

ENGINEER: MECHANICAL

PERRY V. YOUNG, P.E., C.F.E.I.
Engineering Design & Testing Corp.
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EDUCATION:

1979 **Bachelor of Science in Mechanical Engineering**
University of Missouri, Columbia, Missouri

EXPERIENCE:

February 2004 **Consulting Engineer / Engineering District Manager with**
to Present **Engineering Design & Testing Corp.**
Orlando, Florida

Specialized consulting in the reconstruction of vehicle accidents involving light and heavy vehicles, investigations of walkway accidents, failure analysis of equipment and components, analysis of mechanical equipment; origin and cause of fires, and assessment of scope of damage and cost of repairs of mechanical equipment. Provide engineering and business management support to engineering and administrative staff in Orlando District Office.

December 2009 **Race Track Safety Reviewer with Sports Club of America (SCCA)**
to Present **Topeka, Kansas**

Review race tracks for amateur sports car/ road racing activities. Examine safety and operational features. Identify areas of concern for improvements. Approve or disapprove race tracks for SCCA competitions.

April 2003 **Mechanical Engineer with Hitachi Electronic Devices (USA)**
to December 2003 **Greenville, South Carolina**

Experience in layout of production lines and placement of machines for a new production line. Designed specialized inspection and measurement mechanisms. Provided failure analysis support for these projects. Rendered technical drawings in support of these projects. Provided engineering support for installation of new production line and for marketing.

December 1999
to February 2003

**Lead Design Engineer with General Electric Power Systems
Greenville, South Carolina**

Experience in the design, analysis and development of gas turbine engines. Performed finite element analyses to determine stresses due to thermal and mechanical loads. Provided engineering support for drafters and manufacturing personnel. Led team of engineers in complicated stress analysis project. Provided project management leadership for the stress analysis team.

June 1979
to December 1999

**Senior Support Equipment Design Engineer
Senior Support Equipment Logistics Engineer
Materials Engineer/Senior Materials Engineer with United
Technologies Corporation, Pratt & Whitney Aircraft Engines,
West Palm Beach Florida**

Senior Support Equipment Design Engineer. Experience in design, analysis and development of support equipment for gas turbine engines and rocket engine turbopumps. Provided failure analysis support for these projects. Led multifunctional team in difficult support equipment design, analysis, manufacture and development project. Provided engineering support for drafters and manufacturing personnel. Rendered technical drawings.

Senior Support Equipment Logistics Engineer. Experience in preparation of logistics documents for maintenance support equipment. Supervised group of engineers preparing logistics documents. Prepared cost/benefit analyses.

Materials Engineer/Senior Materials Engineer. Experience in design and development of specialized testing machines and performing materials testing programs. Testing machines were developed for materials characteristic testing in high-pressure hydrogen atmosphere at elevated temperatures; for wear and friction resistance testing of components, assemblies and materials; and for developing new nondestructive testing methodologies. Provided failure analysis support for these projects. Provided engineering support for technicians. Rendered technical drawings.

September 1978 to June 1979 **Undergraduate Research Assistant with College of Engineering,
University of Missouri, Columbia, Missouri**

Experience in monitoring and measurement of materials characterization tests. Performed metallurgical sample preparation. Graded homework for undergraduate courses.

SELECTED CONTINUING EDUCATION:

- 2000 Introduction to ANSYS Part I, General Electric Gas Turbines, Greenville, South Carolina
- 2000 Introduction to ANSYS Part II, General Electric Gas Turbines, Greenville, South Carolina
- 2001 Advanced ANSYS for General Electric Gas Turbines, General Electric Gas Turbines, Greenville, South Carolina
- 2004 Traffic Accident Reconstruction I, Northwestern University Traffic Institute, Evanston Illinois
- 2004 Investigation of Vehicle Fires, LSC & Associates, Inc., Wakefield, Rhode Island
- 2004 Bendix Air Brake Training Program, Bendix Commercial Vehicle Systems LLC, Chicago, Illinois
- 2005 Event Data Recorder Update, Engineering Design & Testing Corp., Asheville, North Carolina
- 2005 An Introduction to Infrared Thermography, Engineering Design & Testing Corp., Asheville, North Carolina
- 2005 Round Table Discussion for Vehicle Engineers, Engineering Design & Testing Corp., Asheville, North Carolina
- 2006 Warnings versus Instructions, Engineering Design & Testing Corp., Kansas City, Missouri
- 2006 Nighttime Visibility Studies, Engineering Design & Testing Corp., Kansas City, Missouri

- 2006 Principles of Failure Analysis, ASM International, Metals Park, Ohio
- 2007 Crash Data Retrieval System Operator Training Series, Collision Safety Institute, Largo, Florida
- 2007 Heating, Ventilating & Air-Conditioning Systems: Sizing and Design, American Society of Mechanical Engineers, Orlando, Florida
- 2007 Understanding Chiller Performance, Operation and Economics, American Society of Mechanical Engineers, Orlando, Florida
- 2008 Lights Out: Power Generation Mechanical Equipment Failures, Engineering Design & Testing Corp., Memphis, Tennessee
- 2008 Damage Assessment: Electronic Theodolite Applications, Engineering Design & Testing Corp., Memphis, Tennessee
- 2009 Fire Suppression Systems – Save the Day or Rain on Your Parade, Engineering Design & Testing Corp., Birmingham, Alabama
- 2009 Use of Metallurgical Analysis to Pinpoint a Brake Problem and the Cause of a Bus Fire, Engineering Design & Testing Corp., Birmingham, Alabama
- 2009 Track Review Training, Sports Car Club of America, Sparta Kentucky, South Beloit, Illinois, and Starke, Florida
- 2010 Human Factors and Driver Response – An Overview of the State of the Art, Engineering Design & Testing Corp., Columbia, South Carolina
- 2010 Product Liability – Terms and techniques, Engineering Design & Testing Corp., Columbia, South Carolina
- 2010 The Engineer’s Role in Loss Valuation, Engineering Design & Testing Corp., Columbia, South Carolina
- 2010 Fire Safety Design: Egress & Extinguishing Systems, RedVector.com
- 2010 Hot-Dip Galvanizing: Corrosion Protection, RedVector.com
- 2011 Vehicle Dynamics of Passenger Vehicles, Engineering Design & Testing Corp., San Antonio, Texas

2011 2011 Advanced National Fire, Arson & Explosion Investigation Training Program, National Association of Fire Investigators, Sarasota, Florida

PUBLICATIONS:

“Analysis of Transport Trailer Front End Structures”, Proceedings of 2007 Materials Science & Technology Conference and Exhibition, Detroit, Michigan (co-authored with R.D. Harris)

PRESENTATIONS:

“ASI: Accident Scene Investigations”, York Claims Service, Longwood, FL, October 2007

“Pedestrian Falls”, technical presentation, Engineering Design & Testing Corp., Memphis, Tennessee, February 2008

“Pedestrian Falls, A Technical Perspective”, Allstate Insurance Company, Maitland, Florida, August 2008

“Pedestrian Falls, A Technical Perspective”, Zurich Direct, Orlando, Florida, December 2008

“Pedestrian Falls, A Technical Perspective”, Auto Owners Insurance, Tallahassee, Florida, February 2009

PROFESSIONAL ORGANIZATIONS:

American Society of Mechanical Engineers (ASME)

Society of Automotive Engineers (SAE)

American Society for Metals (ASM)

American Society for Testing and Materials (ASTM)

Member of Committee F13 - Pedestrian/Walkway Safety and Footwear

National Fire Prevention Association (NFPA)

National Association of Professional Accident Reconstruction Specialists (NAPARS)

National Association of Fire Investigators (NAFI)

Florida Advisory Committee on Arson Prevention (FACAP)

REGISTRATIONS:

Registered Professional Engineer in Florida (#44205)

Registered Professional Engineer in Georgia (#29944)

Registered Professional Engineer in Alabama (#26620)

Registered Professional Engineer in Mississippi (#17537)

Registered Professional Engineer in Louisiana (#33558)

Registered Professional Engineer in Tennessee (#115039)

National Council of Examiners Engineering and Surveying (NCEES) (#25429)