

WILLIAM G. SWITALSKI, P.E.

**Switalski Engineering, Inc.
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Mechanical Engineering Safety and Design Consultant

EDUCATION

St. Laurence High School; Oak Lawn, Illinois; May 1976. Completed an honors college preparatory program
Bachelor of Science in Mechanical Engineering with honors, Illinois Institute of Technology; Chicago, IL; May 1980
Master of Mechanical Engineering (MME), Illinois Institute of Technology; Chicago, Illinois; May 1989

HONORARY SOCIETIES

Pi Tau Sigma - Mechanical Engineering Honorary

PROFESSIONAL CERTIFICATION

Licensed Professional Engineer; State of Illinois
Licensed Professional Design Firm; State of Illinois; Switalski Engineering Inc.

PROFESSIONAL DEVELOPMENT (as an Attendee or Student)

1. "Safety Analysis Methods for Farm Machinery," Agri-Component Exposition; Kansas City, MO; June 9, 1983.
2. "Product Liability: Theory v Practice," Greater Chicago Plastics and Allied Industries Council for the City of Hope; Niles, IL; November 16, 1983.
3. "The Analysis and Design of Mobile Crane Safety Systems," Grove Manufacturing Company; Shady Grove, PA; March 26-28, 1984.
4. "Safety and Human Factors Considerations in the Design of Electrodynamics Separators," Greater Portland Production Engineers; Portland, OR; June 2, 1984.

5. "How Long Should a Product Last?" American Society of Mechanical Engineers Design Engineering Education Committee; Chicago, Illinois; McCormick Place; March 3, 1987.
6. "Computer Programs for Design Engineers," American Society of Mechanical Engineers Design Engineering Education Committee; McCormick Place; Chicago, Illinois; March 3, 1987.
7. Oakton Community College; Des Plaines, Illinois; Fundamentals of the Internet, course no. WWW 111; August to December, 2004
8. Oakton Community College; Des Plaines, Illinois; Residential Wiring, course no. ELT 114; February to May, 2006
9. "Product Certification and Safety Standards: What You Need to Know"; on-line seminar provided through Consulting-Specifying Engineer; June 2009
10. "How Changes in OSHA Regulations and ANSI Standards Impact Your Selection and Use of Fall Protection Equipment"; on-line seminar presented by Industrial Safety and Hygiene News; March, 2013
11. "The Fundamentals of FR", on-line seminar presented by Bulwork Protective Apparel and Industrial Safety and Hygiene News; July 2013
12. "What You Need to Know About OSHA's New Global Harmonization & Hazard Communication Standard", on-line seminar presented by Roofing Contractor; November 2013
13. "Welding: It Doesn't Have to be a Grind"; The latest in Respiratory Protection and PPE for welders and grinders; on-line seminar presented by Bullard; September 9, 2014
14. "Eye Injuries: You rarely see them coming. Practical solutions for reducing injuries to the eye." The latest in face and eye protection; on-line seminar presented by 3M; November 4, 2014
15. "Practical Group Lockout Techniques You Can Use"; Information from the soon to be released 2016 ANSI Z244 Lockout standard; on-line seminar presented by Master Lock; November 1, 2016
16. "What's on Your Roof? Assessing Rooftop Safety Hazards"; Misconceptions about rooftop fall protection; active vs. passive fall protection; and roof safety audits; on-line seminar presented by Tractel; November 2, 2016

LECTURES & SEMINARS (as a Speaker/Lecturer)

Seminar: "The Analysis and Design of Mobile Crane Safety Systems," Grove Manufacturing Co.; Shady Grove, PA; March 26, 1984. Topic: Insulated Links for Cranes.

Seminar: "Lockout-Tagout During Machine Maintenance" - American Contractors Insurance Group; Triodyne Inc.; Niles, Illinois; September 13, 1996.

Guest Lecturer: ASME Student Chapter; Notre Dame University; South Bend, Indiana; November 4, 1996. Topic: "The History and Development of Automated Pinspotting."

Seminar: "Construction Crane/Overhead Powerline Contact" - Construction Industry Manufacturers Association. Triodyne Inc.; Niles, Illinois; December 11, 1997

STANDARDS COMMITTEES

1. Title: Accredited Standards Committee ASC-A14, Safety Codes for the Construction, Care and Use of Ladders.
Duration: August, 1995 to March, 2004.
Position: Representative of Triodyne, Inc., Technical Co-Secretariat at Executive Sub-Committee (ExSC) meetings.
2. Committee: American National Standards Institute A14.7, Mobile Ladder Stands and Ladder Stand Platforms
Sub-Committee Member: August, 2004 to October, 2011
Chairman: October, 2011 to Present
3. Committee: American National Standards Institute A14.8, Ladder Accessories
Sub-Committee Member: November, 2004 to Present
4. Committee: A14 Ladder Labeling Task Force
Member: March, 2012 to Present
5. Committee: A14 Steering Committee
Member: October, 2011 to Present
6. Committee: A14 Executive Committee
Member: February, 2016 to Present

Codes/Standards - Reviewed, Voted on and/or Solicited Comments

1. ANSI-ASC A14.4-2015 American National Standard Safety Requirements for Job-Made Wooden Ladders; September, 2016; Affirmative vote with comments

2. ANSI-ASC A14.11-2016 American National Standard Safety Requirements for Stepstools; October,2016; Affirmative vote with comments

PROFESSIONAL SOCIETIES

American Society of Mechanical Engineers - Associate Member through 2004
 American Society of Safety Engineers – Member through 2004

EMPLOYMENT

1. Employer: Switalski Engineering, Inc., Glenview, Illinois
 Business: Engineering and Safety Consulting
 Position: Mechanical Engineering Safety and Design Analysis
 Duration: March, 2004 - Present
 Duties: On-site and laboratory investigation of industrial and consumer product accidents. Design and safety analysis of machinery, mechanical components, consumer products, and the physical environment as related to science and mechanical engineering.

- 1a. Employer: Countryside Bowl Inc., dba Rolling Lanes; Countryside, Illinois
 Business: Bowling and Recreation Center
 Position: Weekend Manager; Automatic Pinsetter Technician
 Duration: October, 2008 - Present
 Duties: Supervision of bowling center staff; Repair and maintenance of the Automatic Pinsetters and related bowling equipment; Revenue collections and bookkeeping; Customer Service; Consultant to Proprietor

2. Employer: Triodyne Inc., Northbrook, Illinois (Niles, Illinois; and Skokie, Illinois)
 Business: Safety and Engineering Consulting
 Position: Senior Mechanical Engineering Safety and Design Analysis Consultant
 Duration: May 1980 - April 2004
 Duties: On-site and laboratory investigation of industrial and consumer product accidents. Training and supervision of part-time student help. Design and safety analysis of machinery, mechanical components, consumer products, and the physical environment as related to science and mechanical engineering.

3. Employer: Institute for Advanced Safety Studies, Niles, Illinois
 Business: A not-for-profit safety research consortium
 Position: Research and Development
 Duration: September 1984 - 1995
 Duties: Coordination and participation in safety research programs.

4. Employer: Alliance Tool and Manufacturing; Maywood, Illinois
 Business: Manufacturers of high speed and carbide tipped cutting tools
 Position: Engineering and cost estimation
 Duration: June 1984 - November 1984
 Duties: Cost estimation, evaluation and design of special cutting tools. Coordination of activities for the expansion of the product line. Computerization of record keeping and office operation systems.

5. Employer: Illinois Institute of Technology, Chicago, Illinois
 Business: Recreation Room Operations
 Position: Automatic Pinsetter Mechanic
 Duration: February 1979 - May 1979 and August 1979 - May 1980
 Duties: Repair and maintenance of all bowling equipment; training of student help.

6. Employer: Brunswick Corporation, Muskegon, Michigan
 Business: Bowling Equipment Design and Manufacturing
 Position: Manufacturing Engineer
 Duration: June 1979 - August 1979
 Duties: Participated in an automatic pinsetter parts cost-reduction project, and assisted in the preliminary development of modifications to reduce pinsetter power consumption. Preparation of engineering drawings compatible with computer-aided manufacturing processes.

7. Employer: Gage Park Recreation Center, Inc., Chicago, Illinois
 Business: Bowling and Recreation Center
 Position: Chief Automatic Pinsetter Mechanic
 Duration: September 1974 - January 1979
 Duties: Repair and maintenance of the automatic pinsetting equipment (62 machines) and all other associated bowling lane equipment. This entailed record keeping, parts purchasing, organization of summertime mechanical overhauls, training of high school age summer help, electrical maintenance of the building, and knowledge of welding.

8. Employer: Castle Engineering Co., Chicago, Illinois
 Business: Supply clients with qualified drafting personnel and related equipment
 Position: Drafting Apprentice
 Duration: June 1976 - August 1976

Duties: Drafting and detailing of machine parts and assemblies

OTHER BUSINESS INTERESTS

Business: Lawn Bowl, Inc. dba Lawn Lanes
Location: Chicago, Illinois
Position: Director and Co-proprietor
Duration: September, 1993 to December 31, 2000

Business: Countryside Lanes, Inc. dba Rolling Lanes
Location: 6301 Joliet Rd., Countryside, Illinois
Position: Secretary/Treasurer and Co-proprietor
Duration: June, 1994 to October, 2008

VOLUNTEER ORGANIZATION

Illinois Institute of Technology Alumni/Admissions Program, 1983.

Purpose: Contact and counsel pre-freshman engineering students. Offer guidance in the areas of time-budgeting, course of study, financial planning, living accommodations, etc.

PUBLICATIONS

1. William G. Switalski and Ralph L. Barnett, "Two Press Guards...A Second Look," National Safety News v. 123, no. 5 (May 1981): 64-5. Reprinted in Triodyne Safety Brief v. 2, no. 4 (September 1984).
2. William G. Switalski and Ralph L. Barnett, "Trailer Hitches & Towbars," Triodyne Safety Brief v. 3, no. 3 (July 1985).
- 3a. William G. Switalski and Ralph L. Barnett, "Principles of Safety," American Society of Agricultural Engineers, Paper No. 87-5513. Paper presented at the 1987 International Winter Meeting of the American Society of Agricultural Engineers, Chicago, December 17, 1987, 39 pages.
- b. Triodyne Safety Brief v. 5 #1 (February 1988)
- c. Triodyne Safety Brief v.24, #1 (July 2003)
- d. Forensic Engineering v. 1 #3 (1988): 153-173

- e. "Overseas Product Liability Information 1993 No. 1," ("Principles of Safety") Tokyo, The Yasuda Fire & Marine Insurance Company, Limited., 1993.
- 4. William G. Switalski and Edward A. Fritz, "Small Agricultural Tractor ROPS New Operator Protective Zone," Society of Automotive Engineers, Paper No. 911782. Paper presented at the 1991 SAE International Off-Highway & Powerplant Congress & Exposition, Milwaukee, Wisconsin, September 10, 1991. Also, Paper No. 911615, presented at the American Society of Agricultural Engineers 1991 International Winter Meeting, Chicago, Illinois, December 19, 1991.
- 5. William G. Switalski and Ralph L. Barnett, "Truck Mounted Ladder Racks," Triodyne Safety Bulletin v. 6, No. 2 (December 1997).
- 6. William G. Switalski, "The Washing Machine Flood," Triodyne Safety Bulletin v. 9, No. 1 (January 2000).
- 7. William G. Switalski, Primary vs. Secondary Protection: Why Interlocks Are Not An Acceptable Alternative To Lockout," Triodyne Safety Bulletin v. 9, No. 2 (September 2000).
- 8a. William G. Switalski and Ralph L. Barnett, "Case Study - The Safety of Wood Railings," American Society of Mechanical Engineers, Paper No. IMECE 2001/SERA-24009. Paper presented at the 2001 ASME International Mechanical Engineering Congress & Exposition; New York, New York, November 14, 2001.
- b. Triodyne Safety Brief v. 18, No. 1 (March 2001).
- 9a. William G. Switalski and Ralph L. Barnett, "Auto-Setting Ladder Inclination," American Society of Mechanical Engineers, Paper No. DETC 2003/SERA-48689. Paper presented at the ASME 2003 Design Engineering Technical Conference and Computer and Information in Engineering Conference; Chicago, Illinois, September 2-6, 2003.
- b. Triodyne Safety Brief v. 24, No. 1 (July 2003).
- 10. Switalski, William G., "Developing a Guardrail Test Criteria," Safety and Forensic Engineering (SAFE) Journal, volume 4, January 2005
- 11. Switalski, William G., "Machinery Maintenance and Temporary Bypassing of Safety Devices," Safety and Forensic Engineering (SAFE) Journal, volume 5, February 2006
- 12. Switalski, William G. and Smith, R. Kevin, "Wind Loading Considerations in the Design of Aerial Work Platforms," Safety and Forensic Engineering (SAFE) Journal, volume 6, March 2009

13. Inside View - Newsletter of Switalski Engineering Inc., Topics in Premises Liability: "Building Codes," February 2015
14. Inside View - Newsletter of Switalski Engineering Inc., Topics in Industrial Safety, "Lockout/Tagout," March 2015
15. Inside View - Newsletter of Switalski Engineering Inc., Topics in Industrial & Consumer Safety, "A Fresh Approach to Ladder Safety Training & Ladder Standards Expansion," May 2015
16. Inside View - Newsletter of Switalski Engineering Inc., Topics in Product Liability, "The Evolution of Warning Sign Codes," July, 2015
17. Inside View - Newsletter of Switalski Engineering Inc., Topics in Industrial Safety, "What Do Unauthorized Workers Need to Know About Lockout?" November 2016

TECHNICAL RESEARCH OR TESTING REPORTS (Public)

1. "CAD/CAM Techniques as Applied to Metalworking Operations," Illinois Institute of Technology. December 1987, 40 pages.
2. "Mechanical Engineering Aspects of Overhead Powerline Contact," Project Report for Master of Mechanical Engineering Degree: April, 1989; 81 pages.

Part I: "An Evaluation of Two Construction Crane Safety Devices for Preventing Electrocution."
Part II: "Mechanical Aspects of a Minimum Cost Power Distribution System"