

**CURRICULUM VITAE**

**Andrew M. Derrick**

**May 4, 2012**

**Employment**

**Current status – ‘Retired Fire Captain’ – Private Fire and Explosions  
Investigator**

**31.75 Approximate Years of Service as a Firefighter and Fire Captain with the  
City of Merced City Fire Department – Regular duties included 20 years  
as Fire/Arson/Bomb Investigator**

**20 Years - Private Fire/Explosions Investigator - 08/28/92 P # 15809 - including  
(1) year employment as a Fire Investigator for Tyson Fire Investigations  
– 14 Fire Investigations**

**Education**

**1993 Bachelor of Science Degree - California State University Stanislaus**

**1990 Certificate of Achievement - Fire/Arson Investigation ‘Tested’  
– National Fire Academy in Emmitsburg, Maryland**

**1989 Graduate – Officer Safety and Field Tactics for the  
Arson Investigator - California Specialized Training Institute**

**1974 Associate of Arts - Degree and Certificate of Completion in Fire Science  
Merced College - Additional Units completed at Community Colleges and  
the University of California Berkley**

**Fire and Explosions Investigative Experience**

**20 Years Experience as Fire Captain, and as Fire-Arson-Bomb Investigator,  
Investigation Team Leader (Phoenix Team). During my fire service career I  
responded to more than 2000 fire and explosion related incidents, and assisted  
with and/or had the responsibility for origin and cause determination and  
investigation of approximately:**

- |   |  |
|---|--|
| <ul style="list-style-type: none"><li>• 451 Residential Structure Fires</li><li>• 41 Commercial/ Industrial Fires</li><li>• 179 Vehicle / Aircraft Fires</li><li>• 12 Mobile Home Fires</li><li>• 314 Grass/Brush Outdoor Fires</li></ul> | <b>14 Explosions And Bombings<br/><u>Including:</u><br/>13 Fire Related Deaths</b> |
|---|--|

**I have participated in and directed Fire/Death Investigations with California Department of Justice (D.O.J.), California Department of Forestry (C.D.F.), the Bureau of Alcohol Tobacco and Firearms (BATF) and the California State Fire Marshal's Office (In addition to working with Merced City and County Fire Police/Sheriff Officials)**

**As a Private Fire Investigator - I have participated in the investigation of 346 Commercial / Structure / Mobile Home / Vehicle / Marine, fire and explosion incidents; including the fire related deaths of 8 persons, for private and corporate entities as of: 10-21-2011.<sup>1</sup>**

**I found that of the 352 fires I investigated as a Private Investigator, I determined that (13) were intentionally caused (approx. 3.8%). I co-investigated fire and explosion related fire death and catastrophic multiple fire deaths with Dr. John DeHaan and State Fire Marshal E.R. Scott Baker. The commercial fire and explosion related death I investigated with Dr. DeHaan occurred in Chico, CA and involved the explosion of a large gasoline storage tank. The multiple fire death occurrences (5), I investigated with Dr. DeHaan, occurred located in Lemoore, CA.**

### **Expert Testimony Experience**

**I have testified in criminal and civil court matters as an expert witness in fire origin and cause determination and other fire bomb related issues, and prepared and served search warrants. I also served in Merced County Superior Court as Juror and Jury Foreman in a civil matter. ['Court Testimony' listing upon request.]**

### **Fire Service Assignments**

- **Acting Fire Division Chief (Platoon Supervisor)**
- **Fire Captain – All Engine and Truck Companies**
- **Fire/Explosions Investigations**
- **Phoenix Fire/Arson Investigation Team Leader**
- **Airport Operations– Aircraft Rescue & Firefighting**

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<sup>1</sup> Includes: Consultation and/or Review of incidents within the specific categories listed above.



**Derrick Fire Investigations**

**Awards: Firefighter of the Year 1988 – and multiple Commendations relating to successful individual and Fire Company performance during Firefighting Operations and Fire/Arson/Bombing Investigations.**

**Certifications and Permits**

**2006 Certified Fire Investigator – Certification #598 (C.C.A.I)**

**1992 August California Licensed Private Investigator**

**Concealed Weapons Permit: ORI #CA0220000 – CII 07889894**

**1991 October Fire Investigator II (Office of the Calif. State Fire Marshal)**

**1984 February Fire Investigator I (Office of the Calif. State Fire Marshal)**

**1973/74 CPC – 832 – Arrest/Firearms – as a Fire Department Peace Officer I participated in the apprehension, arrest and successful prosecution of multiple felony and misdemeanor suspects.**

**Peace Officer Standard Training P.O.S.T / Certifications**

**Reserve Police Officer Level II - Continued Advanced Officer Training including; – Lethal Force/Weaponry**

**Other Fire Service Certifications:**

<b>Chief Fire Officer - CFO</b>	<b>Fire Officer</b>
<b>Fire Instructor</b>	<b>Fire Apparatus Operator</b>
<b>Fire Firefighter I, II &amp; III</b>	<b>Hazmat First Responder</b>

**Professional Organizations**

<b>International Association of Arson Investigators (IAAI)</b>	<b>Member</b>
<b>National Association of Fire Investigators</b>	<b>Member</b>
<b>Central Valley Arson Investigators Assoc. (CVAIA)</b>	<b>Past Pres./ Assoc.Member</b>
<b>California Conference of Arson Investigators (CCAI)</b>	<b>Member</b>
<b>Round Table Coordinator – Southern Sierra Section 4</b>	
<b>National Fire Protection Association (NFPA)</b>	<b>Member</b>
<b>*Fire Service Section</b>	<b>Member</b>
<b>*Fire Science and Technology Educators Section</b>	<b>Member</b>
<b>*NFPA International Fire Marshalls Association</b>	<b>Assoc. Member</b>
<b>California Fire Chiefs Assoc. -Training Officers Association</b>	
<b>Northern Division -</b>	<b>Past – Exe. Board Member</b>
<b>International Fire Service Training Assoc. (I.F.S.T.A.)</b>	<b>Past Member</b>
<b>California State Sheriff’s Association</b>	<b>Assoc. Member</b>

### **Publications/Committees**

I wrote / co-authored a periodical article Fire Scene Examination of Burned Vehicle #4 provided at the March Seminar published in the California Conference of Arson Investigators Association periodical: California Fire/Arson Investigator Winter 2011 edition.

I was a Member and Secretary of two \*I.F.S.T.A. Committees. Our committees developed, edited and validated two training manuals now in publication: "Fire Origin And Cause Determination" and "Fire Investigator" IFSTA training manuals are nationally and internationally recognized as quality training materials for; Firefighters, Investigators, Law Enforcement Officers, Attorneys And Fire Protection and Investigation Professionals.

\* IFSTA – The International Fire Service Training Association  
Oklahoma State University – Stillwater, Oklahoma

Recommended to NFPA Fire Investigation 921 Committee as potential committee member - by Chief Bill Petersen – Chief Plano, Texas Fire Department

Committee Member - Fire Symposium IV "Mitigating the Arson and Bomb Problem in California" Sponsored By: the California State Fire Marshal, the State Board of Fire Services, and the Governor's Special Arson Task Force

Periodicals: The California Fire Investigator (CCAI), Fire & Arson Investigator (IAAI), The California Fire Service (CFSA), Scientific American, Popular Science, Popular Mechanics, NFPA Journal, National Fire Investigator (NAFI)

### **Training Relating To Investigative Certifications:**

#### **1984 Certified Fire Investigator I**

1A – Fire Cause and Origin Determination

1B – Techniques of Fire Investigation

1C – Laws of Arrest, Search and Seizure

Additional requirements include: Firefighter II and 1 year fire investigative experience.

#### **1991 Certified Fire Investigator II**

2A – Criminal and Legal Procedures

2B – Field Case Studies



## **Derrick Fire Investigations**

**\*Additional requirements include: Investigator I, plus a full range of experience in all aspects of fire investigation duties, investigation of fires and expert witness testimony.**

### **Fire/Rescue And Command Related Training:**

**1978 State Fire Marshal – Fire Fighter II Validation Test**

#### **\*Certified Fire Instructor**

**1A – Instructional Techniques – Part 1**

**1B – Instructional Techniques – Part 2**

**‘97-’98 Fire Instructor - Fire/Arson Investigation - Merced College**

**1992 Fire Instructor - Fire Control 3 Fire/Arson 32 Hours**

**1991 Assistant Instructor Fire Investigation Class  
with Captain Tom Robello - 36 Hours**

**1987 Assistant Instructor Structure Fire Investigation  
with State Fire Marshal Scott Baker**

#### **\*Certified Fire Officer –**

**1 – Management Supervision for Company Officers**

**1A – Instructional Techniques – Part 1**

**1A – Fire Origin and Cause Determination**

**1A - Fire Inspection Practices**

**1B - Fire Command**

**1B – Instructional Techniques – Part 2**

**1B - Hazardous Materials for Company Officers**

**1B - Code Enforcement**

#### **\*Certified Chief Officer - Command**

**2A – Command Tactics at Major Fires**

**2B – Scene Management at Major Incidents**

**2C – High Rise Fire Tactics**

**2D – Managing Large Scale Disasters**

**E – Wildland Fire Tactics**

**\*State Certification requires testing with a minimum 70% score and verification of prerequisite training and experience by the fire chief or police chief. All testing was proctored by an “accredited instructor”.**

**Management**

- 2A – Organizational Development and Human Relations**
- 2B – Finance and Business Management for Chief Officers**
- 2C – Computer Applications for the Fire Service**
- 2D – Strategic Planning**
- 2E – Staff Assignment and Line Functions**

**Additional Certifications:**

<b>Calif. Dept. of Education – Auto Extrication</b>	<b>Jan. 24, 1974</b>	<b>15 Hours</b>
<b>State Fire Marshal – Emergency Care</b>	<b>Feb. 22, 1980</b>	<b>30 Hours</b>
<b>State Fire Marshal – Rope Management</b>	<b>May 25, 1983</b>	<b>8 Hours</b>
<b>State Fire Marshal – Fire Control III, L.P.G.</b>	<b>Nov. 20, 1982</b>	<b>8 Hours</b>
<b>State Fire Marshal – ICS-334 Strike Team Leader Engine Emergency Medical Technician</b>		<b>May 19, 1994</b>

**Scientific Testing And Experimentation**

On March 12, 2007 my associate Mr. Jack Meade B.S. and I participated in and assisted with the scientific examination and testing of a residential propane fuel gas system, its related components and other exemplar components. The field testing took place at the scene of a severely fire damaged home located in Yosemite West, California and was conducted to test the plausibility of a proposed fire origin and cause hypothesis. The testing was conducted by two highly qualified professional engineers: Dr. Glen Stevick P.E. and Mr. John M. Freeman M.S/P.E. and was witnessed by attorneys: Mr. Geordan Goebel Esq. and Mr. John R. Fletcher, Esq. The testing conclusively proved the proposed hypothesis as the most reasonable and plausible explanation of the fire origin and cause.

During a CCAI Training Seminar (Nov. '07) I assisted Dr. John DeHaan and video recorded (for CCAI) his NFPA 705 testing regarding of the ignition properties of various combustible materials. During the conference and on an ongoing basis, I participated in the construction of testing modules, set-up and testing of: cigarette ignition of gasoline vapors, spontaneous heating and ignition and fire behavioral aspects of other combustible materials during ignition experiments. The experiments were conducted with and under the supervision of the listed instructors.



## **Derrick Fire Investigations**

### **Training Burns**

**I have participated in the organized controlled burning of at more than 50 buildings and vehicles for fire investigative and firefighting training. During many of these training burns I have acted as instructor or assistant instructor of fire/arson investigation. We ignited the buildings and vehicles in many different ways to observe the effects of; ignition, ventilation, fuel package arrangement and geometry, fire environments and the various effects of the fire control efforts have on the fire behavior and relative evidence.**

- **During the CCAI conference March-April 2009 I participated in a fire scene investigation demonstration/training module with Mr. Lou Bilancia Professional Electrical Engineer. We were one of three teams developed to provide the teaching demonstrations. We investigated a fire scene involving a building which was previously burned (without our knowledge) and video-taped. The scene examination / investigation was conducted as a teaching demonstration with approximately 50 students (CCAI attendees) observing and questioning the evidence and our methods. We followed NFPA 921 guidelines and employed the systematic methodology suggested therein. We demonstrated in initial/preliminary scene assessment, examination of the fire patterns and evidence, witness interviewing, excavation and reconstruction, evidence collection techniques, and the obtaining and processing of potential accelerant samples for testing. Together Mr. Bilancia and I examined the residential electrical system devices and the attached electrical appliances, and collected additional evidence. We developed our findings and employed an “Ignition Matrix” recently developed by Mr. Bilancia to consider and eliminate ignition sources and initial fuels. The following day we presented our findings to the general assembly and afterward the video tape of the fire was shown. Our team was the only team to accurately determine the origin and cause of the fire.**
- **During a subsequent CCAI conference March 2010 I also participated in a fire scene investigation demonstration/training module as a co-instructor with Mr. Vern Canon Fire Marshal Nevada County Consolidated Fire District. We were one of four teams developed to provide the teaching demonstrations. We investigated a vehicle fire scene involving a car which was previously burned (without our knowledge) and video-taped. The scene examination / investigation was conducted as a teaching demonstration with approximately 30+ students primarily investigators (CCAI attendees) observing and**





## Derrick Fire Investigations

questioning the evidence and our methods. We followed NFPA 921 guidelines and employed the systematic methodology suggested therein. We demonstrated in initial/preliminary scene assessment, examination of the fire patterns and evidence, witness interviewing, excavation of the interior of the vehicle, and the use of an accelerant detection canine. We examined the vehicle and additional evidence. We developed various fire origin and cause hypotheses and cognitively tested them. The following day we presented our findings to the general assembly and afterward the video tape of the fire was shown. Although members of our team were of different opinions as to the fire cause our team most accurately determined the most probable specific vehicle area in which the fire originated; in the engine compartment or immediately adjacent in the driver's side front wheel well. The following day we presented our findings to the general assembly and afterward the video tape of the fire was shown. The tape revealed that the fire was set under the driver's side wheel well with a wooden match and newspapers; wind had blown the newspapers away during and after the fire.

Following the training seminar I wrote (co-authored) the earlier listed article for the CCAI California Fire/Arson Investigator magazine documenting the training and examination of the vehicle fire.

- I continue to instruct and co-instruct periodically at CCAI round table meetings as Coordinator of Round Table #4.

### Continuing Fire/Arson/Bomb Investigation Related Training

(Training recorded to May, 2012)

2012, March	C.V.A.I.A. Fire/Arson Investigation	20 Hours
2011, December	I.A.A.I. Arc Mapping Basics	4 Hours
2011, September	C.V.A.I.A. Evidence Collection	4 Hours
2011, March	C.C.A.I. Fire/Arson Investigation – tested	20 Hours
2011, February	International Fire and Materials Conference in S.F. including: Principles of Electrical Fires & Explosions Vytenis Babrauskas, PhD	3 days
2010, November	C.C.A.I. Fire/Arson Investigation – tested	20 Hours
2010, September	International Association Of Arson Investigators, Inc CFITrainer – Understanding Fire Through the Candle Experiments – Tested	3 Hours
2010, September	International Association Of Arson Investigators, Inc	





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	<b>CFI Trainer – electrical safety – Tested</b>	<b>3 Hours</b>
<b>2010, July</b>	<b>IAAI Investigation of Electrical &amp; Appliance</b>	<b>20 Hours</b>
	<b>Related Fires A Technical/Scientific Approach - Tested</b>	
<b>2010, April</b>	<b>C.C.A.I. Fire/Arson Investigation – Tested</b>	<b>20 Hours</b>
<b>2009, November</b>	<b>C.C.A.I. Fire/Arson Investigation – Tested</b>	<b>20 Hours</b>
<b>2009, April</b>	<b>C.C.A.I. Fire/Arson Investigation – Tested</b>	<b>20 Hours</b>
<b>2009, January</b>	<b>Principles of Electrical Fires –</b>	
	<b>Vytenis Babrauskas, PhD</b>	<b>2 days</b>
<b>2008, November</b>	<b>C.C.A.I. Fire/Arson Investigation – Tested</b>	<b>20 Hours</b>
<b>2008, March</b>	<b>C.C.A.I. Fire/Arson Investigation – Tested</b>	<b>20 Hours</b>
	<b>Electrical Ignition Sources – Jim Allen/Joe Konefal</b>	
<b>2007, November</b>	<b>C.C.A.I. Fire/Arson Investigation – Tested</b>	<b>20 Hours</b>
	<b>(Courses Of Instruction: Ignition Sources – Instructors Dr. John DeHaan,</b>	
	<b>James Allen - Joe Konefal - Lon Bilancia)</b>	
<b>2007, August</b>	<b>Public Agency Training Council – Tested</b>	<b>22 Hours</b>
	<b>(Course Of Instruction: Fire Pattern Recognition/Certification:</b>	
	<b>Steve Chasteen)</b>	
<b>2007, March</b>	<b>C.C.A.I. Fire/Arson Investigation – Tested</b>	<b>20 Hours</b>
<b>2006, December</b>	<b>C.V.A.I. – Explosive Recognition</b>	<b>8 Hours</b>
<b>2006, July</b>	<b>C.C.A.I. Fire/Arson Investigation – Tested</b>	<b>20 Hours</b>
<b>2006, January</b>	<b>C.C.A.I. Fire/Arson Investigation – Tested</b>	<b>20 Hours</b>
	<b>Public Agency Training Council – National Criminal Justice</b>	
<b>2005, December</b>	<b>Fire/Arson Investigator Academy– Tested</b>	<b>40 Hours</b>
<b>2005, July</b>	<b>C.C.A.I. Fire/Arson Investigation – Tested</b>	<b>20 Hours</b>
<b>2005, January</b>	<b>C.C.A.I. Fire/Arson Investigation – Tested</b>	<b>20 Hours</b>
<b>2004, December</b>	<b>Electrical Fire/Arson Investigation – Tested</b>	<b>22 Hours</b>
<b>2004, December</b>	<b>Advanced Fire Origin &amp; Cause – Tested</b>	<b>24 Hours</b>
<b>2004, July</b>	<b>C.C.A.I. Fire / Arson Investigation – Tested</b>	<b>20 Hours</b>
<b>2004, May</b>	<b>C.V.A.I. – 921 Class</b>	<b>8 Hours</b>
<b>2004, March</b>	<b>Evidence Photography</b>	<b>14 Hours</b>
<b>2004, February</b>	<b>C.V.A.I. Interviewing Techniques</b>	<b>8 Hours</b>
<b>2004, January</b>	<b>C.C.A.I. Fire / Arson Investigation – Tested</b>	<b>20 Hours</b>
<b>2003, May</b>	<b>C.V.A.I. – Report Writing</b>	<b>5 Hours</b>
<b>2003, July</b>	<b>C.C.A.I. Fire / Arson Investigation</b>	<b>20 Hours</b>
<b>2003, January</b>	<b>C.C.A.I. Fire / Arson Investigation</b>	<b>20 Hours</b>
	<b>N.A.F.I - Public Agency Training Council – National Criminal Justice</b>	
<b>2002, December</b>	<b>Electrical Fire Investigation Riggs and Powell</b>	<b>20 Hours</b>
<b>2002, July</b>	<b>C.C.A.I. Fire / Arson Investigation</b>	<b>20 Hours</b>



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2002, April	C.V.A.I.A. – Report Writing	8 Hours
2002, February	Courtroom Fire Case Testimony	7 Hours
2002, January	C.C.A.I. Fire / Arson Investigation – Tested	20 Hours
2001, October	I.A.A.I. Nevada – NFPA 921/Bldg. Const. - Tested	20 Hours
2001, July	C.C.A.I. Fire / Arson Investigation	20 Hours
2001, January	C.C.A.I. Fire / Arson Investigation	22 Hours
2000, July	C.C.A.I. Fire / Arson Investigation	20 Hours
2000, Spring	Electrical Fire Investigation	
2000, Spring	Appliance Fire Investigation	
2000, January	C.C.A.I. Fire / Arson Investigation	18 Hours
1999, September	NOR/CAL T.O.’s Practical Fire Investigation	8 Hours
1999, March	C.V.A.I.A. Electrical Fire Investigation	8 Hours
1999, September	C.V.A.I.A. Fire/ Evidentiary Issues	8 Hours
1999, July	C.C.A.I. Fire / Arson Investigation	18 Hours
1999, February	C.A.L.I. Privacy and the P.I.	8 Hours
1999, January	C.C.A.I. Fire / Arson Investigation	18 Hours
1998, July	C.C.A.I. Fire / Arson Investigation	18 Hours
1998, January	C.C.A.I. Fire / Arson Investigation	18 Hours
1997, January	C.C.A.I. Fire / Arson Investigation	18 Hours
1996, January	C.C.A.I. Fire / Arson Investigation	18 Hours
1995, January	C.C.A.I. Fire / Arson Investigation	18 Hours
1994, June	Wildland Fire Investigation	8 Hours
1994, January	C.C.A.I. Fire / Arson Investigation	8 Hours
1993, July	C.C.A.I. Fire / Arson Investigation	18 Hours
1992, January	C.C.A.I. Fire / Arson Investigation	18 Hours
1991, July	C.C.A.I. Fire / Arson Investigation	18 Hours
1990, January	C.V.A.I. Structural Fire Investigation	18 Hours
	Search and Seizure – Hawthorne	2 Hours
	Structural Fire Investigation – Hawthorne	4 Hours
	Evidence Preservation – Hawthorne	2 Hours
1990, June	C.C.A.I. Fire and Arson Invest.	18 Hours
1990, January	C.C.A.I. Fire and Arson Invest.	18 Hours
1989, December	Fire Investigation 2A - Allen –Tested	36 Hours
1989, November	C.V.A.I. Structural Fire Investigation	8 Hours
1989, June	C.C.A.I. Fire and Arson Invest.	18 Hours
1989, February	State Fire Marshal – Fire Death Invest.	8 Hours
1989, January	C.C.A.I. Fire and Arson Invest.	18 Hours
1988, September	Advanced Peace Officer Training	12 Hours



## Derrick Fire Investigations

1988, May Calif.	State Fire Marshal-Fire Investigation – Instructor S. Baker	4 Hours
1988, June	C.C.A.I. Wildland Fire Invest.	18 Hours
1988, March	Kinetic Interview Techniques - Link/Foster	18 Hours
	C.C.A.I. Explosive Ordinance – Flannigan	6 Hours
	B.A.T.F. Blast Scene Investigation	8 Hours
	Crime Scene Evidence Stone	4 Hours
	Case Report Testimony –Goodnigh	t4 Hours
1988, May	Calif. State Fire Marshal - Fire Investigation Instructor - S. Bake	4 Hours
1988, January	B.A.T.F. Explosives Invest. - Flannigan	8 Hours
1987, June	C.C.A.I. Fire and Arson Invest.	20 Hours
	Structure Fire Origins	4 Hours
	Estimating Fire Damage	4 Hours
	Fire Death Investigation	2 Hours
	Fire Death Pathology/ Juvenile Law	4 Hours
1987, January	C.C.A.I. Insurance Investigations	2 Hours
1987, October	Fire Investigation 2b - Jones –Tested	36 Hours
1986, May	State Fire Marshal – Fire/Police Fire/Bomb Scene	3 Hours
1985, February	Fire Prevention 1B -	Tested
1984, July	Central Valley Arson Investigators Association (C.V.A.I.A. <sup>1</sup> ) Structural Fire Investigation	8 Hours
1984, February	Fire Investigator 1 -	Tested
1983, January	Fire Investigation 1B - McGill/Nav/DeHaan-Tested	36 Hours
1982, December	Fire Investigation 1A - Navarette – Tested	36 Hours
1982, November	Fire Investigation 1 -	Tested
1981, August	CHP & State Fire Marshall “Hazardous Materials” Fire & Explosion Chemistry - Behavior & Investigation	
1979, January	State Fire Marshal – Fire Investigation	8 Hours

<sup>1</sup> (C.V.A.I.A.) Central Valley Arson Investigators Association