

## Greg G. Weames

115 Main Street S., Suite 202, Georgetown, ON Canada, L7G 3E5, gweames@pageengineering.net

---

### Education and Designations:

- M.Sc.* Kinanthropology (Occupational Biomechanics); School of Human Kinetics, University of Ottawa
- B.Sc.* Kinesiology (Honors, Co-op); Kinesiology Department, University of Waterloo
- CPE* Certified Professional Ergonomist from the Board of Certification in Professional Ergonomics
- CCPE* Canadian Certified Professional Ergonomist from the Canadian College of Certified Professional Ergonomists
- CRSP* Canadian Registered Safety Professional from the Board of Canadian Registered Safety Professionals
- 

### Professional Experience:

#### ***Certified Ergonomist***

*Page Engineering Inc., 2003-Present  
Georgetown, ON*

- Forensic services regarding musculoskeletal injury/disorder risk and expert testimony.
- Corporate advisory and management services in ergonomics and health and safety.
- Ergonomics analysis of exposure to occupational physical factors.
- Ergonomics design of facilities, tools, equipment, and workplaces.
- Development of information systems for ergonomics, technical and scientific data analysis.
- Management of projects and processes for providing ergonomics services to clients.

#### ***Ergonomics Consultant***

*Page Engineering, 2000-2003 (contract work)  
Calgary, AB*

- Presented findings from researching peer-reviewed studies on various musculoskeletal disorder topics in comparison with typical North American railroad industry jobs.

**Senior Ergonomist***Canadian Pacific Railway, 1998-2003  
Calgary, AB*

- Developed and implemented an ergonomics awareness and an ergonomics assessment training courses for employees, health and safety committees and supervisors.
- Developed and implemented a corporate investigation of safety-related occurrences protocol and training course for company management and health and safety committee members.
- Member of technical committees in locomotive, remote locomotive control, and track programs equipment evaluation and specification.
- Researched and evaluated human performance metrics for return to work and personal injury claims cases providing reports for submission to insurance agencies.
- Evaluated workplaces and work tasks in Engineering Services, Mechanical Services, Field Operations, Intermodal Services and Network Management Center aspects of railroad operations and presented solutions to improve work performance.
- Member of federal employer's group responsible for ergonomics regulation with Human Resources Development Canada.

**Occupational Biomechanist***Ergonomics Plus Inc., 02, 1998-09, 1998  
Toronto, ON*

- Analyzed the ergonomics of jobs in industrial, clinical, manufacturing, distribution and office workplace environments and presented findings on work demands in professional reports and in response to orders from legislated authorities.

**Corporate Ergonomist***Workplace Safety and Insurance Board, 1994-1998  
Toronto, ON*

- Establish company process for providing ergonomics services and support for more than 10 000 employees in Ontario.
- Researched and evaluated human performance metrics for return to work and personal injury claims cases and providing reports on findings.
- Responsible for education and training in ergonomics work practices.

**Ergonomics Researcher***Ontario Universities' Back Pain Study, 1994  
Oshawa, ON*

- The research team developed and conducted on-site evaluation tools and procedures to assess the issues of back pain at a large automobile manufacturing plant, related to the ergonomic design of the workplace.

**Ergonomics Researcher** *Human Kinetics Assessment Center, 1992-1994*  
Ottawa, ON

- Evaluated job demands and functional abilities of Emergency Medical Attendants across the province of Ontario for the purposes of verifying implementation of a new (A-35) field stretcher.

**Ergonomics Consultant (co-op placement)** *Ontario Hydro, 1990*  
Toronto, ON

- Evaluated the ergonomics temporary grounding procedures for electrical transformer stations and implemented improvements in job demands.

**Ergonomics Consultant (co-op placement)** *Canada Post Corporation, 1989*  
Ottawa, ON

- Researched human movement response to various mail carriage systems to determine which was best. Carriers across Canada now use a new letter satchel design based on the recommendations of the study.

---

**Associations and Committee Appointments:**

<i>Member</i>	-Association of Canadian Ergonomists.
<i>Member</i>	-Human Factors and Ergonomics Society.
<i>Member</i>	-International Society for Occupational Ergonomics & Safety.
<i>Member</i>	-American Railway Engineering and Maintenance of Way Association, Committee 27 (Design of Track Programs Equipment).
<i>Past President</i>	-Association of Canadian Ergonomists and National Committee Director (Alberta/NWT Region, 2000-2004).
<i>Past Director</i>	-Health and Safety Conference Society of Alberta (2002-2004).
<i>Past Member-</i>	-FETCO, Ergonomics Regulation, Human Resources Development Group Canada (2000-2003).

---

**Publications:**

Assessment of four different mail carriage systems, *Proceedings of the Second North American Congress on Biomechanics*, Aug. 24<sup>th</sup>-28<sup>th</sup>, 1992.

Comparison of the 1991 NIOSH lifting equation and m. erector spinae EMG, *Proceedings of the Eighth Canadian Society for Biomechanics Biennial Conference and Symposium*, Aug 18<sup>th</sup>-20<sup>th</sup>, 1994.

Whole-Body postural adaptation during manual materials handling-type exertions: implications for job task assessment, *Proceedings of the XXIst Annual*

- International Occupational Ergonomics and Safety Conference*, June 11-12, 2009.
- Postural fixity and neutrality: a case study of the modern north American locomotive cab environment, *Proceedings of the XXIst Annual International Occupational Ergonomics and Safety Conference*, June 11-12, 2009.
- Rock and roll: perception and reality of whole-body vibration exposure under different service conditions, *Proceedings of the XXIInd Annual International Occupational Ergonomics and Safety Conference*, June 10-11, 2010.
- Whole-body activity and postural fixity and neutrality: a case study of North American railroad conductor/brakemen, *Proceedings of the XXIInd Annual International Occupational Ergonomics and Safety Conference*, June 10-11, 2010.
- Whole-body vibration exposure at the seat pan: an investigation of jointed rail upon the locomotive cab, *Proceedings of the XXIInd Annual International Occupational Ergonomics and Safety Conference*, June 10-11, 2010.
- Data compilation and risk analysis for exposure to occupational physical factors for the North American railroad train crew: part I, *Association of Canadian Ergonomists 41st Annual Conference Proceedings*, October 4-7, 2010.
- Data compilation and risk analysis for exposure to occupational physical factors for the North American railroad train crew: part II, *Association of Canadian Ergonomists 41st Annual Conference Proceedings*, October 4-7, 2010.
- Analysis of exposure to lower extremity occupational physical factors in North American train crews: walking and ballasted surfaces, *Proceedings of the XXIIIrd Annual International Occupational Ergonomics and Safety Conference*, June 9-10, 2011.
- Analysis of exposure to cervical and lumbar spine occupational physical factors in North American railroad carmen-inspectors, *Proceedings of the XXIVth Annual International Occupational Ergonomics and Safety Conference*, June 7-8, 2012.
- Analysis of exposure to upper and lower extremity occupational physical factors in North American railroad carmen-inspectors, *Proceedings of the XXIVth Annual International Occupational Ergonomics and Safety Conference*, June 7-8, 2012.
- Analysis of whole-body vibration exposures associated with commonly used land and aquatic vehicles, *Proceedings of the XXVth Annual International Occupational Ergonomics and Safety Conference*, June 6-7, 2013.
- Frequency and duration of occupational physical factors for the job of the North American railroad carman in car repair service: in support of risk evaluation, *44<sup>th</sup> Annual Conference of the Association of Canadian Ergonomists –Conference Proceedings (ISBN 978-1-926954-03-5)*, October 8-10, 2013.
- Modeling of occupational physical factors for the job of the North American railroad carman in car repair service: in support of risk evaluation, *44<sup>th</sup> Annual Conference*

*of the Association of Canadian Ergonomists –Conference Proceedings (ISBN 978-1-926954-03-5), October 8-10, 2013.*

Locomotive train crew whole-body vibration exposure: an investigation of speed-restriction administrative controls, *45<sup>th</sup> Annual Conference of the Association of Canadian Ergonomists –Conference Proceedings*, October 7-9, 2014.

Slow and steady: safe lifting at the ready, *Proceedings of the XXVIIth Annual Occupational Ergonomics and Safety Conference*, May 28-29, 2015.

---

## Presentations:

Assessment of Four Different Mail Carriage Systems, *North American Congress on Biomechanics*, Aug. 24<sup>th</sup>-28<sup>th</sup>, 1992.

Comparison of the 1991 NIOSH Lifting Equation and M. Erector Spinae EMG, *Canadian Society for Biomechanics Biennial Conference and Symposium*, Aug 18<sup>th</sup>-20<sup>th</sup>, 1994.

Investigation of Safety-Related Occurrences Protocol, *AAR 2003 Annual Safety Meeting*, Sept 21<sup>st</sup>-24<sup>th</sup>, 2003.

Ergonomics: Business Lessons Learned & Where to Start Managing Upper Extremity Disorders, *US National Banking Health & Safety Seminar*, Oct. 14<sup>th</sup>, 2004.

Determining the Work-Relatedness of MSI's, *Alberta Health and Safety Conference*, Nov 7<sup>th</sup>-9<sup>th</sup>, 2005.

Analysis of exposure to lower extremity occupational physical factors in North American train crews: walking and ballasted surfaces, *XXIIIrd Annual International Occupational Ergonomics and Safety Conference*, June 9-10, 2011.

Analysis of exposure to cervical and lumbar spine occupational physical factors in North American railroad carmen-inspectors, *Proceedings of the XXIVth Annual International Occupational Ergonomics and Safety Conference*, June 7-8, 2012.

Analysis of exposure to upper and lower extremity occupational physical factors in North American railroad carmen-inspectors, *Proceedings of the XXIVth Annual International Occupational Ergonomics and Safety Conference*, June 7-8, 2012.

Frequency and duration of occupational physical factors for the job of the North American railroad carman in car repair service: in support of risk evaluation, *44<sup>th</sup> Annual Conference of the Association of Canadian Ergonomists –Conference Proceedings*, October 8-10, 2013.

Modeling of occupational physical factors for the job of the North American railroad carman in car repair service: in support of risk evaluation, *44<sup>th</sup> Annual Conference of the Association of Canadian Ergonomists –Conference Proceedings*, October 8-10, 2013.