

Christopher C. Nail | Senior Forensic Engineer, PE, ACTAR, CXLT

1800 10th Street, Suite 300, Plano, TX 75074
Servicing Central Arkansas

501.858.9765
Email: Chris.nail@efiglobal.com

Professional Summary:

Mr. Nail has 11 years of experience in mechanical engineering with nine years in HVAC and Plumbing design, with an additional 20 years in construction experience. He specializes in mechanical failure. Mr. Nail has been a registered professional engineer since 2015.

Mr. Nail has experience in commercial and industrial HVAC systems including boilers, chillers, cooling towers, air separators, pumps, packaged and split systems, hydronic, geothermal, VAV, ERV, VRF, natural gas, fire sprinkler systems, domestic water, sewer, grease sewer, acid waste, compressed air, and propane systems. Mr. Nail also possesses experience in the field of accident reconstruction. Mr. Nail also has experience in installing, diagnosing, and repairing residential plumbing, HVAC, and associated electromechanical components.

Mr. Nail began performing forensic work in 2020 and has experience in investigations involving industrial explosions, industrial losses relating to hurricanes, residential fires, building flooding, HVAC fires, inspecting hail damage, gas system testing, domestic water losses, fire sprinkler losses, fuel gas-based explosions, vehicle fires, and accident reconstruction. Mr. Nail also evaluates repair invoices relating to HVAC claims.

Licenses and Certifications:

Professional Engineer, AL, #50579

Professional Engineer, AR, #16926

Professional Engineer, FL, #93220

Professional Engineer, TX, #137818

Professional Engineer, KS, #27633

Professional Engineer, OK, #31872

Professional Engineer, LA, #44831

Professional Engineer, MS, #31189

Professional Engineer, MO, #PE-2020027031

Professional Engineer, TN, #124228

Accreditation Commission for Traffic Accident Reconstruction (ACTAR) #3999

FAA Certified Small Unmanned Aircraft System (Drone) Airman, Certificate #4378003

Tribometer Certification by Excel Tribometers, LLC, Certificate #2202868

Project Experience:

Confidential Insurance Client, Texas

Industrial Plant Fire

Led investigation into fire at a food manufacturing plant. Determined cause of loss was in the industrial dryer. Reviewed plant repairs and determined that over \$1,000,000 in repair quotes were not related to the claim and were upgrades.

Confidential Insurance Client, Texas

Lightning strike investigation

Led investigation into multiple system failures at an assisted living facility. Determined cause of loss was lightning strike due to multiple low voltage failures in different systems, and concentration of damage on one side of the building was higher than the other. Determined repair scope of VRF HVAC system and determined which invoices were claim related.

Confidential Insurance Client, Arkansas

Water loss in commercial office building

Performed investigation in an office building that experienced a water loss. Determined that the cause of the failure was galvanic corrosion of the domestic water pipe due to using dissimilar metals (galvanized water pipe with brass couplings). Informed building owner that he had similar connections to replace since there were multiple connections of the same sort, and some were already leaking and close to failure.

Confidential Attorney Client, Oklahoma

HVAC System Failure

Led investigation of HVAC system failure. Determined cause of loss was disconnected hydronic coupling to water source heat pump. Client was able to successfully subrogate the loss.

Confidential Insurance Client, Texas

Water loss in commercial office building

Led investigation in an office that experienced a water loss. Determined that the cause of the failure was improper slope in a dry fire sprinkler system and improper installation of piping in the wet fire sprinkler system.

Professional Experience:

EFI Global Inc., Senior Forensic Engineer, 2022 – Present

EFI Global Inc., Forensic Mechanical Engineer, 2020 – 2022

HSA Engineering Consulting Services Inc., Mechanical Engineer 2011-2020

Central Arkansas Water, Engineering Intern, summer 2009 and 2010

East-Harding Construction Inc., General Labor, summer 2005, 2006, 2007, and 2008

Specialized Education:

Cooling Tower Water Treatment, Process Engineering Consultants, 2022

Walkway Auditor Qualified per ASTM F2948-13, University of North Texas, 2021

Principles of Hydraulic and Pneumatic Systems, Continuing Education and Development, 2021

Fundamental Techniques of Crash Investigation, University of North Florida, IPTM, 2020

Residential Electrical Systems, International Association of Arson Investigators, 2020

Education:

Bachelor of Science, Mechanical Engineering, Arkansas Tech University, Russellville, AR

Associate of Science, Nuclear Technology, Arkansas Tech University, Russellville, AR