

# FIRE INVESTIGATION REPORTS

WRITING TECHNICAL REPORTS aka EXPERT REPORTS

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## COURSE OBJECTIVES

- TO FAMILIARIZE THE STUDENT WITH WRITING TECHNICAL REPORTS; SPECIFICALLY ORIGIN AND CAUSE REPORTS
- TO FAMILIARIZE THE STUDENT WITH APPLICABLE STANDARDS, CODES AND GUIDELINES REGARDING REPORTING OF EXPERT OPINIONS.
- TO REINTRODUCE THE STUDENT WITH REPORTING PROCEDURES



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## DISCLAIMERS

- Writing technical reports is not easy!
- Placing opinions means you are writing **YOUR** opinions!
- If you walk out saying I am crazy, you are a salty seasoned investigator who does not understand the origin and cause world!
- Do the format your department desires



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## MY OPINION



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## REPORT GOALS

- To depict an accurate story (chronological/methodical) of the findings and opinions of the origin and cause investigator
- To follow the standards of all the folks who are creating them and what you will be held to

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## WHO READS THESE?

- Boss
- Insurance Folks
- Attorney's (prosecution, defense, civil)
- Other fire investigators
- Other para-professional folks
- Media



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### WHAT STANDARDS?

- Arizona Rules of Evidence
- NFPA 921 Chapter 16 (16.5 – 16.5.3)
- NFPA 1033 (4.3, 4.3.3)
- ASTM – ASTM International
  - Interdisciplinary Forensic Science Standards
  - E620, E678, E1020, E1188



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### RULE 702 TESTIMONY OF EXPERTS

- If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise.



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### NOTE TAKING

- Transfer notes to an actual report within the required time frame of evidentiary rules
- Only take necessary notes regarding origin and cause stuff – **I personally believe in taking purposeful photos**
- Don't shoot me but in the private world notes are kept forever (NFPA921)



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## RULE 15 CRIMINAL PROCEDURE

- 15.1 discusses disclosure
- 15.4 discusses handwritten notes that have been substantially incorporated into a document or report within **20** working days of the notes being created (includes electronically, mechanically, verbatim dictation) – no longer themselves considered a statement



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## RULE 26.1 CIVIL

- Prompt Disclosure of Information
  - Factual basis of claim
  - Legal theory
  - Witnesses
  - Experts (names, qualifications, reports)

The reason why many experts do not write a report!



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## QUALITY

- A criminal, civil, origin and cause investigation is only as good as the report that supports it!
  - Complete
  - Clear
  - Concise
  - Accurate

**If your lucky you testify close to case completion.**



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## THE BASICS

- Write in the first person.
- Use chronological order.
- Use past tense.
- Use active voice.
- Use correct spelling and punctuation.
- Use correct subject/verb agreement.
- Use correct pronoun reference.
- Avoid jargon and wordiness.
- Write facts rather than opinions.
- Choose the correct word to describe the incident.
- Organize the report by using openings, paragraphs, and headings.



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## FIRST PERSON

- I, me, my, myself, mine etc.
- Opinions are much stronger due to first personal influence
- Most law enforcement, fire departments do not allow third person reference



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## MISSING INFORMATION

- Sucks!
- Is not seen as professional
- Leads to distrust although we all know it is not necessarily why there is missing information
- Tends to discredit the reporting person in the sense expertise is not relayed



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### CHRONOLOGICAL (METHODOLOGY)

- Report should be chronological
- Should show a methodical investigations approach
- Show a methodology in writing and design of report



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### GRAMMAR & PUNCTUATION

- This truly; is not grammar, class so please ensure you: are following all grammar and punctuation' rules (use installed programs, peer review, administrative review etc.)



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### SPELLING

- Again, we are not in English class so pleeeeee use correct spelling and the programs installed



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## ACTIVE

Every sentence has a subject and a verb.

**Active Voice:** When the subject performs the action of the verb.

Active voice: I asked the man about the broken mirror.

**Passive Voice:** When the action is done to the subject. The subject receives the action of the verb.

Passive voice: The fire *was reported* by the child.



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## A WORD ON WORDINESS

- More words will kill you!
- Facts and findings are key
- Opinions should be clear and meet the guides and standards. You should not have too many identified opinions.
- Origin and cause reports are not term papers!



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## SAY WHAT?

- Who
- What
- Why
- When
- Where
- How



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## YOUR SENSES

- You have the wonderful ability to report on your senses
- Make sure you can correctly articulate those senses later
  - "I smelled the odor of gasoline"



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## OUR AUDIENCE

- Jury folks – 8<sup>th</sup> grade education level, like technology (don't understand it), watch CSI and expect that whether real or not!
- Defense attorneys – always looking for the loophole, missing information, ambiguity and the "does not prove beyond a reasonable doubt"



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## Court

- z In the world of expert opinions (origin and cause reports) you have the most awesome ability to express your opinions (backed up of course)
- z Although it may not be in the report and you can discuss it, it will certainly take from the real core issue



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### A WORD ON FIRE COMPANY REPORTS

- Typically useless in regards to O/C
- Best information from interviewing crews
- Have them complete a witness information form (first responding units)

**MAYBE**



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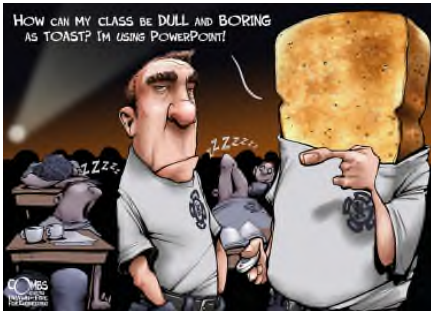
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### BREAK TIME



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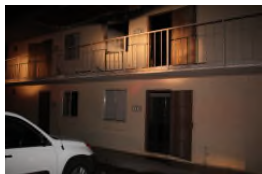
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### Lets Get To It!

- z Directions, how do you know where you are at? (own a compass?)
- y East, West, North, South
- y A, B, C, D
- y Front, Back, which sides?



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## MY FORMAT

- Synopsis
- Introduction
- Fire Discovery  
Firefighting Actions
- Alterations to Fire  
Scene/Scene Security
- Property Description
- Site (Scene)  
Examination
- Area & Point of Origin
- Interviews
- Potential Ignition  
Sources
- Evidence Log
- Enclosures
- **Considerations**
- Fire Cause  
Determination



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## Synopsis

- z What it is exactly you did and found in a brief statement (statement of investigation), uh-oh your first opinion!
- y Lets take a peek a some.....



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## Introduction

- z How you came about to be involved in this investigation (who, what, where, why when and how)
- y Lets take a gander at some of these.....



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### **Fire Discovery/ Firefighting Actions**

- z How was this fire discovered and what were the actions of the responding fire crews?
- y Losing creativity so lets look at some.....



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### **Alterations to the fire scene/scene security**

- z Quite simply any alterations to the fire scene and how was it secured and found by you?
- y Take a peek at some of these.....



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### **Property Description**

- z This is the time to list the property building type, size etc. Also the time to set the direction of the property (N/S/E/W)
- z This is the time I take to discuss utilities, fire protection, security, contents etc.
- z **I personally do not like checkbox sheets but if you do, enjoy!**
- z Lets take a peek at some.....



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## Site (Scene) Examination

- z Methodical approach key here
- z Exterior –
- z Interior –
- z Least to Most -



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## AREA AND POINT OF ORIGIN

- I prefer to call it out
- Looky looky.....



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## INTERVIEWS

- I bullet point interviews, narrative format gets quite long and information lost to the reader
- Recordings should be impounded/saved
  - Take a peek



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### POTENTIAL IGNITION SOURCES

- The evaluation of potential ignition sources in the **area of origin**



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### EVIDENCE LOG

- A listing of evidence or reference to an evidence log collected.



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### ENCLOSURES

- Other items included with the origin and cause report that are relevant to the report



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## CONSIDERATIONS

- Commentary on the case, claim etc.
- Public reports should not include this as in general items listed could be product liability, subrogation, negligence etc.



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## TYPES OF FIRE CAUSE

- Accidental-does not involve a deliberate act to ignite or spread fire into an area where the fire should not be.
- Natural-caused without direct human intervention, such as lightning, wind, earthquake and the like.
- Incendiary-deliberately ignited under circumstances which the person knows that the fire should not be ignited.
- Undetermined – Sometimes the cause can not be determined.



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## FIRE CAUSE DETERMINATION

- This is the meat and potatoes of the origin and cause report and includes:
  - Classification of the fire (4 classifications)
  - Your opinion on how the fire started (cause)
    - Ignition source
    - First material ignited
    - Ignition sequence/scenario



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### CONCLUSIONS/FIRE CAUSE

- The statement should be strong otherwise it should be undetermined
  - Probable v. Possible (921 4.5)



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### UNDETERMINED CAUSE

- Based on my scene examination, interviews and the evidence present at the scene the cause of this fire at this time and in accordance with NFPA 921 must be categorized as undetermined; caused by an unidentified ignition source coming into contact with an unidentified fuel. This investigator reserves the right to change the determination or opinions expressed should additional information be provided that may warrant further examination.



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### JUVENILE FIRE SETTERS/ARSON

- Must be able to distinguish that the fire should not have been started
- Look at your ages and legalities
- Look for multiple fire setting behaviors
- Not all kids should be referred to a fire setting program



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**CONCLUSION**

- Good luck!



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