

CURRICULUM VITAE MICHAEL A. GINN, CFI

EMPLOYMENT EXPERIENCE:

Fire Investigator – Fire Cause Analysis 2009 to Present
Fire Marshal – Petaluma Fire Department, 1994 to 2008 (Retired)
Fire Captain – Santa Rosa Fire Department, 1992-1994
Fire Inspector – Santa Rosa Fire Department, 1986-1992
Firefighter – Santa Rosa Fire Dept., 1982-1986

Santa Rosa Junior College, Adjunct Faculty, 1986 to 2015

- Teach semester length fire prevention and investigation courses (2300+/- hours).
- Certified by the State Fire Marshal to teach State Certified Courses in Fire Investigation 1A, 1B, 2A and 2B. Fire Prevention 1A, 1B and 1C.
- I have been primary/lead instructor for many short course wildland fire investigation classes (total combined course work – 100hrs. +/-). I was also a co-coordinator for a 40-hour NWCG FI-210 (Wildland Fire Origin and Cause Determination) course. In 2006 and 2009 I was the lead coordinator for the same course.

FIRE INVESTIGATION/PREVENTION EXPERIENCE:

- 5 years experience as a firefighter
- 2 years as a fire captain with practical experience in fire behavior, fire suppression and elementary recognition of fire cause and origin.
- 6 years as a member of the Fire Prevention Bureau with the Santa Rosa Fire Department as a fire inspector and fire investigator.
- 15 years as Fire Marshal with the Petaluma Fire Department with primary responsibility for cause and origin determination of fires and fire prevention/code enforcement. I supervise staff that conduct fire investigations and code enforcement, evaluate them on the same and review and approve all fire investigation or prevention reports they prepare.
- Fire Service Investigator:
 - Investigated 550 (+/-) fires ranging from structure type to grass and brush and from accidental to incendiary.
 - Investigator of record on over 450 fires, including 8 fires involving fire fatalities. In addition, I have served as assistant investigator on over 100 fires, including 7 fire fatalities.

- Private Investigator:
 - Over 1,200 fires as a private investigator for Fire Cause Analysis.
 - Conducted at least 21 fatality investigations and many large loss fires (\$1,000,000+).
 - Conducted fire prevention and code analysis for cases involving fire and/or life safety issues.
 - I have also secured successful outcomes for cases involving mediation and/or forensic analysis for both fire investigations and code issues.

EDUCATION:

- A.A. Degree – General Education, Santa Rosa Junior College, 1985
- B.S. Occupational Studies – Vocational Arts – California State University Long Beach, 2003

CERTIFICATION AND MEMBERSHIPS:

- Certified Fire Investigator #533 – California Conference of Arson Investigators (CCAI)
- Certified Fire and Explosion Investigator #8077-3889 – National Association of Fire Investigators (NAFI)
- Certified Fire Officer – State of California
- Certified Chief Officer – State of California
- Certified Fire Investigator Level I – State of California
- Certified Fire Investigator Level II – State of California
- Certified Fire Instructor I – State of California
- Member of the California Conference of Arson Investigators (CCAI)
- Member of the International Association of Arson Investigators (IAAI)
- Member of the National Association of Fire Investigators (NAFI)

Conferences Attended:

- California Conference of Arson Investigators (1989, 1992, 1996, 1998, 2002, 2008, 2011, 2012, 2013, 2019)
- International Conference of Arson Investigators (2004, 2011, 2014, 2017)

COURT EXPERIENCE

- 1988-2007 - public agency, fire investigator, secured convictions (plea bargain) on several incendiary fires I have investigated.
- I have been qualified as percipient and an expert witness in Sonoma County Superior Courts as a public agency investigator:
 - 1990 – public agency, fire investigator (arson case).
 - 1995 – public agency, fire investigator (multiple fatality fire involving a natural gas explosion).
- Depositions:
 - 2005 – public agency - as fire marshal/lead investigator (multi-million-dollar fire loss – buildings under construction).
 - Lloyds of London vs. CJS Plumbing
 - 1/14/2005 – San Francisco, CA.

- Case No. – 232594 (County of Sonoma)
 - Attorney: Mr. Douglas Shureen, 707-525-5420
 - 2010 – FCA - 10-12761F (forensic analysis of origin and cause, code research)
 - Rakesh & Rashmeke Patel vs. LeBlanc (D)
 - 4/28/2010 – San Francisco, CA.
 - Case No. - CGC-08-482231 (County of San Francisco)
 - Attorney: Ms. Jessica Pliner, 415-278-9400
 - 2014 – FCA – 14-18195 (Origin and Cause Analysis 5-story apt., \$20M loss)
 - Argon Vs. Ent (P)
 - 5/27/2014 – Oakland, CA.
 - Case No. – Oakland, CA. - RG 12633674 (County of Alameda)
 - Attorney: Craig Wallace, 415-394-6688
 - 2015 – FCA – 11-13146 (Origin and Cause Analysis – LPG gas explosion in large residence)
 - Bush & O’Brien vs. Pacific Propane and other related cross actions (D)
 - 3/2/2015 – San Jose, CA.
 - Case No. – Monterey County #M111747
 - Attorney: David Denton, Denton, Berg Tuffley, 213-356-4683
- Trials:
 - 1994 Sonoma County Superior Courts
 - Gallaread, et al vs. PG&E
 - Testified as the primary investigator (public agency – Santa Rosa FD) in a civil case involving a natural gas leak and explosion that severely damaged a multi-family apartment complex.
 - Two fatalities resulted from the event
 - Sonoma County Superior Court #SCV202527
 - 2014 – FCA – 14-18195 (qualified as expert – O&C Analysis)
 - Argon Vs. Ent (P)
 - 5/27/2014 – Superior Court, Oakland, CA.
 - Case No. – RG 12633674 (County of Alameda)
 - Attorney: Craig Wallace, 415-394-6688
 - 2015 – FCA – 11-13146 (Origin and Cause Analysis – LPG gas explosion in large residence)
 - Bush & O’Brien vs. Pacific Propane and other related cross actions (P)
 - 4/23/15 – Superior Court, Monterey, CA.
 - Case No. – Monterey County #111747
 - Attorney: Steve Defilipis, 408-292-0441

SPECIALIZED TRAINING

- Advanced Live Burns (2001) – 16 hours
Conducted burns of buildings before and after fire ignition. Witnessed many types of fire ignition scenarios and fire packages. Observed fire behavior and suppression activities.
- Arson Scene Search and Evidence Recovery (2006) – 16 hrs
Principles of scene searches involving arson. Methods of evidence collection and packaging of typical types of evidence found in fire scenes, including ignitable liquids. Photography of fire scenes and evidence. Fire scene sketches/diagrams.
- Candle Fire Causes (2004) - 2 hours (CCAI Conf.)
Overview of typical fire causes/ignitions and burn patterns associated with candle fires. Discussed how candles fail and what indicators to look for in fire debris involving candles.
- Courtroom Fire Case Testimony (2002) – 7 hours
The class focused on preparing for courtroom testimony. How to qualify as an expert. Case preparation and the elements required to secure an arson conviction.
- Electrical Fire Investigation (1999) – 24 hours
Specifically focused on electrical fire causes. Introduction into electrical distribution systems in buildings. Hands on fire testing of electrical devices.
- Explosive Recognition Training (2003) – 7 hours
- Explosion (gas) Training (2018 ITC Dallas) – 2hrs
- Fire Investigation 1A (1985) – 40 hours – Fire Cause and Origin Determination
Basic elements of fire investigation, cause and origin, motives, identification of accidental and incendiary fire indicators, structure fire investigation, report writing, legal aspects of investigation, explosives and incendiary devices

Lead instructor for 2004 through 2016 (2 courses in 2009, 2 courses in 2011, 2012, 2013, 2015, 2016) certification courses for Fire Investigation 1A.
- Fire Investigation 1B (1994) – 40 Hours – Techniques of Fire Investigation
In depth study of fire indicators, fire behavior, study of burn and char patterns, overview of all aspects of interpretation of fire scene for determining the cause and origin of a fire.

Lead instructor for 2006, 2009, 2011, 2012, 2013, 2015, 2016, certification courses for Fire Investigation 1B.
- Fire Investigation 2A (1990) – 36 hours – Criminal and Legal Procedures
Field burn exercise, surveillance, elements of search and seizure, preparation of search warrants, trial preparation, court testimony

- Fire Investigation 2B (1998) – 40 hours – Field Case Studies
Field case studies, study of advanced fire indicators, hands on training in all aspects of fire investigation, set various types of fires, examine fire behavior (field exercises), collect and package evidence, prepare search warrants, task force concept
- Fire Death Investigation (1985 & 1999) – 36 hours each – (2003 – 16 hours) Elements of Fire Death Investigation, 2017 (ITC-LV, 2 hrs)
Advanced fire indicators, elements of criminal motive in fire death causes, autopsy proceedings, case studies in fire death investigation, examine accidental and incendiary causes relative to fire death, processing and examination of remains, scene security, evidence collection.
- Fire Investigation - Advanced (2000) – 36 hours
Fire dynamics, fire science indicators, individual burn investigation and courtroom presentation.
- Fire Investigation (1994) – 8 hours, (2003), ITC-LV (2017 6hrs) - 4 hours – Cause and Origin Seminar
Review of specific techniques of fire cause and origin determination, field case studies, interpretation of fire indicators and fire behavior
- Fire Command 1A & 1B (1985, 1990) – 80 hours – Fire Tactics and Strategy
- Fire Command 2A & 2B (1996) – 80 hours – Managing Large Scale Fire Incidents
Basic and advanced elements of fire behavior, fire suppression tactics, incident command system
- Fireworks Enforcement Training – (1989, 1994, 2002, 2005) – 1 or 2 hours each
The class focused on recognition of legal and illegal fireworks type. Recognition of explosive and detonation materials. Regulations and laws relating to the same.
- Fire Dynamics/Behavior Courses (1988, 1994, 2002, 2005, 2012, 2013, 2014, 2017 (ITC-LV)), 2018 (ITC Dallas)
Effects of fire growth and fire dynamics on rooms/spaces/buildings. Practical experience participating in setting fires in controlled environments to evaluate the effects of heat, flames and smoke on fuel packages within rooms. Training includes pre/post flashover fire scenarios, including ventilation affect on fire dynamics and fuel packages.
- Fire Pattern Analysis and Recognition (2002) – 24 hours, ITC-LV (2017, 4hrs), ITC Dallas (2018, 4hrs)
In depth review of 72 common and scientifically established fire patterns. Study of fire behavior and burn, smoke and fire indicators. Review of fire causation indicators. Review and discussion of the scientific method for fire origin and cause determination.

- Fire Scene Reconstruction – Principles of Reconstruction (2004) – 6 hours (CCAI Conf.)
Overview of latest principles practices of fire scene reconstruction. Course covered principles of reconstruction, basic fire dynamics/documentation, fire deaths and injuries, arson crime scene analysis.
- 832PC (1987) – 40 hours – Arrest and Firearms
Overview of criminal behavior, elements of arrest, search and seizure, firearms training
- Interview and Interrogation Techniques (1997) – 16 hours, (2005) – 8 hours, ITC-LV (2017, 4hrs)
Procedures on how to ask questions. Interview techniques which included observing body language, voice inflection and written communication.
- Juvenile Fire Setter Training (1989) – 24 hours – Juvenile Fire Behavior
Overview of juvenile fire setting behavior, elements of fire setting models, Interview techniques of children and teens, counseling techniques
- Recognizing Fire Causes and Insurance Fraud (2002) – 8 hours
The class focused on ignition sources, including arson and fire pattern recognition. Insurance fraud and recognizing signs of the same were also taught.
- Trail of an Arson Case – In Depth Overview – Expert Witness Requirements (2004) – 8 hours (CCAI Conf.)
In depth study of two arson cases involving insurance fraud. Also reviewed how to prepare a case for trail and techniques in witness presentation as an expert. Reviewed proper preparation for deposition hearing.
- Spontaneous Ignition (2006) – 3 hours
Overview of the factors/conditions associated with spontaneous ignition – presented by Dr. John DeHaan. Course included review of laboratory tests/graphs of heat release rates analysis, time temperature curves and video of various types of actual spontaneous ignition scenarios.
- UV Light Sources – as a measuring tool to determine the presence of ignitable liquids (2006)
Sponsored by the Petaluma FD and the Sonoma County Fire Investigation Task Force (FITF). Training included hands on training burns utilizing various types of ignitable liquids (gasoline, BBQ lighter fluid, fire starter gel, alcohol, other lighter/heavier hydrocarbons) both on carpet and on furniture. Utilized UV light sensors and combustible gas indicators to determine presence of ignitable liquids. Also, used control samples with no flammable liquids present to qualify effectiveness of equipment.
- Vehicle Fire Investigation (1992 & 1998 – 24 hrs) (2004 & 2008 – 16 hrs/ea) – Techniques of Vehicle Fire Investigation
Vehicle fire indicators, motives for vehicle fires, fire for fraud, field investigation of over 50 vehicles (accidental & incendiary), collection of evidence, interview techniques.

- Wildland Fire Investigation Certification (2004, 2006, 2009) – FI-210 Course 36 hours
National Wildland Coordinating Group (NWCG) certification for wildland fire investigation. Included live training burns, viewing of over 20 typical ignition sources in burn plots, case preparation and court presentation. Tested certification.

In 2006 & 2009 courses served as course coordinator and lead instructor for several classroom lectures. Also, coordinated live burns, test burn sites and ignition source burn recognition demonstrations.
- Wildfire Investigation (advanced indicators course) – 5 hours – 2013
- Wildland - Powerlines as an Ignition Source (4hrs, CCAI 2019)
Presented by Dr. Vito Babrauskas. Overview of powerlines and potential ignition source.
- Wildland Fire Investigation (1999-2003)
Program development and provided training in annual wildland investigation training courses. Acted as lead instructor on various course topics. Conducted live training burns with various areas of origins and ignition sources from accidental to incendiary. Fire pattern and fire indicators recognition.
- Wildland Fire Investigation (2003) – 24 hours, ITC-LV 2006 (4hrs), ITC-LV 2017 (4hrs), FCA (2015, 2hrs), ITC Dallas (2018, 8hrs), CCAI (2019, 24hrs)
Attended course at IAAI or CCAI seminars on all aspects of wildland fire investigation techniques.
- Wildland. An analysis of Powerline Causation Issues in Wildland Context (2018), ITC Dallas (2hrs)

Other Miscellaneous Courses:

- Technical Report Writing – 68 hours
- Miscellaneous training and field exercises conducted by S.R. Fire Department and Sonoma County Fire Investigation Task Force – totaling at least 85 hours.

Articles/Books Reviewed/Read

(only began documentation of these actions since 2014)

Books:

- Kirks Fire Investigation, 7th ed,
- Forensic Fire Scene Reconstruction
- NFPA 921 (2008, 2011,2014, 2017)
- NFPA 1033
- Ignition Source Handbook

Articles:

- Effects of Multiple Ventilation Openings in Post Flashover Fires, NFPA Journal, January 2014 (February 2014)
- COHb Levels in Fire Victims and Origin Analysis – An ATF Case Study, Fire and Arson Investigator, IAAI, (April 2016)
- Laws of Thermodynamics, overview of the 3 basic laws of thermodynamics (Thoughtco@ thoughtco.com, 4/2017)

Podcasts/Video/Webinar Training:

- Expert Challenges and the Revised NFPA 1033, Webinar Training, Cozen/O'Connor (December 2014)
- Attic Fan Fires, Webinar Training, Cozen/O'Connor (March 2017)