

CONFERENCE OF THE HUNGARIAN MILITARY SCIENCE ASSOCIATION Human Resources and Technical and Technological Development Challenges in the Military

OPENING

Benkő, Tibor

Values and Technological Development in the Hungarian Defense Forces

DOI 10.17047/HADTUD.2016.26.K.6

ABSTRACT:

As a non-governmental organization, the Hungarian Association of Military Science is not a part of the Hungarian Defense Forces, yet the two are interconnected through their aims and activities. Scientific life is very important for the Hungarian Defense Forces, that is why I am delighted that the conference of the association was titled *Human resources and challenges of technological development in the Armed Forces*. Science and innovation are indispensable for national defense. In 2013 we created the HDF General Staff Scientific Research Center as a means to stir up the academic life of the General Staff of the Armed Forces. Its main areas – among others – are the organization of academic work, research, and supporting the results. Keeping the aim of the conference in mind, I will speak about values in the armed forces, technological development, future perspectives and a few recent organizational changes.

KEY WORDS:

values in the armed forces; technological development; Zrínyi 2026.

PANEL I.

The Military Profession Value Content in the Volunteer Armed Forces

Krizbai, János

Human Resources Challenges in the Hungarian Armed Forces

DOI 10.17047/HADTUD.2016.26.K.15

ABSTRACT:

The author's analysis of the impact of organizational changes in the Army examines the future challenges. He highlights questions, emphasizes dilemmas. He points out some similarities and differences and draws attention to the lack of deeper interpretation.

KEY WORDS:

volunteer force; the challenges; values.

Himmer, Péter

Value – Values – Our Values

DOI 10.17047/HADTUD.2016.26.K.25

ABSTRACT:

In my paper, first, I demonstrate the theoretical claim that value – wherever is obtained – is not an arbitrarily definable and freely chosen category, but is always honored by somebody (us or others) and socially determined, which is only enforced by our choice (or the choice of others). Then, in the light of this theory of value, I focus on the possible values of the contemporary Hungarian soldiers.

KEY WORDS:

soldier; value; choice of values.

Poór, József

Challenges of Human Resources and Technological Developments in Lights of Management Paradigms

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ABSTRACT:

The National Association of Human Managers has been cooperating with the Hungarian Military Science Association for several years. Two years ago we held a joint conference. I had been thinking a lot about what I should say as a civilian to non-civilians. I have been dealing with leadership for a long time (these days it is called management sciences), so I have decided to discuss a few general paradigms. In this connection I would discuss whether a paradigm shift is needed in the field of management.

KEY WORDS:

management paradigms; private sectors; public sectors.

Törő, Lajos

The Appreciation of the Military Profession in the 21st Century

DOI 10.17047/HADTUD.2016.26.K.39

ABSTRACT:

The timeliness of the topic, the reasons of appreciation of the military profession and the relationship between religion and ethics in the military education.

KEY WORDS:

postmodernism, professional ethics, professional officer, responsible, military ethics educations.

Boda, Mihály

Courage and Distance

DOI 10.17047/HADTUD.2016.26.K.45

ABSTRACT:

The virtues are the positively valuable character traits of the human personality. By the virtues human beings are disposed to behave ideally from the ethical point of view (or to attain ethical good), in some area of the human life. Military virtues have significance in relation to waging and winning wars. Courage, honor, and loyalty are some examples of the military virtues which had important role in the past. Although, contemporary phenomena of military life as humanitarian intervention, peacekeeping, contracting private military firms (mercenaries), and applying semi-automatic weapon systems, are showing that traditional military virtues are changing. Since in these military phenomena there is not much significance of courage (peacekeeping, applying semi-automatic weapon systems), or loyalty (humanitarian intervention, contracting private military firms). In my paper I focus on the specific question that whether somebody needs courage to control semi-automatic weapon systems?

KEY WORDS:

military ethics, courage, drone

Mező, Ferenc

Projected Changes of the Human Factor along the Military Aspects

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ABSTRACT:

While the population of the world increases year by year (the average rate is between 40-70 million people per year), the Hungarian population is decreasing. In case of the decreasing of quantitative values, the qualitative 'human' factors (e.g. intelligence, creativity etc.) will be more and more important in the future - in the armed forces, too. What changes can we predict among the future soldiers? This study gives prognosis and suggestions in the area of intelligence, creativity, learning, anxiety and talent.

KEY WORDS:

human factor; prognosis.

Takács, Attila Géza

The Responsibility of a Commander and Team Building, the Challenges in the (Post) Modern Armed Forces

DOI 10.17047/HADTUD.2016.26.K.69

ABSTRACT:

In this study, I would like to introduce the results of my research and describe the commanders' role by sharing my experience. I also intend to highlight the challenges, which are present in the life of the Hungarian Defence Forces. A commander has to handle the internal and external changes as well. The warfare, the method of War changed a lot in the last 25 years. The analysis of single events and establishment of interdependencies can establish the base of the preparation for the next mission and enhance the situation awareness of the subordinated units.

KEY WORDS:

postmodern war; commander; generations of War; operational leadership; building cohesion;

PANEL II.

The Relations between Armed Forces, Science and Technology (Outlook 2030)

Ráth, Tamás

Reflections

DOI 10.17047/HADTUD.2016.26.K.81

ABSTRACT:

Many generally accepted principles and facts have been modified by political transition since 1990. The development of technology and its results have remained in the focus in the most developed countries.

The future has a lot of uncertainties and the modernization of Hungarian Armed Forces is unavoidable. Without any medium or long term thought, the planning of the capability of armed forces will not be increased significantly. Cohesion of the military-industrial co-operation is in the hands of engineer officers, their fruitful work needs a well-organized institute.

KEY WORDS:

technology; research and development; medium-term thought; engineer officers; system approach.

Szépvolgyi, János

Development in Materials Science with Special Regard
to Application in Military Technology

(What Can Be Expected in 2020s?)

DOI 10.17047/HADTUD.2016.26.K.86

ABSTRACT:

This paper presents selected examples on the state-of-art in materials science and technology. The main goal is to point at recent trends of development, results of which will probably be applied even in the military technology in the next decade. In this respect, nanotechnology is regarded as of special importance, because materials and devices produced by this technology can open new vistas in the personal and armor protection, decrease of environmental impacts, communication and other fields of military technology, as well.

KEY WORDS:

materials science, nanotechnology, new materials and processes, military technology

Turcsányi, Károly

Viewpoints and Methods for the Assessment
of Compliance of Military Technology

DOI 10.17047/HADTUD.2016.26.K.90

ABSTRACT:

One of the decisive factors of military capabilities is the compliance (quality) of military technology used. Historical facts could prove that the selection of armament was often wrong and important aspects were not taken into account. This article presents some useful possibilities and procedures of comparison and assessment of military technical means by the examples of heavy battle tanks from World War II.

KEY WORDS:

Military Technology; Heavy Tank; Compliance and Quality; Qualification; Comparative Assessment.

Gyulai, Gábor

Complex Approach of Domestic Research & Development in Field Of Military Technology

DOI 10.17047/HADTUD.2016.26.K.103

ABSTRACT:

Domestic Research & Development (R&D) in field of military technology plays a special role regarding the security of the country, the national defence and in the system of armies. It has bearing on education system, the industry and a lot of fields of economy. All the strategic, tactical, financial, economic, organizational, logistics etc. considerations are important to estimate the exact role, place and function of the domestic R&D. The author highlights these relationships in this paper.

KEY WORDS:

Research & Development (R&D); national defence; military technology; defence industry.

Pap, László

Overview the Future of the Unmanned Aerial Vehicles and Aircraft Systems

DOI 10.17047/HADTUD.2016.26.K.118

ABSTRACT:

The contribution gives an overview about the development of the UAV and UAS devices and the main trends of their market. It deals with the general classification of the military and civil UAV equipment and systems and with their typical applications. Based on the "US Army UAS Roadmap 2010 2035" the author summarizes the main goals of the US Army in introducing, development and applications of the UAV systems in the next two decades. The paper gives an overview about some results of the domestic developments and the further possibilities in the near future.

KEY WORDS:

Unmanned Aircraft System ? UAS, Unmanned Aircraft System ? UAS, classification of the military and civil UAV equipment and systems, applications, US Army UAS Roadmap for UAS 2010 2035, possibilities of the domestic development

MILITARY OPERATIONS

Pozderka, Zoltán

Roles and Functions of Information Operations in Operations Planning

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ABSTRACT:

Information Operations, just like other staff functions, play an important role in the Operations Planning Process, which can be understood better by examining the different versions of definitions, comparing the dispositions of the function in different staff structures and presenting the concept of effect based approach. During the Operations Planning Process the role of this staff function is to analyze, plan and assess information activities to achieve

objectives, while integrating other experts in different working groups. Information Operations is represented in the Operations Planning Group and other working groups during the whole process of operations planning.

KEY WORDS:

INFOOPS; Information Operations; effect based operations; INFOOPS staff function; operations planning.

MILITARY TECHNOLOGY

Kollár, Csaba

Can we like robots?

Human-robot interaction – Theoretical aspects of human side

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ABSTRACT:

Many of us can remember some films, where robots were the leading actors; they were nice and likeable; the moviegoers could even identify themselves with the character of the robot. We have been witnessing a lot of inventions recently (e.g. EveR, DER2, Saya, Sophia, Jangjang) where the primary objective is to build robots or rather androids or humanoids, which are more and more similar to humans in terms of their anthropometrical features, mimics, gestures and voice. The present study discusses the robot appearance and expressions which can be perceived by human senses (in our case, vision, hearing, touch), exists in the traditional and extended/virtual outside world and look like human beings. Regarding communication aspects, the paper first of all examines what the human-robot relation can be like; what it depends on; whether human emotions can be developed and this relation can be deepened. The first part of the study analyses the topic with the help of theoretical sources, the second part uses empirical sources. This latter is also based on the results of own research.

KEY WORDS:

human-robot interaction; social robots; feelings; human aspect.

HUMAN RESOURCES PROFESSIONAL ACTIVITIES

Jobbágy, Zoltán – Stummer, Judit

Challenges in Recruiting Personnel for the Hungarian Defence Forces.

Reputation of the Military Profession among the Young Generation

DOI 10.17047/HADTUD.2016.26.K.155

ABSTRACT:

The article is based on empirical research. It gives insight into potential labour market segments that are, in terms of commitment to national defence issues, important for the Hungarian Defence Forces. The article details certain results of a survey conducted among youngsters going to high school, students attending institutes of higher education, and cadets of the HDF Ludovika Battalion.

KEY WORDS:

Hungarian Defence Forces; military recruitment; voluntary force; military higher education; Military Knowledge; National Defence as Course.

Kladek, András

Some Thoughts on the Reform of the Volunteer Reserve System

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ABSTRACT:

The volunteer reserve system is prior to renewal on a territorial basis. The author puts forward proposals in this regard. One proposal is aimed at improving the age structure of the reserve component, where the retention of young, regular service members as reservists appears an appropriate method. Of course, proper motivational tools are needed. Proposals are made to further develop the employer support programme in order to help reservists retain their workplaces. A labour advocacy organization as a forum for volunteer reservists and their employers is also suggested.

KEY WORDS:

reserves; volunteer reserves; motivational tools; the employer support programme.