

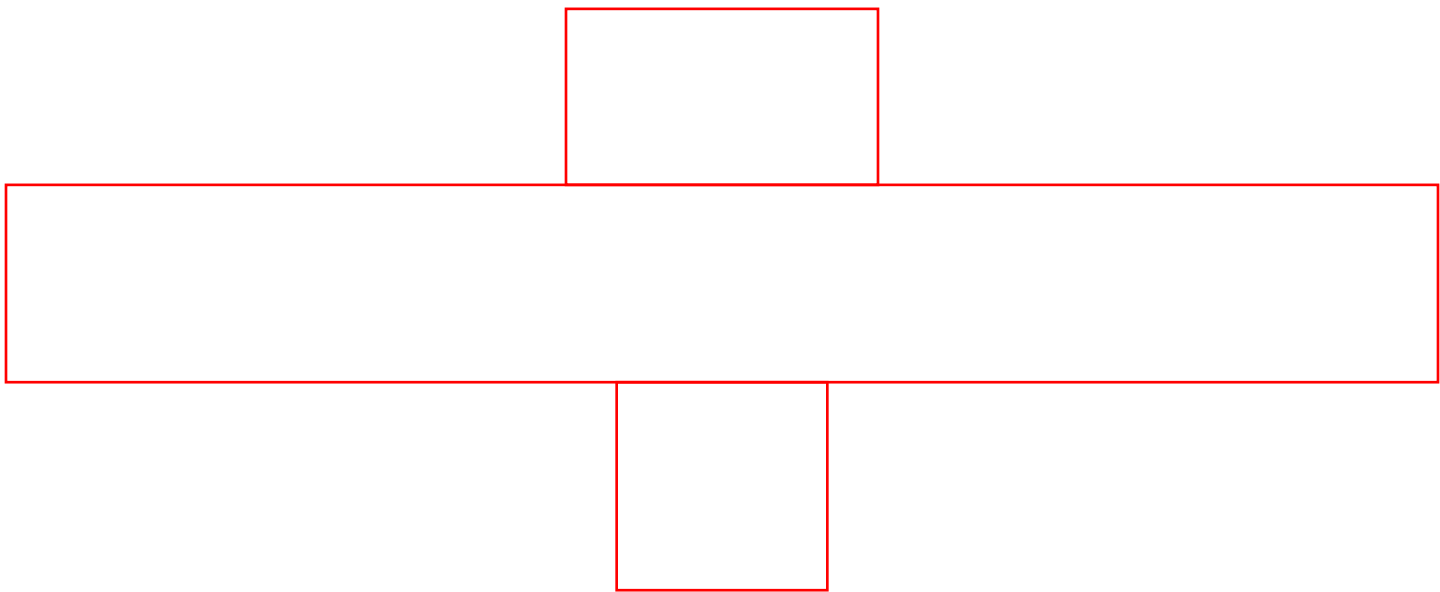
This is [Google](#)'s [cache](#) of <http://www.gwu.edu/~asemconf/prelprog.html> as retrieved on Dec 4, 2004 21:27:19 GMT.

[Google](#)'s cache is the snapshot that we took of the page as we crawled the web. The page may have changed since that time. Click here for the [current page](#) without highlighting. This cached page may reference images which are no longer available. Click here for the [cached text](#) only.

To link to or bookmark this page, use the following url: `http://www.google.com/u/gwu?q=cache:zho0Dafrf0oJ:www.gwu.edu/~asemconf/prelprog.html+M-CAM&hl=en&gl=us&ct=clnk&cd=1&ie=UTF-8`

Google is neither affiliated with the authors of this page nor responsible for its content.

These search terms have been highlighted: **m cam**



October 4-7, 2000

OVER 120 PROFESSIONAL PAPERS IN 30 PAPER SESSIONS IN THE

FOLLOWING 6 TRACKS:

- ¥ Management of Technical Start-ups & New Ventures
- ¥ Management of Fast Growth in Changing Markets and Technologies
- ¥ Advances in the Practice of Engineering Management
- ¥ Current Issues in the Management of Technical Organizations and Operations
- ¥ Engineering Management Practices in the New

- [Objective](#)
- [Registration](#)
- [Schedule](#)
- [Speakers](#)
- [Preliminary Program](#)
- [Hotel & Directions](#)
- [Local Information](#)
- [Instructions to Authors - Copyright](#)
- [Request Info](#)

[FAQ](#)

[Tours and Events](#)

[Committees](#)

[Cooperating Societies](#)

[ASEM](#)

[SEAS](#)

Millennium

¥ Engineering Management Tutorial Sessions

2 SPECIAL PANELS ADDRESSING:

¥ The Internet Changes Everything

¥ Management of Research and Technical Change

CONFERENCE WELCOME



asemconf@gwu.edu

A message from Donald R. Lehman, Vice President for
Academic Affairs,
The George Washington University

Dear Colleague:

The George Washington University is delighted to sponsor the 21st Annual Conference of the American Society of Engineering Management. With the help of the Society and local high-tech industry, we have developed a program to inform and to challenge practitioner, scholar, and student, alike. Washington, DC, is one of the fastest growing areas of the practice in the world, thus it is fitting that we sponsor the Conference and urge you to attend.

The GW program in engineering management goes back to 1953. At that time, at the closing of the Washington Navy Yard, we developed a course of study to assist Navy engineers to transition into project management roles. In the intervening 47 years, the Department of Engineering Management and Systems Engineering has contributed over 5300 graduates to the profession. With a student body of over 600, we are still at it! Sponsorship of the Conference is a part of our commitment to the ongoing development of the profession.

I hope that you will join in this conference October 4, 5, 6, and 7 in Washington, DC!

Sincerely,

Donald R. Lehman, Ph.D.
Vice President for Academic Affairs
The George Washington University

A message from Jerry D. Westbrook, P.E., President of
ASEM

Come join us at the 21st ASEM National Conference! It promises to be one of the outstanding events in the society's history. The George Washington University and the ASEM 2000 Executive Advisory Committee from the DC Metro area high technology community have done a great job in organizing an exceptional program. Look at the events described inside: Internet, entrepreneurship, knowledge management, and much more. It continues our tradition of providing the best forum for the exchange of information on the latest advances in the management of technology.

I urge all ASEM members and interested professionals to join in the year 2000 celebration of our growing society. Meeting space is limited. Register now! Don't miss this outstanding event: ASEM 2000 in Washington, DC!

Sincerely,

Jerry D. Westbrook, P.E.
ASEM President

CONFERENCE INFORMATION

ASEM 21st National Conference October 4-7, 2000

WHAT IS ASEM?

ASEM is the professional organization for engineering managers. The 2000 ASEM Conference brings together the nation's leading engineering managers, with a special emphasis on evaluating technical leadership in the

Washington metropolitan area's vibrant information systems technology sector. Participants come from all over the world to meet with professional peers, network and update themselves on new ideas in their field. The conference is structured to enable attendees to exchange ideas with industry, government, and academic leaders interested in the practice of leadership in engineering, scientific, and technical organizations. Special focus will be placed on the dynamics in the rapidly evolving information technology and telecommunications industries and the impact of technical management.

Back in our Nation's Capital after a 12 year hiatus, we expect this year's Conference to be bigger and better than ever. Our Executive Advisory Committee [EAC], comprising top executives from the high technology industry in the Washington Metropolitan area, has put together an excellent program. Our list of featured speakers includes John W. Sidgmore, Chairman of UUNet and Vice Chairman of the Board of WorldCom, and Dr. J. Robert Beyster, Chairman and CEO of SAIC.

WHO SHOULD ATTEND?

The Conference is aimed at managers and aspiring managers of high tech organizations, including start-ups. Attendees will include practitioners from industry and government, academics and students, researchers, innovators, and policy makers. Anyone interested in the impact of electronic communications on technical management, and/or the growth and change of technical organizations will benefit from participation. One of the Conference's six tracks is directed at persons interested in or participating in new technology ventures. The other tracks include issues associated with fast growth industries, advances in the practice and research in management of technical organizations, and applicable case studies.

WHERE AND WHEN

The Conference will be held at the Washington Marriott Hotel, 1221 22nd Street, NW, Washington, DC. The official Conference program starts with the Welcome Reception on Wednesday, October 4, 2000 and ends the afternoon of Saturday, October 7, 2000.

ASEM CONFERENCE 2000 SUMMARY

Wednesday, October 4, 2000

2:00-6:00pm Board Meeting

6:30-7:30pm Welcome Reception

Thursday, October 5, 2000

7:30-8:30am Continental Breakfast

8:30-10:00am Welcome & Keynote Address

10:00-10:30am Refreshment Break

10:30-12:00pm Session A, Tracks 1 through 6

12:15-2:00pm Lunch & Speaker

2:15-3:45pm Session B, Tracks 1 through 5

3:45-4:30pm Refreshment Break

4:30-6:00pm Session C, Tracks 1 through 6

6:30-7:30pm President's Reception

Friday, October 6, 2000

7:30-8:30am Continental Breakfast

7:45-8:45am ASEM Annual Meeting

9:00-10:00am Keynote Address

10:00-10:30am Refreshment Break

10:30-12:00pm Session D, Tracks 1 through 6

12:15-2:00pm Lunch & Speaker

2:15-3:45pm Session E, Tracks 1 through 6

3:45-4:00pm Refreshment Break

4:00-4:30pm Fifth EMJ Issue Session

4:30-6:00pm Session F, Tracks 1 through 4 & 6

6:30-7:30pm Banquet Reception

7:30-10:00pm Banquet Dinner

Saturday, October 7, 2000

7:30-8:30am Continental Breakfast

9:00-10:30am Panel 1: The Internet Changes Everything

10:30-10:45am Refreshment Break

10:45-12:15pm Panel 2: Managing Research &
Technical Change

12:30-2:30pm Lunch, Speaker, & Paper Awards

PROGRAM OVERVIEW

Technical Management: Key to Enterprise Success in the
21st Century

Technical Program Coordinators

General Chair: Robert Waters, D.B.A., Professor, Dept. of

Engineering Management and Systems Engineering, School of Engineering and Applied Science, The George Washington University,
Technical Program Chair: Jonathan P. Deason, Ph.D., P.E., Professor, Department of Engineering Management and Systems Engineering, The George Washington University,
Deputy Technical Program Chair: J. Rene van Dorp, D.Sc., Assistant Professor, Department of Engineering Management and Systems Engineering, The George Washington University

Track #1

Management of Technical Start-ups & New Ventures
This track will focus on emerging considerations in managing private sector enterprises in the New economy. It will cover such issues as managing rapid change and technological risk, legal issues confronting technical start-ups and new ventures, motivating technical employees under current market conditions, and team management.

Track Chair: Dennis Perry, Ph.D., Vice President, Science Applications International Corporation

Track #2

Management of Fast Growth in Changing Markets and Technologies
This track will focus on ways to attain maximum productivity in rapidly changing conditions, how to leverage technological innovations into bottom-line profits, and approaches to managing critical technologies. It also will cover discussions about how to maximize benefits of technology transfers and the commercialization of emerging technologies, as well as incubating new businesses from the ground up.

Track Chair: Elias Carayannis, Ph.D., Associate Professor, School of Business and Public Management, The George Washington University

Track #3

Advances in the Practice of Engineering Management
This track will focus on the state-of-the-art practices of

engineering management, including optimal utilization of the new concept of knowledge management and recent developments in the economic aspects of engineering management. It also will examine new tools for managing technical resources, especially in such areas of application as defense systems, solutions to environmental problems and operational systems optimization.

Track Chair: Lewis D. Walker, Principal, BAHHR, Inc., former Deputy Assistant Secretary of the Army (Environment)

Track #4

Current Issues in the Management of Technical Organizations and Operations

This track will examine specific current issues concerning the management of technical organizations, such as technical management of the U.S. air traffic control system, the management of our Nation's infrastructure assets, and Corps of Engineers business operations. The use of case studies and teaming approaches will be emphasized in this track.

Track Chair: J. Winston Porter, Ph.D., P.E., President, Waste Policy Center, former Assistant Administrator, U.S. Environmental Protection Agency

Track #5

Engineering Management Practices in the New Millennium

This track will cover a variety of important topical areas relevant to the practice of modern engineering management. These include recent advances in engineering management graduate education and training programs, and insights into recent engineering management-related research results. It also will include discussions about how to improve project management and how to use systems-based research results to improve technology management.

Track Chair: Shahram Sarkani, Ph.D., Professor, Department of Engineering Management and Systems Engineering, The George Washington University

Track #6

Engineering Management Tutorial Sessions

This track consists of a set of tutorial sessions on current engineering management topics. It includes sessions on engineering management on changing markets, improvisations in new economy marketing, and understanding organizational issues in rapidly changing times. It also includes tutorial sessions on early career planning for engineering management students and teaching operations management methodologies.

Track Chair: Gideon Frieder, D.Sc., Professor and A. James Clark Chair, Department of Engineering Management and Systems Engineering, The George Washington University

*All presenters are subject to change dependent on final acceptance of paper.

THE PROGRAM

Wednesday, October 4th

2:00 p.m. – 6:00 p.m.
Board Meeting

6:30 p.m. – 7:30 p.m.
Welcome Reception

Thursday, October 5th

8:30 a.m. – 10:00 a.m.
Welcome & Keynote Address
Keynote Speaker: John W. Sidgmore, Chairman UUNET
and Vice Chairman, WorldCom

10:30 a.m. – 12:00 p.m.
Session A

Track #1: Management of Technical Start-ups & New

Ventures

Session Chair: Howard Eisner, D.Sc., Professor of Engineering Management, The George Washington University; former President, Intercon Systems Corporation; former President of the Atlantic Research Services Corporation

Session Title: Emerging Considerations for Enterprise Management in the New Economy

Papers:

¥ Charles Keating, Department of Engineering Management, Old Dominion University - Limitations of a Systems Engineering Approach in a Non-Traditional Setting

¥ Thomas Nagy, School of Business and Public Management, The George Washington University - Moving Through Metaphors: Improving the Use of the Web

¥ Kim L. Needy, Department of Industrial Engineering, University of Pittsburgh - A Data Collection Strategy for the Study of Successful Enterprise Governance

¥ Dawn R. Utley, Department of Industrial & Systems Engineering & Engineering Management, The University of Alabama - Thoughts on the Establishment of a Collaborative Engineering Laboratory - Defining and Refining a New Systems Engineering Paradigm

Track #2: Management of Fast Growth in Changing Markets and Technologies

Session Chair: Kostas Triantis, Professor and Director, System Performance Lab Department of Industrial and Systems Engineering, Northern Virginia Center, Virginia Tech

Session Title: Productivity/Performance Enhancement

Papers:

¥ Warren K. Vaneman, Department of Industrial and Systems Engineering, Virginia Tech - Embedding Data Envelopment Analysis into a System Dynamics Framework

¥ Elias C. Carayannis, School of Business and Public Management, The George Washington University

Technological Learning a Firm Core Competence? An
Empirical Study of Multi-Level Learning and Performance
¥ Victor Perazolli, Department of Industrial Engineering,
Texas Tech University Ð Statistical Method Approach to
Productivity Analysis: A Conceptual Model
¥ Rick Groesbeck, Department of Industrial and Systems
Engineering, Virginia Tech - An Evaluation of Team
Effectiveness: A DEA Approach

Track #3: Advances in the Practice of Engineering
Management

Session Chair: Robert Tanenhaus, Lead General Systems
Engineer, MITRE Corporation

Session Title: Knowledge Management: Key to Enhanced
Organizational Performance

Papers:

¥ E. Taggart Smith, Department of Organization
Leadership and Supervision, School of Technology, Purdue
University Ð Knowledge Management for Dummies: KM
for the Rest of Us

¥ Franseco A. Calabrese, Chairman & CEO, Enterprise
Knowledge Management Group, Inc. Ð A Suggested
Framework of Key Elements Defining Effective Enterprise
Ð Wide Knowledge Management Programs

¥ Richard L. Keyser, Department of Industrial & Systems
Engineering & Engineering Management, The University of
Alabama Ð A Taxonomy of Knowledge Management
Attributes and Benefits

¥ Robert Tanenhaus, Lead General Systems Engineer, The
MITRE Corporation Ð Performance Management
Integration Schema and Products

Track #4: Current Issues in the Management of Technical
Organizations and Operations

Session Chair: Michael W. Usrey, Ph.D., P.E., Lockheed
Martin Engineering Management Program, University of
Colorado

Session Title: Case Studies in the Management of Technical
Organizations

Papers:

¥ Benjamin C. Ford, Engineering Supervisor, John Deere Dubuque Works Ð Designing and Implementing Lean Manufacturing at John Deere Dubuque Works

¥ Randall G. Wilmeth, Substation Engineer, New Century Energies - Evaluating Reliability Centered Maintenance for Substation Equipment at New Century Energies

¥ Bill Truran, Stevens Institute of Technology Ð Web-Based Surveys: A Case Study

¥ Don Kennedy, Kennedy Technical Services, Inc. Ð Pragmatism & Politics in a Project Ranking System

Track #5: Engineering Management Practices in the New Millennium

Session Chair: Theresa Jefferson, D.Sc., Assistant Professor, Department of Engineering Management and Systems Engineering, The George Washington University

Session Title: Improving Engineering Management Graduate Education

Papers:

¥ Theresa Jefferson, Department of Engineering Management and Systems Engineering, The George Washington University Ð Virtual Project Teams in an Academic Setting

¥ Dawn R. Utley, Department of Industrial & Systems Engineering & Engineering Management, The University of Alabama - Survey of Worker Perception of Quality Systems Implementation Success

¥ Pamela W. Takada, NASA/Huntsville Marshall Space Flight Center Ð Gender-Based Differences in Learning and Satisfaction Levels in Graduate Engineering Management Education

¥ Nesli Alp, College of Engineering and Computer Science, University of Tennessee - The Lean Transformation in The Master of Engineering Management Program at The University of Tennessee at Chattanooga

Track #6: Engineering Management Tutorial Sessions

Session Chair: Herb Tuttle, Engineering Management Program, University of Kansas

Session Title: Early Career Planning for Engineering
Management Students

Lunch

12:15 p.m. - 2:00 p.m.

Luncheon Speaker:

LTG (Ret.) E.R. (Vald) Heiberg III

President, Heiberg Associates; former Commander, U.S.
Army Corps of Engineers; former CEO, J.A. Jones
Environmental Services, Inc.; former CEO, Rollins Field
Services, Inc.

2:15 p.m. - 3:45 p.m.

Session B

Track #1: Management of Technical Start-ups & New
Ventures

Session Chair: Vicki Spivey, VP Administration/ Director
of Employee Programs, SAIC

Session Title: Managing and Motivating Technical
Employees

Papers:

¥ Harold Kurstedt, Director of Systems Engineering,
Virginia Tech - Effective Technical Management Through
Solution-Focused Techniques

¥ Robert L. Lord, Manager of Business Development,
SUMMA Technology, Inc. - The Applicability of
Traditional Motivation Theories to Engineers Aged 55
Years and Older

¥ Patrick J. Sweeney, Department of Engineering
Management, School of Engineering, University of Dayton
- Emotional Intelligence and Influence Tactics: A Pilot
Study

¥ Robert A. Bayles, Department of Industrial & Systems
Engineering & Engineering Management, The University of
Alabama - Successful Integration of Professionals of

Different Organizational Cultures Into a Merged Organization

Track #2: Management of Fast Growth in Changing Markets and Technologies

Session Chair: Rosalie Ruegg, Director of ATP, NIST

Session Title: Leveraging Technological Innovation

Papers:

¥ Leonid Bazilevich, Engineering Management and Systems Engineering Dept., Stevens Institute of Technology
Ð Measurement of Innovation Motivators for New Product Development Team

¥ Philip Auerswald, Harvard U. Kennedy School of Government - Findings of Harvard Study on How Innovative Companies Deal with Risk and Changing Conditions

¥ Jeanne Powell, Acting Director, ATP Economic Assessment Office - What Awardee Companies Are Saying About How Changing Conditions Can Affect ATP Projects

¥ Rosalie Ruegg, TIA Consulting - The Advanced Technology Program: Balancing the Need of Companies to Respond to Changing Conditions with its Need to Adhere to Mission

Track #3: Advances in the Practice of Engineering Management

Session Chair: MG (Ret.) Charles Henry, President, LFR, Inc.; former Deputy Commander, Defense Logistics Agency

Session Title: Engineering Management Advances in Defense Related Programs

Papers:

¥ Dawn R. Utley, Department of Industrial & Systems Engineering & Engineering Management, The University of Alabama
Ð Organizational Affects on the Near-Term Technology Infusion Process

¥ John V. Farr, Stevens Institute of Technology - A Comparison of Portfolio Analysis Techniques for Research and Development Programs

¥ Robert R. Stiger, University of Idaho at Idaho Falls
Systems Engineering at DOE Sites: A Case Study of Two Sites

¥ Dale E. Moore, Department of Industrial & Systems Engineering & Engineering Management, The University of Alabama
Systems Engineering: What's Really Happening in the Field

Track #4: Current Issues in the Management of Technical Organizations and Operations

Session Chair: John J. Fearnside, Ph.D., Former CEO, Mitre Corp.

Session Title: Technical Management of the U.S. Air Traffic Management System

Panel Presentation by Experts:

¥ John J. Fearnside, Former CEO, Mitre Corp.

¥ Robert Baker, Vice Chairman, American Airlines

¥ Daniel Meehan, Chief Information Officer, Federal Aviation Administration

Track #5: Engineering Management Practices in the New Millennium

Session Chair: Richard Soland, Ph.D., Professor, Department of Engineering Management and Systems Engineering, The George Washington University

Session Title: Advances in Engineering Management Training Programs

Papers:

¥ Wyrick - Training the New Engineering

Graduate - Implications of Learning Styles and Fitting into the Organization

¥ Paul Hirtz, University of Missouri-Rolla
Project Management Training Program for Student Design Competition Teams

¥ William A. Young, Department of Civil and Environmental Engineering, The University of Melbourne
Development and Delivery of a Specialist Project Management Course for Indonesian Nationals

¥ Paul Hirtz, University of Missouri-Rolla - Building Effective Student Teams Through Transformational Leadership Training

4:30 p.m. Ð 6:00 p.m.
Session C

Track #1: Management of Technical Start-ups & New Ventures

Session Chair: John R. Harrald, Ph.D., Professor of Engineering Management and Systems Engineering, The George Washington University

Session Title: Effective Team Development

Papers:

¥ Ali Akgun, Wesley J. Howe School of Technology Management, Stevens Institute of Technology - Critical Speed and Success Factors for New Product and Technology Development in Hi-Tech Industry

¥ Leonid Bazilevich, Wesley J. Howe School of Technology Management, Stevens Institute of Technology - New Product Development Process: A Simulation Approach

¥ Ali Akgun, Wesley J. Howe School of Technology Management, Stevens Institute of Technology - New Product Development Team Improvisation and Speed-to-Market: An Extended Model

¥ Gregory C. Palko, The University of Alabama, Oak Ridge National Laboratory - Organizational Culture and Team Effectiveness - How Are They Related?

¥ Ronda Reigle, Department of Industrial & Systems Engineering & Engineering Management, The University of Alabama - Organizational Culture Assessment

Track #2: Management of Fast Growth in Changing Markets and Technologies

Session Chair: Cathy Clark, CEO, Landmark Corporation and NVTC Chair

Session Title: Leveraging Information Technology in Fast-

Growing SMEÖs

Papers:

- ¥ Lena Rantakyro, Dept. of Human Work Sciences, Luled University of Technology, Sweden
- Ð Knowledge Management in Small Manufacturing Companies
- ¥ A Panel of Experts from SMEÖs

Track #3: Advances in the Practice of Engineering Management

Session Chair: George William Sherk, Environmental Attorney

Session Title: Applications of Engineering Management Tools to Environmental Problems

Papers:

- ¥ George William Sherk, Environmental Attorney - An Engineering Management Approach to Understanding the Relationship Between Brownfields Redevelopment and Urban Sprawl
- ¥ Edward N. Aqua, Department of Civil Engineering and Environmental Engineering, Tufts University
- Ð ISO 14000 as a Linkage for Business and Universities
- ¥ Hui Huang, Department of Engineering Management and Systems Engineering, The George Washington University - The Life Cycle (Total) Management Solution for the Uses of Chlorinated Paraffins and Nonylphenol Ethoxylates
- ¥ Hilton McDavid, Department of Management Studies, The University of the West Indies, Mona, Kingston, Jamaica - Managing the Harvesting of the Queen Conch from the Pedro Banks of Jamaica

Track #4: Current Issues in the Management of Technical Organizations and Operations

Session Chair: Kyle Schilling, P.E., Former Director, Water Resources Support Center, U.S. Army Corps of Engineers

Session Title: Corps of Engineers Operations Business Information Link and Taxonomy of Internet Project Management Techniques

Papers:

- ¥ Robert A. Pietrowski - The Corps of Engineers Operations And Maintenance Plan of Improvement
- ¥ John F. Langowski, Jr., Ph.D., Planning Management Consultants, Ltd. - Operations and Maintenance Cost Savings: A Federal Case for Discriminators
- ¥ Nancy Hanna-Somers, Planning Management Consultants, Ltd. - U.S. Corps of Engineering, the Operations and Maintenance Business Link
- ¥ Steve D. Giffin, P.E., Department of Engineering Management and Systems Engineering, The George Washington University - Internet Applications for Project Management Communications

Track #5: Engineering Management Practices in the New Millennium

Session Chair: Saralyn Bunch, Focus Area Manager, Office of Project Management, U.S. Department of Energy; President, National Capital Section, American Society of Engineering Management

Session Title: Improving Project Management

Papers:

- ¥ Ogelle - Managing the Project Performance of the Construction Firm: A Case Study
- ¥ W. N. Thompson, Department of Industrial Engineering and Management Science, Northwestern University - The Progress Report: Past, Present and Prospects
- ¥ Paul Kaufmann, Department of Engineering Management, Old Dominion University Ð The Importance of Independent Cost Terms in Reducing Estimate Variance
- ¥ William A. Young, Department of Civil and Environmental Engineering, The University of Melbourne Ð No Injuries to Anyone Ever

Track #6: Engineering Management Tutorial Sessions

Session Chair: Dennis Kalonda, Ph.D., Engineering Management Program, University of Central Florida

Session Title: Teaching Operations Management Using the CASE-Based Methodology

6:30 p.m. Ð 7:30 p.m.
President's Reception

Friday, October 6th

7:45 a.m. Ð 8:45 a.m.
ASEM Annual Meeting

9:00 a.m. Ð 10:00 a.m.
Keynote Address
Keynote Speaker: To Be Announced.

10:30 a.m. Ð 12:00 p.m.
Session D

Track #1: Management of Technical Start-ups & New
Ventures

Session Chair: Dawn Nunziato, J.D., Associate Professor of
Law, The George Washington University Law School

Session Title: Legal Issues Confronting Technical Start-Ups
and New Ventures

Papers:

¥ Keith P. Enright, Director, Privacy Programs,
AllAdvantage.com - Privacy Law Issues

¥ Ellen P. Goodman, Senior Associate, Covington &
Burling - Telecommunications Issues

¥ Thomas W. Krause, Adjunct Professor, Georgetown
University Law Center, and Special Counsel, Covington &
Burling - Patent Issues

¥ Joshua Newberg, Prof. of Logistics, Business and Public
Policy, R.H. Smith Business School, University of
Maryland - Antitrust Issues

Track #2: Management of Fast Growth in Changing
Markets and Technologies

Session Chair: Ari Patrinos, Director, Human Genome

Project, DOE

Session Title: Managing Geonomics Research

Papers:

¥ Daniel Drell, Ph.D., Life Sciences Division, Office of Biological and Environmental Research US Department of Energy

¥ William C. Nierman, The Institute for Genomic Research - Software Infrastructure for Managing Genome Sequencing Projects

¥ A Panel of Experts

Track #3: Advances in the Practice of Engineering Management

Session Chair: Daniel Sheer, Ph.D., President, Water Resources Management, Inc.

Session Title: Advances in Systems Operational Optimization

Papers:

¥ Jerry Stedinger, Cornell University - Power Optimization in California

¥ Chuck Howard, President, Howard Associates - Short-Term Power Optimization

¥ David Hurlbut, Univ. of Texas at Austin - Simulating Water Resource Systems in the Rio Grande Basin

¥ Aris Georgakakis, Georgia Tech - Control Technologies for Water Resources Systems

¥ Dan Sheer, President, WRMI, Inc. - Use of Simulation and Artificial Intelligence in Water Resource Systems

Track #4: Current Issues in the Management of Technical Organizations and Operations

Session Chair: Tim Kotnour, Ph.D., Department of Industrial Engineering and Management Systems, University of Central Florida

Session Title: Knowledge Management in the Project Environment

Papers:

- ¥ Keith Britton, Project Office, NASA/Kennedy Space Center Ð The Project Manager as a Knowledge Broker
- ¥ Charles Keating, Department of Engineering Management, Old Dominion University Ð Design for Collaborative Engineering Work Systems
- ¥ Willie MacFadden, United States Military Academy Ð Beyond Information: Issues in Construction and Representation of Organizational Knowledge Systems
- ¥ Tim Kotnour, Department of Industrial Engineering and Management Systems, University of Central Florida Ð Understanding an Organization's Knowledge Management, Learning and Project Management Competence

Track #5: Engineering Management Practices in the New Millennium

Session Chair: J. Rene van Dorp, D.Sc., Assistant Professor, Department of Engineering Management and Systems Engineering, The George Washington University

Session Title: Research Insights for the New Millennium

Papers:

- ¥ Gene Dixon, Department of Industrial & Systems Engineering & Engineering Management, The University of Alabama - Organization Level Related Variations of Attributions of Fellowship and Leadership - A Research Proposal
- ¥ Halvard Nystrom, Department of Engineering Management, University of Missouri-Rolla Ð Financial Viability of FRP Bridge Decks
- ¥ Steven C. Dunn, Program Manager, Sverdrup Technology, Inc, AEDC Group Ð An Empirical Study of Motivational Aspects Pertaining to Project and Functional Management in a Matrix Organization
- ¥ Gene Dixon, Department of Industrial and Engineering Management, University of Alabama Ð Impressions From a First Time Conference

Track #6: Engineering Management Tutorial Sessions

Session Chair: Salvatore F. Divita, D.B.A., Professor of Marketing, The George Washington University School of Business and Public Management

Session Title: Effective Marketing in the New Economy:
Vision, Strategy and Execution

Topics:

1. How effective is your marketing?
2. Ineffective Marketing is the Primary Cause of Business Failure
3. Elements for Effective Marketing in the New Economy: Vision, Strategy and Operation

Lunch

12:15 p.m. - 2:00 p.m.

Luncheon Speaker:

I. J. Hudson
Technology Reporter, NBC Television
(Channel 4)

2:15 p.m. Ð 3:45 p.m.

Session E

Track #1: Management of Technical Start-ups & New Ventures

Session Chair: Michael J. Kerrigan, Co-founder of The Etechnology Companies, L.L.C and President, Kerrigan & Associates

Session Title: Unlocking the Wealth in Public Information

Papers:

¥ John Higginbotham, Founder, President and CEO, SpaceVest

¥ Dave Martin, Ph.D., Founder, President and CEO, **M-Cam**

¥ Terry Garcia, Executive VP for Mission Programs, National Geographic Society

Track #2: Management of Fast Growth in Changing
Markets and Technologies

Session Chair: Henry Etzkowitz, Professor of Science &
Technology Studies, SUNY Purchase

Session Title: Technology Transfer, Technology
Commercialization and Business Incubation

Papers:

¥ Elias C. Carayannis, School of Business and Public
Management, The George Washington University -
Catching Up versus Staying Ahead: The Changing Role of
SEMATECH and Government-University-Industry
Cooperation in Semiconductor Research

¥ Mohamed Hassan, Department of Production
Engineering, Helwan University, Cairo, Egypt
Ð Three Stage Technology Transfer Model

¥ H. Martin Meyer, United Kingdom

¥ Invited Panel

Track #3: Advances in the Practice of Engineering
Management

Session Chair: Kim LaScola Needy, Department of
Industrial Engineering, University of Pittsburgh

Session Title: Advances in the Economic Aspects of
Engineering Management

Papers:

¥ Heather Nachtmann, Department of Industrial
Engineering, University of Pittsburgh
Ð The Design and Usage of an Outsourcing Decision Support System: An
Application of Fuzzy Activity Based Costing

¥ Narcyz Roztocki, School of Business, State University of
New York
Ð Variation in Production Volume: the Impact of
Using an ABC-and-EVA System to Reduce Distortions in
Product Cost

¥ Guillermo Valeri, Department of Industrial Engineering,
University of Pittsburgh
Ð Development of an Activity
Based Costing System in a Mid-Sized South American
Pharmaceutical Company

¥ Paul Kauffmann, Department of Engineering

Management, Old Dominion University - Legal
Implications of Earned Value Project Management

Track #4: Current Issues in the Management of Technical
Organizations and Operations

Session Chair: Michael G. Goode, P.E., President, Telford
Consulting

Session Title: Infrastructure Asset Management

Papers:

¥ Michael G. Goode, P.E., President, Telford Consulting -
Importance of Asset Management in the Civil Infrastructure
Business

¥ Madeline Bloom, Director, Office of Asset Management,
FHWA - Promoting Asset Management in the Highway
Sector

¥ Lawrence D. Goldstein, Principal, The SGM Group, Inc.
- Asset Management Practices in the Transit Sector

¥ Andy Bailey, Assistant Commissioner, Virginia DOT -
Where the Rubber Meets the Road in Asset
Management

Track #5: Engineering Management Practices in the New
Millennium

Session Chair: Jonathan P. Deason, Ph.D., P.E., Professor,
Department of Engineering Management and Systems
Engineering, The George Washington University

Session Title: Using Systems-Based Research Results to
Improve Technology Management

Papers:

¥ Sousa-Poza, Department of Engineering Management,
University of Missouri - An Alternative Perspective on the
Relationship Between Corporate Culture and TQM
Implementation

¥ Mario G. Beruvides, Department of Industrial
Engineering, Texas Tech University - A Systematic-
Statistical Approach for Managing Research Information:
The State-of-the-Art Matrix Analysis

¥ Simon Berkovich, Department of Computer Science, The

George Washington University - Organization of Automatic
Spelling Correction: Towards the Design of Intelligent
Information Retrieval Systems

¥ R. William Kehr, Department of Engineering
Management, University of Missouri-Rolla - A Chaos
Theory Approach to Strategic Technology Management

Track #6: Engineering Management Tutorial Sessions
Session Chair: Craig A. Stevens, President, Stevens
Consulting

Session Title: The Research and Practice of Understanding
Organizational Issues for Riding the Tidal Wave of Change

Topics:

1. Current Organizational Trends and a Basic Change
Management Model
2. Verifying and Using the Westbrook Model for
Understanding Organizational Elements that Drive Change
3. Attributes of Quality Management to Understand and
Maximize Organization Effectiveness and Efficiency
4. A Different Virtual "Organic" Organizational Structure
Designed to Use Change as a Competitiveness Tool

3:45 p.m.-4:30 p.m.
EMJ Issue Session

Session Chair: Dr. Ted Eschenbach, P.E., Editor, EMJ

Session Title: Fifth EMJ Issue Session D Ways and Means
for Establishing a 5th Issue of EMJ Dedicated to EM
Education

4:30 p.m. D 6:00 p.m.
Session F

Track #1: Management of Technical Start-ups & New
Ventures

Session Chair: Michael A. Stankosky, Ph.D., Associate
Professor, Dept. of Engineering Management and Systems

Engineering, The George Washington University; Former Senior Vice President, QuesTech, Inc.

Session Title: Managing Change and Technical Risks

Papers:

¥ Donald D. Tippett, Department of Industrial & Systems Engineering & Engineering Management, The University of Alabama - The Correlation between Centralization Attributes and Team Failure

¥ Hamid Tari, American Express, New York - Organizational Culture: Keys to More Effective Operations

¥ Muzaffar A. Shaikh, Department of Engineering Management, College of Engineering, Florida Institute of Technology - A Quantitative Method for Prioritization of Technological Risks

¥ Elias C. Carayannis, School of Business and Public Management, The George Washington University - B-to-B E-Commerce: To Be or Not to Be in the Brave New World of Global Business Virtualities

Track #2: Management of Fast Growth in Changing Markets and Technologies

Session Chair: Dr. Bruce Don, Director, RAND Critical Technologies Institute

Session Title: Critical Technologies Management

Papers:

¥ Steve D. Giffin, Department of Engineering Management and Systems Engineering, The George Washington University - Conducting Project Management Over the Internet

¥ Elias C. Carayannis, School of Business and Public Management, The George Washington University - Dissecting the Professional Culture: Insights from Inside the IT ÒBlack BoxÓ

¥ Jan Lyons, University of Alabama in Huntsville and Lockheed Martin - Intranets as a Vehicle for Fostering Organic Characteristics in Organizations

¥ Richard W. Monroe, Coles College of Business, Kennesaw State University - Has ERP Integrated the

Enterprise and Improved Business Processes?

Track #3: Advances in the Practice of Engineering Management

Session Chair: Bill Truran, Stevens Institute of Technology

Session Title: Improving Knowledge Management through a Systems Approach

Papers:

¥ Juan Pablo Giraldo, Department of Engineering Management and Systems Engineering, The George Washington University - Effect of Knowledge Management Systems on the Performance of Knowledge Management Practices of Global and Transnational Organizations

¥ Cynthia T. Small, George Mason University, The MITRE Corporation - Implementing Knowledge Management: The KM Journey of a Systems Engineering and IT Enterprise

¥ Cynthia T. Small, George Mason University, The MITRE Corporation - A Complex Adaptive Systems Perspective on Improvement in Knowledge Management

¥ Dolores Derrington, The MITRE Corporation - Knowledge Management Using a Corporate Intranet

Track #4: Current Issues in the Management of Technical Organizations and Operations

Session Chair: Donald N. Merino, Stevens Institute of Technology

Session Title: Teaming/Project Management

Papers:

¥ Andrew C. Kobert, Honeywell, Stevens Institute of Technology - The McKinsey 7-S Framework as a Model for Effective Multifunctional Team Performance

¥ Patricia J. Holahan, Wesley J. Howe School of Technology Management, Stevens Institute of Technology - Cross- functional Integration and Cross-functional Team Performance: A Preliminary Test of a Theoretical Model

¥ Patricia J. Holahan, Wesley J. Howe School of Technology Management, Stevens Institute of Technology - Integrating a Team Skills Thread Into an Executive

MastersÕ of Technology Management Program
¥ Danile P. Sirinides, Wesley J. Howe School of
Technology Management, Stevens Institute of Technology -
Key Drivers of Multifunctional Team Effectiveness
¥ William A. Young, Department of Civil and
Environmental Engineering, The University of Melbourne -
Engineering Project Management in Developing Countries

Track #6: Engineering Management Tutorial Sessions
Session Chair: Dr. Carmo DÕCruz, Business Development
Manager, Tantivy Communications, Melbourne, FL;
Adjunct Faculty Marketing Dept., Engineering Management
Program, University of Central Florida, Orlando, FL

Session Title: Engineering Management in Changing
Markets

Topics:

1. The Whole Product Concept
2. The Technology Adoption Lifecycle Landscape
3. How Engineers Think
4. How Marketeers Think
5. Market Validation
6. Case Study 1: The WLAN Product Development and
Launch
7. Case Study 2: The WAN Product Development and
Launch
8. Linking the Whole Product Concept with the Technology
Adoption Lifecycle Landscape
9. Bridging the Engineering / Marketing Divide

6:30 p.m. Ð 7:30 p.m.
Banquet Reception

7:30 p.m. Ð 10:00 p.m.
Banquet Speaker and Engineering Manager of Year
J. Robert Beyster, Ph.D., CEO, Science Applications
International Corporation (SAIC)

Saturday, October 7th

Saturday Sessions: Management of Research & Technical Organizations

9:00 a.m. Ð 10:30 a.m.

Panel 1 - The Internet Changes Everything

¥ Robert E. Kahn, Ph.D., President and CEO, Corp. for National Research Initiatives

¥ Carl N. Kelly, Senior Vice President, Oracle Services Industries

¥ Michael A. Daniels, Vice President, SAIC

¥ Edward D. Paradise, General Manager, Mobile Wireless, Cisco Systems, Inc.

¥ Steve Walker, President, Steve Walker & Associates

10:45 a.m. Ð 12:15 p.m.

Panel 2 - Management of Research and Technical Change

¥ Karen H. Brown, Deputy Director, National Institute of Standards and Technology

¥ Jude E. Franklin, Ph.D., Vice President and Chief, Technology Officer, PRC, Inc.

¥ Donald W. Upson, Secretary of Technology, Commonwealth of Virginia

¥ Howard Frank, Ph.D., Dean, R.H. Smith School of Business, University of Maryland

¥ Carolyn Huntoon, Ph.D., Assistant Secretary for Environmental Management, DOE

Lunch

12:30 p.m. Ð 2:30 p.m.

Luncheon Speaker:

Bill Owens

Vice Chairman, ICO-Teledesic Global Limited (ITGL)

REGISTRATION FORM

Please complete this form or register through the Internet:

<https://www.gwu.edu/cms/asem/regform.htm>

First Name Last Name
 Position/Title Company
 Address
 City State Zip Code Country
 Phone Fax Email
 Badge Nickname Spouse/Guest Name

Registration Fees

Full payment of the registration fee is required.
The early registration deadline is August 31, 2000.

Early Registration

- q Members* (SEE NOTE below) US\$500
- q Non-Members US\$600
- q Author Registration US\$400
- q Daily Registration US\$300
- q Thurs., Oct. 5 q Fri., Oct. 6 q Sat., Oct. 7
- q Students US\$150
- q Spouse/Guest Registration US\$150

Standard Registration

- q Member* (SEE NOTE below) US\$600
- q Non-Member US\$700
- q Daily Registration US\$300
- q Thurs., Oct. 5 q Fri., Oct. 6 q Sat., Oct. 7
- q Students US\$200
- q Spouse/Guest Registration US\$200

*Member and Cooperating Societies Discount Rates
Membership in ASEM or one of the cooperating societies qualifies you for the member rate. Please check the conference website for the most up-to-date list of associations and cooperating societies.

*For both Early and Standard registrations, members please choose one and provide the following information:

q ASEM member: Member Number

q Member of Cooperating Society:
 Society Name: _____ Member
 Number _____

Method of Payment

The completed registration form, along with full payment of the registration fee, must be sent to The George Washington

University via the following payment methods. Please check one:

Total Amount Due: _____

Check, made payable to The George Washington University

Credit Card (please check one below)

VISA MasterCard

Card Number:

Expiration Date:

Cardholder's Name:

Signature:

Date:

Miscellaneous Information

Special requirements

Vegetarian

Other (Please check this box if you have any special needs or requirements and a staff member will contact you to discuss your situation.)

Additional Tickets

(Note: one set of tickets are already included in full registration fee.)

Wednesday, October 4, 2000

Welcome Reception US\$30

Thursday, October 5, 2000

Luncheon US\$45

President's Reception US\$30

Friday, October 6, 2000

Luncheon US\$45

Awards Reception US\$35

Awards Banquet US\$60

Saturday, October 7, 2000

Luncheon US\$45

Please complete this registration form and return it to:

The George Washington University Conference

Management Services ☹ 2029 K Street, NW, Suite 501 ☹

Washington, D.C. 20006 Phone: 202-973-1110 ¥ Fax:
202-973-1111 ¥ email: cms@admin.dup.gwu.edu

Registration

Early registration for the American Society of Engineering Management's 21st National Conference Technical Management: Key to Enterprise Success in the 21st Century is recommended. Registrations will be handled on a first-come, first-serve basis. After September 5, 2000, please confirm availability of space by calling Conference Management Services at 202-973-1110 or by fax at 202-973-1111 or via email at cms@admin.dup.gwu.edu.

The full registration fee includes the following:

- ¥ Three days educational programming
- ¥ Conference materials
- ¥ Three continental breakfasts
- ¥ Three luncheons
- ¥ Three receptions
- ¥ Awards banquet

The spouse/guest registration fee includes:

- ¥ Three continental breakfasts
- ¥ Three receptions
- ¥ Awards banquet
- ¥ Access to spouse/guest lounge

Daily registration fees include events for that day only.

Additional tickets for meal functions may also be purchased.

Member and Cooperating Societies Discount Rates
Membership in ASEM or one of the cooperating societies qualifies you for the member rate. Please check the conference website for the most up-to-date list of associations and cooperating societies.

Hotel Accommodations

The conference will be held at the Washington Marriott Hotel, 1221 22nd Street, N.W., Washington, DC. To qualify for the conference rate of \$159 single/double, call Reservations, 202-872-1500, and identify yourself as a participant in the GWU-American Society of Engineering Management conference. To ensure a room at the

Washington Marriott, reservations should be made by September 15, 2000. After this date, the room block will be released and made available to the public.

Cancellation Policy

Cancellations must be requested in writing in order to receive a refund and will be honored if received by September 28, 2000. A US\$75 cancellation fee will be charged for all refunds. No refunds will be made after that date, however, you may send a substitute in your place. There will be no refunds for no-shows or onsite cancellations. All refunds will be issued after the conclusion of the conference.

Air Transportation

We encourage you to take advantage of discount travel through Navigant International. They can be reached toll free at 1-800-875-9820. If you are calling from the D.C. metro area, their local number is 202-296-9820. Reservations may also be faxed to 202-466-2879, or emailed to libby@cstravel.com. Please identify yourself as an attendee of GWU-American Society of Engineering Management conference.

Ground Transportation

The twenty minute cab ride from Ronald Reagan Washington National Airport to The Washington Marriott Hotel costs approximately US\$15. In addition, the blue line of the Washington Metrorail system departs from Ronald Reagan Washington National Airport and arrives directly at the Foggy Bottom metro station. If you are arriving at Dulles International Airport, the cab fare is approximately US \$45 and your trip will take about 40 minutes.

Liability

The Local Host Committee acts as agent only in securing hotels, transport and travel services and in no event shall be liable for acts or defaults in the event of injury, damage, loss, accident, delay or irregularity of any kind whatsoever

during arrangements organized through contractors or the employees of such contractors in carrying out services.

University Policy on Equal Opportunity

The George Washington University does not unlawfully discriminate against any person on the basis of race, color, religion, sex, national origin, age, disability, veteran status or sexual orientation.

For more information, please refer to our conference website at <http://www.gwu.edu/~asemconf/>
EXECUTIVE ADVISORY COMMITTEE (EAC)

EAC Members

Walter J. Burmeister

President & Founder, FaciliCom International, Inc.

Francesco A. Calabrese

President & CEO, Klein Technologies, Inc.

Elias G. Carayannis

Associate Prof., Science, Technology & Innovation
Program, SBPM, GWU

Jude E. Franklin

Chief Technology Officer, PRC Inc.

Emilio A. Fernandez

Vice Chairman of the Board, Westinghouse Air Brake Co.

Hermann J. Helgert

Chair & Professor, Electrical and Computer Engineering,
SEAS, GWU

Allen P. Herskowitz

CEO, Global Integrity, Inc.

Mark V. Hughes, III

Sector V. P. & General Manager, SAIC

Talbot S. Huff

Former CEO, E-Systems

Dominic J. Monetta

President, Resource Alternatives, Inc.

EAC Ex Officio

Jonathan P. Deason

Professor, EMSE, SEAS, GWU

Technical Program Chair, 2000 ASEM National Conference
David V. Rogers,
Lead Systems Engineer, MITRE Corporation
Thomas A. Mazzuchi,
Interim Dean, SEAS, GWU and
Chair, EMSE, SEAS, GWU
Michael A. Stankosky
Associate Professor, EMSE, GWU
Franklin B. W. Woodbury
Executive Director, ASEM
Robert C. Waters
Professor, EMSE, SEAS, GWU
General Chairman, 2000 ASEM National Conference

© Copyright 1999 The George Washington University, all rights reserved
Designed & Developed by Prasert Suesatayasilp and Carlos Arboleda