**ABSTRACTS OF SCIENTIFIC PUBLICATIONS**

**by CDR PhD Valentin Simeonov Vasilev**

**Assistant professor at Naval Tactics Department in Navigational Faculty**

**I. Monograph:**

**1.1. VASILEV, V. *Dimensions of mine threat to security of navigation*. Varna: NVNA Publishing section, 2019. ISBN 978-619-7428-35-3.**

**Abstract:** The mine threat exists in the modern marine environment and has the potential to have an adverse impact on shipping as the most vulnerable element of the Maritime Transportation System. The assessment of the impact on shipping contributes to improving the effectiveness of the risk management process. It is a matter of a number of activities of competent governmental institutions aimed at maintaining a favorable maritime safety and security environment.

The purpose of presented monographic work is to study the conditions of the environment in which the modern mine threat poses a negative influence over seaborne shipping. Moreover, it should take into account that the use of Naval mines means implementing a plan to build a system of mines in order to jeopardize shipping. It is different from the physical "throwing" into the water of "underwater explosive devices".

**II. Publications in scientific magazines, reffered and indexed in the World data bases of scientific information:**

**2.1. VASILEV, Valentin S. Officers and Cadets from the Third Bulgarian Kingdom - Followers of European Maritime Attainments. *Bulgarian Historical Review*. 2016. No. 1-2, p.202-206. ISSN 0204-8906.**

**Abstract:** The author sheds light on a relatively poorly studied and controversial period of the Bulgarian naval history, impartially and without ideological bias. He subtly suggests that nowadays these facts, events and maritime officers have a kind of fractal reflection. Education abroad leaves behind an indelible "sign" on the fate and career of Bulgarian officers, whether realized in the Navy, or sailing on board of merchant ships around the world. Geopolitical environment worldwide by the end of the XIX century to the 40s of the XX century challenges the Bulgarian maritime educational system. Interfered by military-political factors, it affected the development of young Bulgarian Navy and the fate of the officers who gave away their own youth to the sea. They all remain in history as the descendants of European maritime values and achievements.

It is made visible some regularity derived in correlation with the state of relationship between the Principality of Bulgaria and the Russian Empire. Although the level of dependence on the Russian educational system in the aspect of education and training of future officers varies from tolerant partnership through reservedness to severed disavowal, the training in St. Petersburg and Kronshtadt continue during the time, but their quantity is not permanent. The author distinguishes “waves of trainees”. Usually, the destinies of the young officers graduated abroad are predetermined by the inevitable course of events caused by these heavy waves. Training abroad played a role and formed the orientation and understanding of many Bulgarian naval officers on eve of wars. For example, a synthesized description of the situation of divergence of interest before the start of World War I, in consequence of which the Ministry of War in Sofia “seeks other opportunities beyond the circle of Russian naval schools." This is a completely natural process of formation of a sovereign national policy and determination of a kind of level of national ambitions, the pursuit of which invariably has a projection in the military education system.

**2.2. VASILEV, Valentin S. International regulations related to naval mines and protection of navigation. *IOP Conference Series: Earth and Environmental Science*. 2018. Volume 172, Issue 1, pp. 012013.**

**Abstract:** Safety and security are a required as a prior condition for the development of the maritime transportation system, offshore industry and prosperity for coastal states.The safety and security environment out of territorial waters (TTW) of Coastal states is changing its characteristics. The statute of any military action in Contiguous zone and in Exclusive Economic Zone (EEZ) becomes more sensitive than ever. Nowadays, the use of naval mines is demanding adequate reflection so that to correspond with trends in regional security. The determination of Rules of engagement (ROE) for the coastal State naval forces is another milestone that shapes out the use of mines at sea. The synthesis of proper ROE supports achieving mission goals in accordance with the requirements of the United Nations Convention of Law at sea (UNCLOS-82) and Law of armed conflict (LOAC) in respect with human rights.

The Black Sea is a crossing point of interests and spheres of influence. In order to maintain a stable environment of safety and security, it is necessary to balance the EU, NATO and UN security environment management norms, as well as the national interest. However, taking into account all the factors affecting freedom of navigation and the preservation of economic interests, it is a complex process and a serious challenge for researchers and security experts. In this study, some limitations have been placed in order to sharpen the focus and to achieve specific depth and details of the research work. Limitations are needed in spatial aspect. The projection of the sea mines usage on the security safety and environment in the Western Black Sea is reviewed. A wide range of risks and threats influence the security and safety environment, but among them only impacts of the mine threat has been explored. Significant factors are considered, such as inherent rights and values for free movement at sea, understanding of naval mines nature as well, as existing international legal norms.

It is perceivable that the Hague VIII Convention is an example that there are some needs for regulating the use of naval mines at sea. Actually, the Convention has not expired but it falls behind its time. It is true to be stated that it is not among the most popular legislative sources of international law. UNCLOS-82 fails to treat the use of naval mines in details, so there is a vacuum, in this sense. Accordingly, the effects of the Hague VIII Convention should be matter of concern not only for Legal advisors and Lawyers but for all of those people that are involved in maritime security and maritime business. The protection of civilians and innocent passage is one of the main goals of the maritime security system.

Nevertheless, the Hague VIII Convention gives unsatisfactory aged definitions. It has got ‘gaps’ concerning modern influence mines. So, these blank fields become larger and larger. Contemporary legal aspects of naval mines use are defined successfully by NATO. The San Remo Manual is a good example to produce comprehensive manual for commanders at sea. There is necessity of newly-designed applicable international legal regulations applicable to the use of Naval Mines. Probably it is appropriate for the issue to be under UN jurisdiction. Raised issues should be adequate to contemporary trends in maritime security such as asymmetry, hybrid threats and challenges in delimitation of the sea.

**2.3. VASILEV, Valentin S., The fate of Bulgaria to be а naval ally of the Third Reich during the Second World War. *Bulgarian Historical Review.* 2017. No. 3-4. pp. 222-228. ISSN 0204-8906.**

**Abstract:**The Black Sea was a crucial theatre of impacts during The Second World War. Undoubtedly, the presence of the Third Bulgarian Kingdom on the international scene is noticeable and it throws challenges to contemporary researchers in the field of history. The monograph ‘Bulgaria - the naval ally of the Third Reich during the Second World War (1941 - 1944)’, written by Peter Daskalov, is an unadulterated author`s sight on disputable chain of events in that exciting period of new Bulgarian history. It is distinctively perceptible through the written lines that there is deep horizon that is broadened by processed historical facts. It is noticeable that widely known historical facts are displayed by a specific angle. The presented systematic inquiry contributes to the knowledge of Bulgarian Naval history by adding new details derived from a significant number of searched documents especially in the field of shipbuilding and ship repair during the dawn of industrial boom in Bulgaria.

The presented book is of interest to a wide range of readers. It would be too pretentious to say that unknown facts from the history are presented, but certainly publishing the book excites the interest of researchers, educationalists and critics in the field of naval history, shipbuilding and ship repair. Other interested readers are those who are fond of Bulgarian history and who would not like to miss the opportunity to touch a piece of the naval history of their homeland. In addition, the monograph could find practical application in expanding the knowledge of different categories of learners in the course of the learning process. Undoubtedly, the emergence of the book ‘Bulgaria-the naval ally of the Third Reich during the Second World War (1941 - 1944)’ gives rise to stormy discussions among readers, especially when the content, the illuminated facts and the conclusions are projected on the background of well-known but sent in oblivion historical events.

**III. Publications in scientifically reviewed Magazines and Conference Proceedings unrefferd in the World data bases of scientific information:**

**3.1. VASILEV, V. Influence of offshore object critical vulnerabilities on the implementation of threat. *Proceedings of the Scientific Conference „Actual problems of security”*. 2014. Том 1, с.212-220. ISSN 2367-7465.**

**Abstract:** The offshore production industry is facing a wide range of threats having different sources. Its vulnerability depends on the steadiness and sensitivity of a particular element to unfavourable impact during emerging of threats. It is necessary to introduce a threshold of accessibility to the means of destruction, which would facilitate efforts to limit to some extent the possibilities for their use.

**3.2. VASILEV, V. Possible approaches toward increasing the level of security in maritime domain. *Annual publication of the Rakovski National Defense College. 2015. с.31-39. ISSN 1312–2991.***

**Abstract:** The Black sea region is situated in geopolitical focus of events that influence maritime security worldwide. Characteristics of security environment during last decade of ХХI century are figured by traditional regional challenges as well as “newborn” hybrid threats. In that aspect there are demands concerning establishment of predictable and trustworthy maritime environment. It is vital to adapt existing naval capabilities to dynamically changing conditions in the region.

**3.3. VASILEV, V. Management of the security environment in maritime domain by using deterrence and non-lethal weapons. Proceeding from the Sixth national conference of Bulgarian Academy of Science with international participation. 2017. с. 251-256.ISSN 1313- 8308.**

**Abstract:** The state of the security environment in the National Maritime Areas is a milestone in the process of determining the necessary impact. The system-scenario approach allows selection of indicators of the environment, revealing the genesis and evolution of specific challenges, risks and threats to security. The control in the sea should be adapted to changing environmental conditions. Security crises having different genesis form conditions that facilitate the formation of migrant flows, including infiltration of members of radical organizations or smuggling of dangerous and unlawful goods. It is precondition for emerging a conflict situation at sea where Navy in the exclusive economic zone or Border Police in the territorial sea are involved in any conflict situation. Reliable management of the evolution of the conflict in accordance with national and international law is possible by means of precise procedures and sound rules of engagement. The use of non lethal weapons and means for deterrence gives a wide range of control influence with desirable intensity and discretion.

**3.4. VASILEV, V. Expanding of the management impact effectiveness on destructive incident of maritime security and safety. *Proceedings of the Scientific Conference „Actual problems of security”*. 2017. с. 445-453. ISSN 2367-7473.**

**Abstract:** Nowadays, it is vital to national interests at sea all kind of competent institutions to be adequate to all demands of safety and security environment. The proper and timely amalgamated solutions of these competent institutions should be focused on impartial assessment of the effectiveness of realization of any given management impact on stochastic destructive phenomenon in safety and to control the state of environment in security aspect. Especially, it is valid to maritime environment, where wide spectrum of economic activities is developed such as offshore industry and maritime transportation system.

**3.5. VASILEV, V., LIUTSKANOVA S. Influence of the vulnerabilities of offshore installations on the security and safety. *Mechanics, Transportation, Communications.* 2018. Том 16, № 1, ст. № 1550, XV-10- XV-19. ISSN 2367-6620.**

**Abstract:** Challenges to national energy policy include international energy gas projects and the development of diversification alternatives. The projects are related to the operation of the maritime transportation system, oil-extraction platforms and deep-water pipelines. By applying a system-scenario approach, the article analyzes the vulnerabilities of offshore installations. The results contribute to focusing the efforts of the competent institutions in forming and maintaining a favourable environment for security and safety in the national maritime areas.

**3.6. VASILEV, V. Opportunities for security management of economic activities at sea. *News of the Union of Scientists - Varna. Maritime science Series*. 2017. 1, с. 9-12. ISSN 1314-3379.**

*Резюме:* Effects of any destructive process as result of realized threat or hazard determine the scope of emerging crises. The management of security crises, safety of security subjects or any environmental crises adds specific value to protection of wide spectrum economic activities in Exclusive Economic Zone.The analysis and estimation of threats in maritime domain could be projected over strengths and weaknesses of all threatened physical platforms there, thus creating opportunities to competent authorities to use system-scenario approach within process of sintesing adapted protective measures against revealed unfavorable effects. The planning of reactive and proactive measures can be optimized by implementation of SWOT-analyzis.

**3.7.** **VASILEV, V. Legal norms on mine warfare under changing maritime security paradigm. *Proceedings of the Annual University Scientific Conference 2018 of the National Military University "Vasil Levski" - Veliko Tarnovo, 14 - 15 June 2018*. 2018. с. 546-555. ISSN 2367-7473.**

**Abstract:** The Black Sea crosses interests and spheres of influence. In order to maintain a stable environment of safety and security, it is necessary to balance the EU, NATO and UN security management norms, as well as the national interest. Research work results are obtained by using methodology based on system analysis. Using methodology given by system approach it is possible to assess maritime security elements related with legal aspects of naval mine threat. Undoubtedly, it affects the maritime transportation system as part of global seaborne activities. There is necessity of new-designed applicable International legal regulations applicable to use of Naval Mines. Probably it is appropriate, the issue to be under UN jurisdiction. Raised issues should be adequate to contemporary trends in maritime security such as asymmetry, hybrid threats and challenges in delimitation of the sea.

**3.8. VASILEV, V. Sustainability of the maritime transportation system on impact of naval mine threat in littoral zone. *Proceedings of the Scientific Conference „Actual problems of security”, 2018 г.* 1, с. 210-218. ISSN 2367-7473.**

 **Abstract:** Maritime security threats to shipping affect the predictability and efficiency of sea trade flows. The destructive outcome of security-related incidents has the potential to affect wide spectrum of maritime transportation elements. Naval mines pose inevitable risk to vessels because the world trade is becoming wider, extending to new sea lanes and new critical infrastructure in littoral zone. It makes shipping traffic more intensive in certain regions. Further, congested areas arise, shaping new peculiar shock points being a safety and security challenges.

**3.9. VASILEV, V. The changing importance of National maritime domain and reflections over maritime security. *Proceedings of the International scientific conference “National defense college Rakovski - 105 years of knowledge in security and defense”* 2018. №1, с. 146-150. ISSN 978-619-7478-00-6.**

**Abstract:** The presence of governmental institutions in the sea is realized by economic and naval approach. It is vital to defend the national interests. There is a steady trend in recent decades to implement new technologies, which is particularly noticeable in the offshore industry, in shipping and in monitoring of the ship`s traffic. The creation of a favorable environment gives perspectives on the state of obtaining material welfare. Extraction concessions in National Maritime Areas and operation of the Maritime transportation system are related to the establishing and maintenance of reliable and predictable security environment, safety of navigation and offshore industry, and last but not least, it is related with efforts to protect the environment.

**3.10. VASILEV, V. Organizing the exploitation of ship's armament by commanding officers using the system approach. *Proceedings of the Annual University Scientific Conference 2018 of the National Military University "Vasil Levski" - Veliko Tarnovo, 14 - 15 June 2018.* 2018. с. 535-545. ISSN 2367-7473.**

**Abstract:** Commanding officer is facilitated by the system approach is conducive way to look at processes of creating an organization of exploitation and maintenance of the given weapon system. The knowledge of complex systems and acquiring skills for using a systemic approach in practice are `milestones` in a wide spectrum of military activities in focusing efforts in optimization of operation of weapons in a proper way. Possession of system thinking allows as successful solving of problems as well as finding new solutions.

**3.11. VASILEV, V. Impact over offshore platform by means of Improvised explosive devices. Annual publication of the Rakovski National Defense College - Command and Staff Faculty. 2018, с. 278-284. ISSN 1312-2991.**

**Abstract:** Attack against offshore platform poses inevitable threat to personal and public safety but affects in specific national security, too. In other words, the violation of safety and security of offshore platform is considerable challenge to National maritime authorities. There is not a doubt that internal security is linked with the security at regional level. It is common the counteraction of Improvised explosive devices to be effective when all competent institutions become involved in the process. The counteraction in Maritime Domain could be successful if it is used comprehensive approach enhancing cooperation and interaction of competent governmental institutions - Maritime Administration, Navy, Border Police, and Civil Protection Authorities. Nowadays, the contemporary maritime and safety environment specifics put strict requirements. The Navy should act independently but it is necessary to counteract with other players, so that to obtain capabilities to respond to the threat adequately and with no delay in offshore zone where needed.

**3.12. VASILEV, V. Some specific characteristics of the mine threat to seaborn traffic in the XX century upto the end of the Tanker war. Proceeding from the Annual National military University scientific Conference. 2019. с. 741-751. ISSN 2367-7481.**

**Abstract:** The paradigm for restricting the freedom of navigation by the use of naval mines has been changed after the end of the Second World War. Armed conflicts become local, often of low intensity. The use of mines affects the efficiency of both naval and merchant shipping. This entails the need to allocate significant resources in order to maintain trustworthy mine countermeasure capabilities, thus keeping the interests of unconstrained use of maritime spaces.

**3.13. VASILEV, V. Character of mine threat to navigation in modern local maritime crises. Proceeding from the Annual National military University scientific Conference*.* 2019.с. 752-760. ISSN 2367-7481.**

**Abstract:** Contemporary mine countermeasures possess expeditionary character. It is the main challenge to naval planning and logistics. The mine threat itself is changing. Naval mines become a precise and relatively low-powered weapon, but highly effective and sustainable against mine countermeasure technologies. It is comparatively not sophisticated and therefore not very costly. It gives a reason to be assumed that naval mines could be proliferated in hybrid security crises at sea.

**3.14. VASILEV, V. Possibilities of implementation of integrated naval mine risk menagement standarts in navigation. *Proceeding from the Annual National military University scientific Conference.* 2019. с. 761-769. ISSN 2367-7481.**

**Abstract:** A unified, standardized and structured approach to risk management is applied in determining the desired end-state of the safety and security environment for shipping. It allows the available resources to be used by a wide range of competent institutions, but at the same time, it has dormant problems concerning coordination and interaction between them. Integrating risk management standards can serve as a basis for inter-agency interaction.

**Commander PhD Valentin Vasilev**

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