

**THE INSTITUTE OF ELECTRICAL/ELECTRONICS ENGINEERS
AND
THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS
National Capital Land Transportation Committee
Invite You To Our Monthly Luncheon Meeting
Thursday May 15, 2008, 11:30 am**



Speaker: Mark Hartong, P.E.
Senior Electrical Engineer
Office of Safety
Federal Railroad Administration
Washington, DC

Topic: Positive Train Control—A Regulatory Perspective

Place: American Public Transportation Association
Conference Room - 11th Floor
1666 K Street, NW, Washington, DC

Red Line: Farragut North (K Street Exit)
Orange/Blue Lines: Farragut West (17th Street Exit)

Date/Time Thursday, May 15, 2008, 11:30 am
NOTE THURSDAY DATE!

Lunch: \$15 cash at the door.

Reservations: Ken Briers ken.briers@parsons.com 202-775-3397
Karl Berger karl.berger@dcm-va.com 703-803-7917
(Reservations by 4:00 PM Monday May 12)



ABOUT THE SPEAKER:

Mark Hartong is a Senior Electronics Engineer in the Office of Safety, Federal Railroad Administration, U.S. Department of Transportation, Washington, DC. The FRA is the regulatory and enforcement agency responsible for promoting safe and successful railroad transportation within the United States, and advancing the executive branch policies regarding freight and passenger rail. As an interdisciplinary electronics engineer he serves as the senior technical authority for safety and security critical electronics and software used in railroad operations. Mr. Hartong is also a Ph.D. student in Information Technology at George Mason University, Fairfax, Virginia. His research interests include software engineering, software systems safety, information security, forensics, and control systems security.

Prior to joining the Federal Railroad Administration in 2003, Mr. Hartong was a Staff Systems Engineer with Lockheed Martin Corporation where he provided systems engineering support for a wide range of classified communications hardware and software development programs. He has also been both a Submarine Warfare Officer and a Naval Engineering Duty Officer in the US Navy. Mr. Hartong received a M.S. in Software Engineering from George Mason University, a M.S. in Computer Science from the US Naval Postgraduate School, Monterey, California, and a B.S. with honors in Mechanical Engineering from Iowa State University, Ames, Iowa. He is also a Registered Professional Engineer.

ABOUT THE TOPIC:

Mr. Hartong will provide an overview of the FRA Positive Train Control (PTC) initiative, describe its functions and goals, and explain the scope of FRA regulations. The main PTC functions are to:

- Prevent train collisions
- Enforce speed restrictions
- Protect maintenance of way personnel

These functions are mandated by an FRA performance-based standard. The FRA does not specify the mechanism by which the standard is met. The FRA evaluates compliance by:

- Approving design documents submitted by the railroad
- Evaluating adequacy of the safety analysis
- Monitoring compliance

Principal design documents include the Software Management Control Plan, Railroad Safety Program Plan, and the Product Safety Plan. Mr. Hartong's presentation will review and contrast the various approaches and technologies used in four active PTC projects.

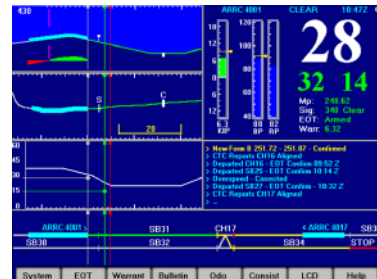
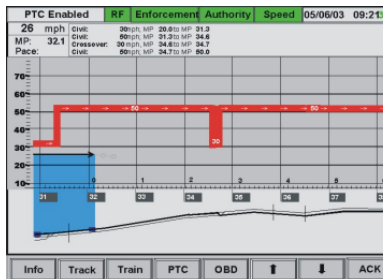
NEED MORE INFORMATION? CALL AN OFFICER!

Chairman: Karl Berger, P.E. Karl.Berger@dcm-va.com 703-803-7917
Vice Chairman: Martin Schroeder, P.E. mschroeder@apta.com 202-496-4885
Secretary-Treasurer: Ken Briers ken.briers@parsons.com 202-775-3397



IEEE/ASME National Capital Land Transportation Committee MAILING LIST

- Please check the mailing label and provide any necessary corrections.
- If you would like to receive your notice by e-mail, contact Karl Berger at karl.berger@dcm-va.com.



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FUTURE MEETINGS:

- June 5— TBD
 - September 9
 - October 14
 - November 11
 - December 9
- See more about the Land Transportation Committee at our website:

<http://www.ieee.org/dc-ltc>

IEEE/ASME National Capital Land Transportation Committee SPECIAL NOTES:

- **Membership in the ASME or IEEE is not required. There are no dues.**
- Guests are always welcome; bring an associate !
- Tell us of other associates to be placed on the meeting announcement list! Give us their names and e-mail addresses.

IEEE/ASME
 Land Transportation Committee
 5667 Stone Road #465
 Centreville, VA 20120



FIRST CLASS