

Professional Summary:

Mr. Delano has over 20 years of experience in the engineering industry with over ten years of experience as a forensic engineer. He has conducted loss investigations and provided engineering consulting services on topics including slip, trip and falls, vehicle accident reconstruction, mechanical and HVAC investigations, appliance failures, boiler and water heater failures and fires, plumbing system failures and water losses. He has evaluated fire sprinkler system water losses. He has experience in fire investigations including commercial and residential appliance examinations. He has investigated Li-ion battery fires. He has conducted and taken part in automotive investigations including fire inspections, mechanical failure investigations, accident investigations including unintended acceleration investigations. He has investigated furniture failures and related personal injury cases.

Mr. Delano has investigated a wide range of product failure and personal injury losses. Cases including consumer product failures, mechanical failure investigations, damage evaluations, medical device failures, product use evaluations, hot surface and hot liquid exposure, bicycle component failures and accidents, appliance failures as well as industrial machine accidents such as nail guns, overhead door accidents and food processing accidents. He is an ACTAR accredited accident reconstructionist and has experience conducting vehicle accident investigations including crash data retrieval. He is a CXL Certified Excel Tribometrist and has experience with slip resistance testing and walking surface evaluations.

He has also conducted subrogation investigations on workplace accidents and injuries. Cases included pressure vessel explosions, fork lift accidents, chemical and thermal exposure accidents and machine guarding issues. Mr. Delano written reports detailing safety and design standard compliance evaluations relevant to the accidents. As well as construction code and industry standard reviews for liability assessments on issues such as stair construction, ADA compliance, egress capacity, egress illumination, walking surface slip resistance, temporary structure requirements, and plumbing installations.

Mr. Delano has experience in design and structural analysis in the aerospace and medical device industry as well as mechanical design using Solidworks CAE simulation tools and Finite Element Analysis. Structural analysis including Low Cycle Fatigue life, Fracture Toughness, High Cycle Fatigue, Ultimate Strength

Licenses and Certifications:

Registered Professional Engineer, CT, #PEN.0022234

Registered Professional Engineer, NJ, #24GE04736200

Registered Professional Engineer, NY, #094267-1

Registered Professional Engineer, PA, #PE082920

Registered Professional Engineer, MA, #52208

Registered Professional Engineer, NH, #15350

OSHA 10-hour Construction Safety and Health 12-006171580

Certified Fire and Explosive Investigator, NAFI

Certified Vehicle Fire Investigation, NAFI

Accreditation Commission for Traffic Accident Reconstruction (ACTAR), #2597

Certified Excel Tribometrist CXLT Certification Number 1910794

Project Experience:

EFI Global Engineering of NY, P.C., Totowa, NJ

Slip and Fall

A pedestrian slipped and fell in a public hall. The pedestrian was seriously injured as a result of the fall. The pedestrian was wearing specialized footwear which was attributed to the fall. A video of the incident was reviewed. Facts of the case and an evaluation of the fall mechanics were provided to the client. The role the footwear had in the fall was evaluated with respect to the pedestrian's history with the footwear along with the pedestrian's mobility as seen in the videos and the mechanics of the fall.

Furnace Damage

Evaluation of damage to gas fired industrial furnace. A fire above an industrial furnace resulted in water and debris damage to electrical and mechanical components of furnace and the furnace itself. Each component was evaluated and categorized for service based on their operation and condition.

Fire Sprinkler Pipe Fracture

Investigated failed CPVC pipes for fire sprinkler system. Examined fracture patterns and indications of the plastic pipe. Inspected the installation of sprinkler system in attic of a building. Evaluated sprinkler code requirements for sprinkler pipe installations in unheated areas.

Camp Stove Explosion

A butane canister for a portable camp stove exploded. The explosion was determined to be a BLEVE (Boiling Liquid Expanding Vapor Explosion) based on evidence examination. The canister was deformed and breached as a result of excessive internal pressure. The canister had been heated due to the cooking process and choice of cookware.

Unintended Acceleration

The owner of a brand new vehicle experienced a crash and rollover. The driver alleged that the vehicle experienced an unintended acceleration. The vehicle was inspected along with the manufacturer's representative. The vehicles crash data was downloaded and evaluated. The data indicated that both the brake and accelerator pedals were depressed during the accident.

Hotel Ventilation System

Investigated microbial and Indoor Air Quality (IAQ) issues at a newly constructed high rise hotel in New York City. The investigation concluded the cause for the IAQ issues was an insufficient exhaust ventilation and circulation design not in accordance to NYC construction codes. Investigation scope included visual inspection, measurements, indoor air readings and review of as built building plans and air handling unit specifications. Recommendations were provided to improve capacity

Travelers Insurance, Morristown, NJ

Heat Pump

Investigation of large property damage loss associated with water leak from a heat pump. Cause of loss was determined as a faulty connection. Various technicians had failed to identify the cause of the malfunction. The technicians had bypassed the wiring for safety shutoffs which allowed the machine to freeze cracking the heat exchanger releasing water.

Dishwasher Fire

After a service call for a dishwasher a fire occurred in a home originating at the dishwasher. A joint inspection of the dishwasher was conducted. It was found that the repair technician had made wiring splices using wire nuts. The origin of the fire was determined to be at the area where the splices were made. The dishwasher was part of a recall campaign in which the wires should have been replaced with an entire new wiring harness.

Pratt and Whitney East Hartford CT

New Product Development

Integrated Product Development Team Leader for the Joint Strike Fighter Mid Bearing Compartment. Led team of engineers on the redesign effort for bearings, gears, seals and housings for F35 jet engine.

Becton Dickinson, Franklin Lakes, NJ

Research and Development

Product development for new product safety devices for syringes and needles. Conducted design development testing, structural analysis of for the long needle safety concept. Coordinated and wrote design verification protocols for product testing. Wrote and conducted Gauge R&R for methods

Court Qualifications/ Depositions:

Litigation CV available upon request.

Professional Experience:

EFI Global, Piscataway, NJ Principal Mechanical Engineer, 2014 to Present

Travelers Insurance, Morristown, NJ, Forensic Specialist, 2008 – 2014

Becton Dickinson, Franklin Lakes, NJ, Senior Engineer, 2005 - 2008

Pratt and Whitney, East Hartford, CT, Senior Engineer, 1997 - 2005

Specialized Education:

ACTAR Exam Preparation, NYSTARS, 2012

ACTAR Joint Conference, NJAAR, 2013

Vehicle Fire Investigation Training Seminar, NAFI, 2011

Mobile Crane and Rigging Inspector Certification, CICB, 2011

Education:

Master of Science, Management, Rensselaer at Hartford, 2000

Master of Science, Mechanical Engineering, Syracuse University, 1997

Bachelor of Science, Mechanical Engineering, Syracuse University, 1995

Affiliations:

NYSTARS- NY State Traffic Accident Reconstructionist Society

NJAAR - New Jersey Association of Accident Reconstructionists

NAFI – National Association of Fire Investigators

ACTAR- Accreditation Commission for Traffic Accident Reconstruction