



THE INSTITUTE OF
ELECTRICAL AND
ELECTRONICS
ENGINEERS, INC.

VEHICULAR TECHNOLOGY SOCIETY

Land Transportation Committee

PLEASE REPLY TO:

Land Transportation Committee
Washington Chapter

February 10, 1987

Social Hour:
11:30 AM

Subject: SPACERAIL - An Old Idea With
A New Look

Lunch:
12:00 Noon

Speaker: John A. Auer, Jr.
General Railway Signal Company

Place: Marvin Center, 3rd Floor
George Washington University
800 - 21st Street, N. W.
Washington, D. C.

Contact: Jerry Hott (785-1351), or
Helmut Kolig (383-3034) for
reservations before 4:00 PM
Friday, February 6, 1987

Spacerail is a new railway signaling and traffic control system, based on the direct linking of all trains with the control office through data radio. The track circuits, pole lines, distributed logic and wayside signals of conventional railway systems are replaced by inert wayside beacons, two-way radio, centralized logic and cab signals. The basic architecture and development status of Spacerail will be described.

Jack Auer, Manager of Advanced Engineering at the General Railway Signal Company, has been involved with railway signaling technology for 37 years. The holder of 91 U. S. patents, he has authored numerous technical papers in the transportation field. He is a member of the IEEE, APTA, Sigma Xi, the Transportation Research Board and the Professional Engineering Society.



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PLEASE REPLY TO:

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March 10, 1987

Social Hour:
11:30 AM

Subject: Developments in AC Propulsion and
GTO Thyristors

Lunch:
12:00 Noon

Speaker: Ake Wennberg
President, ASEA Traction US

Place: Marvin Center, 3rd Floor
George Washington University
800 - 21st Street, N.W.
Washington, D.C.

Contact: Jerry Hott (785-1351), or
Helmut Kolig (383-3034) for
reservations before 4:00 PM
Friday, March 6, 1987

Mr. Wennberg's presentation will report on the latest efforts in ASEA's development of AC propulsion systems and the application of GTO-Thyristor technology to recent and planned projects.

Starting in the System Development Department of ASEA in 1977 as an electrical engineer, Mr. Wennberg has been intimately involved in the design and engineering of subject systems and its applications to various international projects. He is currently President of ASEA Traction US and holds a Master of Science degree in Electrical Engineering from Chalmers University of Technology in Gothenburg, Sweden.



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PLEASE REPLY TO:
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April 14, 1987

Social Hour:
11:30 AM

Subject: The Advanced Train Control System -
A New Era in Railroad Control Systems

Lunch:
12:00 Noon

Speaker: Gary Pruitt
ARINC Research Corporation

Place: Marvin Center, 3rd Floor
George Washington University
800 - 21st Street, N.W.
Washington, D.C.

Contact: Jerry Hott (785-1351), or
Helmut Kolig (383-3034) for
reservations before 4:00 PM
Friday, April 10, 1987

The Advanced Train Control Systems project represents a major step forward by the railroads of North America to take advantage of data communications and computer technology. ATCS consists of central dispatch systems, a data link to trains, work gangs and wayside equipment; locomotive equipment for location tracking, communications, control and data collection; wayside sensor and switch control systems; and other system elements. ATCS will employ state-of-the-art mobile data communications, distributed computer systems and fully integrated, modular communications, command, control and information systems architecture, including automatic location tracking and speed/authority enforcement.

Gary Pruitt is Manager of the Surface Transportation and Distribution Group of ARINC Research Corporation, located in Annapolis, Maryland. He is also project manager of the system engineering team for the Advanced Train Control Systems (ATCS) project. Mr. Pruitt holds a BSEE degree from Drexel University and an MSEE degree from John Hopkins University.



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May 12, 1987

Social Hour:
11:30 AM
Lunch:
12:00

Subject: Advanced Transportation Systems

Speaker: J. Edward Anderson
Professor of Aerospace and
Mechanical Engineering
Boston University

Place: Marvin Center, 3rd Floor
Geo. Washington University
800 21st Street, N.W.
Washington D.C.

Contact: Jerry Hott (785-1351), or
Helmut Kolig (383-3034) for
reservations before 4:00 PM
Friday, May 8, 1987

Professor Anderson from Boston University will present a new form of public transit system that has been derived on economic grounds to minimize cost per passenger mile. The system uses linear induction motors, solid-state drives, microprocessor controls and electronic communications, and can be designed, planned, manufactured, and managed with the aid of computer programs.

From the Mechanical Engineering Department of the University of Minnesota, Professor Anderson came to Boston University in fall of 1986. He holds a BSME from Iowa State University, a MSME from the University of Minnesota and a Ph.D. in Aeronautics and Astronautics from M.I.T.



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Washington Chapter

June 9, 1987

Social Hour:
11:30 AM

Subject: The Iron Highway -- An
Integrated Transport System

Lunch:
12:00 Noon

Speaker: Thomas H. Engle
New York Air Brake Company

Place: Marvin Center, 3rd Floor
George Washington University
800 - 21st Street, NW
Washington, DC

Contact: Jerry Hott (785-1351), or
Helmut Kolig (383-3034) for
reservations before 4:00 PM,
Friday, June 5, 1987

Under the title "The Iron Highway - An Integrated Transport System," Mr. Engle will present the advantages and drawbacks of the existing Railway Freight Transport System and show how, in general, an integrated system design approach can be used to augment the advantages and overcome the drawbacks. Four systems:

- Terminal Loading and Unloading
- Propulsion and Control
- Cars and Suspension
- Maintenance and Repair

are designed independently in order to maximize performance and minimize cost. Finally, examples of the application of the integrated design methodology will be given by explaining the design of New York Air Brake Company's Iron Highway Trailer Train System.

Mr. Engle holds a BSME degree from Wayne State University and has worked for the RI, NYC and C&O Railroads. He is presently General Manager, New Product Development at NYAB Company.

This will be the final meeting of the Land Transportation Committee for the 1986/87 season. We wish you an enjoyable summer and hop to see you again at our first meeting in September 1987.



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PLEASE REPLY TO:
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Washington Chapter

September 15, 1987

Social Hour: Subject: Intermodal Communications Network
11:30 AM
Lunch: Speaker: Thad H. Harden
12:00 Manager, Telecommunications
 Technology
 ARINC Research Corporation

 Place: Marvln Center, 3rd Floor
 George Washington University
 800 - 21st Street, N.W.
 Washington, D.C.

 Contact: Jerry Hott or Leslie Randall
 (785-1351), or Helmut Kolig
 (383-3034) for reservations

The 1987/88 season of meetings of the Land Transportation Committee will be opened with a presentation by Mr. Thad H. Harden, Manager Telecommunications Technology at ARINC Research Corporation, on the topic of a proposed intermodal communications network. A system for intermodal, electronic data interchange, acquired, integrated, and operated by the transportation industry could interconnect existing, established computer and communications systems and provide for an industry-wide data exchange.

Please note that this September meeting will take place on the third Tuesday of the month (September 15) due to the preceding Labor Day weekend.

In addition, we have to announce the following: As the cost for meals and drinks at the George Washington Club has increased during our last meeting session, we are, regrettably, forced to set the luncheon cost at \$15 per person for this year. This will, however, include one beverage (beer, wine, or soda) at no extra charge. We will still request you pay in cash (no personal checks, please.)

Please make reservations before 4:00 p.m., Tuesday, September 11.



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PLEASE REPLY TO:
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October 13, 1987

Social Hour: Subject: Rail Passenger Projects
11:30 AM
Lunch: Speaker: Arrigo P. Mongini
12:00 Federal Railroad Administration

 Place: Marvin Center, 3rd Floor
 George Washington University
 800 - 21st Street, N.W.
 Washington, D.C.

 Contact: Jerry Hott 785-1351, or
 Helmut Kolig 383-3034
 for reservations

This months speaker is Mr. Arrigo P. Mongini, Deputy Associate Administrator for Passenger and Freight Services. Mr. Mongini will be discussing the status of past, present and future Northeast Corridor Improvement projects as well as other FRA activities.

Mr. Mongini holds both a Bachelors and a Masters Degree from MIT in Civil Engineering. He has worked as head of the Central Transportation Planning staff in Boston, as Assistant Budget Director at the Massachusetts Bay Transportation Authority, and as Division Chief in the office of the Secretary of the USDOT.

Please make reservations before 4:00 p.m., Friday, Oct. 9.



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November 10, 1987

Social Hour:
11:30 AM
Lunch:
12:00

Subject: The Effects of Imported Railroad
Products on the North American
Railroad Industry from an
Importer's Perspective

Speaker: Alan Briggs
Sales Mgr.- Track Products
British Steel Corp., Inc.

Place: Marvin Center, 3rd Floor
George Washington University
800 - 21st Street, N.W.
Washington, D.C.

Contact: Jerry Hott 785-1351, or
Helmut Kolig 383-3034
for reservations before
Friday Nov. 6, 1987, 4 PM

This month's presentation will outline the developments in rail and track technology since the early 1970's and the possible directions of future developments.

Mr. Alan Briggs is presently Sales Manager-Track Products for British Steel Corp., Inc. He moved to the United States in 1976 when he joined the Strip Mills Division of the state owned British Steel Corporation. He took over the sales of rails in 1979 and has recently been involved in the introduction and development of new types of trackwork, switch machines, and grade crossing barriers.



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December 8, 1987

Social Hour:
11:30 AM

Subject: Rail Based "Peace Keeper"
Missile System

Lunch:
12:00

Speaker: Lt.Col. Thomas Maxwell
U.S. Air Force

Place: Marvin Center, 3rd Floor
George Washington University
800 - 21st Street, N.W.
Washington, D.C.

Contact: Jerry Hott 785-1351, or
Helmut Kolig 383-3034
for reservations before
Friday, Dec. 4, 1987, 4 PM

Lt.Col. Maxwell is the project monitor on the Secretary of the Air Force's staff for the Peacekeeper missile. As part of his duties, he works closely with the U.S. rail industry, major segments of the aerospace industry, othe branches of the Department of Defense, State Department, Department of Transportation, and various congressional staffs. Colonel Maxwell has 17 years of experience in acquiring, supporting and operating intercontinental ballistic missile systems. He has been assigned to his present position in the Pentagon for two years.