

PREPARING FOR TESTIMONY

NOVEMBER 2011
FIRE MARSHAL
IN-SERVICE TRAINING

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What is Testimony?

- A declaration by a witness under oath, as that given before a court or deliberative body.
- All such declarations, spoken or written, offered in a legal case or deliberative hearing.
- Evidence in support of a fact or assertion; proof.

What Types of Testimony are There?

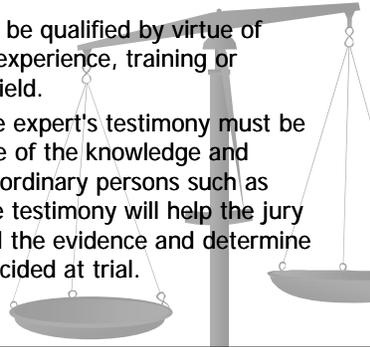
- **FACT:** What you saw, heard, observed
- **EXPERT:** If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education may testify thereto in the form of an opinion or otherwise
(Rule 702, Federal Rules of Evidence)

EXPERT WITNESS

An Expert Witness is one who shows some special knowledge or understanding of the field, which the ordinary person does not possess.

How is Expert Testimony Admissible?

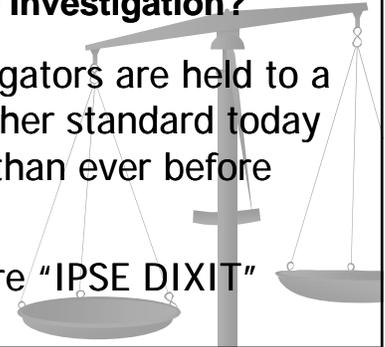
- The witness must be qualified by virtue of knowledge, skill, experience, training or education in the field.
- The subject of the expert's testimony must be something outside of the knowledge and understanding of ordinary persons such as jurors, so that the testimony will help the jury better understand the evidence and determine the facts to be decided at trial.



What Do We Need to Know About Expert Testimony Relating to Fire Investigation?

Fire Investigators are held to a much higher standard today more than ever before

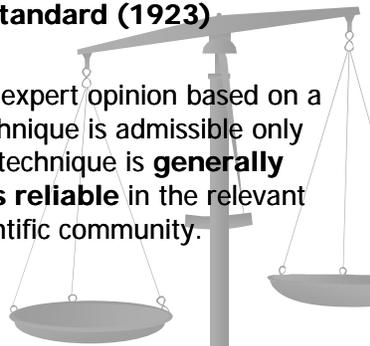
No More "IPSE DIXIT"



What Used to be Required?

Frye Standard (1923)

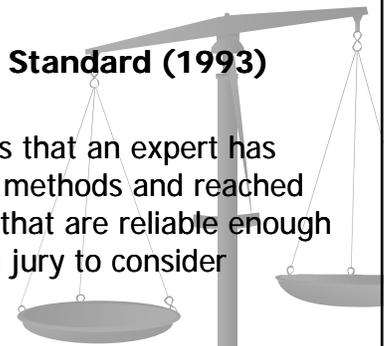
It provides that expert opinion based on a scientific technique is admissible only where the technique is **generally accepted as reliable** in the relevant scientific community.



What is Required Now?

Daubert Standard (1993)

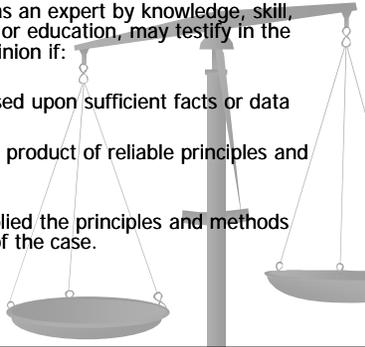
It provides that an expert has employed methods and reached conclusions that are reliable enough for a jury to consider



Rule 702. Testimony by Experts

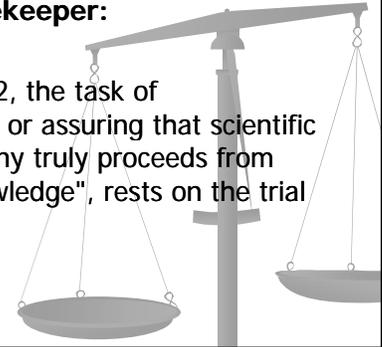
A witness qualified as an expert by knowledge, skill, experience, training, or education, may testify in the form of an expert opinion if:

- (1) the testimony is based upon sufficient facts or data
- (2) the testimony is the product of reliable principles and methods
- (3) the witness has applied the principles and methods reliably to the facts of the case.



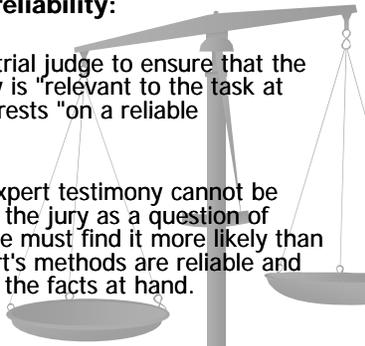
DAUBERT

- **Judge is gatekeeper:**
- Under Rule 702, the task of "gatekeeping", or assuring that scientific expert testimony truly proceeds from "scientific knowledge", rests on the trial judge.



DAUBERT

- **Relevance and reliability:**
- This requires the trial judge to ensure that the expert's testimony is "relevant to the task at hand" and that it rests "on a reliable foundation".
- Concerns about expert testimony cannot be simply referred to the jury as a question of weight. The Judge must find it more likely than not that the expert's methods are reliable and reliably applied to the facts at hand.



DAUBERT

- **Scientific knowledge = scientific method/methodology:**
- A conclusion will qualify as *scientific knowledge* if the fire investigator can demonstrate that it is the product of sound "scientific methodology" derived from the scientific method.



DAUBERT

- Factors relevant:
- The Court defined "scientific methodology" as the process of formulating hypotheses and then conducting experiments to prove or falsify the hypothesis, and provided a nondispositive, nonexclusive, "flexible" test for establishing its "validity":

DAUBERT REQUIREMENTS

- Has the theory or technique been tested using some type of accepted standards or controls?
- Is there a known or potential error rate for the process?
- Has it been subjected to peer review and publication?
- Has it gained general acceptance in the field?

What does this mean for us?

As fire investigators, we must not only be aware of the Daubert Standard, but we must conduct **all** origin and cause investigations so that we may develop proper conclusions that we can support with expert testimony that is admissible

Connecticut is a DAUBERT state

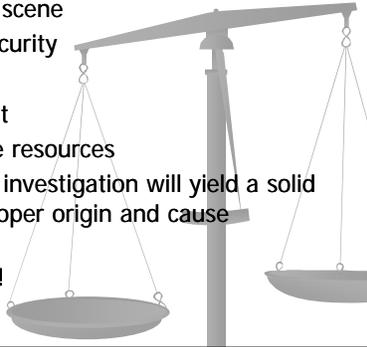
When do we do this?

The time to prepare for expert testimony begins at the moment that we receive the assignment to investigate a fire.

Every step of the investigation must be taken with the Daubert Standard in mind to ensure a thorough and completely supported, scientifically based conclusion.

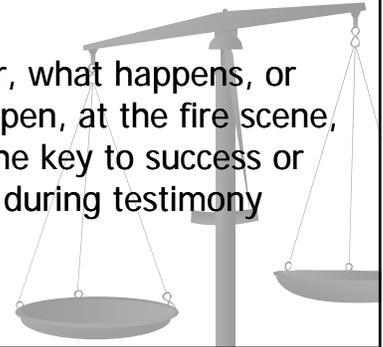
FIRE SCENES

- Treat like a crime scene
- Maintain scene security
- Enter LEGALLY
- Properly document
- Utilize all available resources
- Careful, thorough investigation will yield a solid conclusion and proper origin and cause determination
- TAKE YOUR TIME!



FIRE SCENES

Remember, what happens, or doesn't happen, at the fire scene, may be the key to success or failure during testimony



How do we do this?

- We must conduct every single fire investigation the same way
- We must utilize a systematic approach
- We must be able to explain the methodology that we used to reach a conclusion.
- No more "IPSE DIXIT" ("Because I Said So")

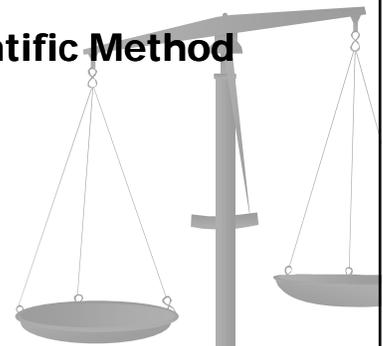
SHOW OUR WORK



What is the recommended Systematic Approach?

Scientific Method

- Know it
- Use it
- Explain it



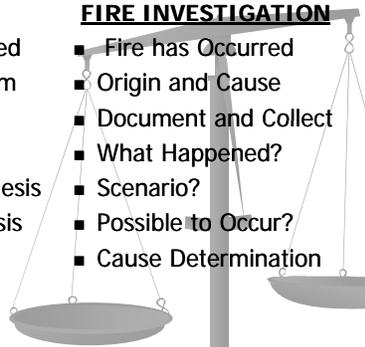
SCIENTIFIC METHOD

SCIENCE LAB

- Recognize the need
- Define the problem
- Collect Data
- Analyze the Data
- Develop a Hypothesis
- Test the Hypothesis
- Conclusion

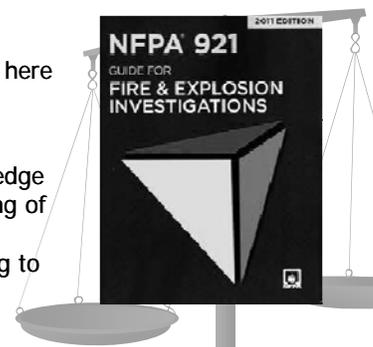
FIRE INVESTIGATION

- Fire has Occurred
- Origin and Cause
- Document and Collect
- What Happened?
- Scenario?
- Possible to Occur?
- Cause Determination



Where do we find it?

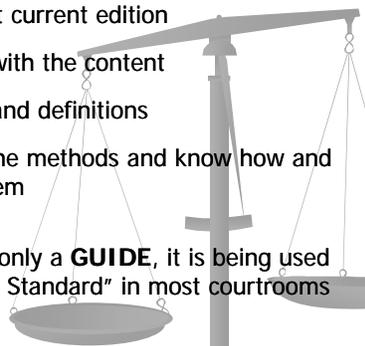
- Like it or not, it's here
- Need to have a working knowledge and understanding of it as a defining document relating to fire investigation



NFPA 921

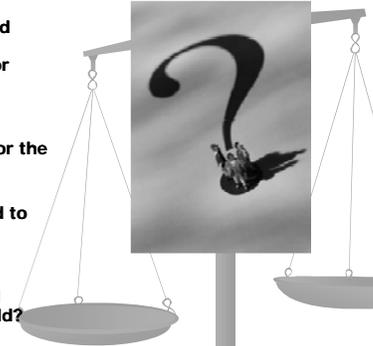
- Maintain the most current edition
- Become familiar with the content
- Know key terms and definitions
- Be familiar with the methods and know how and when to apply them

While NFPA 921 is only a **GUIDE**, it is being used as a "Benchmark Standard" in most courtrooms



DAUBERT and NFPA 921 (Where they Meet)

- Has the theory or technique been tested using some type of accepted standards or controls?
- Is there a known or potential error rate for the process?
- Has it been subjected to peer review and publication?
- Has it gained general acceptance in the field?



What do we need as an Expert Witness?

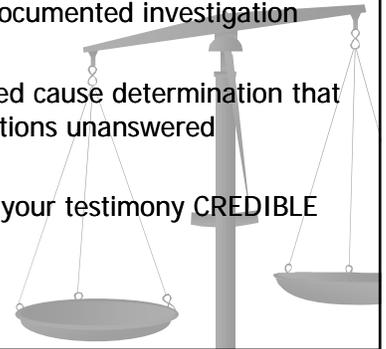
CONTENT
CREDIBILITY



CONTENT

- A thoroughly documented investigation
- A fully supported cause determination that leaves no questions unanswered

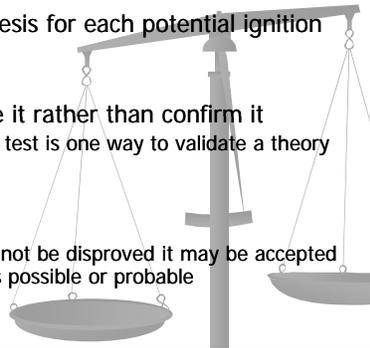
This will make your testimony **CREDIBLE**



HYPOTHESIS

- Develop a hypothesis for each potential ignition scenario
- Test it to disprove it rather than confirm it
 - Field flammability test is one way to validate a theory
 - Peer review
 - Research

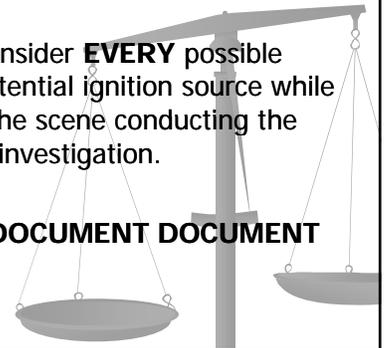
If a hypothesis can not be disproved it may be accepted as possible or probable



CAUSE DETERMINATION

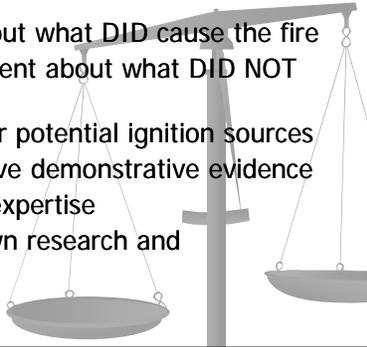
We must consider **EVERY** possible reasonable potential ignition source while we are at the scene conducting the investigation.

DOCUMENT DOCUMENT DOCUMENT



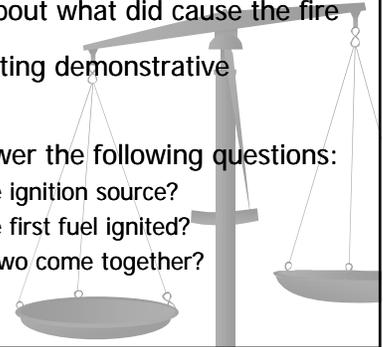
CAUSE DETERMINATION

- Be confident about what DID cause the fire
- Be just as confident about what DID NOT cause the fire
- Rule out all other potential ignition sources
- Include supportive demonstrative evidence
- Rely on others' expertise
- Conduct your own research and experiments



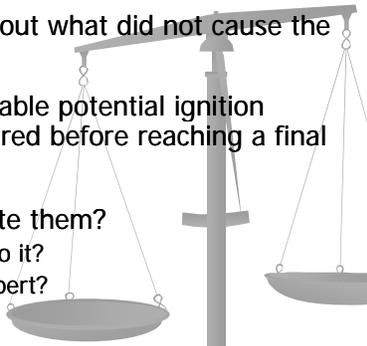
WHAT CAUSED THE FIRE?

- Be confident about what did cause the fire
- Include supporting demonstrative evidence
- Be able to answer the following questions:
 - WHAT was the ignition source?
 - WHAT was the first fuel ignited?
 - HOW did the two come together?



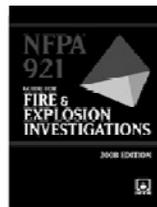
WHAT DID NOT CAUSE THE FIRE?

- Be confident about what did not cause the fire
- Were all reasonable potential ignition sources considered before reaching a final conclusion?
- Did you eliminate them?
 - HOW did you do it?
 - Did another expert?



PROCESS OF ELIMINATION

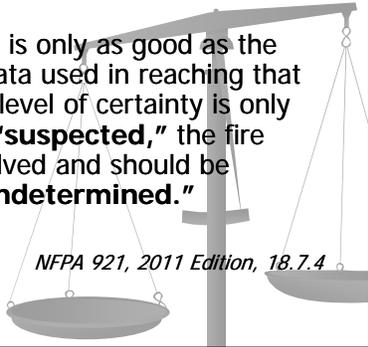
- NFPA 921
2008 Edition
18.2.2
- NFPA 921
2011 Edition
18.6.5*



UNDETERMINED?

"The final opinion is only as good as the quality of the data used in reaching that opinion. If the level of certainty is only **"possible"** or **"suspected,"** the fire cause is unresolved and should be classified as **"undetermined."**

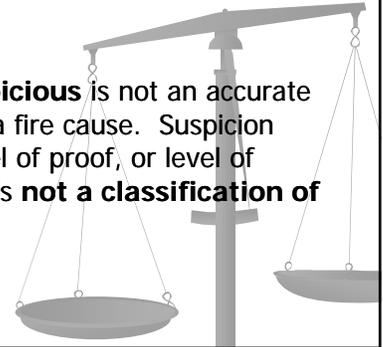
NFPA 921, 2011 Edition, 18.7.4



SUSPICIOUS?

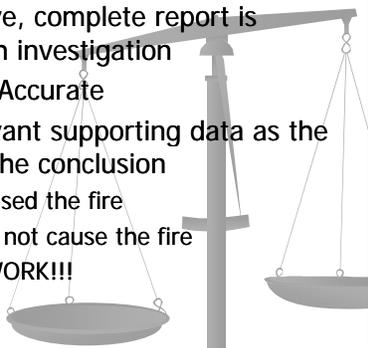
REMEMBER....

The term **suspicious** is not an accurate description of a fire cause. Suspicion refers to a level of proof, or level of certainty, and is **not a classification of fire cause.**



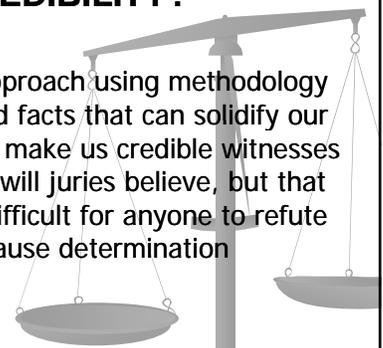
REPORTS

- A comprehensive, complete report is required of each investigation
- Clear, Concise, Accurate
- Include all relevant supporting data as the foundation for the conclusion
 - Detail what caused the fire
 - Detail what did not cause the fire
 - SHOW YOUR WORK!!!



HOW CAN WE ACHIEVE CREDIBILITY?

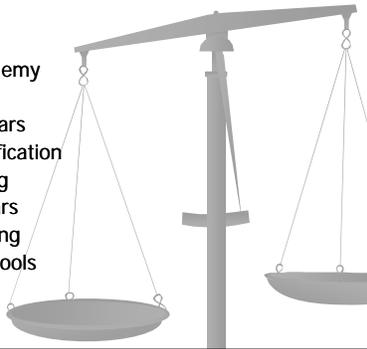
A systematic approach using methodology and supported facts that can solidify our conclusion will make us credible witnesses that not only will juries believe, but that will make it difficult for anyone to refute our cause determination



WHERE DO WE OBTAIN OUR CREDIBILITY?

■ Education

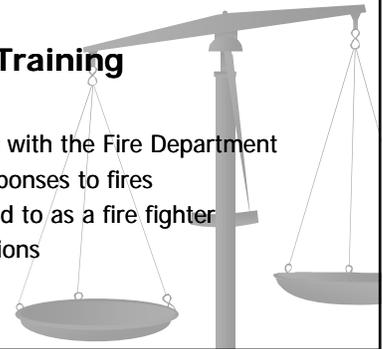
- National Fire Academy
- ATF FLETC
- IAAI/CFMA Seminars
- Fire Marshal Certification
- In-Service Training
- State FMA Seminars
- Fire Fighter Training
- Miscellaneous Schools



WHERE DO WE OBTAIN OUR CREDIBILITY?

■ On the Job Training

- Training Burns with the Fire Department
- Mutual aid responses to fires
- Fires responded to as a fire fighter
- Fire Investigations



WHERE DO WE OBTAIN OUR CREDIBILITY?

■ Professional Memberships

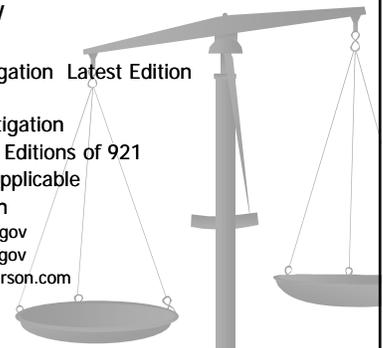
- State & Local Fire Marshal Associations
- Connecticut Chapter IAAI
- CFMA
- NFPA



WHERE DO WE OBTAIN OUR CREDIBILITY?

■ Reference Library

- Kirks Fire Investigation Latest Edition
- NFPA Handbook
- IFSTA Fire Investigation
- Current and Past Editions of 921
- NFPA Codes as Applicable
- Internet Research
 1. NIST www.nist.gov
 2. CPSC www.cpsc.gov
 3. IAAI www.firearson.com



NFPA 1033

Professional Qualifications for Fire Investigator

2009 Edition

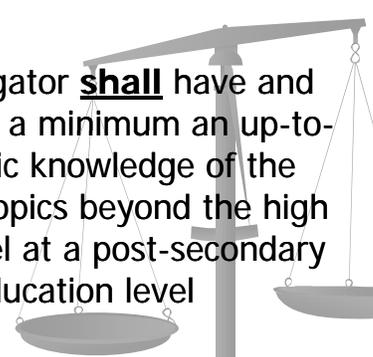


This **Standard shall** identify the professional level of job performance requirements for fire investigators



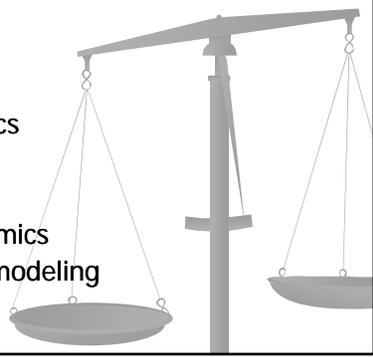
NFPA 1033

The investigator **shall** have and maintain at a minimum an up-to-date basic knowledge of the following topics beyond the high school level at a post-secondary education level



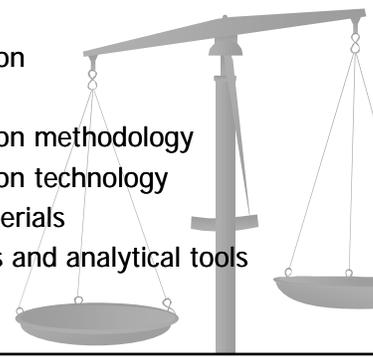
NFPA 1033

- Fire Science
- Fire Chemistry
- Thermodynamics
- Thermometry
- Fire dynamics
- Explosion dynamics
- Computer fire modeling



NFPA 1033

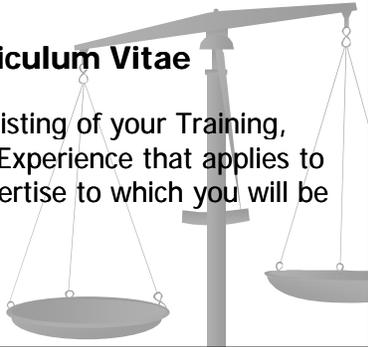
- Fire investigation
- Fire analysis
- Fire investigation methodology
- Fire investigation technology
- Hazardous materials
- Failure analysis and analytical tools



CREDIBILITY TOOL

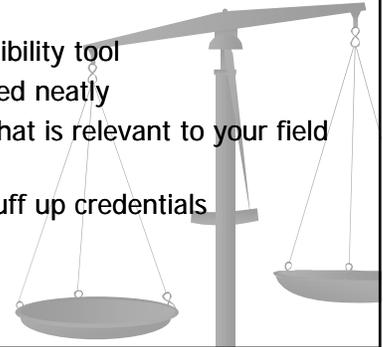
Curriculum Vitae

Chronological Listing of your Training, Education and Experience that applies to the field of expertise to which you will be testifying



CURRICULUM VITAE

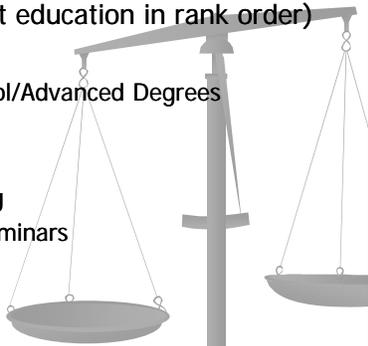
- Important credibility tool
- Organized, typed neatly
- Only include what is relevant to your field of testimony
- Do not lie or puff up credentials
- Keep current



WHAT TO INCLUDE ON A CV

■ Education (List education in rank order)

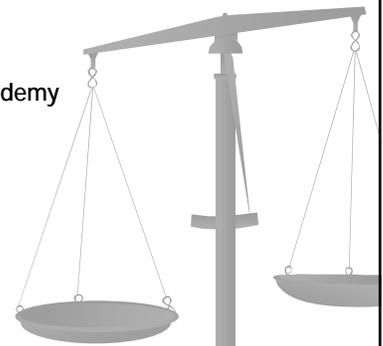
- Graduate School/Advanced Degrees
- College
- High School
- Special Training
- Professional Seminars



WHAT TO INCLUDE ON A CV

■ Training

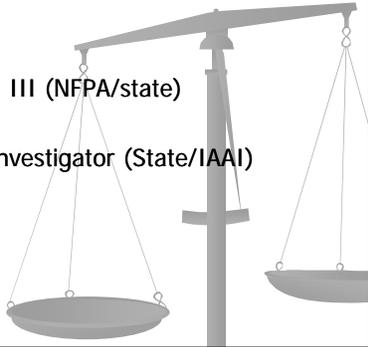
- Fire/Police Academy
- Fire Academy
- State Schools
- Seminars
- Special skills



WHAT TO INCLUDE ON A CV

■ Certifications

- Firefighter I, II, III (NFPA/state)
- Police Officer
- Certified Fire Investigator (State/IAAI)



WHAT TO INCLUDE ON A CV

■ Experience

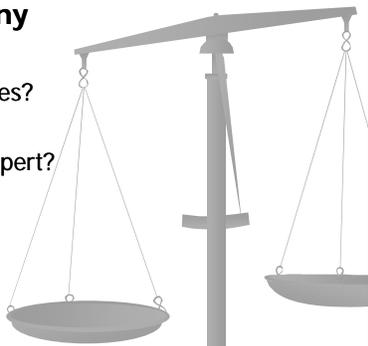
- Positions held
- Supervisory responsibilities
- Number of investigations participated in
- Number of investigations as lead investigator



WHAT TO INCLUDE ON A CV

■ Prior Testimony

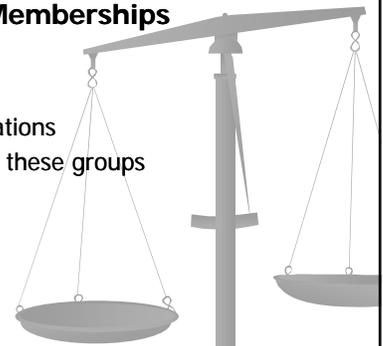
- How many times?
- Where?
- Qualified as expert?



WHAT TO INCLUDE ON A CV

■ Association Memberships

- IAAI/CFMA
- State organizations
- Positions with these groups



WHAT TO INCLUDE ON A CV

■ Professional Writing Credits

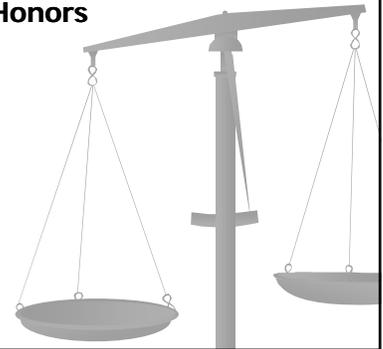
- Magazines
- Articles
- Books



WHAT TO INCLUDE ON A CV

■ Awards and Honors

- Local
- Civic
- State
- IAAI/CFMA

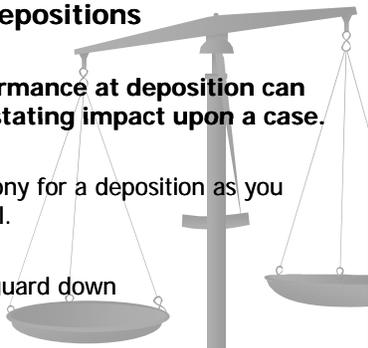


TESTIMONY PREPARATION

Depositions

A poor performance at deposition can have a devastating impact upon a case.

- Prepare testimony for a deposition as you would for a trial.
- Don't let your guard down

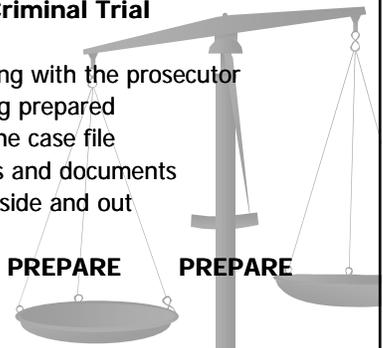


TESTIMONY PREPARATION

Criminal Trial

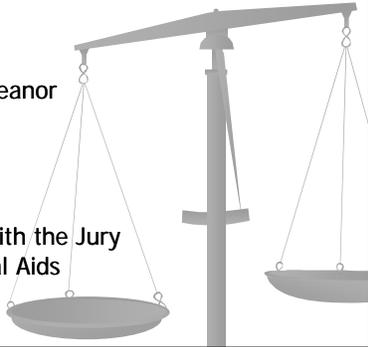
- Insist on a meeting with the prosecutor
- Go to the meeting prepared
- Bring a copy of the case file
- Review all photos and documents
- Know the case inside and out

PREPARE PREPARE PREPARE

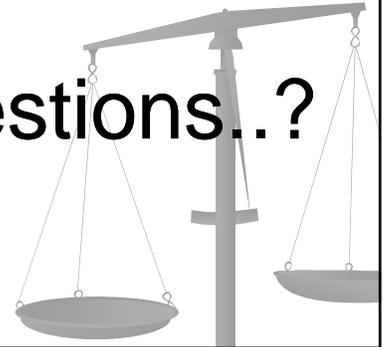


TRIAL TESTIMONY

- Preparation
- Organization
- Appearance
- Attitude and Demeanor
- Nervousness
- Candor
- Confidence
- Terminology
- Communication with the Jury
- Exhibits and Visual Aids



Questions..?



Thank You

