

ABSTRACT - NAVAL AND MANAGEMENT SCIENCE

MĂDĂLINA ALBU (pg.9-10)

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QUALITY MANAGEMENT SYSTEM IMPLEMENTATION

Abstract: Implementing a quality management system in an organization means the way of working and thinking that ensures the success of that system. Immediate benefits, especially the medium and long term advocate the implementation of these systems. The existence of a quality management system can be confirmed by "quality management system documentation" and providing sufficient evidence showing that the rules / regulations established under ISO 9001:2008 are properly applied. This paper reflects license key requirements of ISO 9001 implementation.

Key-words: quality management system, quality management system documentation

DINU ATODIRESEI, VERGIL CHIȚAC, MIHAIL PRICOP, ALECU TOMA (pg.11-14)

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ESTIMATING THE EFFECTS OF UNDERWATER EXPLOSIONS ON MARINE MAMMALS IN THE COASTAL AREA OF NORTHWESTERN BLACK SEA

Abstract: To determine the values of distances calculated for threshold values of impact levels were obtained the values within the ranges specified for the threshold of developing impact level and the most important impact level on the three species of dolphins on the Black Sea (*Phocena phocena*, *Dephinus delphis* and *Tursiops Tursiops*) when mines and torpedoes are used. The mortality or injury thresholds appear at distances of 240-250 (m) or 335-350 (m), mammals are disturbed if the two means of combat producing explosions will act at distances of 2200 (m) and the lowest impact is expected to be met when using reactive bombs, depending directly on the amount and nature of explosives.

Key-words: Black Sea, *Phocena phocena*, *Dephinus delphis* and *Tursiops Tursiops*

GEORGETA BUMBAC (pg.15-17)

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COMPLEX RELATIONSHIPS BETWEEN THE RURAL ECONOMY DIVERSIFY AND DEVELOPMENT OF INFRASTRUCTURE

Abstract: European and global experience showed that to have a prosperous and diversified rural economy, or even a rural economy based on mining and agriculture, it is necessary to create an appropriate infrastructure and foremost a communication infrastructure and providing energy. Later, however, rural entities should have public utilities adapted to local conditions and investments for environment protection. These activities occur in complementary infrastructure development perspective, they reinforce each other and provide high efficiency investments and complex development of human settlements.

Keywords: rural economy, rural infrastructure, rural sustainable development

MIHAELA – LAVINIA CIOBĂNICĂ (pg.18-21)

Spiru Haret University, Faculty of Accounting and Financial Management Constanta

THE ECONOMIC – FINANCIAL BALANCE OF THE ENTERPRISE REFLECTED BY INFORMATION PROVIDED BY BALANCE SHEET

Abstract: The economic life, as well as other fields of social life, in the process of developing activities that give content is dealt with in the permanent problem of balance. It is, in general, of the existence of adequate correlations between the needs of real economic and resources of production factors that underlie to obtain those assets. Economic information is present in all fields of activity, an indispensable element of progress. In the context of the development of market economy and increase the complexity of the economic information required to develop an appropriate area, content and efficiency, so that it can provide the information required to take decisions, to reflect accurately the economic situation of enterprises.

Keywords: economic-financial equilibrium, liquidity, ability to pay, treasury.

VASILE DOBREF, OCTAVIAN TĂRĂBUȚĂ, CĂTĂLIN CLINCI (pg.22-26)

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AUTONOMOUS UNDERWATER VEHICLE DESIGNED TO BE USED IN ANTISUBMARINE WARFARE

Abstract: In this paper we have realized a study which has as a main objective the creation of an underwater target needed for the ASW drills with ships from Romanian Navy Forces. This underwater autonomous vehicle will be obtained by SET53 torpedo modification. The study is focused on: redesign some critical torpedo subsystems, fitting hidroacoustic sensors on the torpedo, testing and evaluation of the modified subsystems.

Key-words: underwater vehicle, torpedo, ASW drills

ȘTEFAN DRAGOMIR, GEORGETA DRAGOMIR (pg.27-31)

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ADMINISTRATION OF URBAN WASTE AFTER USING CONTINUOUSLY RECYCLING SYSTEMS

Abstract: The advantages of recycling are to maintain the natural resources and to reduce the storage space. But collecting, transport, using and finally processing the materials needs more energy and most of recycling programmers are economically subsidized. The basic problems in recycling materials are connected with:-identification of recycled materials;-identification of opportunities of reusing and recycling. The administration of municipal greatest quantity of urban waste is a difficult task and is made by specialized services of city halls public health'. Proportion of urban populations' serve by public health was 76% in 2010, to approximately 87% in 2012. In rural area, don't existing the organized services for administration of waste, the transport to the places of storage is doing individually of the generators. This are serve in charge organized for administration of waste merely a little part from rural localities and in especial except needle rural localities finder out contiguously urban centers.

Key-words: waste, administrations, public health services, reusing and recycling, storage

DANIELA ENACHESCU (pg.32-35)

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APPRECIATION ON THE EVOLUTION OF EXCHANGE RATE COMPARED TO GOLD QUOTES IN ROMANIA DURING FINANCIAL CRISIS

Abstract: *What is better to invest during financial crisis: foreign currency or precious metals? This paper will examine the evolution of major currencies in Romania both absolutely and relatively, compared to the evolution of the Romanian market quotations gold, trying to show major differences in euro or dollar profitability investment compared to precious metals. Also, the paper present the evolution of central bank reserves at this time.*

Keywords: *exchange rate, gold, crisis*

VIREL FLORESCU, SERGIU LUPU (pg.36-39)

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STUDY REGARDING THE INCREMENT OF LIQUID CARGO TRANSFER THROUGH PORT OF MIDIA SPECIALIZED BERTHS

Abstract: *The continuous development of Petromidia refinery requires new technologies and logistics to be used beginig with 2012 in order to increase the refining capacity with more that 1 million tons of crude oil per year. A new Oil Terminal consisting in an Off Shore Single Point Mooring (SPM) has been builded off Port of Midia limits, terminal that facilitate the import of the necessary crude oil quantity for the refinery reducing the handling costs and minimalising losses. Considering that Port of Midia has been projected to accommodate ships of max 10.000 tdw, measures will have to be taken in order to create the possibility to export larger quantities of liquid products. New specialized berths will have to be builded or the actual configuration of the port basin will have to be changed. This paper is presenting few solutions for the above mentioned points.*

Key words: *Port of Midia, liquid products, berths, dredging*

SERGIU LUPU, ANDREI POCORA, ELENA CARMEN LUPU (pg.40-43)

Naval Academy, Constanta, Romania/ Naval Academy, Constanta, Romania/Ovidius University Constanta

THE SIMULATED EFFECT OF THE WIND ON A 13.300 TEU CONTAINER SHIP

Abstract: *Knowing the wind's elements (magnitude and direction) on board is one of the basic tasks of the officer of the watch. Its action affects a vessel arising from its planned course with direct effects on the safety of the ship, its cargo and crew. Magnitude and direction of the wind force depend on the relative wind direction and the center of the wind pressure (W) depend on the area of the ship exposed. Starting with 2009, "Mircea cel Batran" Naval Academy has a complex of maritime simulators named "Integrated simulator for driving of watercrafts" for bridge and machinery. Using the simulator capabilities, this paper aims to present the influence of wind on a 13,300 TEU container. The 13,300 TEU container ship is the biggest ship simulated and is endowed to one of the largest shipping companies.*

Key words: *wind action, ship handling simulator, 13.300 TEU containe ship*

FILIP NISTOR, HARALAMBIE BEIZADEA (pg.44-46)

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CHALLENGES FACED BY ORGANIZATION THAT TRY TO IMPLEMENT QUALITY MANAGEMENT SYSTEM

Abstract: *Managers from an organization must focuses on the operations management techniques that give them more control over an organization's activities if they want to attain superior quality, innovation, efficiency and quick reaction to customers requirements. Improving the quality of an organization's products and services can be achieved by implementing a quality management system. This paper exposes the challenges which are facing an organization for implementing a quality management system.*

Key-words: *quality management, organization, implements*

VERONICA PAȘA STIGNEI (pg.47-49)

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ROMANIAN HIGHER EDUCATION – BASE IN THE TRAINING OF THE YOUNG GENERATION FOR THE LABOUR MARKET

Abstract: *In the administrative systems, decisions reflect the peculiarities established by public authorities, unlike the private sector where work impersonal market forces. The finality of public investment project appears after the manifestation of the will of local administration bodies, before the actions taken and to select a single solution from the available options. Even if usually is used the leitmotif often insufficient allocation of financial resources to local authorities consistently, is observed poor management of this. Even if public organizations are non-profit in the future and the public sector should use methods and techniques specific private sector resource management.*

Key-words: *public projects, sustainable development, public funds*

LOREDANA-MARIA PĂUNESCU (pg.50-51)

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ROMANIAN HIGHER EDUCATION – BASE IN THE TRAINING OF THE YOUNG GENERATION FOR THE LABOUR MARKET

Abstract: *Professional integration of young people has become in recent times, in both Romania and in the European Union, a difficult process that requires an increasingly period of time from the moment of completion of the last forms of education and training until they find a job. The professional insertion requires a harmonious tripartite integration, namely: the University, as main trainer, then, the graduates and employers, as direct beneficiaries, and trainers specialized in specific domains that will provide practical knowledge through secondary training programs for improving the graduates' skills.*

Keywords: *professional insertion, labour market, labour force, economic development, educational system, competitive economic system.*

CĂTĂLIN C. POPA, CORNELIU GRIGORUȚ (pg.52-58)

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THE ECONOMIC POTENTIAL OF MARITIME OFFSHORE ACTIVITIES

Abstract: *The maritime sector is one the most complex economic activity all over the world, embedding all international legal and technical issues into a comprehensive framework for global transport network idea. Because of its international vocation, general public get a limited perception and appreciation of maritime transport influence and role as being fundamental in terms of social and economic*

development, and as a potential source of excellent employment and career opportunities, even if several million people currently working in activities and companies directly and indirectly involved in naval industry worldwide. Historically, the shipping and fishing industry have experienced a continuous trend of increase both in their fleets and in total trade volume and fishing capacity respectively. In parallel to the extraordinary increase of traditional sea-related activities, the maritime sector has experienced a significant qualitative and quantitative expansion with the appearance and development of one new industrial growth pole: the offshore activity. This paper has the chance to evidence the position and role of offshore activity in maritime trade.

Keywords: *maritime transport, off-shore, sustainable development*

IONEL PREDĂ, GHEORGHÎĂ TONCU (pg.59-65)

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SOME CONSIDERATIONS ON FORMS OF AERODYNAMIC SURFACES USED FOR NAVAL MISSILES

Abstract: *Authors' formulas for avoiding critical situations are given, which occur on the aerodynamic surfaces of naval missiles. The sweepback or front angle of wing is now related to critical Mach line and a different method for computing this angle is used. These formulas were successfully applied in new wings computing, based on the missile wings.*

Keywords: *aerodynamic surface, naval missile, sweep-back angle, leading edge, trailing edge, flow.*

SERGIU ȘERBAN, DINU ATODIRESEI, ANDREI POCORA (pg.66-69)

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A NEW APPROACH TO RIVER NAVIGATION IN ICE CONDITIONS

Abstract: *Ice navigation represents a difficult challenge for every Navigation Officer, irrespective of their training level. However, it is possible for ships with strengthen structure in capable hands to navigate successfully through ice-covered waters.*

One of the problems concerning sailing in such areas is the detection of ice hazards early enough to avoid a collision. Although a rigorous watch keeping will help the ship to pass by large ice floes, there is still a need for the close-range detection of small icebergs and ice packs. A solution for this issue can be an enhanced ice detection radar.

This paper presents some ship handling techniques in ice, the advantages of the improved radar and the benefits of an eventual implementation aboard ships navigating on rivers.

Keywords: *ice navigation, river, radar, detection, high-speed scanner, ice jam*

LUCIANA SPINEANU-GEORGESCU (pg.70-72)

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ASSESSING THE FINANCIAL POSITION THROUGH RATE SYSTEM

Abstract: *Financial equilibrium rate system reflects the company's capacity to secure and strengthen its own heritage, closely related to financing choices. In this respect the method call rates. Rates are expressed as ratios between two balance sheet items, profit and loss account or combined as determining the financial health of an economic entity with the returns management and a source of documentation for both enterprise management and for other active economic environment. Rate method is an effective operational tool of financial analysis. Despite its technical simplicity, this method provides clarifying guidance on the financial situation of the company, especially if comparative analysis in time and space.*

Keywords: *rates financial, balance sheet, financial analysis, rates of intangible assets, rate tangible.*

NECULAI C. TATARU, GABRIEL MOISE, FLORIN ALBICI (pg.73-77)

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VOYAGE DATA RECORDER - VDR. IMPLEMENTATION AND PERSPECTIVES

Abstract: *Fly Data Recorder - FDR and Cockpit Data Recorder - CVR are successfully used to study aircraft incidents for a long time. These "black boxes" have a role in aircraft accident investigation, the maintenance, research and development of new technology. In the 80's, several major naval sinister officials led IMO - International Maritime Organization to consider the adoption of similar technologies for ships. As a result, in the 90's have developed technical specifications for "ships black boxes", which allow recovery of important data for marine accident investigators. Voyage Data Recorder records and stores data in a secure capsule essential for any investigation. This capsule can be floating or submersible. Currently VDR plays an important role in maritime safety, providing important analysis for diving, stranding, collision, capsizing and other event and help owners to increase crew training and implementation of naval safety procedures. Relatively recent introduction of these very useful tools in the investigation requires a careful analysis of ergonomics and system maintenance but also offers great opportunities for improvement.*

Keywords: *capsizing, collision, VDR, Voyage Data Recorder*

NERMIN TEKOĞUL, SANDER ÇALIŞAL (pg.78-84)

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DEVELOPMENT OF A COURSE ON 'INTRODUCTION TO ENGINEERING' AT PIRI REIS UNIVERSITY

Abstract: *Education in general and engineering education in particular, changed a lot during the last century. A key date in the west is Sputnik or the beginning of the space race. However the change resulting from this race did not stop but accelerated mainly with the help of the revolutionary changes in the information technology. The paper reviews some of the changes in engineering and specifically in the education naval architecture in North America. The major points of change are summarized for this field for the undergraduate education. As an example of a change the development of a course that started in Canada at the University of British Columbia and recently introduced in Piri Reis University is explained in some detail. The course content, the projects used to introduce team work and creativity and production oriented teaching are explained in detail.*

Modifications made to the original course and lessons learned in Piri Reis are also included. We also believe that this is the type of a course needed to introduce and explain the emerging engineering work environment.

Key-words: *Engineering Education, Project Based teaching, Student projects*

TEODORA IOVCHEVA (pg.85-87)

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ON THE QUESTION OF INTERNATIONAL COOPERATION IN THE LEGAL SPHERE AND APPLICATION OF LAW BEYOND THE LIMITS OF NATIONAL TERRITORY

Abstract: *The report explores some aspects of the operation of legal regulations in the space. It is considered in the theory that it is based on several principles: the „territorial“principle, the“principle of citizenship“, the „real“and the „universal“principles. According to the so-called „universal principle“, the state extended its law beyond the borders of its territory if it results from an international treaty. The presentation focuses on one of the typical examples of this principle - the fight against piracy on the high seas in which the participants in the UN Convention on the Law of the Sea adopted the duty to fight it, no matter what flag or what is the nationality of the pirates or the victims.*

Keywords: *state, territorial, universal, principle, international, cooperation.*

MIROSLAV TSVETKOV, ZHELAZKO NIKOLOV (pg.88-91)

Nikola Vaptsarov, Naval Academy, Varna, Bulgaria

USING MATLAB FOR GLOBAL NAVIGATION SATELLITE SYSTEMS (GNSS) SURVEYS

Abstract: *In this paper are represented a software tools for Global Navigation Satellite System Navstar surveys developed in MatLab. The different tools are suitable for preliminary calculations in respect to planning the GPS measurements and post processing. The tools can support researchers for choosing thebesttime or the best place to perform theGPS measurements. TheMatLabscripts suite can be used for calculations for visible constellation of navigational satellites, creating a map of elevation angles, different types of dilutions of precision, ionosphere maps and total electron contents processing, almanac processing, ephemeris and radioephemeris processing, pseudo range corrections and etc.All calculations are performed for a user-defined point and for a user-defined time moment or time period. The tools can be used for the other Global Navigation Satellite Systems like GALILEO.*

Keywords: *GNSS, MatLab, DOP, Ionosphere, Mapping, Planning, Survey*