Fire Sprinkler Training
Columbia, SC
August 6-10, 2018

Obtain NICET-required Continuing Professional Development (CPD) credits and Continuing Education Units (CEU) for Deputy State Fire Marshal recertification in this seminar package hosted by the South Carolina Fire Sprinkler Association and presented by the American Fire Sprinkler Association.

LOCATION
Embassy Suites by Hilton Columbia Greystone
200 Stoneridge Drive • Columbia, SC 29210
Group Rate: $139 + tax per night. See booking link on page 2.

Seminar Schedule and Registration Fees
Fees shown below are advance rates. If registering after July 26, add $20 per class to rates shown below.

<table>
<thead>
<tr>
<th>Date</th>
<th>Course Description</th>
<th>AHJ</th>
<th>AFSA Member</th>
<th>NonMember</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon., Aug. 6 (8a-5p)</td>
<td>Hydraulic Calculations</td>
<td>___$75</td>
<td>___$95</td>
<td>___$145</td>
</tr>
</tbody>
</table>
| Tues., Aug. 7 (8a-5p) | Residential Sprinkler Systems  
NFPA 13D, 13R, & 13 (2016 Editions) | ___$75 | ___$95      | ___$145   |
| Wed., Aug. 8 (8a-5p)   | NFPA 13 (2016 Ed.): Storage Occupancies                 | ___$75 | ___$95      | ___$145   |
| Thurs., Aug. 9 (8a-5p)  | NFPA 13: 2016 Edition Update                           | ___$75 | ___$95      | ___$145   |

You are invited to attend an SCFSA meeting at 5:30pm on Thurs., Aug. 9 at the on-site Terrace Restaurant and Lounge.

Friday, Aug. 10 (8a-5p)
NFPA 20 (2016 Ed.): Fire Pumps
___$75 ___$95 ___$145

Pre-order your NFPA standards when you register and pick up on-site.

Send check payment to: AFSA • c/o Wells Fargo Bank • PO Box 200201 • Dallas, TX 75320-0201
Fax registration forms with payment info to AFSA at (214) 343-8898 or email your registration to Maricarmen Martinez at mmartinez@firesprinkler.org.

Name _________________________________________________
Company ______________________________________________
Address _____________________________________________________________________________
City/ST/Zip ______________ _______________________________
Phone _____________________ Fax _______________________
Cell Phone (in case of emergency) _____________________________
Email _________________________________________________

Grand Total $ __________________

MasterCard/Visa/AMEX:
____________________________________________________

Exp. Date ________ Security Code (3 or 4 digit #) ________
Zip Code (associated with billing address) ______________________
Print Name _____________________________________________
Signature _______________________________________________

Classes subject to minimum registration. For more information contact Maricarmen Martinez.
mmartinez@firesprinkler.org • (214) 349-5965 x132
All participants are strongly encouraged to bring the applicable NFPA standard with you to class. The course will focus heavily on the standard and will reference numerous NFPA figures and tables. Images from the NFPA standards will rarely be made available to you by the instructor or in class materials. It is critical to bring the standard with you to class to refer to as the instructor leads.

Monday, August 6  
**Hydraulic Calculations**
Understanding the principles of hydraulic calculations is at the core of estimating, design, and system approval. This 8-hour seminar takes the attendee through the basics of hydraulic design including hazard analysis, design methods, criteria selection, water supplies, sprinkler flow and pressure, friction loss, and pressure balancing. The attendees follow a step-by-step hydraulic calculation of a simple tree system to illustrate each principle. Due to the limited time, attendees are required to bring a basic scientific calculator and possess an understanding of how to use the function keys. This seminar will benefit engineers, plan reviewers, and layout technicians, particularly those working towards NICET certification.

Required materials to bring: scientific calculator.

Tuesday, August 7  
This seminar will address the design and installation of sprinkler systems in residential occupancies, per NFPA 13D, Standard for Installation of Sprinklers in One- and Two-Family Dwellings and Manufactured Homes. An understanding of the regulations for sprinkler spacing, components and hardware, hydraulic calculation exercises, along with water supply evaluations are all covered in detail. Installation requirements, including obstruction avoidance, heat zone limitations, pipe supports and valve criteria forming the foundation of such systems' design, are also presented so that attendees may accurately apply the information found in the standard. Included in the presentation are variations in the design requirements for residential or dwelling unit sprinklers found in NFPA 13 and NFPA 13R, to enhance the use of the proper criteria or standard. Participants must bring NFPA 13D to class. It will also be helpful to have NFPA 13R and NFPA 13. Upon completion of this seminar, the participant should be able to restate residential sprinkler spacing rules, calculate minimum water supplies, interpret sprinkler omission rules in residential occupancies, and describe the differences between stand-alone and the various multi-purpose system examples.

Required materials to bring: NFPA 13D (2016 Ed.)

Wednesday, Aug. 8  
**NFPA 13 (2016 Ed.): Storage Occupancies**
This course is a hands-on examination of storage occupancies as defined in the 2016 edition of NFPA 13, and requires an understanding of sprinkler systems and basic layout principles. It includes a review of the organization of the standard in relation to storage definitions, classification of storage commodities, and how to locate and apply the requirements for storage protection. Attendees will complete exercises to determine protection criteria for a number of storage arrangements and commodities. Learning objectives for this course include: explain the organization of chapters related to storage; classify commodities; find and apply definitions of storage terms; and locate and apply storage requirements. This seminar benefits contractors, engineers, layout technicians, and AHJs.

Required materials to bring: NFPA 13 (2016 Ed.)

Thursday, Aug. 9  
**NFPA 13: 2016 Edition Update**
Being up to date and armed with the most current information can provide you and your company with a competitive edge. With more than 750 Public Inputs and 400+ Public Comments addressed by the NFPA 13 Committees during the 2016 edition code cycle, users of the document will want to see and hear about the significant changes that impact your everyday work practices. Upon completion of this course, the participant should be able to describe new and revised requirements for fire sprinkler system design and installation; discuss the impact of the changes in this edition of the standard on the bidding, design and installation processes and strategies; identify revised rules for ceiling cloud protection; understand new and revised storage protection schemes including new criteria for exposed, expanded group A plastic in pallet racks, as well as identify significant changes in the latest edition of NFPA 13 and apply them to their daily projects. This seminar benefits contractors, engineers, layout technicians, and AHJs.

Required materials to bring: NFPA 13 (2016 Ed.)
**Friday, Aug. 10**  

**NFPA 20 (2016 Ed.): Fire Pumps**

This 8-hour seminar focuses on the installation of stationary fire pumps and the requirements of the 2016 edition of NFPA 20. Pump basics are reviewed along with an extensive discussion regarding the sizing of fire pumps. Electric motor and diesel engine drivers are examined in depth along with their associated controllers. The installation requirements for fire pumps are also reviewed. Upon completion of this course, participants should be able to: explain the organization of NFPA 20 and the basic pump principles; locate and apply the installation requirements for stationary fire pumps, drivers, and controllers; and size fire pumps for the most economical application(s). This seminar benefits anyone who specifies, installs, or inspects stationary fire pumps.

**Required materials to bring:** NFPA 20 (2016 Ed.)

---

**Instructor: Ralph Foster, PE**

Ralph Foster is the principal of Foster Engineering and Consulting and is a licensed Fire Protection Engineer. He earned his degree in Mechanical Engineering from the University of South Carolina. He worked for over 24 years in the public sector conducting inspections and life safety code analysis of buildings; analyzing active and passive fire suppression and detection systems; has extensive experience with Performance Based Design. He worked for the SC State Fire Marshal's Office for over 18 years where he served as a Staff Engineer, Chief Deputy State Fire Marshal, Manager of Engineering Services, and taught both state and national certification courses. In 2017, Ralph was made a Fellow of the Society of Fire Protection Engineers. He is active in the SC Fire Marshals Association, the Central Savannah River Chapter of the SFPE, and the SC Fire Sprinkler Contractors Association. He retired from the SC Army National Guard after serving for 28 years and resides in Columbia.

---

**Continuing Education Credits**

Each seminar offers 8 Credit/Contact Hours; 8.0 CPDs (NICET); 0.8 CEUs.

---

**DIRECTIONS** to the Embassy Suites by Hilton Columbia Greystone can be found here:

https://goo.gl/maps/eaUtFM6VkL52

**Booking Link for Embassy Suites by Hilton Columbia Greystone** (Must copy and paste in web browser)


---

**NICET**

To find out if you can claim NICET CPD points for these courses, please review Section 2b of NICET’s recertification policy here:  http://www.nicet.org/about-us/policies/policy30/

---

**CANCELLATION POLICY**

All cancelations must be made in writing on or before July 26, 2018 in order to receive a refund. **Cancelations after July 26, 2018 are not eligible for a refund.** You can submit your request to Maricarmen Martinez via email mmartinez@firesprinkler.org.