REVISTA ACADEMIEI FORTELOR TERESTRE

Anul XV, Nr. 1 (57) Trimestrul I, 2010

TABLE OF CONTENTS

MILITARY ART AND SCIENCE

ON A POSSIBLE EDITION OF THE BROADCASTING ORA ARMATEI IN CZECHOSLOVAKIA, IN 1945 Radut BÎLBÎIE

ABSTRACT

The Operations Echelon of the Signals Command in GHQ (General Headquarters) edited in June an edition for the retreating Romanian troops after the end of World War II; the program would have been broadcast with the consent of the Czechoslovakian authorities. The edition was supposed to have the same title as the program broadcast within the borders of the Romanian Broadcasting Society; the title was Ora Armatei (*The Army's Hour – one hour of information about the Romanian Armed Forces), changed, right after the beginning of the Army's military campaign in the western part of Romania, into Ora Ostasului (The Soldier's Hour). Due to political reasons, the Czechoslovakian authorities refused the already written articles and copies and denied the broadcasting. The project never came to life, but from the research perspective it is worth mentioning.

STRATEGIC HUMAN RESOURCES MANAGEMENT IN THE MARITIME KNOWLEDGE BASED ORGANIZATION Belev BLAGOVEST Radu HANZU – PAZARA Cristina NISTOR

ABSTRACT

Strategic human resource management is the process of linking the function of human resources and the managerial processes requiring human resource policies and practices with the strategic objectives of management in order to improve performance of the knowledge based organization. The aim of this paper is to point that an important aspect of strategic human resource management is employees' development, which begins in the recruitment stage and continues while interviewing prospective cadets and seafarers in order to find the best employees for the maritime company. Following this stage, in order to help seafarers perform at their best, a maritime company can provide specific human resources strategies of continual training programs and regular assessment. A maritime company can increase productivity if there is an adequate human resource planning and integration of human resource strategies with business strategies.

METHODS OF STAFF ACTIVITY OPTIMIZATION IN PLANNING MILITARY OPERATIONS Vasile CARUTASU Daniela CARUTASU Sorin CRISTEA

ABSTRACT

The decision making process has become more and more complex, and requires special skills and expertise in obtaining informational superiority over the adversary, a fact which holds true for all fields of activity and even more so for the military one. planning command activities has never been easy, staff officers being faced with a very difficult task that they have to accomplish without

mistakes, given the serious consequences errors could have upon the course of action of a military operation. as the tactical field changes, the new situations it entails have to be duly and swiftly analyzed, whereas actions have to be reorganized according to the new battlefield characteristics. this can very easily be done with the PERT method, a method applied to plan all activities the completion deadlines of which are not established beforehand but which depend on a series of factors such as: the operator's skill, ability and training, etc. the manual application of this method can however be very problematic given the large number of activities developed as part of complex military operations. in such cases the use of specialized software that offers quick solutions to the problems staff officers are confronted with becomes imperative. the continuous increase and diversification of the available information, the need to process and transmit it in real time sequences, requires the design and use of an adequate tool that can support the decision making process.

LAND FORCES ACTIONS' PHYSIOGNOMY AND CHARACTERSITICS WITHIN THE NATIONAL SECURITY STRATEGY Lucian ISPAS

ABSTRACT

National security is achieved by inherent efforts and cooperation with one's allies and partners, according with the provisions of national programs, European Union and Alliance security strategic concepts. It aims to synchronize national efforts with international commitments, to identify the means to prevent and counteract threats. Within this general effort, the Land Forces have to adapt their missions and their fulfillment to the vulnerabilities of the ever changing strategic environment. Being a member of the North-Atlantic Treaty Organization implies both opportunities and obligations for the Romanian Military as it has to modernize its structures according to the alliance's transformation process and to adapt its military capabilities according to the

The need to adapt military capabilities to the need for transformation aims to obtain optimum-structured forces, able to act jointly under NATO command, independently or as part of multinational forces, with an interoperable command and control system that ensures advantage in the decision making process and adequate equipment required by the physiognomy of present-day military actions as well as by the characteristics of the various theatres of operations where Land Forces structures are deployed.

THEORETICAL APPROACHES TO THE MILITARY ORGANIZATION Radu Adrian MANDACHE

ABSTRACT

The organization, leading and leader are main concepts in the preoccupations and investigations about humankind and society.

The reason for presenting this issue is represented by the fact that we consider a necessity for giving important aspects specific to the officer's backgrounds, contexts and environments, acting as a military leader.

Additionally, the structural-functional characteristics of the organizations model the structural-functional characteristics of human psychic and personality. The human beings are the outcome of the organization/organizations they belong to, work and evolve in.

Consequently, we consider that the officer is the outcome of the military organization, and from this reason it is a necessity to explain its main aspects.

MANAGEMENT AND ECONOMICS

REVIEW CONCERNING THE FUNCTIONS OF PACKAGING Delia DOMNICA

ABSTRACT

Today, packaging plays the role of "speechless sellers' for goods as a result of the competition between products with about the same technical and qualitative parameters. Consequently, appropriate will be the packaging that succeeds in creating a favorable opinion about the product, the packaging that fulfills the functions for which it has been designed and that meets the esthetic requirements. The evolution of functions for packaging is determined by the changes occurred at the level of food products and hence of the respective packaging as a consequence of social and demographical changes, the "convenience" trend and the properties of plastic materials proper for packaging products.

UTILIZATION OF BALANCED SCORECARD IN PUBLIC ADMINISTRATION Monika GRASSEOVA

ABSTRACT

This report highlights the importance and necessity of formulation, implementation, monitoring and evaluation of strategy implementation as a way to attain a determined vision and strategic goals of public sector. Taking into account the existing problems in strategic management of public sector one of the solutions (as described in the part dealing with drawbacks of current strategic management in organizations) could be seen in the use of a tool Balanced Scorecard (BSC). Therefore, the opening part of the article focuses on the tool Balanced Scorecard, strategic maps and their merits. What follows is a formulation of strategic focus of organization. In addition to Balanced Scorecard characterization the article includes also the integration principle of this tool into strategic management of organization. The conclusion not only describes pros of Balanced Scorecard but also the essential steps of implementing Balanced Scorecard method into organization.

EFICIENCY AND EFFICACY IN THE SPORT MANAGEMENT Florin HILA

ABSTRACT

Background and purpose. In defining the best means to act in the sport management, we aim at identifying two important issues in the sport activity and its development, namely efficiency and efficacy.

Methods. In terms of the methods used, we highlight the narrative review. Therefore, we analyze the different theoretical explanations regarding the manager's efficiency and efficacy in the sports activity.

Results and conclusions. We draw the conclusions that these explanations claim validity for the sports activity and its management. Nevertheless, the manager's activity could not be separated from efficiency and efficacy.

THE TRANSPORTS AND THE GLOBALIZATION PROCESS Madalina Giorgiana MANGRA Marieta STANCIU Gabriel Ioan MANGRA

ABSTRACT

The globalization brings into the light a decrease of the borders' significance in the international transport. The economic process of integration, through a number of free trade treaties, led to the determination of some common tariff policies between the groups of nations that have become interdependent. At the same time with the growth of the international commerce and the globalization of the production, the international transport systems have undergone growing

pressures so to cope with the continuously increasing demand for transporting goods. The transports' infrastructure must assure, in the globalization's conditions, the movement of some means of transports more and more improved to reach higher and higher technical and commercial speeds. The transport ties together the factors of production, contributes to the economic development by the creation of new jobs and by activities deriving from its specific and favors the emancipation of a certain space, which combined with other factors determine the industrial development.

FINANCIAL CONTROL SYSTEM IN ROMANIA Emil MARE

ABSTRACT

Intending the harmonization of the internal legislation with the communautary one, the Romanian government has elaborated the development of the internal public financial control strategy in Romania, which illustrates the actual state of the internal financial public control system and designs the main direction for the future development of this system. this process is very important for the alignment of the internal system of financial public control to the internationally accepted standards and to the good practice from the European union. An essential role reverts to protecting the financial interests of the European Union and the anti-

An essential role reverts to protecting the financial interests of the European Union and the antifraud combat, which are placed on the care of the public finances ministry, the court of accounts and the internal structures specialized in combating fraud.

THE COST ESTIMATING RELATIONSHIPS (CER's) - MODERN METHOD FOR PREDICTING COST Dragos STUPARU Tomita VASILE Marieta STANCIU

ABSTRACT

Parametric estimating is a method by which aggregated costs are derived as a function of high-level product characteristics or parameters. The resulting equations are known as cost estimating relationships (CER's). Such equations are particularly useful when detailed technical specifications are not available.

The methodology can provide accurate and supportable contractor estimates, lower cost proposal processes, and more cost-effective estimating systems. The contractor community uses parametric cost models, especially during product concept definition.

In the past decade, significant changes have been made in the way cost information is interrelated with other financial entities in the corporation. New automated tools are available to the cost estimator, and more new techniques have been developed for sizing and costing the evergrowing cost element of software. Cost estimating has truly become an integral part of the engineering process and has encompassed many accounting, financial, statistical and management functions.

THE POLITICAL, LEGAL, AND MILITARY IMPLICATIONS OF OUTSOURCING TO PRIVATE MILITARY COMPANIES Patrick WOUTERS

ABSTRACT

Recurrent and systematic underinvestment (or inadequate management) results in capability shortfalls, that can only be compensated by 'outsourcing' to Private Military Companies. While the use of private companies for corporate or logistic functions might be manageable, complementary and legitimate, outsourcing inherently governmental functions as the use of force to hired guns inevitably leads to legal, military and political issues. Even with an adequate management structure, not all military functions can be privatized, since activities or functions linked with the

state's monopoly on the (authorised) use of force as well as core military mission-critical functions should be banned from privatization.

Assuredly, Defence & Security investments deserve a better outcome than keeping the balance sheets of private companies in the green: critical awareness and an independent knowledge base on the good, the bad and the ugly of hiring Private Military Companies can make the difference for our future (austere) defence budgets between pro-active investments in the provision of public security or compelled recourse to private capabilities.

SOCIAL-BEHAVIOURAL SCIENCES

THE IMAGE OF THE LEADER IN THE ROMANIAN CULTIVATED FAIRY TALE Radut BÎLBÎIE

ABSTRACT

We have drawn up an invetory of more than 50 Romanian fairytales in a research study made in 1994. These tales' main character was the leader as a dominant figure. They were collected from all over the country and anthologized in several corpora, edited so far, without claiming to have included all the copies in this category.

The leader appeared in two situations: young, as a main character, or fully matured, as a secondary character. There are very few instances when the leader is enacted by a female character. Even in these given situations, the dominant features are distinctively masculine (determination, wisdom, balance, spirit of justice).

The leader's generic image, both in folkloric and literary fairytale, is the one of an enlightened despot, whether he is a prince, emperor, king, czar or regnant; he has a strong character, almightiness, yet he is still willing to listen to wise advice or arguments.

THE CLASH OF CIVILIZATIONS: FRANGLAIS AND FRENGLISH Simona BOSTINA-BRATU

ABSTRACT

Languages, like cultures, are rarely sufficient unto themselves. When speakers of different languages interact closely, it is typical for their languages to influence each other. English and French have naturally had a relationship and have always somehow influenced one another. The result of the borrowings between the two languages is commonly known today as Franglais/Frenglish, a portmanteau which refers to a mangled combination of English and French. The present article aims to analyze the evolution and use of Franglais/Frenglish in France and England, then in Canada and other francophone areas in the world, as well as in some well known writers' literary works.

IDENTIFYING AND CHARACTERIZING INDIVIDUAL FEATURES PLAYING A ROLE IN DECISION

MAKING IN ENVIRONMENTS WITH A HIGH LEVEL OF UNCERTAINTY Elena BOULEANU Marian PADURE

ABSTRACT

Making a decision consists of a sequence of cognitive processing leading to choosing an alternative from a variety of choices available. Psychological literature speaks about decision in order of capacity and style. Some recent researches indicate that the decision style (in the taxonomy of Bruce and Scott) is not correlated with the decisional capacity, being related rather to the decision-maker's personality characteristics and the cognitive style. Repeated exposure to situations of a certain type increases the performance and efficiency of decision making.

The cognitive style describes how the individual analyzes, perceives, and updates information and how he/she uses information from previous experiences to solve problems. By virtue of the cognition-centered paradigm, the reflective-impulsive and dependent-independent styles have been

identified. The styles are viewed as integrators or moderators of personality, connecting the cognitive and affective characteristics.

It is necessary to correlate the decision maker's tendency to act with acquiring a minimum volume of information with maximum relevance. Individuals prone to action, will exhibit a spontaneous behavior that does not support efficient data input, relying instead on personal experience in using creativity and emotional resources in the detriment of a behavior using analytical reasoning, as experimental studies suggest.

SPECIFIC ASPECTS OF THE HUMAN DEVELOPMENT – HUMAN SECURITY RELATION IN CENTRAL AND EASTERN EUROPE Iulia Catalina CRACIUN

ABSTRACT

Globalization nowadays is a reality of the contemporary world, represented by actions/displays and repercussions that are interconnected at all levels of the human activity – political, economic, social, cultural, scientific, technologic, ecological etc. The era of globalization has opened new possibilities for millions of people from all over the world. The development of commerce, the foreign investments, the new technologies, as well as the expansion of the communication networks and the global solidarity nourish people's life enlarging considerably their options. However, until the desired equalizing of the people's standard of living is achieved, inequalities gather way on several levels: at the level of regions, of states and of individuals.

LEADERSHIP AND MILITARY MANAGER Zdenek FLASAR Petr CECH Geoffrey Charles PEART

ABSTRACT

Military management as a part of security management also develops changes in people leading of the Army of the Czech Republic. The commander's capability to lead his or her subordinates to fulfill their tasks successfully is of importance.

An unstable environment within contemporary as well as future operations, its asymmetry in a broad conception, many times radically different impacts of the environment (climate, culture, religion, terrain tec.) are the reasons not only for permanent research into the optimal deployment of forces and means in operations but also research in leading people within deployment on these operations. The authors pointed out that the commanders must be able to differentiate between common leading of subordinates, i.e. "management" and dynamically developing the creative leading of subordinates, i.e. "leadership" in deployment to fulfill tasks in future operations.

DIMENSIONS OF THE HUMAN SECURITY CONCEPT Mihai-Marcel NEAG Daniela COMAN

ABSTRACT

The present paper aims at highlighting a general perspective on the human security concept, thus underlying its continuous developing. The human security concept, initially related to physical security has evolved in a broader manner. Nevertheless, it refers to a fundamental change according to the traditional analysis of the security, in terms of international relationships aiming at the rightful State, which is mainly a priority. In this context, the human beings and their complex relationships become priorities. The security concept aims not only at the state or community, but also at the human being itself. Nevertheless, the human security includes the political, economic and social dimensions that allow the human being to live free from risk and fear.

WAYS OF PROMOTING A STUDENT – ORIENTED EDUCATION Adriana RISNOVEANU Sorina Mihaela MARDAR

ABSTRACT

The complex changes in the contemporary society and the culture of change that we are experiencing nowadays presuppose a new way of performing education. Traditional pedagogy, ex cathedra, no longer meets the needs of pupils and students educated today. A teacher's discourse that encourages the accumulation and reproduction of knowledge by the pupils/students is inadequate to the real needs of our society and the nowadays individuals. Stress should be laid on encouraging the learners' autonomy, creativity and involvement with a view to helping them create and develop their own resources. The saying "to learn how to learn" has become today more relevant than ever.

SCIENTIFIC RESEARCH IN THE EUROPEAN CONTEXT Carmen VATAMANU Ana MUNTEANU

ABSTRACT

It takes a lot of knowledge to build up all the necessary skills in order to understand the scientific research and its methodology, as well as its ability to write a paper according to the new Academic European Scientific Practice. The Romanian scientific research of the 21st century must totally take into account and integrate into the European context.

Heads of state and Govern have adopted Lisbon strategy aiming at clear and well set goals. In this context, Europe becomes the most dynamic and competitive knowledge based economy in the world [1]. In order to reach this goal, the European Committee stipulated the creating of a research European space, as described by the most important strategic element of its communicate.

TECHNICAL SCIENCES

SYNTEGRATION AS A HIGHLY EFFICIENT METHOD OF KNOWLEDGE-SHARING, OPINION-FORMING AND DECISION-MAKING Franz J. DIRINGER

ABSTRACT

Postmodern western societies are experiencing a transition from the industrial to the information age, in which knowledge is becoming a crucial resource. Knowledge management is therefore essential not only for companies, but also for non-profit and public organisations. As the success of the whole organisation highly depends on whether its communication works, managing communication processes farther gain importance. This paper looks at an extremely efficient method of optimising large group interaction, i.e. knowledge-sharing, opinion-forming and decisionmaking. The method, which is called Syntegration, is based on scientific findings of management-cybernetics. Its application results in an optimal integration and distribution of the knowledge of all participants and therefore brings forth the maximum benefit of communication processes. Empirical findings and author's own practical experience account for the outstanding success of Syntegration.

CONTRIBUTIONS TO THE CALCULUS AND CONSTRUCTIONS OF THE TRANSLATION AND ROTATION MODULES FROM THE MECHANICAL STRUCTURE OF THE SERIAL MODULAR INDUSTRIAL ROBOT TYPE TRTRR Silviu-Mihai PETRISOR Ghita BARSAN

ABSTRACT

The authors of this paper wish to present a dynamical-machine-parts calculation algorithm

which will be used in the choice of the motors for the translation and rotation modules from the mechanical structure of the studied robot, without bringing any changes to the structure of the already designed modules. The algorithm will focus on the robot's movement differential equations deduced with the help of the Lagrange formalism, and then these equations will be equalled to the machine-parts equations used in the design of the translation and rotation modules which are part of the industrial robot type TRTRR. Following the application of the algorithm, the expressions of the motor moments will be deduced, and then using numeric values from catalogues the direct current servomotors will be chosen which will drive the mobile equipments of the studied robot. In this paper the authors will present the concept and the design of the translation modules MTV-Sil and MT-Sil, as well as those of the 2 degree of freedom robot orientation module MO-Mih.

THE CHARACTERIZATION OF FILMS OBTAINED FROM POLYMER COLLOIDS BY DIGITAL IMAGE ANALYSIS Viorica STANESCU Camelia BESLEAGA

ABSTRACT

Colloid science includes systems in which one or more of the components has at least one dimension within the nanometer to micrometer range. Colloidal particles are widely used in many industries, for example, food, cosmetics, medicine, pharmaceuticals, veterinary, and biotechnology. This paper reports on the use of optical microscopy and image analysis in the characterization of polymer films obtained from colloidal dispersions. Surface morphologies of thin films of chitosan and chitosan/starch which were compared by means of fractal geometry.