



T. M. (Ted) Semeniuk

- A highly experienced mechanical specialist and vehicle defects investigator who has testified at trial over 200 times
- Over 35 years mechanical experience, including 11 years at Transport Canada as a defects investigator and 13 years with the Calgary Police Service as their mechanical investigator
- Extensive experience and training in vehicle accident reconstruction, vehicle mechanics, occupant restraints, and OH&S investigations

TECHNICAL EDUCATION

1974

Mechanic Apprenticeship Program

- 4 year program through Alberta Apprenticeship Board
- Included 2 months of academic courses and 1600 hours of practicum/year

EXPERT EVIDENCE

Evidence has been given over 200 times at trial in Alberta, BC, and Saskatchewan courts. Qualified in the areas of automotive mechanics and heavy-duty mechanics including vehicle fires.

PROFESSIONAL EXPERIENCE

SAMAC Engineering Ltd.

Staff 2009 to date
Consultant 1993 to 2008

Consultant specializing in mechanical failure analysis. Responsible, either independently or as part of a team, for investigation and analysis of vehicle failures including brakes, steering mechanisms, fires, engines, etc. Also responsible for examining incident locations and vehicles for accident reconstruction purposes.

Kinetex & CGGVeritas

2007 To 2008

QHSE (quality health safety environment) coordinator for seismic data exploration companies. Duties included training and maintaining records of training for all levels of crew and contract workers on all aspects of health safety and environment. Maintained standards and regulations regarding exploration as set out by Federal, Provincial and Industry regulators. Conducted and assisted OH&S regulators with investigation of all injury related incidents.

PGS Onshore Inc.

2006 - 2007

HSE (health safety environment) field advisor assigned to Libya. Duties included maintaining health safety and environment rules and regulations as set out by individual country and industry standards. Training and updating all crew members as required. Crews were largely nationals on the labour force and expatriates from around the world filling management positions.

Injury Research Unit - Transport Canada**1995 - 2006**

Accident and defect investigator responsible for investigating and analyzing public complaints in Western Canada. Investigations included potential vehicle and occupant safety defects on vehicles regulated by the Motor Vehicle Safety Act (MVSA) and covered all Canadian Motor Vehicle Safety Standards (CMVSS), such as automobiles, trucks, motorcycles, off-road vehicles, etc. Lecturing and instructing to industry associations, police and fire agencies, public groups and health authorities on mechanical defects, tires, air brakes, vehicle fires, occupant restraints, air bags and child restraint systems.

Calgary Police Service**1982 - 1995**

Technician licensed as a motor mechanic and as a heavy duty mechanic for all types of vehicles, including automobiles, large truck/trailer units, off-road construction equipment and oilfield units. In addition to regular fleet maintenance responsibilities, also had primary responsibility for technical input to the following CPS units:

- a) **Traffic Response Units:** inspecting vehicles involved in serious and fatal accidents and assisting accident investigation teams to prepare court documents.
- b) **Hit and Run Unit:** examining vehicles allegedly involved in hit and run traffic accidents to determine if mechanical condition was a factor. Assisted in removing components for lab inspection.
- c) **Auto Theft Unit:** examining vehicles to determine what mechanical alterations and modifications had been made on stolen vehicles.
- d) **Truck Unit:** inspecting commercial vehicles to assess compliance with Alberta safety regulations.

Heavy Duty Mechanic**1972 - 1982**

Seismic mechanic and assistant crew chief with Bendix United Geophysical for a total of approximately 6 years over the period 1972 to 1982. Responsible for maintenance of equipment including all vehicles and machinery (including contractor equipment) and camp facilities. Work was seasonal.

Over same period contracted with Southridge Lincoln Mercury, Marlborough Ford, and DeVries (total duration approximately 4 years). Duties included routine vehicle maintenance and acting as a service consultant.

PROFESSIONAL ASSOCIATIONS & MEMBERSHIPS

- Society of Automotive Engineers (SAE), Associate Member, 1996
- Canadian Association of Technical Accident Investigators & Reconstructionists (CATAIR), 1999
- Canadian Association of Road Safety Professionals (CARSP), 1999
- Fire Investigation Association of Alberta (FIAA), 2001

PROFESSIONAL & TECHNICAL CERTIFICATIONS

- a) All Terrain Vehicle (ATV) Instructor, Canadian Safety Council, 1 week, 2007
- b) Child Restraint System Instructor, St. John Ambulance, 2003-2007
- c) Instructor for Child Car Seat Program, Alberta Transportation, 1996-2003
- d) Fueling of Propane Motor Fuel Instructor, 1993 to 1995
- e) Inspector, Transportation of Dangerous Goods, Alberta Public Safety, 1986 to 1996
- f) Motor Vehicles Inspector (including School/Commercial Bus, Trucks, Truck-tractors and Trailer/Semi Trailers), License #A0516, 1991
- g) Air Brake Instructor, Certification #234, 1990

- h) Class 1 (tractor-trailer) drivers license, 1988
- i) Heavy Duty Mechanic, License #CA7983, 1979
- j) Motor Mechanic, Interprovincial License (Red Seal) #4129 PF, 1974

TECHNICAL TRAINING

Accident Reconstruction

- *Crash Data Recorder Certification Course*, Technician/Analyst, Langley, BC, 1 week 2009
- *Taproot investigation*, Vancouver, 1 week, 2007
- *Damage Analysis Crash Reconstruction*, Institute of Police Technology and Management (IPTM), Calgary, 5 days, 2005
- *Collision Reconstruction Course, Level IV*, RCMP, Chilliwack BC, 2 weeks, 2005
- *Crash Data Recorder Course*, Vetronix, Toronto, 2 days, 2001
- *Advanced Collision Analysis Course*, Level III, Canadian Police College, Ottawa, 3 weeks, 1998
- *Basic Photography Course*, Identification Section, CPS, 1 week, 1997
- *Speed Analysis for Traffic Accident Investigation*, IPTM, correspondence, 1997
- *Commercial Vehicle Reconstruction Course*, Calgary Police Service (CPS), 1 week, 1996
- *Collision Investigation Level II*, CPS, 1 week, 1990

Vehicle Mechanical

- *Damage Appraisal, Heavy Truck & Trailer*, SAIT, 1 week, 2009
- *ABS Brake Systems*, Ford Training School, 3 days, 1995
- *Practical Skill Applications Regarding Air Brakes*, Joint Police Forces Collision Investigation Workshop, 2 days, 1993
- *Commercial Vehicle Safety Alliance course*, 1 week, 1991
- *Anti-lock Brake Systems*, 1 week, 1989
- *Wheel Alignment* (Journeyman updating), 3 days, 1989
- *Failure Analysis* (metallurgical), S.A.I.T., 1 week, 1988
- *Propane Fuel Systems* (Journeyman updating), 3 days, 1988
- *Advanced Tune-Up* (Journeyman updating), 3 days, 1987
- *Hydraulic & Air Brakes* (Journeyman updating), 1 day, 1984
- *Air Brake Seminar*, Bendix, 1 day, 1983
- *Transmission Seminar*, A.T.R.A., 1 day, 1983
- *Caterpillar Service Training - Series 3406-3408*, 1 week, 1981
- *Detroit Diesel Service Training - 8.2 Litre Engine*, 1 week, 1980
- *Heavy Duty Transmission*, S.A.I.T., evening course, 1980
- *Detroit Diesel Service Training - Series 53/71/92*, 1 week, 1980

Fire

- *Investigating Vehicle Fires*, Fire Investigation Assoc. of Alberta, Calgary, Sept 20-22, 2001
- *Fire Cause Determination*, Calgary Fire Department, 1 week, 1996

Safety

- *Transportation Safety Director*, Red Deer College, 2009
- *Alberta OH&S Regulations update*, Calgary, 1 day, 2008
- *Hours of Service and Fatigue Management*, Enform, 1 day, 2008
- *Seismic Field Operators Supervisor course*, Enform, Calgary, 2007
- *H2S Alive*, Enform, Calgary, 2006
- *General Oilfield Driver Improvement*, Enform, Calgary, 2006
- *Child Passenger Safety Training Course*, Train The Trainer, Ottawa, 1999
- *Carrier Compliance on Driver's Hours of Service*, Alberta Transportation, 2 days, 1995
- *Dangerous Goods Instructors Orientation*, Alberta Public Safety, 1 week, 1983

PRESENTATIONS

Child Car Seat Training, Calgary Health Region, yearly from 1996 to 2006

Lecturer on Vehicle Nomenclature and Occupant Restraints, Level III collision reconstruction, Canadian Traffic Education Center, numerous times from 2000 to 2009

Lecturer at Commercial Vehicle Reconstruction and Dynamic Brake Testing Seminar, CATAIR, Edmonton, 1999

Safety Panelist, Alberta Fleet Maintenance Supervisors Association Meeting, 1987

CONFERENCES

ARC-CSI Crash Conference, Las Vegas, 4 days, 2008

Canadian Multi-disciplinary Road Safety Conference (Transport Canada), 2004, 2003, 2001, 1999, 1997, 1995

Canadian Association of Technical Accident Investigators & Reconstructionists, Annual Conference s in 2005, 2002, and 1995

Society of Automotive Engineers, International Congress & Exposition, Detroit, 2005, 1996

OTHER ACTIVITIES

Assistant Manager for Scuba, World Police Fire Games, Calgary, 1997

Scuba Diving Instructor (1993 to date)

Building and racing a drag race car from 1976 to 1988

Alberta Mustang Auto Club, Calgary - past president

Rebuilding classic automobiles, all aspects of restoration

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