Program Abstract

The Fire Dynamics Calculations Web based seminar is designed to provide the user with the basic information required to use the CFI Calculator application to perform basic field calculations related to a fire investigation. The instructors, Dr. James Quintiere and ATF Special Agent Robert J. Schaal discuss the use of the application and the related science. Calculations included in the application are Flame Height, Heat Flux, Flashover and Fire Growth. Examples of how the field calculations are used in the investigative process and sample calculations using the CFI Calculator application are presented.

Prior to starting the program, participants should download the application for the desired platform (Pocket PC, Palm, Desktop) as well as the program worksheet and review the Required Reading assignments. Completing the worksheet will provide the participant with basic information regarding the calculator and it's use and relates to the information discussed during the program. The Recommended Reading list provides the participant with additional resources that will allow them to get more detailed information on each of the calculations and the related science. When the program is completed the participant has the option to take the program test and receive a certificate of completion.

Program Objectives

At the completion of this program the fire investigator will be able to:

1. Describe the use of flame height calculations in the investigative process.
2. Describe the use of heat flux calculations in the investigative process.
3. Describe the use of flashover calculations in the investigative process.
4. Describe the use of fire growth calculations in the investigative process.
5. Describe the data input process for the CFI Calculator.
6. Describe the limitations and potential uses for fire dynamics field calculations during a fire investigation.
7. Utilize the CFI Calculator application to make calculations related to fire growth and development give investigative findings.