

SUMMARIES



Auftragstaktik and Innere Führung

Dirk Freudenberg

Auftragstaktik (referred to also as “mission command” or “mission-type tactics”) and *Innere Führung* (“leadership culture in camouflage”) are the leadership principles that determine the leadership culture of the Bundeswehr and the self-determination of its soldiers. With this study, the author aims to disclose the main idea of the two concepts and their interrelations. The comprehensive research carried out by the author reveals that the fundamental principles of *Auftragstaktik* based on previous wartime situations are deeply intertwined in *Innere Führung*, a considerably more recent leadership philosophy.

The author also addresses the topics related to the existence of armed forces in a democratic society and citizens in military uniforms at the service of democracy. The numerous historical sources, dating mainly from the 20th century, used by the author help clarify the essence of the contemporary discussion of *Auftragstaktik*.

Development of a Risk Analysis Method for Ammunition Storage on the Basis of a Fictive Storage Facility

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The aim of this article is to introduce a complex risk analysis method for ammunition and explosives storage developed in the Tallinn University of Technology in 2018–19. The basis for this method is to use empirical correlations, which provide trustworthy results even with limited initial data. At the first stage, mathematical models were composed for several purposes: risk modelling and assessment of aboveground storage of 1.1 hazard division (primary type of hazard being mass explosion) explosives and ammunition in earth-covered reinforced concrete ammunition magazines.

A mathematical model of fictive ammunition storage was compiled for the purposes of modelling and risk assessment. The storage model consists of four earth-covered reinforced concrete magazines with fictive parameters. The constructional parameters of the magazines, net explosive quantities in each magazine and distances between magazines are easy to adjust in this mathematical model. Physical risk parameters relating to accidental damage to the magazine were considered and include: shockwave, debris and cratering. Each parameter was included in the model, and the resulting risk factor effects and magnitudes were assessed in terms of future magazine design and construction specifications.

Civilian Mobility in Crisis Situations and its Effects on Operational Capabilities of Military Units

Maret Aarla-Kask, Tanel Jairus, Mike Franz Wahl

Estonian residents' readiness for crisis situations is inadequate and that is why the population has no interest in participating in training exercises or in preparing in any other way. On the basis of world practice, the most crucial factor for survival and successful emergency evacuation in a crisis situation is public awareness.

Therefore, the author concludes that since the preparation of the Estonian population for crisis situations is insufficient, specialists working at emergency services and other crisis management agencies should receive more professional training, which would help compensate for the population's lack of knowledge. Such training is especially important for the officials responsible for informing the public and communicating directly. As world practice has shown, the clarity and precision of the guidelines in a crisis situation is crucial for the population. A minor misunderstanding of instructions can lead to unfortunate consequences.

The author of the paper studied how mass evacuation of the Ida-Virumaa population would take place in the event of a threat posed by the East. The simulations showed that using the main routes is the simplest and fastest way. However, it could pose a problem if military units are moving in the opposite direction at the same time, making it difficult or impossible for civilian vehicles to travel on the main roads. It takes a minimum of 17 hours in the daytime and 18 hours at night to evacuate 44% of the people in Ida-Virumaa

by using alternative routes. The waiting time for the start of evacuation can take a minimum of 5–10 hours.

The author of the thesis does not have information on the details of how much of the road traffic the defense forces may require, but there should definitely be a plan to enable the civilian population to evacuate by using alternative routes. The simulations showed that 57% of the population of Ida-Virumaa could not be evacuated if the main roads were closed.

Impeding factors for evacuation may include the lack of resources, as well as the lack of know-how and experience of personnel who are responsible for the evacuation. In addition, the mapping of evacuation destinations has not been done and there are no clear instructions as to which institution or legal entity should organize the necessary services at the evacuation point. Impeding factors may also include bad weather conditions, the lack of legislation or the lack of ability to quickly facilitate an evacuation.

The author suggests that there is a need to limit civilian and public transport access to the main road 33 (Jõhvi-Kose) in order to allow freedom of movement for Defense Forces vehicles. The author also suggests ordering analyses from a competent authority (for example, the Road Engineering Center), in relation to the density of population and changes in the state's interest in various objects, at least once every three years.

One of the risks pointed out by the author is that all the bus drivers may not agree to work in an emergency situation, but would prefer to be evacuated instead. Many of them are at the retirement age and already suffer from various health issues (anxiety, high blood pressure, etc.), which do not allow them to work in emergency situations. In such cases, the human resources, such as bus drivers, should also be guaranteed.

This paper does not take into account national defence objects, the location of which is considered classified (warehouses, shelters), although traffic congestion would need to be avoided near the aforementioned objects.

Maritime Situational Awareness and its Development Possibilities in the Republic of Estonia

Sven Sargma

The article covers the possibilities for improving maritime situational awareness in the Republic of Estonia and is based on the author's Master's thesis "Maritime situational awareness and its development possibilities based on

the example of authorities engaged in maritime surveillance”, which was defended in the Estonian Academy of Security Sciences in June 2018. The thesis was awarded the scholarship for defence-related Master’s theses by the Estonian Ministry of Defence in December 2017.

The research was designed within the framework of case study research strategy as an embedded single case design case study. A query, document analysis and semi-structured interviews were used as methods for data collection to achieve the research objectives. The method of analysis used was qualitative content analysis and it was conducted using the qualitative data analysis software NVivo 11 Pro.

First, the theoretical chapter explains the incentives for forming maritime situational awareness, the historical-theoretical development of the respective field and its role within the Estonian Maritime Defence Model. The second, empirical chapter, charts the organizational-institutional aspects which inhibit the improvement of maritime situational awareness in the Republic of Estonia.

According to the first chapter, the necessity for a coastal state to develop maritime situational awareness comes from the need and obligation to enforce sovereignty over its maritime domain. To accomplish this goal, the opacity covering the maritime domain must be reduced by combining different sources of maritime situational awareness. A coastal state must have the capability to: gather information from all possible, relevant sources; to analyze the gathered information; and to process it into a suitable form and distribute it to the decision makers. To be more successful in maritime activities than possible adversaries, the information for decision-making and the situational awareness must be of excellent quality and at the same time defended against hostile influences across the Maritime Defence Model. The conclusions described in the first chapter were used for designing the empirical research.

In the second chapter, the directions for improving the maritime situational awareness in the Republic of Estonia were determined based on the analysis of query results, strategy documents and expert interviews. These directions were: improvement of gathering and distribution of information required for maritime situational awareness and better coordination of respective flow of information between agencies; the enhancement of information systems used for creating maritime situational awareness; improvement of policy and decision makers’ understanding of the respective field; better regulation of the field; increasing the survivability of the systems used for creating maritime situational awareness; and mapping the inter-agency needs for exchange of information used for achieving maritime situational awareness.

The possibility of creating a separate organization for management of corresponding systems and infrastructure and the need for creating a joint maritime situational awareness center should be considered.

Diary of Estonian Naval Officers 3rd Course 01.02.1926–05.02.1927

Taavi Urb

The 3rd course of Estonian naval officers started at the Estonian Military School of Joint Military Education Facilities on 7 July 1925 and graduated on 29 April 1928. With 20 graduates (2 cadets did not graduate), it became the single largest cohort of Estonian Navy officers. Students of the 3rd course could enjoy a more systematic and academic approach to their education than their predecessors and by 1940, when the Estonian Navy was abolished, they had achieved prominent positions in the Navy. This crew also produced the most outspoken writers in military journals amongst Estonian Navy officers for the time.

From 1 February 1926 until 5 February 1927, the cadets of the 3rd course kept a diary, which is now retained at the Estonian Maritime Museum. The diary was a collective work: a different person made entries each week and the name of the author was added at the end of the week. As some of the names (and some annexes mentioned in the text) are missing or substituted with the note “unknown”, the version available in the museum seems to be a copy of an original diary or diaries.

It can be deduced that the diary was not meant for publication or for outsiders to read, as some of the entries could have caused a lot of trouble for the writers. However, some extracts with names omitted were published in 1933 in the journal “Merendus”, where the graduates of the 3rd course were active members, to commemorate the 5th anniversary of their graduation. Most of the diary entries relate jolly or annoying episodes of cadets’ everyday life at the Military School in Tondi and during the practice in the Fleet. Therefore it gives an interesting and amusing insight into Estonian Navy cadets’ life during one year.