Social Hour: 11:30 AM

Subject: IC-3 Self-Propelled Diesel Rail Car

Speaker: Mr. Jan Skopol

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

Contact: Jerry Hott 785-1351, or
Lou Sanders (202) 858-4685
for reservations before
Friday, January 5, 1990, 4PM

BIOGRAPHICAL DESCRIPTION:

Mr. Skopol is the Chief Engineer of Scandia-Randers A/S, Denmark, a Danish manufacturer of rolling stock equipment specializing in modern, lightweight passenger transportation equipment. Scandia-Randers is a member of the ABB group.

Mr. Skopol has a Masters degree in Mechanical Engineering from the University of Lund, Sweden. He joined ABB, then ASEA, in 1982, and has since occupied a variety of positions in Sweden and several other countries.

Jan Skopol's subject of his presentation is the newly developed IC-3 rail passenger rolling stock equipment, a self-propelled diesel/hydraulic vehicle soon to enter revenue service in the Danish railway system. The type of vehicle and the operational capabilities are very similar to the RDC concept successfully utilized in the United States and Canada in the fifties and sixties, with some RDC's still providing rail passenger services. The IC-3 includes state-of-the-art technologies such as electronic controls, lightweight carbody shells and an innovative method to couple cars at the control cab ends.
DATE/TIME: Tuesday, February 13, 1990
           11:30 Social; 12:00 Lunch; 12:30 Speaker

PLACE:    University Club, George Washington University
           800 21st Street, Washington, DC

SPEAKER:  Mr. Karl W. Berger, Principal
           Lea+Elliott, Inc., Washington, DC

TOPIC:    Benefits of AC Drive

PRICE:    $15.00 cash at door (Club will not accept checks)

RESERVATIONS: (By February 9): Gerald Hott 202-785-1534
               Lou Sanders 301-266-4685

ABOUT OUR SPEAKER:

Mr. Berger is a Principal of Lea+Elliott, Inc., Washington, D.C. He currently manages a project to provide contract oversight on the design and delivery of 10 ac drive locomotives for the Metro North Commuter Railroad. He also provides technical support to Seattle Metro for their dual-mode ac drive trolley buses.

Prior to becoming a consultant, Mr. Berger was a propulsion system engineer at Westinghouse Transportation Division. His work there included design of the propulsion system for the rebuilt Metroliner cars for which he received a patent. He was responsible for commissioning the world's first microprocessor-controlled propulsion system on the Rio de Janeiro Metro.

Mr. Berger is a registered professional engineer in Pennsylvania, Virginia, California, New York, New Jersey and Florida.
Tuesday, March 13, 1990

Social Hour: 11:30 am  Subject: The Georgetown Branch Study

Lunch: Noon  Speaker: Glenn S. Orlin, P.E., AICP

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

Contact: Jerry Hott, 785-1331, or
Lou Sanders, (301) 266-4685
for reservations before
Friday, March 9, 1990, 4 PM.

Description and Biographical Information:

Mr. Orlin is a graduate of Oberlin College with Masters Degrees in Regional Planning and Civil Engineering from the University of North Carolina and North Carolina State University, respectively. He has served in a variety of positions of increasing responsibility in North Carolina and Maryland culminating in his current assignment as Chief, Planning and Programming, Montgomery County DOT.

Mr. Orlin will discuss the Georgetown Branch Study for which he has served as project manager since 1985.

[Signature]
Louis P. Sanders
THE GEORGETOWN BRANCH TROLLEY/TRAIL PROJECT:

THE SILVER SPRING & BETHESDA TROLLEY AND THE CAPITAL CRESCENT TRAIL

On November 29, 1989, the Montgomery County Council approved a new trolley line (the "Silver Spring & Bethesda Trolley") and hiker-biker trail (the "Capital Crescent Trail") connecting Bethesda and Silver Spring, Maryland in suburban Washington. The trolley and trail largely runs along the right of way of the CSX Georgetown Branch railroad line, upon which freight service was discontinued in 1985. The project is unique in several respects: (1) it is the first circumferential light rail line in North America, linking two branches of the Washington area's Metrorail system; (2) it is the first light rail line to be designed and built with a hiker-biker trail along its entire length; and (3) to accommodate both the trolley and the trail, the trolley is designed to be over 60% single-tracked in its final configuration, not as an interim stage. The State of Maryland has agreed to design and build the 4.4-mile line. Here are some basic facts about the project:

- The Silver Spring & Bethesda Trolley would run between the two branches of Metrorail's Red Line in Montgomery County. The trolley would be set in a linear park with a hiker-biker trail and other recreational amenities. It would serve the suburban business districts of Silver Spring and Bethesda, each of which will have 40,000 employees within the next decade.

- The trolley line would be largely single-tracked (with four sections of double-track) in order to leave more room for the 10-foot-wide Capital Crescent Trail and a landscaped buffer. Since trolleys are powered by electricity, they do not pollute and produce very little noise; the buffer would be provided primarily to protect the privacy of neighboring residents from trolley and trail users.

- The trolley would have four all-day stops: the Silver Spring Metro Station, Lyttonsville, Connecticut Avenue, and Bethesda, plus an off-peak stop at Spring Street. The Bethesda trolley stop would be connected to Metrorail with the construction of a new elevator and mezzanine tying into the south end of the Metrorail station.

- The trolley would run every 6 minutes during rush hours, every 10-12 minutes in the mid-day and Saturday, and every 15 minutes in the evening and on Sunday. The hours of operation would be similar to those of Metrorail.

- The trolley would have a "barrier-free" fare collection system: passengers would buy tickets from a dispenser on the platform, and tickets would be checked by roving fare inspectors. This approach is being successfully applied on light rail systems on the West Coast.

- By trolley the trip between Silver Spring and Bethesda would take 9 minutes; this trip today takes over 15 minutes by car and over 20 minutes by bus during rush hour. These over-the-road times will steadily get worse as traffic increases, but the trolley travel time will remain at 9 minutes.

- According to the official ridership estimates (developed by a consultant retained by the Montgomery County Council), the trolley would have 13,300 weekday riders in 1995. It is estimated that 30-35% of these riders will be Prince George's County or District of Columbia residents.

- The estimated cost—including the Trolley/Trail combination between Silver Spring and Bethesda and the new entrance to Metrorail at the south end of the Bethesda Station—totals about $110 million (in FY 89 dollars), broken down as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silver Spring &amp; Bethesda Trolley</td>
<td>$ 65 million</td>
</tr>
<tr>
<td>Bethesda Metro South Entrance</td>
<td>$ 15 million</td>
</tr>
<tr>
<td>Capital Crescent Trail</td>
<td>$ 9 million</td>
</tr>
<tr>
<td>Right of Way</td>
<td>$ 21 million ($10 million already acquired)</td>
</tr>
</tbody>
</table>

The cost of the trolley line and Bethesda Metro entrance would be covered by the Maryland Department of Transportation, while the cost of the trail and right of way would be borne by Montgomery County.

- The Silver Spring & Bethesda Trolley and the Capital Crescent Trail are scheduled to open in 1994.

Montgomery County DOT
February 8, 1990
Tuesday, April 10, 1990

Social Hour: 11:30 am  Subject: Grand Central Terminal Renovation
                Vital Microprocessor Based Interlocking
                Control

Lunch: Noon  Speaker: Mr. William J. Matthews

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

Contact: Jerry Hott, 785-1351, or
         Lou Sanders, (301) 266-4685
         for reservations before
         Friday, April 6, 1990, 4 PM.

Description and Biographical Information:

Bill Matthews, senior technical consultant to General Railway Signal
Company, will discuss the application of Vital Microprocessor-Based
Interlocking Control to the renovation of Metro North Commuter
Railroad's Grand Central Terminal Facilities in New York City. The
principles of VPI will be reviewed followed by a description of the
system at Grand Central and an examination of the logistics of
installing the VPI components and related equipment.

Louis F. Sanders
Social Hour: 11:30 am  Subject: Northern Virginia Commuter Rail

Lunch: Noon  Speaker: Mr. Stephen T. Roberts

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

Contact: Jerry Hott, 785-1351, or
         Lou Sanders, (301) 266-4685
         for reservations before
         Friday, May 4, 1990, 4 PM.

Description and Biographical Information:

Mr. Roberts, Director of Finance for the Northern Virginia Transportation Commission, will discuss the progress being made on the Commuter Rail Project, including the procurement of cars and locomotives. Mr. Roberts has been the project manager for the Virginia Railway Express since its inception in 1985. Mr. Roberts joined the NVTC staff in 1976 as Intergovernmental Fiscal Relations Officer, to oversee the financial planning for mass transit in the six NVTC jurisdictions. In his current capacity as Director of Finance, Mr. Roberts' principal duties involve the budget, finance and legislative programs of the regional partners of METRO. Before joining NVTC, Mr. Roberts was a Budget Analyst for Fairfax County. Mr. Roberts is a graduate of the University of Wisconsin and holds a Master's Degree in public administration from the University of Oklahoma.
Social Hour: 11:30 am  
Subject: High Speed Rail

Lunch: Noon  
Speaker: Mr. Louis T. Cerny

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

Contact: Jerry Hott, 785-1351, or  
Lou Sanders, (301) 266-4685  
for reservations before  
Friday, June 8, 1990, 4 PM.

Description and Biographical Information:

Mr. Louis T. Cerny is currently serving as Executive Director, American Railway Engineering Association and Executive Director of the Engineering Division of the Association of American Railroads. Mr. Cerny who holds a Master of Science degree from the University of Illinois (1965) has served in various capacities within the railroad community.

Mr. Cerny will share with us his observations made during a recent tour of TGV facilities in France and Spain. His extensive background in maintenance of way will certainly make his commentary most enlightening.

Please be with us on our season ending meeting. It should be one of our most interesting.

Louis F. Sanders
WASHINGTON CHAPTER
ASME & IEEE
LUNCHEON MEETING

SPONSORS: AMERICAN SOCIETY OF MECHANICAL ENGINEERS, AND
INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

 SPEAKER: MR. THOMAS MARTIN FIORENTINO
Chief of Staff
Federal Railroad Administration

SUBJECT: FRA'S LEGISLATIVE AGENDA

PLACE: University Club, George Washington University,
800 21st. Street, Washington, D.C.

DATE/TIME: Tuesday, September 11, 1990
11:30 Social; 12:00 Lunch; 12:30 Speaker

PRICE: $15.00 cash at door

RESERVATIONS: Gerald Hott 202/785-1534
Raúl V. Bravo 703/425-6059

Please, call no later than Friday, September 7.

ABOUT OUR SPEAKER

Thomas M. Fiorentino is the Chief of Staff of FRA. Prior to
joining FRA Fiorentino was Assistant to the President of CSX
Technology, where he managed administrative, legal and government
affairs. From 1986 to 1987 he was Director, Risk Management, with
CSX Transportation; from 1984 to 1986 he was an attorney with the
Seaboard System Railroad, where he began his career in 1983.

In 1988 Fiorentino was appointed by Florida Governor Bob Martinez
to the Fourth Circuit Judicial Nominating Commission.

Fiorentino received a bachelor's degree in 1980 from the
University of Florida and his Juris Doctor degree in 1983 from
Mercer University.
INSTITUTE OF ELECTRICAL & ELECTRONICS ENGINEERS

AND THE

AMERICAN SOCIETY OF MECHANICAL ENGINEERS

CORDIALLY INVITE YOU TO ATTEND A TECHNICAL LUNCHEON

SOO LINE GOES FOR MICROPROCESSOR SIGNALING ON MAINLINE

This is the topic for the October 9, 1990 luncheon at the George Washington University Club. Speaker is W. J. Matthews, Senior Technical Consultant, General Railway Signal Company.

This technical luncheon is sponsored by the Land Transportation Division, IEEE and the Railroad Division, ASME.

The luncheon is at the George Washington University Club, 800 21st St. NW (3rd floor), Washington, DC (near Metro's Foggy Bottom Station).

Attitude adjustment is 11:30 am
Luncheon buffet at Noon
Technical presentation on Soo Line ctc follows.

Price is $15 cash at the door. For reservations, please call Gerry Hott at 202-785-1534 or Raul Bravo at 703-425-6059. Please call by Friday noon on October 5. NOTE: Use area codes for local calls.

Speaker William J. Matthews is a native of Newark, NY and a graduate electrical engineer from Syracuse University. He began his railroad career in the mechanical department of the New York Central working on train control. Later, he joined General Railway Signal, where he has held various engineering positions. He also holds six patents in railway signaling products. He is Senior Technical Consultant, whose many duties include liaison with various technical organizations.

NOTE: For the November 13, 1990 meeting the speaker will be Paul H. Reistrup, President, Monongahela Railway, who will speak on the future of high speed rail transportation. He is Chairman of TRB Committee A2MO2 Electrification and Train Control Systems for Guided Ground Transportation Systems.
INSTITUTE OF ELECTRICAL & ELECTRONICS ENGINEERS

AND THE

AMERICAN SOCIETY OF MECHANICAL ENGINEERS

CORDIALLY INVITES YOU TO LEARN MORE ABOUT

HIGH SPEED RAIL—The Outlook in the United States

You can hear what the prospects are for High Speed Rail outside of the Northeast Corridor at the November 13 meeting of the Land Transportation Division/IEEE and the Railroad Division/ASME.

Speaker is Paul H. Reistrup, President, Monongahela Railway who is also Chairman of the High Speed Rail Association.

The luncheon meeting is at the George Washington University Club, Marvin Center 3rd floor, 800 21st St, NW, Washington, DC (near Foggy Bottom Metro Station).

Attitude Adjustment is 11:30 am
Buffet luncheon is at Noon
Technical presentation on HSR follows

Price is $15 at the door. Please make telephone reservations by calling Louis Sanders at 202-858-4685 or 301-266-4685. Please call no later than Friday November 9, 1990.

Paul H. Reistrup has been president of the Monongahela Railway since June 1988. For 10 years before joining Monongahela, he was vice president of R. L. Banks, consultants. One of the projects he directed at R. L. Banks, was economic projections for high speed rail service. From 1975 to 1978, he was President of Amtrak, and previously had been a vice president of Illinois Central and ICG involved in passenger service, intermodal and traffic operations. A graduate of the U.S. Military Academy, Mr. Reistrup after his military service began his railroad career in 1959 with the Baltimore & Ohio and moved through several engineering, operating and management positions. At one point, he was in charge of B&O and later Chessie passenger operations. He left Chessie in 1967 to join Amtrak.
Cordially invites you to our monthly luncheon meeting

SPEAKER:    MR. R.E. (ROB) WRIGHT
            Passenger Locomotive Sales
            General Motors

TOPIC:      GM LOCOMOTIVES FOR PASSENGER SERVICES FOR THE NINETIES

PLACE:      UNIVERSITY CLUB, George Washington University
            Marvin Center, 3rd. Floor
            800 21st. Street, NW., Washington, D.C.

DATE/TIME:  Tuesday, December 11, 1990
            11:30 Social; 12:00 Lunch; 12:30 Speaker

PRICE:      $15.00 cash at door (Club will not accept checks)

RESERVATIONS: Lou Sanders  301/266-4685
              Raul Bravo     703/425-6059

ABOUT THE SPEAKER AND THE SUBJECT:

Rob Wright is in charge of the newly formed GM unit for the
development and sales of locomotives for passenger services,
indicating GM's recognition and commitment to rail passenger
transportation. Rob will speak and present on-going developments
to satisfy the demand during this coming decade.

Rob is a graduate of the St. Clair College in 1965 and the
University of Western Ontario in 1971. Rob has been with General
Motors since 1972.