



C.V.

J. NIGEL ELLIS, Ph.D., CSP, P.E., CPE

www.FallSafety.com/expert Fall Safety Litigation Support

www.FallSafe.com Fall Protection Engineering

DSC Companies:

**Ellis Fall Safety Solutions. LLC
Ellis Litigation Support (dba DSC)
Ellis Ladder Improvements, Inc.**

**efss@FallSafety.com
dsc@FallSafety.com
eli@FallSafety.com**

**306 Country Club Drive
Wilmington, DE 19803
302-571-8470 ext 121**

Dr. J. Nigel Ellis, CSP, P.E., CPE

Dr. J. Nigel Ellis is a leading authority in the field of industrial and construction fall protection. He is President of DYNAMIC SCIENTIFIC CONTROLS (DSC), Divisions of DSC include: Ellis Fall Safety Solutions, a consulting firm specializing in fall hazard control planning, engineering and training. Ellis Litigation Support and Ellis Ladder Improvements (ELI).

He is former Chief Executive Officer of RESEARCH & TRADING CORPORATION (RTC) of Wilmington, Delaware producers of an extensive line of industrial fall protection, controlled descent and confined entry rescue systems.

A Board Certified Safety Professional (CSP) by examination 1984, Dr. Ellis is the 109th Fellow and Professional Member of the American Society of Safety Engineers (ASSE) with memberships in the Construction and Consultant Divisions. In 2011 he has been awarded the ASSE Thomas F. Bresnahan Standards Medal for voluntary standards Excellence participation. He is also a Distinguished Service to Safety Award winner in 2007 and member of the National Safety Council (NSC) and is Past Chairman of the NSC Construction Division. In addition, a member of the Human Factors & Ergonomics Society and Past President of the Veterans of Safety (VOS), Past Dean of Ambassadors (VOS), www.vetsofsafety.org

Dr. Ellis is a Registered Professional Safety Engineer in the States of California and Massachusetts. He is a Board Certified Professional Ergonomist (CPE) 1994,(human factors specialist) and he is also a National Academy of Forensic Engineers (NAFE), CESB Board Certified Fellow in Forensic Engineering. (Council of Engineering Specialty Boards).

Over three decades, Dr. Ellis has helped develop Occupational Safety & Health Administration (OSHA) standards on fall protection, emergency egress and confined space safety. He has testified at OSHA hearings on fall protection in the Oil and Gas Well Drilling and Servicing industry, Exterior Building Maintenance, Construction, General Industry and Confined Space Standards. He provides expert witness services to OSHA in fall protection cases and also testifies in negligence and product liability cases

Dr. Ellis has been a member of the following ANSI, ASME, ASTM, SAE, and ISO committees and groups for many years:

- Z359.1 Personal Fall Protection (General Industry) and several sub-committees including the following:
- Z359.2 Minimum Requirements for a Comprehensive Managed Fall Protection Program
- Z359.3 Safety Requirements for Positioning and Travel Restraint Systems (Former Chairman)

Z359.6	Specifications and Design requirements for Active Fall Protection Systems
Z359.8	Requirements for Rope Access
Z359.9	Personal Equipment for Protection Against Falls-Descending
Z359.12	Connecting Components for Personal Fall Arrest Systems
Z359.14	Safety Requirements for Self-Retracting Devices for Personal Fall Arrest and rescue Systems
Z359.15	Safety Requirements for Vertical Lifelines for Personal Fall Arrest Systems
Z359.16	Safety Requirements for Fall Arresters for Personal Fall Arrest Systems
Z359.17	Safety Requirements for Horizontal Lifelines for Personal Fall Arrest Systems
Z359.18	Safety Requirements for Anchorage Connectors for Personal Fall Arrest Systems
A10	Construction & Demolition Operations Committee and several sub-committees including:
A10.08	Scaffolding Safety Requirements
A10.18	Temporary Roof & Floor Holes, Wall Openings, Stairways Safety Requirements for, & Other Unprotected Edges in Construction & Demolition Operations
A10.22	Rope-Guided and Non-guided Worker's Hoists – Safety Requirements
A10.24	Roofing Safety Requirements for Low-Sloped Roofs
A10.28	Work Platforms Suspended from Cranes or Derricks – Safety Requirements
A10.32 (A10.14)	Fall Protection Systems for Construction & Demolition Operation
A10.43	Confined Spaces in Construction
A10.48	Communication Tower Construction
A14	American Ladder Institute - Committee Member
A14.3	Ladder – Fixed – Safety Requirements
A14.8	Ladder – Accessories – Safety Requirements
Z117.1	Confined Space Safety Requirements (Gen. Industry)
A120	Building Exterior Maintenance Safety Requirements
I-14.1	International Window Cleaning Association (IWCA) Window Cleaning Safety Standard
American Society of Testing Material (ASTM)	
E06.51.25	Skylight Human Impact Resistance Committee, Co-Chair
E06.77	High-Rise Building External Evacuation Devices
F08.16	Archery Products (Hunting Tree Stands)
E58	Forensic Engineering
F13	Pedestrian/ Walkway Safety and Footwear
The American Society of Mechanical Engineers	
	ASME Steel Stack Access

SAE International
SAE J185 Access Systems for Off-Road Machines
International Organization for Standardization
ISO TC94/SC4 International Fall Protection/ANSI TAG
National Safety Council (NSC) member since 1974
NSC Construction Division, chairman 2012-2014 (1200 Members)
Member of Broad of Delegates
OSHA Alliance Program Construction Roundtable NSC representative 2009-present

Nigel Ellis Expertise: 48 Years safety and human factors experience: Registered Safety Engineer CA/MA, Certified Safety Professional, Certified in Human Factors, scientist, author of textbooks and numerous articles on safety and hazard recognition; labels warnings and instructions expert; safety consulting business development, business agreements relating to safety requirements, safety assessments, developer of safety appliances including ladder improvements, patent holder: safety solutions, developer of safety procedures, eliminator and controller of workplace walking/working hazards,. He typically applies safety principles to potential incidents of sudden energy release that potentially cause injury and property damage. Dr. Ellis' extensive networking in the industry has brought him within reach of many leading experts in related specialties. Dr. Ellis is not only an expert in the performance of fall devices, he is also expert in the placement of these devices for optimal use. This includes scaffolds, towers, roofs, skylights etc. Which are an integral part of any fall protection system and their management including the hierarchy of fall hazard controls.

WORK EXPERIENCE

- 2005 – Present** **President, Ellis Litigation Support, Div. of DSC**
Consult with and assist counsel in personal injury litigation related to falls.
- 2005 – Present** **Management Member, Ellis Fall Safety Solutions, LLC, Div. of DSC**
Fall Protection assessment, engineering, installation and training in the workplace.
- 1985 – Present** **President, Dynamic Scientific Controls, Inc. (DSC)**
Safety Consulting Firm; corporate and OSHA consultation for elevated work safety policy, programs and training, planning of feasible work methods and safety engineering of the workplace. Site visit evaluation of work practice and fall hazard exposure. Fall protection engineering consultant on-site for turnaround, construction and process. Fall protection training classes conducted nationwide. DSC subsidiary Ellis Fall Safety Solutions LLC (EFSS) for Consulting, Engineering and Training and Ellis Ladder Improvements Inc. (ELI) is where Ellis patents are managed. DSC is the parent of Ellis Litigation Support Services (ELS) which provides the technical information on fall cases to clients.
- 1986 - 1996** **C.E.O., Research & Trading Corporation (RTC)**
Safety Equipment Manufacturer. Safety engineering and design of RTC manufactured fall arrest products into the workplace, including human factors, engineering of labels and warning information systems.
- 1970 - 1986** **President, Research & Trading Corporation (RTC)**
Safety Equipment Wholesaler and Manufacturer;
Systems for fall protection and emergency escape from elevated workstations to be engineered into the workplace or buildings.
- 1968 - 1970** **Sales Representative., Addressograph Multigraph**
Varityper Division; typesetting systems for safety newsletters, reports, engineering drawings, educational and training audio visual facilities.
- 1966 - 1968** **Research Chemist, DuPont Company**
The research and development of high temperature, high strength, fire-retardant thermoplastics additives for industrial engineering applications and safety.

EDUCATION

CERTIFICATION: **Board Certified Safety Professional**

Specialty: 1. Management Aspects 1984
2. Comprehensive Practice 1992
3. Construction Safety 1994

Certificate Number 7266

Board of Certified Safety Professionals, BCSP, Savoy IL

Vol. recertification phase approved 1990. Formally recertified 1992-2011 (NOTE: CSP curriculum including but not limited to mathematics, chemistry, physics, engineering, applied mechanics, structural design, ergonomics, industrial hygiene, fire prevention/protection, electrical hazards, job hazard analysis, facilities and equipment design, behavioral sciences, safety program planning, legal and regulatory requirements, disaster planning, epidemiology, environmental hazards - full curriculum and maintenance of certification submitted upon request).

Board Certified Professional Ergonomist (1994)(Human Factors)

Certificate Number 675

Board of Certification in Professional Ergonomics,
BCPE, Bellingham WA

Full curriculum and maintenance of certification 2010 available

OSHA Trainer: Fall Arrest Systems 6/91, 9/91, 5/92, 7/92, 4/94

NAFE Fellow, CESB Board Certified Diplomate in Forensic Engineering by NAFE, Certificate Number 485F

National Academy of Forensic Engineers 2/9/94

Alexandria, VA

CESB is the Council of Engineering Specialty Boards

LICENSING

Registered Professional Engineer

Safety Engineering, License #SF003342

Issue Date 1/29/93

Board of Registration for Professional Engineers and Land Surveyors, State of California

Registered Professional Engineer

Safety Engineering, License #37299

Issue Date 3/26/93

Board of Professional Engineers and Land Surveyors; State of Massachusetts

UNIVERSITY

Ph.D., Photochemical Processes

University of Manchester, England (1966)

The research of sunlight-induced reactions of common chemicals to produce complex industrial chemicals and pharmaceuticals by more economical engineering means.

M.Sc., Chemistry

University of Manchester, England (1964)

Curriculum included advanced mathematics, physics and physical chemistry.

B.Sc. Honours Chemistry

University of Manchester, England (1963)

Curriculum included advanced mathematics and organic, inorganic and physical chemistry and physics.

M.S. Industrial Engineering and Safety program partially complete (2007-)

Auburn University, Occupational Biomechanics,

Engineering Economics, Lean Production

Partial completion for requirements of M.S. degree

HIGH SCHOOL

Acklam Hall Grammar School

Middlesbrough, England (graduated 1960)

ADDITIONAL TRAINING

Aerial Lift Safety Presentation, Jeff Stachowiak, Z359 05/2017

Competent Person Scaffolds, Hands On, Design & Loading, and Suspended Scaffolds Four Day "Train-The-Trainer" certification 25119

Scaffold Training Institute. League City, TX 07/18-21/11

SEAK 18th Annual National Expert Witness Conference, Chicago, IL 06/2010

Standard First Aid, Certificate, American Red Cross of Alaska 2009

"Multimedia Standard First Aid Certificate", American Red Cross

1985, 2009

SEAK 15th Annual National Expert Witness Conference, Cape Cod, MA 06/2007

Daubert Challenges to Forensic Engineering and Scientific Methodologies NAFE

06/2007

Philo "21 hour course "Third Party case development 9/93, 9/94, 9/96, 9/97, 9/99, 9/01, 09/02, 09/15, 09/16

OSHA 10-Hour Construction Course (National Safety Council) 1/97

Full Radiation Worker trained and indexed (NRC Salem II Nuclear Power Station) 6/94

Human Factors Engineering Course, University of Michigan 8/94 (40 hours)

OSHA Fall Arrest Systems Course 6/91, 9/91, 5/92, 7/92, 4/94

Agency and Remedies Courses and Writing, Delaware Law School 6-7/93

Scaffold Erection and Safety 40 hours Course - Purdue University, Dept of Construction Technology, Calumet, IN 8/91

Architect-Engineer Liability, Cambridge Ins. 1/91

Engineer-in-Training Review Course, University of Delaware, Oct 1990 - April 1991

"Slip and Fall" Seminar, National Academy of Forensic Engineers, National Society of Professional Engineers conference Minneapolis, MN 1989

"Human Factors" ASSE Consultants Division course by Alphonse Chapanis, Ph.D. 1988 and also ASSE Construction Division Course (1988) San Francisco and New York City

"The Management Course" American Management Associations (four weeks) 1980

Other Experience:

ASSE Foundation Research Committee 2009- Present

ASSE Assistant Administrator Engineering Practice Specialty 2006-09

Jewish Community Center (Wilmington, DE) Safety Director 2006-2009

ASSE Engineering Practice Specialty Newsletter By-Design 2006-2008

ISFP Founding Member and Co-Chair of Program Committee for ISFP Symposium 2000, Orlando, FL

International Society for Fall Protection (ISFP) Board Member 1988-Present

Patents:

Dr Ellis holds numerous patents on fall-related devices and techniques obtained throughout his career.

8,316,611 B2	Portable Safety Skylight Replacement Assembly
8,122,673 B2	Portable Safety Skylight Replacement Assembly
7,992,681 B2	Portable ladder assembly
7,527,461	Safety rail assembly
6,619,428	Walk-through ladder
6,347,685 B1	Walk-through ladder
6,095,283	Walk-through ladder
4,538,703	Climbing aid and safety descent system
4,458,781	Climbing aid and safety descent device
4,392,555	Fall protection device
8,251,179 B2	Portable Safety Ladder Assembly
D760,9175	Ladder Safety Rail Set
9,540,875 B2	Safety Device for Ladders

PUBLICATIONS

- Nov 2012 Three-Point Control Analysis & Recommendations for Climbing
Ladders, Stairs & Step Bolts
Professional Safety Magazine
- Oct 2012 Walk On The Wild Side Fall Equipment selection for Nik
Wallenda's stroll across the Horseshoe Falls, Niagara Falls, NY
ISHN Magazine
- July 2012 Fall Protection for Nik Wallenda's crossing of the Horseshoe
Falls, Niagara Falls , NY
Modern Safety
- Aug 2011 Three Point Control: Analysis and Recommendations
American Society of Safety Engineers, ByDesign Newsletter
Engineering Practice Specialty
- Nov 2009 Skylight Safety in the U.S.
American Society of Safety Engineers, By-Design Newsletter
Engineering Practice Specialty
- Nov 2009 Status of Skylight Safety
American Society of Safety Engineers, The Compass Newsletter
Management Practice Specialty
- May 2008 Recognizing and Responding to Catastrophic Fall Exposures
During Truck and Trailer Tarping Operations
Professional Safety Magazine
- Feb 2008 Assessing Your Fall Protection
The Grey House, Safety & Security Directory
- Feb 2008 Supermarket Safety
The Grey House, Safety & Security Directory
- Nov 2007 Drivers Endangered When Covering Truck Loads
BNA, Inc. Reporter
- March 2006 Fall Protection Is All About Engineering
American Society of Safety Engineers, By-Design

Oct 2005	Previously Unknown Fall Hazard Kills Workers Compliance Magazine
Sept 2005	Design Objective: Think Safety Architecture Magazine
Aug 2005	Fall Protection Traps that Workers can't avoid ENR Magazine
Aug 2005	Forensic Engineering Analysis of Nail Extraction Force in Failed Barrier National Academy of Forensic Engineers Vol. XXXII No. 1
June 2005	Don't Cut Off Fall Protection Equipment When Stabilizing The Injuries of Fall Patients Fire Engineering magazine
Feb 2005	Fall Protection Program Guidelines The Grey House, Safety & Security Directory
Feb 2005	The Benefits of Engineered Fall Protection The Grey House, Safety & Security Directory
April 2004	Fall Protection Compliance and Solutions Construction Safety Management and Engineers American Society of Safety Engineers
Feb 2004	Assessing Your Fall Protection The Grey House, Safety & Security Directory
Feb 2004	Fall Protection Program Guidelines The Grey House, Safety & Security Directory
June 2003	Open and disguised holes lead to injury and death www.plantengineering.com
March 2003	Fall Protection and Anchorages Compliance Magazine
March 2003	Engineered Anchorages Trend Continues for Greater Safety Compliance Magazine
March 2003	Engineered Anchorages Trend Continues for Greater Safety Lifting & Transportation International

July 2002	Ask the Expert, Fall Protection Compliance Magazine
July 2002	Predicting Injurious Events Occupational Health & Safety Magazine
March 2002	Safe Anchorage Point Key to Effective Fall Harness BNA, Inc. Reporter
Feb 2002	Ask the Experts Fall Protection Compliance Magazine
Feb 2002	Fall Protection Standards Similar for OSHA, ANSI Questions & Answers Safety & Health
Dec 2001	Playing The Game Of Fall Protection Welding Means Fall Hazards The World Of Welding
Aug 1999	Steel Erection and Related Activities Occupational Health & Safety Magazine
July 1999	Take Control of Fall Hazards Safety & Health Magazine
July 1999	Update on Fall Protection Standards Professional Safety Magazine
June 1999	Using Safety Awards to Promote Fall Prevention Occupational Hazards
Sept 1998	Reviewing Fall Protection in General Industry Compliance Magazine
March 1998	Warning! Check Harness Designs for Proper Protection Compliance Magazine
Jan 1998	The Belt for Fall Protection is Prohibited! ISHN Magazine
July 1997	Fall Protection issue: Hazard Information Newsletter Sierra Vista AZ
April 1996	Summaries of significant recent federal regulations with common- sense commentary on their real-world ramifications. Compliance Magazine

March 1995	Comparison of OSHA Standards old and new, Compliance Magazine
Oct 1994	Evaluation of OSHA's new Construction Fall Protection Standard, Compliance Magazine
Fall 1994	10 Critical requirements for an anchorage point, Construction Division Newsletter, American Society of Safety Engineers
March 1994	Confined Spaces: Answers to 11 Critical Questions on Fall Protection Programming: Suspenseful Suspension Occupational Health & Safety Magazine
Spring 1994	10 Critical requirements for an anchorage point Consultants Division Newsletter, American Society of Safety Engineers
Feb 1992	Confined Space Fall Protection, Occupational Health & Safety Magazine
Sept 1991	Fall Protection Anchorages, Safety & Health Magazine, National Safety Council
Oct 1990	Changes in the new OSHA Fall Protection Rules Construction Section Newsletter, National Safety Council
April 1990	OSHA's New Fall Protection Rules - contribution and article review Occupational Safety and Health
Jan 1990	Stiffer rules for Fall Protection ahead - contribution and article review Engineering News Record
April 1989	Slips and Falls Occupational Hazards Magazine
March 1989	Maintenance of Fall Protection Systems - making the right connection Safety & Health Magazine
Jan 1988	Suspended Scaffolding: Proper Protection Reduces Injuries Occupational Safety & Health
May 1987	Safety Management, #290 - Fall Hazards are More Serious than You Think

Nov 1986	National Safety Council Constr'n Newsletter Use Fall Protection Devices Safely - Follow Instructions!
April 1985	Fall Protection: Meeting the New Standard Western Oil Reporter
Feb 1985	Protection Systems Curb Death from Falls National Safety News
Jan 1985	Purchasing World, PW Technical File Fall Protection
Dec 1984	Fall Protection - A Systems Approach Reviewing Types of Equipment Industrial Safety & Hygiene News
July 1984	Fall Protection: A Sound Investment pp. 14-16 Well Servicing Magazine
June 1984	Fall Safety Equipment Up to Standards pp. 18-20 The American Oil & Gas Reporter
April 1983	Accidental Falls Cause Consternation: Protection Programs are Needed Northeast Oil Reporter
July 1982	National Safety Council Construction Newsletter Retracting Lifeline can arrest falls comfortably
June 1976	Communication News, Vol. 13, No. 6, pp. 54 Fall Protection for Tower & Antenna Climbers

BOOKS/CHAPTERS AUTHORED

- 2014 Forensic Engineering Critique of Fall Equipment Selection for Nik Wallenda's walk across the Horseshoe Falls, Niagara Falls, New York. Journal of Nat'l Academy of Forensic Engineering Vol.XXXV111 No. 1
- 2012 Fourth Edition: "Introduction to Fall Protection" Textbook
Updates with latest data, standards, requirements and equipment for addressing falls in workplace. New illustrations and photos. New rope access methods 600 pages
- 2009 13th Edition; Accident Prevention Manual
- 2005-2008 Supermarket Safety
The Grey House, Safety & Security Directory
- 2005 The Benefits of Engineered Fall Protection
The Grey House, Safety & Security Directory
- 2004 Fall Protection Compliance and Solutions Chapter 15
Construction Safety Management and Engineering
American Society Of Safety Engineers
- 2003-2007 Checklists on Assessing Your Fall Protection Program
The Grey House, Safety & Security Directory
- 2003-2008 Fall Protection Program Guidelines
The Grey House, Safety & Security Directory
- 2002 Best's Safety Directory - Checklists on Assessing Your Fall Protection Program
- 2001 Third Edition: "Introduction to Fall Protection"
Reorganized chapters, fall protection engineering focus and standards update 509 pages
- 2001 12th Edition; Accident Prevention Manual
- 1997 - 1999 Best's Safety Directory 36-39th Edition - Checklists on Fall Protection Programs
- 1996 11th Edition; Accident Prevention Manual
Fall Protection Systems, and program development throughout the Manual

- 1975 -1995 Best's Safety Directory 15th to 34th Ed. (exc 33rd Ed.)
"Guidelines on Fall Protection"
- 1995 Bests' Safety Directory: 34th Ed. "Guidelines on Confined
Space Fall Protection and Retrieval"
- 1994 Second Edition "Introduction to Fall Protection"
Updates new OSHA, ANSI and other standards around the world 228
pages
- 1992 10th Edition; Accident Prevention Manual
Fall Protection Systems/Personal Protective Equipment Chapter -
review and rewrite
- 1988 "Introduction to Fall Protection" 1st Edition Textbook
Publisher: American Society of Safety Engineers, Des Plaines, Illinois
Text book 8 (1/2)" x 11" format 132 pages
Provides a methodology for safety planning to provide fall protection in
both general industry and construction trades applications. Provides
engineering guidelines for helping interact safety professionals with civil
engineers working together to plan fall protection for foreseeable fall
hazards. Calculations for horizontal lifelines dynamic performance are
presented with determination of maximum fall arrest distance and
clearances required for proper anchorage point planning.
- 1988 9th Edition; Accident Prevention Manual
- 1984, 1992 Fall Protection Tips (second edition 1992)
Publisher: Research & Trading Corporation, Wilmington Delaware
and Dynamic Scientific Controls, 1992
Provides tips for practical solutions to fall hazard problems in
construction and industry.
- 1973-74 Best's Safety Directory 14th Ed. "Guidelines on Fall Protection"

DSC FALL PROTECTION TRAINING CENTER
(3-4 day courses)
INDUSTRIAL AND CONSTRUCTION FALL PROTECTION

Fall Protection Training Center

1990-1999 Instructor for dozens of Courses for Competent & Qualified Persons.

1991 Dr. Ellis and John Newquist jointly developed and presented the first OSHA Training Institute Course for OSHA Fall Arrest Systems, Course#0311

1991-2002 Instructor for dozens of Custom tailored on-site courses for numerous private and government organizations

SEMINARS and TALKS

Since 1985 Dr. Ellis has presented over 100 times to audiences coast to coast

HONORS & AWARDS

- 2011 ASSE Thomas F. Bresnahan Medal for Standards Excellence
- 2010 ASSE 109th Fellow Honor Award
- 2007 NSC Distinguished Service to Safety Award (DSSA)
- 2007 ASSE Engineers Practice Specialty By-Design Editor "Most Improved Newsletter" Award by the ASSE Council of Practices and Standards
- 2006 ASSE Engineers Practice Specialty Newsletter Editor
- 2007 2005-06 ASSE Engr. Practice Specialty "Safety Professional of the Year"
- 1990 Listed in National Directory of Safety Consultants - ASSE
- 1988 NSC Medal - William H. Cameron Award for Safety
- 1988 Listed in "Who's Who in the East"
- 1986 American Society of Safety Engineers - elected Professional Member
- 1985 NSC Medal - William H. Cameron Award for Safety
- 1985 Listed "Who's Who in Finance and Industry"

MEMBERSHIPS

ASSE Engineering Practice Specialty Asst. Administrator 2007 – 2009
ASSE Engineering Practice Specialty Newsletter Editor 2005-2007

American Ladder Institute A14 Committee - 2016

American National Standards Z359 Committee 1987 -Present (co-founder)

American National Standard ASSE A10 Construction & Demolition Operations
Committee Member 2007 – Present

American Society of Safety Engineers, President, Lower Delaware Valley
Chapter 1994-1998

American Society of Safety Engineers, 1975; Professional Member, Present
#2183200

American Society for Testing and Materials, F-13 Committee 1999-Present

American Society for Testing and Materials, E06.51.25 Skylight Human Impact
2008-present co-chairman

American Society for Testing and Materials, E58 Forensic Engineering

Delaware Engineering Society, 1993 - Present

Human Factors and Ergonomics Society, Member, 1990 - Present

National Academy of Forensic Engineers #485, 1993- Present

National Association of Tower Erectors NATE 1996-1999

National Safety Council

Constr'n (Sect'n) Division Member, Nat'l Safety Council (1980-1993), 1993-
Present

Chairman Construction Division Nat'l Safety Council (2013-2014)

Vice Chairman Construction Division Nat'l Safety Council (2011-2013)

Secretary Construction Division, Nat'l Safety Council (2009-2011)

National Society of Professional Engineers #103414067, 1993-Present

Veterans of Safety, 1990 Member (Board of Directors 2009 - 2012)

Veterans of Safety President 2012-2013

Veterans of Safety Dean of Ambassadors 2013-2014

APPENDIX A

SEMINARS AND TALKS

- September 2017 Fall Protection: New OSHA Regulations and Update on ANSI
21 Hour Philo Seminar
Detroit, MI
- September 2017 Fall Protection: New OSHA Regulations and OSHA Update on
ANSI Standards
BLR Webinar
- July 2017 New "OSHA" Regulations on Fall Protection
NAFE
Atlanta, GA
- February 2017 Falling Down on the Job: Fall Protection on Stationary Tank
Cars/Trucks:
NORA
Las Vegas, NV
- July 2017 New "OSHA" Regulations on Fall Protection
NAFE
Atlanta, GA
- October 2016 Three Point Control Ladders
National Safety Council Congress & Expo
Anaheim, CA
- October 2016 Fall Protection for Cell Towers/Poles/Rooftops
Slips Trips Falls Conference
London, UK
- October 2016 Fragile Roofs: Skylights/Rooflights
Slips Trips Falls Conference
London, UK
- October 2016 Ladder Extension w/Three Point Control
Slips Trips Falls Conference
London, UK
- September 2016 Fall Protection for Cell Towers/Poles/Rooftops
21-Hour Philo Seminar
Detroit, MI

September 2016 Ladder Extension w/Three Point Control Climbing Principle
ASSE Delmarva Chapter
Salisbury, MD

September 2016 Fragile Roofs: Skylights/Rooflights
ASSE Delmarva Chapter
Salisbury, MD

June 2016 Fall Protection for Towers/Poles/Rooftops
WOSH
Newport Beach, CA

April 2016 Fall Protection: Tips for Complying with Tips for Complying with
OSHA Sub D and ANSI Z359 Standards
BLR Safety Summit Webinar

September 2015 Fall Protection and Safety for Attorneys
21 Hour Philo Seminar
Detroit, MI

July 2015 Fall Protection and Safety for Engineers
National Academy of Forensic Engineers (NAFE) Special Seminar
Seattle, WA

April 2015 Fall Protection for Engineers
Pennsylvania Society of Professional Engineers Boot Camp East
King of Prussia, PA

Nov 2014 Fall Protection for Engineers
U Of Michigan, Ann Arbor, MI

Sept 2014 A New Means To Improve Elimination and Fall Hazard Control
American Society of Safety Engineers Annual PDC, San Diego, CA

Sept 2014 Fall Protection for Engineers
Pennsylvania Society of Professional Engineers, Harrisburg, PA

June 2014 Forensic Engineering Critique of Fall Equipment Selection for Nik
Wallenda's walk across the Horseshoe Falls, Niagara Falls, NY
Journal of National Academy of Forensic Engineering
Vol. XXVIII No.1

May 2014 Why Holding Ladder Rungs at Heights may Save your Life
PacRim Conference Honolulu, HI

May 2014	Three Point Control, Research into Gripping Ladders and Grab Bars, Emerging Issues in Stairway Usability and Safety Toronto, Canada
April 2014	Emerging Issues in Fall Protection, BLR Safety Summit, Atlanta, GA
June 2013	Futuristic Fall Protection Now American Society of Safety Engineers Annual PDC, Las Vegas, NV
June 2013	Three Point Control – Analysis and Recommendations International Fall Protection Symposium Las Vegas, NV
Mar 2013	How To Protect your Organization from Fall Protection Litigation Indiana Safety & Health Conference Indianapolis. IN
May 2013	Human Factors Engineering for a Walk over the Falls, Fall Protection for Nik Wallenda Human Factors Engineering Society Southampton, PA
Feb 2013	Planning for a Walk over Niagara Falls: Fall protection for Nik Wallenda's National Safety Council Construction Division Washington DC
Jan 2013	Forensic Engineering for a Walk over the Falls: Fall protection for Nik Wallenda's Walk National Academy of Forensic Engineers (NAFE) Special Seminar Newport Beach, CA
June 2012	How to Protect your Organization against Fall Protection Litigation American Society of Safety Engineers Annual PDC, Denver, CO
Apr 2012	Three Point Control - Analysis and Recommendations PacRim Conference Honolulu, HI
Feb 2012	Fall Protection Criteria, Systems, Engineering Fall Protection Safety Workshop NE Region Construction., Worcester, MA
Oct 2011	Fall Protection: Fabricate your Own or Purchase National Safety Council Congress & Expo., Philadelphia, PA

June 2011	<p>“OSHA” Construction and Industry Working Ever Closer Together on Fall Protection American Society of Safety Engineers Annual PDC Chicago, IL</p>
May 2011	<p>Evolving Fall Protection Standards and Litigation and Presentation of the Society Fellow Award American Society of Safety Engineers, Philadelphia Chapter</p>
May 2011	<p>Hazard Analysis the Dave MacCollum Way Veterans of Safety</p>
Oct 2010	<p>Fall Protection Compliance Options National Safety Council Congress & Expo., San Diego, CA</p>
June 2010	<p>How to Apply the Latest Developments in Fall Protection to Your Site American Society of Safety Engineers Annual PDC, Baltimore, MD</p>
June 2010	<p>Update on a Dynamic Test Standard for Skylight Human Impact International Fall Protection Symposium. Baltimore, MD</p>
Apr 2010	<p>Roof Fall Hazard Experiences Roofers and Waterproofers Research & Education Joint Trust St. Louis, MO</p>
Mar 2010	<p>Roof Fall Hazard Experiences Roofers and Waterproofers Research & Education Joint Trust Minneapolis, MN</p>
Jan 2010	<p>Advances in Roof Fall Protection Planning Mid-America OSHA Education Ctr., ABC Dayton, OH</p>
Oct 2009	<p>Advances in Roof Fall Protection Planning American Hotel Lodging Association Kansas City, MO</p>
Oct 2009	<p>Advances in Roof Fall Protection Planning National Safety Council, Orlando, FL</p>
Aug 2009	<p>Making Fall Protection Work at Your Site American Society of Safety Engineers, San Antonio, TX</p>

Aug 2009	New Developments in Fall Protection Planning using ANSI Z359-2007 Veterans of Safety
Feb 2009	Fall Protection Advances in Construction World of Concrete Las Vegas, NV
Aug 2008	New Developments in Fall Protection Planning, ANSI Z359-2007 ORC Worldwide Washington, DC
June 2008	Qualified Person Duties to Create a Fall Protection System Meeting Z359 Las Vegas, NV
June 2008	Truck Falls, Fall Protection Symposium, Las Vegas, NV
Feb. 2008	Roofers and Waterproofers Research & Education Joint Trust Achieving 100% Fall Protection in Roofing, Portland, OR
Jan 2008	What Lawyers need to know about Fall Protection Engineering. CLE (National Continuing Legal Education) Vail, CO
Oct 2007	Fall Protection for Stationary Vehicles National Safety Council, Chicago, IL
Aug 2007	Design of Ladders and Grab Bars for Effective Fall Solutions International Conference on Slips, Trips and Falls Hopkinton, MA
June 2007	New Developments in Fall Protection Planning American Society of Safety Engineers, PDC Orlando, FL
Mar 2007	American Society of Safety Engineers Philadelphia Chapter Fall Hazards- Can you Recognize Them?
Mar 2007	Roofers and Waterproofers Research & Education Joint Trust Achieving 100% Fall Protection in Roofing Minneapolis, MN
Feb 2007	Safety Design Principles Natural Hazard - Gravity 17 th Annual Construction Safety Conference & Exposition
Feb 2007	Roofers and Waterproofers Research & Education Joint Trust Achieving 100% Fall Protection in Roofing

Nov 2006	Fall Protection Engineering Avoids System Failure National Safety Council San Diego, CA
June 2006	Fall Protection in General Industry where no OSHA regulations apply American Society of Safety Engineers, PDC Seattle, WA
June 2006	What's next for Fall Protection? International Fall Protection Symposium (ISFP) Seattle, WA
Mar 2006	"Fall Protection for Plant Engineers and Facility Managers" National Manufacturing Week Conference Stephens Convention Center in Rosemont, IL
Sept 2005	The Responsibility of Management or Worker? National Safety Council 93rd Congress & Expo, Orlando, FL
June 2005	Fall Protection – “ Engineered” is Best but is “Do Your Best” an Option? American Society of Safety Engineers Annual PDC, New Orleans, LA
Jan 2005	Nail Extraction Force in Failed Barrier National Academy of Forensic Engineers, San Diego, CA
Sept 2004	Engineered fall safety: How to Sell It Internally National Safety Council 92 th Congress & Expo, New Orleans, LA
June 2004	Fall Protection for Your Small Contractors American Society of Safety Engineers Annual PDC, Las Vegas, NV
Mar 2004	Reducing Fall Injuries and Deaths Through a Hierarchy of Controls 2004 Construction Safety Conference & Expo., Randolph, MA
Oct 2003	Truck Driver Fall Protection XL Environmental, Exton, PA
Sept 2003	Fall Protection Implementation and Verification National Safety Council 91 th Congress & Expo Chicago. IL
Sept 2003	Fall Protection for Holes and Disguised Holes International Fall Protection Symposium, Chicago, IL

July 2003	Fall Protection Focus Day American General Contractors of San Diego, CA
June 2003	Fall Protection for Difficult Exposures, American Society of Safety Engineers Annual PDC, Denver. CO
Feb 2003	Hazard Information Foundation Inc. (HIFI) Safety Workshop Why Fall Protection Programs Fall Through the Cracks
June 2002	Fall Protection for Engineers National Safety Council 90 th Congress & Expo., San Diego, CA
Apr 2002	Reducing Fall Injuries Means Profitability for Clients. Independent Insurance Agents Dover, DE
Apr 2002	Case Histories of Fall Protection Engineering for Roofs and Warehouses American Society of Safety Engineers Annual PDC, Nashville, TN
Mar 2002	Harnesses Provide Appearance of Safety; Anchorage Points Must Be Provided, BNA, Occupational Safety & Health
Jan 2002	Construction Fall Protection American Society of Safety Engineers Philadelphia PA Chapter
Jan 2002	Home and Business Fall Hazards and What you need to know about the Danger of Falling and what you can do about it Cedar Rodney Rotary Club, Wilmington, DE
June 2001	What is a Fall Hazards? American Society of Safety Engineers, Philadelphia, PA
Mar. 2001	Fall Protection for Safety Professional, Oregon Governor's Occupational and Safety Health Conference
June 2000	What is Fall Protection? American Society of Fall Protection, Annual PDC Orlando, FL
Jan 2000	Fall Accident Reconstruction, National Association of Legal Investigators, Mid Year Meeting, Orlando, FL
Apr 1999	National Association of Investigators Fall Protection for Investigation
Sept 1998	How the US Legal System Affects Fall Protection Product Design: International Fall Protection Symposium in Wuppertal (IFPS'98)

Feb 1998 Elimination of Fall Hazards on Jobsites: BuildSafe '98, Construction Safety Councils, Chicago, IL

Feb 1997 Fall Protection Standards, Associated General Contractors of America, National Safety Council, Construction Division, Sacramento, CA

Sept 1996 Developing a Effective Fall Protection Program; PDC Region 1X Williamsburg, VA

Feb 1996 When the Fall Protection System Failed., American Society of Safety Engineers, LDVC, Wilmington, DE

Sept 1995 Fall Protection Subpart M and proposed General Industry regs, Lancaster County Industrial Safety Council

Mar 1995 Fall Protection - the new Construction standard, American Society of Safety Engineers, LDVC, Prof. Dev. Conf, Philadelphia, PA

Mar 1995 New Standards for Fall Protection, American Society of Safety Engineers, Calumet Chapter PDC, IN

Feb 1995 Anchorage Point critical requirements - National Safety Council, Construction Division, Atlanta, GA

Feb 1995 Foundations for Fall Protection - Builders Exchange & Rochester Safety Council, Rochester, NY

Feb 1995 Fall Protection Solutions Hierarchy, America West Safety & Health Expo, Sacramento, CA

Dec 1994 Principles of Fall Protection - Argonaut Insurance Company, Valley Forge, PA

Oct 1994 Fall Protection Training - Current American Perspective, International Fall Symposium, San Diego CA

June 1994 Elements of a Fall Protection Program, American Foundryman Society, Des Plaines, IL

Apr 1994 Integrating Fall Protection into Construction Work Methods, Pacific Rim Safety Conference, Honolulu HI

Jan 1994 New Directions in Fall Protection public seminar; Los Angeles, CA

Nov 1993	Fall Protection and Confined Space Solutions, public seminar; Atlanta GA
Sept 1993	Fall Protection and Confined Space Solutions, public seminars; Freeport TX
Aug 1993	Fall Protection Methods in Construction Chicagoland Construction Association, Chicago IL
Aug 1993	Fall Protection and Confined Space Solutions, public seminar; Seattle WA
July 1993	Fall Protection/Prevention - Ideas for the 1990's All-Ohio Safety Professional Development Conference, Akron Ohio
May 1993	A comparison of the fall protection methods and regulations developed in Europe and North America - 3rd EuroAmerican Construction Conference, Glasgow, Scotland
Apr 1993	Fall Protection for the '90's Southeast Safety & Health Conference, Georgia Tech., Atlanta GA
Feb 1993	WATTec '93 1. Fall Protection for the Nineties 2. Fall Arrest Systems to minimize injury potential; Nashville TN
Dec 1992	Fall Protection Systems - Proper Use & OSHA Update Safety Council of the Louisiana Capital Area
June 1992	Latest OSHA developments in fall protection: Maui Safety Association, Hawaii, HI
May 1992	Fall Protection methods for welders American Welding Society, Delaware Chapter
Apr 1992	Fall Protection skills for safety professionals Indiana- University of Pennsylvania, Safety Systems Course
Oct 1991	Fall Protection is Profitable - there's proof! Tri State Safety Council Chicagoland Construction Safety Council Chicago, IL
Oct 1991	OSHA Fall Protection Standards are Profitable American Society of Safety Engineers, Chesapeake Chapter, Baltimore, MD

July 1990	Fall Protection for Chemical Process Towers: The responsibility of supervisors and managers for planning Occidental Chemical Corp. Corpus Christi, TX
May 1990	100% Fall Protection at Heights and in Confined Spaces Amoco Health and Safety Conference, Itasca, IL
May 1990	Fall Protection Standards 22nd Governor's Safety & Health Conference Woodlawn, MD
Apr 1990	Current Issues in Fall Protection: Western Pennsylvania Safety Council, Monroeville, PA
Apr 1990	Inherently reliable Fall Arrest and Controlled Descent Equipment for Rescuers: COLLAPSE '90, Pennsville, NJ
Feb 1990	The New Fall Protection and Confined Space Standards ASSE Gold Coast Chapter, Boynton Beach, FL
Feb 1990	A Guide to becoming an Expert Witness ASSE Lower Delaware Chapter, Concordville, PA
Feb 1990	Trends and techniques in Fall Protection: an update of the national standards ASSE PDC Full day meeting, sponsored by ASSE Allegheny Chapter, Monroeville, PA
Sept 1989	Refinery Fall Protection and Confined Space Safety, Baton Rouge, LA
Sept 1989	Fall Protection Methods, Longview, TX
Sept 1989	Confined Space Fall Protection and Retrieval Dallas, TX
Sept 1989	New OSHA Fall Protection Standards, Pasadena, TX
Sept 1989	Train the Trainers in Fall Protection, Exxon Chemicals, Baytown
Sept 1989	ALCOA - Introduction of Fall Protection Policy, Davenport, IA (2½ day seminar program)
Sept 1989	ALCOA - Introduction of Fall Protection Policy, Knoxville, TN (2½ day seminar program)
Sept 1989	Competent Person's role in Fall Protection National Petroleum Refiners Association Annual Meeting, Houston, TX

May 1989	Fall Protection for Roofers and other contractors, Phoenix, AZ
May 1989	New OSHA Fall Protection Standards, Pasadena, TX
May 1989	Fall Protection Solutions - Beyond the Harness, Exxon Refining Baytown, TX
Apr 1989	Slip, Trip and Fall Protection, Tristate Safety Council, Frederick, MD
Dec 1988	Fall and Slips, ASSE Chapter, Harrisburg, PA
Oct 1988	ISO International Fall Protection Seminar Panelist, Orlando, FL
May 1988	Fall Protection in Electrical Utility Operations, Edison Electric Institute, Savannah, GA
Mar 1988	OSHA 1926 Subpart M Construction Hearing testimony
Mar 1988	Fall Prevention at the Worksite Texas/Southwestern Safety Conference, Dallas, TX
Oct 1987	Fall Prevention - Techniques and Systems, 75th National Safety Congress, Blockbuster Session, ATM Section, Chicago, IL
Sept 1987	Fall Protection in the Chemical Plant Environment, Freeport, TX
Sept 1987	Preventing Injuries from Use of Fall Protection Equipment, Edison Electric Institute, Seattle, WA
Jul 1987	New Fall Protection for the Construction Industry, CNA Insurance Co., Chicago, IL
Apr 1987	New Ideas in Elevated Fall Protection and Confined Space Entry and Retrieval, Southern Pulp and Paper Safety Association, Greensboro, NC
Mar 30-Apr 1987	The New Fall Protection, Seattle, Spokane, WA
Feb 1987	Fall Protection for Suspended Scaffold Users, Honolulu, HI
Feb 1987	New Approaches to Elevated Fall Protection, Honolulu, HI

Oct 1986 Planning Safety at Elevation: The Latest in Fall Protection, 74th National Safety Congress, Public Utility Section, Chicago, IL

Sept 1986 The New Fall Protection, Kingsport, Chattanooga, TN and Atlanta

Sept 1986 Fall Protection in Construction, CNA Insurance Co. Chicago, IL

June 1986 Fall Protection, NSC Construction Section Meeting, Boise, ID

May 1986 The New Fall Protection, Los Angeles, San Francisco, CA

May 1986 The New Fall Protection, Annual Eastern Pennsylvania Safety Conference, Allentown, PA

May 1986 The New Fall Protection, Detroit, MI, Chicago, IL, Milwaukee, WI

Apr 1986 The New Fall Protection, ASSE PDC, Philadelphia, PA

Apr 1986 The New Fall Protection, New Jersey Safety Conference, Atlantic City, NJ

Feb 1986 OSHA Power Platform Hearing testimony, Chicago, IL

Feb 1986 100% Elevated Fall Protection, ASSE 1/2 day Seminar

Jan 1986 The New Fall Protection, ASSE, Colonial Virginia Chapter, Richmond, VA

Oct 1985 Fall Protection - Are You Prepared?, Governor's Safety Conference, Anchorage, AK

Sep 1985 The New Fall Protection, ASSE. McKinley Chapter, Barberton, OH

July 1985 The New Fall Protection, Philadelphia, PA. Naval Shipyard

May 1985 The New Fall Protection, Seattle, WA

May 1985 The New Fall Protection, Richland, WA

May 1985 Fall Protection - The Most Underused Safety Resource in America, W. New York Safety Conference, Buffalo, NY

Feb 1985 The New Fall Protection, Birmingham, Mobile AL, Baton Rouge, Lafayette, LA

Feb 1985 Falls Can Be Prevented, Delmarva Safety Conference, Salisbury,
MD

Jan 1985 The New Fall Protection, Shreveport, LA, Borger, Amarillo,
Longview, TX