



**Center for the Commercial Deployment
of Transportation Technologies**

ADVISORY COMMITTEE MEETING

The Watergate Hotel, Washington, D.C.

Agenda and Presenter Information

**Center for the Commercial Deployment of Transportation Technologies
California State University, Long Beach Foundation
6300 State University Drive, Suite 332 • Long Beach, CA 90815 • 562.985.5537**

November 1, 2002

CCDoTT Advisory Committee Meeting

The Watergate Hotel, Washington D.C.

Friday, November 1, 2002

Agenda – Open Session

0730-0800 Continental Breakfast – Riverview Room

Morning Session – Riverview Room

0800-0830	Welcome and Comments Brief CCDoTT Overview	Jim Ackerman, Chair Stan Wheatley, CCDoTT
0830-0850	Agile Port Program	John Vickerman/Blair Garcia TranSystems Corporation
0850-0910	HSS Technology	David Lavis Band, Lavis & Associates
0910-0930	Trimaran Program	Jalal Mapar/Igor Mizine SAIC
0930-0945	Break	
0945-1005	HSS Lifting Body	Steven Loui, Pacific Marine
1005-1025	Inspection Technology/Goods Movement	Larry Mallon, CSULB/CITT
1025-1045	Collaborative Visualization	John Detwiler, Maya Viz
1045-1105	HSS Pacific Market	Doug Coates, Manalytics
1105-1200	Discussions – Q/A	

Afternoon – Closed Session

Advisory Committee Members

James Ackerman, Esq., Chair
Law Offices of James H. Ackerman

Vice Admiral Al Herberger, USN ret.

Lt. General Kenneth Wykle, USA ret.
President, National Defense Transportation Association (NDTA)

Eugene Pentimonti
Maresk-Sealand
Chair, Cargo Handling Cooperative Program (CHCP)

J. Brian Sharkey
Vice President, Advanced Systems & Concepts, Hicks & Associates, Inc.

Stanley Siegel
President, Mari-flite Ferries

Jordan Truchan
President & CEO, American Ship Management, LLC

Presenters

M. John Vickerman, Principal
Blair R. Garcia, Associate/Vice President
David R. Lavis, General Manager
Jalal Mapar, Vice President
Dr. Igor Mizine, Sr. Research Scientist
Steven Loui, President
Dr. Lawrence G. Mallon, Dir. of Research
John S. Detwiler, Program Manager
J. Douglass Coates, Principal

TranSystems Corporation
TranSystems Corporation
Band, Lavis and Associates, Inc.
Science Applications International Corp.
Science Applications International Corp.
Pacific Marine & Supply Co.
CSULB/CITT
Maya Viz, Ltd.
Manalytics International

CCDoTT Staff

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PRESENTER INFORMATION

TranSystems Corporation

M. John Vickerman, Principal
Blair R. Garcia, Associate, Vice President

Company Background

TranSystems Corporation specializes in the planning and design of maritime facilities for all types of cargoes and waterfront developments. These facilities include container terminals, intermodal rail facilities, passenger and cruise terminals, break-bulk and neo bulk cargo terminals and mixed-use developments. Their work is directed toward increasing operational efficiency and creating facilities that respond to emerging technological change within the context of environmental responsibility.

History with CCDoTT

TranSystems has worked with CCDoTT since 1997 in the area of developing agile port technology. Under FY 97-98 CCDoTT funding, the company participated in various projects including the definition of the global and military requirements for an agile port and an international review of ports to determine what practices appear to be the “best practices” as they applied to the future of U.S. ports. Also, several CCDoTT projects with TranSystems are committed to planning and demonstrating the concept of the Efficient Marine-Rail Interface that examines a particular agile port system including marine terminals and inland intermodal terminals. Under FY 2001 Funding, the company will have a full-scale demonstration of the Efficient Marine Terminal.

Personal Profiles

M. John Vickerman, Principal

Mr. Vickerman is a founding Principal and member of the Board of Directors of TranSystems Corporation. As a specialist in intermodal and maritime terminal design, he has led TranSystems’ work on major port projects throughout the world for more than 22 years. His experience includes strategic and tactical planning for 65 of the 90 U.S. deep-water general cargo ports. Mr. Vickerman provides innovative solutions to the many planning, design and operational issues that currently confront the transportation industry. He has served as principal-in-charge for all CCDoTT projects in the past six years.

Blair Garcia, Associate and Vice President

In addition to being Associate and VP, Mr. Garcia is a maritime and rail freight and passenger planner. He has participated on projects involving the planning of commercial and industrial facilities and corridors, land development, utilities layout and transportation planning. Since joining TranSystems in 1996, his work has focused on the design and planning of major maritime and intermodal transportation projects. His experience has included projects at major international maritime ports, including the Port of Cherbourg, France, Jeddah Islamic Port, Saudi Arabia and the Puerto Rico Port Authority. He has also been closely involved in developing, evaluating and assessing new concepts and technologies (infrastructure, equipment and information technology) related to freight and passenger transport. Mr. Garcia has served as project manager for all CCDoTT projects in the past six years.

Band, Lavis & Associates

David Lavis, General Manager

Company Background

Band, Lavis & Associates is an engineering firm offering advanced marine engineering and naval architectural services. The company is a member of the CDI Marine Group and provides particular expertise in hydrodynamics and in the design of high-speed ships and marine craft. Its U.S. clients include NAVSEA PMS-377, CDNSWC Codes 50, 102, and 22; the U.S. Coast Guard; and the Office of Naval Research.

History with CCDoTT

Band, Lavis & Associates (BLA) has worked with CCDoTT for several years and will begin the second phase of their research with CCDoTT regarding new designs for advanced waterjet proposals shortly. The first phase of this project was part of the FY2001 CCDoTT program along with a project investigating the structural loads experienced by new generations of high-speed vessels. In FY2000, BLA worked with CCDoTT to provide technical support to NSWC Caderock to examine options for an Innovation Cell for Fast Military Sealift.

Personal Profile

David Lavis, General Manager

Mr. Lavis has worked for over 42 years on the research, development and design of high-speed marine craft and ships. During this period, he has been engaged in numerous foreign and domestic projects from initial conceptual design through construction, test and in-service operational phases. Mr. Lavis is acknowledged nationally and internationally as an authority in fast ship technology and has served as an advisor to both the U.S. Delegation and the Chairman of NATO Special Working Group Six, a 13-nation design committee concerned with the development of high performance ships. He is a member of 14 professional organizations concerned with fast vessels and is a Fellow of the Royal Institution of Naval Architects and a Chartered Engineer in the UK.

Mr. Lavis holds a BS in mechanical engineering and a MS in Aeronautical Engineering from Cranfield Institute of Technology, U.K. He has authored and published numerous fast-ship related technical papers and authored several hundred advanced ship technical reports for various clients since 1959. He has also lectured at the U.S. Naval Academy and George Washington University on the subject of advanced ship stability and control. He was the original Chairman of Band, Lavis and Associates and is now senior VP of CDI Government Services and General Manager of Band, Lavis & Associates.

Science Applications International Corporation

Jalal Mapar, Vice President and Manager, Advanced Systems and Concepts Division

Dr. Igor Mizine, Sr. Research Scientist, Advanced Systems and Concepts Division

Company Background

SAIC currently ranks as the largest employee-owned research and engineering firm in the nation. They are a leader in the development and application of state-of-the-art technologies that solve vital transportation industry problems. Their solutions include intermodal, maritime, truck, and rail asset management and video inspection, video audit and enforcement of toll lanes, traffic intersections, and highway-rail crossings, and wireless data networks.

History with CCDoTT

In FY1998, SAIC worked with CCDoTT to identify the different issues associated with the need for improvements in current port infrastructure in order to create modern agile ports in the 21st century. The company also was funded to help explain the challenges involved in producing high-capacity merchant vessels with at least twice the amount of speed than are currently in use that also have greater range. SAIC has also been instrumental in the development of past CCDoTT strategic planning documents.

Personal Profiles

Jalal Mapar, Vice President and Manager, Advanced Systems and Concepts Division

Mr. Mapar has over 20 years of experience in advanced technology development, design, and engineering of complex systems for marine, space, and air vehicles. His Division also conducts research and development in state-of-the-art modeling and simulation based design, process and behavior modeling, risk analysis techniques, information technology/ software development, and advanced collaborative engineering environments for customers ranging from DARPA to NASA. Mr. Mapar has a BS and MS in Aerospace Engineering from University of Texas at Austin.

Dr. Igor Mizine, Sr. Research Scientist, Advanced Systems and Concepts Division

Dr. Mizine is the SAIC Lead Scientist on the high speed ship technology development. With 29 years of experience in naval architecture and ship design, he is the foremost authority on fast ship systems. He has directed research and development programs for high speed vessels including the development of the VHST ship concept. Dr. Mizine holds a PhD in applied hydrodynamics and ship design from Krylov Ship Research Institute, St. Petersburg, Russia.

Pacific Marine and Supply Co., Ltd.

Steven Loui, President and CEO

Company Background

Pacific Marine, founded in 1944, is a privately-owned, diversified Hawaii corporation with 450 employees and sales of \$63 million in FY 2001. Its primary lines of business include research, development and prototype construction of advanced ship hull forms for the U.S. Navy; commercial and military ship repair; tour and ferry boat operations; and specialty industrial contracting. Its eight subsidiaries include Navatek, Ltd., a high-tech ship design and R&D subsidiary. An affiliate of the company, Pacific Shipyards International (PSI), is the State's largest commercial ship repair company.

History With CCDoTT

Pacific Marine has been working with CCDoTT since FY 2000 in the area of computational fluid dynamics. This work has involved a close relationship with CSULB's College of Engineering in developing CFD design and optimization tools for fast ships, and then applying them to analyze and optimize one of Pacific Marine's advanced hull platforms (underwater lifting bodies). For FY 2001, Pacific Marine will continue to further develop and validate the CFD tools and will compare those results to experimental results obtained from sea-trials using a Pacific Marine hull-form. For FY 2002, Pacific Marine will actually build a scale version of the underwater lifting body and install it on a hull-form for real-time testing.

Personal Profile

Steven Loui, President and CEO

Pacific Marine is owned and headed by Mr. Steven Loui who graduated from Stanford University in 1973 with a bachelor's in engineering. Mr. Loui holds three U.S. patents on advanced underwater lifting body hull forms, including MIDFOIL and HYSWACT™. Mr. Loui became CEO of his family-owned corporation Pacific Marine in 1973, and oversaw a major corporate diversification program that successfully repositioned the company from a narrow-based, ship repair operation into a broad-based group of industrial and service companies. In 1993 he received a U.S. Senate Productivity Award for efforts to improve the ship repair and ship construction industry in Hawaii.

**California State University, Long Beach
Center for International Trade and Transportation**

Dr. Larry Mallon, Director of Research and Development

Organizational Background

The Center for International Trade and Transportation (CITT) is a University approved, and Congressionally designated multidisciplinary center for intermodal transportation studies and integrated logistics research, education, training, policy analysis, and technology transfer. Established in 1977 the Center is a self-governing, autonomous, multi-function special unit within the University College and Extension Services at California State University, Long Beach (CSULB). The Center has been designated a university transportation research center under, and the technology transfer arm of, the Center for Metropolitan Transportation Studies (METRANS) under a partnership between the University of Southern California and CSULB.

History with CCDoTT

CCDoTT began working with CITT in FY 2000 on two separate projects. The first project functioned as a support program for Manalytics International's high-speed ship economic feasibility project with CCDoTT that commenced in FY 2000. CITT also began a multiphase project that year entitled, "Port of Entry Inspection Process and Technology Infrastructure Project." The project, which will begin its third phase in FY 2002, has taken data gathered from many federal inspections to research the development of a single uniform platform for an effective container inspection technology. The platform will help those federal agencies inspect a greater percentage of the cargo imported into the United States for the purpose of contraband discovery and security threat detection. In FY 2002, CITT will also begin the second phase of a project entitled, "Optimization of Military and Commercial Goods Movements Through Southern California Using Information Technology," which seeks to analyze regional good movements and supply chains to optimize both military and commercial deployments to avoid a negative impact on cargo throughput velocity at times of military surge movements.

Personal Profile***Dr. Larry Mallon, Director of Research and Development***

Dr. Mallon is the Legal Counsel and Director of Research and Development for CITT. He has been the Task Manager for CITT projects funded by CCDoTT to date. In addition to his duties with CITT, Larry is the Managing Principal for the legal firm of Lawrence G. Mallon & Associates, providing legal and international business consulting services to Federal and State governmental agencies, universities, cities, counties, special districts, and joint powers agencies, foreign and domestic for-profit and non-profit corporations, trade associations, labor organizations and individual clients, international trade, transportation, and global logistics. The firm was founded in 1987, with Principal offices in Southern California, and Washington D.C.

Maya Viz, Ltd.

John Detwiler, Project Manager

Company Background

Based, out of Pittsburgh, Pennsylvania, Maya Viz develops software that improves the way people use information collectively to make decisions. The company serves a mix of private and public-sector clients in information design, information visualization, and software development. MAYA Viz and its affiliated company, MAYA Design Group, have a total of 60 employees. Their software enhances productivity and effectiveness as people collaborate to navigate, assess, and understand complex information in highly visual and interactive representations.

History with CCDoTT

Beginning in FY 2001, Maya Viz has been working with CCDoTT to develop prototype collaborative planning tools to help USTRANSCOM (and its affiliated agencies) analyze transportation-relevant information effectively and efficiently. CCDoTT has awarded MAYA Viz a follow-on subcontract to continue through September 2003.

Personal Profile

John Detwiler, Project Manager

John Detwiler joined MAYA Viz in 2001, and serves as the Project Manager for the CCDoTT subcontract. He holds a Ph.D. in Electrical Engineering from Carnegie Mellon University, and has twenty years experience in software development, system integration, and business process consulting. Previous clients include: the U.S. Air Force and Boeing Corporation (for automated machining), domestic and Canadian steel makers (for continuous casting and order management), Columbia Gas Transmission (for pipeline capacity management), and major American consumer banks (for Internet bill payment services). He is a former professor of Electrical and Biomedical Engineering (with research papers published in the American Journal of Obstetrics and Gynecology), a registered Professional Engineer, and former owner of a 120-person systems integration firm.

Manalytics International, Inc.

J. Douglass Coates, Principal

Company Background

Manalytics International, Inc. is a San Francisco based, employee-owned management consulting firm, specializing in the analysis of the movement of goods in domestic and international commerce. Since its founding in 1970 as a spin-off of Matson Navigation Co., Manalytics has developed particular capabilities in the integration of technical, economic, and policy influences on transportation and the logistics systems.

History with CCDoTT

Manalytics began working with CCDoTT in FY 2000 with its economic assessment of the feasibility of a high-speed ship system in Pacific Basin whose main purpose was to determine the market size and characteristics if such a system were put in place. The second phase of this project under FY 2001 CCDoTT funding focused on shipper supply chain trade-offs and decision-making using high-speed ships. This phase also addressed military utility and dual-use applications of an high-speed ship system in the Pacific Basin. For FY 2002, the company will focus on an assessment of competitive modes of transportation in the Pacific Basin and will analyze the infrastructure and Information Technology (IT) requirements to support a door-to-door solution for a transportation and logistics system based on high-speed ships.

Personal Profile

J. Douglass Coates, Principal

Mr. Coates is an innovator in international and domestic transportation and logistics with vast executive experience in the transportation industry. Some of the positions he has held include:

Itel Corporation:

- Itel Rail – President/CEO
- Itel Container - Vice President, Marketing

American President Companies:

- American Consolidation Services – President
- American President Distribution Services – Vice President, Marketing

Mr. Coates is also involved in various consulting projects including the development of new business strategies, marketing strategies, and logistics operations for various companies. He received his bachelor's degree from Penn State University in the area of Industrial Engineering and received his MBA from the Wharton School at the University of Pennsylvania.

