Symposium Programme



Faculty of Navigation Gdynia Maritime University

and



have the honour to invite to

7th INTERNATIONAL SYMPOSIUM ON MARINE NAVIGATION AND SAFETY OF SEA TRANSPORTATION

TRANS-NAV'2007

Gdynia 2007

PRELIMINARY PROGRAM OF THE SYMPOSIUM



Photo: A. Weintrit

Symposium Office:

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Prof. Michał Holec - Dean of Faculty of Navigation, Gdynia Maritime University, Poland

Editor:

Prof. Adam Weintrit - Head of Navigational Department, Gdynia Maritime University, Poland

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Conference Co-Organizers:

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Symposium Programme

Note:

All timing and papers are subject to change - please consult the 'News" and "Program" pages of our website <u>http://transnav.am.gdynia.pl</u> for the most up to date timetable

Wednesday 20th June 2007

0800 - 1200 Registration in the Main Hall of the Gdynia Maritime University, Morska Str. 81

Plenary Session A0 - Opening Address

0900 - 0930 Place: Main Lecture Hall (Aula) of the Gdynia Maritime University, Morska Str. 81 Chairmen: Michal Holec, Adam Weintrit

> Welcome Adam Weintrit, Chairman of Organizing Committee

Opening Address Rafal Wiechecki, Minister of Maritime Economic Ministry of Poland

Opening Address Wojciech Szczurek, Mayor of Gdynia

Opening Address for TransNav 07 at Gdynia Maritime University Nicholas Cooper, President of the Nautical Institute

Opening Address Jozef Lisowski, President of Gdynia Maritime University

TransNav'2007 - the 7th International Symposium on Marine Navigation and Safety of Sea Transportation Michal Holec, Dean of Faculty of Navigation, Gdynia Maritime University Adam Weintrit, Chairman of Organizing Committee

0930 - 0940 Short Performance of Gdynia Maritime University's Choir

Plenary Session A1 - Safety of Navigation

0940 - 1100 Place: Main Lecture Hall (Aula) of the Gdynia Maritime University, Morska Str. 81 Chairmen: Andrzej Felski, Jac Spaans

> The Dynamic Game Models of Safe Navigation Jozef Lisowski

Innovative Probabilistic Prediction of Accident Occurrence Kinzo Inoue, Masayuki Kawase

On Ship Systems Multi-State Safety Analysis Przemyslaw Dziula, Miroslaw Jurdzinski, Krzysztof Kolowrocki, Joanna Soszynska

Availability of the Certain Value of Position Error in the Navigational Systems – Model Application Cezary Specht

Session B1 - E-Navigation

1130 - 1300 Place: Lecture Hall A16, Basement of Mechanical Faculty, Gdynia Maritime University Chairmen: Henryk Sniegocki, Bengt Stahl

The Development of e-Navigation *David Patraiko*

Polish Approach to E-Navigation Concept Adam Weintrit, Ryszard Wawruch, Cezary Specht, Lucjan Gucma, Zbigniew Pietrzykowski,

Vision of the Decision Support Model on Board of the Vessel with Use of the Shore Based IT Tools Lukasz Bibik, Andrzej Krolikowski, Krzysztof Czaplewski, Daniel Duda,

The Role of Operational Ocean Forecasting in e-Navigation Jerzy Graff

GMDSS as a Data Communication Network for e-Navigation Karol Korcz

1300 - 1330 Break: Transfer by Bus to Skwer Kosciuszki, Gdynia

Session C1 - Ships Routeing and Vessel Traffic Services

1130 - 1300 Place: Lecture Hall A13, Basement of Mechanical Faculty, Gdynia Maritime University Chairmen: *Miroslaw Jurdzinski, John Kemp*

> Mental Workload of the VTS Operators by Utilising Heart Rate Serdar Kum, Masao Furusho, Okan Duru, Tanzer Satir

Intelligent VTS Wlodzimierz Filipowicz

Study on VTS Simulator Training Based on Internet Integration System of Ship-handling Simulator Study on VTS Simulator into Net System of Ship-handling Simulators *Yi Zhang, Jun Ma, Chaojian Shi, Qinyou Hu*

Traffic Separation Schemes and Mandatory Ship Reporting System in the Baltic for the approaches to the Polish ports in the Gulf of Gdańsk *Ryszard Wawruch, Bogdan Rojek*

New Development of Ships Routeing in Chinese Navigable Waterways Hui Ma, Zhaolin Wu, Zhengjiang Liu

1300 - 1330 Break: Transfer by Bus to Skwer Kosciuszki, Gdynia

1330 - 1500 Lunch in Restaurant Roza Wiatrow

SPECIALIST SESSIONS

Session D1 - Navigation, Manoeuvring and Ship-Handling Simulation

1500 - 1630 Place: Main Lecture Hall (Aula) at Faculty of Navigation, Gdynia Maritime University Chairmen: Stanislaw Gorski, Masao Furusho

Internet Based Integration of Multi-Ship Handling Simulators with IP Multicast Jinbiao Chen, Songqing Shao, Qinyou Hu, Mingming Zhang

Combined Manoeuvring Analysis: AIS and Full Mission Simulation Karl Gunnar Aarsather, Torgeir Moan

Combination of Processing Methods for Various Simulation Data Sets. *Maciej Gucma*

Fairway Navigation – Observing Safety-Related Performance in a Bridge Simulator Robert Nilsson, Tommy Garling, Margareta Lutzhof

Use of Simulation for Optimizing Manoeuvres in Constantza Port Eugen Barsan

1630 - 1645 Coffee Break in Room 121 (Faculty Board Room)

Session E1 - Anti-Collision

1500 - 1630 Place: Gdynia Maritime University, Faculty of Navigation, Room No. 206 Chairmen: Avtandil Gegenava, Andrzej Stateczny

The COLREGS and the Princess Alice *John Kemp*

The Determination of a Minimum Critical Distance for Avoiding Action by a Stand-On Vessel as Permitted by Rule 17 a)ii) Edward Wladyslaw Rymarz

Fuzzy Collision Threat Parameters Area (FCTPA) - A New Display Proposal *Rafal Szlapczynski*

Planed Route Based Negotiation for Collision Avoidance between Vessels *Qinyou Hu, Chun Yang, Haishan Chen, Baojia Xiao*

Building of CBR's DB Using Ontology for a Collision Avoidance System *Gyei-Kark Park, Woong-Gyu Kim, John L.R.M. Benedictos*

1630 - 1645 Coffee Break in Room 121 (Faculty Board Room)

Session F1 - Methods and Algorithms, Part 1

1500 - 1630 Place: Gdynia Maritime University, Faculty of Navigation, Room No. 306 Chairmen: Stanislaw Oszczak, Kinzo Inoue

Assessment of Navigational Safety in Vessel Traffic in an Open Area

Zbigniew Pietrzykowski

The Use of Estimation of Position Coordinates with Constraints in Navigation Andrzej Banachowicz, Grzegorz Banachowicz

Game Based Learning for Seafareres: A Framework for Instructional Game Design for Safety in Marine Navigation *Ioannis Sirris, Nikitas Nikitakos*

Method of Synthesis of Flexible Strategies for Preventing Collisions *Mykola Tsymbal*

Ship Control in Manoeuvring Situations with Fuzzy Logic Controllers Leszek Morawski, Vinh Nguyen Cong

1630 - 1645 Coffee Break in Room 121 (Faculty Board Room)

Session G1 - Manoeuvring in Port Area and Pilot Navigation, Part 1

1500 - 1630 Place: Gdynia Maritime University, Faculty of Navigation, Room No. 114 Chairmen: Lucjan Gucma, David Patraiko

> Analysis of Ships Turn Manoeuvres in Port Water Area Jakub Kornacki, Wieslaw Galor

An Application of ANN to Automatic Ship Berthing Using Selective Controller Namkyun Im, Lee Seung Keon, Bang Hyung Do

The Use of Backstepping Method to Ship Course Controller Anna Witkowska, Roman Smierzchalski

Some Problems of Berthing of Ships with Non-Conventional Propulsions *Wojciech Koziol, Wieslaw Galor*

Depth Optimization of Designed New Ferry Berth Stanislaw Gucma, Stefan Jankowski

1630 - 1645 Coffee Break in Room 121 (Faculty Board Room)

Session H1 - Human Factors and Crew Resource Management, Part 1

1500 - 1630 Place: Gdynia Maritime University, Faculty of Navigation, Room No. 111 Chairmen: Andrzej Krolikowski, Takeshi Nakazawa,

> What is Human Factors Compared to Crew Resource Management? *Gunnar K. Fahlgren*

Securitas Mare - Crowd and Crisis Management Christer Bergquist

Identifying the Potential Role of Design-Based Failures on Human Errors in Shipboard Operations Metin Celik, Ismail Deha Er

The Effectiveness of Multinational Maritime Task Groups in Shipping Protection Daniel Duda, Tomasz Szubrycht Effects of Fatigue on Navigation Officers and SWOT Analyze for Reducing Fatigue Related Human Errors on Board *Ozcan Arslan, Ismail Deha Er*

1630 - 1645 Coffee Break in Room 121 (Faculty Board Room)

Session D2 - Technical Aids To Navigation

1645 - 1815 Place: Gdynia Maritime University, Faculty of Navigation, Lecture Hall (Aula) Chairmen: Chaojian Shi, Adam Weintrit

The Role of Navigational Aids such as RADAR/ARPA, ECDIS, AIS, Autopilot, and VHF on Safe Navigation at Sea *Homayoun Yousefi*

Multidimensional Presentation of Radar Image Mariusz Waz, Tadeusz Stupak, Andrzej Szklarski

Study on One Mile SART Shogo Hayashi, Masayasu Ogawa, Manami Ide

Gyrocompasses - their Condition and Direction of Development Andrzej Felski

The Process of Radar Tracking by Means of GRNN Artificial Neural Network with Dynamically Adapted Teaching Sequence Length in Algorithmic Depiction *Andrzej Stateczny, Witold Kazimierski*

Session E2 - Automatic Identification Systems

1645 - 1800 Place: Gdynia Maritime University, Faculty of Navigation, Room No. 206 Chairmen: *Roman Smierzchalski, Alfred Brandowski*

> Usage AIS Data for Analyzing Ship's Motion Intensity Krzysztof Naus, Artur Makar, Jaroslaw Apanowicz

AIS Contribution in Navigation Operation- Using AIS User Satisfaction Model *Abbas Harati-Mokhtari, Philip Brooks, Alan Wall, Jin Wang*

Operational Status of Polish AIS Network Wojciech Drozd, Marek Dziewicki, Marcin Waraksa, Lukasz Bibik

Safety of Vessels' Traffic, Bound for Polish Ports *Jerzy Hajduk, Jakub Montewka*

Session F2 - Methods and Algorithms, Part 2

1645 - 1815 Place: Gdynia Maritime University, Faculty of Navigation, Room No. 306 Chairmen: Wlodzimierz Filipowicz, Mykola Tsymbal

Multisensor Data Fusion in the Decision Process on the Bridge of the Vessel *Tomasz Neumann*

E-Chartering Web Based Platforms between Success and Failure *Ghiorghe Batrinca*

Reinforcement Learning in Ship Handling *Miroslaw Lacki*

Integrated software for implementation of control systems based on PLC controllers Jerzy Mikulski, Szymon Surma

Accuracy of Relative Navigation in Automated Systems of Data Communication *Milan Dzunda, Vladimir Humenansky*

Session G2 - Manoeuvring in Port Area and Pilot Navigation, Part 2

1645 - 1815 Place: Gdynia Maritime University, Faculty of Navigation, Room No. 114 Chairmen: Leszek Morawski, Dang Wan Uy

Probabilistic Model of Underkeel Clearance in Decision Making Process of Port Captain *Lucjan Gucma, Marta Schoeneich*

Mooring the Ferry m/f "Gryf" in Extreme Hydro and Meteorological Conditions *Adam Kowalski*

Construction of the Ship's Technical Failure Model to Asses the Navigational Safety *Lucjan Gucma, Rafal Gralak*

The Analysis of Possibilities How the Collision between m/v 'Gdynia' and m/v 'Fu Shan Hai' Could Have Been Avoided *Andrzej Banachowicz, Piotr Wolejsza*

The Model of Ship Movement while Touching the Sea Bed *Wieslaw Galor*

Session H2 - Human Factors and Crew Resource Management, Part 2

1645 - 1815 Place: Gdynia Maritime University, Faculty of Navigation, Room No. 111 Chairmen: Krzysztof Kolowrocki, Nikitas Nikitakos

Investigation the Root Causes of Seafarers' Turnover and its Impact on the Safe Operation of the Ship *Fatih Turker, Ismail Deha Er*

Analysis of Sea Accidents in 2006 Magda Bogalecka, Marzena Popek

Analysis of Factors Affecting the Evacuation of People from Vessels in Life-Endangering Situations Dorota Lozowicka

Statistical Studies on Marine Accidents Happened in the Bohai Sea Zhaolin Wu, Jingjun Zhao, Guanghui Li

On the Relationships between Indexes of Merchant Vessel Accidents and Indexes of Economy and Shipping Zhongyi Zheng, Hejun Feng, Guanghui Li

Risk Management - Do We Really Need It in Shipping Industry? *Kuba Szymanski*

- 1815 2000 Free Time
- 2000 2300 Dean's Party in Restaurant 'Rodizio el Toro', Gdynia, Kamienna Gora

Thursday 21st June 2007

0800 - 1200 Registration in the Main Hall of the Gdynia Maritime University, Morska Str. 81

Plenary Session A2

on the occasion of celebrating the World Hydrography Day with theme for this year: Electronic Navigational Charts (ENCs); an Essential Element of Safety at Sea and Efficient Maritime Operations

0900 - 1100 Place: Main Aula of the Gdynia Maritime University, Morska Str. 81 Chairmen: Czesław Dyrcz, Piotr Pernaczynski

The IHO Supporting Maritime Demands. Report on the Occasion of Celebrating the World Hydrography Day with theme for this year: "Electronic Navigational Charts (ENCs); an Essential Element of Safety at Sea and Efficient Maritime Operations" *Alexandros Maratos, Adam Weintrit*

10 Things They Should Have Told You about ECDIS *David Edmonds*

ECDIS Operator Training Jochen Rudolph

Worldwide and route-specific coverage of Electronic Navigational Charts Erik Vanem, Magnus Strandmyr Eide, Rolf Skjong, Gjermund Gravir, Arve Lepsøe

A Method to Build Web Raster Chart Systems *Qinyou Hu, Jinhai Chen, Lili Yu*

Specificity of ENC Data Representation on an Archipelagic Sea Area – Example of the East Coast of the Middle Adriatic Sea Area *Tea Duplancic Leder*

Economic Analysis on Substitution of Paper Chart with ECDIS Onboard for Turkish Flag Ships Oguzhan Gurel, Ismail Deha Er

1100 - 1130 Coffee Break in Students Club "Bukszpryt"

Round Table Panel Session B2 "Galileo: A Significant Benefit to Marine Navigation?"

1130 - 1300 Place: Lecture Hall A16, Basement of Mechanical Faculty, Gdynia Maritime University Chairman: *Vidal Ashkenazi*

Panellists:

Jean-Pierre Barboux Galileo Applications Development Manager, Thales, France

Carlo Des Dorides Head of the Concession Department European GNSS Supervisory Authority (GSA), Italy Rolf Backstrom Finnish Maritime Administration and IALA, Finland

R A Smith Secretary General, International Association of Institutes of Navigation, UK

Adam Weintrit Head of Navigational Department, Gdynia Maritime University, Poland

1300 - 1330 Break: Transfer by Bus to Skwer Kosciuszki, Gdynia

Domestic Session C2 - Annual General Meeting of Polish Hydrographers Society (in Polish language)

1130 - 1300	Place: Lecture Hall A13, Basement of Mechanical Faculty, Gdynia Maritime University Session in Polish
1300 - 1330	Break: Transfer by Bus to Skwer Kosciuszki, Gdynia
1330 - 1500	Lunch in Restaurant Roza Wiatrow
1430 - 1530	Registration in the Main Hall of Faculty of Navigation, GMU, Jana Pawla II Ave. 3

SPECIALIST SESSIONS

Session D3 - Global Navigation Satellite System - Part 1		
1500 - 1630	Place: Gdynia Maritime University, Faculty of Navigation, Lecture Hall (Aula) Chairmen: <i>Dick Smith, Cezary Specht</i>	
	Modernization of Satellite Navigation Systems and theirs New Maritime Applications Jacek Januszewski	
	DGNSS Re-Capitalisation Michael Pattinson, Mark Dumville, Nick Ward	
	Application of GNSS Integrated Technology to Safety of Inland Water Navigation Dariusz Popielarczyk, Stanislaw Oszczak	
	Software navigation receivers for GNSS and DVB Frantisek Vejrazka, Pavel Kovar, Martin Eška, Pavel Puričer	
	Possibility of Precise Positioning and Precise Inshore Navigation Using RTK and Internet Lech Kujawa, Jerzy B. Rogowski	
1630 - 1645	Coffee Break in Room 121 (Faculty Board Room)	

	Session E3 - Weather Navigation and Meteorological Aspects
1500 - 1630	Place: Gdynia Maritime University, Faculty of Navigation, Room No. 206 Chairmen: Krzysztof Czaplewski, Michal Holec
	Multiobjective Approach to Weather Routing Joanna Szlapczynska
	A Numerical Prediction System for Wind and Sea Wave: A Typhoon Case Jau-Ming Chen, Jia-Shen Hu, Wen-Laung Huang, Li-Hua Hsu
	Numerical Simulation of Nonlinear Water Wave Problems D.C. Lo, Jia-Shen Hu, I-Fu Lin
	A Required Data Span to Detect Sea Level Rise Tomasz Niedzielski, Wieslaw Kosek
	Tidal Level Predictions in Reference to Their Datum, Based on Particular, Selective Sources <i>Piotr Kabziński</i>
1630 - 1645	Coffee Break in Room 121 (Faculty Board Room)
	Session F3 - Safety and Security in Sea Transportation - Part 1
1500 - 1630	Place: Gdynia Maritime University, Faculty of Navigation, Room No. 306 Chairmen: German de Melo, Jerzy Mikulski
	The IMO Instruments for Ensure Safety Transportation of Dangerous Goods Marzena Popek, Magda Bogalecka
	Safety and Environmental Concern Analysis for LNG Carriers Ismail Deha Er
	Safety of Cargo Handling and Transport Liquefied Natural Gas by Sea. Dangerous Properties of LNG and Actual Situation of LNG Fleet <i>Andrzej Starosta</i>
	The Environmental Effects of Projected Container Terminal to the Safely Manoeuvring Cemil Yurtoren, Okan Duru, Tanzer Satir
	Total Losses of Fishing Vessels Due to the Insufficient Stability Przemyslaw Krata
1630 - 1645	Coffee Break in Room 121 (Faculty Board Room)
	Session G3 - Maritime Education and Training - Part 1
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1500 - 1630	Place: Gdynia Maritime University, Faculty of Navigation, Room No. 114 Chairmen: Eamonn Doyle, Zbigniew Pietrzykowski
	The MARENG Project - A Tool Enhancing Safety in Navigation and Maritime Transport Barbara Katarzynska
	Information and Communication Technology (ICT) Training Application for MET

Institutions Muhsin Kadioglu Economic Constraints on Maritime Training and Education in Turkey *Kadir Cicek, Ismail Deha Er*

Social Impacts on the Maritime Education – A Case Study National Kaohsiung Marine University in Taiwan Jia-Shen Hu, Shyy Woei Chang, Che-Tsung Chen

Examining and Promoting Chinese Seafarer Education and Training Bao Junzhong, Xu Mingqiang

1630 - 1645 Coffee Break in Room 121 (Faculty Board Room)

Session H3 - Pollution and Environment Protection

1500 - 1630 Place: Gdynia Maritime University, Faculty of Navigation, Room No. 111 Chairmen: Gyei-Kark Park, Wojciech Wawrzyński

> Ship to Ship Operations in Cold Climate Environments Tor Einar Berg

The Semirara Oil Spill: Its Implications to Maritime Legislations Melchor Magramo

The Implementation of Oil Spill Costs Model in the Southern Baltic Sea Area to Assess the Possible Losses due to Ships Collisions *Lucjan Gucma, Elwira Goryczko*

The Model of Oil Spills Due to Ships Collisions in Southern Baltic Area *Lucjan Gucma, Marcin Przywarty*

Human Errors and Oil Pollution from Tankers Paulica Arsenie, Radu Hanzu-Pazara

1630 - 1645 Coffee Break in Room 121 (Faculty Board Room)

Session D4 - Global Navigation Satellite System - Part 2

1645 - 1815 Place: Gdynia Maritime University, Faculty of Navigation, Lecture Hall (Aula) Chairmen: Jacek Januszewski, Frantisek Vejrazka

ASG-EUPOS - A Multifunctional Precise Satellite Positioning System in Poland Jaroslaw Bosy, Wieslaw Graszka, Marcin Leończyk

Accuracy Analysis of the EGNOS System During Mobile Testing Douglas Aguilar, Leszek Jaworski, Marcin Kolodziejczak

EGNOS Status and Performance in the Context of Marine Navigation Requirements Jaroslaw Cydejko

An Effect of Urban Development on the Accuracy of the GPS/EGNOS System *Ryszard Bober, Tomasz Szewczuk, Adam Wolski*

GNSS for an Aviation Marek Grzegorzewski Janusz Cwiklak, Henryk Jafernik, Andrzej Fellner GNSS for Aviation Analysis Based on EUPOS and GNSS/EGNOS Collocated Stations in PWSZ Chelm Andrzej Fellner, Janusz Cwiklak, Henryk Jafernik, Pawel Trominski, Jozef Zajac, Krzysztof Banaszek

Session E4 - Integration of Navigation

1645 - 1815 Place: Gdynia Maritime University, Faculty of Navigation, Room No. 206 Chairmen: Shogo Hayashi, Ryszard Wawruch

> Analytical Model of Position Uncertainty of Ship's Plan Geometry in Integrated Navigation System *Arkadiusz Tomczak*

Intelligent Ship Control System Andrzej Lebkowski, Roman Smierzchalski, Witold Gierusz, Krzysztof Dziedzicki

On an Advanced Shipboard Information and Decision-Making System for Safe and Efficient Passage Planning Søren Vinther Hansen, Egil Pedersen

Combination of Navigational Equipment and VDR Based Information to Enhance Alert Management Michael Baldauf, Knud Benedict, Erland Wilske, Peter Grundevik, John O. Klepsvik

Distributed Navigational Alert Management Joachim Behnke, Christoph Becker

The Research of Integrated Maritime Digital Information System Zhang Wei, Liu Renjie, Liu Chang

Session F4 - Safety and Security in Sea Transportation - Part 2

1645 - 1800 Place: Gdynia Maritime University, Faculty of Navigation, Room No. 306 Chairmen: Eugen Barsan, Bogumil Laczynski

Safety and Security Aspects for the Effective Shipment of Radioactive Materials with Maritime Transportation *Zuhal Er*

Model of Interaction of Water and Tank's Structure in Sloshing Phenomenon *Przemyslaw Krata*

The Paris MOU on PSC, Propulsion and Auxiliary Machinery Deficiencies and Maritime Safety

German de Melo Rodrigues, Ismael Cobos Delgado

Smart Container Security - The E-Seal with RFID Technology Jin Zhang, Ya-Qing Liu, Chun-Yan Yu, Cui-Fen Zhang

Session G4 - Maritime Education and Training - Part 2

1645 - 1815 Place: Gdynia Maritime University, Faculty of Navigation, Room No. 114 Chairmen: Shyy Woei Chang, Wladyslaw Rymarz

The Improvement of Higher MET at Vietnam Maritime University by Enhancement of the Linkage with Industries and International Relations

Dang Wan Uy, Pham Xuan Duong

Role and Importance of Simulator Instructor Asghar Ali

Reform of Technical Subject Examination with Multiple Choice - Essay Writing Exam Forms *Thien Hoa Ngo*

Participation of Polish Maritime Educational Institutions in Implementing Ideas of the EU Green Paper Aleksander Walczak

Project "E-Marine", A New Approach for Port and Maritime Activities *Doina Carp*

Session H4 - STCW Implementation and Maritime Policy

1645 - 1815 Place: Gdynia Maritime University, Faculty of Navigation, Room No. 111 Chairmen: Ismail Deha Er, Waclaw Morgas

> The Public Private Partnership Model on which the National Maritime College of Ireland was Conceived and Operates *Eamonn Doyle*

The STCW 1995 Convention: Awareness Attitude and Compliance among Seafarers *Ralph Pador*

The STCW Convention & the Manning Resolution Need Amendment & Improvement *Fazlur Chowdhury*

Quality Standards System: Status, Compliance and Adherence in Maritime Institutions in the Philippines

Melchor Magramo, Flora V. Javier, Marian Lazaro

Foundation for the Promotion of Technical Education Stanislaw Zurkiewicz

The Study on Social Security of Seamen *Zhang Li*

- 1815 2000 Free Time
- 2000 2400 Dean's Party in Restaurant 'Poklad', Gdynia, Skwer Kosciuszki

Friday 22nd June 2007

- 0800 1400 Sightseeing Tour by Bus for Symposium Participants to Gdansk and Sopot
- 0800 1000 Registration in the Main Hall of the Gdynia Maritime University, Morska Str. 81

Plenary Session A3 on the occasion of celebrating the 70th Birthday of Prof. Michal Holec, Dean of Faculty of Navigation

(in Polish language)

0900 - 1100 **Place:** Gdynia Maritime University, Faculty of Navigation, Aula **Chairmen:** Jozef Urbanski, Aleksander Walczak

Jubileusz 70-lecia Komandora Profesora Doktora Habilitowanego Michala Seweryna Holeca *Andrzej Banachowicz*

Dziekan, Komandor, Profesor Doktor Habilitowany Michał Holec Zdzisław Kopacz, Wacław Morgaś, Józef Urbański

Prof. dr Michał Holec - wspomnienia z dawnych lat *Zbigniew Szczepanek*

Jak Michał wspierał dzieło Latajacego Holendra Andrzej Felski

Głos na Jubilata Klemens Tymański

Michał Holec i cała ta "Holcowizna" Henryk Nitner

Moje wspomnienia Grzegorz Rutkowski

Prof. Michał Holec ojcem (twórcą) Sympozjum Nawigacyjnego organizowanego od 1995 roku przez Wydział Nawigacyjny Akademii Morskiej w Gdyni *Adam Weintrit*

1100 - 1130 Coffee Break in Room 121 (Faculty Board Room)

Plenary Session A4 on the occasion of celebrating the 70th Birthday of Prof. Michal Holec, Dean of Faculty of Navigation (cont.)

1130 - 1300Place: Gdynia Maritime University, Faculty of Navigation, Aula
Chairmen: Andrzej Banachowicz, Jerzy B. Rogowski

Today's Maritime Navigation and Its Changes Waclaw Morgas, Jozef Urbanski, Zdzisław Kopacz

Galileo Satellite Navigation System Receiver Concept Jerzy Demkowicz, Mateusz Lemanczyk

MAAPCNIA: a Boost to Authentic MET Instruction *Angelica Baylon, Daniel Torres*

Some New Dimensions in Sextant-Based Celestial Navigation. Aspects of position solution reliability with multiple sights *Herman Zevering*

Estimation of Altitude Accuracy of Punctual Celestial Bodies Measured with Help of Digital Still Camera *Piotr Bobkiewicz*

1300 - 1400 Break - Preparation to final Plenary Session on board "Dar Pomorza"

Plenary Session on board of Polish Tall Ship "Dar Pomorza" 1400 - 1500 Place: Tall ship "Dar Pomorza", President's Basin, Gdynia Chairmen: Miroslaw Jurdzinski, Adam Weintrit 1400 - 1500 Invited Keynote Presentation: 1420 - 1450 An Important Waypoint on Passage of Navigation History: Zheng He's Sailing to West Ocean Jin Ding, Chaojian Shi, Adam Weintrit 1450 - 1500 Walk to Restaurant "Roza Wiatrow"

Closing Ceremony

1500 -1600 Diner in Restaurant "Roza Wiatrow", Closing Ceremony



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