

# CFPI 2017 Class Descriptions

## Monday March 13, 2017

### **Session 101 – 4 hours. Food Trucks**

**Instructor Jacqueline R. Wilmont, NFPA**

Food trucks have been gaining popularity in recent years, and to date, there are no codes, standards, or guidelines to provide the minimum fire safety requirements. After the 2014 Philadelphia food truck explosion killed a mother and daughter, the International Fire Marshals Association (IFMA) developed a task group to address this issue and submitted public input to NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, and NFPA 1, Fire Code. There is also new regulations being proposed for the International Fire Code.

This class will take a look at the proposed regulations and discuss what some jurisdictions are already doing. For example, on one end of the spectrum, the City of Rochester, NY requires at all mobile food vehicles with propane to have at least one person trained in handling and exchanging propane tanks on board at all times. This person must complete a fire safety course provided by the Rochester Fire Department to be certified. On the other side of that spectrum, in Indiana, state law bans fire departments from even inspecting food trucks, because they are considered vehicles.

### **Session 102 – 4 hours. Firework Disasters and Enforcement**

**Instructor TBA**

Are you responsible for inspecting public fireworks displays? Are you comfortable with these inspections? This class will take a look at some of the lessons learned from recent fireworks disasters including a few in California, among others. We will also discuss the requirements for providing inspection of these large displays.

### **Session 103 – 4 hours. Fire Risks and Fire Safety of Large Wood Structures**

**Instructor Dr. Fred Mowrer**

Wooden structures are being built larger and taller than ever before. Once completed and occupied, these buildings are typically equipped with automatic sprinkler systems, gypsum-sheathed walls and ceilings, and other features that reduce the fire hazards and risks associated with these large combustible structures. But while they are under construction or demolition, these structures can represent extreme hazards that can threaten surrounding buildings and infrastructure, as evidenced by a number of fires involving such projects while under construction.

This class will also look at recent architectural trends that include the design and construction of increasingly tall buildings with structural components comprised of engineered wood. Previous research has shown that timber elements can contribute to the fuel load in buildings and can increase the initial fire growth rate. There is a need to evaluate the contribution of massive timber elements that would be expected to be found in tall buildings. This presentation will provide a summary and current status of an on-going Research Foundation project to quantify the contribution of timber building elements (e.g. CLT) to a compartment fire.

**Session 104 – 4 hours. Code Considerations for Combustible Construction**  
**Instructor Stuart Tom**

This class will take a look at the changes we have seen in the building code since migrating to the IBC with regard to the use of combustible construction. The allowance for multi-story buildings and highrise construction to be built with combustible construction has increased dramatically. Emphasis will be placed on important code requirements every plans examiner and inspector needs to know. Learn where combustible construction must be protected, and common errors that are often missed during construction and inspection. Follow a brief history of the evolution of Allowable Height and Area, and see how the new tables contained within the 2016 CBC are applied. Examples will be used to demonstrate proper consideration of automatic fire sprinkler “trade-offs” to avoid the “double-dip” protection for certain occupancies in California.

**Session 105 – 8 hours. Overview of the 2016 Changes in NFPA 13, 13R & 13D**  
**Instructor Cecil Bilbo**

Get up to date with the latest changes in sprinkler installation standards.

**Session 106 – 8 hours. L – Occupancies**  
**Instructor Reinhard Hanselka**

This class will take an in-depth look at all things “L” Occupancy. The history and intent of the L Occupancies and the various codes and standard that are commonly used in the design and construction.

**Session 107 – 24 hours. 2016 California Fire Code (3-day session)**  
**Instructor Kevin Scott**

Want to improve your knowledge of the fire code? This class will take you through the 2016 California Fire Code with an instructor that has been involved development of the code over the last 30 years. Take this opportunity to learn from the best and further your understanding of the code or get started in fire prevention with a solid foundation and understanding of the code. You will learn how the code is structured, where to find the information you are looking for quickly and take a look at the more complex topics that will help you in your everyday job activities. This is a rare opportunity for such in depth training on the code you use every day.

## **Tuesday March 14, 2017**

**Session 201 – 4 hours. Best Practices for Managing a Fire Prevention Bureau**  
**Instructor TBA**

**Session 202 – 4 hours. Fire Death and Injury Investigations - "Knowing the Code"**  
**Instructors Robert Rowe & Pat Wills**

This class will profile the 2006 Paradise Gardens fire in Long Beach California. The fire claimed the lives of two occupants when a large residential apartment building with multiple and on-going fire and building code violations burned. The daytime fire starts on the first floor and rapidly spreads throughout the building trapping numerous occupants on balconies until their rescue by Firefighters. Sadly, two occupants perished in upper hallway as they attempted to escape the fire. The investigation identified how existing fire and building code violations contributed to the rapid spread of fire and smoke, and were contributing factors in the deaths of the occupants.

In the aftermath of the fire, the Long Beach Fire Department was served with multiple subpoenas to produce investigation reports, inspection records (some dating back to the 1980's), e-mails and photographs. Investigators and Inspectors were subject to multiple lengthy depositions. The lawsuit resulted in a multiple million dollar judgement against the property owner.

All deaths and serious injuries resulting from fire must be thoroughly investigated. All too often consideration of fire code is overlooked or omitted in these investigations. Many Investigators are unaware of the value of basic fire code knowledge. Understanding and considering the provisions of the fire code in your investigation can play a major role in how and why the death or injury occurred as well as documenting the speed and spread of the fire. This added element will greatly enhance the quality of your investigation and enhance your credibility as an investigator.

The Long Beach Paradise Gardens Case study will be the focus of the class and will detail the extensive investigation and the legal issues that arose from this tragic case. The incident begins through the eyes of an occupant who is trapped on his balcony unable to escape the fire and begins to video tape his experience. Firefighters rescue the trapped occupants as the fire spreads throughout the building. The presentation will also utilize news footage and fire scene investigation photos to detail the investigation including the fire code violations that were identified and how and why the fire spread throughout the building.

**Session 203 – 8 hours. Fire Alarm Plan Review**  
**Instructor CAFAA**

**Session 204 – 8 hours. Flammable Refrigerants and Refrigeration Rooms**  
**Instructor Reinard Hanselka**

**Session 205 – 8- hours. CBC Chapter 7 Fire Resistive Construction**  
**Instructor Stuart Tom**

When inspecting existing buildings it often falls on prevention personnel to ensure that the fire resistance of a building is maintained over the life of the building. In order to do this effectively it is helpful to understand how the building was supposed to be built in the first place. Chapter 7 of the CBC establishes the requirements for Fire Resistive Construction. Learn the difference between fire walls, fire barriers, fire partitions, smoke barriers and smoke partitions. Understand where each type of wall is required. Learn how to read fire resistance markings on glazing and other fire protective features. Understand the purpose of shaft construction, and when it is required. Participate in a discussion to learn more about fire dampers, smoke dampers, combination dampers and ceiling radiation dampers. Examples of common code violations will be presented to show attendees what to look for during construction and also during annual inspections.

## **Wednesday March 15, 2017**

**Session 301 – 1 hr. 45 min. Round Table Discussion on Fire Sprinkler Systems  
Panel/Open Forum Discussion**

**Session 302 – 1 hr. 45 min. Round Table Discussion on Fire Sprinkler Systems  
Panel/Open Forum Discussion (Repeat of session 301 above)**

**Session 303 – 1 hr. 45 min. Round Table Discussion on Fire Alarm Systems  
Panel/Open Forum Discussion**

**Session 304 – 1 hr. 45 min. Round Table Discussion on Fire Sprinkler Systems  
Panel/Open Forum Discussion (Repeat of session 303 above)**

**Session 305 – 1 hr. 45 min. Round Table Discussion Office of the State Fire Marshal Hot Topics: Mobile  
Fueling, I3 Occupancies and more.  
Panel/Open Forum Discussion**

**Session 306 – 1 hr. 45 min. Round Table Discussion Office of the State Fire Marshal Hot Topics: Mobile  
Fueling, I3 Occupancies and more.  
Panel/Open Forum Discussion (Repeat of session 305 above)**

## **Thursday March 16, 2017**

**Session 401 – 4 hours. Fire Safety Aspects of Energy Storage Systems and Storage Batteries  
Instructor Howard Hopper, UL**

**Session 402 – 4 hours. Fire Prevention and Photo Voltaic Requirements  
Instructor Matt Paiss**

This program is designed for emergency responders, Incident commanders, and code officials responsible for the permitting of PV systems. In many areas PV systems are being installed long before local fire departments can even learn of their existence, not to mention how to safely operate around them. Program participants will actively participate by identifying, discussing, and addressing:

- Statistical Installation Growth PV
- Background on the development of PV Safety for Firefighters
- Electrical theory review
- System component identification & operation
- Disconnects: The good, The Bad, and The Ugly
- What you can and can't turn off
- Significant PV fires case studies
- Tactical considerations
- Ventilation considerations
- PV code update
- Optional hands-on prop with all the components of a PV system, or system walkthrough

**Session 403 – 8 hours. Sprinklers: Type, Spacing and Location Requirements - An in depth look at NFPA 13 Chapter 8**

**Instructor Matt Klaus**

Whether you are doing plan review or field inspections of fire sprinkler systems, fully understanding all of the various requirements related to the proper head selection to the proper location of each type of head is essential to an effective fire suppression system. This class will walk you through all of those tables and exceptions that make up Chapter 8 of NFPA 13. You will learn how to quickly and effectively apply the requirements of Chapter 8.

**Session 404 – 8 hours. High piled storage**

**Instructor Ellie Klaus-Bruckner**

This course provides a detailed understanding of the hazards associated with high piled combustible storage by introducing inspection and fire professionals to Chapter 32 of the 2013 CFC. Attendees will learn to use the commodity classification system, identify various storage methods, describe how each storage method contributes to fire behavior, and understand the application of NFPA 13 in high pile storage to high piled storage.

**Session 405 – 8 hours. WUI Program: Fire Prevention Efforts in WUI Areas - Current and Future Activities and Technologies**

**Instructors Dave Shew & Michelle Steinberg**