



**OFFICE OF THE STATE FIRE MARSHAL
STATEWIDE TRAINING AND EDUCATION ADVISORY COMMITTEE
DEPARTMENT OF FORESTRY AND FIRE PROTECTION**

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Date: April 17, 2015

Attachment 8

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

From: Joe Bunn, Fire Service Training Specialist III

Subject/Agenda Action Item: FSTEP Incident Management of Major Fires Curriculum (2015)

Recommended Actions: Information/Discussion

Background Information:

After Analysis of the entire State Fire Training Chief Officer Certification Training Standards in 2009, the review Cadre recommended that three specific levels of Chief Officer certification be developed. STEAC and the State Board of Fire Services (SBFS) approved this recommendation. This recommendation was based on an analysis of the National Professional Development Model, National Fire Protection Association's Standard 1021, the National Fire Academy's Fire and Emergency Services in Higher Education (FESHE) Professional Development Model, the Fire Chief's Development Handbook of the International Association of Fire Chiefs (IAFC), and Chief Fire Officer Credentialing guidelines of the Center of Public Safety of Excellence. In addition, the existing State Fire Training (SFT) Fire Officer, Chief Officer and Fire Chief certification tracks were analyzed.

In 2013, SFT established priorities to update and develop new curricula. After the approval of SFT staff, task orders were developed for all the new curricula. Cadre leads were assigned and developmental and validation cadres formed for all the new certification tracks. The development of all materials were established and completed through the ongoing contract with Sacramento State University.

By the 20th of November of 2014 all the new curricula had been developed, validated and had been approved by STEAC and SBFS that were identified as priorities by SFT. In addition, during the process of moving numerous Certification Training Standards through the system a discussion developed around the certification process. When working with NFPA having identified the Job Performance Requirements and that there will be a greater emphasis placed on the demonstration of proficiency. With changes in curricula hours for didactic instruction it was determined that SFT look seriously at the development of FSTEP courses for continuing education or professional development and with the new curriculum development process, the classes can be more streamlined.

Based on the discussion that occurred at the above meeting it was determined that a budget for updating existing or creating new curricula that would address missing current information from legacy curriculum to the new course plan format be created, but not necessarily based solely from an NFPA standard as are the certification tracks. However, for the purposes of updating future curricula it should be noted that whenever possible utilizing an NFPA standard as the bloodline of the material should be established. This insures that on an ongoing basis the curriculum will be current and represents the latest in industry standards. This concept of developing FSTEP courses from the legacy courses or new curriculums for the

purpose of continuing education and professional development was approved by STEAC on April 18, 2014. Accordingly, the classes were identified with cadre leads assigned and an overview of those classes was presented to STEAC as information only. One of those classes identified was the Fire Command 2A, Command Tactics of Major Fires. This course had been revised as a second edition in 1985.

Again, a designated cadre of experienced Chief and Training Officers were selected from various departments and backgrounds in the mission to update, revise and/or change the content to translate into an FSTEP course.

Cadre Leadership

Joe Bunn**, Deputy Fire Chief (Retired), Laura Garwood Meehan, Cadre Editor, Sacramento State

Development Cadre Members

Mike Bryant, Deputy Chief (ret) Los Angeles County Fire Department, Gary Lane, Division Chief (ret), North County Fire Protection District, Ryan Wakefield, Fire Chief, CDCR Pelican Bay State Prison, Antoine McKnight, Battalion Chief, City of Los Angeles Fire Department, Jeff Youngsma, Training Officer, Fremont Fire Department

The development of the Course Plans did not require the development of a Certification Training Standards (CTS) because this course is established as a FSTEP course. However, Terminal Learning Objectives are established from the Job Performance Requirements (JPR’S) that typically would be in the CTS. In this case, several NFPA standards were utilized. The majority of the TLO’s and the supporting Enabling Learning Objectives (ELO’s) were developed from NFPA 1561 Standard on Emergency Services Incident Management System and Command Safety, 2014 Edition. The other NFPA Standards were 1500, 1021 and 1521 aided as support documents while establishing the Course Plans. The development of the material required one multi-day session. Several of the cadre members are State Fire Instructors and facilitate the legacy course Fire Command 2A, Command Tactics of Major Fires. With the alignment of the new course plans with the NFPA standards it was unanimous among the cadre members to change the new course to Incident Management of Major Fires.

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

Incident Management of Major Fires	
Didactic	16 Hours
Simulations	24 Hours

The development cadre insisted that the standards for the instructors of this course meet or exceed the minimum requirements to facilitate the legacy course Fire Command 2A, Command Tactics of Major Fires that presently is included in the present Chief Officer Certification to retire on December 31, 2016.

Analysis/Summary of Issue:

Following is an analysis of the major differences between the old legacy SFT courses and the new FSTEP courses being developed.

1. This class is consistent with the existing SFT course with the exception that the core of the content has utilized NFPA 1561,1500,1021 and 1521 standards, which is in alignment with other courses presently being developed by SFT. Any professional or volunteer fire service Officer will benefit greatly with the design and content of this course.

2. To avoid potential confusion with the present Fire Command 2A, Command Tactics of Major Fires, which presently is a core course for Certification for Chief Officer. As we know the legacy course is due to end on December 31, 2016 when the new Certification for Chief Fire Officer will be implemented. The implementation of the new FSTEP course, Incident Management of Major Fires, could be utilized on a temporary basis to fill a currency gap option for the year 2016 for the existing Chief Officer Certification until the new Chief Fire Officer Certification is implemented on January 1, 2017. The recommendation would be to accept either course during the implementation period to the end of year 2016 at which point the new Incident Management of Major Fires would be cataloged into the FSTEP classification.
3. Following the Homeland Security Presidential Directive-5 definition and requirements for ICS training, the cadre agreed that I-300 Intermediate Incident Command System falls in line with the requisite level command training for a course at this level. In addition, it is in alignment with any Company Officer or Chief Fire Officer course at this level in the future.
4. The cadre was concerned about the instruction level of this course. The instructor should meet all the requirements that any of the level II courses requires. In particular, the instructor should have background experience in managing multi alarm fires and incidents.

In addition, existing SFT courses that are or will be in the Fire Service Training and Education Program (FSTEP) catalogue may provide additional development opportunities in the future. The implementation plan for this new course is pending development.



Incident Management of Major Fires

Course Plan

Course Details

- Description:** This course provides knowledge, skills, and abilities for those who are responsible for command and control of dynamic and complex fireground emergencies.
- Designed For:** Incident commanders
- Authority:** NFPA 1021 Standard for Fire Officer Professional Qualifications (2014)
NFPA 1500 Standard on Fire Department Occupational Safety and Health Program (2013)
NFPA 1521 Standard for Fire Department Safety Officer (2015)
NFPA 1561 Standard on Emergency Services Incident Management System and Command Safety (2014)
Incident Response Pocket Guide, by the National Wildfire Coordinating Group
Cal/OSHA Title 8 Regulations
- Prerequisites:** Intermediate Incident Command System I-300
- Standard:** Attend all classes and participate in all activities.
- Hours:** Lecture: 16:00
Activities: 24:00
- Hours (Total):** 40:00
- Maximum Class Size:** 40
- Instructor Level:** Primary Instructor
- Instructor/Student Ratio:** 1:30
- Restrictions:** None

SFT Designation: FSTEP

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Required Resources

Instructor Resources

To teach this course, instructors may choose to use:

- *Evidence-Based Practices for Strategic and Tactical Firefighting*, Jones and Bartlett, 2016, ISBN: 978-1-284-08410-8
- *Structural Firefighting: Strategy and Tactics*, Jones and Bartlett, 2008, ISBN: 978-0-7637-5168-5
- *Structural Firefighting: Strategy and Tactics, Second Edition Instructor's Toolkit* (CD-ROM), Jones and Bartlett, ISBN: 978-0-7637-5604-8
- *Fire Command, Second Edition*, by Alan V. Brunacini, Across the Streets Production, 2002, ISBN: 0-87765-500-6

Online Instructor Resources

The following instructor resources are available online at:

<http://osfm.fire.ca.gov/training/instructorresources.php>

- Incident Management of Major Fires Course Plan
- National Institute of Fire Technology UL: news.ul.com/articles/innovating-fire-attack-tactics
- Modern Fire Behavior.com:
<http://www.firecompanies.com/modernfirebehavior/governors%20island%20online%20course/story.html>
- *FIRESCOPE Incident Command System for Fire Department Structure Fire Operations*, ICS-SF

Student Resources

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

- *Evidence-Based Practices for Strategic and Tactical Firefighting*, Jones and Bartlett, 2016, ISBN: 978-1-284-08410-8
- *Structural Firefighting: Strategy and Tactics*, Jones and Bartlett, 2008, ISBN: 978-0-7637-5168-5

Facilities, Equipment, and Personnel

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

- Any AV equipment required
- Any equipment needed to create simulations

Acknowledgments

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Cadre Leadership

Joe Bunn

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Laura Garwood Meehan

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Antoine McKnight

Battalion Chief, Los Angeles Fire Department

Ryan Wakefield

Fire Chief and Safety Officer, CDCR Pelican Bay State Prison

Jeff Youngsma

Captain and Training Officer, Fremont Fire Department

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. What is a formative test? What is a summative test?

Activities

1. To be determined by the instructor.

Unit 2: The Eight Standards of Command

Unit 2 Activities

1. The instructor may create an initial activity walking students (divided into command groups) through a simulation, applying the eight standards of command.

2. The instructor should demonstrate the application of the standard at the end of each topic. For example, the instructor could build several different scenarios representing each of the various types of occupancies.

Topic 2-1: Identifying the Components of the Process of Assuming Command

Terminal Learning Objective

At the end of this topic, a student, given a simulated major fire scenario, will be able to identify the components of the process of assuming command of an incident.

Enabling Learning Objectives

1. Use recognition prime decision model
2. Describe the modes of operations
3. Describe the levels of command:
 - Task
 - Tactical
 - Strategic
4. Describe the responsibilities associated with each level of command
5. Identify the components of an initial radio report
6. Identify the components of a strategic command post location

Discussion Questions

1. What is recognition prime decision making?
2. What are the modes of operations?
3. What is the difference between each level of command in terms of their associated responsibilities? What level of accountability is associated with each?

Activities

1. The instructor should create an activity directing groups of students to model assuming command within their agencies.

Instructor Notes

1. Refer to the most recent version of FIRESCOPE. Instructor should stress using the AHJ's specific order of radio report components.
2. For information on the RPD, refer to Gary A. Klein, 1998, *Sources of Power: How People Make Decisions*.

Topic 2-2: Improving Situational Awareness and Identifying the Risk Assessment Process

Terminal Learning Objective

At the end of this topic, a student, given a simulated major fire scenario, will be able to improve situational awareness, identify the risk assessment process.

Enabling Learning Objectives

1. Identify critical factors:
 - Life hazard
 - Building characteristics and stability

- Fire behavior (flow path) and smoke conditions
 - Environmental factors
 - Ongoing actions
2. Assess hazards
 3. Describe the levels of situational awareness:
 - Perception
 - Comprehension
 - Projection
 4. Develop controls and mitigations for hazards
 5. Implement controls
 6. Supervise and evaluate

Discussion Questions

1. What is your organization's risk-management plan?
2. What is situational awareness and what is its role in command and control operations?
3. What critical factor may allow operations that pose a significant risk to safety personnel?

Activities

1. To be determined by the instructor.

Instructor Notes

1. For more on situational awareness, refer to Dr. Mica Endsley, *The Theoretical Model*.

Topic 2-3: Establishing a Communications Plan

Terminal Learning Objective

At the end of this topic, a student, given a simulated major fire scenario, will be able to establish an effective communications plan.

Enabling Learning Objectives

1. Demonstrate an understanding of emergency traffic
2. Demonstrate an understanding of mayday traffic
3. Identify the components of a CAN report
4. Use clear text
5. Implement and expand the command, tactical, air-to-ground channels

Discussion Questions

1. What is your agency's procedure for using emergency traffic?
2. What communication challenges have your agency encountered?

Activities

1. The instructor should create an activity directing students to bring in their agency's procedures for emergency traffic.
2. The instructor should create an activity involving managing communications.

Instructor Notes

1. The instructor should emphasize that groups, division supervisors, branch directors, command, and general staff should be communicating with the incident commander on the command channel.

2. Stress that command post support should be used for communications, accountability, and resource support. Emphasize the importance of enabling the IC to focus on the incident.

Topic 2-4: Developing and Implementing an IAP

Terminal Learning Objective

At the end of this topic, a student, given a simulated major fire scenario, will be able to develop and implement an IAP.

Enabling Learning Objectives

1. Identify incident priorities
 - Life
 - Fire control/incident stabilization
 - Property preservation
 - Environment
2. Identify and communicate strategic objectives
 - RECEO VS
 - Modes of operation
3. Identify and assign tactical objectives
4. Evaluate situation status
5. Maintain and update resource status
6. Establish a communication plan
7. Establish an incident safety plan
 - RIC
 - Rehabilitation
 - Accountability
 - Medical
8. Assign a safety officer to:
 - Identify building construction problems
 - Evaluate conditions for potential hostile fire events
 - Ensure the accountability system is functioning correctly and advise the incident commander
 - Provide strategies to the incident commander for controlling risk

Discussion Questions

1. How do the incident commander's incident priorities and strategic objectives align with the tactical objectives and tasks?
2. What factors into the development of the incident commander's priorities?
3. Provide examples of how the tactical objectives and tasks may change when your incident priorities change from life to incident stabilization and/or property preservation.

Activities

1. To be determined by the instructor.

Instructor Notes

1. The strategic objectives are the “what we are trying to do” of the incident, achieving the desired outcome of the incident through short- and long-term goals.
2. All incident decisions are driven by the current incident priorities.
3. Incident priorities drive the strategic objectives; strategic objectives drive tactical objectives; tactical objectives drive tasks. This must be reinforced.

Topic 2-5: Developing an Effective Incident Organization

Terminal Learning Objective

At the end of this topic, a student, given a simulated major fire scenario, will be able to develop an effective incident organization to assemble, coordinate, and control tactical resources, allowing for expansion based on complexity of the incident.

Enabling Learning Objectives

1. Manage the task, tactical, and strategic operations
2. Manage resources according to the incident’s evolving needs
3. Maintain unity of command, company unity, and span of control
4. Maintain direct supervision over the entire incident

Discussion Questions

1. How does your agency divide or expand the ICS organization on major fires?
2. What circumstances would require expanding or dividing the organizational structure?

Activities

1. The instructor should create an activity giving groups of students information on a sample major fire and directing them to create an organizational chart.

Instructor Notes

1. The instructor should address the challenges in applying command terms (i.e., interior) used as a component of the incident organization during high-frequency fires (i.e., single-family dwellings) to the development of the incident organization during major fires. The students must consider what actions and needs are specific to larger-scale incidents in the areas of command and control and accountability.

The instructor should address the ways in which command terms used during high-frequency fires (i.e., interior) can affect the commander’s mindset when approaching command of a major fire. It should be discussed when

Topic 2-6: Initiating Accountability and Command Worksheets

Terminal Learning Objective

At the end of this topic, a student, given a simulated major fire scenario, will be able to initiate and maintain accountability throughout the event at all levels and initiate a command worksheet.

Enabling Learning Objectives

1. Maintain accountability at all levels:
 - Task (company level)
 - Tactical (division or group level)
 - Strategic (IC or staff level)
2. Identify the components of an accountability and command worksheet
3. Identify the policies and procedures of the AHJ

Discussion Questions

1. What type of accountability system is your agency using?
2. How does your agency maintain accountability beyond using worksheets and equipment?

Activities

1. To be determined by the instructor.

Instructor Notes

1. Stress that command post support should be dedicated to communications, accountability, and resource support. Emphasize the importance of enabling the IC to focus on the incident.

Topic 2-7: Reviewing, Evaluating, and Revising the IAP

Terminal Learning Objective

At the end of this topic, a student, given an IAP, will be able to review, evaluate, and revise the IAP as needed.

Enabling Learning Objectives

1. Reevaluate the critical factors and risk assessment
2. Evaluate the need for contingencies
3. Adjust the IAP as necessary using the planning process
4. Forecast future needs to support the plan

Discussion Questions

1. How do you currently review, evaluate, and revise your IAP? Give examples.
2. What planning process does your agency use?

Activities

1. To be determined by the instructor.

Instructor Notes

1. A good IAP evaluation tool is assessing its tasks, tactics, strategies, and incident priorities to ensure they are all in alignment. If not, adjustments must take place.
2. For more information, refer to Colonel John Boyd's Observation, Orientation, Decision, and Action (OODA loop), discussed in Robert Coram's *Boyd: The Fighter Pilot Who Changed the Art of War* (2004).
3. Use the components of the planning P as an example of the informal planning process (tactics meeting).

Topic 2-8: Continuing, Transferring, and Terminating Command

Terminal Learning Objective

At the end of this topic, a student, given a simulated major fire scenario, will be able to continue, transfer, and terminate command.

Enabling Learning Objectives

1. Analyze the critical factors
2. Describe the considerations for:
 - Continuing command
 - Expansion of staff
 - AHJ policies and procedures regarding command duration
 - Effectiveness of current operations
 - Transferring command
 - General situation status
 - IAP
 - Current deployment and assignments of operation companies
 - Specific safety hazards, life and property loss potentials
 - Additional resources to complete the IAP
 - Terminating command
 - Occupant support
 - Cooperating and assisting agencies
 - Cause and determination meeting statutory requirements
 - Ensuring an effective overhaul and salvage
 - After-action review
 - Order the demobilization of resources when appropriate
3. Describe the considerations for and components of unified command:
 - Multijurisdictional or multiagency incident
 - Agencies' values at risk
 - Statutory authority
 - Duration and scope of agencies' involvement
 - One IAP, a single ordering point, and a single operations chief
 - A collective set of incident objectives

Discussion Questions

1. What advantages do you see in unified command?
2. What other agencies could be in unified command on a major fire incident?
3. What agencies would be assisting and cooperating?

Activities

1. To be determined by the instructor.

Instructor Notes

1. When multiple agencies agree to enter into unified command, each agency does not abdicate its own authority, responsibility, and accountability.

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Time Table

Segment	Lecture Time	Activity Time	Total Unit Time
Unit 1: Introduction			
Topic 1-1: Orientation and Administration			
Lecture	1:30		
Activity 1-1: To be determined by instructor		0:00	
Unit 1 Totals	1:30	0:00	1:30
Unit 2: The Eight Standards of Command			
Topic 2-1: Identifying the Components of the Process of Assuming Command			
Lecture	1:30		
Activity 2-1: The instructor should create an activity directing groups of students to model assuming command within their agencies.		0:30	
Topic 2-2: Improving Situational Awareness and Identifying the Risk Assessment Process			
Lecture	3:00		
Activity 2-2: To be determined by instructor		1:00	
Topic 2-3: Establishing a Communications Plan			
Lecture	1:30		
Activity 2-3a: The instructor should create an activity directing students to bring in their agency's procedures for emergency traffic. Activity 2-3b: The instructor should create an activity involving managing communications.		1:00	
Topic 2-4: Developing and Implementing an IAP			
Lecture	3:00		
Activity 2-4: To be determined by instructor		1:00	
Topic 2-5: Developing an Effective Incident Organization			
Lecture	1:30		

[Short Course Title]

Segment	Lecture Time	Activity Time	Total Unit Time
Activity 2-5: The instructor should create an activity giving groups of students information on a sample major fire and directing them to create an organizational chart.		1:00	
Topic 2-6: Initiating Accountability and Command Worksheets			
Lecture	1:00		
Activity 2-6: To be determined by instructor		1:00	
Topic 2-7: Reviewing, Evaluating, and Revising the IAP			
Lecture	1:00		
Activity 2-7: To be determined by instructor		1:30	
Topic 2-8: Continuing, Transferring, and Terminating Command			
Lecture	2:00		
Activity 2-8: To be determined by instructor		1:00	
Unit 2 Simulations: To be determined by instructor		16:00	
Unit 2 Totals	14:30	24:00	38:30
Lecture, Activity, and Unit Totals:	16:00	24:00	40:00

Course Totals

Total Lecture Time (LT)	16:00
Total Activity Time (AT)	24:00
Total Course Time	40:00