NAFE Sunday Schedule (January 17, 2027)

Rebecca A. Bowman, Esq., P.E., D.F.E. (NAFE #1153M)
Private Practice Attorney and Forensic Engineer
Self-Employed

Time: 8 to 9 AM

Title: When Alternative Dispute Resolution Happens to You

Abstract: Disputes happen. Sometimes we're a party, sometimes we're fact or expert witnesses in an arbitration, and sometimes we're at a mediation to provide analytical or evaluative support. This session will examine the processes of alternative dispute resolutions, as well as strategies and techniques that can improve the possibility of success in arbitration and mediation, no matter which we're role in. The session will also take a quick look at what it's like to BE a mediator.



Rebecca A. Bowman, Esq., P.E., D.F.E. (NAFE #1153) served four years as the Senior Director of Ethics and Professional Practice with the National Society of Professional Engineers. She is the principal of a woman-owned business in civil engineering, dispute resolution, and legal services. She is experienced in boundary law issues, engineering design and forensic analysis, and construction/ project management. She is a registered professional engineer, a certified arbitrator, mediator, and Christian conciliator, and a Diplomate of Forensic Engineering. Mrs. Bowman wrote a column for Pennsylvania's PE Reporter, "Risky Business," for more than 20 years. Her book, Residential Construction and Remodeling in Pennsylvania: Working with Homeowners and Small Contactors, is going into its second edition.

She is a frequent CPE lecturer (law and engineering) for a variety of providers. She received her B.S. degree in civil engineering from the University of North Dakota, her M.B.A. degree from Oklahoma University, her J.D. degree from Duquesne University, and she recently completed her certificate in Sustainability Policy from Penn State. Mrs. Bowman is involved with the National Society of Professional Engineers, American Society of Civil Engineers, the National Academy of Forensic Engineers, the American Arbitration Association, and the American Bar Association. She received the 2014 PSPE President's Distinguished Service Award.

Paul Tucker, SE, PE, DFE, FRSE, CXLT (NAFE #1129S)
Structural Engineer,
Áreté Forensics

Time: 9 to 10 AM

Title: Temporary Bracing of PEMBs During Erection

Abstract: Temporary bracing requirements for pre-engineered metal buildings. Full abstract coming soon!



Mr. Tucker's work experience includes civil and structural engineering positions in industry, academia, and consulting firms. In industry, he has been responsible for structural engineering design, project management, inspections, and code compliance. Mr. Tucker has personally designed thousands of buildings and structures, including but not limited to schools, churches, restaurants, gymnasiums, condominiums, industrial facilities, recreational facilities, retail stores, office buildings, and residential structures. In academia, he has incorporated his industrial and consulting experience into graduate and undergraduate classroom lectures on structural engineering and construction.

As a structural engineering consultant, Mr. Tucker applies the principles of design, analysis, testing, and safety to the forensic evaluation of damaged and deficient structures. Mr. Tucker is currently taking a hiatus from his Ph.D. studies at the University of Tennessee in the Biosystems Engineering Department. Mr. Tucker is a native speaker of English, is fluent in Modern Standard Arabic, and has a basic proficiency of Spanish.

Samuel G. Sudler, III, P.E., IntPE, DFE, CFEI, CVFI (NAFE#886F)
Forensic Lead, Battery & Energy Storage Principal Electrical Engineer
S-E-A

Time: 10:15 to 11:15 AM

Title: Board of Ethical Review Case Studies

Abstract: Coming Soon!



Mr. Sudler is a Board-Certified Diplomate in Forensic Engineering (DFE) by the National Academy of Forensic Engineers in accord with the guidelines of the Council of Engineering Specialty Boards (CESB). Mr. Sudler has conducted well over 2,000 investigations throughout his 18-year career, and is frequently retained nationally by product manufacturers, attorneys, and insurance companies. He has also been retained to conduct high profile investigations internationally in Canada, the Caribbean, the United Kingdom and South America. He is an International Registry Member of Professional Engineers in the disciplines of Electrical Engineering and the specialty practice areas of Forensic Engineering Studies of the United States Council of International Engineering Practice (USCIEP). Mr. Sudler is a member of the American National Standards Institute (ANSI)/Underwriters Laboratories (UL) Standards Technical Panel (STP) 1642, Lithium, Household and Commercial Batteries, that is responsible for maintaining several UL Safety Standards pertaining to batteries.

Mr. Sudler is Senior Vice President and a Member of the Board of Directors for the National Academy of Forensic Engineers (NAFE). Chairman of the Ethics Committee for the National Academy of Forensic Engineers (NAFE). He is a Senior Member of the Institute of Electrical and Electronics Engineers (IEEE) and the IEEE Consumer Electronics Society; Participating Member of the American Society for Testing and Materials (ASTM International) E58 Forensic Engineering Committee; Senior Member of the National Academy of Forensic Engineers (NAFE); Council Record Holder designated Model Law Engineer (MLE) of the National Council of Examiners for Engineers and Surveyors (NCEES); Former Chairman of the Board of Ethical Review for the National Society of Professional Engineers; Licensed Member of the National Society of Professional Engineers (NSPE); Former Vice President of the Illinois Society of Professional Engineers (ISPE); and a Senior Member of the Instrumentation, Systems and Automation Society (ISA). Mr. Sudler has provided expert testimony in municipal, state and federal courts of law, is licensed as a professional engineer (P.E.) in 47 states, and registered internationally as an International Professional Engineer (IntPE).

John Flynn, P.E.
Principal Forensic Engineer
LGI Forensic Engineering, P.C.

Time: 11:15 AM to 12:15 PM

Title: 9-11: The Construction and Deconstruction of the World Trade Center Towers

Abstract: This education session will explore the manner by which the World Trade Center towers were constructed and the implications of the construction characteristics with the evacuation and collapse of each tower on 9-11-01. The presentation will touch on forensic engineering-related, code-related and emergency-response related factors that played a role in the events of that historic day. Important lessons will be derived from a discussion of these important topics.



John Flynn, P.E. is a Principal Forensic Engineer at LGI Forensic Engineering, P.C., where he has worked as a structural forensic engineer for 28 years. Mr. Flynn also concurrently served as a Firefighter, Lieutenant and Captain with the New York City Fire Department (FDNY) spanning a career of 21 years and in this capacity was assigned as a Structural Specialist with NY-Task Force 1, a federally funded FEMA emergency response team that has responded to disasters including the World Trade Center attack, the Oklahoma City bombing, and several hurricanes around the world. Mr. Flynn has also served as a Master Instructor with the International Association of Firefighters (IAFF), a faculty member for Incident Response to Terrorist Bombings (IRTB) at the Energetic Materials Emergency Response Center (EMRTC) in Socorro, New Mexico and other locations around the country, and as a faculty member for the New York University (NYU) School of Continuing Education instructing “Small Building Inspection”.

Curt M. Freedman, PE, CEM, CEA, LEED AP, DFE (NAFE #912S)
Consulting Engineer at CMF Engineering, Inc.

Time: 1:15 to 2:15 PM

Title: The Development and Testing of a Transportable, Multi-Parameter, Solar Insolation Apparatus to Determine Improved ASHRAE Clear Sky Equations for Forensic Engineering, Scientific, and Building Energy Load Analysis Purposes

Abstract: This proposed educational presentation at the upcoming NAFE conference will include the technical and forensic engineering applications of the improved solar insolation model, as well as the logistical challenges of transporting equipment and completing FE scientific research in remote locations. Additionally, the importance of a "Responsible Charge" comprehensive engineering/ scientific opinion substantiated by conventional mathematics, science, and reliable certified instrumentation will be a key goal of this educational module.



Curt Freedman, PE, is President of CMF Engineering, Inc., established in 1985, specializing in forensic engineering, mechanical systems design, indoor air quality, and energy conservation. He also serves as an Adjunct Professor at Western New England University, teaching alternative energy, energy management, and HVAC design.

He holds a B.S. in Mechanical Engineering from Lehigh University and an M.S. in Engineering Management from Western New England University. He is a registered Professional Engineer in 23 states and holds certifications as a Certified Energy Manager (CEM), Certified Energy Auditor (CEA), and LEED Accredited Professional.

A Senior Member of NAFE, he is also affiliated with several engineering and professional organizations, including ASME, ASHRAE, ASCE, NFPA, and NSPE. He received NAFE's 2019 Best Technical Conference Presentation Award for his presentation on fires caused by concentrated reflected sunlight. His published research includes work on solar energy systems and the use of CO_2 tracer gas to evaluate air infiltration. He also holds three patents for HVAC products.

Stephen Batzer, PhD, PE (NAFE #677F)
President
Batzer Engineering

Time: 2:15 to 3:15 PM

Title: Exterior Ballistics – The Bullet in Flight

Abstract: Exterior ballistics is the science of the projectile's arc-like path after it leaves the launcher, typically the barrel muzzle. This lecture will describe the history and physics of this complex topic.



Steve Batzer, PhD, PE, is a mechanical forensic engineer who consults with clients regarding patent infringement, firearms, and the forensic analysis of accidents and product failures. He has taught at five universities, served as a commissioned officer of the U.S. Army, and has worked as a manufacturing engineer in the Michigan automotive industry. He has testified at more than 50 trials and published more than 70 peer-reviewed engineering papers. Dr. Batzer is also a member of the Society of Automotive Engineers, the American Society of Mechanical Engineers, and is a fellow of the National Academy of Forensic Engineers.

He is a Vice President of the Michigan Society of Professional Engineers and encourages all engineers to be licensed. He earned his BS in mechanical engineering from Michigan Tech, an MS degree in manufacturing systems engineering from the GMI Engineering and Management Institute in Flint, Michigan, and a PhD in Mechanical Engineering, again from Michigan Tech. Dr. Batzer lives with his wife in a log cabin in the Pere Marquette forest near Fife Lake, Michigan.

Samuel G. Sudler, III, P.E., IntPE, DFE, CFEI, CVFI (NAFE#886F)
Forensic Lead, Battery & Energy Storage
Principal Electrical Engineer
S-E-A

Rebecca A. Bowman, Esq., P.E., D.F.E. (NAFE #1153M)
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Time: 3:30 to 4:30 PM

Title: Panel Discussion – Overcoming Hurdles and Challenges in Forensic Engineering

Abstract: This panel discussion will utilize mix of pre-written questions and audience-fielded questions to address unique challenges faced by forensic engineers.

Some questions include:

• Does a forensic engineer have an affirmative duty to report hazardous conditions discovered during an inspection, even when the client has not requested that assessment?

• How should an engineer distinguish between a condition that warrants immediate notification to the authorities and one that should first be communicated to the property owner for corrective action?

• What responsibility does the engineer have when reporting a condition could result in condemnation, leaving the insured or homeowner without a place to live?

• How should engineers navigate conflicting obligations to public safety, professional ethics, client confidentiality, and the scope of their assignment?

• Tell us about a time that you showed up to an inspection feeling under prepared and how you handled that in the moment.

• What is one piece of advice that you would give to a PE who wants to transition from working for someone else to starting their own practice?

• For those on their own (or very small practice), who does the billing/Accounts Receivable for your practice?How did you decide on that?

• How do you overcome a Daubert challenge once it has been successfully used against you?

• How do you resolve correcting a previously issued opinion which is no longer valid based on addition research performed or information received?

• Have you ever been gate-kept by a judge or have otherwise been excluded from providing testimony?

Panelists/Moderators: *Rebecca Bowman* brings a unique perspective shaped by a career spanning engineering, law, and dispute resolution. She served four years as Senior Director of Ethics and Professional Practice with NSPE and wrote a professional practice column "Risky Business," for Pennsylvania's PE Reporter for more than 20 years.





Sam Sudler has conducted more than 2,000 forensic investigations over an 18-year career, including high-profile and international cases. He has provided expert testimony in municipal, state, and federal courts, currently chairs NAFE's Ethics Committee, and previously chaired NSPE's Board of Ethical Review.

Together, they bring extensive firsthand experience in ethical, legal, and practical challenges facing forensic engineers.