

## **National Fire Academy Bring Your Own Device (BYOD) Course Materials/Download Instructions**

If you own an electronic device (laptop computer, tablet, etc.) and are familiar with its document reader functions, we are asking you to download the Student Manual (SM) before you travel to class and bring the preloaded device with you.

The **first step** is to download Adobe Acrobat Reader to your device. This will enable you to read and manipulate the course materials. Adobe Acrobat Reader can be used to comment and highlight text in PDF documents. It is an excellent tool for note-taking purposes.

### **For laptops and computers**

Adobe Acrobat Reader can be downloaded from [www.adobe.com/downloads/](http://www.adobe.com/downloads/). It is a free download. Please note that depending on your settings, you may have to temporarily disable your antivirus software.

### **For tablets and other similar hand-held devices**

Adobe Acrobat Reader can be downloaded onto devices such as iPads, Android tablets and other hand-held devices. The application can be found in the device's application store using the search function and typing in "Adobe Acrobat Reader." Follow the instructions given. **It is a free application.**

After you have successfully downloaded the Adobe Acrobat Reader, please use the following web link to download your SM. You may copy/paste this link into your web browser.

[https://apps.usfa.fema.gov/ax/sm/sm\\_0264.pdf](https://apps.usfa.fema.gov/ax/sm/sm_0264.pdf)

Note: In order to have the editing capabilities/toolbar, the SM needs to be opened with Adobe Acrobat Reader. There should be a function on your device to do this.

If you need assistance, please contact [nfaonlinetier2@fema.dhs.gov](mailto:nfaonlinetier2@fema.dhs.gov).

## PRE-COURSE ACTIVITY 1

### Fire Alarm Basics

#### Purpose

Prepare for the “Plans Reviews of Fire Alarm Systems” (PRFAS) course by obtaining foundational knowledge about fire alarm systems.

#### Directions

1. Read the following blogs from the National Fire Protection Association (NFPA).
  - “A Guide to Fire Alarm Basics” <https://www.nfpa.org/News-and-Research/Publications-and-media/Blogs-Landing-Page/NFPA-Today/Blog-Posts/2021/03/03/A-Guide-to-Fire-Alarm-Basics>
  - “Guide to Fire Alarm Basics – Power Supplies” <https://www.nfpa.org/News-and-Research/Publications-and-media/Blogs-Landing-Page/NFPA-Today/Blog-Posts/2021/10/25/Guide-to-Fire-Alarm-Basics-Power-Supplies>
  - “A Guide to Fire Alarm Basics – Off-Premises Signaling and Supervising Stations” <https://www.nfpa.org/News-and-Research/Publications-and-media/Blogs-Landing-Page/NFPA-Today/Blog-Posts/2021/09/24/A-Guide-to-Fire-Alarm-Basics-Off-Premises-Signaling-and-Supervising-Stations>
  - “A Guide to Fire Alarm Basics – Emergency Control Functions” <https://www.nfpa.org/News-and-Research/Publications-and-media/Blogs-Landing-Page/NFPA-Today/Blog-Posts/2021/08/20/A-Guide-to-Fire-Alarm-Basics-Emergency-Control-Functions>
  - “A Guide to Fire Alarm Basics – Supervision” <https://www.nfpa.org/News-and-Research/Publications-and-media/Blogs-Landing-Page/NFPA-Today/Blog-Posts/2021/06/25/A-Guide-to-Fire-Alarm-Basics-Supervision>
  - “A Guide to Fire Alarm Basics – Notification” <https://www.nfpa.org/News-and-Research/Publications-and-media/Blogs-Landing-Page/NFPA-Today/Blog-Posts/2021/05/21/A-Guide-to-Fire-Alarm-Basics-Notification?icid=W483>
  - “A Guide to Fire Alarm Basics – Initiation” <https://www.nfpa.org/News-and-Research/Publications-and-media/Blogs-Landing-Page/NFPA-Today/Blog-Posts/2021/04/14/A-Guide-to-Fire-Alarm-Basics-Initiation?icid=W483>
2. Answer the questions on the following page.

This page intentionally left blank.

## PRE-COURSE ACTIVITY 1 (cont'd)

### Fire Alarm Basics Questions

1. Which of the following components of a fire alarm system includes devices and circuits that send a signal to a fire alarm to provide the status of a fire?
  - a. Initiation.
  - b. Supervision.
  - c. Power.
  - d. Notification.
  
2. A \_\_\_\_\_ consists of a supervising station under the same ownership as the protected building that it supervises, while a \_\_\_\_\_ consists of a constantly attended location that receives signals from various protected premises typically owned by different parties.
  - a. central station service alarm system; secondary power source
  - b. communications pathways; protected premises
  - c. proprietary supervising station alarm system; remote supervising station alarm system
  - d. remote supervising station alarm system; proprietary supervising station alarm system
  
3. Which of the following is a switch that is open and closed electromechanically and allows the fire alarm control unit (FACU) to operate emergency control functions?
  - a. Output module.
  - b. Control circuit.
  - c. Terminal.
  - d. Relay.
  
4. \_\_\_\_\_ supervisory devices are used on an initiating device circuit and use an increase in current flowing through the circuit to cause a supervisory signal to the FACU.
  - a. Emergency
  - b. Addressable
  - c. Signaling
  - d. Conventional

5. A fire alarm system must use the temporal \_\_\_\_\_ pattern for evaluation/relocation, while temporal \_\_\_\_\_ pattern is used for carbon monoxide.
- a. 1; 2
  - b. 2; 3
  - c. 3; 4
  - d. 4; 5
6. Which of the following is an example of a visual notification?
- a. Voice.
  - b. Strobe.
  - c. Horn.
  - d. Speaker.
7. \_\_\_\_\_ devices are capable of communicating a unique identification number or address to a control unit using a signaling line circuit.
- a. Conventional
  - b. Addressable
  - c. Central
  - d. Supervisory

## **PRE-COURSE ACTIVITY 2**

### **Consequences of Improper Fire Alarm System Design and Installation**

#### **Purpose**

Assess the consequences of improper fire alarm system design and installation.

#### **Directions**

1. Research two fire incidents that resulted from an error(s) in fire alarm system installation and/or design. Describe the errors and consequences in 250-350 words. You may choose from the following list or from other fire incidents that are relevant to fire alarm systems.
  - MGM Grand fire in Las Vegas, Nevada.
  - Triangle Shirtwaist Factory fire in New York City, New York.
  - Station Nightclub fire in West Warwick, Rhode Island.
  - One Meridian Plaza fire in Philadelphia, Pennsylvania.
  - Beverly Hills Supper Club fire in Southgate, Kentucky.
  - Ghost Ship Warehouse fire in California.
  - Imperial Foods fire in Hamlet, North Carolina.
  - First Interstate Tower fire in Los Angeles, California.
  - Seton Hall University dorm fire in New Jersey.
  - Barclay Friends Senior Living Facility fire in Pennsylvania.
2. You will submit your paper to the instructor(s) on the first day of class.
3. Be prepared to discuss your research throughout the course.