Course Overview

- Establishing The Need
- What is NFPA 1403?
- Training On a Budget, Big or Small
- Preparing The Structure
- What Does IDEM Require?
- Planning Burn
- The Big Day
- Flashover Survival

Objectives

Students will be able to:
- Describe the trends in the fire service regarding firefighter fatalities and injuries involving training events
- Demonstrate an understanding of NFPA 1403
- Describe various types of live fire training aides and how to safely utilize them
- Demonstrate an understanding of IDEM requirements involving live fire training and the necessary forms to be filed
Objectives

Students will be able to:

- Demonstrate the ability to plan a live fire evolution in accordance with NFPA 1403
- Demonstrate the ability to instruct a Flashover Survival course
- Demonstrate the ability to lead the preparation phase of an acquired structure burn
- Demonstrate the ability to lead a live fire training effectively.

NFPA 1403 Live Fire Instructors Program

Why Train Instructors Specifically for Live Fire?

Does instructor I mean you are qualified to teach live fire?
Is being a better than average firefighter enough?
What makes live fire different than anything else?
Group Exercise

- Case Study #1
- Case Study #2

Lairdsville, NY

Lairdsville, NY
Trends and Hazards in Firefighter Training

“From 1987-2001 there has been a 31 percent decrease in the incidence of structure fires throughout the United States”
Training Injury Data

- 1987-2001 training injuries increased 21%
- In 2001, nearly 7,000 training-related injuries were reported

Rate of Training-Related Injuries per 1,000 Firefighters

Training-Related Fatalities 1978-2001

Training-Related Fatalities 1978-2001
Burn Buildings versus Acquired Structures

Live fire training buildings and simulators have made fire training safer than in the past, but generally do not provide the same quality of realism as live fire training in acquired structures.

Controlled Training Techniques

Closely controlled and repetitive procedures that simulate “actual” fire conditions have led to fireground injuries in cases where inexperienced firefighters have not been able to select the most appropriate tactical procedure. Firefighters must be taught to recognize the early signs of flashover and building collapse so they can take appropriate action quickly.

Training Standards and Procedures

In cases reviewed by this report in which serious injuries resulted, procedures from either the NFPA 1403 Standard or the department’s own established procedures were violated. Failure to follow well-established standards and procedures occurred in virtually every training injury reviewed during this study.
Need for Improved Health and Fitness Programs

Firefighters continue to become injured or killed as a result of poor physical fitness. Improved health and wellness programs can reduce firefighters’ risk for heart attack and stroke and better overall physical fitness can reduce the risk of other injuries (e.g., sprains/strains).

New Types of Training With Their Inherent Risks

The need to expand training to include technical rescue, hazardous materials and EMS, for example, has increased the types of training hazards to which firefighters can be exposed.

Instructor Expertise

Today’s fire service instructors are more qualified and well versed in instructional methodologies than in the past. However, they may not have the same level of fireground experience as previous instructors, due in part to the decline in the number of structure fires over the past two decades.
Less Time Available for Training in Basic Evolutions

In order to meet the demands of expanding fire service roles, advanced and technical training evolutions have increased, thus reducing the amount of time available to perform basic training evolutions on such subjects as hose, ladder, and tool work.

New Technologies Contribute to Safety

Modern, computerized burn buildings, fed by propane or natural gas, have many built in safety features for conducting live fire training. Modern personal protective equipment, such as turnout gear and SCBA, provide greater escape time in dangerous conditions such as flashover. Simulation technology has increased the margin of safety in training.

Future Trends

New technologies, such as virtual reality and other simulators, will inevitably become part of the training tools used by firefighters. These technologies can enhance, but not substitute for, actual live fire evolutions.
NFPA 1403 Overview

- Administration
- Referenced Publications
- Definitions
- Acquired Structures
- Gas-Fired training Center Buildings
- Non-gas Fired Training Center Buildings
- Exterior Props
- Exterior Class B Fires
- Reports and records
- Annexes

All Chapters Contain

- Student Prerequisites
- Structures and Facilities
- Fuel Materials
- Safety
- Instructors
All Students Must Have Training In:

- Safety
- Fire Behavior
- Portable Extinguishers
- Personal Protective Equipment
- Ladders
- Fire Hose, Appliances, and Streams
- Overhaul
- Water Supply
- Ventilation
- Forcible Entry

Training Props
Commercial and Otherwise

- Flammable range box
- Backdraft box
- Car fire
- Flashover
- Compartment simulator
- Gas Fired
- Non-Gas Fired
- Propane Simulators
Exterior Props

- Car fire simulator
- Propane tree
- Class B pan
- Dumpsters
Non-Gas Fired Buildings

BIG!! or small

Non-Gas Fired Buildings

Expensive or Not so expensive
Acquired Structures
Chapter 4

IDEEM Requirements

• Variance Request- Fire training
• Request For Variance- Motor Vehicle Fire Training
• Identification of Potentially Affected Persons
Reports and Records
Chapter 9
Records to be maintained on all live fire training evolutions
- An accounting of all activities conducted
- A listing of instructors present and their assignments
- Documentation of unusual conditions
- Any changes or deterioration of the structure
- Documentation of the condition of the premises at the conclusion of the training