

**RESPONDING**

**DELIVERING**

**SATISFYING**



**Uncompromising Forensic Engineering**  
*Finding Solutions Since 1959*

# Trident – Your Trusted Resource for Forensic Engineering Solutions

**W**hen you need answers to what, why, when and how things went wrong, our team at Trident Engineering Associates, Inc., is ready to serve your individual needs. Our reliable, professional experts uncover the facts and secure the answers you require, delivering them accurately, rapidly, and in an easy-to-understand report. **You will benefit from our vast technical knowledge and strong commitment to objectivity and professional service.** We want you to achieve the highest level of comfort, security and success working with our team. Let us be your trusted resource.

## BUILDING FROM A STRONG FOUNDATION

Founded in 1959 by several senior U.S. Naval Academy scientific faculty members, our company is named Trident Engineering to reflect the sea, our naval roots, and our collective wisdom, strength, and leadership. We initially focused on product research and development for government agencies and private industry; however, as occupational safety, product liability, and consumer protection issues surfaced, our skills in technical liability investigations became increasingly in demand. Today we're a leading forensic engineering business serving law firms, insurance companies, and government agencies' technical investigation and litigation support needs. Although our work spans the eastern seaboard and across the country, most of our clients are in the Mid-Atlantic region. **Our team is dedicated to providing you with fast, unbiased analyses, opinions, and solutions.**



## FOCUSING OUR EXPERTISE WHERE YOU NEED IT

Our extensive array of professional engineering and investigative associates ensures that you receive accurate, objective and comprehensive information. **Our services focus on these areas:**

- ▲ Civil Engineering
- ▲ Electrical Engineering
- ▲ Mechanical Engineering
- ▲ Metallurgy and Materials Engineering
- ▲ Aviation Engineering
- ▲ Marine Engineering
- ▲ Accidents
- ▲ Fire – Origin and Cause
- ▲ Forensic Accounting
- ▲ Business Valuation

Our Trident Engineering experts work hard to conduct comprehensive and extremely detailed investigations.

### Our evaluations generally include these important steps:

- ▲ Site or item inspection
- ▲ Scene or product photography
- ▲ Measurements and/or collection of samples
- ▲ Laboratory testing and analysis
- ▲ Conducting interviews with all involved parties
- ▲ Review of vital documents
- ▲ Assessment of original design specifications
- ▲ Engineering evaluation for possible deficiencies in:
  - Construction
  - Materials
  - Workmanship
  - Maintenance

When needed, our experts will offer recommendations to solve the problem. In addition, we're highly experienced in providing accurate, authoritative legal testimony and will support you from beginning to end if long-term litigation is required.

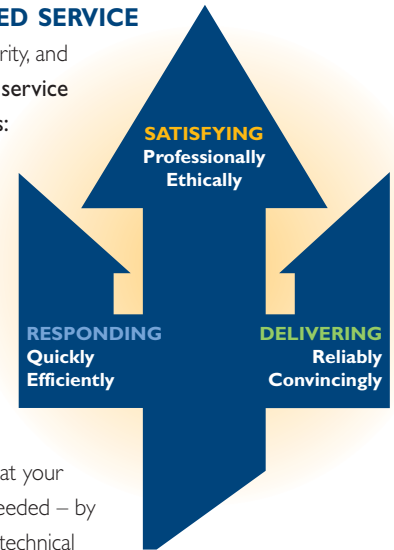
## PROVIDING UNEQUALLED SERVICE

Client needs are our highest priority, and we ensure you efficient, quality service through three guiding principles:

**RESPONDING** ▲ With one simple call or click, we match our top-caliber experts to your requirements. We respond quickly to our insurance, legal, and government client inquiries. And, we investigate your cases immediately and efficiently, **saving you time and money.**

**DELIVERING** ▲ We ensure that your individual needs are met and exceeded – by providing objective case analyses, technical issues resolution, forensic problem-solving techniques, expert witness testimony, and litigation support services. We deliver a “custom” product of uncompromising quality, enhanced by our ability to assemble multi-discipline expert teams and our unique **2-Pro Peer Review Process.**

**SATISFYING** ▲ We're highly competent, extremely thorough, always impartial, and unafraid of monumental tasks. With over 12,000 cases investigated and an exceptional level of personalized attention, **our results have been rock solid since 1959.**



## ENSURING ACCURATE ANSWERS – 2-PRO PEER REVIEW PROCESS

At Trident Engineering, we take great care in preparing our comprehensive **Signature Case Reports.** All are written in terms easily understood by non-technical individuals (such as juries) to conclusively identify and document failures and cause-effect relationships. We call them Signature Case Reports because they're examined and signed by two experts through our unique **2-Pro Peer Review Process.** After the lead investigator compiles your final Signature Case



Report, a second engineering professional, with similar or cross-discipline expertise, double-checks all calculations and theories and reviews the report for accuracy, completeness, and readability. This **2-Pro Peer Review Process** sets us apart, and ensures that you will receive an objective, concise, and correct Signature Case Report based solely upon the facts.



# FORENSIC ENGINEERING Investigations and Failure Analyses



## Civil Engineering

We're ready to assist you with any need – from structure, roof, and water pipe collapse evaluations to bridge, dam, and levy security assessments and/or mold investigations. We offer proficient forensic engineering services to review structural, construction, environmental, geotechnical, transportation, and water resource conditions and events. Additionally, we're skilled in examining code standards and compliance. **Our principal, Donald W. Vannoy, Ph.D., P.E., is recognized both nationally and internationally as an authority in Civil Engineering. He has over three decades of design and forensic experience.**



## Electrical Engineering

When lightning strikes, an appliance burns, or an electrical system fails, we determine the root cause for you promptly and efficiently. Our experts examine residential, commercial, and vehicular situations – at the scene and/or in the laboratory – to determine what, when, and why. We also have experience in assessing battery and charger flaws and malfunctions.



## Mechanical Engineering

We have the expertise to authoritatively evaluate all types and sizes of industrial and automotive mechanical equipment and component failures – from forklifts to gas heaters, and even aircraft carrier elevators. We offer detailed investigations of product defects to determine mode and cause of failure, with attention to original product design specs, component modifications, age/condition, usage methods, safety labeling, and safeguarding mechanisms.



## Metallurgy and Materials Engineering

Our technical knowledge and experience with ferrous and non-ferrous materials is extensive and includes metals, plastics, glass, paints, coatings, ceramics, fiberglass, and chemicals. We've investigated fracture/fatigue, corrosion, bending and loading stress, as well as manufacturing and assembly defect cases in virtually all areas of materials science. We apply our expertise to swiftly and reasonably discern the cause of the problem for you.



## Accidents

We do it all – vehicle, home, workplace and construction accidents – from slips and falls to capital equipment mishaps. In our investigations, we analyze scene evidence and damage data, including property damage, casualty losses, as well as police, fire, and/or workman's compensation reports. In addition, we research and assess compliance to standards or applicable laws. If required, we can conduct vehicle accident reconstructions to conclusively state the cause. Our multi-discipline investigative team approach provides complete mechanical, electrical, and civil engineering support when needed.



## Fire – Origin and Cause

You can be confident that our licensed Certified Fire Investigators and Certified Vehicle Fire Investigators are skilled at determining the cause of vehicle, home, commercial and industrial structure fire and explosion incidents. As with accident investigations, our team approach provides complete mechanical, electrical, and civil engineering support for you if needed.



## OTHER SERVICES



## Aviation and Marine Engineering



## Forensic Accounting and Business Valuation



# SUBROGATION & LITIGATION SUPPORT



## Proven Expert Witnesses

Subrogation and litigation are costly and complex. At Trident Engineering, we excel at supporting you through the entire process thanks to our long-term business experience. Many of our professionals are court-qualified experts in their respective fields and adept in conveying technical concepts in an easily understandable manner. With the help of visual resources such as charts, graphs, diagrams, digital presentation slides, models, photography, and video, our experts deliver convincing statements to help you win your case.

## MISSION STATEMENT

Trident Engineering's mission is to provide our clients with ethical, expert, independent engineering and financial analyses.



## SUCCESSING IN BUILDING STRONG RELATIONSHIPS

“...JOE'S WORK WAS INSTRUMENTAL IN THIS CASE. AND I WANT TO PERSONALLY THANK YOU, JOE, AND TRIDENT FOR BEING SO HOSPITABLE.”

*Attorney, Silver Spring, MD*

“JUST WANTED YOU TO KNOW THAT WE WERE VERY PLEASED WITH THE FINE JOB TRIDENT ENGINEERING DID FOR US IN THE SAFETY STUDY OF OUR...OPERATIONS. ...PLEASE CONVEY MY PERSONAL APPRECIATION AND THAT OF MY STAFF...FOR A JOB VERY WELL DONE.”

*Associate Director, U.S. Department of Commerce*

“...THANK YOU AGAIN FOR YOUR PROFESSIONAL AND PROMPT RESPONSE TO THE ANALYSIS OF THE WINDSHIELD CONDITION. I ALWAYS ENJOY WORKING WITH YOU AND TRIDENT ENGINEERING. UNTIL THE NEXT WINDSHIELD...”

*United States Aviation Underwriters, Inc.*

“NOW THAT WE HAVE REACHED AN END IN THIS CASE... WE ARE VERY GRATEFUL FOR YOUR TERRIFIC SERVICE. YOU WERE A JOY TO WORK WITH AND WE HOPE TO HAVE A CHANCE TO WORK ON ANOTHER CASE TOGETHER IN THE NEAR FUTURE.”

*Attorney, Washington, DC*



# Choosing Trident Engineering



**Let us become your resource for experienced, fast, unbiased analyses, opinions, and solutions.**

Our dedicated team of professionals will provide you with a level of unmatched forensic engineering services. We'll get you the answers you need. **Contact us today.**

**We have memberships in over 130 societies, institutes and associations including these leading organizations:**

- ▲ American Academy of Forensic Sciences
- ▲ American Institute of Chemical Engineers
- ▲ American Nuclear Society
- ▲ American Society of Civil Engineers
- ▲ Institute of Marine Engineers
- ▲ Institute of Transportation Engineers
- ▲ National Academy of Science Research Council
- ▲ National Association of Professional Accident Reconstruction Specialists
- ▲ National Institute of Building Sciences
- ▲ National Society of Professional Engineers
- ▲ National Society of Testing Materials
- ▲ Society of Automotive Engineers
- ▲ U.S. Naval Institute



**SIMPLY CALL OR CLICK**

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