

THEORETICAL AND METHODOLOGICAL APPROACH TO DEFENCE AND SECURITY IN A TIME OF GLOBALIZATION

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Abstract: Nowadays, at the time of deepening globalization, defence and security belong to the most frequent words used all over the world. Practically, there is no TV channel or radio station which would not use these words in their programs several times a day. There are no daily journals and weekly or monthly magazines which would not inform their readers about changes in the field of defence and security. As a development in those areas is directly influenced by a development of the whole human society, an author, in his contribution, deals with theoretical and methodological aspects of defence and security, define them, and simultaneously, due to the worsening of global security environment, points out the necessity to pay maximal possible attention to support of defence and security.

Keywords: Defence, security, globalization, global security environment, human society, risks, definition, crisis.

OPTIMISATION OF CONTAINER UNIT FORMATION USING DECKING SYSTEM ANCRA

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Abstract: This paper analyzes the possibility of using decking beams ANCRA in ISO 1 C storage containers of version "A" to achieve higher loading efficiency and proposes a load plan of container for storing pallet units created using wooden EURO pallets sized 1200 × 800mm. The model comparison of methods currently used is included in the paper, including model calculations of return of invested funds to purchase decking beams ANCRA. Finally the paper presents directions for further research into safe and effective creation of container units.

Keywords: ISO 1 C container, europallet, decking beams ANCRA, load plan, total interior space.

VSWR MEASUREMENT WITH FERRITE CIRCULATOR

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Abstract: Matching of antennas to feeding transmission lines is crucial factor that limits utilization of RF generator power. In the paper, there is described a design of VSWR measurement scheme with ferrite circulator. It is dedicated for impedance matching measurement of antennas in the microwave region. The measurement scheme is completed with mathematical apparatus that is employed into evaluation of impedance matching. Furthermore paper presents measurement results, which were obtained with suggested VSWR measurement method.

Keywords: Voltage Standing Wave Ratio, microwave antenna, ferrite circulator, reflection coefficient.

THE IMPACT OF TECHNOLOGICAL SYNERGY ON THE MILITARY MANAGEMENT IN THE CONTEXT OF TRANSFORMATION

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Abstract: The present paper lays emphasis upon the concepts, the transition methods and the adaptation to the new technological developments in the context of military operations highlighting the new balance of powers which emerged from the revitalization of the political, social and military strategies as well as their adaptations to the current objectives. The present paper aims at creating a research study regarding the influence of the new technological achievements in the field of military operations.

Keywords: Transformation, technological synergy, high tech, RMA.

SENSE OF SECURITY THE CITY'S INHABITANTS AND THEIR ATTITUDE TOWARDS THE JUSTICE OF INSTITUTION

Franciszek KOZACZUK

Abstract: Safety is a lack of danger to prevent normal function and the need of safety, certainty, stability, support, a lack of violence and catastrophic events. Need of safety is a natural human need. It affects common crime and organized crime. Threats of crime especially in big cities depend on effective police work and justice. Attitudes towards the inhabitants of this institution are reflection of the sense of security.

Keywords: Safety, crime, sense of security threat, attitude towards law and police.

MEDIUM TO INCREASE THE SAFETY OF AIR TRAFFIC CONTROL HUMAN FACTOR, SIMULATORS & TRAINERS IN AIR FORCES

Matúš GREGA, Tomáš SCHÖBER, Tomáš BAŇAS

Abstract: Virtual simulation is the latest and most dynamic area of training and therefore also to air Visual Information System (LETVIS) are and will be placed high demands, especially as regards the extension of additional functionality, as regards the introduction of new security features and also interconnection with virtual flight simulators MiG-29, TL-39 and Mi-17 and the reconfigurable simulators. Interconnection of simulator LETVIS with air units, reconfigurable simulators, virtual control tower and training center of central ground controlled interception is possible to create a platform for building a federation of simulations that will permit not only joint training of all air traffic controllers and pilot training, but also increase the safety of flight personnel and thus the safety of air traffic services operators.

Keywords: Simulators, safety, air traffic control, virtual simulation, trainers, pilots.

INVENTORY MANAGEMENT REVISED

Analysis of behavioral aspects of decision making within
Sales & Operations Planning process

Peter JUREČKA

Abstract: The purpose of this article is to extend the standard text-book static inventory optimization model for the process view by analyzing the antagonistic incentives of different planning stakeholders that may lead to inefficiencies in inventory management. Two models are outlined to investigate the impacts of such potentially contradictory behavior – optimization model based on duality known from the classic microeconomic theory of consumer representing more theoretical simulation and Value Based Management model following recent trends in business management.

Keywords: Inventory management, economic modeling, process optimization, sales and operations planning, S&OP.

RESEARCH FILTERING ALGORITHM WITH DELAY EFFECT FOR MEASUREMENT SYSTEM

Andrey PROLETARSKY, Konstantin NEUSIPIN

Abstract: An object with the delay effect in the signal transmission was researched. The efficiency of the developed modified Kalman filter with time delay was demonstrated by the simulation of the test model error of the inertial navigation system (INS).

Keywords: Filter Kalman, delay effect, INS.

REVIEW OF MAINTAINABILITY AND MAINTENANCE OPTIMIZATION METHODS FOR AVIATION ENGINEERING SYSTEMS

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Abstract: Reliability is an essential element for aviation systems operators in order to accomplish assigned missions in a continuous challenging world. Increased reliability could be achieved through increased availability and maintainability. This has emphasized the importance of maintenance, especially for the systems designed to operate in less friendly environment. An efficient maintenance process in case of airborne assets could be achieved through optimized preventive maintenance methods, considering also the influences of palliative maintenance actions. This would reduce the logistic footprint, especially when operating in remote and challenging areas of operations. The present paper focuses on surveying the optimization methods of the maintenance policy in the case of the aviation engineering systems, on the grounds that an improper policy would increase above an accepted threshold the risks to mission accomplishment and to human operators.

Keywords: Preventive maintenance policy, optimization models, aviation engineering systems.

THE MANAGEMENT AND MANAGERIAL SKILLS ARE NEEDED FOR THE SLOVAK MANAGER

Daniela HREHOVÁ, Peter KAMENEC

Abstract: To manage a business appropriately is to manage it effectively, respecting and taking advantage of knowledge of management, marketing, law, economic and technical standards, knowledge of technology, foreign languages and other disciplines (psychology, sociology, etc.). (1) The aim: To show that managers need to have management skills to influence effectively the behaviour of others, and ultimately achieve the desired results and determine the level of management skills manager. (2) The discussion: According to the mentioned data, self-reflection of managers at the level of self management skills is not completely balanced in terms of ability to manage. The result is also consistent with other available research results of other authors. Insufficiency can be traced within the decision-making skills as well as within the ability to solve legal, economic and personal or financial and material problems. 3) The conclusion: Additional research is needed in the area to determine how best to recruit and train managers in these skills to move forward.

Keywords: Manager, management skills, soft skills, self-reflection, research.

SOCIAL AND PSYCHOLOGICAL RISKS ARISED IN POPULATION AND CLEANERS AS A RESULT OF THE CHERNOBYL ACCIDENT

Inga URYADNIKOVA, Vasyl ZAPLATYNSKYI

Abstracts: The analysis of social and psychological risks arise among the population as a result of nuclear accidents was made. Shown that depressed and stress state due to human perception of threat to the health explains the growing number of somatic diseases and can be regarded as adaptive behavior of people in these circumstances. To reduce the risk of mental illnesses requires a number of educational and general preventive measures to reduce the accumulation of radionuclides in the contaminated areas, as well as for constant radiation, medical and genetic monitoring of the population.

Keywords: Risk, mental illnesses, radionuclide.

MARKETING OPPORTUNITIES FOR EDUCATING THE YOUTH IN NATIONAL DEFENCE: A SYSTEM-BASED APPROACH

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Abstract: In a discussion during the meeting of the Human Resource Management Working Group of the V4 Countries held in Hungary in spring last year, apart from introducing the Human and Family Support System, educating the youth in national defence was also on the agenda. Members of the delegations praised the Hungarian initiative aimed at broadening the information of young people on national defence, and regarded the just launched *KatonaSuli* (MilitarySchool) program as an example to follow. As of now the program consists only of two courses such as *Katonai alapismeretek* (Basic Military

Knowledge) and *Honvedelmi alapismeretek* (National Defence Knowledge). A successful expansion of the program demands marketing mentality and a system-based approach. However, before starting the expansion, resources such as personnel, finance, technics, etc. must be provided. These resources must properly be positioned, processes be made transparent, regulations be elaborated, and last but not least, completed training of the personnel involved. As a system the program requires continuous monitoring and oversight control. This must involve adequate data coming from an information architecture that captures, registers, observes, researches information in order to support the decision-making process. Finally, marketing mentality includes market segmentation and definition, and a proper communication of the extended program.

Keywords: Military, school, education, national defence, youth, marketing, research.