

# Exponent® Engineering & Scientific Consulting

## John Osteraas, Ph.D., P.E.

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## **Professional Profile**

Dr. John Osteraas is a Corporate Vice President and Principal Engineer in Exponent's Buildings and Structures Practice. He specializes in the evaluation of the performance of buildings under extreme loads, including earthquake, wind, flood, landslide, explosion, high-energy impact, and construction failure.

Dr. Osteraas' research has focused on performance of structures under seismic loading and full-scale instrumentation and testing of structures under dynamic loading. His expertise in structural and earthquake engineering includes structural safety and damage assessment; structural analysis; soil-structure interaction; seismic site response assessment; and analysis and design of wood, steel, concrete, masonry, and composite systems. His geotechnical engineering expertise extends to foundation and retaining structure analysis and design, slope stability analysis, and analysis of soil-structure interaction.

Drawing upon his construction experience, Dr. Osteraas addresses problems associated with design documents; construction materials; means and methods of construction; construction failures; application of design and construction codes and standards; properties, performance, response, and deterioration of construction materials; and repair methodology.

Dr. Osteraas has also served as a Structures Specialist with FEMA's Urban Search and Rescue program and has been deployed to New Orleans in 2005, the World Trade Center in 2001, and Oklahoma City in 1995 to assist with search and rescue activities. He was a founding Board Member and Corporate Secretary for Krawinkler Luth and Associates, Inc., a structural design firm, and has held research and consulting positions with the John A. Blume Earthquake Engineering Center at Stanford University, the Counter Quake Corporation, Structural Research Inc., Engineering Research Inc., Marshall Erdman and Associates, and Fel-Pro Energy Systems.

## Academic Credentials & Professional Honors

Ph.D., Civil Engineering, Stanford University, 1990

M.S., Civil and Structural Engineering, Stanford University, 1977

B.S., Civil and Environmental Engineering, University of Wisconsin, Madison, 1976

California Preservation Foundation, Preservation Design Award in recognition of outstanding achievement in the field of historic preservation for the Napa Courthouse Earthquake Repair, October 18, 2019

Commendation for service following the September 11, 2001 terrorist attack on the United States, Governor's Office of Emergency Services, State of California

Commendation for outstanding service to the Urban Search & Rescue Response System during the Oklahoma City 6th Street bombing incident, April 19, 1995, Governor's Office of Emergency Services, State of California

Distinguished Service Citation, University of Wisconsin - Madison

Chi Epsilon National Civil Engineering Honor Society, Chapter Honor Member, University of Wisconsin - Madison

Outstanding Paper of 1992, American Society of Civil Engineers, Technical Council on Forensic Engineering, Journal of Performance of Constructed Facilities

1989 Student Paper Award, Earthquake Engineering Research Institute

ARCS Foundation Scholar, Stanford University

Certificate of Recognition, National Aeronautics and Space Administration

Senior High Honors, University of Wisconsin

#### Licenses and Certifications

Professional Engineer Civil, Arizona, #31483

Professional Engineer Civil, California, #35844

Professional Engineer Civil, Idaho, #P-14524

Professional Engineer, Louisiana, #PE.0031972

Professional Engineer, Michigan, #6201056853

Professional Engineer, Mississippi, #16955

Professional Engineer, Missouri, #PE-2020013087

Professional Engineer Civil, Nevada, #12603

Professional Engineer, New York, #80356

Professional Engineer Civil and Structural, Oklahoma, #29770

Professional Engineer, Utah, #190526-2203

Professional Engineer, Virginia, #402049691

Professional Engineer Civil, Washington, #51768

Professional Engineer, Wisconsin, #19023-6

Licensed General Contractor (CA)

### **Professional Affiliations**

American Society of Civil Engineers (Fellow)

Structural Engineers Association of Northern California (Member; Director 2008-2010)

Earthquake Engineering Research Institute (Member)

EERI Northern California Chapter (Member; Director 2005-2008)

International Code Council (Professional Member)

#### **Publications**

Osteraas J, Hunt J, Luth G. Performance-based seismic design of the Gigafactory in Tesla time. SEAOC 2017 Convention Proceedings, Structural Engineers of California, San Diego, CA, 2017.

Luth G, Osteraas J. Delivering the Gigafactory in Tesla time using HD BIM. SEAOC 2017 Convention Proceedings, Structural Engineers of California, San Diego, CA, 2017.

Ojala D, Osteraas J. Performance-based engineering and the evaluation of existing buildings - potential legal ramifications. Proceedings, Second ATC & SEI Conference on Improving the Seismic Performance of Existing Buildings and Other Structures, American Society of Civil Engineers, San Francisco, CA, 2015.

White M, Osteraas J, Perry C. Precedential consequences of the recent Myrick lawsuit: Using ASCE 7-10 and ASCE 41-13 Performance Targets to Manage Seismic Risk in the Legal Arena. Proceedings, Second ATC & SEI Conference on Improving the Seismic Performance of Existing Buildings and Other Structures, American Society of Civil Engineers, San Francisco, CA, 2015.

White M, Osteraas J, Fierro E, Perry C. Precedential consequences of the recent Beacon lawsuit: foreseeing harm to third parties caused by the unsatisfactory seismic performance of a flawed design. Proceedings, Second ATC & SEI Conference on Improving the Seismic Performance of Existing Buildings and Other Structures, American Society of Civil Engineers, San Francisco, CA, 2015.

White M, Osteraas J. Predictions of performance of seismically vulnerable structures: helping owners develop practical strategies for managing seismic risk in the legal arena. Proceedings, 10th National Conference on Earthquake Engineering, Earthquake Engineering Research Institute, Anchorage, AK, 2014.

White M, Osteraas J. When new structures fail: partial seismic collapse of the Royal Palm Resort - Design flaws, construction defects, and legal ramifications for other reinforced concrete structures. Proceedings, 10th National Conference on Earthquake Engineering, Earthquake Engineering Research Institute, Anchorage, AK, 2014.

Uriz P, Osteraas J, McDonald B. Using ASTM E1155 to determine finished floor quality: background and areas for consideration. Proceedings, 6th Congress on Forensic Engineering, San Francisco, CA, October 31, 2012.

Krawinkler H, Osteraas J, McDonald B, Hunt J. Development of damage fragility functions for URM chimneys and parapets. Proceedings, 15th World Conference on Earthquake Engineering, Lisbon, Portugal, September 23-28, 2012.

White M, Osteraas J. Seismically vulnerable structures and owner's risk in the legal arena: practical considerations for the interim use period. Proceedings, 15th World Conference on Earthquake Engineering, Lisbon, Portugal, September 23-28, 2012.

Osteraas J, Krawinkler H, McDonald B, Hunt J. ATC-58 Fragility of masonry chimneys. Applied Technology Council, Redwood City, CA, March 2011.

McDonald B, Hunt J, Krawinkler H, Osteraas J. ATC-58 Fragility of masonry parapets. Applied Technology Council, Redwood City, CA, March 2011.

Stone H, Barker M, Osteraas J, Hammond DJ. Rescue engineering: Practical aspects of building stabilization in a search and rescue environment. Department of Homeland Security Science and Technology Directorate Building Stabilization Workshop, US Army Corps of Engineers Engineering Research and Development Center, Vicksburg, MS, August 25-27, 2009.

Osteraas J, Shusto L. Assessment and repair of earthquake damaged woodframe buildings. Proceedings of the Third Conference on Seismic Hazards in the Eastern San Francisco Bay Area — Science, Hazard, Engineering, and Risk, California State University - East Bay, October 24, 2008, California Geological Survey Special Report 219, 2010.

Osteraas J, Gupta A. Order out of chaos: application of earthquake damage assessment and repair guidelines in loss modeling. Proceedings, 14th World Conference on Earthquake Engineering, Beijing, China, October 12-17, 2008.

Osteraas J, Gupta A, Griffith M, McDonald B. Woodframe seismic response analysis — Benchmarking with buildings damaged during the Northridge Earthquake. Proceedings, 2008 ASCE Structures Conference, Vancouver, BC, April 24-26, 2008.

Osteraas J (ed). General guidelines for the assessment and repair of earthquake damage in residential woodframe buildings. Consortium of Universities for Research in Earthquake Engineering, CUREE Publication No. EDA-02, October 2007. Certificate of Merit, Structural Engineers Association of California 2008 Excellence in Engineering Awards Program.

Osteraas J. Murrah building bombing revisited: A qualitative assessment of blast damage and collapse patterns. Journal of Performance Constructed Facilities 2006; 20(4).

Gupta A, McDonald B, Griffith M, Osteraas J. Displacement coefficients for conventional residential woodframe structures. Proceedings, 8th U.S. National Conference on Earthquake Engineering, San Francisco, CA, April 18-22, 2006.

Gupta A, McDonald B, Alavi B, Osteraas J. Rational seismic evaluation and retrofit design of a multistory RC shear wall structure. Proceedings, 8th U.S. National Conference on Earthquake Engineering, San Francisco, CA, April 18-22, 2006.

Osteraas J, Bonowitz D, Gupta A, McDonald B. Development of guidelines for assessment and repair of earthquake damage in woodframe construction. Paper No. 1580. 13th World Conference on Earthquake Engineering, Vancouver, BC, August 1-6, 2004.

Gupta A, Osteraas J. Improved post-earthquake portfolio loss estimation. Paper No. 1030. 13th World Conference on Earthquake Engineering, Vancouver, BC, August 1-6, 2004.

Arnold A, Uang CM, Osteraas J. Cyclic performance and damage assessment of stucco and gypsum sheathed walls. Paper No. 1484. 13th World Conference on Earthquake Engineering, Vancouver, BC, August 1-6, 2004.

McDonald B, Luth G, Osteraas J. Review of safety factors for assessing column stability in existing braced frame buildings by Brian McDonald. Proceedings, 2004 Structures Congress, The Structural Engineering Institute of the American Society of Civil Engineers, Nashville, TN, May 22-26, 2004.

Osteraas J, Shusto L, McDonald B. Earthquake damage assessment and repair protocols. pp. 209-218. In: Forensic Engineering: Proceedings, Second Congress. American Society of Civil Engineers, San Juan, Puerto Rico, May 21-23, 2000.

McDonald B, Bozorgnia Y, Osteraas J. Structural damage claims attributed to aftershocks. pp. 123-131. In: Forensic Engineering: Proceedings, Second Congress. American Society of Civil Engineers, San Juan, Puerto Rico, May 21-23, 2000.

Osteraas J, Shusto L, McDonald B. Engineering involvement in post-Northridge damage assessment and repair of wood-frame dwellings. Paper Number 2593. 12th World Conference on Earthquake Engineering, Auckland, New Zealand, January 30-February 4, 2000.

Hinman E, Durkin M, Osteraas J. Preliminary analysis of casualties resulting from the Oklahoma City bombing. Prepared for The Blast Injuries Study Group, Oklahoma State Department of Health, Oklahoma City, OK. Exponent Failure Analysis Associates, Menlo Park, CA, 1996.

Osteraas J, Barrett R. Multimedia in dispute resolution. The Construction Specifier 1996; 49(1):20-25.

Osteraas J (contributor). Northridge earthquake of January 17, 1994, Reconnaissance Report. Vol. 2 Supplement C to Volume 11, Earthquake Spectra. Earthquake Engineering Research Institute, Oakland, CA, 1996.

Osteraas J (editorial committee). Japan — The great Hanshin earthquake. Risk Management Solutions, Inc. and Failure Analysis Associates, Inc., 1995.

Ross B, Johnston P, Osteraas J, Barrett R. Catastrophic collapse of a tower crane due to sequential failure of truss members. 3rd International Symposium on Structural Crashworthiness and Failure, University of Liverpool, UK, April 14-16, 1993.

Moncarz P, Hooley R, Osteraas J, Lahnert B. Analysis of stability of L'Ambiance Plaza lift-slab towers. Journal of Performance Constructed Facilities 1992; 6(4).

Nassar A, Osteraas J, Krawinkler H. Seismic design based on strength and ductility demands. Proceedings, 10th World Conference on Earthquake Engineering, pp. 5861-5866, Madrid, Spain, July 19-24, 1992.

Krawinkler H, Nassar A, Osteraas J. Ductility and strength demands for seismic design. Proceedings, American Society of Civil Engineers Structures Congress, pp. 211-219, Indianapolis, IN, April 29-May 1, 1991.

Ross B, Osteraas J, Moncarz P. The Loma Prieta earthquake — a pictorial essay with engineering comment. The Second Pan American Congress of Applied Mechanics, Valparaiso, Chile, January 1991.

Osteraas J. Strength and ductility considerations in seismic design. Dissertation, Stanford University, 1990; also, John A. Blume Earthquake Engineering Center Report No. 90, Department of Civil Engineering, Stanford University, August 1990.

Osteraas J, Krawinkler H. The Mexico earthquake of September 19, 1985 — Behavior of steel buildings. Earthquake Spectra 1989; 5(1):51-88; also Costruzioni Metalliche1990; Part 1 XLII(2), Part 2, XLII(3).

Krawinkler H, Osteraas J. Seismic design based on strength of structures. Proceedings, Fourth U.S. National Conference on Earthquake Engineering, Palm Springs, CA, Earthquake Engineering Research Institute, Vol. 2, pp. 955-996, El Cerrito, CA, May 1990.

Moncarz P, Thomas J, Osteraas J. Quality of constructed facilities: Definition of safety, serviceability and economy in engineering decisions. Proceedings, 33rd Meeting of the International Committee on

Industrial Chimneys (CICIND), Barcelona, Spain, April 19-20, 1990.

Osteraas J, Krawinkler H. Pino Suarez — Implications for modern steel structures. Earthquake Engineering Research Institute Annual Meeting, San Francisco, CA, February 9, 1989.

Krawinkler H, Osteraas J. Steel building design. Seminar on Evolving Earthquake Hazard Mitigation Practices, 1998 Annual Meeting, Earthquake Engineering Research Institute, Mesa, AZ, February 4, 1988.

Moncarz P, Osteraas J, Wolf J. Designing for maintainability. Civil Engineering 1986.

Moncarz P, Osteraas J, Wolf J. Impact of design/construction/maintenance practices on structural deterioration. Proceedings, Structural Division of the American Society of Civil Engineers Convention 1985, Seattle, WA, April 1986.

Osteraas J (contributor). Earth sheltered housing. G. Klodt, Reston Publishing Co., 1985.

Moncarz P, Osteraas J, Curzon A. Modeling of reinforced concrete containment structures. Proceedings, Design of Concrete Structures the Use of Model Analysis, Joint Institution of Structural Engineers/B.R.E. Seminar Elsevier Applied Science Publishers, London, England, November 1984.

Moncarz P, Osteraas J. Major considerations in scale modeling of reinforced concrete containment structures. American Society of Civil Engineers Conference on Structural Engineering in Nuclear Facilities, Raleigh, NC, September 10-12, 1984.

Moncarz P, Osteraas J. Structural aspects of leakage in reinforced concrete containments — Experimental approach. Proceedings, 2nd Workshop on Containment Integrity, Sandia National Laboratories, June 1984.

Osteraas J (contributor). A review of fracture mechanics life technology. National Aeronautics and Space Administration Report, NAS 8-34746, September 1983.

Peyrot A, Lee J, Jensen H, Osteraas J. Application of cable elements concept to a transmission line with cross rope suspension structures. Institute of Electrical and Electronics Engineers, Transaction on Power Apparatus and Systems, July 1981.

Lee J, Peyrot A, Dupuis R, Osteraas J. Research considerations for the transmission line mechanical research facility. Electric Power Research Institute Report, EPRI TPS 80-719, 1980.

Osteraas J. Loads on wood-frame structures — A literature review. U.S. Forest Products Laboratory Internal Report, 1976.

Osteraas J. Structural potential of a Douglas-fir veneered urea-bonded extruded particleboard ('plyboard'). U.S. Forest Products Laboratory Internal Report, 1974.

#### Presentations

Osteraas J. Earthquake damage assessment and repair. PLRB Claims Conference and Insurance Services Expo, Indianapolis IN, April 1, 2019; Orlando, FL, April 16, 2018; San Antonio, TX, April 19, 2016; Anaheim, CA March 31, 2015; Indianapolis, IN, March 18, 2014; Boston, MA, March 19, 2013; Orlando, FL, April 17, 2012; Nashville, TN, April 5, 2011; San Antonio, TX, March 23, 2010; Seattle, WA, March 24, 2009; Boston, MA, April 14, 2008; Orlando, FL, March 20, 2007; Nashville, TN, April 4, 2006; San Antonio, TX, April 19, 2005; Chicago, IL, March 16, 2004.

Osteraas J, Morgan T. Earthquake Damage Evaluation. Lloyds, London, March 21, 2019.

Osteraas J. The Art & Science of Engineering: Soil-Structure Interaction. CEE 293, Stanford University, March 12, 2019; March 6, 2018; March 10, 2015; March 4, 2014.

Osteraas J. Adventures in Forensic Engineering. Department of Civil and Environmental Engineering, CEE3984 & CEE5450, Virginia Tech, Blacksburg VA, February 28, 2019.

Luth GP, Osteraas J. Building the Gigafactory in Tesla Time Using HD BIM & Performance-Based Design. Structural Engineers Association of Central California, Sacramento, CA, March 13, 2018; CEE298 Winter Seminar Series, Stanford University, January 17, 2017; Structural Engineers Association of Northern California, Mountain View, CA, October 25, 2016.

Osteraas J. ATC-20 procedures for post-earthquake safety evaluations of buildings. Featured Speaker, Structural Engineers Association of Northern California Disaster Emergency Services Committee Safety Assessment Workshop, Santa Clara University, November 11, 2017; Mills College, May 21, 2016; San Francisco State University, November 1, 2014; Santa Clara University, June 22, 2013; Mills College, November 5, 2011; Santa Clara University, November 1, 2008; University of California, Berkeley, October 22, 2006; The Presidio, San Francisco CA, May 2, 2004; Exponent, Menlo Park, CA, August 12, 2003; Santa Clara University, October 5, 2002; The Presidio, San Francisco, CA, May 3, 2001; University of California, Berkeley, March 20, 1999.

Luth GP, Osteraas J. Kansas City Hyatt Walkway Collapse - Root Cause Analysis. Exponent/GPLA Engineering Seminar, Menlo Park, CA August 26, 2017, Santa Clara, CA August 28, 2017.

Osteraas J. Lessons from Structural Failures in Natural Disasters. International Seminar of the Integrated Arts and Sciences for Disaster Reduction Research Group, Disaster Prevention Research Institute, Kyoto University, November 8, 2016.

Osteraas J. Structural Design in Tesla Time - The New Paradigm. Structural Engineering Seminar, University of California, San Diego, October 24, 2016.

Osteraas J. ATC-20 procedures for post-earthquake safety evaluations of buildings. Featured Speaker, Structural Engineers Association of Northern California Stanford Student Chapter, Safety Assessment Workshop, Stanford University, October 22, 2016; October 10, 2015; October 11, 2014; October 19, 2013; October 20, 2012.

Luth GP, Osteraas J, et al. Building in Tesla Time - The Gigafactory a New Paradigm, Center for Integrated Facilities Engineering Summer Program, Stanford University, September 20, 2016.

Osteraas J. Structural Engineering Lessons from Failures Great & Small. Center for Integrated Facilities Engineering, Stanford University, June 22, 2016.

Osteraas J. Engineering Lessons from Failures Great and Small. California Polytechnic State University, San Luis Obispo, February 7, 2015.

Osteraas J, White MN. Partial Seismic Collapse of the Royal Palm Resort: Design Flaws, Construction Defects, and Legal Ramifications. 10th National Conference on Earthquake Engineering, Anchorage, AK, July 24, 2014.

Osteraas J. Urban Resiliency Lessons Courtesy of Hurricane Katrina. Urban Resilience in Disaster Prone Areas, International Graduate Summer Course, Earthquake Engineering Research Centre, University of Iceland, Selfoss, Iceland, June 23, 2014.

Osteraas J. A Brief Introduction to Earthquakes. Urban Resilience in Disaster Prone Areas, International Graduate Summer Course, Earthquake Engineering Research Centre, University of Iceland, Selfoss, Iceland, June 23, 2014.

Osteraas J. Urban Resiliency Lessons Courtesy of Kobe Earthquake (The Great Hanshin EQ). Urban Resilience in Disaster Prone Areas, International Graduate Summer Course, Earthquake Engineering Research Centre, University of Iceland, Selfoss, Iceland, June 23, 2014.

Osteraas J. The Southern California Shakeout (Earthquake Scenario). Urban Resilience in Disaster Prone Areas, International Graduate Summer Course, Earthquake Engineering Research Centre, University of Iceland, Selfoss, Iceland, June 23, 2014.

Osteraas J. Urban Resiliency. Urban Resilience in Disaster Prone Areas, International Graduate Summer Course, Earthquake Engineering Research Centre, University of Iceland, Selfoss, Iceland, June 23, 2014.

Osteraas J. Earthquake Damage Assessment and Repair: Working with Engineers. California Earthquake Authority Annual Claim Meeting, Sacramento, CA, May 20, 2014.

Osteraas J. Special topics in earthquake engineering. Earthquake Engineering & Engineering Seismology, University of Iceland Faculty of Civil and Environmental Engineering, Selfoss, Iceland, June 20, 2013.

Osteraas J. Soil structure interaction — Structural considerations. Stanford University, Department of Civil Engineering, March 12, 2013, February 28, 2012.

Osteraas J. Introduction to earthquake engineering. Natural Disaster Management. University of Iceland, Faculty of Civil and Environmental Engineering, Selfoss, Iceland, June 7, 2012.

Osteraas J. Introduction to earthquakes and earthquake engineering - Natural catastrophes. University of Iceland, Faculty of Civil and Environmental Engineering, Selfoss, Iceland, June 2, 2011.

Osteraas J. Structural aspects of foundation design. Stanford University, Department of Civil Engineering, Stanford, CA, March 1, 2011.

Osteraas J. Multi-hazard USAR: A comparison of collapse patterns, voids, and stability from the structural engineer's point of view. Rescue 2010 - International SAR Conference, Reykjavik, Iceland, October 22-24, 2010.

Osteraas J. Engineers and rescue teams, structural engineering aspects of USAR. Rescue 2010 Pre-Conference, Reykjavik, Iceland, October 20-21, 2010.

Osteraas J. Building collapse and monitoring, structural engineering aspects of USAR. Rescue 2010 Pre-Conference, Reykjavik, Iceland, October 20-21, 2010.

Osteraas J, Hammond DJ. Multi-hazard post-disaster safety assessment training for evaluators. Naval Facilities Engineering Command (NAVFAC), Jacksonville, FL, April 27,2009; San Diego, CA, July 14, 2009; Great Lakes, IL, August 18, 2009; Norfolk, VA, Sept 9, 2009; Pearl Harbor, HI, September 15, 2009.

Osteraas J. Challenges with going green: what can go wrong? Prospective failure analysis. Property Claims Association of the Pacific Annual Convention, Sacramento CA, September 10, 2009.

Osteraas J. Engineering response to catastrophic workplace accidents. Oregon Governor's Occupational Safety & Health Conference, Portland, OR, March 12, 2009.

Osteraas J. Earthquake damage assessment and repair. AllCat Claims Services Training Seminar, San Antonio, TX, February 26, 2008. National Association of Catastrophe Adjusters 33rd Annual Convention, Las Vegas, NV, January 22, 2009.

Osteraas J. Lessons from failures great and small. AIA Nevada - Triptych Design Conference, Olympic

Valley, CA, November 7, 2008.

Osteraas J. Assessment and repair of earthquake damaged woodframe buildings. 3rd Conference on Seismic Hazards in the Eastern San Francisco Bay Area, California State University - East Bay, October 24, 2008.

Osteraas J. Order out of chaos: application of earthquake damage assessment and repair guidelines in loss modeling. 14th World Conference on Earthquake Engineering, Beijing China, October 14, 2008.

Osteraas J. Earthquake damage assessment and repair. California Earthquake Authority Claim Manager Meeting, Sacramento, CA, May 7, 2008.

Osteraas J. Woodframe seismic response analysis - benchmarking with buildings damaged during the Northridge Earthquake. 2008 ASCE Structures Conference, Vancouver BC, April 26, 2008.

Osteraas J. For want of a nail and other tales of engineering failure. Stanford University, January 30, 2008.

Osteraas J. The view from Ground Zero — Rescue, recovery, and reconstruction at the World Trade Center. Stanford University, November 8, 2007; Stanford University, November 10, 2005; MIT Club of Northern California, Menlo Park, CA, November 9, 2005; O'Hagan, Smith & Amundsen, Chicago, IL, January 28, 2004; Federation of Defense and Corporate Counsel, Quebec, Canada, August 1, 2003.

Osteraas J. Designing for failure — Lessons for California (?) courtesy of Katrina. Earthquake Engineering Research Institute 2007 Annual Meeting, Los Angeles, CA, February 9, 2007; Stanford University, Stanford, CA, January 10, 2007; Structural Engineers of Northern California, Mountain View, CA, October 12, 2006.

Osteraas J. Evaluation and repair of earthquake damage in woodframe buildings. 8th U.S. National Conference on Earthquake Engineering, San Francisco, CA, April 18-22, 2006.

Osteraas J. Post-earthquake building assessment. 8th U.S. National Conference on Earthquake Engineering, San Francisco, CA, April 18-22, 2006.

Osteraas J. Overview of earthquake effects. IEEE Disaster Recovery Workshop, San Francisco, CA, March 30, 2006.

Osteraas J. CUREE earthquake damage assessment project update. CEA Claims Liaison Meeting, Sacramento, CA, October 13, 2005.

Osteraas J. Urban search and rescue in the United States. International Diplomacy Council, Natural Disaster Response Group, San Francisco, CA, June 20, 2005.

Osteraas J. Pino Suárez collapse after 20 years — What have we (not) learned? Earthquake Engineering Research Institute 2005 Annual Meeting, Ixtapa, Mexico, February 5, 2005.

Osteraas J, Hammond DJ. The rescue engineer's new reality — Recent changes and deployments in the FEMA US&R response system. Structural Engineers of Northern California, San Francisco, CA, December 12, 2004.

Osteraas J. Engineering damage assessment and repair for residential construction. Pacific Earthquake Engineering Research Center (PEER) Earthquake Engineering Scholars' Course, University of California, Los Angeles, November 6, 2004.

Osteraas J. Development of guidelines for assessment and repair of earthquake damage in woodframe construction. 13th World Conference on Earthquake Engineering, Vancouver, BC, August 3, 2004.

Osteraas J, Arnold AE. Cyclic behavior and repair of woodframe walls with finish materials. 13th World Conference on Earthquake Engineering, Vancouver, BC, August 2, 2004.

Osteraas J. Rescue engineering response to 9/11. Stanford University, Department of Civil Engineering, May 3, 2004, May 5, 2003, April 22, 2002.

Osteraas J. Earthquakes and the damage they cause. 2004 PCS Catastrophe Conference — Challenges from Coast to Coast, Hilton Long Beach Hotel, Long Beach, CA, April 26, 2004.

Osteraas J. CUREE-CEA woodframe project. EERI Southern California Chapter, University of Southern California, Los Angeles, CA, November 19, 2003.

Osteraas J. Catastrophe response: Lessons from Northridge. LHB Pacific Law Partners Fall Symposium, Pan Pacific Hotel, San Francisco CA, October 23, 2003.

Osteraas J. Pathology and lessons of the World Trade Center disaster. San Francisco Public Utilities Commission Noon Seminar, San Francisco, CA, September 11, 2002.

Osteraas J. Why buildings collapse: From natural disasters to terrorist attacks. TEMPO-Madison, Madison WI, July 9, 2002.

Osteraas J. Urban search and rescue response to 9/11. Western Construction Consultants Association, Alameda, CA, April 17, 2002.

Osteraas J. Urban search and rescue: New York City/Oklahoma City. Structural Engineers Association of Northern California Special Seminar: Synopsis of the September 11, 2001, World Trade Center Attack and Recovery, San Francisco, CA, January 31, 2002; San Francisco Fire Department and Structural Engineers Association of Northern California, Structural Integrity of High-Rise Buildings, San Francisco, CA, November 28, 2001.

Osteraas J. Measure twice, cut once: Lessons from failures large and small. National Council of Structural Engineers Associations, Structural Engineering Winter Institute, Phoenix, AZ, January 21, 2002.

Osteraas J. Assessment and repair of earthquake damage in residential buildings. Costa Mesa, CA, November 15, 2001; California Earthquake Authority Seminar, Sacramento, CA, October 30, 2001.

Osteraas J. Seismic building codes. Stanford University, Department of Geophysics, Stanford, CA, November 1, 2001; November 2, 2000.

Osteraas J. Structural pathology of the Murrah Building bombing. Stanford University, Department of Civil Engineering, Stanford, CA, May 7, 2001; California Institute of Technology Department of Civil Engineering, Pasadena, CA, February 22, 2001.

Osteraas J. Reducing failures through computer graphics — A demonstration. Civil Engineering Research Foundation, Washington, DC, April 25, 2001.

Osteraas J. Working with experts — One expert's perspective. National Asian Pacific American Bar Association Twelfth Annual Convention, Washington, DC, October 13, 2000.

Ross B, Osteraas J, Luth G, Bozorgnia Y. Seismic collapse of reinforced concrete towers at Royal Palm Resort, Guam, USA. 25th Anniversary Conference on Our World in Concrete and Structures, Singapore, August 22-24, 2000.

Osteraas J. Oklahoma City bombing — The limits of engineering. Stanford University, Department of Civil Engineering, April 24, 2000; May 18, 1998.

Osteraas J. The Oklahoma City bombing — Pushing the limits of engineering. Structural Engineers Association of Arizona, Phoenix, AZ, May 18, 1999.

Osteraas J. Decay and death in San Francisco — Consulting in the criminal arena. Lessons Learned in Forensic Engineering, Fourth Annual Seminar on Issues in Forensic Engineering, ASCE Forensic Engineering Technical Group, Los Angeles Section, University of California, Irvine, CA, May 7, 1999.

Osteraas J. Multimedia in construction dispute resolution. The Nuts and Bolts of Nuts and Bolts, Association of Defense Counsel of Northern California Seminar, San Jose, CA, April 23, 1999.

Osteraas J. Performance of structures under extreme loads. Stanford University, Department of Civil Engineering, May 26, 1997.

Osteraas J. Lesser known collateral seismic hazards. Seismic Hazard Analysis Short Course, Association of Engineering Geologists, Menlo Park, CA, May 3, 1997.

Osteraas J. Structural failures: Four case studies. Stanford University, Department of Aeronautics and Astrophysics, May 20, 1996.

Osteraas J. Structural safety and damage assessment. Stanford University, Department of Civil Engineering, May 6, 1996; May 8, 1995.

Osteraas J. Shake, rattle, and roll — What you need to know about the Big One. 31st All-Industry Insurance Conference, Risk and Insurance Management Society, Washington Chapter, Seattle, WA, March 12, 1996.

Osteraas J. The Great Hanshin earthquake. Uninterruptible Uptime Users Group, Fall Conference, San Diego, CA, November 15-17, 1995.

Osteraas J. Observations of Kobe and Mexico with implications for California. American Concrete Institute, Northern California and Western Nevada Chapter Meeting, Oakland, CA, November 14, 1995.

Osteraas J. Oklahoma City Murrah Building structural lessons. 24th Annual ASCE Structural Design Conference, Ames, IA, November 13, 1995.

Osteraas J. Earthquake update. Claims Conference of Northern CA, Sacramento, CA, October 5-6, 1995.

Osteraas J. The Great Hanshin earthquake. American Petroleum Institute Crisis Management Seminar, Houston, TX, September 25-27, 1995.

Osteraas J. Earthquake engineering: Reality meets insurance company expectations. International Institute of Loss Adjusters, Inc., Annual Convention, San Rafael, CA, September 24-29, 1995.

Osteraas J. The Kobe, Japan, Earthquake — A preview of a future California temblor? Risk Insurance Management Society, Santa Clara Valley Chapter Meeting, May 11, 1995.

Osteraas J. Kobe event report. Disaster Recovery Journal's Sixth Annual Corporate Contingency Planning Seminar and Exhibition, San Diego, CA, March 27-29, 1995.

Osteraas J. Japan's Great Hanshin earthquake event report. Business Recovery Managers Association Meeting, San Ramon, CA, March 23, 1995; Loss Executives Association Mid-Winter Meeting, Tampa, FL, January 26-27, 1995.

Osteraas J, Johnston P. Case studies in failure analysis. Stanford University, Department of Civil Engineering, February 15, 1995.

Osteraas J. Northridge: Earthquake engineering theory meets earthquake insurance reality. Loss Executives Association Mid-Winter Meeting, Tampa, FL, January 26-27, 1995.

Osteraas J. Failures in the design and construction process. Stanford University, Department of Aeronautics and Astrophysics, May 22, 1995, May 9, 1994.

Osteraas J. 1994 Property Claim Services Catastrophe Conference: Preparing for the California Earthquake, San Francisco, CA, April 18-20, 1994.

Osteraas J. Regulatory ordinances: The role of codes and standards, their evolution and mechanisms for correct implementation. Stanford University, Department of Civil Engineering, May 2, 1994; May 3, 1993; April 27, 1992; April 29, 1991.

Osteraas J. Technical aspects of earthquakes. International Institute of Loss Adjusters, Inc., Singapore, October 23, 1992 (via videotape).

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