

ABSTRACT - NAVAL AND MANAGEMENT SCIENCE

ANDRIAN MIHEI (pg.9-10)

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140 DE ANI DE ÎNVĂȚĂMÂNT ROMÂNESC DE MARINĂ SUB SPIRITUAL ȘI SEMNUL LUI "MIRCEA CEL BĂTRÂN!"

“Învățătura trebuie să fie uneori un drum, întotdeauna un orizont” (Nicolae Iorga)

MARIAN CAȚĂ (pg.11-13)

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E-MARITIME: CONCEPT, OBJECTIVES, COMPONENTS

Abstract: Maritime transport is the prominent mode for trade between EU and third-countries carrying approximately 40% of internal market freight flows and 90% of EU external trade. More than half of EU ports have no dedicated system for communicating with Administration or the transport operators. The EU e-Maritime initiative will embody policies, strategies and capabilities facilitating the development of e-services.

Keywords: e-Maritime, SKEMA, SafeSeaNet, e-Navigation

VERGIL CHIȚAC, MUSTAFA TANER ALBAYRAK, OCTAVIAN TĂRĂBUȚĂ (pg.14-16)

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ROLE AND INFLUENCE OF ACADEMIC EDUCATION AND VOCATIONAL TRAINING ON NAVAL LEADERSHIP

Abstract: Leadership is the simultaneous interaction based on a common communication language, aiming to achieve a target characterized by complexity, dynamism and a variable degree of uncertainty. Training knowledge, skills and attitudes necessary for the leader will follow the principle of lifelong learning. Leadership in the naval academies/maritime universities should be studied and applied continuously from the first year of study and ending when obtaining the first rank of officer. Subsequently, modern leadership skills will be developed to the level of the naval hierarchy organization and the position within it. The role and influence of academic education and vocational training on naval leadership is of utmost importance. These are implicit elements of any sides of the triangle of leadership – authority, responsibility, accountability. The authors attempt to analyze the factors that determine the ratio of academic education vs. vocational training, through several perspectives of both participants and beneficiaries of the education process.

Key-words: naval leadership, academic education, vocational training, Marine.

MARINESCU CALIN DRAGOMIR (pg.17-18)

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OPPORTUNITIES OF ACQUIRING NEW OR SECOND HAND SEA GOING VESSELS

Abstract: At the present overall economic situation acquiring of sea going vessels seems to be a quite difficult deal due to lack of investors and the high risk of credit repayment, especially in shipping industry which was tremendously hit by the international decrease of the foreign trade due to the reduced commodities demand and supply volumes.

Keywords: vessel, industry, expenses, market

VIOREL FLORESCU, ALECU TOMA (pg.19-22)

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COMERCIAL TRADING OF LIQUID CARGO THROUGH PORT OF MIDIA

Abstract: Port of Midia, the second large port on the Romanian Black Sea litoral, has been projected to accommodate the Oceanic Fishing Fleet and to manipulate liquid cargo (petrochemical products) and Life Stock. Except the „traditional ways of transport „ on the road and rail way”, Port of Midia is the gate for the Poarta Alba – Midia- Navodari canal which connects the Black Sea with Danube River. Industry evolution in the last 30 years has imposed changing of the harbour logistics and facilities in order to respond and to face the new challenges. Today, in the Port of Midia, the main categories of cargo operated are: Crude oil, Clean Refined Products, GPL , Scrap Iron and Life stock. The increment of the refining capacity of the petrochemical industry, has imposed the need of finding new solutions for higher efficiency of the liquid cargo handling through port of Midia. In order to export bigger quantities of clean products the port logistics and facilities will have to be reconsidered, the navigating chanel will have to be enlarged so that the oil tankers that will be accommodated by the Midia Harbor to be higher than 10.000 tdw. Same thing can be achieved with a specialized white product SPM installed off port limit.

Key-words: port, shipping, cargo

GHEORGHE ICHIMOAEI, CĂȚĂLIN CLINCI, OCTAVIAN TĂRĂBUȚĂ (pg.23-26)

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A STUDY OF THE EFFECTS OF UNDERWATER EXPLOSIONS ON SHIP HULL

Abstract: In this paper we made an analysis of effects of underwater explosions on ship hull. The effect of the underwater explosions on ship hull is a characteristic of navy warfare. The effect could be: total damage (destruction), damage (mobility kill), light damage. The criteria used for the effects evaluation are tactically and technically and depends with ship type, overall dimensions of ship, ship missions etc. We made simulations for three explosions of a depth charge (a spherical depth charge made by TNT with 300 kilos weight) placed on various distances from ship at 20 meters depth .

KALIN KALINOV (pg.27-30)

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ASPECTS OF THE PARTICULARITY OF MILITARY ORGANIZATIONS

Abstract: In recent decades, significant progress has been made in an interdisciplinary field of knowledge - theory of organizations. The rapid change in theoretical domain allows looking at military organizations from a systematic point of view. Belonging to a particular type of organizations – “artificial organizations”, the military systems poses some specific trends. In this context the paper explores the particularity of military organizations formulating recommendation on their management and development. As a general methodology the paper applies the systematic approach. Additionally the paper describes some modern phenomena in the organizational theory: fractality, homotopy and heteroarchy. As a whole the paper sticks to the abstract border between the rational and the irrational, between hypothesis and knowledge.

I.M MOSKVICHENKO, E.V GRUSHEVSKAYA (pg.31-35)

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SINGULARITIES OF THE PORT FEES COLLECTION IN PORTS OF THE WORLD

Abstract: *In this article it was reviewed and analyzed the existing systems of port fees collection in the world. The port fees are forming an important part of the ports' income and in the total income received by the ports, port fees can range from one to three quarters [15]. In many ports around the world the main source of income (35 - 50%) is the rent[14]. In the Russian ports as the main source of income are port fees. Port fees in the income structure of the Ukrainian ports range from 35% (Illichivsk) to 60% (Yuzhnyi). Except port charges levied on vessels and port customers the main cash flow of Port Authority is formed by fees for the use of territories (rent, concession fees, etc.), port basins, piers, driveways, heavy cargo handling equipment and other services. Port fees are classified according to charging conditions for: compulsory and optional. The same fees can be divided into two groups on the basis of the measurability of services: dues and And the division of port fees depending on its status for: state and regional/local.*

Keywords: *ports, port charges, the scheme of port fees levying, port fees concept*

FLORIN NICOLAE, MARIAN RISTEA, MATILDA TOTOIU, MARIUS APETROAEI (pg.36-38)

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METHOD FOR COMPARATIVE ANALYSIS OF ENVIRONMENTAL PERFORMANCE IN TRANSPORT

Abstract: *The main objective of this analysis is focused on establishing the models and main trend lines characteristic for the transport chains, by using a critical and comparative approach over the environment performance point of view. The approach is often used in Europe and it is fundamented on life –cycle assessment for several transportation means. Over this point of view, the assessment of the environmental impact used in this study is proposing a set of specific markers (OECD Core Set of Indicators – OECD 1995).*

In this paper we are showing that for the known economic efficient maritime transport chain, there is necessary to be carried a comparative assessment relative to other transportation means and that will be related with the environmental performance. The paper opens new research trends in order to improve the transport chains both from the economic efficiency but also from the environmental efficiency point of view, important criteria promoted by the European Policies in transport industry.

Keywords: *transport chain, naval transport, environmental performance.*

FLORIN NICOLAE, ISABELLA RADU, MARIUS APETROAEI (pg.39-47)

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CONTRIBUTIONS TO THE ANALYSIS OF SAFETY NAVIGATION IN THE BLACK SEA - VIEWS ON PORT STATE CONTROL ACTIVITIES

Abstract: *The issue of maritime safety is the attribute of national regulators, with a well defined status and responsibilities established by international conventions (Romanian Naval Authority including Port State Control). The management of effects and implications in the medium and long term on the sustainable development of maritime transport and other related activities associated with this field carried in the Black Sea have so far not been subject to any scientifically based analysis and published in our country. The thesis contains the analysis of maritime safety in the Black Sea region on Port State Control inspection data from the BS MOU and refers, in a broader sense at the approach of the target factor in terms of selecting ships for inspection. Descriptive statistics and analysis are structured on 5 indicators and evaluating inspections conducted on ships transiting the region, and the findings are interpreted and visualized.*

Keywords: *safety, navigation, inspection, deficiencies, Port State Control*

FLORIN NICOLAE, MARIUS APETROAEI (pg.48-50)

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METHODOLOGY FOR ANALYZING OF OIL POLLUTION SOURCES IN ROMANIA'S COASTAL ZONE

Abstract: *The industrial activities developed on the Romanian sea coast are also represented by those corresponding to the shipping industry. From this point of view, the shipping transport constitutes one of the best represented sectors in the world economy. In the near future, the globalization process will lead to important changes in the field, starting with an increased change of goods and services by means of merchant ships and also with the development of modern technologies in the shipbuilding industry or in the port activity, with a reduced impact on the environment.*

The paper establishes a framework founded on the durable principles of development so that medium and long term projects will lead to a harmonious, coherent and balanced evolution specific to the European economies.

CĂTĂLIN C. POPA, HARALAMBIE BEIZADEA (pg.51-53)

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MULTIMODAL TRANSPORT ANALYSIS BASED ON COMPARATIVE ADVANTAGES OF UNIMODAL MEANS OF TRANSPORTATION

Abstract: *Transport activity is a complex process of transporting goods or people through two points. A cheap and efficient way of transporting goods is by sea. Transporting goods on inland waterways functionally consist in two elements, the shipping companies and the inland waterways. Some of the advantages of this kind of transport are that is friendly with the environment, it can transport a large quantity of goods, it has a low fuel consumption and has low commercial risks. Inland waterways transport must be studied in comparison with other ways of transporting goods, road and railway. The main comparison points are: transport capacity, transport costs, voyage and the distance. This study will show that inland waterways transport can be used in the future, given up at road transport and making it a best way of transporting goods.*

Key-words: *multimodal transport, naval, freight, means of transportation*

IGOR STOLBTSOV (pg.54-60)

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THE MAIN DIRECTIONS OF DEVELOPMENT OF THE PORT OF ODESSA AND THEIR PERSPECTIVES IN FUTURE

Abstract: *The port of Odessa is one of the largest ports of the Eastern Europe today. The developed transport infrastructure open the wide possibilities for conduction of the port business in passenger and cargo directions. That's why the marine passenger terminal will play the important role as transport knot during EURO-2012. The port of Odessa has the good base for development of the cargo handling. The modern technologies and the unique geographical position for the transit of goods to the other countries open the*

opportunities for the building of new terminals. This report is about the main ways of development of the port of Odessa, and its future perspectives, connected with the big potential of this enterprise.

Keywords: *the port of Odessa, passenger terminal, metals, containers, new terminal, perspectives*

NECULAI C. TATARU, GABRIEL MOISE, FLORIN ALBICI (pg.61-64)

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VTS - VESSEL TRAFFIC SERVICES DEVELOPMENT IN CONSTANTA

Abstract: *By VTS conference in Bergen in 2008 was implemented 96 such systems in 27 countries. Initially, states have implemented their own VTS system, established the rules to be followed by participants in maritime traffic when entering the area of responsibility. Thus there were procedures vary from country to country, to be followed and met by vessels in the area, which caused enough problems to watch teams, especially in areas where passing ships transiting the VTS centre under the responsibility of the another. To limit this confusion, which sometimes give rise to serious accidents since the 80s, the International Maritime Organization was also involved in this situation, making a VTS Guide, designed to standardize practices related to monitoring and directing traffic. Have been mentioned types of activities and services that a centre must meet to be considered VTS centre, which led to a standardization not only in the process, but also the types of equipment used and the method of preparation and training of VTS operators.*

Key-words: *direction and monitoring of shipping traffic, IMO, Vessel Traffic Services, VTS operators, VTS Guide, IMO*

IONELA – RODINELA TICU, RADU-ALEXANDRU POPA (pg.65-70)

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SOME CONSIDERATIONS REGARDING THE STUDY OF SAILING PROPULSION COMBINED WITH A CONVENTIONAL SYSTEM

Abstract: *In this research, we study the way of using a sail as a propellant with other classical propulsion systems. Firstly, we include a state of the art of the existing technologies. After the consideration of the apparent wind concept, we present the range of usage of this complementary propulsion system. We also include the calculation methodology, the numerical simulations and the wind inputs from a specific route.*

ALECU TOMA, DINU ATODIRESEI, SERGIU ȘERBAN (pg.71-73)

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INTERCOMMUNICATION BETWEEN NATO AND SHIPPING INDUSTRY FOR MARITIME SECURITY

Abstract: *The NATO Shipping Centre (NSC) promotes the co-operation between the military naval forces and merchant shipping by contributing to the white portion of the Recognized Maritime Picture (RMP) and apprising merchant ships of potential risks and possibly gives routing advice. When a military operation is designed in a heavy maritime traffic area, the NATO Shipping Centre assists these two parties: military and merchant shipping.*

Keywords: *merchant shipping, maritime security, terrorism, NATO*

MARIYA ZHELEVA (pg.74-77)

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SOVEREIGNTY - HISTORICAL, THEORETICAL AND LEGAL ASPECTS

Abstract: *The report traces the emergence, historical development and theoretical justification of sovereign power. It analyzes different incarnations of the idea in a periods of culmination and crisis of the nation-state, as well as contemporary relevance of the concept of sovereignty in a globalized world.*

Key words: *state, internal, external sovereignty, supreme, unlimited, independent.*