Rail, Water, Air, Pipeline)

HMO-01.09 Trainee shall communicate with carrier representatives to reduce impact of a release.

NFPA 1072 5.2.1

HMO-01.10 Trainee shall identify basic physical and chemical properties

NFPA 1072 5.2.1

- | | |
|--|--|
| A. Boiling Point | I. Persistence |
| B. Chemical reactivity | J. Physical State (Solid, Liquid, Gas) |
| C. Corrosivity (pH) | K. Radiation (Ionizing, Nonionizing) |
| D. Flammable Range (LFL, UFL) | L. Specific Gravity |
| E. Explosive Range (LEL, UEL) | M. Toxic Products of Combustion |
| F. Flash Point | N. Vapor Density |
| G. Ignition Temperature (Autoignition) | O. Vapor Pressure |
| H. Particle Size | P. Water Solubility |

HMO-01.11 Trainee shall demonstrate how to identify the behavior of a material, and its container, based on the material's physical and chemical properties and the hazards associated with the identified behavior.

NFPA 1072 5.2.1

HMO-01.12 Trainee shall identify examples of potential criminal and terrorist targets.

NFPA 1072 5.2.1

HMO-01.13 Trainee shall identify Indications of possible criminal or terrorist activity for each of the following:

NFPA 1072 5.2.1

- A. Chemical agents
- B. Biological agents
- C. Radiological agents
- D. Illicit laboratories (e.g., clandestine laboratories, weapons labs, ricin labs)
- E. Explosives

HMO-01.14 Trainee shall identify additional hazards associated with terrorist or criminal activities such as secondary devices.

NFPA 1072 5.2.1

HMO-01.15 Trainee shall describe how to determine the likely harm and outcomes associated with the identified behavior and the surrounding conditions.

NFPA 1072 5.2.1

Identify Action Options

- HMO-02.01 Trainee shall identify policies and procedures for Hazardous Materials/WMD incident operations.
NFPA 1072 5.2.1
- HMO-02.02 Trainee shall identify basic components of an Incident Action Plan (IAP).
NFPA 1072 5.3.1
- HMO-02.03 Trainee shall identify modes of operations:
NFPA 1072 5.3.1
A. Offensive
B. Defensive
C. Nonintervention
- HMO-02.04 Trainee shall identify types of response objectives.
NFPA 1072 5.3.1
- HMO-02.05 Trainee shall identify resources, objectives, and action options based on the scope of the problem and available resources.
NFPA 1072 5.3.1
- HMO-02.06 Trainee shall identify types of actions options.
NFPA 1072 5.3.1
- HMO-02.07 Trainee shall identify types of response information available from:
NFPA 1072 5.3.1
A. Emergency Response Guidebook (ERG)
B. Safety Data Sheets (SDS)
C. Shipping papers with emergency response information
- HMO-02.08 Trainee shall identify safety procedures.
NFPA 1072 5.3.1
- HMO-02.09 Trainee shall identify risk analysis concepts.
NFPA 1072 5.3.1
- HMO-02.10 Trainee shall identify the purpose, advantages, limitations, and uses of PPE to determine if PPE is suitable for incident conditions.
NFPA 1072 5.3.1
- HMO-02.11 Trainee shall identify whether approved PPE is suitable for the incident conditions.
NFPA 1072 5.3.1
- HMO-02.12 Trainee shall identify difference between exposure and contamination.
NFPA 1072 5.3.1
- HMO-02.13 Trainee shall identify contamination types including sources and hazards of carcinogens at incident scenes.
NFPA 1072 5.3.1
- HMO-02.14 Trainee shall identify routes of exposure.
NFPA 1072 5.3.1/5.5.1
- HMO-02.15 Trainee shall identify types of decontamination.
NFPA 1072 5.3.1/5.5.1
A. Emergency
B. Mass
C. Technical
- HMO-02.16 Trainee shall identify the purpose, advantages, and limitations of emergency decontamination.
NFPA 1072 5.3.1/5.5.1
- HMO-02.17 Trainee shall identify emergency decontamination needs based on the scope of the problem.
NFPA 1072 5.3.1
- HMO-02.18 Trainee shall identify procedures, tools and equipment for performing emergency decontamination.
NFPA 1072 5.3.1/5.5.1

Action Plan Implementation

- HMO-03.01 Trainee shall identify scene control procedures.
NFPA 1072 5.4.1
- HMO-03.02 Trainee shall demonstrate how to establish and maintain scene control.
NFPA 1072 5.4.1
- HMO-03.03 Trainee shall identify procedures for protective actions, including evacuation and sheltering-in-place.
NFPA 1072 5.4.1
- HMO-03.04 Trainee shall identify procedures for ensuring coordinated communications between responders and to the public.
NFPA 1072 5.4.1

- HMO-03.05 Trainee shall identify evidence recognition and preservation procedures.
NFPA 1072 5.4.1
- HMO-03.06 Trainee shall demonstrate how to recognize and preserve evidence.
NFPA 1072 5.4.1
- HMO-03.07 Trainee shall identify incident command organization.
NFPA 1072 5.4.1
- HMO-03.08 Trainee shall identify purpose, importance, benefits, and organization of incident command at hazardous materials/WMD incidents.
NFPA 1072 5.4.1
- HMO-03.09 Trainee shall identify policies and procedures for implementing incident command at hazardous materials/WMD incidents.
NFPA 1072 5.4.1
- HMO-03.10 Trainee shall identify capabilities, limitations, inspection, donning, working in, and going through decontamination while wearing and doffing approved PPE.
NFPA 1072 5.4.1
- HMO-03.11 Trainee shall demonstrate how to inspect, don, work in, and go through decontamination while wear and doffing approved PPE.
NFPA 1072 5.4.1
- HMO-03.12 Trainee shall identify signs and symptoms of thermal stress.
NFPA 1072 5.4.1
- HMO-03.13 Trainee shall identify safety precautions when working at hazardous materials/WMD incidents.
NFPA 1072 5.4.1
- HMO-03.14 Trainee shall identify purpose, advantages, and limitations of cross decontamination.
NFPA 1072 5.4.1
- HMO-03.15 Trainee shall identify the need for cross decontamination in the field based on the tasks performed and contamination received, including sources and hazardous of carcinogens at in incident scenes.
NFPA 1072 5.4.1
- HMO-03.16 Trainee shall identify cross decontamination procedures for personnel, tools, equipment, and PPE.
NFPA 1072 5.4.1
- HMO-03.17 Trainee shall demonstrate conducting cross decontamination of contaminated personnel, tools, equipment, and PPE in the field.
NFPA 1072 5.4.1
- HMO-03.18 Trainee shall identify cleaning disinfecting, and inspecting tools, equipment, and PPE.
NFPA 1072 5.4.1
- HMO-04.01 Trainee shall define the following terms:
NFPA 1072 5.5.1
- A. Contamination
 - B. Cross Contamination
 - C. Exposure
- HMO-04.02 Trainee shall identify contamination types.
NFPA 1072 5.5.1
- HMO 04.03 Trainee shall identify policies and procedures for performing emergency decontamination.
NFPA 1072 5.5.1
- HMO 04.04 Trainee shall demonstrate selecting an emergency decontamination method.
NFPA 1072 5.5.1
- HMO 04.05 Trainee shall demonstrate setting up emergency decontamination in a safe area.
NFPA 1072 5.5.1
- A. Use PPE in proper manner
 - B. Implement emergency decontamination
 - C. Prevent spread of contamination
 - D. Avoid hazards during emergency decontamination
- HMO 04.06 Trainee shall identify hazard avoidance for emergency decontamination.
NFPA 1072 5.5.1
- Progress Evaluation and Reporting**
- HMO 05.01 Trainee shall identify the components of progress reports.
NFPA 1072 5.6.1
- HMO 05.02 Trainee shall identify policies and procedures for evaluating and reporting progress.
NFPA 1072 5.6.1
- HMO 05.03 Trainee shall demonstrate use of approved communication tools and equipment.
NFPA 1072 5.6.1

HMO 05.04 Trainee shall determine incident status using approved communications tools and equipment and communicate that status of assigned tasks.

NFPA 1072 5.6.1

HMO 05.05 Trainee shall identify signs indicating improving, static, or deteriorating conditions based on the objectives of the action plan.

NFPA 1072 5.6.1

HMO 05.06 Trainee shall identify circumstances under which it would be prudent to withdraw from a hazardous materials/WMD incident.

NFPA 1072 5.6.1

Personal Protective Equipment

HMO 06.01 Trainee shall identify policies and procedures for PPE selection and use.

NFPA 1072 6.2.1

HMO 06.02 Trainee, when selecting and using PPE, shall identify importance of working under the guidance of a:

NFPA 1072 6.2.1

- | | |
|------------------------------------|----------------------------------|
| A. hazardous materials technician; | C. Emergency Response Plan; |
| B. Allied professional; | D. Standard Operating Guidelines |

HMO 06.03 Trainee shall identify the capabilities and limitations of and specialized donning, doffing, and usage procedures for approved PPE.

NFPA 1072 6.2.1

HMO 06.04 Trainee shall identify the components of an incident action plan (IAP).

NFPA 1072 6.2.1

HMO 06.05 Trainee shall identify the procedures for decontamination, inspection, maintenance, and storage of approved PPE.

NFPA 1072 6.2.1

HMO 06.06 Trainee shall identify process for being decontaminated while wearing PPE.

NFPA 1072 6.2.1

HMO 06.07 Trainee shall identify procedures for reporting and documenting the use of PPE.

NFPA 1072 6.2.1

Product Control

HMO 07.01 Trainee shall identify types of PPE and the hazards for which they are used.

NFPA 1072 6.6.1

HMO 07.02 Trainee shall demonstrate selecting and using PPE.

NFPA 1072 6.6.1

HMO 07.03 Trainee shall identify the importance of working under the guidance of a:

NFPA 1072 6.6.1

- | | |
|------------------------------------|----------------------------------|
| A. hazardous materials technician; | C. Emergency Response Plan; |
| B. Allied professional; | D. Standard Operating Guidelines |

HMO 07.04 Trainee shall define the following:

NFPA 1072 6.6.1

- | | |
|----------------|-------------------|
| A. Control | C. Containment |
| B. Confinement | D. Extinguishment |

HMO 07.05 Trainee shall identify policies and procedures.

NFPA 1072 6.6.1

HMO 07.06 Trainee shall identify Product Control Methods for controlling a release with limited risk of personal exposure.

NFPA 1072 6.6.1

HMO 07.07 Trainee shall select and perform product control techniques to confine/contain the release with limited risk of personnel exposure using approved control agents and equipment on a release involving hazardous materials/WMD.

NFPA 1072 6.6.1

HMO 07.08 Trainee shall identify safety precautions associated with each product control method.

NFPA 1072 6.6.1

HMO 07.09 Trainee shall identify the location and operation of the remote/emergency shutoff devices in cargo tanks and intermodal tanks in transportation and containers at facilities that contain flammable liquids and flammable gases.

NFPA 1072 6.6.1

HMO 07.10 Trainee shall demonstrate using remote control valves and emergency shutoffs devices on cargo tanks and intermodal tanks in transportation and containers at fixed facilities.

NFPA 1072 6.6.1

HMO 07.11 Trainee shall identify the characteristics and applicability of approved product control agents.

NFPA 1072 6.6.1

HMO 07.12 Trainee shall perform product control techniques.

NFPA 1072 6.6.1

HMO 07.13 Trainee shall identify use of approved tools and equipment.

NFPA 1072 6.6.1

HMO 07.14 Trainee shall identify the requirements for reporting and documenting product control operations.

NFPA 1072 6.6.1

MINIMUM STANDARDS FOR INDUSTRIAL FIREFIGHTER CERTIFICATION

REFERENCE MATERIALS

The jurisdictional entity in which the Firefighter Personnel serves must have access to the most current editions of the following training manuals:

IFSTA

Essentials of Firefighting

Jones & Bartlett

Fire Fighter Skills and Hazardous Materials Response

NFPA

NFPA 1001: *Standard for Fire Fighter Professional Qualifications*

The Certification Program offers two (2) levels of fully accredited Firefighter certification.

NFPA 1081: Industrial Firefighter I

- a. Minimum Requirements – Applicant must complete and report each of the following:
 - i. 'Courage to be Safe' coursework;
 - ii. the most current version of FEMA NIMS IS-100: Introduction to ICS;
 - iii. the most current version of FEMA NIMS IS-200: Basic Incident Command System for Initial Response;
 - iv. the most current version of FEMA NIMS IS-700: Introduction to NIMS;
 - v. First Aid including CPR and AED
 - vi. Hazardous Materials Technician certification in accordance with:
 - a) NFPA 472/1072; or
 - b) OSHA 29CFR1910.120 (q); or
 - c) proof of equivalent training in this discipline.
 - vii. Applicants must complete one (1) of the following:
 - a) all objectives from the SFFMA Industrial Firefighter I curriculum; or
 - b) 1081: Advanced Exterior Industrial Fire Brigade Member coursework, including successful demonstration of required skills.
- b. The Austin office will issue an Eligibility Endorsement letter stating that the trainee is qualified to take the Board-approved examination.
 2. Full Industrial Firefighter I Certification
 - a. Minimum Requirements – Applicant must:
 - i. successfully complete the required Board-approved written examination (for testing reciprocity see section V. Credit for Volunteer Certification Training section D).

NFPA 1081: Industrial Firefighter II

- a. Minimum Requirements – Applicant must:
 - i. 'Courage to be Safe' coursework;
 - ii. the most current version of FEMA NIMS IS-100: Introduction to ICS;
 - iii. the most current version of FEMA NIMS IS-200: Basic Incident Command System for Initial Response;
 - iv. the most current version of FEMA NIMS IS-700: Introduction to NIMS;
 - v. First Aid including CPR and AED
 - vi. 1072: Hazardous Materials Technician coursework, and
 - vii. Applicants must complete one (1) of the following:
 - a) all objectives from the SFFMA Industrial Firefighter II curriculum; or
 - b) 1081: Interior Structural Industrial Fire Brigade Member coursework, including successful demonstration of required skills.
 - ix. Applicants must hold, or apply concurrently for, the following SFFMA certifications:
 - a) 1081: Firefighter I
 - b. The Austin office will issue an Eligibility Endorsement letter stating that the trainee is qualified to take the Board-approved examination.
2. Full Industrial Firefighter II Certification
 - a. Minimum Requirements – Applicant must:
 - i. successfully complete the required Board-approved written examination (for testing reciprocity see section V. Credit for Volunteer Certification Training section D).

SECTION 1 FIREFIGHTER SAFETY AND SURVIVAL

Industrial Firefighter I

- IF-01.01 Trainee shall describe the most common causes of firefighter injuries and deaths.
- IF-01.02 Trainee shall explain methods for preventing accidents.
NFPA 1081 6.3.1
- IF-01.03 Trainee shall identify potential long-term consequences of exposure to products of combustion.
NFPA 1081 6.2.3
- IF-01.04 Trainee shall explain the safety role of the Rapid Intervention Team/Rapid Intervention Crew (RIT/RIC) in an emergency situation.
NFPA 1081 6.2.9
- IF-01.05 Trainee shall explain Rescue, Exposure, Containment, Extinguishment, and Overhaul (RECEO) and its role in safety.
NFPA 1081 6.2.3
- IF-01.06 Trainee shall discuss the educational and human behavioral components that impact safety and survival in the fire fighting profession.
- IF-01.07 Trainee shall explain the difference between intervention and mitigation.
- IF-01.08 Trainee shall discuss basic atmospheric monitoring equipment and when it should be used.
NFPA 1081 6.2.9
- IF-01.09 Trainee shall explain the importance of personnel accountability systems and their use.
NFPA 1081 6.2.8
- IF-01.10 Trainee shall identify facility emergency evacuation signals.
NFPA 1081 5.1.2.2, 6.3.7
- IF-01.11 Trainee shall describe emergency evacuation methods.
NFPA 1081 6.2.2
- IF-01.12 Trainee shall define safe haven.
NFPA 1081 5.2.3

Industrial Firefighter II – There are no objectives required for this certification level.

SECTION 2 FIRE BEHAVIOR

- IF-02.01 Trainee shall describe the fire tetrahedron.
NFPA 1081 5.1.2
- IF-02.02 Trainee shall define fire Classes A, B, C, D, and K.
NFPA 1081 5.1.2
- IF-02.03 Trainee shall identify the risks associated with each class of fire.
NFPA 1081 5.1.2
- IF-02.04 Trainee shall describe the effect of oxygen on fire's behavior.
NFPA 1081 5.1.2
- IF-02.05 Trainee shall define key terms and concepts related to fire and fire behavior.
NFPA 1081 5.1.2
- IF-02.06 Trainee shall identify dangerous conditions caused by a fire.
NFPA 1081 5.1.2
- IF-02.07 Trainee shall identify and discuss the stages of fire.
NFPA 1081 5.1.2
- IF-02.08 Trainee shall list the physical states of matter in which fuels are found.
NFPA 1081 5.1.2

Industrial Firefighter II – There are no objectives required for this certification level.

SECTION 3 COMMUNICATIONS AND INCIDENT REPORTS

- IF-03.01 Trainee shall identify the procedures for reporting an emergency.
NFPA 1081 5.1.2.1, 6.3.7
- IF-03.02 Trainee shall explain the importance of knowing a facility layout, special hazards, and emergency response procedures.
NFPA 1081 5.1.2.3, 6.3.1
- IF-03.03 Trainee shall identify the content requirements for basic incident reports.
NFPA 1081 5.1.2.5
- IF-03.04 Trainee shall explain the purpose and value of accurate incident reports.
NFPA 1081 5.1.2.5
- IF-03.05 Trainee shall describe how to obtain necessary information for completing the incident report.
NFPA 1081 5.1.2.5
- IF-03.06 Trainee shall identify facility communication procedures and etiquette for routine and emergency traffic.
NFPA 1081 5.1.2.2, 6.3.7

Industrial Firefighter II – There are no objectives required for this certification level.

SECTION 4 PERSONAL PROTECTIVE EQUIPMENT (PPE)

- IF-04.01 Trainee shall list the items that constitute protective clothing worn by all fire brigade personnel.
NFPA 1081 6.2.1, 7.1.2.1
- IF-04.02 Trainee shall identify advantages and disadvantages of personal protective clothing.
NFPA 1081 6.2.1, 7.1.2.1
- IF-04.03 Trainee shall name the hazards that protective clothing is designed to protect against.
NFPA 1081 6.2.1, 7.1.2.1
- IF-04.04 Trainee shall state the proper care and maintenance guidelines for each item of protective clothing.
NFPA 1081 6.2.9, 7.2.10

Industrial Firefighter II – There are no objectives required for this certification level.

SECTION 5 PORTABLE FIRE EXTINGUISHERS

- IF-05.01 Trainee shall identify the symbols used for the five classifications of fire.
NFPA 1081 JPR 5.2.1
- IF-05.02 Trainee shall identify types of portable fire extinguishers.
NFPA 1081 5.2.1, 6.3.9, 6.3.10, 7.3.7, 7.3.11
- IF-05.03 Trainee shall describe the ratings system for portable fire extinguishers.
NFPA 1081 5.2.1, 6.3.9, 6.3.10, 7.3.11
- IF-05.04 Trainee shall identify limitations of portable fire extinguishers.
NFPA 1081 5.2.1, 6.3.9, 6.3.10, 7.3.11
- IF-05.05 Trainee shall explain the operating procedures for portable fire extinguishers.
NFPA 1081 5.2.1, 6.3.9, 6.3.10, 7.3.11
- IF-05.06 Trainee shall discuss inspections, maintenance, and testing of portable fire extinguishers.
NFPA 1081 5.2.1, 6.3.9, 6.3.10, 7.3.11

Industrial Firefighter II

- IF-05.07 Trainee shall demonstrate the ability to select, carry, and operate portable fire extinguishers on an interior fire using the appropriate extinguisher based on the fire size and type.
NFPA 1081 5.2.1, 6.3.9, 6.3.10

SECTION 6 SELF-CONTAINED BREATHING APPARATUS (SCBA)

Industrial Firefighter I

- IF-06.01 Trainee shall name the conditions that require respiratory protection.
NFPA 1081 6.2.2
- IF-06.02 Trainee shall identify the limitations of SCBA units and users.
NFPA 1081 6.2.2
- IF-06.03 Trainee shall list the components of SCBA.
NFPA 1081 6.2.2
- IF-06.04 Trainee shall explain breathing techniques for use with SCBA.
NFPA 1081 6.2.2
- IF-06.05 Trainee shall identify emergency procedures used with SCBA.
NFPA 1081 6.2.2

- IF-06.06 Trainee shall describe the donning and doffing procedures used with SCBA.
NFPA 1081 6.2.2
- IF-06.07 Trainee shall recognize the physical requirements of the SCBA user.
NFPA 1081 6.2.2
- IF-06.08 Trainee shall describe the purpose of Personal Alert Safety System (PASS) devices.
NFPA 1081 6.2.2

Industrial Firefighter II

- IF-06.09 Trainee, during interior fire operations, shall demonstrate the proper use of PASS devices during interior fire operations.
NFPA 1081 6.2.2
- IF-06.10 Trainee, during interior fire operations, shall demonstrate the ability to control breathing.
NFPA 1081 6.2.2
- IF-06.11 Trainee, during interior fire operations, shall use SCBA in limited visibility conditions.
NFPA 1081 6.2.2
- IF-06.12 Trainee, during interior fire operations, shall demonstrate the ability to replace SCBA air cylinders within specified time limits.
NFPA 1081 6.2.2
- IF-06.13 Trainee, during interior fire operations, shall use SCBA to exit through restricted passages.
NFPA 1081 6.2.2, 6.2.4
- IF-06.14 Trainee, during interior fire operations, shall complete donning and doffing procedures within specified time limits.
NFPA 1081 6.2.2
- IF-06.15 Trainee, during interior fire operations, shall inspect SCBA and Personal Protective Equipment (PPE).

SECTION 7 FIRE HOSE AND WATER SUPPLY

Industrial Firefighter I

- IF-07.01 Trainee shall describe the types, design, operation, nozzle pressure effects, and flow capabilities of nozzles.
NFPA 1081 6.2.3, 7.2.1
- IF-07.02 Trainee shall describe the principles of fire streams.
NFPA 1081 6.2.3, 7.2.1
- IF-07.03 Trainee shall identify fire and hose tools and appliances, and explain their function.
NFPA 1081 6.2.3, 7.2.1
- IF-07.04 Trainee shall explain basic hydraulic principles.
NFPA 1081 6.2.3, 7.2.1

Industrial Firefighter II

- IF-07.05 Trainee shall identify the types, sizes, and applications of hand lines used for attacking incipient and advanced exterior fires.
NFPA 1081 6.2.3
- IF-07.06 Trainee shall discuss precautions to be followed when advancing hand lines to a fire.
NFPA 1081 6.2.3
- IF-07.07 Trainee shall identify the observable results that a fire stream has been properly applied.
NFPA 1081 6.2.3
- IF-07.08 Trainee shall describe attack and control techniques.
NFPA 1081 6.2.3
- IF-07.09 Trainee shall explain water sources available for facility use.
NFPA 1081 6.2.7
- IF-07.10 Trainee shall describe the correct operation of site water supply components.
NFPA 1081 6.2.7
- IF-07.11 Trainee shall explain the effect of mechanical damage and temperatures on the operability of the water supply source.
NFPA 1081 6.2.7

SECTION 8 MASTER STREAMS, SALVAGE, AND OVERHAUL

Industrial Firefighter I – There are no objectives required for this certification level.

Industrial Firefighter II

- IF-08.01 Trainee shall discuss the uses, tactics, and safe operations of master streams.
NFPA 1081 6.3.3
- IF-08.02 Trainee shall explain the selection of master stream appliances for different fire situations.
NFPA 1081 6.3.3
- IF-08.03 Trainee shall discuss the effect that master stream appliances have on search and rescue.
NFPA 1081 6.3.3

- IF-08.04 Trainee shall explain the principles of exposure protection.
NFPA 1081 6.2.3
- IF-08.05 Trainee shall explain the effects of master streams on property conservation.
NFPA 1081 6.3.3
- IF-08.06 Trainee shall explain the purpose of property conservation and its value to the organization.
NFPA 1081 6.2.5
- IF-08.07 Trainee shall describe methods used to protect property.
NFPA 1081 6.2.5
- IF-08.08 Trainee shall describe the potential effect of master streams on the environment.
NFPA 1081 6.2.5
- IF-08.09 Trainee shall discuss types of salvage covers.
NFPA 1081 6.2.5
- IF-08.10 Trainee shall identify types of fire attack lines and water application devices that are most effective for overhaul.
NFPA 1081 6.2.6
- IF-08.11 Trainee shall identify types of tools and methods used to expose hidden fire.
NFPA 1081 6.2.6
- IF-08.12 Trainee shall describe dangers associated with overhaul.
NFPA 1081 6.2.6
- IF-08.13 Trainee shall describe the signs of areas of origin or arson.
NFPA 1081 6.2.6
- IF-08.14 Trainee shall discuss the importance of preserving fire cause evidence.
NFPA 1081 6.2.6
- IF-08.15 Trainee shall demonstrate how to put a master stream appliance into service.
NFPA 1081 6.3.3
- IF-08.16 Trainee shall demonstrate how to correctly deploy covering materials.
NFPA 1081 6.2.5

SECTION 9 FOAM

Industrial Firefighter I – There are no objectives required for this certification level.

Industrial Firefighter II

- IF-09.01 Trainee shall explain the methods where foam prevents or controls a hazard.
NFPA 1081 6.3.4
- IF-09.02 Trainee shall discuss the principles that generate foam.
NFPA 1081 6.3.4
- IF-09.03 Trainee shall identify the causes for poor foam generation and corrective measures.
NFPA 1081 6.3.4
- IF-09.04 Trainee shall explain the difference between hydrocarbon and polar solvent fuels and the concentrates that work on each.
NFPA 1081 6.3.4
- IF-09.05 Trainee shall describe the characteristics, uses, and limitations of fire fighting foams.
NFPA 1081 6.3.4
- IF-09.06 Trainee shall list the advantages and disadvantages of using fog versus air aspirating nozzles for foam application.
NFPA 1081 6.3.4
- IF-09.07 Trainee shall discuss foam stream application techniques.
NFPA 1081 6.3.4
- IF-09.08 Trainee shall identify hazards associated with foam usage and methods for reducing or eliminating hazards.
NFPA 1081 6.3.4
- IF-09.09 Trainee shall prepare a foam concentrate supply for use.
NFPA 1081 6.3.4
- IF-09.10 Trainee shall demonstrate the ability to assemble foam stream components.
NFPA 1081 6.3.4
- IF-09.11 Trainee shall employ various foam application techniques.
NFPA 1081 6.3.4
- IF-09.12 Trainee shall demonstrate the ability to approach and retreat from fires/spills as a part of a coordinated team.
NFPA 1081 6.3.4

SECTION 10 FIXED FIRE PROTECTION SYSTEMS

Industrial Firefighter I – There are no objectives required for this certification level.

Industrial Firefighter II

- IF-10.01 Trainee shall define fixed fire protection systems.
NFPA 1081 6.3.8
- IF-10.02 Trainee shall name the types of extinguishing agents.
NFPA 1081 6.3.8
- IF-10.03 Trainee shall describe system overrides and manual intervention procedures.
NFPA 1081 6.3.8
- IF-10.04 Trainee shall describe the hazards associated with fixed system operation.
NFPA 1081 6.3.8
- IF-10.05 Trainee shall discuss fixed system operation.
NFPA 1081 6.3.8
- IF-10.06 Trainee shall describe the effect of automatic sprinkler systems on property conservation.
NFPA 1081 6.2.5
- IF-10.07 Trainee shall describe shutdown procedures.
NFPA 1081 6.3.8
- IF-10.08 Trainee shall identify different alarm detection systems within a facility.
NFPA 1081 6.3.7
- IF-10.09 Trainee shall explain the difference between alarm, trouble, and supervisory alarms.
NFPA 1081 6.3.7
- IF-10.10 Trainee shall identify the hazards protected by the detection systems.
NFPA 1081 6.3.7
- IF-10.11 Trainee shall identify the hazards associated with each type of alarm condition.
NFPA 1081 6.3.7
- IF-10.12 Trainee shall operate a fixed fire protection system via mechanical means and properly shut down and reset fixed fire suppression systems.
NFPA 1081 6.3.8

SECTION 11 LADDERS

Industrial Firefighter I – There are no objectives required for this certification level.

Industrial Firefighter II

- IF-11.01 Trainee shall identify the parts of a ladder.
NFPA 1081 6.3.11
- IF-11.02 Trainee shall explain what constitutes a stable foundation for ladder placement.
NFPA 1081 6.3.11
- IF-11.03 Trainee shall explain what constitutes a reliable structural component for top placement.
NFPA 1081 6.3.11
- IF-11.04 Trainee shall determine different angles required for various tasks.
NFPA 1081 6.3.11
- IF-11.05 Trainee shall discuss the safety limits related to the degree of angulation of a ladder.
NFPA 1081 6.3.11
- IF-11.06 Trainee shall describe the hazards associated with setting up ladders.
NFPA 1081 6.3.11
- IF-11.07 Trainee shall carry, raise, and extend ladders.
NFPA 1081 6.3.10, 6.3.11
- IF-11.08 Trainee shall lock flies.
NFPA 1081 6.3.11
- IF-11.09 Trainee shall determine that a wall and roof will support the ladder.
NFPA 1081 6.3.11
- IF-11.10 Trainee shall assess extension ladder height requirements.
NFPA 1081 6.3.11
- IF-11.11 Trainee shall place the ladder to avoid obvious hazards.
NFPA 1081 6.3.10, 6.3.11

SECTION 12 INCIDENT COMMAND SYSTEM (ICS)

Industrial Firefighter I – There are no objectives required for this certification level.

Industrial Firefighter II

- IF-12.01 Trainee shall describe the concepts and principles of the National Incident Management System (NIMS).
NFPA 1081 4.3.11, 6.1.1
- IF-12.02 Trainee shall identify the components of NIMS.
NFPA 1081 4.3.11, 6.1.1
- IF-12.03 Trainee shall identify five major management functions of ICS.
NFPA 1081 4.3.11, 6.1.1
- IF-12.04 Trainee shall describe the purpose of unique position titles in ICS.
NFPA 1081 4.3.11, 6.1.1
- IF-12.05 Trainee shall discuss the importance of operating within the site emergency response plan (ERP), site Standard Operating Procedures (SOP) and safety procedures, and the Incident Action Plan (IAP).
NFPA 1081 JPR 5.1.2
- IF-12.06 Trainee shall describe the basic organization of ICS, and explain the functional roles and responsibilities of the command and general staffs.
NFPA 1081 4.3.11, 6.1.1
- IF-12.07 Trainee shall determine when it is appropriate to institute a unified or area command.
NFPA 1081 4.3.11, 6.1.1

SECTION 13 CONSIDERATIONS FOR EFFECTIVE RESPONSE (TEAM TESTING)

Industrial Firefighter I – There are no objectives required for this certification level.

Industrial Firefighter II

- IF-13.01 Trainee shall name the five components of the response process.
- IF-13.02 Trainee shall explain the purpose of the fire preplan.
NFPA 1081 6.1.2.1
- IF-13.03 Trainee shall identify the components of a fire preplan.
NFPA 1081 6.1.2.1
- IF-13.04 Trainee shall discuss reading site drawings.
NFPA 1081 6.3.2
- IF-13.05 Trainee shall identify forcible entry tools.
NFPA 1081 6.3.2
- IF-13.06 Trainee shall identify common symbols used in diagramming construction features, utilities, hazards, and fire protection systems.
NFPA 1081 6.3.2
- IF-13.07 Trainee shall explain the purpose of the site safety survey.
NFPA 1081 6.3.1
- IF-13.08 Trainee shall identify special considerations for responding to incidents involving civil unrest, Weapons of Mass Destruction (WMD), or acts of terrorism.
NFPA 1081 4.3.10, 6.1.1
- IF-13.09 Trainee shall describe access procedures.
NFPA 1081 6.3.2
- IF-13.10 Trainee shall identify site-specific hazards such as access to areas restricted by rail car movement, fences, walls, and areas of low overhead clearance.
NFPA 1081 6.3.2
- IF-13.11 Trainee shall explain procedures associated with special hazard areas such as electrical substation, radiation hazard areas, and others specific to the site.
NFPA 1081 6.3.2
- IF-13.12 Trainee shall recognize areas on roadways having load restrictions and access hazards presented by gates.
NFPA 1081 6.3.2
- IF-13.13 Trainee shall identify access routes to water supplies, hazardous materials locations, and electrical equipment locations.
NFPA 1081 6.3.2
- IF-13.14 Trainee shall recognize inherent hazards related to the material's configuration.
NFPA 1081 5.3.1
- IF-13.15 Trainee shall identify response hazards.
NFPA 1081 5.1.2.3

- IF-13.16 Trainee shall demonstrate the ability to complete forms, recognize hazards, match findings to pre-approved recommendations, and effectively communicate findings to the proper authority.
- IF-13.17 Trainee shall safely use each piece of provided response equipment.
NFPA 1081 5.1.2.3
- IF-13.18 Trainee shall implement the response.
NFPA 1081 5.1.2.3
- IF-13.19 Trainee shall operate facility communication equipment.
NFPA 1081 5.1.2.5
- IF-13.20 Trainee shall relay and record information.
NFPA 1081 5.1.2.2
- IF-13.21 Trainee shall use Self-Contained Breathing Apparatus (SCBA) in a live fire situation.
- IF-13.22 Trainee shall determine a fire's growth and development.
NFPA 1081 6.3.3
- IF-13.23 Trainee shall attack fires.
NFPA 1081 6.3.2
- IF-13.24 Trainee shall operate the site water supply components and identify damage or impairment.
NFPA 1081 5.3.1, 6.2.7
- IF-13.25 Trainee shall evaluate and modify water application for maximum penetration.
NFPA 1081 5.3.1