

TABLE OF CONTENTS

MILITARY ART AND SCIENCE

BIOTERRORISM: DANGEROUS THREAT OF THE 21ST CENTURY

Pavel BUCKA

Miroslav ZAK

Pavel NECAS

ABSTRACT

Terrorists, at present, are not interested in a mass disposal of the world population. If they were, they would surely use the methods of spreading biological weapons in the form of aerosols. Spraying biological material from duster planes would be very dangerous. This scenario could have happened in the time before 9/11 2001, when the vigilance of individual countries was, as was shown, at an insufficient level. It is not as easy anymore. Terrorists are not interested just in mass losses of the opponent. They are interested in causing an atmosphere of fear. After the attacks in the USA it was enough to send several envelopes with anthrax, and it caused damages of incalculable amounts. The expense of sending the letters was only approximately several thousand dollars. The corresponding effects cost several millions of dollars. A dominant effect is unfortunately the psychological effect, when fear multiplies the real threat. We may think that terrorists do not have the power to use biological means in the classic fighting sense; for example spraying aerosols on a huge area. But they are beyond question capable of diverse actions involving local use of biological means. There is no credible sign that they possess specially adapted microorganisms, which have been developed for decades in the military laboratories of world powers. On the other hand, information published in the scientific press might be used by terrorists – for example a detailed description of the virus Marburg. Unfortunately, other information about genetic engineering, pathogenic microorganisms resistant to antibiotics has also been published.

CLIMATE CHANGE AND ITS IMPLICATIONS (PART TWO)

Sorin IOAN

ABSTRACT

The effects of climate change, now visible almost everywhere around the globe, represent a major issue of concern to both science men, businessmen, and of course policymakers, who have to safeguard the interests of the citizens they represent. The economic consequences and their implications upon the social state of the entire population have also drawn the attention of international governmental and non-governmental organizations, depending on their areas of responsibility. The coordinates of military adaptation to the effects of climate change should be clearly defined ahead of time, by both military analysts who should focus on the implications upon national and collective security and by military commanders, planners and logisticians who should look at scientific evaluations seen through the lens of their peace- and war-time experience.

**DOCTRINARY ELEMENTS REGARDING THE IMPROVEMENT OF INTEGRATED
ACTIONS**

Aurelian RATIU

ABSTRACT

The process of transforming the military organizations has had implications in all the domains, including in the doctrinary one.

Taking into consideration the future battles characterized by a increased degree of complexity and incertitude, when the military forces become multinational/joint forces, the awareness of the necessity and development of new mechanisms to integrate the actions of all the power instruments, is, in our opinion, a major priority.

Furthermore, the purpose of this article is to present some doctrinary concepts, guiding principles and methods by means of which one might accomplish this desideratum – the integrated use of the capabilities of all the power-instruments.

Thus, we emphasize the necessity to develop the Capabilities Integration Strategy, an integrative document, able to emphasize the nature of modern warfare, to tackle the concept of integrated capabilities, establishing the principles that regulate the status and the role of each power instrument, defining the situations and the conditions in which these will be used, as well as the integrated organizing structures needed to plan and lead the forces and to coordinate the effects.

THE INTERINSTITUTIONAL COOPERATION FOR THE PREVENTION AND COUNTERACTING OF TERRORISM WITHIN THE NATIONAL SYSTEM OF PREVENTION AND COMBAT AGAINST TERRORISM

Dan ROSU

ABSTRACT

The fundamental interests of Romania impose, at present, the configuration and the operationalization of an interinstitutional mechanism for the prevention and the combat against terrorism on all plans, compulsorily subordinated to the firm decision and the clear vision of the states of the world for the end goal to be reached: the limitation if not the total eradication of the terrorist phenomenon in a mode that meets the challenges specific to the present security context.

MULTIPLE FUTURES PROJECT THE TYPOLOGY OF FUTURE CONFLICTS FROM THE NATO PERSPECTIVE

Tomita Catalin TOMESCU

Paul SZUCS

ABSTRACT

Globalization has created an unprecedented boost in technology and an increase in wealth and knowledge for many countries. But not everybody has benefited equally from its blessings. In some nations it has brought social and cultural fragmentation, which resulted in bloody wars and fragile or even failed states. On top of globalization there are other drivers of change and uncertainty, such as demographic change, climate change, pandemics, terrorism, scarcity of natural resources and many others. Nobody knows what the resulting vector from all these drivers will be. To prepare for what cannot be predicted is the challenge we face.

MANAGEMENT AND ECONOMICS

QUALITY MANAGEMENT IN MILITARY HIGHER EDUCATION

Alexandru BABOS

ABSTRACT

Nevertheless, the educational system is extremely important in the economic evolution of every single state. The quality in Higher Education and Scientific Research is a key factor, in the competition between Nations. The purpose of this document is to introduce the concept of quality and quality management in terms of Military Higher Education, by strongly highlighting the particularities that make the latter a competitive body within the sphere of education, at a National and International level.

CORRELATIONS AND DYSFUNCTIONALITIES REGARDING THE INFLUENCE OF DEPENDENCE/INTERDEPENDENCE ON ECONOMIC SECURITY

Anca DINICU

ABSTRACT

The contemporary world is one of profound interdependences: national economies can not function in an autarchic manner, the penetration of the markets by identifying and conquering the niche areas is conditioned by international specialization, national development is influenced by the external political and economic environment, the profitability of companies is possible through denationalization of production and relocation of the activity.

No state, including the economically powerful ones and which promote an active foreign policy, shaping the international environment (including by means of the military instrument) can not isolate itself from the rest of the world, denying the international context. Any country enters economic relations with other countries through a multitude of forms: trade, scientific, financial exchanges, cooperation in research and production, so that the emergence and deepening of the global market disturbances affects, one way or another, any national economy. All the more so as the global economic phenomena and processes are in constant and rapid evolution, important changes occurring at shorter and shorter intervals.

THE OFFERS' EVALUATION PROCESS ANALYSIS WITHIN E-MARKETPLACE USED IN THE CZECH ARMED FORCES

Radka LOPOUROVA

Natasa POMAZALOVA

ABSTRACT

E-commerce is used more and more not only to facilitate the business life of the companies but it should also help to save time and financial resources in public administration organizations. The purpose of this research is to analyze the frequency of multi-criteria offers evaluation used during one part of the procurement process in the Czech armed forces – de-central acquisition. Items which are procured are divided into classes according to commission's subjects.

To sum up, this research provides empirical evidence that multi-criteria evaluation is not widely used within the de-central acquisition process in the Czech Armed Forces which can mean the risk of not including important factors such as life cycle costs into offers evaluation process.

INCOMES PROCEEDED FROM THE STATE BUDGET

Vasile TABARA

ABSTRACT

Local autonomy is a fundamental principle of local government. This can not be achieved may in the absence of financial autonomy. Local authorities by means of whom self-government is realized are local councils and county councils as deliberative authorities and elected mayors as executive authorities.

Local authorities have several functions. To achieve these functions they should have the necessary material and financial resources. Each authority of the local government has its own budget established on autonomous bases.

Local budgets are acts of foresight, authorization and cancellation. They are instruments of economic policy and system of financial flows. In the budget process both the deliberative and the executive authorities have a word to tell. Local public budgets influence the revenues of the community members, by the expenditures made and the public services provided by the authorities.

In Romania, local budgets have their own revenues, which are achieved from the state budget, grants from the state budget and public loans.

Local budgets depend a lot on the state budget and the amounts from the state budget usually have special purposes, which limits local autonomy.

The main role in realizing the budgets belongs to the authorizing officers. To fulfill this role they have at their disposal several budgeting tools.

SOCIAL-BEHAVIOURAL SCIENCES AND FOREIGN LANGUAGES

THE INFLUENCE OF INFORMATION ON HUMAN SECURITY

Lucian ISPAS

ABSTRACT

The requirement of information is essential today in any field of activity. The present-day security environment is in a continuous change which is characterized of an extremely large scale which requires firm decisions for all the state and non-state actors involved in facing of their threats.

Real information, timely, and complete are vital for analyzing critical situations and for the decision making process in order to solve the problems according with the human security component with both its military and non-military dimensions.

CONCEPTUAL DELIMITATIONS CONCERNING CIVIL DEMOCRATIC CONTROL

Sorin MIHAI

ABSTRACT

Far from being a new issue, the relationship between the military, political and social factors has raised throughout time many questions, the answers to which have been constructed depending on the type of society, historical conditions, and ideologies. Many have been those that advocated the necessity of subordinating the military to a higher will from reasons that need no questioning. Clausewitz saw the war as being an extension of politics, and the armed forces as an instrument of political strategy: "Subordinating the political point of view to the military one would be absurd, because politics generated war, politics is the brains, and war is only the instrument and not the other way around. Therefore there is no other way but to subordinate the military point of view to the political one".

A STUDY ON THE FUTURE AND ON DELINQUENT PERSONALITIES' PERCEPTION OF IT

Marius RIZESCU

ABSTRACT

This paper provides and in-depth description of convicts' perception of the future and of how they think they will adapt to life on the outside, re-integrate into society and resume daily activities.

The specialized literature has already consecrated the fact that the personality consists of more subsystems, one of which is orientation. The perception of the future is part of the orientation subsystem and this paper analyses two of its elements, convicts' self perception and their values respectively, in order to reveal any possible relationship between these personality components and convicts' perception of the future, this being the foremost objective of this paper.

ASPECTS OF LANGUAGE AND MEANING AS USED IN ADVERTISING

Adriana VINTEAN

ABSTRACT

Consumers are presented with the existence and benefits of products and services in order to be attracted to them and determined to buy them. In advertising, words acquire a tremendous importance in conveying ideas. Their power of significance is enhanced not only by their denotation, but also by their connotation. The choice of words within an advertising campaign depends to a large extent on what the utilised words suggest. The advertising campaign includes favourable mentioning of a campaign's products or services, made in any medium - read, viewed or heard by a company's costumers or potential costumers. The different messages sent during the advertising campaign of a particular product or services are based on the feelings and suggestions prompted by the words, in addition to their actual meanings. This paper deals with some aspects of language and meaning as they are used in advertising.

TECHNICAL SCIENCES

EXPERIMENTAL RESEARCH ON ESTABLISHING THE SHOCK FEATURES FOR SOME BALLISTIC PROTECTION MATERIALS

Simona BADEA

Doru-Adrian GOGA

Florin ILIE

ABSTRACT

The protection for shock waves action is essentially different from the traditional one, used for shrapnel threat and the bullets. High strength materials used for the ballistic protection have a limited effect in mitigating the shock waves. Knowing the materials' shock features is an imperative not only for the design of new means to protect, but also for the qualitative and quantitative assessing of the phenomena arising from the generation and propagation of shock waves, in the material, and default on the ability to mitigate the material.

ENVIRONMENTAL INFLUENCE ON NATURAL AND ANTHROPOGENIC DISASTERS

Cosmin-Laurentiu BALCU

ABSTRACT

Environmental degradation, settlement patterns, livelihood choices and behavior can all contribute to increase disaster risk, which in turn adversely affects human development and contributes to further environmental degradation. The poorest countries are the most vulnerable to disasters because they are often pushed to settle on the most marginal lands and have least access to prevention, preparedness and early warning. A comprehensive approach to disaster risk reduction acknowledges the role of the environment in triggering disasters and protecting communities. At the same time, it recognizes that the environment is itself vulnerable to disasters and post-disaster recovery.

NEW PYRIMIDINES 2-AMINO-6-METHYL-4-AMINO-SUBSTITUTES, SUPPOSED TO BE BIOLOGICALLY ACTIVES

Alina BARSAN

ABSTRACT

There have been obtained seven new pyrimidines 2-amino-6-methyl-4-aminosubstitutes through the reaction of 2-amino-6-methyl-4-chloro-pyrimidine with amines (o-, m-, p-methyl-aniline, o- and m-trifluor-methyl-aniline, amino-salicylic acid and 3-dimethylamino-1-propylamine), with the yields between 19-93%. The obtained products have been characterized by the melting points, the R_f of the thin layer chromatography (TLC), as well as by the spectral data (UV-VIZ, FT-IR, ¹H-RMN and MS). The products have been submitted under biological tests and the results will be communicated in the future.

STANDARD TACTICAL DATA LINKS

Dorin CHIRCA

ABSTRACT

Digital modulation techniques allows communication systems to exchange digital data via common networks, with automated and real-time update of the information.

This is the main reason why Tactical Digital Information Link (TADIL) has become the most suitable for real-time digital information exchange between data tactical systems.

Choosing and applying the appropriate standardized communication link when referring to Tactical Digital Information Link is the main role in support of joint and combined operations.

NUCLEAR ATTACK MANAGEMENT SUBSEQUENT ACTIVITIES OF CBRN DEFENSE STRUCTURES: CURRENT POSSIBILITIES OF IMPLEMENTATION

Maria Magdalena NEGOI

Calin GAVA

Simona MICLAUS

ABSTRACT

Present paper aims to illustrate the administration and coordination of activities immediately after a nuclear attack by CBRN defense structures, taking into account the current possibilities of Romanian armed forces. A 17kt nuclear attack scenario is imagined for the area of Rosiorii the Vede city. Using specific modeling and simulation programs, standardised procedures are applied for management of the event consequences. In the attack range an infantry battalion of own troops are located so estimated damages are assessed: the probable personnel destructions, damages on point targets (a bridge that own troops must use to exit in a proper time from the contaminated area) and the probable destruction on communication equipment. The time needed for the radioactive particles fallout is also calculated. After the fallout is completed the contaminated area can be physically inspected. Implemented scenario and its solving demonstrate the current forecasting capabilities at national level. The used software, NBC Analysis and NBC Defense, automatically calculates the CBRN predicted hazards area and can rapidly display that information on a map of responsibility area. The approach offers the possibility to early warning and reporting. This capability provides commanders at any level predictions of CBRN and TIM hazards and of effects in the operational environment.

EXPERIMENTAL RESEARCH ON OPTICAL SHAPED FIBER MANUFACTURING BY DRAWING

Marius RUSSU

Eugen TRANA

Constantin ENACHE

ABSTRACT

The paper presents some computational models and experiments on the technological process of manufacturing shaped optical fiber, mentioning that the drawing process would require to consider material outside the specified parameters, and inertial component structural terms of the glassy state of glass.