

# **CDC 10011**

## **Fire Fighter I**

### **Instructor Guide Sheets**



**Extension Course Program (A4L)**

**Air University**

**Air Education and Training Command**

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**AFSC 10011**

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Material in this volume is reviewed annually for technical accuracy, adequacy, and currency. For SKT purposes the examinee should check the *Weighted Airman Promotion System Catalog* to determine the correct references to study.

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Welcome to the Career Development Course (CDC) program, a vital element of the Department of Defense (DoD) Fire and Emergency Services Certification Program. If this is your first attempt at a CDC, we recommend you read DoD Manual 6055.06-M, *Department of Defense (DoD) Fire and Emergency Services Certification Program*. If this is not your first CDC, we're pleased that you are progressing well through the certification program and encourage you to continue your efforts to complete this CDC and obtain your certification for Fire Fighter I. This course, CDC 10011, Fire Fighter I is designed to give you the requirements and references required to obtain this certification. Certifications to the Hazardous Materials Awareness and Operations (core and mission specific PPE & product control) levels are mandatory prerequisites for certification at the Fire Fighter I level. (See DoD Manual 6055.06-M for additional guidance.)

These requirements are based on NFPA 1001, *Standard for Fire Fighter Professional Qualifications*, 2008 edition. The relevant NFPA standard is listed in each section of the certification materials. Each section is to be used in conjunction with the NFPA standard to ensure all information is covered. Due to the unique nature of the NFPA Job Performance Requirement (JPR) format many topics appear to be or tend to be repeated. It is necessary to study the information once, but the candidate must realize that questions on such information may be given in any objective to which the NFPA or the Instructor Guide Sheets refer to that information. Where appropriate and applicable, notes have been made to bring the repetition to the candidates' attention.

The overall Course Objectives use only NFPA standards, local policies/procedures, and IFSTA Manual *Essentials of Fire Fighting and Department Operations*, Fifth Edition. Student fire fighters must comprehend the job requirements of a Fire Fighter I by obtaining a minimum passing score of 65% on the end of course examination and completing the appropriate Performance Tests.

This CDC consists of two separate booklets, the Instructor Guide Sheets and Performance Tests, each of which carries different requirements. The successful completion of both booklet requirements will result in DoD fire fighter certification to the Fire Fighter level I.

Throughout the certification materials, Department of Defense enhancements to the NFPA standards are underlined.

Instructor Guide Sheets briefly outline the information for each objective. The Guide Sheets are broken into three columns. Column one indicates both the learning objective and NFPA line item. Learning Objective (LO) numbers shown in the extreme left column of the Instructor Guide Sheets are primarily for Extension Course Program (E) tracking purposes but may be used by candidates for correlation to the Certification Course Review Exercises used with CerTest (see the CerTest Procedural Guide for more information) and the final End-Of-Course (EOC) examination.

Column two contains the outline of information students are required to research and comprehend.

Column three provides reference notations indicating where additional information may be found (**test questions come from these references**). Instructors should develop their own lesson plans using the guide sheets as a starting point. Performance tests provide detailed performance checklist items for candidate testing.

Code numbers on figures are for preparing agency identification only.

The use of a name of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

To get a response to your questions concerning subject matter in this course, or to point out technical errors you find in the text, unit review exercises, or course examination call or write the author using the contact information on the inside front cover of this volume.

**NOTE: Do not use the IDEA Program to submit corrections for printing or typographical errors.**

Consult your education officer, training officer, or NCOIC if you have questions on course enrollment, administration, or irregularities (possible scoring errors, printing errors, etc.) on unit review exercises or course examination. For these and other administrative issues, you may also access the Air University e-campus support (helpdesk) at <http://www.auecampussupport.com> and do a search for your course number. You may find your question has already been answered. If not, submit a new question or request, and you will receive a response in four days or less.

This volume is valued at 18 hours and 6 points.

**NOTE:** In this volume, the subject matter is divided into self-contained units. A unit menu begins each unit, identifying the lesson headings and numbers. After reading and studying the references for each unit take the certification course review exercises (CCRE) provided in CerTest. Use of CerTest and the CCRE is explained in the CerTest Procedural Guide.

Preparation of this volume was aided through the cooperation and courtesy of the International Fire Service Training Association, (IFSTA). The Association furnished technical materials for the Fire Fighter Certification training materials.

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**Unit 1. Fire Fighter I General Requirements**  
**Objectives: NFPA Standard 1001, Chapter 5, para. 5.1-5.1.2 ..... 1**

**Unit 2. Fire Department Communications**  
**Objectives: NFPA Standard 1001, Chapter 5, para. 5.2 through 5.2.3 ..... 2**

**Unit 3. Fireground Operations**  
**Objectives: NFPA Standard 1001, Chapter 5, para 5.3 through 5.3.19 ..... 3**

**Unit 4. Prevention, Preparedness, and Maintenance**  
**Objectives: NFPA Standard 1001, Chapter 5, para 5.5 through 5.5.2 ..... 13**

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# **Student Notes**

**Unit 1. Fire Fighter I General Requirements**

**Objectives: Given NFPA Standards, the IFSTA *Essentials of Fire Fighting and Fire Department Operations* manual, local policies & procedures, and the Instructor Guide Sheets, comprehend the general knowledge requirements pertaining to Fire Fighter I.**

<i>LO/OBJ</i>	<i>CONTENT</i>	<i>REFERENCE</i>
<b>LO 001 / 5.1.1</b>	<p><b>Fire Fighter I General Requirements</b></p> <p>A. NFPA Standard 1001, <i>Standard for Fire Fighting I Professional Qualifications</i> establishes the minimum qualifications required for Fire Fighter I</p> <p>a. Fire Service Mission and Organization</p> <ol style="list-style-type: none"> <li>1. Fire service mission</li> <li>2. Fire department organization</li> <li>3. Duties of Fire Fighter I</li> </ol> <p>b. Fire Department Regulations</p> <ol style="list-style-type: none"> <li>1. Policies and procedures</li> <li>2. Standard operating procedures</li> </ol> <p>c. Interacting with Other Organizations</p> <p>d. Fire Fighter Safety and Health</p> <ol style="list-style-type: none"> <li>1. NFPA 1500</li> <li>2. Fire fighter health considerations</li> <li>3. Employee assistance and wellness programs</li> </ol>	<p>NFPA Standard 1001, <i>Standard for Fire Fighter Professional Qualifications</i>, Chapter 5, 2008 Ed</p> <p>IFSTA <i>Essentials of Fire Fighting and Fire Department operations</i>, 5<sup>th</sup> Ed, Chapters 1 and 2, all pgs</p>
<b>LO 002 / 5.1.1</b>	<p>e. Ropes and Knots</p> <ol style="list-style-type: none"> <li>1. Types of rope and their uses</li> <li>2. Rope storage and maintenance</li> <li>3. Rope hardware and webbing</li> <li>4. Knots</li> <li>5. Hoisting tools and equipment</li> <li>6. Rescue rope and harness</li> </ol>	<p>IFSTA <i>Essentials of Fire Fighting and Fire Department operations</i>, 5<sup>th</sup> Ed, Chapter 7, all pgs</p>
<b>Performance Objective</b>	<p>Demonstrate the ability to tie various knots, hoist tools &amp; equipment using the proper ropes and the correct knots, and the storage / cleaning / inspection of ropes.</p>	<p>IFSTA <i>Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i></p> <p>Skills Sheet 7-I-2 through 7-I-16</p>

## Unit 2. Fire Department Communications

**Objectives:** Given NFPA Standards, the IFSTA *Essentials of Fire Fighting and Fire Department Operations* manual, local policies & procedures, and the Instructor Guide Sheets, comprehend the knowledge requirements pertaining to Fire Department Communications.

<i>LO/OBJ</i>	<i>CONTENT</i>	<i>REFERENCE</i>
5.2	<b>Fire Department Communications</b>	
<b>LO 003 / 5.2.1-5.2.3</b>	<p>A. Fire Department Communications</p> <ol style="list-style-type: none"> <li>1. Communications Center               <ol style="list-style-type: none"> <li>a. Alarm receiving equipment</li> <li>b. Computer-aided dispatch</li> <li>c. Recording information</li> <li>d. Communications center personnel</li> </ol> </li> <li>2. Receiving Nonemergency Calls</li> <li>3. Receiving Emergency Calls               <ol style="list-style-type: none"> <li>a. Public alerting systems</li> <li>b. Procedures for reporting a fire or other emergencies</li> </ol> </li> <li>4. Radio Communications               <ol style="list-style-type: none"> <li>a. Radio procedures</li> <li>b. Emergency radio traffic</li> <li>c. Evacuation signals</li> </ol> </li> </ol>	<p>NFPA Standard 1001, <i>Standard for Fire Fighter Professional Qualifications</i>, Chapters 5, 2008 Ed</p> <p>IFSTA <i>Essentials of Fire Fighting and Fire Department operations</i>, 5<sup>th</sup> Ed, Chapter 19, all pgs</p>
<b>Performance Objective</b>	Demonstrate the ability to operate fire department communications equipment, record & relay information, operate fire station telephone & intercom equipment & radio equipment, and discriminate between routine / emergency traffic.	<p>IFSTA <i>Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i></p> <p>Skills Sheet 19-I-1 Skills Sheet 19-I-2</p>

**Unit 3. Fire Ground Operations**

**Objectives: Given NFPA Standards, the IFSTA *Essentials of Fire Fighting and Fire Department Operations* manual, local policies & procedures, and the Instructor Guide Sheets, comprehend the knowledge requirements pertaining to Fire Ground Operations.**

<b>LO/OBJ</b>	<b>CONTENT</b>	<b>REFERENCE</b>
<b>5.3</b>	<b>Fire Ground Operations</b>	
<b>LO 004 / 5.3.1</b>	<p>A. Self-Contained Breathing Apparatus (SCBA) Practices</p> <ol style="list-style-type: none"> <li>1. Respiratory Protection                             <ol style="list-style-type: none"> <li>a. Respiratory Hazards</li> <li>b. Protective Breathing Apparatus Limitations</li> <li>c. Types of Respiratory Protection</li> </ol> </li> <li>2. Donning and Doffing Protective Breathing Apparatus</li> <li>3. Personal Alert Safety Systems</li> <li>4. Using SCBA</li> </ol>	<p>NFPA Standard 1001, <i>Standard for Fire Fighter Professional Qualifications</i>, Chapters 5, 2008 Ed</p> <p>IFSTA <i>Essentials of Fire Fighting and Fire Department operations</i>, 5<sup>th</sup> Ed, Chapter 5, pgs 180-212</p>
<b>Performance Objective</b>	<p>Demonstrate the following abilities: don and operate the SCBA within 1 minute, control breathing, replace SCBA air cylinders, exit with SCBA through restricted passages, initiate and complete emergency procedures due to SCBA failure or air depletion, and doffing procedures.</p>	<p>IFSTA <i>Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i></p> <p>Skills Sheet 5-I-1                      Skills Sheet 5-I-2                      Skills Sheet 5-I-7                      Skills Sheet 5-I-8                      Skills Sheet 5-I-9                      Skills Sheet 5-I-10</p>
<b>LO 005 / 5.3.2-5.3.3</b>	<p>B. Responding to Emergencies</p> <ol style="list-style-type: none"> <li>1. Safety on the Apparatus</li> <li>2. Personal Protective Clothing                             <ol style="list-style-type: none"> <li>a. Donning</li> <li>b. Doffing</li> </ol> </li> <li>3. Emergency Operations                             <ol style="list-style-type: none"> <li>a. Preparedness</li> <li>b. Emergency Scene Safety</li> <li>c. Scene Management</li> </ol> </li> </ol>	<p>IFSTA <i>Essentials of Fire Fighting and Fire Department operations</i>, 5<sup>th</sup> Ed , Chapters 2, all pgs; and 5, pgs 165-180</p>

<i>LO/OBJ</i>	<i>CONTENT</i>	<i>REFERENCE</i>
<b>Performance Objective</b>	Demonstrate the ability to don/doff PPE within 1 minute and employ safety through the use personal protective clothing, deploy traffic and scene control devices, dismount apparatus, and operate in the protected work areas as directed.	IFSTA <i>Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i>  Skills Sheet 2-I-1 Skills Sheet 2-I-2 Skills Sheet 5-I-1 Skills Sheet 5-I-2
<b>LO 006 / 5.3.4</b>	<p>Forcible Entry</p> <ol style="list-style-type: none"> <li>1. Common building materials</li> <li>2. Door size-up and construction features</li> <li>3. Locks and locking devices</li> <li>4. Nondestructive rapid entry</li> <li>5. Conventional forcible entry through doors</li> <li>6. Forcing windows</li> <li>7. Breaching walls</li> <li>8. Breaching floors</li> </ol>	IFSTA <i>Essentials of Fire Fighting and Fire Department operations</i> , Ed, Chapters 4, pgs 137-145; and 9, all pgs
<b>Performance Objective</b>	Demonstrate the ability to transport and operate hand / power tools and to force entry through doors, windows, walls, and floors.	IFSTA <i>Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i>  Skills Sheet 9-I-3 thru 9-I-15
<b>LO 007 / 5.3.5</b>	<p>D. Exiting a Hazardous Area</p> <ol style="list-style-type: none"> <li>1. Emergency operations <ol style="list-style-type: none"> <li>a. Personnel accountability</li> <li>b. Communication procedures</li> </ol> </li> <li>2. Fire fighters in distress <ol style="list-style-type: none"> <li>a. Emergency evacuation procedures</li> <li>b. Safe haven</li> <li>c. Hazard indications</li> </ol> </li> <li>4. Respiratory protection <ol style="list-style-type: none"> <li>a. Respiratory hazards</li> <li>b. Emergency procedures</li> </ol> </li> </ol>	IFSTA <i>Essentials of Fire Fighting and Fire Department operations</i> , 5 <sup>th</sup> Ed, Chapters 2, all pgs; 5, pgs 207-213, and 8, pgs 305-327.

<i>LO/OBJ</i>	<i>CONTENT</i>	<i>REFERENCE</i>
<b>Performance Objective</b>	Operate as a team member in vision-obscured conditions, locate and follow a guideline, conserve air supply, and evaluate areas of hazard.	IFSTA <i>Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i>  Skills Sheet 8-I-2
<b>LO 008 / 5.3.6</b>	E. Ground Ladders <ol style="list-style-type: none"> <li>1. Parts of a ladder</li> <li>2. Handling ladders                             <ol style="list-style-type: none"> <li>a. Ladder safety</li> </ol> </li> <li>3. Positioning ground ladders                             <ol style="list-style-type: none"> <li>a. Responsibility for positioning</li> <li>b. Factors affecting ground ladder placement</li> </ol> </li> <li>4. General procedures for raising and climbing ladders</li> </ol>	IFSTA <i>Essentials of Fire Fighting and Fire Department operations, 5<sup>th</sup> Ed, Chapter 10, all pgs</i>
<b>Performance Objective</b>	Demonstrate the ability to properly and safely carry ladders, raise ladders, extend ladders and lock flies.	IFSTA <i>Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i>  Skills Sheet 10-I-2 thru 10-I-17
<b>LO 009 / 5.3.7</b>	F. Passenger Vehicle Fire Fighting <ol style="list-style-type: none"> <li>1. Principles of fire streams</li> <li>2. Vehicle fires                             <ol style="list-style-type: none"> <li>a. Basic procedures</li> <li>b. Hazards</li> </ol> </li> </ol>	IFSTA <i>Essentials of Fire Fighting and Fire Department operations, 5<sup>th</sup> Ed, Chapters 14, all pages; and 15, pgs 773-779 and 796-797</i>
<b>Performance Objective</b>	Demonstrate your ability to attack a passenger vehicle fire by advancing and effectively employing a 1½ in. or larger diameter attack line to extinguish expose and hidden fires.	IFSTA <i>Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i>  Skills Sheet 15-I-5
<b>LO 010 / 5.3.8</b>	G. Exterior Class A Fire Fighting <ol style="list-style-type: none"> <li>1. Fire control theory                             <ol style="list-style-type: none"> <li>a. Science of fire</li> <li>b. Temperature reduction</li> <li>c. Fuel removal</li> <li>d. Oxygen exclusion</li> <li>e. Chemical flame inhibition</li> </ol> </li> </ol>	IFSTA <i>Essentials of Fire Fighting and Fire Department operations, 5<sup>th</sup> Ed, Chapters 3, pgs 85-112 and 130-132; and 15 &amp; 18, all pgs</i>

<i>LO/OBJ</i>	<i>CONTENT</i>	<i>REFERENCE</i>
<b>Performance Objective</b>	<ol style="list-style-type: none"> <li>2. Deploying hand lines &amp; master streams               <ol style="list-style-type: none"> <li>a. Supplying streams</li> <li>b. Staffing stream devices</li> <li>c. Elevated master streams</li> </ol> </li> <li>3. Trash container fires</li> <li>4. Roles and responsibilities               <ol style="list-style-type: none"> <li>a. The fire fighter</li> <li>b. The investigator</li> <li>c. On the scene observations and conduct                   <ol style="list-style-type: none"> <li>a. Observations enroute</li> <li>b. Observations upon arrival</li> <li>c. Observations during fire fighting operations</li> </ol> </li> </ol> </li> <li>5. Protecting and preserving evidence</li> </ol> <p>Extinguish an exterior Class-A material stacked or piled fire, given hand tools and an attack or master stream, so exposures are protected and evidence preserved.</p>	<p><i>IFSTA Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i></p> <p>Skills Sheet 15-I-1            Skills Sheet 15-I-2            Skills Sheet 15-I-6            Skills Sheet 15-I-7            Skills Sheet 18-II-1</p>
<b>LO 011 / 5.3.9</b>	<p>H. Search and Rescue</p> <ol style="list-style-type: none"> <li>1. Assisting a victim down a ladder</li> <li>2. Fire fighters in distress</li> <li>3. Building search safety</li> <li>4. Conducting a search           <ol style="list-style-type: none"> <li>a. Primary search</li> <li>b. Secondary search</li> </ol> </li> <li>5. Search methods</li> <li>6. Searching multistory buildings</li> <li>7. Victim removal</li> <li>8. Considerations related to respiratory protection</li> </ol>	<p><i>IFSTA Essentials of Fire Fighting and Fire Department operations, 5<sup>th</sup> Ed, Chapters 5, pgs 207-212; 8, pgs 305-330; and 10, pgs 505-507</i></p>

<i><b>LO/OBJ</b></i>	<i><b>CONTENT</b></i>	<i><b>REFERENCE</b></i>
<p><b>Performance Objective</b></p> <p><b>LO 012 / 5.3.10</b></p>	<p>Demonstrate the ability to conduct search and rescue of a structure, given proper tools, PPE and SCBA, so team safety and integrity is maintained and the victim located and safely removed.</p> <p>I. Interior Structural Fire Fighting</p> <ol style="list-style-type: none"> <li>1. Principles of fire streams, patterns and nozzles                             <ol style="list-style-type: none"> <li>a. Solid stream</li> <li>b. Fog stream</li> <li>c. Broken stream</li> </ol> </li> <li>2. Advancing hose into a structure</li> <li>3. Extinguishing properties of water</li> <li>4. Dangerous building conditions</li> <li>5. Deploying master stream devices</li> <li>6. Products of combustion</li> <li>7. Physical / chemical changes of matter</li> <li>8. Fuel types                             <ol style="list-style-type: none"> <li>a. Gaseous</li> <li>b. Liquid</li> <li>c. Solid</li> </ol> </li> <li>9. Hazards and extinguishing fires in structures</li> <li>10. Rapid intervention crew</li> <li>11. Exposure protection</li> <li>12. Fire in upper levels of structures</li> <li>13. Fires below ground in structures</li> <li>15. Locating hidden fires</li> <li>16. Fire hose sizes</li> </ol>	<p>IFSTA <i>Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i></p> <p>Skills Sheet 8-I-1 thru 8-I-10                      IFSTA <i>Essentials of Fire Fighting and Fire Department operations, 5<sup>th</sup> Ed, Chapters 3, all pgs; 4, pgs 151-158; 13, all pgs; 14, pgs 717-733; and 15, pgs 759-772 &amp; 787-795</i></p>
<p><b>Performance Objective</b></p>	<p>Operating as a team member, attack an interior structure fire given attack lines, proper tools, PPE, and SCBA, so that team integrity/safety is maintained so the fire is extinguished.</p>	<p>IFSTA <i>Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i></p>

<i>LO/OBJ</i>	<i>CONTENT</i>	<i>REFERENCE</i>
<p><b>LO 013 / 5.3.11</b></p>	<p>J. Horizontal Ventilation</p> <ol style="list-style-type: none"> <li>1. Horizontal ventilation               <ol style="list-style-type: none"> <li>a. Advantages</li> <li>b. Disadvantages</li> <li>c. Weather conditions</li> <li>d. Exposures</li> </ol> </li> <li>2. Forced ventilation               <ol style="list-style-type: none"> <li>a. Advantages</li> <li>b. Disadvantages</li> <li>c. Negative pressure</li> <li>d. Positive pressure</li> </ol> </li> <li>3. Hydraulic ventilation               <ol style="list-style-type: none"> <li>a. Advantages</li> <li>b. Disadvantages</li> </ol> </li> <li>4. Safety considerations during ventilation</li> <li>5. Fire Development in a compartment</li> <li>6. Products of combustion</li> <li>7. Backdraft</li> <li>8. Reduction of backdraft potential</li> </ol>	<p>Skills Sheet 13-I-4 thru 13-I-5            Skills Sheet 13-I-19 thru 13-I-23            Skills Sheet 13-I-25 thru 13-I-26            Skills Sheet 14-I-1 thru 14-I-3            Skills Sheet 15-I-4            Skills Sheet 17-I-11</p> <p><i>IFSTA Essentials of Fire Fighting and Fire Department operations, 5<sup>th</sup> Ed, Chapters 3, pgs 112-132; all pgs; and 11, pgs 541-553 &amp; 570-579</i></p>
<p><b>Performance Objective</b></p>	<p>Operating as a team member, safely perform horizontal ventilation on a structure given the proper tools, equipment, and PPE so the structure is cleared of smoke.</p>	<p><i>IFSTA Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i></p> <p>Skills Sheet 11-I-3 thru 11-I-4</p>
<p><b>LO 014 / 5.3.12</b></p>	<p>K. Vertical Ventilation</p> <ol style="list-style-type: none"> <li>1. Transmission of heat</li> <li>2. Thermal layering</li> <li>3. Roofs               <ol style="list-style-type: none"> <li>a. Flat</li> <li>b. Pitched</li> <li>c. Arched</li> <li>d. Concrete &amp; metal constructed roofs</li> </ol> </li> </ol>	<p><i>IFSTA Essentials of Fire Fighting and Fire Department operations, 5<sup>th</sup> Ed, Chapters 3, all pgs; 4, all pgs; and 11, pgs 541-568</i></p>

<i><b>LO/OBJ</b></i>	<i><b>CONTENT</b></i>	<i><b>REFERENCE</b></i>
<p><b>Performance Objective</b></p>	<ul style="list-style-type: none"> <li>4. Trench or strip ventilation</li> <li>5. Conventional basement fire ventilation</li> <li>6. Safety and indicator of building/ roof collapse</li> <li>7. Construction classifications                             <ul style="list-style-type: none"> <li>a. Type I</li> <li>b. Type II</li> <li>c. Type III</li> <li>d. Type IV</li> <li>e. Type V</li> </ul> </li> <li>8. Precautions against upsetting vertical ventilation</li> </ul> <p>Operating as a team member, safely perform vertical ventilation on a structure given the proper tools, equipment, and PPE so the structure is cleared of products of combustion.</p>	<p><i>IFSTA Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i></p> <p>Skills Sheet 11-I-1 thru 11-I-2</p>
<p><b>LO 015 / 5.3.13</b></p>	<p>L. Overhaul</p> <ul style="list-style-type: none"> <li>1. Overhaul                             <ul style="list-style-type: none"> <li>a. Fire Safety During Overhaul</li> <li>b. Locating Hidden Fires</li> <li>c. Overhaul Procedures</li> </ul> </li> <li>2. Protecting fire scene evidence                             <ul style="list-style-type: none"> <li>a. Roles and responsibilities</li> <li>b. On the Scene: Observations and Conduct</li> <li>c. Responsibilities After the Fire</li> </ul> </li> </ul>	<p><i>IFSTA Essentials of Fire Fighting and Fire Department operations, 5<sup>th</sup> Ed, Chapters 17, pgs 881-886; and 18, all pgs</i></p>
<p><b>Performance Objective</b></p>	<p>Overhaul a fire scene given proper tools, equipment, and PPE so structural integrity is maintained, hidden fires are discovered, and evidence preserved.</p>	<p><i>IFSTA Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i></p> <p>Skills Sheet 17-I-11 Skills Sheet 18-II-1</p>
<p><b>LO 016 / 5.3.14</b></p>	<p>M. Salvage</p> <ul style="list-style-type: none"> <li>1. Philosophy of loss control</li> <li>2. Salvage                             <ul style="list-style-type: none"> <li>a. Salvage procedures</li> <li>b. Salvage covers and equipment</li> <li>c. Folding &amp; rolling of salvage covers</li> </ul> </li> </ul>	<p><i>IFSTA Essentials of Fire Fighting and Fire Department operations, 5<sup>th</sup> Ed Chapters 16, pgs 842-857; and 17, pgs 867-880</i></p>

<i>LO/OBJ</i>	<i>CONTENT</i>	<i>REFERENCE</i>
<b>Performance Objective</b>	<ul style="list-style-type: none"> <li>d. Improvising with salvage covers</li> <li>e. Covering openings</li> </ul> <ul style="list-style-type: none"> <li>3. Operations at fires in protected properties</li> <li>4. Sprinkler System Fundamentals</li> </ul> <p>Operating as a team member, overhaul a fire scene given proper tools, equipment, and PPE so the structure and contents are protected from further damage.</p>	<p><i>IFSTA Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i></p> <p>Skills Sheet 16-I-1 thru 16-I-2 Skills Sheet 17-I-2 thru 17-I-10</p>
<b>LO 017 / 5.3.15</b>	<p>N. Water Supply</p> <ul style="list-style-type: none"> <li>1. Fire hydrants &amp; supply hose</li> <li>2. Alternative water supplies</li> <li>3. Rural water supply operations</li> </ul>	<p><i>IFSTA Essentials of Fire Fighting and Fire Department operations, 5<sup>th</sup> Ed, Chapters 12, all pgs; and 1 pgs 664-670</i></p>
<b>Performance Objective</b>	<p>As team member, connect a pumper to a water supply, given proper tools, equipment, and PPE so water flow is unobstructed.</p>	<p><i>IFSTA Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i></p> <p>Skills Sheet 12-I-1 thru 12-I-4 Skills Sheet 13-I-12 thru 13-I-13</p>
<b>LO 018 / 5.3.16</b>	<p>O. Portable Fire Extinguishers</p> <ul style="list-style-type: none"> <li>1. Classifications of fires</li> <li>2. Fire control <ul style="list-style-type: none"> <li>a. Suppressing structure fires</li> <li>b. Suppressing Class B fires</li> <li>c. Suppressing Class C Fires</li> <li>d. Suppressing Class D Fires</li> </ul> </li> <li>3. Portable extinguisher rating system</li> <li>4. Using portable fire extinguishers</li> <li>5. Selecting the proper fire extinguisher</li> </ul>	<p><i>IFSTA Essentials of Fire Fighting and Fire Department operations, 5<sup>th</sup> Ed, Chapters 3, pgs 110-112; all pgs; and 15, pgs 759-768 and 773-787</i></p>
<b>Performance Objective</b>	<p>Safely extinguish an incipient stage Class A, Class B, and Class C fire utilizing the proper portable extinguisher so the fire is completely extinguished.</p>	<p><i>IFSTA Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i></p> <p>Skills Sheet 6-I-1 thru 6-I-3</p>

<i>LO/OBJ</i>	<i>CONTENT</i>	<i>REFERENCE</i>
<p><b>LO 019 / 5.3.17</b></p> <p><b>Performance Objective</b></p>	<p>P. Incident Illumination</p> <ol style="list-style-type: none"> <li>1. Power plants</li> <li>2. Lighting equipment</li> <li>3. Auxiliary electrical equipment</li> <li>4. Maintenance of portable plants and lighting equipment</li> </ol> <p>Safely illuminate the emergency scene, given the proper tools and equipment, so the area is properly illuminated.</p>	<p>IFSTA <i>Essentials of Fire Fighting and Fire Department operations</i>, Ed, Chapter 8, pgs 330-334</p> <p>IFSTA <i>Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i></p> <p>Skills Sheet 8-I-11</p>
<p><b>LO 020 / 5.3.18</b></p> <p><b>Performance Objective</b></p>	<p>Q. Utilities</p> <ol style="list-style-type: none"> <li>1. Control of gas utilities</li> <li>2. Suppressing Class C fires                             <ol style="list-style-type: none"> <li>a. Transmission lines and equipment</li> <li>b. Underground transmission lines</li> <li>c. Commercial high-voltage installations</li> <li>d. Controlling electrical power</li> <li>e. Electrical hazards</li> <li>f. Guidelines for electrical emergencies</li> </ol> </li> <li>3. Fire in properties protected by fixed systems</li> </ol> <p>Demonstrate the ability to identify and safely turn off utilities, given proper tool, equipment, and PPE, so scene safety is enhanced.</p>	<p>IFSTA <i>Essentials of Fire Fighting and Fire Department operations</i>, Ed, Chapter 15, pgs all pgs</p> <p>IFSTA <i>Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i></p> <p>Skills Sheet 15-I-3</p>
<p><b>LO 021 / 5.3.19</b></p>	<p>R. Ground Cover Fire Fighting</p> <ol style="list-style-type: none"> <li>1. Wildland fire techniques                             <ol style="list-style-type: none"> <li>a. Fuel</li> <li>b. Weather</li> <li>c. Topography</li> <li>d. Parts of a wildland fire</li> <li>e. Wildland protective clothing and equipment</li> <li>f. Attacking the fire</li> <li>g. Ten Standard fire fighting orders</li> </ol> </li> </ol>	<p>IFSTA <i>Essentials of Fire Fighting and Fire Department operations</i>, Ed, Chapter 15, pgs 800-806</p>

<i>LO/OBJ</i>	<i>CONTENT</i>	<i>REFERENCE</i>
<b>Performance Objective</b>	Operating as a team member and equipped with the proper tools, equipment, and PPE, combat a ground cover fire so threats to property are reported, safety of fire fighters is ensured, and the assignment is completed unless retreat is warranted.	IFSTA <i>Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i>  Skills Sheet 15-I-8

**Unit 4. Prevention, Preparedness, and Maintenance**

**Objectives: Given NFPA Standards, the IFSTA *Essentials of Fire Fighting and Fire Department Operations Manual*, local policies/procedures, and the Instructor Guide Sheets, comprehend the General knowledge requirements pertaining to Prevention, Preparedness, and Maintenance.**

<i>LO/OBJ</i>	<i>CONTENT</i>	<i>REFERENCE</i>
<p><b>LO 022 / 5.5.1</b></p> <p><b>Performance Objective</b></p>	<p><b>Prevention, Preparedness, and Maintenance</b></p> <p>A. Cleaning and Checking departmental tools and equipment</p> <ol style="list-style-type: none"> <li>1. Cleaning natural and synthetic ropes</li> <li>2. Care and maintenance of forcible entry tools</li> <li>3. Cleaning ladders</li> <li>4. Salvage cover maintenance</li> <li>5. Care of personnel protective equipment</li> <li>6. Cleaning ventilation equipment</li> </ol> <p>Inspect and clean ladders, ventilation equipment, SCBA, ropes, hand tools, and salvage equipment, given the proper cleaning tools and supplies, so the equipment is cleaned, maintained, return to ready service and records updated.</p>	<p>IFSTA <i>Essentials of Fire Fighting and Fire Department operations</i>, 5<sup>th</sup> Ed, Chapters 5, pgs 179 and 205-207; 7, pgs 269-273; 9, pgs 411-413; 10, pgs 478-481; and 17, pgs 873</p> <p>IFSTA <i>Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i></p> <p>Skills Sheets 5-I-3 thru 5-I-6, 7-I-1, 9-I-1 thru 9-I-2, 10-I-1, 17-I-1</p>
<p><b>LO 023 / 5.5.2</b></p> <p><b>Performance Objective</b></p>	<p>B. Hose Cleaning</p> <ol style="list-style-type: none"> <li>1. General care and maintenance of fire hose</li> <li>2. Hose rolls</li> <li>3. Basic hose loads and finishes</li> </ol> <p>Demonstrate the ability to clean, inspect, and return to ready service fire hose, given the proper cleaning equipment / supplies and records are updated.</p>	<p>IFSTA <i>Essentials of Fire Fighting and Fire Department operations</i>, 5<sup>th</sup> Ed, Chapter 13, all pgs</p> <p>IFSTA <i>Essentials 5<sup>th</sup> Ed Fire Fighter I &amp; II Skills Handbook</i></p> <p>Skills Sheet 13-I-1 thru 13-I-3 Skills Sheet 13-I-6 thru 13-I-11</p>

## Bibliography

### References:

IFSTA, *Essentials of Fire Fighting, 5<sup>th</sup> Edition*, 2008, Fire Protections Publications, Oklahoma State University

IFSTA, *Essentials of Fire Fighting, 5<sup>th</sup> Edition, Skills Handbook for Fire Fighter I & II*, 2008, Fire Protections Publications, Oklahoma State University

NFPA, 1001: *Standard for Fire Fighter Professional Qualifications*, 2008, National Fire Protection Association, Quincy, Massachusetts.

# **Student Notes**

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