

**BULETIN STIINTIFIC Nr.2/1999**  
**PUBLICATIE STIINTIFICA SI DE INFORMARE A ACADEMIEI FORTELOR**  
**TERESTRE**  
**SUMAR**

**IMPLICATIILE MIGRATIEI DEMOGRAFICE ASUPRA SECURITATII NATIONALE SI**  
**COLECTIVE**

Col. conf. univ. dr. COSMA MIRCEA

**ABSTRACT:**

*Due to its profoundness, intensity, quickness and variety, the demographic migration phenomenon became one of the most important and updated analysis element, not only for the specialists but also for the politicians and for the cultural, religious, economic and military institutions' leaders.*

*Due to the causes and effects they generate, and to their involvement in different geographical areas, the migration and immigration became interest issues to the geopolitical and geostrategical approaches.*

*The stating of the historical evolution, the actual features and the future trends point out the complexity of this phenomenon. The conclusion is very obvious: without taking into account certain adequate measures, disorders with negative effects on the national and international security may be generated.*

**PREMISE TEORETICE PRIVIND SCIENTIZAREA NORMARII MILITARE**

Lt. col. SFARLOG BENONI

**ABSTRACT:**

*The interventions in social are favourable when they have a scientific basis. In the military field the norms have an axiological, lawful, praxiological and purposeful foundation. That is why their production shouldn't be empyrical and in accordance with the interpretative perspective in which it exists to leave out the arbitrary and the possibility of secondary effects occurrence.*

**MANAGEMENTUL CA STIINTA**

Lt. col. TELESPAN CONSTANTIN

**ABSTRACT:**

*Le foisonnement technologique ouvre la voie aux "écoles virtuelles" où chacun pourra à loisir se former au moment de son choix. Nous disposons bien aujourd'hui des outils pour repenser l'acte d'apprendre. Alors que cette révolution est en marche, on ne peut que regretter l'absence de pensée, à quelques exceptions près, sur la société qu'annoncent ces technologies.*

**SISTEMUL EXPERT**

Lt. col. dr. PETCA IOAN-CONSTANTIN

**ABSTRACT:**

*The S.E. are systems based on knowledge, mimining the human experts. The main idea behind S.E. is the expertise that a large field of specific knowledge's is transferred from man to computer and the users require by this, the proper advice.*

*The applications field of the S.E. are spread in: geology, chemistry, electronics, transports, gestions of economic organisations etc.*

*On the contrary, they must be conceived as help instruments in taxing decision. The S.E. have a series of limits, but none is a reason of not using them.*

**INTELIGENTA SI  
PSIHOLOGIE INFORMATIONALA**  
Psiholog FALOBA DIANA

**ABSTRACT:**

*From the beginning of psychology there were many tries in finding the true meaning of intelligence. The definition that has the most followers is that the intelligence is a general capacity to solve a variety of problems that include different difficulties serving the act of adaptation. From the perspective informational psychology the intelligence works certain instruments (perception, memory, learning, language, tradition, science) including factors which came in a direct relation (fast learning, soace relations, social memory, fast perception of words, verbal understanding, solving problems).*

**EVOLUTIA MANAGEMENTULUI RETELELOR DE COMUNICATII**

Lect. univ. ing. RATIU GHEORGHE  
Col. conf. univ. dr. ing. BURLACU STEFAN

**ABSTRACT:**

*The advances of digital technology defined the services of the communications: voice, data and video; digital signals hardly differ from each other in the way are processed and transmitted. This change has created a phenomenal opportunity in the existing telecommunication market. It is expected that the convergence of voice and data on the same network, as well as the convergence of fixed and mobile services, will bring about a substantial change in network architecture. All these new elements ask for a new outlook of the network management of tomorrow's telecommunications.*

**DETERMINAREA CU AJUTORUL RETELELOR PETRI SI AL FUNCTIILOR SPLINE A  
FIABILITATII SI A DISPONIBILITATII SISTEMELOR CU ELEMENTE AVAND RATE  
DE DEFACTARE SI DE REPARARE VARIABLE IN TIMP**

Lector univ. ing. OCTAVIAN-IOAN BOGDAN

**ABSTRACT:**

*This paper describes a methodology to determine the reliability and the availability of the systems that have the components with time-varying failure and repair rates. For modeling, this method uses the Petri nets, the Markov processus and the spline functions.*

**APLICAREA METODEI DE DETERMINARE CU AJUTORUL RETELELOR PETRI SI  
AL FUNCTIILOR SPLINE A FIABILITATII SI A DISPONIBILITaTII SISTEMELOR  
COMPUSE DIN ELEMENTE CU RATE DE DEFACTARE SI de REPARARE VARIABLE  
IN TIMP**

Lector univ. ing. OCTAVIAN-IOAN BOGDAN

**ABSTRACT:**

*The paper shows the application of the method to determine the reliability and the availability of the systems that have the components with time-varying failure and repair rates (presented in [ 1] ), using two-component serie systems and two-component parallel systems.*

**OSCILOSCOAPE MODERNE**

Lector univ. ing. TEODORU EMIL

**ABSTRACT:**

*The article realise a comparative presentation of modern oscilloscopes in use today, their architecture, most important advantages in characterisation of analysing signals. The new*

*generation of DPO osilloscopes offer a fully integrated measurement system, a superior acquisition speed, a rich image that let you better understand the signal, based on a new architecture and processing device.*

### **IMAGINI MULTIDIMENSIONALE**

Cpt. ing. POPA MIRCEA

#### **ABSTRACT:**

*It is important to define the theoretical background to describe the problems associated with the feasibility of density estimation in more than two dimensions, or the complexity of computations connected with some particular types of signals.*

### **ECOUL SI STABILITATEA IN SISTEMELE DE COMUNICATII MILITARE (S.C.M.)**

Col.conf.univ.dr.ing. BURLACU STEFAN

#### **ABSTRACT:**

*The paper treats, in the first three chapters, the talker echo and the listener echo in analogic, digital and data communication network.*

*In the fourth chapter is presented the stability in the communication network.*

*In the fifth chapter is presented the parameters that affects the echo and the stability of the military communications networks.*

### **CONSIDERATII PRIVIND OPTIMIZAREA CARACTERISTICILOR TEHNICE SI CONSTRUCTIVE ALE BINOCULURILOR MILITARE**

Col. ing. HOMEI DUMITRU

Mr. lector univ. ing. IACOBESCU AUREL

#### **ABSTRACT:**

*This work consists of an evaluating analysis of the structural, technical and tactical characteristics of the military binocular optical systems. Then, on the basis of the resulting conclusions and depending of the real work conditions, it presents a method of computerised analysis that allows us to evaluate the optimum of these characteristics.*

### **ATM. INTERFATA UTILIZATOR-RETEA**

Cpt. asist. univ. ing. BADESCU CONSTANTIN

#### **ABSTRACT:**

*ATM is a fast pachet switching technique using short, fixed length pachets called cells. In principle, it is quite similar to other pachet switching techniques, however, the detail of its operation is somewhat different. Each atm cell is made up of 53 octets. Of these 48 octets make up the user information field (payload) at 5 octets make up the header.*

### **EFECTELE ZGOMOTELOR SURSEI DE REFERINTA IN SINTEZA INDIRECTA DE FRECVENTA**

Cpt. ing. BECHET PAUL

#### **ABSTRACT:**

*The phase noise performance of a synthesizer can be described using a simplified model. In this model we consider reference noise components which appears at the system output. One measure of system performance is the steady-sate error, that is, the error remaining after transients have died out. We will be calculated and represented the transient phase error sample sequence as a function of the system parameters.*

## **SECURITATEA RETELELOR DE CALCULATOARE**

Lector univ. ing. CARMEN PETRASCU

### **ABSTRACT:**

*The design of computer net also needs designing of security tools ansamble. Next to evoluation of net needs, the net administrator will project the security policy. In this material on ansamble of security assurance methods, operations to apply and physical components of the net are presented.*

## **DIAGNOZA TEHNICII MILITARE. PARAMETRII DE DIAGNOSTICARE**

Mr.sef lucrari ing. CRISTEA SORIN

### **ABSTRACT:**

*The complexity of armoured vehicles rise quickly. The time for to verify vehicles before the fight is shortly. In this situation we propose to take into account three new characteristics for diagnosis parameters. Acording our estimation to use eight (not five) characteristics is necessary for a constraints safety and price .*

## **ECUATIA DE MISCARE A SISTEMULUI RECOLANT IN PERIOADA ALIMENTARII ARMEI**

Lect. univ. ing. ACHIM RADU

### **ABSTRACT:**

*The paper presents a combined application of rigid solid subjected to friction connections, the second haw of dynamics and variation theorems to the impulse and the cinetic energy (as elements of theoretical Mechanics) în armament technique, having as main objective determination of moving equation to the recoilment system during the supplying the weapon.*

## **REALIZAREA UNEI INSTALATII CU JET DE APA pentru INCERCARE BLINDAJELOR USOARE**

Sef lucrari ing. IOAN MARCEL MICLEA

### **ABSTRACT:**

*The present paper is a part of a large research work about of utilization of the water jet to the non conventional technologies. It is presented some aspect about creation a lab installation using water jet for testing easy armored plate.*

## **ASPECTE ALE DIAGNOSTICARII APARATURII HIDRAULICE DE DISTRIBUTIE DIN COMPONENTA AUTOVEHICULELOR MILITARE**

Asist. univ. ing. ANDI-CRISTIAN ADRIANESCU

### **ABSTRACT:**

*At the diagnosis of some defects we start from the find effect. This can be provoke by one or more causes, that operate independent or simultaneous. Frequently, in practice, the cause is confound with the effect becoming more difficult the defect analysis and the establish of some efficacious measures to remedy. The superficial analysis of the defects and the wrong or incomplete establish of the causes that generate then are going to the repeat of the initial defect or to the increase of some associates defects.*

**DETERMINAREA VIETII TEVILOR ARMAMENTULUI DE INFANTERIE PRIN  
TRAGERI DE ANDURANTA DUPA CRITERIUL VITEZEI INITIALE A GLONTULUI**  
Mr. ing. KERESZTES LÁSZLÓ

**ABSTRACT:**

*The paper presents the methodology of determining the bullet's speed within the tests of the armament by endurance shootings which is an analytical experimental method. The purpose of determining the bullet's speed is to establish the length of the effective necessary time until after a certain number of shot shells, the bullet's speed decreases under a certain established value.*

**ASPECTE COMPARATIVE INTRE LASERUL CU ELEMENT ACTIV SOLID SI LAMPA  
DE POMPAJ OPTIC**

Cpt. prep. univ. drd. ing. VIRCA IOAN

**ABSTRACT:**

*This study presents advantages which to offer both laser with solid active element and optic pump lamp. At the same time, this study make a comparison the two sources to radiation and specification means to processing with optic pump lamp.*