

THOMAS ZAREK, CFEI, CVFI

SUMMARY

Mr. Zarek is a well-established forensic investigator with over twenty years of appliance failures inspections and over thirty years' experience in construction and remodeling of homes and commercial businesses. Over the years Mr. Zarek's experience has encompassed repairs, including water supply and distribution issues, electrical and low voltage systems, sprinkler systems, electro-mechanical controls and pumping systems.

Thomas has been responsible for a variety of forensic engineering assignments, on average between 200 and 300 assignments per year. These have comprised not only heating system failures, but freeze loss examinations, piping and plumbing systems, water and wastewater distribution systems, fire investigation, and failures of commercial and residential systems.

Mr. Zarek has performed cause and origin analysis involving full building destruction due to fire, explosions due to gas leaks, and cause and origin determination of fires with major and minor appliances and vehicle fire investigation. In addition, Thomas has investigated failures of wet, dry and antifreeze based systems in both residential and commercial applications. Mr. Zarek has also provided expert witness services in the Massachusetts District.

MARINE EXPERIENCE SUMMARY

During Mr. Zarek time at Massachusetts Maritime Academy he was able to attain a USCG License as Third Mate Unlimited tonnage all oceans.

Thomas maritime experience thru the years covered a wide array of fields, including, but not limited to Marine Navigation Systems and Aids to Navigation - Shipboard propulsion systems, Damage control and shipboard repair including shipboard firefighting and fire suppression systems, USCG rules of the road (navigation) for both inland and international regulations – Ship Handling and Life boat procedures. Because of this experience and training Thomas as a USCG licensed 3rd mate and can sail merchant vessels throughout the world. As a cadet Thomas sailed on the USS Baltimore and the USS Tampa as well as the Training Ship Baystate and the Training Ship State of Maine.

Mr. Zarek was a LCDR USNR/MMR Retired and served in various positions under the Merchant Marine reserve program, primarily in Mine hunting and Mine warfare, side scan and towed sonar systems on small craft Mine Hunters COOP (Craft Of Opportunity Program) Mine Squadron 22 in Charleston, South Carolina.

Thomas was with the Program and Project Manager Defense Mapping Agency in Washington, DC. He served first as a Marine Information Specialist in the Mapping and Charting Department, then as a Program Manager for the Scientific Data Department in programs spearheading the Digital Nautical Chart Initiative. Served on multiple process improvement teams for quality control and process improvement in nautical charting.

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At L3 Communications SeaBeam Instruments, Thomas served as Contract Manager for the development and installation of Multi-beam Deep Water Sonar systems for commissioning on Indian Naval and Japanese Research Survey vessels as well as the USCG Healy WAGB -20 and the PGS explorer research vessel.

EDUCATION

Massachusetts Maritime Academy - Bachelor of Science Degree
US Naval War College, Master of Arts Degree with an emphasis in National Security and Strategic Studies
Harcourt Learning School - Appliance Repair Technician
Penn Foster/Harcourt Learning School - Refrigerator, and Air Conditioning Technician

REGISTRATIONS & CERTIFICATIONS

Massachusetts Licensed Oil Heating Technician (2001)
Certified Fire and Explosion Investigator (2002)
Certified Vehicle Fire Investigator (2007)
National Fireplace Institute Gas Hearth Specialist Certification (2009)

PROFESSIONAL ASSOCIATIONS

Member of National Association of Fire Investigators (NAFI), 2001 to Present
Member of Mass Chapter of the International Association of Arson Investigators (MAIAAI), 2002 to Present
Member of International Association of Arson Investigators (IAAI) 2017 to Present
Associate Member of the National Academy of Forensic Engineers (NAFE), 2009 to Present

CONTINUING EDUCATION AND TRAINING

Certifications and Courses completed in the following areas:

- IAAI Seminar June 5-7, 2019 - Complex Fire Investigation for the Insurance Industry.
- NAFE Seminar January 4-6, 2019 - Application of Engineering in the Jurisprudence System and Ethics, Forensic Analysis, and Professional Practice.
- IAAI Seminar November 18, 2018 - A Systematic Approach to the Investigation and Post-Flashover Compartment Fires.
- IAAI Seminar June 6-8, 2018 - Motor Vehicle Fire Investigations.
- IAAI Seminar November 17, 2017 - Analysis of Post Flashover Compartment Fires.
- IAAI Seminar June 7-9, 2017 - Clandestine Laboratory Investigations for the Fire Investigator.
- NAFE Seminar January 14-15, 2017 - Application of Engineering in the Jurisprudence System and Ethics, Forensic Analysis, and Professional Practice.
- IAAI Seminar November 17, 2016 - An Overview of the Fire Hazards Associated with Lithium Ion Batteries.
- NAFE Seminar January 23 -24 2016 - Application of Engineering in the Jurisprudence

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- System and a special Seminar on Ethics, Forensic Engineering, Analytical Techniques.
- IAAI Seminar January 3 -5 2015 - Marine Fire Investigation 20 Hour comprehensive Fire and arson Investigation Seminar.
- NAFE Seminar January 11, 2015 - Ethics, Rules and Laws, Daubert Proofing and Unreasonable Products 8 Continuing Education credits.
- NAFE Seminar January 10, 2015 - Application of Engineering in Jurisprudence system, 8 Continuing Education credits.
- IAAI Fire and Arson Investigation Seminar September 18, 2014 - National Grid Energy Distribution Overview.
- IAAI Fire and Arson Investigation Seminar, June 11-13, 2014 - Challenges for Today's Fire Investigators & Prosecutors.
- IAAI 3 Day Seminar on 21st Century Construction Fires, 2013.
- IAAI Solar Voltaic Systems Seminar, 2013.
- Fire Findings-Investigating Solid Fuel Burning Appliance Fires, 2011.
- IAAI Fire and Arson Investigation Seminar on Appliance Fires, 2011.
- IAAI Fire and Arson Investigation Seminar, 2009.
- Penn Foster HVAC Technician Training Module, 2009.
- Fire Findings – Investigating Residential Dryer Fires, 2008.
- NAFI Vehicle Fire, Arson & Explosion Seminar, 2007.
- IAAI Fire and Arson Investigation Seminar on Appliance Fires, 2007.
- NFPA Inspection, Testing and Maintenance of Water Based Sprinkler Systems, 2007.
- NFPA Seminar, April 19, 2007 - Fire Pumps.
- Mass Chapter IAAI Fire Investigation in Commercial Kitchen Systems Seminar, 2006.
- NFPA Seminar, March 22-23, 2004 - Automatic Sprinkler Systems.

CAREER HISTORY

FORCON INTERNATIONAL – Independent Forensic Consultant – Fire and Marine

ISE ENGINEERING, INC. – Fire Investigator