

Fire Investigation Independent Study Continuing Education

NFPA 921 UNIT #19 – Study Guide

NFPA 921 Guide for Fire and Explosion Investigations 2001 Edition

Objective: Given an examination the participant shall demonstrate a knowledge and understanding of the investigation of incendiary fires.

Reading/study assignment: NFPA 921 Guide for Fire and Explosion Investigations, 2004 Edition, pp. 921-165 through 921-171 (Chapter 22)

Study/reference questions:

What is HTA?

What is the difference between the use of a fuel and the use of a trailer?

What are multiple fires?

Explain and define the profit motive? What are the targets, categories, subcategories, etc.?

What are the six motive classifications?

What are some examples of multiple fires?

What is the fire investigator cautioned about concerning the use of other evidentiary factors?

Apparent multiple fires can result from what?

How do previous fires, scene reconstruction, and careful examination enter into multiple fire determination?

What is an incendiary device and what should the investigator search for if use of this is suspected?

What are delay devices and what are some examples?

What does confirmation of multiple fires indicate?

What are evidentiary factors of an incendiary fire?

What is a trailer?

What is an incendiary fire?

What may give the appearance of a trailer when in fact no trailer existed?

Are a pattern and a trailer the same? Why or why not? What is an example?

Why is lack of expected fuel load or lack of ignition sources an incendiary fire indicator and what are some examples?

How many HTA fires have been proven and confirmed?

What are exotic accelerants and what should the investigator consider in reference to rate of fire growth?

What are unusual fuel load or configuration and what are some examples?

Why would the fire investigator be concerned with the manner and extent of burn injuries and where might they check to identify persons having received recent burns?

What is an incendiary fire indicator?

Why would the owner of the property who has had fires at other locations be an indication of an evidentiary factor of an incendiary fire?

What does the presence of ignitable liquids indicate? When and where?

Why would overinsurance, timed opportunity, fires during severe natural conditions, fires during civil unrest, and fire department unavailability be other evidentiary factors of an incendiary fire? Explain. Give examples.

What does the investigator need to determine to conclude that there were multiple fires?

What are the three principal trends or patterns in repetitive fire setting?

What are irregular patterns, what can they indicate, and what should be done concerning them?

What are potential indicators not directly related to combustion?

Study the following indicators not directly related to combustion. Why would they be an indicator? What are they trying to accomplish in each type of indicator? What are examples of these?

Remote location with view blocked or obscured

Fires near service equipment and appliances

Removal or replacement of contents prior to the fire

Replacement

Removal

Absence of personal items prior to the fire

Entry blocked or obscured

Sabotage to the structure of fire protection systems

Damage to fire-resistive assemblies

Damage to fire protection systems

Open windows and exterior doors

What are some examples of incendiary devices and the evidence that may remain from them?

What may the analysis of confirmed incendiary fires reveal?

What materials may be used for trailers and what should be done in reference to remains of trailers?

How does the extent of fire damage affect the determination of multiple fires?

Explain and define the extremism motive? What are the targets, categories, subcategories, etc.?

What are geographic area, clusters and what may they indicate?

What is temporal frequency and what may they indicate and/or reveal?

What is materials and method and what may this indicate?

What problems may evidence of another crime or crime concealment present the fire investigator in reference to motive? Why?

Why is evidence of another crime or crime concealment an indicator of an incendiary fire?

Why would indications of financial stress be another evidentiary factor of an incendiary fire? Explain. Give examples.

Explain how existing or history of code violations may be an indication of an evidentiary factor of an incendiary fire.

What is the proper use of motive indicators in the fire investigation?

Explain and define the excitement motive? What are the targets, categories, subcategories, etc.?

What is crime analysis?

Are behaviors related to the classification of a motive exclusive to one motive? What must you then do?

What is intent?

What is the difference between intent and motive?

What is necessary to show proof of a crime, intent, motive or both? Explain.

What are the three principal trends that may be identified through analysis of confirmed incendiary fires?

What is NCAVC?

What are the three classifications of repetitive fire setting? Explain.

What should the fire investigator do if a non-activated incendiary device is discovered?

What is a problem with the investigator's assessment of fire growth and fire damage and what is the investigator cautioned about concerning this? Why?

Explain and define the vandalism motive? What are the targets, categories, subcategories, etc.?

Explain and define the revenge motive? What are the targets, categories, subcategories, etc.?

What fuels may be used for trailers?

What is motive?

Explain and define the crime concealment motive? What are the targets, categories, subcategories, etc.?

An ignitable liquid used in conjunction with an incendiary fire may be referred to as what?