



CCDoTT Program Review

Hall of States Building, 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 220 • Long Beach, CA 90815 • 562.985.7394**

March 16, 2005



CCDoTT PROGRAM REVIEW

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**Hall of States Building
444 N. Capital Street, Conference Room 283
Washington, DC**

AGENDA

8:30 a.m.	<i>Coffee Service</i>	
9:00 a.m.	Welcome and Introductions CCDoTT program overview	Stan Wheatley, CCDoTT Steven Hinds, CCDoTT
9:30 a.m.	High Speed Trimaran Technologies	Dr. Igor Mizine, SAIC
10:15 a.m.	<i>Break</i>	
10:30 a.m.	Automated MDO Method for Multihull Vessels	Dr. Hamid Hefazi, CSULB
11:15 a.m.	Advanced Axial Flow Waterjet Pump	David Lavis, CDI Marine Jeff Benson, CDI Marine
12:00 p.m.	<i>Lunch</i>	
1:00 p.m.	Very Stable Mobile Ocean Platform	J. J. McClelland, Navatek, Ltd.
1:45 p.m.	Agile Supply Network Optimization & Security	Dr. Lawrence Mallon, CSULB
2:30 p.m.	<i>Break</i>	
2:45 p.m.	High Speed Intermodal Corridor for POLA/LB	Dr. Ken James, CSULB
3:30 p.m.	EMT/Agile Port System Demonstration	Blair Garcia, TranSystems Corp. Ed Savacool, TranSystems Corp.
4:15 p.m.	Final Comments and Adjournment	Stan Wheatley, CCDoTT Steven Hinds, CCDoTT

CCDoTT Advisory Committee

Vice Admiral Al Herberger, USN ret., Chairman

Vice Admiral Francis R. Donovan, USN ret.

Eugene Pentimonti, Vice President, Government Affairs
Maersk, Inc.

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Preston, Gates, Ellis & Rouvelas

J. Brian Sharkey, Vice President, Advanced Systems & Concepts
Science Applications International Corp.

Stanley Siegel, President
Mari-Flite Ferries

Jordan Truchan, President & CEO
American Ship Management, LLC

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

CCDoTT Staff

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PRESENTER INFORMATION

Stan Wheatley, Manager and Principal Investigator	CSULB CCDoTT
Steven Hinds, Program Administrator	CSULB CCDoTT
Dr. Hamid Hefazi, Professor and Chair	CSULB College of Engineering
Dr. Ken James, Professor	CSULB College of Engineering
Dr. Lawrence G. Mallon, Dir. of Research	CSULB CITT
David R. Lavis, Sr. VP and General Manager	CDI Marine, SDD
Jeff Benson, Programs Manager	CDI Marine, SDD
J. J. McClelland, Dir. of Business Development	Navatek, Ltd.
Dr. Igor Mizine, Sr. Research Scientist	SAIC
Blair R. Garcia, Vice President and Senior Associate	TranSystems Corporation
Ed Savacool, Consultant	TranSystems Corporation

California State University, Long Beach (CSULB)**Center for the Commercial Deployment of Transportation Technologies (CCDoTT)****Stan Wheatley, Manager and Principal Investigator**

Mr. Wheatley has been at the helm of the CCDoTT program since 1999. A graduate of the U.S. Merchant Marine Academy, he has served at sea on various commercial and naval ships in all engineering capacities completing his active seagoing career as Chief Engineer of the N.S. SAVANNAH. Following assignments with the U.S. Maritime Administration as Director, Office of Advanced Ship Operations; Director, The National Maritime Research Center; and Director of Ships Operations; Mr. Wheatley was engaged as Vice President of Engineering with a U.S. flag shipping company operating both commercial and government owned ships in worldwide trade.

Steven Hinds, Program Administrator

Mr. Hinds brings to CCDoTT extensive experience in military logistics operations from both the operational and planning perspective. As a member of the Policy Staff and the Supreme Headquarters Allied Powers Europe, he was responsible for the policy coordination of NATO Military Defense Plan. As the Physical Security Officer for the United States Marine Corps, Mr. Hinds was responsible for all physical security issues throughout the Marine Corps; and coordinated with Department of Defense to develop a single standard for physical security guidelines for all services world-wide. Mr. Hinds has served in a number of roles with the United States Government, including that of Deputy Assistant Secretary of the Navy (FSN) (Acting). Mr. Hinds has 10 years experience as an analyst and program manager providing high-level decision makers on the OPNAV staff (N-80 Assessment Division) and the Marine Corps Combat Development Center with decision support analysis supporting the Navy Investment Balance Review (IBO), the Quadrennial Defense Review, and the Marine Expeditionary Forces (MEF) Combat Service Support Review. He has also participated in studies and war gaming joint force closure planning, Ready Reserve Fleet planning and use, infrastructure requirements, Mobility Requirements Study analysis, and many ship requirements studies.

College of Engineering**Dr. Hamid Hefazi, Professor, Aerospace Engineering and Chair, Mechanical and Aerospace Engineering Department**

Dr. Hefazi received his Ph.D. degree in Aerospace Engineering from the University of Southern California in 1985. He has been involved in a broad range of teaching and research activities in fluid mechanics, including geophysical fluid mechanics and computational fluid dynamics (CFD), with emphasis on the computation of transonic flows over complex geometries. His more recent works have been on the application of CFD in turbomachinery, aerodynamic design optimization, aeroacoustics, hydrodynamics, and advanced optimization methods. He has more than 36 papers and book chapters in various publications and is a senior member of the American Institute of Aeronautics and Astronautics. He has been the Principal Investigator for twenty-five (25) externally funded research projects during the last 8 years; including projects sponsored by Boeing, Northrop Grumman, Honeywell, National Science Foundation and the Office of Naval research. Since the year 2000, he has been the task manager for the CCDoTT project on CFD Design Tool Development for Fast Ships. Currently, he works on two of the CCDoTT projects on the development of stable ocean platforms and multi disciplinary design and optimization methods for multi-hull vessels. He has worked as a consultant for the Prada 2000 America's Cup challenges in the areas of keel, hull and sail performance for race boats and continued in the same capacity for the 2003 challenge. He is the director of the CSULB's Computational Fluid Dynamics Research Laboratory as well as director of the "Boeing Technology Center" located in the College of Engineering. He is also a member of the California Space Grant Consortium.

Dr. Ken James, Professor, Electrical Engineering and Computer Engineering/Computer Science

Dr. James joined the faculty at CSULB in 1978 where he is a Professor in both Electrical Engineering and Computer Engineering/Computer Science with research emphasis in fiber optics and advanced ASIC design. Since 1999 he has been Technical Coordinator for CCDoTT, where he oversees numerous High-Speed Ship and Agile Port projects. Upon receiving his BS in Physics in 1968 from Case Institute of Technology in Cleveland, he joined the technical staff of Rockwell International Research Division in Anaheim, California. While employed with Rockwell International as a Design Engineer for VLSI devices and fiber-optic sensors, he completed an MS in Electrical Engineering at California State University, Fullerton in 1972 and a Ph.D. in Electrical Engineering at the University of California Irvine, in 1982. In 1984, he formed OPCOA, Inc. in Garden Grove, California and served as CEO until 1996. The company, through funded research from NASA, produced the first micromechanical optical filter for fiber communications. He is the author of 12 articles and has been awarded 15 patents.

Center for International Trade and Transportation (CITT)**Dr. Lawrence G. Mallon, J.D., LL.M. Director of Research and Development**

Dr. Mallon has served as Counsel and Director of Research and Development, for CITT since 1998 and has been a CCDoTT Task manager in Goods Movement and Inspection Technology since 2000. He is the former Maritime Counsel to the US House of Representatives from 1977-87. He was an Attorney-adviser, Select Committee on the Maritime Industry, California State Senate from 1987-1993. He is the Chair, Southern California Marine and Intermodal

Transportation System Advisory Council (SOCALMITSAC) to U.S. Secretary of Transportation, and the Secretary of Department of Homeland Security since 2002. He is the Executive Director of the Pacific Area Port Security Consortium of the California State University System. He is the Chair of the Safety and Security Committee of the AB2043 Goods Movement and Port Security Task Force for the State of California. He holds degrees in international business and economics from Georgetown University, a Juris Doctor degree from Emory University, and a Master of Laws in Maritime and International law from the University of Miami. He was awarded a post-doctoral fellowship from MIT-Woods Hole Oceanographic Institution. He was the official Congressional Observer to the Third United Nations Conference on the Law of the Sea, and to the IMO Legal and Marine Safety Committees. He is a certified Proctor in Admiralty since 1978. He is admitted to practice in the States of Georgia, California, New York, and the District of Columbia and before the Supreme Court of the United States. He is a retired naval reserve officer with Viet Nam era active service and reserve specialty in sealift mobility and logistics.

CDI Marine, Systems Development Division (SDD)

David Lavis, Senior V.P., Government Services and General Manager, SDD

Mr. Lavis has worked 45 continuous years in the development of high-speed vessels for numerous foreign and domestic projects spanning initial conceptual design through construction, test and in-service operational phases. He has served as an advisor to NATO SWG-6, a committee of 12 countries concerned with high-performance ships, is a Fellow of the Royal Institution of Naval Architects, a Chartered Engineer in the UK, and holds a MSc degree in Aeronautical Engineering from Cranfield Institute of Technology, U.K.

Jeff Benson, Programs Manager

Mr. Benson has been working in government and industry for over 39 years. His most recent accomplishments include program management for development of the low-signature composite masts on the US RADFORD and LPD-17, and support to ONR for oversight of the Composite High-Speed Vessel (CHSV) at Northrop Grumman. He has Bachelor's Degrees in Electrical Engineering and Engineering Science & Psychology from the University of Pennsylvania and a Master's Degree in Operations Research from Polytechnic Institute of Brooklyn.

Navatek, Ltd.

Joseph J. "Jim" McClelland, Jr., Director of Business Development

Admiral McClelland graduated from Tufts University, Medford, MA.. B.S. in biology/pre-medicine. Entered U.S. Coast Guard through Officer Candidate School, served for thirty-six years. M.S. in Physical Oceanography from Naval Postgraduate School, Monterey, CA. Ship Salvage and Helium-Oxygen Diving Officer. Four assignments in icebreakers working arctic and Antarctic. Commanded oceanographic ship and International Ice Patrol. Retired in 2001.

Science Applications International Corporation (SAIC)

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 Ph.D. in applied hydrodynamics and ship design from Krylov Ship Research Institute, St. Petersburg, Russia.

TranSystems Corporation

Blair Garcia, Vice President and Senior Associate

As a maritime and rail freight and passenger planner, Mr. Garcia has participated in projects involving the planning of commercial and industrial facilities and corridors, land development, utilities layout and transportation planning. Since joining TranSystems Corporation, Mr. Garcia's work has focused on the design and planning of major maritime and intermodal transportation projects. His experience includes projects at major international maritime ports including the Port of Cherbourg, France; Jeddah Islamic Port, Saudi Arabia; and the Puerto Rico Port Authority. In addition to his international marine and rail planning experience, Mr. Garcia has been intimately involved in developing, evaluating and assessing new concepts and technologies (infrastructure, equipment and information technology) related to freight and passenger transport. This work includes the definition and evaluation of port agility and information technology improvement in marine terminals. Mr. Garcia has served as project manager for all TranSystems projects with CCDoTT.

Ed Savacool, Consultant

Ed Savacool (Colonel, United States Army, Ret.) has over 30 years of experience managing complex transportation organizations and projects. He is proficient in program management, acquisition planning support, transportation logistics, strategic sealift systems analysis, and operational testing of transportation hardware and software systems. Ed Savacool served 26 years in the United States Army. His first 14 years of military service was in Army Aviation and the following 12 years in the Transportation Corps. His highest military award is the Distinguished Flying Cross. Mr. Savacool has worked with CCDoTT on numerous Agile Port, High-Speed Ship and Rapid Deployment projects.