# REVISTA ACADEMIEI FORTELOR TERESTRE

Anul XIV, nr. 2 (54) Trimestrul II, 2009

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### I. MILITARY SCIENCES

# HISTORICAL AND ECONOMIC RESEARCH OF LOGISTICS – CLASS II OF THE BULGARIAN ARMY FROM 1877 TO 1910

Assoc.Prof. Sevdalina DIMITROVA, PhD
1st LT Daniel MANOLOV

## **ABSTRACT**

The paper examines the historical development for one of the Bulgarian Army logistics' elements and the aspects of documentation from 1877 to 1910. In each period of the national and economic development of Bulgaria, the Bulgarian Armed Forces' commanders had problems of logistic support – food, clothes and medicine. Although the problems of feeding the Bulgarian Forces have undergone a historical and economic research, it appears that the research of class II logistic support- remained un-examined. That denotes our goal in the present historical and economic research of the Bulgarian Army's class II logistic support, as a part of its logistic system in a certain period of the state's development.

# MODERNIZATION OF THE CZECH ARMY SOLDIER'S COMBAT UNIFORM MAJ M.Sc. Petr HARASTA M.A. Jirí DVORÁK

### **ABSTRACT**

At present new pieces of accoutrement are introduced in the Army of the Czech Republic within a complementary innovation cycle with the aim to increase soldiers' comfort and their tactical capabilities as well as the practical value of accoutrement in comparison to the commodities currently in service. This paper presents only selected parts of the Czech Army soldiers' combat uniform, which are, or will be used mainly during tactical training and foreign missions. The current innovative trends in the accoutrement service of the Army of the Czech Republic are presented in the paper. It is mainly focused on the area of internal normative acts and the introduction of new types of accoutrement for soldiers' special training and fulfilment of their tasks in foreign missions. It is absolutely necessary for the members of the Czech Armed Forces to be equipped with modern weapon systems, military vehicles and equipment in order to fulfil demanding and increasingly dangerous missions effectively in various operations.

# CAMOUFLAGE PATTERNS – OPTICAL ILLUSIONS OF FUSION AND DECOMPOSITION Momchil Todorov TACHEV, PhD

## **ABSTRACT**

In 2004 the Bulgarian army resented and adopted a new camouflage pattern. It has nothing to do with the traditional Bulgarian (Wehrmacht Heer variation) splinter. This change has inspired me to research the principles and optical illusions used by the designers of the military camouflage patterns. In the development of multicolour camouflage cloths for the army, the matters of colour, patterns and colour ranges of hue spots are of crucial importance for the degree of efficiency during the execution of the main task – e. g. the creation of visual illusions, connected with the "dissolution" of the soldier's body in the environment. In the beginning of the period (1916-1938), the main principles that have been used are those of boundary and simultaneous contrast, targeting

at an effect of relief and non-homogeneity and decomposition. Later on, under influence of modernistic style in art camouflage patterns, a new concept was issued, which is still used today. The wanted effect is destined more for fusion of the soldier's body outline rather than just for its decomposition. This effect is still actual today with the latest "digital" types of camouflage patterns.

# A COMPARATIVE ANALYSIS OF THE ROMANIAN AND HUNGARIAN DEFENCE PLANNING SYSTEMS

Asst.Prof. Maria CONSTANTINESCU, PhD

### **ABSTRACT**

The major political changes which took place in the Central and Eastern Europe in the last decade of the 20th century exerted an important influence on the security and defence environment of the countries in the region, triggering the need for a radical defence reform aimed at adapting the role of the military factor in the national security system and developing modern armed forces. One of the results of these reforms has been the implementation in these countries of new defence planning systems. The focus of this paper is a comparison between the Romanian Planning Programming Budgeting Evaluation System and the Hungarian Portfolio Defence Planning System, highlighting the common areas and the main differences between the two defence planning systems.

# SOME CONSIDERATIONS IN THE PRESS OF SIBIU IN 1962 ON THE CUBAN MISSILE CRISIS

Cristina ION Gabriela MIHAILA-LICA

### **ABSTRACT**

We are interested in the impact that the Cuban Missile Crisis had on the international situation at that time and in how the press of Sibiu reported the events. The importance of the media as a source of documentation needs not be proven, it is well known the fact that most of the time it appeared as an active factor, participating in the debates of ideas, informing and forming the public opinion. We focused on the Romanian newspapers in Sibiu because we consider them relevant for the tone of the Romanian newspapers during that period.

# UNDERSTANDING CAPABILITIES Asst.Prof. Lucian ISPAS

## **ABSTRACT**

The word "capabilities" very often appears in political defense-related speeches, in military analysts' syntheses on military commitments made by our country or in military language, where it often replaces the term "capacities". However, a clear definition of the term, encompassing all its dimensions, hasn't appeared yet, not even in the Romanian Language Explanatory Dictionary. It is compulsory to know the role and place of military capabilities, as they must ensure freedom and democracy expansion and consolidation in this complex, dynamic and conflict-stained world, where the main confrontation is between fundamentally different values, faiths and perceptions, from democracy to totalitarianism. Our world is epitomized by major aggressions of international extremist religion-related terrorism, structured into transnational networks. No one can accurately state which military capabilities would be able to counter balance this phenomenon.

# THE QUANTITATIVE OPTIMUM PROVIDING THE QUALITY OF ROMANIAN ARMED FORCES LTC Grigoras CONSTANTIN

## **ABSTRACT**

The sudden change of system brought about by the revolution of December 1989 irrevocably determined the historical transformation of the national military institution. The spontaneous, still dispersed challenges coming from the insecure space of the bipolar geo-strategy and geo-politics

should thoroughly, meticulously and systematically be met by the Romanian Military. Nowadays, more than ever, the defence and defence planning capabilities are subject to the political, economic, technological and military, domestic and foreign determinations in concert with the changes from the geo-strategic and geo-political environments, with the assessment of military national and NATO commands, with the technological evolution, the role and responsibilities within the Alliance, as well as with the national economic-financial possibilities. It is certainly impossible for forces to be built up without taking into account the financial, economic, cultural, demographic and technological capacities, the Individual needs of the Alliance, the other forces, the vulnerabilities, as well as the risks and threats.

### II. BEHAVIOURAL-SOCIAL SCIENCES AND FOREIGN LANGUAGES

# WOMEN IN MODERN PRINT ADS – AN OVERVIEW Ileana IOAN

## **ABSTRACT**

The objective of this paper is to provide an insight about how the image of women in printed advertising is being displayed. Following this introduction, the term advertising is defined and its position in the marketing mix briefly shown. The next point of discussion is highlighting the image the woman and the different changes which occurred throughout time with the help of a brief historical background. Afterwards, following the pattern of some types of woman adopted by advertisement, each pattern will be illustrated with examples; in each of these roles the woman will be also depicted also as a consumer. The paper ends with a conclusion.

# OBSERVATIONS ON SOME OF THE EFFECTS OF THE FINANCIAL-ECONOMIC CRISIS IN EASTERN EUROPE Prof. Iosif MOLDOVAN, PhD

### **ABSTRACT**

The international financial-economic crisis effects are signalled more visibly in the Eastern European states with a higher degree of exposure, comparative to the developed countries. Estimations and prognoses of some indicators are analyzed at a macro and micro level and constitute the premises in making decisions at state level. This happens along with a joint effort made by the world's nations, of the European Union and other financial organizations, in a common effort to counteract and overcome the crisis' effects.

# CIVILIZATION CLASHING Assoc.Prof. Marioara PATESAN, PhD

### **ABSTRACT**

We live in an age of rapid changes, with a boom in scientific discoveries. At the same time we witness that more and more individuals-especially the young ones who seem to lack national identity-feel the need to search for roots. In an age of rapid and unlimited ways of communication, of traveling or settling anywhere we wish, we become more and more aware of the cross-cultural differences between individuals and groups as well as their influence upon personalities and organizations. Scholars have started to explore and exploit these differences and their implications. They have investigated local and tacit knowledge, symbols, rituals, languages and manners. The theories proposed, range from the radical ones – Huntington's clash of civilization or Ritzer's globalization of nothing- to milder ones that stress the need for people's awareness and knowledge of cultures. In order to understand other individuals and their culture we should have some knowledge of it. Modern society is more complex and sophisticated and therefore it is much more difficult to explain and understand others that do not share our language, beliefs or customs. In a world full of contradictions it is only natural that a proliferation of academic theories to emerge. In this study we will take a closer look at some of the controversial ideas concerning the impact of different cultures on different civilizations.

# PROFESSIONAL QUALIFICATIONS IN THE KNOWLEDGE SOCIETY Col. Tudor BORCEA

### **ABSTRACT**

In the context of social reality, the "professional employment" inevitably undergoes a re-definition with new meanings. In the context of social reality, the "professional employment" inevitably undergoes a re-definition with new meanings. In this perspective, the Amsterdam treaty (1997) introduces stipulations regarding employment politics by promoting labour force that is better trained professionally and that is adaptable to the labour market due to be receptive to the economic changes. Other summits were organized in order to resolve problems identified on the labour market and apply "The European Employment Strategy" – EES – (Luxemburg, 1997), at Cardiff (1998), Köln (1999), Lisbon and Stockholm (2000), Barcelona (2002), the Lisbon summit being the most important one – the strategic objective of the next 10 years was elaborated here, i.e. EU, the most dynamic and competitive economic space, based on the knowledge economy. Also, the regional aspect of the employment issue was discussed.

# IMPROVING RECEPTIVE AND PRODUCTIVE SKILLS Asst.Prof. Georgeta OBILISTEANU, PhD

## **ABSTRACT**

Listening, speaking, reading and writing are a constant part of people's lives. Communication involves the use of a broad and integrated range of language skills, so it is common in ELT to talk about 'the four skills', by which we mean listening, speaking, reading and writing. The paper focuses on all the four language skills and deals with ways of improving them during the English language class.

# STYLISTIC ASPECTS IN THE ENGLISH MILITARY LANGUAGE Elena DOCHINOIU (FUIOREA)

### **ABSTRACT**

As all scientific languages, the military language has a powerful denotative character. Nevertheless, there are terms and expressions with a certain connotative power. At the level of the metaphorical expression, their usage renders the discourse with rich shades of expressiveness. The figures of speech associated with war are frequent in the military language. And it is precisely on these stylistic aspects (especially on metaphors and euphemisms) and their effective use that the paper relies.

### III. TECHNICAL AND FUNDAMENTAL SCIENCES

### ON WEIGHTED CEBYSEV INEQUALITIES

Assoc.Prof. Arif RAFIQ, PhD Asst.Prof. Ana Maria ACU, PhD Assoc.Prof. Florin SOFONEA, PhD

### **ABSTRACT**

By using a generalization of Montgomery's identity obtained by Rafiq, Shahbz and Acu [10], some Cebysev inequalities are established. These inequalities are established for absolutely continuous functions by removing the condition (AQ) from the results obtained in [10]. If the weight function W:[a,b]->[0, oo] from the weighted Cebysev type inequalities obtained in this paper is the probability density function, then we obtain the results of F. Ahmad, N. S. Barnett and S.S. Dragomir ([3]).

# THE SYNTHESIS OF LOWPASS ACTIVE FILTERS BY TRANFORMATION OF LOWPASS LADDER FILTERS, USING FLOATING SIMULATED INDUCTORS Prof. Octavian-Ioan BOGDAN, PhD

### **ABSTRACT**

In this paper, the author proposes a synthesis means of RC active filters based on the replacement of the real inductors from the LC ladder filter by using floating simulated inductors. The inductors are simulated with the help of the generalized impedance converters, achieved with negative second generation current conveyors. In turn, the negative second generation current conveyor is obtained by the appropriate connectivity of the terminals of four terminal floating nullor, synthesized with two AD844 amplifiers. The exemplification is made by transformation of a fifth order low pass ladder filter in the same type of active filter and their modelling with the NI MULTISIM 10 software. By simulating the operation we have obtained both filter frequency characteristics, and we have compared the results.

## CAPABILITIES OF HCDR RESOURCES

LT Radu MITRAN LTC Paul BECHET LTC Iulian BOULEANU LT Iulian ILIES

### **ABSTRACT**

Obtaining, analyzing and disseminating information are critical factors for the success of modern military actions. The accuracy and speed at which these operations can be performed may determine the success or the failure of the military actions on the battlefield. In these conditions, military communications systems need to support the rapid transport of information between the operational and tactical echelons.

The dynamics of tactical military actions and the great mobility of the weapon platforms impose special conditions on the tactical communications systems. Therewith, the traffic volume exchanged in order to command and coordinate the military actions and to acquire and hit targets grew considerably. Therefore, designing tactical military systems becomes more and more difficult. Because of their lower costs and the need to fulfill interoperability requirements, the military tried to adapt civilian communication protocols (WLAN) for the tactical segment of military communications. Thus, the military tried to implement the Tactical Internet on the battlefield as far as each warfighter and weapon platform. The specifics of tactical military actions imposed the need of designing radio stations capable of transmitting data at high speeds (HCDR - High Capacity Data Radio) and to develop new TCP/IP or UDP compatible protocols. Consequently, the MANET (Mobile Ad-hoc Network) concept was designed, as well as a series of protocols which can operate in conditions characterizing the military environment [1].