# **CURRICULUM VITAE OF PAUL L. CARPER, P.E.**

# February 2022

# I. GENERAL INFORMATION

#### A. **POSITION**:

Senior Mechanical Engineer – Founding Partner Verité Forensic Engineering, LLC. 10070 Airport Road Conroe, TX 77303

Mechanical engineering consultant with experience in local, national, and international matters. Testimony provided in numerous state and federal courts.

### II. PROFESSIONAL SUMMARY

#### A. EDUCATION:

Bachelor of Science in Mechanical Engineering, May 1983 Texas A&M University, College Station, Texas

### B. PROFESSIONAL REGISTRATIONS AND CERTIFICATIONS:

Licensed Professional Engineer, State of Texas, Arkansas, Colorado, Oklahoma, Louisiana, Mississippi and New Mexico

Certification – National Council of Examiners for Engineering and Surveying (NCEES) – Certification No. 45639

CFEI - Certified Fire and Explosion Investigator – NAFI, active CFII – Certified Fire Investigator Instructor – NAFI, active

# C. **EXPERIENCE:**

Senior Mechanical Engineer – Founding Partner Verité Forensic Engineering, LLC. Conroe, Texas August 1998 to Present

Forensic engineering analysis of disaster related incidents/accidents, including mechanical aspects of fire investigation, fuel gas system and appliance analysis and testing, vehicle accident reconstruction and failure analysis of general mechanical systems.

Senior Mechanical Engineer SEA Limited Houston, Texas December 1993 to July 1998

Senior mechanical engineer responsible for forensic engineering projects including vehicular accident reconstruction and failure analysis of mechanical systems. Vehicular accident investigations involved automobiles, tractor-trailers, motorcycles, bicycles, and pedestrians.

Senior Engineer Lockheed Engineering and Sciences Company Houston, Texas June 1991 to October 1993

Project engineer responsible for design, manufacture, destructive/nondestructive material testing, and failure analysis of components at the NASA – Johnson Space Center Facility. Managed JSC Structures Laboratory Specialty Machine Shop and Radiography Laboratory.

Materials and Processes Engineer – Structure and Design Lockheed/Fort Worth (formerly General Dynamics/FW) Fort Worth, Texas November 1985 to January 1991

Responsible for developing and implementing hardware and procedures for the testing and production of advanced aerospace materials. Held secret security clearance.

Applications Engineer ITL/Veritas Technologies Houston, Texas 77084 March 1984 to June 1985

Operated test equipment in field assignments involving pipeline and vessel testing to applicable codes and QA requirements. Conducted laboratory tests of engineering materials.

#### D. TECHNICAL COMMITTEES - PROFESSIONAL SOCIETIES:

Member, Technical Committee for Excellence, Houston Fire Department January 2001

Member National Association of Fire Investigators

# E. TEACHING – INSTRUCTION:

Montgomery County Fire Marshal's Office, *Forensic Mechanical Failure Analysis*, Woodlands Training Center, Texas. March 3, 2021

U.S Department of Justice, ATF Recertification Class – Faculty Member Emmitsburg, MD – July 2014

State Bar of Texas, Professional Development Program. Advanced Expert witness Course 2001, Faculty Member on topic – *The Auto Accident Reconstruction Expert* 

U.S. Bureau of Alcohol, Tobacco & Firearms (ATF), Mechanical Aspects of Fire Investigation, November 2001

Texas State Fire Marshal's Training School, 2000. Instructor on natural gas and propane systems at advanced fire investigation class

Houston Community College and Tomball Community College. Instructor on gas systems and the investigation of gas appliance fires, 1999 and 2000

### F. TRAINING - SEMINARS:

Motor Vehicle Fire Investigation – 3-Day, Livingston, TX February 8-10, 2022, CFI Trainer, IAAI

Certified Fire Investigation Instructor – NAFI, Richmond, KY – March 17, 2017

National Fire Investigation Training Program – NAFI, Richmond, KY – March 13-16, 2017

Complex Arson Investigation Techniques – Brunswick, GA – September 29 to October 4, 2013

Applied Fire Dynamics for Fire Investigators – Killeen, Texas – December 2012

Fire and Explosion Investigators (NFPA 921) – NFPA Course – Houston, Texas February 2011

DRI Conference – Fire and Casualty Seminar – Chicago, Illinois, November 2010

2008 CDR User's Group Conference – addressed new developments in downloading and analyzing vehicle airbag computer data; Houston, Texas January 2008

"Feel the Heat" Fire Seminar, presented by Armstrong Forensic Laboratory, Arlington, Texas April 2006

ARC-CSI Crash Conference – addressed accident reconstruction technologies; participated in staged vehicle crash tests and data analysis, Las Vegas, Nevada June 2005

Crash data Retrieval System Training Course – Houston, Texas June 2004, 24 hours. Received CDR System Operator certification

Vehicle Fire Investigation – presented by I.A.A.I – Cody, Wyoming, September 2002, 20 hours

Driving Schools – Included high performance car motorcycle instruction on closed racecourses, with emphasis on vehicle control concepts. August 1997 and June 1998

Commercial Vehicle Inspection and Accident Investigation – Texas Engineering Extension Service, March 1997, 40 hours

Motorcycle Accident Investigation – Institute of Police Technology and Management, December 1996, 40 hours

Advanced Accident Reconstruction – Texas Engineering Extension service, April 1995, 40 hours

Nondestructive Testing:

American Society of Nondestructive Testing – Level III Certification in Basic, Ultrasonic, Radiography test methods 1992-2002

Ultrasonic Testing – Level I and II, Westinghouse Technical Institute, Pittsburgh, Pennsylvania, 1984, 80 hours. Level II Certification in UT and PT methods

Radiography/radiation safety – General Dynamics, Fort Worth, Texas, 1988, 40 hours

# G. PUBLICATIONS:

Tractor – Trailer Accidents – Eugene Beckham and Paul L. Carper, For the Defense (periodical), Defense Research Institute, Inc., March 2001

Development of Fracture Control Methodology for Threaded Fasteners in the Space Program – presented at NASA JSC, Julie A. Henkener, Attibele R. Shamala, Paul L. Carper, Royce G. Forman, Charles L. Salkowski, ASTM Publication 1236/Structural Integrity of Fasteners

# H. MISCELLANEOUS:

Instrument and Multi Engine Rated Private Pilot, FAA

Remote Pilot - Small Unmanned Aircraft Systems (Commercial Drone), FAA