Dear readers,

You are holding this year's first issue of the *scientific, peer-reviewed journal Science & Military, which is published by the Academy of the Armed Forces of General M. R. Štefánik in Liptovský Mikuláš.*

The mission of the Science & Military journal is to enrich the field of military science by means of papers and articles written by specialists working in a wide variety of specializations covered by the journal.

The latest issue of the Science & Military journal differs from all the previous issues since it is focused monothematically. The articles present the issues related to communication and information technologies in the armed forces. The current issue contains ten high-quality and captivating articles focused on cyber security, net operations, military communication and information systems and information processes. I believe that these articles will provide inspiration for their readers and space for discussion and exchange of knowledge and experience in the aforementioned specializations.

The first article, written by Radoslav Masnica and Jozef Štulrajter is titled "Impact of Reliability Factors on the Probabilistic Model Properties of IFF Recognition in a Network – Oriented Environment". This article focuses on the description of the properties of a probabilistic model for processing of sensor signals using a probabilistic model of recognition Custom / Foreign (Identification Friendly or Foe - IFF) and access to the current intelligence picture of the commander in the common operational picture (COP) for C4I2 systems.

The second article was written by Rafal Gliwa, Janusz Szmidt and Robert Wicik. The article titled "Searching for Cryptographically Secure Elliptic Curves Over Prime Fields" presents results of original experiments with generating cryptographically secure elliptic cures over prime fields using various types of seeds.

The article written by Oleg Y. Sova et al. titled "Hierarchical Model of Decision Acceptance in Intelligent MANET Control System" deals with new hierarchical model for MANET, intelligent agent based system, using graph theory.

Cryptography and Genetic Algorithms is the topic of the article by Martin Javurek and Marcel Harakaľ. This article is a brief overview of genetic algorithms. The genetic algorithms are used as generators of random numbers. They are also used in cryptanalysis and for training and designing of artificial neural networks. The summary describes the advantages and disadvantages of genetic algorithms.

Another article was written by Miroslav Ďulík and Miroslav Ďulík Junior. The article titled "Security in Military Cloud Computing Applications" presents types of cloud computing models and cloud service model SPI (Software, Platform and Infrastructure). This paper shows the security technologies and mechanisms for implementing security in private cloud applications, where the high levels of security is necessary and proper.

The article titled „Effects of Well-known Forms of Improvised Explosive Devices Using Homemade ANFO Explosives" written by Lucia Figuli et al. focused on the research of effects of improvised explosive devices (in the form of suicide belt, vest, car etc.) using homemade ANFO (Ammonium Nitrate and Fuel Oil) explosives as a body of the IED.

"Evaluation of the Uniform Linear Microphone Array for Detection Systems" is the topic of the article by Roman Berešík, Jozef Puttera and Jozef Jurčo. The article deals with simulations of the uniform linear microphone array as a basic configuration of the sensor array for detection of events in the monitored area. In conclusion, outcomes of simulations are evaluated and also further research in the field of sensor arrays and array signal processing is outlined.

The author Ľubomír Semančík wrote the article titled "The Importance of Replication in the Application Logic". This paper describes possibilities of using replications for updating database applications. The paper characterizes the replications and describes their categorization and properties.

The next article titled "Monitoring of Department Network – Administrator's View" written by Július Baráth answers basic questions: how to collect, normalize and process log and audit information; what is essential information to log across the platforms used; and how to monitor network attached devices in the department network.

The final article by Stanislava Gažovová, František Nebus, Vladimír Belák presents analysis of personal vehicles electromagnetic emissivity, which is one of the possible characteristics useful for vehicles classification and recognition. The signals analysis, based upon emissivity measurement in anechoic chamber, is investigated in the frequency range from 100 kHz to 35 MHz, concluded with some specific classification characteristics.

Dear readers,
if the mission of our journal appeals to you, I will be glad if you publish your opinions as well. In this way, you will support our efforts to reach unity in diversity of scientific knowledge.

Assoc. Prof. Eng. Marcel HARAKAĽ, PhD.
Chairman of the editorial board