

Maritime Security: The New Mission of Naval Forces

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ABSTRACT

In this paper, the new mission of naval forces, i.e. the mission of “ensuring the security at sea and the security against the dangers threatening from sea” – have been discussed and presented. Especially the content of today’s World’s terrorism, the subject of the global war on transnational terrorism, the subject of the maritime security, as well as the consequences resulting from the new mission – have been shown.

The considerations, statements, and conclusion contained in this paper regard mainly the European NATO countries, particularly the smaller ones.

INTRODUCTION

By the term “naval forces mission” we will understand the “one of the main and enduring tasks of naval forces”.

The main and the most know missions of naval forces are “sea control “and “maritime blockade”. The other missions are: “ensuring and maintaining the safety of sea lines of communications”, “projection of power ...from the sea”, and some other. Missions of naval forces remain almost constant for very very long period of time, though the means and methods of naval. Warfare is being permanently changed and perfected as result of steady scientific and technological progress.

Very rarely the new naval missions are being emerged. However now, i.e. in some last years, the huge changes of economic, but especially of political, social and military world’s situation resulted in emerging and arising the new naval mission. This mission is: “ensuring the maritime security”, i.e. ensuring the security of all the maritime movable and fixed objects, including the security against environmental catastrophes, as well as security of all coastal objects against the terrorist attacks threatening from sea.

The main reasons that resulted in emerging the new mission of naval forces was the collapse of Soviet political and military black, as well as collapse of Soviet Union, but mainly, as result of emerging and growing the threat of transnational terrorism and dire necessity to wage the global war on world’s terrorism.

The direct reason of the outbreak of the global war on the world’s terrorism, which may last for very very long period of time, or even to become the permanent phenomenon of the future world was the terrorist attack and destroying the Towers of World Trade Center in New York on 11.09.2001.

Below, the following issues have been discussed and presented:

- world’s terrorism, its subject and objectives,

Dabrowski, T.; Kopacz, Z.; Morgaś, W.; Urbański, J. (2006) Maritime Security: The New Mission of Naval Forces. In *Tactical Decision Making and Situational Awareness for Defence Against Terrorism* (pp. 12-1 – 12-12). Meeting Proceedings RTO-MP-SCI-174, Paper 12. Neuilly-sur-Seine, France: RTO. Available from: <http://www.rto.nato.int/abstracts.asp>.

Report Documentation Page

Form Approved
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

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|---|------------------------------------|-------------------------------------|-------------------------------|---|------------------------------------|
| 1. REPORT DATE 01 MAY 2006 | | 2. REPORT TYPE N/A | | 3. DATES COVERED - | |
| 4. TITLE AND SUBTITLE Maritime Security: The New Mission of Naval Forces | | | | 5a. CONTRACT NUMBER | |
| | | | | 5b. GRANT NUMBER | |
| | | | | 5c. PROGRAM ELEMENT NUMBER | |
| 6. AUTHOR(S) | | | | 5d. PROJECT NUMBER | |
| | | | | 5e. TASK NUMBER | |
| | | | | 5f. WORK UNIT NUMBER | |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) The Institute of Navigation and Hydrography Naval University in Gdynia Smidowicza Str. 69 81-103 Gdynia POLAND | | | | 8. PERFORMING ORGANIZATION REPORT NUMBER | |
| 9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) | | | | 10. SPONSOR/MONITOR'S ACRONYM(S) | |
| | | | | 11. SPONSOR/MONITOR'S REPORT NUMBER(S) | |
| 12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release, distribution unlimited | | | | | |
| 13. SUPPLEMENTARY NOTES See also ADM202346. | | | | | |
| 14. ABSTRACT | | | | | |
| 15. SUBJECT TERMS | | | | | |
| 16. SECURITY CLASSIFICATION OF: | | | 17. LIMITATION OF ABSTRACT | 18. NUMBER OF PAGES | 19a. NAME OF RESPONSIBLE PERSON |
| a. REPORT unclassified | b. ABSTRACT unclassified | c. THIS PAGE unclassified | | | |

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- global war on world's terrorism, its subject and objectives,
- maritime security as the main mission of naval forces,
- main consequences, resulting from the new mission of naval forces.

1. WORLD'S TERRORISM, ITS SUBJECT AND OBJECTIVES

Terrorism, being the sustained clandestine use of violence to achieve a political purpose, is not a new social phenomenon. Its beginnings go back to the very distant past. Terrorism is considered as the way of carrying on the underground/guerrilla warfare, i.e. the way of fighting against incomparable more powerful enemy. Therefore, this kind of warfare is being waged by the asymmetric warfare means.

The terrorist acts are, as a rule, covertly prepared and carried out attacks whose purpose is the destruction of the very important economic, political, social and military objects; killing the VIPs; slaughtering the people participating in different mass gatherings, and others, by the means of traditional asymmetric weapons or weapons of even mass destruction.

Terrorists can also cause marine environment catastrophes by capturing, destroying or damaging the tankers transporting the dangerous liquids and gases and other kinds of dangerous goods.

Today's world's terrorism is generated by the violent Islamic fundamentalism driven by the religious fervor and fanaticism, which generates, i.e. produces fanatical Jihad's warriors and suicide terrorists.

"Islam" means the act of committing unreservedly to God (Allah). A Muslim is a person who makes such commitment.

The amount of Muslims constitutes today about 1.3 billion people. This amount is increasing yearly by about 25 millions people.

The fundamentalistic part of Islamic religion preserves the gender segregation and myriad of cultural restrictions, as well as the lack of individual freedoms. All this handicaps also the education as well as scientific and technological progress and results in economic, political and social backwardness in comparison with Western-civilization countries including Russia, China India, as well as many progressive Muslim countries.

Taking the above into consideration, it is evident that such situation generates the dissatisfaction and hostilities towards the whole Western civilization. The additional reason generating the suicide terrorists, is fact that the Islamic religion promises to killed Jihad's fighters the happy life in the paradise which offers additionally a lot of sensual pleasures and delights. Such perspective is much more attractive and stimulating than being alive and exist in extreme poverty.

Today's terrorism is not the state terrorism, i.e. terrorism sponsored by any particular country, as was considered even some years ago. Today's terrorism is the transnational terrorism, i.e. terrorism controlled by the very extent network of terrorist organizations and groups, such as al Queda, Baathists, Fedeyeen, and others, scattered in many world's regions, i.e. in Middle East, Far East, in the whole north Africa and in many other regions.

The terrorist organizations and groups cooperate very closely organizing and carrying out the terrorist activities, i.e. they wage the war against the Western an other peaceful countries.

The main objective of the today's terrorist war (Jihad) is to diminish and eliminate the influence of Western civilization on the Muslim, countries, and create one powerful Islamic state governed according to the Islamic law, and tradition (Sharia) and in this way t ensure welfare and respect of Islamic society in

today's world. Islamic terrorists proclaim that their "Holy War" (Jihad) is being waged to free the Islamic World from the dominance and exploitation of the United States, Israel and all the World's Jewery who are responsible for backwardness, hardships and suffering of all the Muslims in today's world.

However, many critics say that Islam is and always was a menace for their neighbors and now to mankind. They also maintain that Jihadists are going to wage war against infidels until the last of them is converted to Islam.

The primordial and most important geographic region, where the Islamic terrorism was originated and developed is Middle East (Arabian, Pensile, Palestine, Afghanistan, Iraq).

Second, very important economically and politically geographic region, is Indonesia with its massive gas resources and vital sea-lines.

Third order of terrorist threat of Jihadist insurgencies constitutes Philippines, Thailand, Malaysia and others.

Terrorist activities are being spread out in many Muslim countries of North Africa. Also Balcans and the whole region of Mediterranean Sea, are more and more endangered by the Islamic terrorism.

2. GLOBAL WAR ON WORLD'S TERRORISM; ITS SUBJECT AND OBJECTIVES

Terrorist attack and destroying the Towers of World Trade Center opened eyes all the peaceful countries to the real threat of today's transnational Islamic terrorism. For all the peaceful countries the Islamic terrorism constitutes the deadly danger for their peaceful and sustainable economic, political and social development. It become also obvious that the war on world's terrorism can be efficient only then when it will be waged by all the peaceful countries. As the result of such consciousness, the global war on world's terrorism has been proclaimed and begun.

The countries constituting the coalition carrying on the global war on world's terrorism are: the United States and all NATO countries, Russia, South Asia Muslim countries (former Soviet-Union's republics), India, Pakistan, China, Japan and some other.

The global war on world's terrorism must be won! However, the question is when this war may be won, and how high costs must be paid?

Even today, (July 2004) taking into account the results of the Iraqi war it seems self-evident that war on world's terrorism will be very long. This war can become the permanent political and military phenomenon not only in the nearest but also in distant future.

Taking into consideration the subject of Islamic terrorism, as well as reasons, which generate and strengthen this terrorism, it is obvious that the global war on world's terrorism cannot be won only with the military means. This war can be won only by permanent destroying the world's terrorist structure with the military means, and at the some time, by eliminating the economic, political and social (including cultural and religious) reasons which generate the world's terrorism, applying proper non-military means [25].

In further part of this paper we will discuss mainly the military aspects of the global war on world's terrorism.

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Generally, the global war on world's terrorism comprises three intensity levels of the this war which are carried on in three different zones.

The first zone, i.e. the zone of the highest intensity war on world's terrorism, is Iraq Palestine and Afghanistan. In this zone, but especially in Iraq, the war on Islamic terrorism has the highest intercity. In this zone Islamic terrorist carry on the terrorist activities, mainly by the means of suicide terrorists. They explode themselves with the explosive materials causing the huge damages. The terrorists, also in many other ways kill and slaughter the coalition warriors, civic personnel and civilian people. The coalition military forces (mainly the, improved combined action platoons) try to spy and detect terrorists and kill them or take them as prisoners [18]. At the some time, the economic, political and social situation is being stabilized by the proper organizations and groups (e.g. by the civil affairs personnel and others). For such regions as Afghanistan, Iraq, etc. the international aid as well as military stabilization operations are absolute necessities.

The second level of the global war on world's terrorism is waged in the second zone. Its objective is to counteract the spreading of terrorist activities. On land, such zone constitute the South-Asia Muslim countries, as well as Bosnia, Kosovo, and others. On sea, such zone constitute the surveillance and terrorism's counteracting zone along the Cap of Africa, in Persian Gulf, on the Mediterranean Sea and others.

These zones should protect and counteract the infiltration and smuggling the terrorist assets to the regions endangered by terrorism, as well as to prevent the supplying (the terrorists in first intensity zone (Iraq, Afghanistan, etc.) with war materials.

The third zone of the global war on world's terrorism constitute the antiterrorism-coalition's, i.e. their territories, air spaces, and adjacent sea waters. In this zone, there are organized and maintained the national and regional security systems (land, air, and maritime) whose objective is to protect all important objects against terrorist attacks, as well as counteracting and fighting all attempts of terrorist activities, and eliminish the effects of terrorist attacks when security measures occurred to be insufficient.

3. MARITIME SECURITY AS THE NEW AND MAIN MISSION OF NAVAL FORCES

“Maritime security” is the component part of “Homeland security”. The other component parts of the homeland security are “Air-space security” and “Land security”. The national defence and national (homeland) security systems constitute the national defence and security system.

However, we should return to the topic of our consideration, i.e. to roots, sources and reasons having resulted in emerging the “maritime security” as the new mission of naval forces.

After the collapse of Soviet Military Block and Soviet Union, the world as the whole has become less stable and less predictable. The world's political and military situation began to promote the economic, political, ethnic and religions conflicts. This unstable political and military situation favored also the strengthening and spreading the Islamic terrorist activities in Palestine, Afghanistan, Chechnya, Iraq and in other regions.

The above situation has influenced also the armed forces, including naval forces. There have been disappeared the basic naval foes on the open seas and oceans waters. At the some time, it has began to emerge and spread out the numerous new threats and, therefore, new tasks of naval forces in the littoral waters. “The power projection...form the sea” has become one of the main missions of naval forces.

However, the political and military situation has become more and more complex. It has begun to emerge the new threat for naval forces. They began to be attacked by the Islamic terrorists. On 12.10.2000 the U.S.S. Cole ((destroyer) in part A den (Yemen). 17 sailors was killed. However, the turning point, and of the some time, the main reason of further and fundamental transformation (recording) of the doctrine of the United States and NATO naval forces, was attack and destroying of the Towers of World Trade Center in New York on 11.09.2001. It became obvious that all the important state's objects, including objects of maritime infrastructure, must be protected. It become also evident that the terrorist attacks and terrorists themselves and their war materials can follow from the sea. Also the large and super large tankers carrying on the dangerous liquid and gases, when these ships would be sized by the terrorists and exploded or even damaged in important ports or even in the coastal zone, might result in the immense damages and harms, including the marine environment catastrophes.

This situation resulted in the further change and adaptation of the naval forces doctrine to the new very formidable threats.

Therefore, the “ensuring the maritime security” has become the new and very very important mission of naval forces.

However, it should stressed and remembered that any mission of naval forces cannot be carried out separately. Therefore, also the mission of “ensuring the maritime security” must be and is being realized as the component part of the main naval forces function, i.e., function of “ensuring the maritime defence and maritime security of the state”. However, it should be emphasized that the above function is being realized by the NATO countries in all three zones in which the global war on world's terrorism is being waged.

The main naval forces function, i.e. “ensuring the defence and security of state at sea and form the sea” is being realized in three main forms:

- participation, in naval and joint operation of high intensity,
- participation in stabilization, protection and supplying operations or activities,
- ensuring the maritime securities of national maritime areas and coastal zones.

The main naval-force function is being realized in three geographical regions:

- in the enemy's littoral waters,
- in the open sea and in coastal protection zones,
- in own maritime areas.

In the enemy's littered waters, there are carried out the following naval warfare tasks:

- preparing the chosen littoral areas to projection of the power form the sea,
- assisting and supporting form the sea the fighting groups and teams on land.

In the open sea and coastal protection zones, there are carried out the following naval warfare tasks:

- transporting and protecting the personnel and material for operation in littoral waters,
- protection of chosen sea areas and sea lines of communications,
- ensuring the maritime security in distant protection zones.

In the own maritime areas, there are carried out the following naval warfare tasks:

- gardening and protecting the national sovereignty,

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- surveillance and protection of the maritime areas,
- ensuring the terrorist (maritime) security.

How mission of naval force whose objective is “ensuring the maritime security” (especially in own maritime areas) does not mean that naval force alone should or could be able to carry out this mission by oneself. This new mission of naval forces can be carry out only in close cooperation with other governmental services and offices, as well as in close cooperation with the maritime industries.

The naval forces mission of “ensuring the maritime security” means”:

- participation in the distant maritime areas (protection zones) in surveillance and counteracting the supplying the terrorists with weapons, war equipment and materials, as well as fighting all other illegal activities and crimes,
- ensuring the maritime security in own (national) maritime areas and security of all important coastal objects from terrorist attacks following form the sea.

Ensuring the maritime security of the own maritime areas and coastal zone should and must comprise:

- surveillance of the maritime areas,
- monitoring the ships traffic and ships’ cargoes,
- ensuring the antiterrorist security of all important maritime objects, activities and environment,
- counteracting, preventing and combating all the illegal activities and crimes regarding customs procedures, piracy, drug trafficking, smuggling weapons and components for production of mass destruction weapons, and other illegal materials,
- detecting, tracking and prosecuting all kinds and forms of terrorist activities and neutralizing them,
- maintaining the raciness of proper services, groups and teams for minimizing the effects of terrorist activities, including environmental and human catastrophes, if they would not have been averted.

The above tasks constituting the subject of “maritime security” cannot be carried out by naval forces alone. These tasks can and must be performed by naval forces in cose cooperation with:

- governmental services, agencies and institutions (Border Guard) Coast Guard (Border Police; Customs Service, State Police; Intelligence and Counterintelligence Agencies; Maritime Administration and its special services (SAR Service, Marine-Environment Pollution Combating Service); National and Provincial Crisis Management Centers, etc.,
- maritime industries (Port s, Harbours, Shipping Companies, Sea Exploration and Exploitation Companies, and others,
- self-governed authorities and institutions,
- inhabitants of the coastal zone.

However, naval forces should and must be decisive part regarding coordination and realization of the counterterrorist tasks, even while the lowest level of the terrorist threat.

In the distant antiterrorist protection zone, naval forces must realize all the antiterrorist (security) tasks.

In own maritime areas, naval forces should be decisive part in maintaining the surveillance of all the maritime areas. In these areas, naval forces should cooperate in realization of all security tasks. However,

while the higher levels of terrorist threats, naval forces must be able not only to supervise the realization of security activities but also coordinate and control all the maritime security activities.

4. MAIN CONSEQUENCES RESULTING FROM THE NEW MISSION OF NAVAL FORCES

The analysis of today's world's political and military situation influencing the naval forces, allows to conclude:

- there have been almost disappeared the naval missions being realized on open seas and oceans (there are almost no threats to fight them in these areas,
- there have been emerged a lot of new naval warfare tasks which must be carried out in the enemy's littoral waters,
- there has been emerged, arisen, and is further growing the threat of the world's terrorism. Therefore, the global war on world's terrorism must be waged in coastal areas of terrorist countries and countries endangered with terrorism, as well as in all the coastal areas of NATO countries.

The above situation is resulting in:

- emerging the new missions of naval forces, among them the mission of "ensuring the maritime security",
- slowly disappearing the distinction between the naval warfare activities and maritime security activities. It means that the naval forces are carrying out more and more police tasks and activities, especially in the distant areas,
- necessity of adaptation of the naval forces to realization of new defence and security tasks.

The realization of the last task means:

- necessity of transformation, i.e. adaptation of naval warfare means (ships, helicopters, unmanned aerial and underwater (combat) vessels, as well as the equipment and command, control, communications, computers, intelligence, surveillance and reconnaissance (CISR) and weapons systems to realization of the new naval warfare tasks,
- necessity to prepare the proper methods and procedures of carrying out the new defence and security tasks, including the proper education and training of the naval forces personnel.

The updated, i.e. amended naval warfare missions (defence and security ones) require:

- the existing naval ships to be gradually adapted to new naval warfare missions, especially for ensuring the maritime security. It needs, among the other things, the ships to be equipped with the proper naval warfare equipment and system to wage asymmetric war on world's terrorism,
- procuring the new kinds of ships proper for realization of new naval warfare tasks (including maritime security tasks), especially in the distant geographic regions.

Procurement of new kinds of ships should take into account the following kinds of ships:

- amphibious ships,
- littoral combat ships,
- seabased asymmetric warfare ships (SAWS),
- fast patrol (chasing) boats.

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The amphibious ships are vital for participation on naval forces in crisis response operations and in peace enforcement operations. They should be capable of transporting, deploying and supporting an expeditionary military unit not lesser than one battalion.

The littoral combat ships are indispensable for carrying out the joint missions of “projection the power... from the sea”. These ships should be enough large, fast with low draught (catamarans). These ships should be enough large, fast with low drought (catamarans). They should be capable of carrying out the following tasks: [28]

- augmenting close-in-air defence of forces ashore,
- supporting non combatant evacuation operation and medical civic-action project,
- performing mine countermeasures and shallow water antisubmarine warfare tasks,
- providing situational awareness and wide-area surveillance and targeting for force on sea and ashore,
- conducting blockade and ship boarding-and search operation,
- functioning as affect medical evacuation platform,
- providing repairs, maintenance and sustainment capabilities for other ships.

The sea-based asymmetric warfare ships (SAWS) should be the main ships for fighting terrorists in the distant geographical regions (e.g. participating in operation like “Endurance Freedom”, etc.) [24]

Sea endurance of such ships should last 90-120 days; their short-time speed should exceed 35 knots. They should be equipped with three speedboats, whose speed should exceed 60 knots; and with two unmanned aerial (combat) vehicles. Therefore, their displacement may amount 2500-3000 tons.

Such ships, called too as the “ships of the future” (germ. Kampfschiffe der Zukunft) – should be capable of carrying out the following naval warfare tasks:

- fighting small surface, aerial and underwater terrorist craft,
- surveilling the maritime areas with own UAVs,
- attacking and destroying the terrorist craft by the means of UA(C)Vs and speedboats,
- deploying their own SWAT (Special Weapons and Tacties Teams) teams.

The today’s and tomorrow’s naval warfare tasks are becoming the defence and security tasks, i.e. naval warfare and police tasks. It seems evident that the security tasks will gradually surpass the traditional naval warfare tasks.

Taking the above into consideration, it is obvious that ships-crew composition is being changed now and will also be changing in near and further future. Already today, the SWAT teams have become a component part of each ship’s crew, but especially the crew of middle-and larger ships [21]. These teams can be deployed for carrying out the myriad of maritime security tasks, especially in far distant areas.

Permanents (or almost permanent) part of ships crew constitute now and will constitute in the future the Law Enforcement Detachments/Teams (LED/Ts) which will board, inspect and check the transporting and other ships, especially in the areas for from the coast. This kind of activity constitutes on important maritime security measure.

It should be also emphasized that the ships crew will be more and more frequently in the immediately touch with terrorists and, therefore, they should know now to behave in order not to be the victims of terrorist attacks, especially of the terrorist suicide attacks.

Almost each of the crew members must, in sufficient degree, be able to carry out special warfare tasks, especially combating the shallow-water threats.

The crew of ships who wage the global war on world's terrorism in distant geographic region must also possess proper knowledge and proficiencies regarding tradition, culture, religion, language, beside knowledge and proficiencies regarding explosive ordnance disposal and engineer expertise.

The education and training of future ships crew should always take into account the self-evident truth that "people win wars, especially war on world's terrorism, machines not"!

The above considerations and statements allow to conclude that the new naval warfare mission of "ensuring maritime security" influences and will influence in future the education and training of all the naval warriors, including sailors constituting ships crew.

CONCLUSIONS

In this paper, the emerging of new mission of naval forces, i.e. the mission of "ensuring the maritime security" has been presented.

The above statements, but especially conclusions, although they take into account today's opinions on this matter, having been expressed in professional journals – are authors' own conclusions and opinions.

Authors' intention was to emphasize the threat of today's world terrorism, and show now its existence, spreading and becoming more and dangerous, influences the naval forces affairs, but especially their missions. The authors also wanted to stress that the "ensuring maritime security" mission is becoming the new and more and more important mission of naval forces, as well as to stress also the consequences of this process for naval affairs including educational ones.

Authors' belief is that they, though partly, have achieved this end.

REFERENCES

- [1] Barret T.I. One Team. One Fight. Naval Forces No IV, 2003.
- [2] Barnett R.W., Dulles V.A. Asymmetrical Warfare: Today's Challenge to U.S. Military Power. U.S. N.J. Proceedings No 12, 2003.
- [3] Frank H. Rolle der Seestreitkräften in Kampf gegen Terrorismus. Marine Forum No 4, 2004.
- [4] Felski A., Urbański J. Satellite Navigation and Safety-of-navigation System (in Polish). AMW. Gdynia, 1997.
- [5] Dahman F. D. Weiterentwicklung der Führungsunterstützung der Marine. Marine Forum Nr 5, 2004.
- [6] Gay T. A. Marine Traffic-Tracking System. Cornerstone of Maritime Homeland Defense. Naval War College Review, No 4, 2003.
- [7] Gusentine R. V. Asymmetric Warfare in Our Terms. U.S. N.J. Proceedings No 2, 2002.
- [8] Hull J. Brokering the Coast Guard's Resources. U.S. N.J. Proceedings No 12, 2002.

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- [9] Kopacz Z., Morgaś W., Urbański J. The selected issues of the International Maritime Navigation Safety System (in Polish). AMW, Gdynia, 1998.
- [10] Kopacz Z., Morgaś W., Urbański J. The Maritime Safety System. Its main components and elements. The Journal of Navigation No 2, 2001.
- [11] Kopacz Z., Morgaś W., Urbański J. The Maritime Navigation Safety System and Its Participation in the Process of Safe and Efficient Conduct The Ships on Sea. Proceedings of the IV Russia Scientific and Technological Conference on: "Today's state of navigation and hydrography". St. Petersburg, 2001.
- [12] Kopacz Z., Morgaś W., Urbański J. Identification and Specification of the Maritime Safety System. Archives of Transport col. 14, issue 3. Warsaw, 2002.
- [13] Kopacz Z., Morgaś W., Urbański J. The Ship's Navigation Function. Ship's Navigation Process and Ship's Navigational Information. The Journal of Navigation No 1, 2003.
- [14] Kopacz Z., Morgaś W., Urbański J. The Maritime Safety and Security system and ways of its improving (in Polish). Budownictwo Okrętowe. Part 1, No 2, 2004, Part 2, No 4, 2004.
- [15] Królikowski A., Urbański J., Duda D., Morgaś W., Kopacz Z. The Maritime Safety System on Polish Maritime Areas. Proceedings of the XIII International Scientific and Technological Conference on „Part of Navigation in Ensuring the Safety of Human Activities at Sea”. Institute of Navigation and Hydrography, Gdynia, 2002.
- [16] Królikowski A., Urbański J., Duda D., Morgaś W., Kopacz Z. The Maritime Safety System on Polish Maritime Areas. Some Proposals on Its Improvement. Proceedings of the XIII International Scientific and Technological Conference on “Part of Navigation in Ensuring the Safety of Human Activities at Sea”. Institute of Navigation and Hydrography, Gdynia, 2002.
- [17] Kubiak K., Terrorism is the new enemy at sea. U.S. N.J. Proceedings No 12, 2003.
- [18] Marx P.H. Barbarians at the Gate U.S. N.J. Proceedings No 5, 2004.
- [19] Mizell L., DiRamzo IIIJ. Coast Guard Leads Maritime Homeland Security. U.S. N.J. Proceedings No 3, 2003.
- [20] Mones G.A.C. The Coast Guard needs help from ... Navy and Marine Corps. U.S. N.J. Proceedings No 1, 2004.
- [21] Mullin P., Bartee J. Put a SWAT Team on Every Ship. U.S. N.J. Proceedings No 12, 2002.
- [22] Naval Cooperation and Guidance for Shipping (NCAGS). Study draft. NATO/PIP Unclassified. January 2002.
- [23] Record J. Is the War on Terrorism Sustainable? U.S. N.J. Proceedings No 8, 2003.
- [24] Saddler K.O. Sea based Asymmetric Warfare Ship (SAWS). Marine Forcem No 5, 2004.
- [25] Spiro A., Beckhard P. Woodard D.R. Civic Affairs in the Invisible Forum. U.S.N.J. Proceedings No 11, 2003.

- [26] Tamir Ashel. Israel's coastal defence challenge. EEZ International. Henley Media Group, Ltd, London.
- [27] Vedida Ya'ari. Fighting Terrorism ... form the Sea. U.S. N.J. Proceedings No 8, 2003.
- [28] Washington G.R. Littoral Warfare Needs Specific Ships. U.S. N.J. Proceedings No 1, 2003.
- [29] The basic International Conventions on "Safety and Security at Sea", including the resolutions of Conference of Contracting Governments to the International Convention for "Safety of Life at Sea" 1974, 9-13 December 2002.



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