Date: July 14, 2017

To: Ronny J. Coleman, Chairman
    Statewide Training and Education Advisory Committee
    c/o State Fire Training

From: Kevin Conant, Fire Service Training Specialist III

Subject/Agenda Action Item: FSTEP Incident Management of High Rise Fires (2016)

**Recommended Actions:** Approve the Incident Management of High Rise Fires (2016) Curriculum

**Background Information:**

This curriculum was presented at the January 13, 2017 STEAC Meeting. This is the second reading; as of this date we have not received any feedback or input on the new curriculum.


A cadre of experienced subject matter experts with extensive high rise firefighting experience, including several members of the FIRESCOPE High Rise specialty group were selected from various agencies and backgrounds in the mission to update the content into a new FSTEP course.

**Cadre Leadership**

Kevin Conant, Battalion Chief (ret), Laura Garwood Meehan, Cadre Editor, Sacramento State.

**Development Cadre Members**

Jason Cardenas, Fire Captain, County of Los Angeles Fire Department; Jeff Gillette, Battalion Chief, Colton/Loma Linda Fire Department; Nicol Juratovac, Battalion Chief, San Francisco Fire Department; Gerry Laird, Battalion Chief, San Jose Fire Department; Demond Simmons, Battalion Chief, Oakland Fire Department; Tom Siragusa, Assistant Chief, San Francisco Fire Department; Charles Tobias, Battalion Chief, Fresno Fire Department; Surgey “Guy” Tomlinson, Battalion Chief, Los Angeles Fire Department; Jack Wise, Battalion Chief, Los Angeles Fire Department

Several of the cadre members are SFT Registered Instructors and all have extensive operational experience with high rise incidents, and three of the cadre members are on the FIRESCOPE High Rise specialty group. Because this is a FSTEP Course Plan, the development of a Certification Training Standards (CTS) was not required. The majority of the Terminal Learning Objectives (TLO’s) and the supporting Enabling Learning Objectives (ELO)

“The Department of Forestry and Fire Protection serves and safeguards the people and protects the property and resources of California.”

Additionally, the following FIRESCOPE ICS High Rise specialty documents were also referenced: ICS-HR-120-1 High-Rise Structure Fire Operational System Description; ICS-1001 Lobby Control Unit Leader—High-Rise Incident; ICS-1002 Systems Control Unit Leader—High-Rise Incident; ICS-1003 Staging Area Manager—High-Rise Incident; ICS-HR-1004 Base Manager—High-Rise Incident; ICS-HR-1005 Rapid-Ascent Team Leader—High-Rise Incident; ICS-HR-1006 Rapid Intervention Group Supervisor—High-Rise Incident; ICS-HR-1007 Evacuation Group Supervisor—High-Rise Incident; ICS-HR-1008 Ground Support Unit Leader—High-Rise Incident. The Course Plan will be available on the SFT website.

The breakdown of the **40-hour** FSTEP course is as follows:

<table>
<thead>
<tr>
<th>Incident Management of High Rise Fires</th>
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</thead>
<tbody>
<tr>
<td>Lecture/Didactic</td>
<td>17:30 Hours:Minutes</td>
</tr>
<tr>
<td>Activities/Simulations</td>
<td>19:30 Hours:Minutes</td>
</tr>
<tr>
<td>Testing</td>
<td>3:00 Hours:Minutes</td>
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### Analysis/Summary of Issue:

Following is an analysis of this new FSTEP course.

1. The NFPA 1021 *Standard for Fire Officer Professional Qualifications* (2014) does not specifically address the job performance requirements of high-rise fire incident management. Therefore, SFT did not include it in the Certification Standard for Company Officer or Chief Fire Officer. Consequently, stakeholders requested staff to update the legacy Fire Command 2C, *High-rise Fire Fighting Tactics* (1995) curriculum by creating a new FSTEP course to include operational level training for high-rise incident management, aligning with the work of the FIRESCOPE ICS High Rise specialty group.

2. This course provides aspiring and incumbent Company Officers and Chief Officers with the knowledge, skills, and abilities required for managing incidents occurring in large, multistory buildings. These incidents may present significant management, logistical, and safety challenges to emergency personnel. The size and complexity of the interior spaces; limited, sometimes arduous access; extended travel and response times; and the concentrated occupant load with egress challenges all contribute to the problems faced by emergency responders. Additionally, most high-rise structures are equipped with various environmental, fire protection, and life-safety systems that require support and control. Successful emergency operations in these types of buildings also require preplanning and technical competence on the part of the emergency responders.

3. This course utilizes case studies and specifically emphasizes the necessity to secure and utilize an actual high-rise building to meet the course objectives by conducting high-rise command and general staff simulation activities. Additionally, a facilitated walk through of the high-rise building occurs with a fire protection engineer, and/or building engineer.

4. This course is in alignment with the training necessary for the statewide deployment of Cal OES resources by local government agencies responding to mutual aid high-rise fire incidents.

5. The implementation plan for this new course is attached.
Incident Management of High Rise Fires (2016)
Implementation of New Curriculum

This document is intended to provide information for all State Fire Training (SFT) stakeholders on the new Incident Management of High Rise Fires (2016) curriculum, a replacement of the Fire Command 2C: High-rise Fire Fighting Tactics (1995) curriculum. Stakeholders are encouraged to study this information carefully and seek clarification from SFT if questions arise. NOTE: Special attention should be paid to this new FSTEP course, as it is NOT included in either the Company Officer or Chief Fire Officer certification track.


Additionally, the following FIRESCOPE ICS High Rise specialty documents were also referenced:
ICS-HR-120-1 High-Rise Structure Fire Operational System Description; ICS-1001 Lobby Control Unit Leader—High-Rise Incident; ICS-1002 Systems Control Unit Leader—High-Rise Incident; ICS-1003 Staging Area Manager—High-Rise Incident; ICS-HR-1004 Base Manager—High-Rise Incident; ICS-HR-1005 Rapid-Ascent Team Leader—High-Rise Incident; ICS-HR-1006 Rapid Intervention Group Supervisor—High-Rise Incident; ICS-HR-1007 Evacuation Group Supervisor—High-Rise Incident; ICS-HR-1008 Ground Support Unit Leader—High-Rise Incident. The Course Plan is available on the SFT website.

Incident Management of High Rise Fires (2016) Change Timeline

FULL IMPLEMENTATION.............................................................................................. Effective June 1, 2017
COURSE PHASE OUT ........................................................................................................................................... Effective December 31, 2016

Effective December 31, 2016, Fire Command 2C: High-rise Fire Fighting Tactics (1995) course will no longer be delivered and the curriculum will be retired.

INSTRUCTOR REQUIREMENTS .......................................................................................................................... Effective June 1, 2017


New instructors for the Incident Management of High Rise Fires (2016) course shall meet the SFT requirements for Registered Instructor, and will be required to either take the course or apply for a Pace II review of their instructor qualifications, including appropriate education and practical experience relating to course content.

Additionally, a new instructor of the Incident Management of High Rise Fires (2016) a FSTEP Command course, the following shall apply:

1. Rank and Professional Experience:
   a. Held the rank of suppression officer within a Recognized Fire Agency in California for a minimum of three years or;
   b. Worked as a volunteer suppression officer or paid call officer with a Recognized Fire Agency in California for a minimum of five years.
   c. Specific expertise in command level strategy and tactics at high rise fires.

SFT STAFF COORDINATION

This course replaces a former CFSTES course and is now a FSTEP course in the Command Instructor discipline.

POTENTIAL AGENCY IMPACTS

Fire agencies utilizing the existing Fire Command 2C: High-rise Fire Fighting Tactics (1995) Curriculum as a requirement for their recruitment/promotion activities need to review the new Incident Management of the High Rise Fires (2016) Curriculum to ensure all agency training needs are being met. After review, fire agencies should update their job specifications and recruitment documentation to reflect this new course. Fire agencies should also evaluate how this new course may impact their existing labor agreements.

NOTE: Special attention should be paid to this new FSTEP course, as it is NOT included in either of the CFSTES Company Officer or Chief Fire Officer certification track. Agencies desiring their officers to receive additional training in strategy and tactics at high rise fires should strongly consider this course in their job specifications and recruitment documentation.

Accredited Regional Training Programs (ARTP), Accredited Local Academies (ALA), community colleges and all other local delivery venues need to review the curriculum and seek approval from their curriculum committee/program sponsor, as appropriate. ARTPs should review the new Incident Management of High Rise Fires (2016) curriculum and discuss potential impacts with their advisory committees.
Incident Management of High Rise Fires

Course Plan

Course Details

Description: This course provides knowledge, skills, and abilities required for those managing incidents occurring in large, multistory buildings. These incidents may present significant management, logistical, and safety challenges to emergency personnel. The size and complexity of the interior spaces; limited, sometimes arduous access; extended travel and response times; and the concentrated occupant load with egress challenges all contribute to the problems faced by emergency responders. Additionally, most high-rise structures are equipped with various environmental, fire protection, and life-safety systems that require support and control. Successful emergency operations in these types of buildings also require preplanning and technical competence on the part of the emergency responders.

Designed For: Aspiring and incumbent company officers and chief officers

Authority: State Fire Training Company Officer 2D: All-Risk Command Operations for Company Officers

State Fire Training Incident Management of Major Fires

FIRESCOPE ICS 420-1 Field Operations Guide

FIRESCOPE ICS 500 Structure Fire Operations

FIRESCOPE ICS 910 Fire Fighter Incident Safety and Accountability Guidelines

NWCG PMS 461 Incident Response Pocket Guide

NFPA 1021, Standard for Fire Officer Professional Qualifications (2014)


NFPA 1521, Standard for Fire Department Safety Officer Professional Qualifications (2015)
Incident Management of High Rise Fires


**Prerequisites:**
1. Fire Command 2A or Incident Management of Major Fires (FSTEP); and
2. Fire Command 1A or Command 1A or Company Officer 2D: All-Risk Command Operations for Company Officers

**Standard:**
Attend all classes and participate in all activities

**Hours:**
- Lecture: 17:30
- Activities: 19:30
- Testing: 3:00

**Hours (Total):** 40:00

**Maximum Class Size:** 30

**Instructor Level:** Primary instructor

**Instructor/Student Ratio:** 1:30 Lecture

**Skills Evaluator/Student Ratio:** 1:10 Simulations/Activities

**Restrictions:** None

**SFT Designation:** FSTEP
Required Resources

Instructor Resources

To teach this course, instructors need:

- State Fire Training Company Officer 2D: All-Risk Command Operations for Company Officers Course Plan
- State Fire Training Incident Management of Major Fires Course Plan
- FIRESCOPE ICS 500 Structure Fire Operations (current edition)
- FIRESCOPE ICS 910 Fire Fighter Incident Safety and Accountability Guidelines (current edition)
- NWCG PMS 461 Incident Response Pocket Guide (current edition)

Instructors may choose to use:


Online Instructor Resources

The following instructor resources are available online at http://osfm.fire.ca.gov/training/instructorresources.php:

- 750 Adams, Memphis, Tennessee: https://www.youtube.com/watch?v=CAHCO-1SAfc&app=desktop
- Orie Palmer, FDNY: https://www.youtube.com/watch?v=VGzMnmWYec0
- State Fire Training Company Officer 2D: All-Risk Command Operations for Company Officers Course Plan
- State Fire Training Incident Management of Major Fires Course Plan
- NWCG PMS 461 Incident Response Pocket Guide (current edition)
- FIRESCOPE: http://firescope.org/
- FIRESCOPE ICS 500 Structure Fire Operations (current edition)
- FIRESCOPE ICS 910 Fire Fighter Incident Safety and Accountability Guidelines (current edition)
- ICS-HR-120-1 High-Rise Structure Fire Operational System Description
- ICS-1001 Lobby Control Unit Leader—High-Rise Incident
- ICS-1002 Systems Control Unit Leader—High-Rise Incident
- ICS-1003 Staging Area Manager—High-Rise Incident
- ICS-1004 Base Manager—High-Rise Incident
- ICS-1005 Rapid-Ascent Team Leader—High-Rise Incident
- ICS-1006 Rapid Intervention Group Supervisor—High-Rise Incident
- ICS-1007 Evacuation Group Supervisor—High-Rise Incident
- ICS-1008 Ground Support Unit Leader—High-Rise Incident
Student Resources

To participate in this course, students need (if assigned by instructors):

- NWCG PMS 461 Incident Response Pocket Guide (current edition)
- FIRESCOPE ICS 500 Structure Fire Operations (current edition)
- FIRESCOPE ICS 910 Fire Fighter Incident Safety and Accountability Guidelines (current edition)
- ICS-HR-120-1 High-Rise Structure Fire Operational System Description
- ICS-1001 Lobby Control Unit Leader—High-Rise Incident
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- ICS-1007 Evacuation Group Supervisor—High-Rise Incident
- ICS-1008 Ground Support Unit Leader—High-Rise Incident

Facilities, Equipment, and Personnel

The following facilities, equipment, or personnel are required to deliver this course:

**Facilities**

- Class room
- It is necessary that the instructor secure and utilize an actual high rise building to meet the objectives and conduct the activities of this course. It is highly recommended to utilize this building to conduct the incident command system high rise command and general staff position simulation activities. Additionally, a facilitated walk through of a high rise building should occur with a fire protection engineer, and/or the building engineer.

**Equipment**

- Any equipment needed to conduct presentations; and create/present simulations, communications equipment (handi-talkies), and a mobile/stationary command post
- High rise incident command tactical worksheets and other job aids for position descriptions

**Personnel**

- Skills Evaluators: in order to maintain a 10:1 Student to Skills Evaluator ratio for simulations/activities
- Guest lecturer(s): fire protection engineer; building engineer; elevator contractor
Unit 1: Introduction

Topic 1-1: Orientation and Administration

Terminal Learning Objective
At the end of this topic, a student will be able to identify facility and classroom requirements and identify course objectives, events, requirements, assignments, activities, resources, evaluation methods, and participation requirements in the course syllabus.

Enabling Learning Objectives
1. Identify facility requirements
   - Restroom locations
   - Food locations
   - Smoking locations
   - Emergency procedures
2. Identify classroom requirements
   - Start and end times
   - Breaks
   - Electronic device policies
   - Special needs and accommodations
   - Other requirements as applicable
3. Review course syllabus
   - Course objectives
   - Calendar of events
   - Course requirements
   - Student evaluation process
   - Assignments
   - Activities
   - Required student resources
   - Class participation requirements

Discussion Questions
1. To be determined by the instructor

Activities
1. To be determined by the instructor
Unit 2: Preincident Considerations

Topic 2-1: Identifying Critical Factors and Hazards

Terminal Learning Objective
At the end of this topic, a student, given a high-rise scenario, will be able to identify the critical factors and hazards associated with incidents in high-rise buildings.

Enabling Learning Objectives
1. Describe the benefits of a prefire plan
2. Describe the complexities associated with a high-rise incident
3. List the benefits of frequent high-rise training
4. Describe the logistical and safety challenges to emergency personnel
5. Describe the impact of multiple “false alarm” incidents creating the normalization of deviance

Discussion Questions
1. Discuss the lessons learned from historic high-rise fires.
2. Describe your organization’s history of responding to past high-rise incidents.
3. Discuss the barriers to situational awareness in high-rise events and how they impact the emergency responder’s technical competence.

Activities
1. It is recommended that the instructor create an activity directing students to identify the dangers of complacency and the improper PPE in a high-rise incident.

Instructor Notes
1. Instructor may choose to base the activity on 750 Adams, Memphis, Tennessee: https://www.youtube.com/watch?v=CAHCO-1SAfc&app=desktop
2. Instructor may choose to base the activity on Orie Palmer, FDNY: https://www.youtube.com/watch?v=VGzMnmWYec0

Topic 2-2: Identifying Construction and Fire-Protection Features

Terminal Learning Objective
At the end of this topic, a student, given a high-rise scenario, will be able to identify the construction and fire-protection features based upon the age and occupancy type of a building.

Enabling Learning Objectives
1. Define a high-rise building
2. Describe the different generations/eras of building construction
3. Describe the various design features of high-rise construction
4. Discuss the hazards associated with each generation/era of high-rise construction
5. List common types of fire-protection systems
6. Describe the water systems within the different building construction generations/eras
Incident Management of High Rise Fires

Discussion Questions
1. How do the Pressure-Reducing Valve (PRV) and restricting orifice plates limit water flow?
2. What are some distinguishing building characteristics based on building age?

Activities
1. It is recommended that the instructor create an activity bringing students to visit high-rise buildings, emphasizing various construction features.

Instructor Notes
1. The last topic of the course plan is an extensive fire and life-safety systems lesson.

Unit 3: Emergency Operations

Topic 3-1: Describing the ICS’s Modular Development and Initial Response Roles and Responsibilities

Terminal Learning Objective
At the end of this topic, a student, given a high-rise assignment, will be able to describe the elements of the incident command system’s modular development and the roles and responsibilities for initial response.

Enabling Learning Objectives
1. Describe the roles and responsibilities of the initial incident commander
   • The standards/functions of command
2. Describe the deployment of initial responders based on incident priorities
3. Describe initial investigation/attack priorities
4. Describe your agency’s policy for establishing:
   • water supply on the initial response
   • personnel accountability
   • lobby
   • staging
   • base

Discussion Questions
1. What are the critical factors in high-rise building fires, including life hazards, building characteristics and stability, fire behavior, flow path, smoke conditions, and environmental factors?
2. What are the advantages and disadvantages of the different command options (modes of operation)?
   • Investigation
   • Fast attack
   • Command
3. What is your agency’s policy on passing command on high-rise incidents?
4. When do you employ two in, two out?
5. How does ALS-BASE serve as a foundation for initial incident management?
6. Discuss the importance of supplying the proper fire department connection.
7. What are the initial functions of lobby prior to the arrival of reinforcements?
8. How does your agency address the effects of wind for the initial attack team?
9. What is your agency policy for taking equipment aloft in the initial response?

Activities
1. It is recommended that the instructor obtain a building and conduct scenario-based assignments.
2. It is recommended that the instructor create audio-visual scenario-based evolutions.
3. It is recommended that the instructor create an activity highlighting wind-driven effects on high-rise fires.

Instructor Notes
1. Refer to the Incident Management of Major Fires course plan and FIRESCOPE ICS 500 Structure Fire Operations for the standards/functions of command.
2. The instructor should consider scenarios that occur in locations other than above ground, such as subdivision(s) and in the lobby.
3. The instructor should consider scenarios that involve different types of high-rise occupancies, including institutional, residential, commercial, office, and different eras/generations.

Topic 3-2: Describing the ICS’s Modular Development and Multidivision/Group (reinforced) Response Roles and Responsibilities

Terminal Learning Objective
At the end of this topic, a student, given a high-rise assignment, will be able to describe the elements of the incident command system’s modular development and the roles and responsibilities for multidivision/group (reinforced) response.

Enabling Learning Objectives
1. Describe the challenges of maintaining unity of command and span of control in an escalating incident
2. Describe the roles and responsibilities of the incident commander during an escalating incident
   - The standards/functions of command
3. Describe the roles and responsibilities of the incident safety officer
4. Describe the implementation of divisions/groups on an escalating incident
5. Describe the implementation, roles, and responsibilities of:
   - Plans
   - Logistics section chief
     - Ground support
     - Systems control
     - Medical unit
     - Base manager
   - Evacuation group
Incident Management of High Rise Fires

- RAT: Rapid Ascent Team (established under search or evacuation)
- Search
- Rescue
- Ventilation
- RIC: Rapid Intervention Company/Crew
- Medical group
- Designated facilities
  - ICP
  - Base
  - Staging
- Air operations
- Salvage

Discussion Questions
1. What should a fully functioning staging area look like as reinforcements arrive?
2. How does your agency fulfill safety-officer roles and responsibilities?
3. When would your agency implement an operations section chief during an escalating incident?
4. Discuss the expanding responsibilities of lobby during an escalating incident.
5. Describe lessons learned from case studies about appropriate staffing of your medical group.
6. What are your agency’s policies with regards to shelter in place versus evacuation?
7. When would you consider establishing RAT on the initial response?
8. What is your agency’s policy on establishing RIC?

Activities
1. It is recommended that the instructor obtain a building and conduct scenario-based assignments for an escalating incident.
2. It is recommended that the instructor create audio-visual scenario-based evolutions for an escalating incident.

Instructor Notes
None

Topic 3-3: Describing the ICS’s Modular Development and Multibranch Response Roles and Responsibilities

Terminal Learning Objective
At the end of this topic, a student, given a high-rise assignment, will be able to describe the elements of the incident command system’s modular development and the roles and responsibilities for multibranch (extended) response.

Enabling Learning Objectives
1. Describe the implementation, roles, and responsibilities of the liaison officer
2. Describe the implementation, roles, and responsibilities of the public information officer
3. Describe the implementation, roles, and responsibilities of the medical branch director
4. Describe the roles and responsibilities of the assistant safety officers
5. Describe the implementation of branches on an escalating incident
6. Describe the implementation, roles, and responsibilities of:
   - Air operations branch
     - Helicopter coordinator
     - Helispot manager
   - Planning section chief
     - Restat
     - Sitstat
     - Demobilization
     - Documentation
     - Technical specialist
       - Structural engineer
       - Building engineer
   - Logistics
     - Support branch
     - Supply
     - Service branch
     - Communications
     - Responder rehabilitation

Discussion Questions
1. What are the components of the medical branch?
2. What are your staffing contingencies to ensure the appropriate number of resources? (For example, mutual aid and incident management teams.)
3. How has your agency performed mutual aid training to evaluate interagency compatibility?
4. How can technical specialists assist you in mitigation of emergencies? How do you request these resources?
5. How does the AHJ’s emergency operations plan address recovery operations?

Activities
1. It is recommended that the instructor obtain a building and conduct scenario-based assignments for an escalating incident.
2. It is recommended that the instructor create audio-visual scenario-based evolutions for an escalating incident.

Instructor Notes
None
Terminal Learning Objective
At the end of this topic, a student, given a high-rise scenario, will be able to assess and use the fire and life-safety systems based upon the age and occupancy type of the building.

Enabling Learning Objectives
1. Describe the different components that comprise fire and life-safety systems based on the building era/generation, including but not limited to:
   - Standpipe
   - Sprinklers
   - Air handling and smoke removal
   - Doors
   - HVAC
   - Building control station
   - Electrical systems
   - Fire pumps
   - Annunciator panel
   - Lockbox and keys
   - Alarm system
   - Public address system
   - Fire department communication systems
   - Video monitoring
   - Emergency procedures manual
   - Emergency generator
   - Elevators
   - Disability, accessibility, and functional needs for vulnerable populations
   - Refuge area
   - Stairways

Discussion Questions
1. How many personnel does it take to manage systems control?
2. How can you use fire and life-safety systems to assist with evacuation?
3. What is your agency’s policy for addressing the different fire and life-safety systems?
4. How integrated is your fire prevention bureau with your fire suppression resources?
5. What is your agency’s policy for water supply?
6. How does your agency address disability and special-needs populations and language barriers?
7. What is your agency’s policy on the use of elevators?

Activities
1. It is recommended that the instructor create an activity bringing students to visit high-rise buildings, emphasizing fire life-safety systems.

Instructor Notes
1. The instructor should strongly consider having a fire-protection engineer and/or building engineer as a guest lecturer.
2. The instructor should strongly consider having an elevator contractor as a guest lecturer.
## Time Table

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<thead>
<tr>
<th>Segment</th>
<th>Lecture Time</th>
<th>Activity Time</th>
<th>Total Unit Time</th>
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<tr>
<td><strong>Unit 1: Introduction</strong></td>
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<td>Topic 1-1: Orientation and Administration</td>
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<td>Topic 3-1: Describing the ICS’s Modular Development and Initial Response Roles and Responsibilities</td>
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## Incident Management of High Rise Fires

### Segment

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<th>Lecture Time</th>
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### Unit 4: Fire and Life-Safety Systems

#### Topic 4-1: Assessing and Using Fire and Life-Safety Systems

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#### Unit 4 Totals

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<th>Time</th>
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<td><strong>6:00</strong></td>
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<table>
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<tr>
<th>Lecture, Activity, and Unit Totals:</th>
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<tbody>
<tr>
<td><strong>17:30</strong></td>
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### Course Totals

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<th>Time</th>
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<tr>
<td><strong>Total Lecture Time (LT)</strong></td>
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<td><strong>Total Activity Time (AT)</strong></td>
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<tr>
<td><strong>Total Testing Time (TT)</strong></td>
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<td><strong>Total Course Time</strong></td>
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### Acknowledgments

State Fire Training gratefully acknowledges the following individuals and organizations for their diligent efforts and contributions that made the development and publication of this document possible.

#### Cadre Leadership

**Kevin Conant**  
*Cadre Leader*  
*Fire Service Training Specialist III, Office of the State Fire Marshal*

**Laura Garwood**  
*Cadre Editor*  
*Sacramento State University*
Cadre Participants

Cardenas, Jason  
*Fire Captain, County of Los Angeles Fire Department*

Gillette, Jeff  
*Battalion Chief, Training Division, Colton/Loma Linda Fire Department*

Juratovac, Nicol  
*Battalion Chief, San Francisco Fire Department*

Laird, Gerry  
*Battalion Chief, San Jose Fire Department*

Simmons, Demond  
*Battalion Chief, Oakland Fire Department*

Siragusa, Tom  
*Assistant Chief, San Francisco Fire Department*

Tobias, Charles  
*Battalion Chief, Fresno City Fire Department*

Tomlinson, Surgey “Guy”  
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Wise, Jack  
*Battalion Chief, Los Angeles Fire Department*

Partners

State Fire Training also extends special acknowledgement and appreciation to the Conference and Training Services Unit with the College of Continuing Education at California State University, Sacramento, for its ongoing meeting logistics and curriculum development support, innovative ideas, and forward-thinking services. This collaboration is made possible through an interagency agreement between CAL FIRE and Sacramento State.
Incident Management of High Rise Fires

Course Details

Description: This course provides knowledge, skills, and abilities required for those managing incidents occurring in large, multistory buildings. These incidents may present significant management, logistical, and safety challenges to emergency personnel. The size and complexity of the interior spaces; limited, sometimes arduous access; extended travel and response times; and the concentrated occupant load with egress challenges all contribute to the problems faced by emergency responders. Additionally, most high-rise structures are equipped with various environmental, fire protection, and life-safety systems that require support and control. Successful emergency operations in these types of buildings also require preplanning and technical competence on the part of the emergency responders.

Designed For: Aspiring and incumbent company officers and chief officers

Authority:
- State Fire Training Company Officer 2D: All-Risk Command Operations for Company Officers
- State Fire Training Incident Management of Major Fires
- FIRESCOPE ICS 420-1 Field Operations Guide
- FIRESCOPE ICS 500 Structure Fire Operations
- FIRESCOPE ICS 910 Fire Fighter Incident Safety and Accountability Guidelines
- NWCG PMS 461 Incident Response Pocket Guide
- NFPA 1021, Standard for Fire Officer Professional Qualifications (2014)

**Prerequisites:**
1. Fire Command 2A or Incident Management of Major Fires (FSTEP); and
2. Fire Command 1A or Command 1A or Company Officer 2D: All-Risk Command Operations for Company Officers

**Standard:** Attend all classes and participate in all activities

**Hours:**
- Lecture: 17:30
- Activities: 19:30
- Testing: 3:00

**Hours (Total):** 40:00

**Maximum Class Size:** 30

**Instructor Level:** Primary instructor

**Instructor/Student Ratio:** 1:30 Lecture

**Skills Evaluator/Student Ratio:** 1:10 Simulations/Activities

**Restrictions:** None

**SFT Designation:** FSTEP
Required Resources

Instructor Resources

To teach this course, instructors need:

- State Fire Training Company Officer 2D: All-Risk Command Operations for Company Officers Course Plan
- State Fire Training Incident Management of Major Fires Course Plan
- FIRESCOPE ICS 500 Structure Fire Operations (current edition)
- FIRESCOPE ICS 910 Fire Fighter Incident Safety and Accountability Guidelines (current edition)
- NWCG PMS 461 Incident Response Pocket Guide (current edition)

Instructors may choose to use:


Online Instructor Resources

The following instructor resources are available online at http://osfm.fire.ca.gov/training/instructorresources.php:

- 750 Adams, Memphis, Tennessee: https://www.youtube.com/watch?v=CAHCO-1SAfc&app=desktop
- Orie Palmer, FDNY: https://www.youtube.com/watch?v=VGzMnmWYec0
- State Fire Training Company Officer 2D: All-Risk Command Operations for Company Officers Course Plan
- State Fire Training Incident Management of Major Fires Course Plan
- NWCG PMS 461 Incident Response Pocket Guide (current edition)
- FIRESCOPE: http://firescope.org/
- FIRESCOPE ICS 500 Structure Fire Operations (current edition)
- FIRESCOPE ICS 910 Fire Fighter Incident Safety and Accountability Guidelines (current edition)
- ICS-HR-120-1 High-Rise Structure Fire Operational System Description
- ICS-1001 Lobby Control Unit Leader—High-Rise Incident
- ICS-1002 Systems Control Unit Leader—High-Rise Incident
- ICS-1003 Staging Area Manager—High-Rise Incident
- ICS-1004 Base Manager—High-Rise Incident
- ICS-1005 Rapid-Ascent Team Leader—High-Rise Incident
- ICS-1006 Rapid Intervention Group Supervisor—High-Rise Incident
- ICS-1007 Evacuation Group Supervisor—High-Rise Incident
- ICS-1008 Ground Support Unit Leader—High-Rise Incident
Student Resources

To participate in this course, students need (if assigned by instructors):

- NWCG PMS 461 Incident Response Pocket Guide (current edition)
- FIRESCOPE ICS 500 Structure Fire Operations (current edition)
- FIRESCOPE ICS 910 Fire Fighter Incident Safety and Accountability Guidelines (current edition)
- ICS-HR-120-1 High-Rise Structure Fire Operational System Description
- ICS-1001 Lobby Control Unit Leader—High-Rise Incident
- ICS-1002 Systems Control Unit Leader—High-Rise Incident
- ICS-1003 Staging Area Manager—High-Rise Incident
- ICS-1004 Base Manager—High-Rise Incident
- ICS-1005 Rapid-Ascent Team Leader—High-Rise Incident
- ICS-1006 Rapid Intervention Group Supervisor—High-Rise Incident
- ICS-1007 Evacuation Group Supervisor—High-Rise Incident
- ICS-1008 Ground Support Unit Leader—High-Rise Incident

Facilities, Equipment, and Personnel

The following facilities, equipment, or personnel are required to deliver this course:

**Facilities**

- Class room
- It is necessary that the instructor secure and utilize an actual high rise building to meet the objectives and conduct the activities of this course. It is highly recommended to utilize this building to conduct the incident command system high rise command and general staff position simulation activities. Additionally, a facilitated walk through of a high rise building should occur with a fire protection engineer, and/or the building engineer.

**Equipment**

- Any equipment needed to conduct presentations; and create/present simulations, communications equipment (handi-talkies), and a mobile/stationary command post
- High rise incident command tactical worksheets and other job aids for position descriptions

**Personnel**

- Skills Evaluators: in order to maintain a 10:1 Student to Skills Evaluator ratio for simulations/activities
- Guest lecturer(s): fire protection engineer; building engineer; elevator contractor
Unit 1: Introduction

Topic 1-1: Orientation and Administration

Unit 2: Preincident Considerations

Topic 2-1: Identifying Critical Factors and Hazards

Topic 2-2: Identifying Construction and Fire-Protection Features

Unit 3: Emergency Operations

Topic 3-1: Describing the ICS's Modular Development and Initial Response Roles and Responsibilities

Topic 3-2: Describing the ICS's Modular Development and Multidivision/Group (reinforced) Response Roles and Responsibilities

Topic 3-3: Describing the ICS's Modular Development and Multibranch Response Roles and Responsibilities

Unit 4: Fire and Life-Safety Systems

Topic 4-1: Assessing and Using Fire and Life-Safety Systems
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Simmons, Demond  
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Siragusa, Tom  
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