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### Course Outline for FST 71C

### FIRE COMMAND 1C - I-ZONE FIRE

Effective: Spring 2009

I. CATALOG DESCRIPTION: FST 71C — FIRE COMMAND 1C - I-ZONE FIRE — 2.00 units

Designed for Firefighters, Company Officers, and Chief Officers with limited wildland experience. This course is designed around the responsibilities of the Company Officer at a wildand/urban interface incident. It will bring the structural Company Officer out of the city and into the urban/interface, in other words, from his or her comfort zone into an area that could very well be quite unfamiliar. This is a State of California Fire Marshal, CFSTES (California State Fire Service Training and Education System) course approved by the California State Fire Board. A certificate will be issued by the California State Fire Marshal, State Fire Training upon successful completion of the course This course satisfies one of the course component requirements for the certification track of "Company Officer". This course also meets a component of certification required for CICCS recognition for "Strike Team Leader".

2.00 Units Lecture

# **Grading Methods:**

Letter Grade

## Discipline:

MIN **Lecture Hours:** 36.00 36.00 **Total Hours:** 

- II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1
- III. PREREQUISITE AND/OR ADVISORY SKILLS:
- IV. MEASURABLE OBJECTIVES:

# Upon completion of this course, the student should be able to:

- A. Understand and describe the three elements of wildland fire behavior, fuel, weather, and topography;
  B. Understand and identify the elements of ICS as it relates to I-Zone fire fighting;

- C. Understand and describe an Incident Action Plan;
  D. Describe the duties and responsibilities of the strike team Company Officer;
- Understand the communication process as it relates to I-Zone fire fighting, Describe the fundamental elements of size-up as they relate to I-Zone fire fighting,
- Identify the key components of a report on conditions in the I-Zone fire fighting environment,
- Identify I-Zone fire fighting resources and describe their capabilities,
- Understand fire fighter safety and survival in I-Zone fire fighting,
- Understand evacuation criteria as it relates to I-Zone fire fighting,
- K. Describe procedures and criteria for structure triage and protection;
- Develop strategies and tactics utilizing table top exercises in response to I-Zone fire fighting scenarios.

# V. CONTENT:

- A. Wildland fire protection organization in California

  1. Wildland values and functions

  - Organization for wildland protection

  - 3. Fire terminology4. The fire problem in California
    - a. Recent incident studies
  - Authority, responsibility and accountability
  - Laws governing I-Zone
  - State and Federal agencies
  - 8. City Charter
  - 9. Local, state and federal mutual aid
  - 10. California Fire Assistance Agreement
- B. Fire Behavior and Fire Weather
  - 1. Principle environmental elements
  - Fuel factors that affect wildland fires Weather factors that affect wildland fires

  - 4. Factors of topography that affect wildland fires
- C. Fire Prediction Systems
  - 1. Campbell Prediction System

- 2. "Behaveplus" Fire Modeling System
  - Windows Application
- Belt Weather Kit
- Electronic Pocket Weather Station "Appendix B" Fireline Handbook
- 6. National Fire Danger Rating System
- D. Incident Command System
  - 1. Command Staff
  - 2. General Staff
  - 3. Operations Section

  - Planning Section
     Logistic Section
     Finance Section
- E. Duties and Responsibilities of the Company Officer
  - Preparation for Response

  - Dispatch Information
     Incident Number Terminology

  - Response and Request Levels
     Check-In Locations and Information
     Paperwork and Documentation
     Additional Services and Resources
  - LCES System Approach to Fire line Safety
     Stress Management

  - 10. Demobilization
- F. Incident Action Plans
  1. IAP Forms
- G. Resources
  - 1. Engines
  - 2. Hand Crews

  - 3. Dozers4. Water Tenders
  - 5. Air Tankers
  - 6. Helicopters
  - 7. Performance Standards Guidelines
  - 8. Incident Management Teams
- H. Maps, Compasses and GPS
- I. Communications
  - 1. Types of Radios
  - 2. Radio Discipline
  - 3. Chain of Command
- J. Strategy and Tactics

  1. Wildland Fire Strategy
  - a. Direct attack
  - b. Indirect attack
  - c. Combination attack
- K. -Zone Size-up

  1. Developing an Action Plan
  2. Report on Conditions
  L. Safety and Survival
- - Standard Fire Orders
- 18 Watch-out Situations
   M. Politics and Firefighting
- N. Risk Management Process
  O. Entrapment Avoidance

- 1. Trigger Points
   P. Last Resort Survival
   Q. Properly Refusing Risk
   1. SAFENET
- R. Firefighter Fatalities and Near Miss Case Studies
- 1. Thirty-mile Fire S. Pre-Incident Operations
- T. Pre-Incident Training
- U. I-Zone Incident Operations
- V. Safety during Structure Protection
  - 1. Evacuation
  - Legal Authority
  - Structure Triage
  - 4. Preparing the Structure
- 5. Foams and Gels W. I-Zone Defensive Firing
- X. Aircraft Use in the I-Zone

# VI. METHODS OF INSTRUCTION:

- A. **Lecture** B. Group Discussion
- C. Audio-visual aids
- D. Practical field applications
- Simulated problem solving Oral and written reports
- G. Reading assignments
  H. Individual and Group Activities

# VII. TYPICAL ASSIGNMENTS:

A. Students will be able to develop a wildland interface scenario and describe the procedures towards conducting size up, containment, extinguishment and overhaul. 1. Students will be able to demonstrate an understanding of "Basic Wildland Fire Behavior", by participating in an individual Activity, completing exercises in Unit 1 and Unit 2 in the S-190 Student Workbook 2. Students will demonstrate use of obtaining weather conditions in a group activity utilizing Belt Weather Kits and Electronic Pocket Weather Stations 3. Students will demonstrate in a Group Activity an understanding and working knowledge of the Incident Command System including position titles and responsibilities.

# VIII. EVALUATION:

# A. Methods

- 1. Exams/Tests
- 2. Quizzes
  3. Oral Presentation
  4. Other:

# B. Frequency

- IX. TYPICAL TEXTS:
  1. Introduction to Wildland Fire Behavior S-190 Student Workbook., NWCG (NFES 1860), 1994.
  2. Fire Command 1C Student Supplement., SFT, 2004.
  3. Incident Response Pocket Guidebook., NWCG (NFES 1077), 2006.
  4. Fireline Handbook., NWCG (NFES 0065, PMS 410-1), 2006.
  5. Appendix B, NWCG., (NFES 0065, PMS410-2), 2006.
  6. ICS 420-1 Field Operations Guide., FIRESCOPE, 2004.

# X. OTHER MATERIALS REQUIRED OF STUDENTS: A. Belt Weather Kit B. Electronic Pocket Weather Station