

## **PETER JOHNSTON, P. Eng., CFEI**

### **SPECIALIZED PROFESSIONAL COMPETENCE**

- Accident Reconstruction- automobiles, boats, snowmobiles, trucks
- Failure Analysis- materials, mechanical systems, equipment
- Fire cause and origin investigation

### **ACADEMIC BACKGROUND**

- Bachelor of Engineering Science (Mechanical Engineering), University of Western Ontario, 198

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### **ADDITIONAL COURSES & SEMINARS**

- NAFI Advanced Fire and Explosion Training Aug., 2011
- ASM Introduction to Polymer and Polymer Testing Apr. 2011
- SAE Annual World Congress, Detroit 2011
- TSAA Elevator Emergency Rescue Course 2010
- NASA/CSA EVA study participant 2003
- Firefighter Heat Stress Study Participant 2001, 2002
- OFM Component 1, Firefighter Curriculum 1999; Components 2, 3, 2002
- GTAA Emergency Services Training Division Technician Level Hazmat Training 2001
- OFM Pump Operator Course
- Toronto Fire Services – Fire Fighter Basic Training, 1999
- Flashover Survival Training – Cambridge Fire Dept. 1998
- Basic Trauma Life Support – BTLS, Pediatric Course, and Access Course, Metro Ambul. 1998
- CPR, S-AED Defibrillator and First Responder
- Pedestrian/Bicycle Accident Investigation – University of North Florida 1997
- Ontario Fire College - Volunteer Fire Officers Course, 1997
- Training and practise with Philip Environmental - HAZMAT Spill Response, 1997
- Certified Fire and Explosion Investigator (CFEI), 1996
- Fire Investigation Seminar (NFPA 921), Int'l Association of Arson Investigators, 1996
- Field Metallurgy and Fractography, IMS Conference, Montreal, 1994
- Fractography, ASM, University of Tennessee, 1994
- Anatomy, Injury, Testing and Regulation, SAE, 1993
- Forensic Animation of Traffic Crashes, IPTM, University of North Florida, 1993
- Advanced Accident Reconstruction with the aid of microcomputers, IPTM, 1992

### **EMPLOYMENT BACKGROUND**

Caskanette Udall Consulting Engineers

Consulting Engineer, August 1998 - present

Providing forensic engineering services to insurance and legal clients

Toronto Fire Department

Firefighter and Pump, Aerial, Squad Driver/Operator, 1999-2011 (Retired)

Special Operations – Heavy Rescue Squad,

Fireground Incident Technician, Chief Driver

Responses include Medical, Hazmat, Elevator Rescue, High Angle Rescue,

Water and Ice Rescue, Confined Space, Extrication, and Fire Suppression

Burlington Fire Department (Volunteer Division)

Firefighter and Pump Driver/Operator, 1995 - 1999

Respond to both medical and fire-related calls

#### Philip Environmental

Emergency Response Spill Team, April 1997 - 1999

Contracted to Philip Environmental to assist in remediation of HAZMAT spills.

#### Walters Forensic Engineering

Consulting Forensic Engineer, December 1991 - 1998

Perform engineering assessments of motor vehicle collisions, mechanical failures, and origin and cause fires.

#### Ace Composites (self-employed)

Sole proprietor-manufacturing facility for aircraft components, June 1990 - December 1991

#### Canadian Armed Forces

Squadron member (reserves) of 411 and 400 Helicopter Squadron, CFB Toronto

#### McDonnell Douglas Canada Limited

Responsible for ensuring the quality and integrity of metallic components manufactured for use on both commercial and military aircraft.

Senior Materials and Processes Engineer (1988-1990)

Quality Assurance Representative (1985-1988)

Metallurgical Technician (1985)

Heat, Treat & Electroplate Inspector (1984-1985)

#### **PROFESSIONAL SOCIETIES**

- Association of Professional Engineers of Ontario (PEO)
- Society for Automotive Engineering (SAE)
- American Society for Materials (ASM)
- International Metallographic Society (IMS)
- ASTM
- National Association of Fire Investigators (NAFI)

#### **ASTM VOTING COMMITTEE MEMBER**

- B02 on Nonferrous Metals and Alloys
- E58 on Forensic Engineering
- F32 on Search and Rescue

#### **LECTURES**

- EPIC guest lecturer- Non-Destructive Evaluation (NDE), 1995
- University of Western Ontario-guest lecturer - Corrosion Prevention, 1989
- University of Western Ontario- guest lecturer - Metal Fatigue in Aircraft, 1990
- Insurance Company Seminars- guest lecturer - Accident Reconstruction, Failure Analysis

#### **COURT EXPERIENCE**

- Provided expert testimony on behalf of plaintiffs and defendants in criminal and civil trials at various court levels in Ontario, approximately 6 times.