**System Safety Society Canada Chapter**

**Spring Event**

**presents**

**System Safety in Rail Transportation: The Way Forward *Focussing on the Rail Regulatory Regime, Designing Rail Safety Systems, Investigations and Citizen Engagement***

May 30, 2013 from 7:45 am to 12:30 pm

Nepean Sailing Club, [3259 Carling Avenue (Dick Bell Park), Ottawa, ON](http://maps.google.ca/maps?f=q&source=s_q&hl=en&geocode=&q=3259+Carling+Avenue,+Ottawa,+ON&sll=49.891235,-97.15369&sspn=40.024225,79.101563&ie=UTF8&z=16&iwloc=A)

**Timeline of Events**

7:45 – 8:30       Registration and breakfast

8:30 - 8:40        Introduction

8:40 – 9:20       Speaker #1 – Roger Woodhead and Brian McDonnell

9:20 – 10:00     Speaker #2 – Daniel Holbrook

10:00 – 10:15   Break

10:15 – 11:05   Speaker #3 – David L. Jeanes

11:05 – 11:45   Speaker #4 – Terry Kelly

11:45 – 11:50   Mini break

11:50 – 12:25   Panel discussion

12:25 – 12:30 Conclusion

See <http://canada.system-safety.org/> for more information

Click on <<[http://issccanadamay302013.eventbrite.ca](http://issccanadamay302013.eventbrite.ca/)>> to register

First Speaker: 8:40 – 9:20

**Roger Woodhead Ph.D., P.Eng.**

Design Manager

Rideau Transit Group Engineering

Joint Venture on the Confederation Line

From 2005 to 2009 Roger was Technical Director for SNC Lavalin Inc. the EPC Contractor for the $2 billion Canada Line Rapid Transit Project in Vancouver BC and was responsible for overseeing all engineering, quality management and technical issues. As such he was heavily involved in the Systems Certification Plan and obtaining the final operating permit.

Roger has worked in both the consulting engineering and construction industries for over 35 years. From 1990 to 1995 he worked on the $1.5 billion Hibernia Gravity Base Structure (GBS) in Newfoundland where he was Site Development Engineering Manager and Technical Services Manager for construction of the GBS.

He was Design Manager and Project Director for SNC-Lavalin on a $50 million cut and cover tunnel in Kuala Lumpur and Quality Systems Manager on the $1.2 billion SkyTrain Millennium Line.

Roger is also an Adjunct Professor in Construction Management at UBC.

**Brian McDonnell M.Eng.Sc., P.Eng.**

Systems Assurance Manager

Rideau Transit Group on the Confederation Line

Brian McDonnell specializes in systems assurance and safety certification for the transit industry. He is Systems Assurance Manager for SNC Lavalin on Vancouver’s Evergreen Line, and for Edmonton’s LRT. From 2006 to 2009 he served in the same capacity for SNC Lavalin on the Canada Line in Vancouver and was responsible for developing and implementing the System Certification Plan. From 2003 to 2010 he developed and implemented the System Certification Plan for the Sheppard Subway. Brian is also Independent Safety Assessor for retrofit of Automatic Train Control in the TTC subway, and has performed a variety of transit safety studies and risk assessments.

**Abstract**

Safety Certification of the Confederation Line

This presentation will discuss Rideau Transit Group's advance planning for System Safety Certification for the Confederation Line. The presentation will draw heavily on both speakers' experience on the Canada Line Rapid Transit System in Vancouver, BC where they were both key players in the team that successfully achieved Revenue Service 3 1/2 months ahead of schedule.

Second Speaker: 9:20 – 10:00

***Daniel Holbrook***

Manager, Head Office and Western Regional Operations

Railway/Pipeline Investigations Branch

Transportation Safety Board

Mr. Daniel Holbrook has been at the Transportation Safety Board of Canada (TSB) in the Railway/Pipeline Investigations Branch since 1995. He held the position of specialist/Senior Investigator Operations until 2001 when he took on his current role as Manager Head Office and Western Regional Operation. During his time at the TSB, he has been a key investigator and provided management oversight to a number of investigations of significance, for example, Edson, Field Hill, Biggar, Thamesville, McBride, Wabamun, Cheakamus, Lillooet. Before joining the TSB, Mr. Holbrook held was Chief of Railway Operations and Transportation of Dangerous Goods at Transport Canada’s Ontario Region. He held certifications as a railway safety officer under the *railway Safety Act*, a dangerous Goods inspector under the *Transportation of Dangerous Goods Act* and a safety officer under Part II of the *Canada Labour Code*. From 1983 until 1992, Mr. Holbrook worked for Canadian Pacific Railway (CP) where he gained considerable experience in the field of railway operations. At CP he worked as a trainman, conductor and locomotive engineer. In management at CP, he held the positions of divisional trainer, supervisor of operating practices and trainmaster.

**Abstract**

Railway System Safety in Practice

The mandate of the Transportation Safety Board of Canada is to advance transportation safety in the marine, pipeline, rail and air modes of transportation by (in part) conducting independent occurrence investigations in order to understand their causes and contributing factors, and, in doing so, identifying systemic safety deficiencies. This presentation will discuss the organization of the TSB, and its approach to investigations. It will also give a snapshot of the current state of railway safety in Canada. Finally, it will discuss some recent investigations as indicators of current railway system safety philosophy in practice.

Third Speaker: 10:15 – 11:05

***David L. Jeanes, P.Eng***

President

Transport Action Canada

David is president of Transport Action Canada, a national advocacy group for public transportation. He holds a B.A.Sc. from the University of Toronto in Engineering Science and an M.Eng. in Electrical Engineering. Transport Action was founded in 1976 as Transport 2000 and is concerned with transcontinental and intercity transportation by rail, air, and bus as well as urban transit and marine ferries within Canada. Transport Action has appeared before hearings and parliamentary committees in reviews of railway safety and air safety. We participate in Transport Canada committees on air safety, (such as CARAC). We have also focussed on truck and transit bus safety issues. Transport Action is regularly contacted by the media for comment on major transportation incidents.

**Abstract**

Public Transportation Safety and the Public Interest

David Jeanes will discuss public concern about the safety of different transportation modes, particularly rail. A reality check of the real risk levels is often needed. Issues have been raised about the Safety Management Systems approach which shifts safety responsibility from government inspection to self-regulation by transport providers. Government regulation can affect fatigue among train engineers, airline, pilots, and bus or truck drivers. There have also been concerns about the availability of qualified persons to assist safe evacuation of aircraft, trains and buses in emergency situations.

Fourth Speaker: 11:05 – 11:45

***Terry Kelly***

Managing Director

SMS Aviation Safety Inc.

Terry Kelly is the Managing Director of SMS Aviation Safety. He was an advisor to the Independent Panel that reviewed the Railway Safety Act in 2006-7. His experience in safety spans 35 years in a number of domains in North America, Europe, the Middle East and the Caribbean.

SMS Aviation Safety assists industry executives and government officials with the development and implementation of long-term plans, policies and safety programs. Current work focuses on the management of safety-risks related to change in large organizations and regulatory bodies. As such, it has been actively engaged in the design, development and implementation of tools to custom-build Safety Management Systems (SMS), and to measure safety performance – measurement protocols that are employed by the Operator, and by the regulator.

**Abstract**

Imagine

The Railway Safety Act implemented in 1989 was the first attempt to introduce performance-based safety regulations in any sector of transportation in North America. Subsequent reviews of the legislation, regulations and standards have demonstrated the challenges of such a regulatory program – challenges that have emerged in the performance-based programs of other safety critical industries around the world. Most regulatory programs are not designed to effectively oversee the ‘system safety’ of increasingly complex services. This presentation describes a world that lies just slightly over the horizon. In this future world, rail safety oversight programs are structured on system safety principles and concepts; the regulator effectively measures the safety performance of rail companies; and risk-based information and data drive the priorities and direction of the regulator’s performance-based oversight program.