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Principles of anti-amphibious operations in the Baltic in the post World War II period

INTRODUCTION

The development of military warfare as well as naval warfare is a process of elaboration of principles, kinds and ways of use (new) forces and combat-means in the real historical environment. A naval operation remained a main kind of naval combat activities. On the one hand, the change of situation of belligerents on the maritime theatre is taking place in a wide area, which causes the necessity of many tactical activities so that the sum of achieved tactical goals makes possible to achieve an operational object. But on the other hand geographical circumstances like closed, small and shallow theatre causes that the warfare at such areas is quite different one. Simultaneously an “...aggressive innovation, experimentation, and education are fundamental to meeting the challenges of an uncertain future”[1, p. 8].

The World Navies activities manuals contain the prescriptions of the so called major naval operations. Meanwhile (especially in the post World War II period the codification of them had to be verified, because the way of conducting naval operations (especially in closed theatres) changed. The paper presents selected aspects connected with problems of anti landing defense in the last period of The Cold War under special circumstances of the Baltic Sea.

1. DOMAIN OF DEFINITIONS CONNECTED WITH COMBATING AMPHIBIOUS FORCES

Sea borne defense of the coast includes: combat activities at sea, which are important for support of sea area, sea lines of communication, harbors, sea bases as well as for security of the seaside of land front. It means also to prevent the infiltration of sabotage groups in the regions in the vicinity of sea- and airbases as well as counteraction to enemy reconnaissance, mining and missile as well as gunfire attacks against military objectives (military facilities).

The collection of tasks, which are carried out while seaborne defense of the coast can be differed in two groups. It means:

- tasks carried out for protection of the coast:
  - securing of sea lines of communication, which are next to the coast;
  - mine countermeasures (monitoring of mine activities) on the approaches to harbours and bases;
  - direct protection of the coast (executed in form of anti submarine warfare and anti surface warfare);
  - seaborne protection of ports and bases (executed in form of anti air warfare as well as force protection);
- tasks carried out for support of operational forces:
  - combating of enemy forces (ships), which may be dangerous for costal land front;
  - sea blockade of ports and bases of enemy forces;
  - transport by sea of troops, equipment and supplies (operational transport and supply transport);
  - direct fire support of troops' activities along the coast.

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2 Artykuł recenzowany.
3 It can take place during systematic combat activities, so the main task of defense will be to prevent suppressing hits against own ships at sea as well as in bases and also against facilities along the coast.
The tasks listed previously will be conducted by all navy assets, closely supported by air force assets and border guard assets. A part of this tasks will be executed also at peace time as so called naval combat service. They include:
– patrolling of coastal waters and participation in rescue actions at sea;
– emergency service in sea bases and airbases ready for leaving them to carry out a mission;
– prevention against violation of sea border of the state;
– prevention against the infiltration of diversion groups.

**Land borne defense of the coast** is a part of coastal defense system. Its aim is to make for the enemy impossible sabotage penetration as well as action in the area of bases and harbors. It means also to make impossible to land from the air and from the sea in the coastal region as well as dispose of consequences of enemy attacks.

The land borne defense of the coast includes following measures: anti landing defense, anti sabotage defense and supporting measures (as part of territorial defense and as part of state security). It should be mentioned, that the anti diversion defense (executed during land borne defense of the coast is closely bound on security of sea border.

Anti landing defense means: defense of coastal strip, organized and conducted by land forces supported by the navy and air force. Its aim is not to allow conduct sea- or air landings. If such a landing will be successful, the aim of anti landing defense is to destroy (destruct) or put the landing forces from the beach into the water.

In case of failure of naval defensive operation and in case of keeping the initiative by the enemy we can be almost sure, that the enemy will start an air and sea landing operation. It will have an operational or tactical importance. The time of the beginning of the operation will depend on enemy success on land. Own armed forces will have to organize and conduct coastal defense by unfavourable situation. This situation will mean enemy air superiority and sea blockade of own forces in order to make favourable preconditions for an amphibious operation.

In this case the answer for enemy amphibious operation will be an own anti air operation, organized by national supreme commander. During this operation the navy will conduct a mission to support the troops, which defend the coast. So it will be a joint operation of all services, conducted after a jointly prepared plan. The anti landing operation will include elements (activities) from seaborne and land borne coastal defense. The answer for the enemy tactical landings will be an anti landing action.

The anti-amphibious operation is the entirety of joint combat activities conducted by land forces as well as naval forces, which are coordinated in following aspects: objectives, place and time. These activities will be carried out after a joint plan and by support of air forces. The goal of this activities is to make impossible the enemy invasion, to prevent the enemy operational (air and/or sea) landing and to keep the defended coast.

Following the definition of anti-amphibious operation and anti amphibious coastal defense we can conclude, that this two activities have many joint features as: destroying of the same targets (means air- and sea landings) as well as use for this action the same services and branches. However there are a lot of differences as: goals of combat action, area of combat action as well as scale and possibility of use different services and branches. The goal of an anti-amphibious operation is wider than the goal of anti-landing coastal defense.

The differences concern also the area of activities. During coastal defense the forces act only on the own territory. However during an anti-amphibious operation we are also interested in the enemy territory. If we achieve to destruct enemy amphibious forces in its rendezvous areas or embarkation areas, as well as during the phase of movement towards own coast, we can prevent the action on own territory.

So the coastal defense (plus anti landing activities) as well as anti amphibious operations are terms, which are coordinate and can appear separate. However the term of anti-amphibious operation is more
extensive. The anti landing defense of the coast we can find as well as in an anti-amphibious operation as in coastal defense.

2. FUNDAMENTALS OF ACTIVITIES AGAINST AMPHIBIOUS FORCES

Independent on the scale of landing threat (tactical or operational landing) and adequate own counteraction (anti landing activities or ant-amphibious operation), the defending of enemy sea landing will be executed by organizing of anti landing defense system. This system will be organized on the threshold between land borne and seaborne defense line. This system will be prepared already at peace time and brought to live (by setting with forces) after the symptoms of landing danger appear and the probably amphibious objective areas will be pointed.

Organizing the anti landing defense will be pointed following strips of action:
- for an army — a strip which is to 500 km wide and to 100—120 km deep;
- for a corps — a strip which is to 200 km wide and to 60 km deep;
- for a division — a strip which is to 60 km wide and to 20—25 km deep.

In allocated strip as well as in coastal waters will be organized a defense system. It should involve:
- operation groups of troops and an operational arrangement organized depending on the intent for the action during anti landing defense;
- arrangement of lines, areas and positions of anti landing defense;
- system of fire in the water and coastal area;
- system of anti landing obstacles and minefields in the water and on the coast;
- system of air defense and combating air- (heliborne) landings;
- system of electronic warfare and camouflage.

During the anti landing defense the operational arrangement of defense forces should prevent enemy landings and prepare conditions to make a maneuver with forces and means towards endangered directions and to counterattack the enemy forces, which succeed to break the defense.

The operational arrangement of an army can consist of two echelons (first and second) and reserve troops (general and special) as well as arrangements of other services. The naval forces and means can be situated in the first echelon.

The arrangement of lines, areas and positions of anti landing defense will possess following features: the absence of continuous front and different scale of its preparation. The defense will be based on keeping the most important strips (areas) on the direction of possible landing of opposite forces. All elements of the operational arrangement should be active and should have high abilities to maneuver. On other directions will be organized observation and patrolling as well as engineer obstacles will be prepared. There will be also prepared single battalion defense areas and company defense areas. Thos defense areas will be manned only if danger of an opposite landing exists. The second defense strip should be also prepared.

The main defense strip towards the most dangerous direction of opposite landing activities will be prepared and should consist of three to four positions and where the danger is smaller one or two.

The front defense strip, depending on intent of action, on character of the coast and on navigational conditions can be placed directly along the coast or not far away from it. In case when the front defense strip will be placed further away, a front position will be organized.

System of fire in the water and coastal area (see picture nr 1) will be organized in order to make possible to organize fires of all fire units. Fire missions include precisely planned burst fires of missile artillery, air force, naval force, coast artillery and organic means of the army. They will be carried out using following methods:
- thicket and concentrated fire strikes on the most important concentrations of landing force;
- mobile barrage fires on directions, where the landing crafts can approaches the coast;
- fixed barrage fires on the coast line and in the depth of defense;

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4 The own forces can conduct it during a long period of time and the counter parts do not need be active.
5 The so called concept of “favourable landing areas” is losing its importance, because amphibious forces have more and more crafts and means, which can conduct the ship-to-shore-movement by air or over the surface.
– direct fire conducted by tanks and artillery units, as well as anti tank and anti air assets.

Fire strikes will be prepared on the probable areas of concentration of landing and transport forces and means, embarkation points, transfer routes, tactical deployment and unloading areas, where the troops will be unloaded from utility shipping on smaller landing ships and crafts and during direct approach of them to the landing sites. The intensity of fire should become bigger, when the crafts are approaching the coast line. The forces and means dispensed for direct fire, tank and antitank units, should be ready to size previously prepared fire positions and fire lines in order to destroy landing forces, especially amphibious tanks and assault vehicles, which are approaching the coast.

The coordination of activities of different services and branches, which are participating in a joint operation as part of anti landing defense can be achieved by preparation of fire system. The joint fire system means preparation of five fire zones, which make possible the deconfliction of forces by space. The system enables the defending forces to heighten the fire power, when the landing forces approaches the coast and it make possible to use the fire assets rationally. The commander of a joint operation points in his decision the targets for air force, ships and coast artillery and field artillery as well as the sequence of strikes, the direction of main effort, combat arrangement and the character of manoeuvre.

The fire zone No 1 means an area, which is 25 to 80 km far from the coast. The strikes against enemy will be conducted here by missile coast artillery units, tactical missile artillery units, surface action groups and air force units. The task of those units is to prevent the entrance of the enemy into the zone. Making the target allocation the command should keep in mind the fact, that the missile coast artillery units are able to hit sea targets with high efficiency, so they should get the most important targets to strike, as carrier vessels, dock landing ships, enemy surface action groups or similar ones. And for tactical or operational missile artillery units is useful the target allocation of group targets. The areas of strikes can be the areas of unloading of crafts from transport shipping on landing crafts, the areas of launching of assault vehicles from dock landing ships and the areas of formation of waves as well as the areas placed behind the line of departure and on this line.

The fire zone No 2 means an area, which is 18 to 25 km far from the coast. The strikes against enemy will be conducted here by long-range artillery and rocket artillery. By planning of fire in this zone can also be planned strikes of surface combatants. Striking together means here conducted jointly simultaneous engagement or defeating piecemeal carried out by coastal missile units (second burst) and missile ships against enemy crafts approaching the coast. For example, the landing crafts approaching the landing sites or fire units on positions. There will also be prepared fire concentrations of many fire units against landing ships or fire support units [6, p. 5].

The fire zone No 3 extends from 6.5 to 18 km from the coast. In this are the fire of field artillery, tanks and coast artillery (medium and small caliber) will be massed. By planning of fire in this zone can also be planned strikes of naval aviation (especially attack helicopters) as well as surface action groups.

The fire zone No 4 extends from 1 to 6.5 km from the coast and is the zone of barrage fire. In this zone the whole army artillery is firing. It will be supported by combat helicopters. The artillery makes barrage fires on some lines, which are 800 meter and more far from each other. The barrage lines will be pointed depending on geographical features of amphibious objective area, mine lines and other anti landing obstacles and the directions of sea routes in areas, which are favourable for landings. The last barrage fire line will be planned 1.5 km far from the coast, where the landing crafts will be combated by antitank missiles. The strips of barrage fire should be pointed in front of mine lines. He barrage fire strips should be 50 yards wide for one gun. So each artillery unit should have a 200 yards wide strip on the line of barrage fire on the probably direction of approach of landing crafts.

The fire zone No 5 extends to 1 km from the coastline and is the zone of direct fire, as well as fire of antitank missiles, which are the most effective mean of combating armored surface targets. During organization of fire system must be granted the possibility of fire by night and by low visibility. There must be beforehand pointed illumination units.

The first units approaching the amphibious objective area are the mine countermeasures units and fire support units and other units pointed for preparation of landing. The artillery surface combatants
support the mine countermeasures (MCM) units during they combat the mine threat and prepare beach lines for landing crafts. The artillery units should open the fire against MCM units as far as possible in casualty area. The firing units should aim to keep under fire as many MCM ships as possible. The main effort should be to destroy or destruct the MCM units, which are combating mines on the main direction of landing. Some artillery units should simultaneously counteract against landing fire support units, which are protecting the MCM forces.

At the moment, when the first echelon of landing reaches the casualty area of artillery units the coastal artillery missile units fire the first missile salvo against big landing ships of main landing units in order to destroy them before the troops were unloaded on small landing crafts. The most possible engagement of coastal missile units is a joint engagement with missile surface ships.

During planning of joint activities we also should take into consideration the fire lines of army assets engagement. When the helicopter carriers will be spotted, the coastal missile units should launch the missiles against them before they start their helicopters. The landing of advance force components should be combated by all fire means such as means of units from the first position, army artillery units, ships, coastal missile units and other supporting units.

This suggestion of fire system must be prepared more detailed. However it is the most easiest solution to organize the fire forces in order to deconflict them by space. The system of anti landing obstacles and minefields in the water and on the coast involves mine lines, which were lied by the depth of 13 feet or more especially in the tactical deployment areas, in the vicinity of line of departure, on the approaches and on beach lines as well as mine fields against infantry lied in very shallow waters (less than 13 feet), directly on the beach and in the depth of defense.

The mine fields and anti landing obstacles will be prepared in order to inflict the enemy as many as possible losses, in order to limit his maneuver, to over his tempo during landing and to make favourable conditions to defeat him with counter attacks and counter strikes.

The anti landings obstacles in water will be prepared by naval assets when the water is 13 feet deep or more and by army engineer assets when the depth of the water is less than 13 feet.

Organizing the system of anti landing obstacles we should bearry in mind, that they should be protected against low and deep waters during tides as well as against storms. Because they can be destroyed, the planning boards should prepare solutions to renew them quickly.

The system of air defense and combating air- (heli borne) landings will be organized in order to protect own forces against strikes from the air and to combat as many as possible airborne lading forces. The main force concentration of this system are the air defense units and reserve of the army foreseen for combating air landings. The naval air defense units protect regions of bases and ports. The air defense means of the ships are destined for self-defense.

The system of electronic warfare and camouflage will be organised in order to overwhelm and disturb the functions of enemy command systems at sea and in the air as well as reconnaissance and warning systems. When the preparation of the enemy for an amphibious operation will be detected we should strengthen own coastal system of electronic reconnaissance and surveillance. Simultaneously, if possible, own naval and air strike groups should start to directly combat enemy landing forces in his base, in embarkation areas and they continue their actions while movement of the amphibious task force striking big transport units and fire support units. After locating of the main direction of landing own minelayer units should lay additional mines on the routes towards own coast.

One of the most important tasks during coastal defense is the overwhelming and destroying of enemy command means. In order to do this, we should take all own means of electronic warfare, air defense and naval strike forces. We have to strike command ships as well as headquarters on land, where the enemy commands the landing and controls the situation on the bridgeheads. If the first tactical line of defense is broken, we should make a strike with the second operational echelon. Previously to this strike we should hit the enemy forces use missile units, air force and naval strike groups.
3. SEQUENCING AND CONTENTS OF ACTIVITIES DURING AN ANTI-AMPHIBIOUS OPERATION

The goal of an anti-amphibious operation can be to break the enemy amphibious operation and do not admit the enemy to land on the own coast or do not admit him to land on and to take big islands, sea bases, ports and other important objects (facilities) on own coast. An anti-amphibious operation will be organized taking into consideration the analysis of situation on the theatre and the disclosure of symptoms of preparation for an amphibious operation or when the amphibious task force will be spotted.

The operation will be started in many cases surprisingly and will be conducted with unfavourable force ratio, because the enemy is keeping the strategic (operational) initiative and supremacy on the theatre of action.

Thos circumstances make important to start the defense activities as soon as possible against the weakest elements of enemy concentration of forces, further to make a maneuver from the depth an from the wings on the disclosed direction of landing as well as right use of positional obstacles, military-geographical and topographical conditions of the area.

In case when there is the possibility to land in some regions of defended coast, very important has to make at right time a maneuver of naval and land forces on the disclosed direction of landing. In all situations we have to achieve the destruction of the enemy landing if possible in the most possible distance from the own coast.

The main direction of action of forces during an anti-amphibious operation are the main forces of the enemy amphibious task force, landing units consisting on helicopters or landing ships air cushion as well as the ships from fire support units. At the same time as main effort we can also distinguish destroying of enemy main strike units, which are supporting the landing. The main method of acting of own forces on the main direction of action is conduct of simultaneous and sequenced strikes against the first echelon of main forces of ATF especially in rendezvous and embarkation areas and during movement and assault.

Preparation of favourable conditions for acting on the main direction will be achieved through supporting activities on auxiliary directions. It can be: destroying of surface action groups, surveillance facilities, communication facilities, headquarters, ASW forces in the area of operation as well as destroying and overwhelming of forces and means of air defense on the strip of flight of own aircrafts.

There are three phases during an anti-amphibious operation:
- The Phase I — destroying of landing in the areas of rendezvous, in embarkation area and regions of formation of amphibious task units and task forces;
- The Phase II — destroying of enemy landing during movement towards AOA, as well as destroying of its supporting assets;
- The Phase III — (very often the most important for success of an anti-amphibious operation), which consists of defending of sea and air landings directly in the amphibious objective area, destruction of landing forces ashore and/or destruction and overwhelming of evacuation and destruction at sea of the withdrawing forces.

The participation of naval forces in the first phase may be a little bit problematic, because the embarkation and formation areas of amphibious task force usually are quite far from the amphibious objective area and from bases of own air and naval forces. Additionally, the enemy always posses there air superiority and sea supremacy so he has operational initiative.

During a quite long period of time the people mined, that naval forces play the crucial role in the second phase of an anti-amphibious operation. They should be the main organizer (COORDINATOR) and conductor of activities against enemy amphibious task force. Their combat units should concentrate their activities on the first echelon of ATF and on the operational support forces (so called gun fire support units). The first echelon of ATF usually consists of 65% of main forces. However, so stated task of naval forces during an anti-amphibious operation was many times quite unrealistic one, because it should be conducted in situation, when the enemy had sea supremacy and air superiority.
Simultaneously the ratio in the combat area was also unfavourable for own forces. Every action of own forces out of own defended coastal area would mean loses and frankly speaking immediate damage of combat units.

The modern concept of anti-amphibious operations means concentration of efforts on the third phase [3] and caused shortening of time needed to achieve own goals. Means breaking of enemy operation, because of loses. But on the other hand such change caused, that the intensity and dynamic of action grew rapidly. So the most difficult phase is the phase defending of sea and air landings directly in the amphibious objective area, when the amphibious task force is approaching the coast or if the enemy is successful, on the beach and in the depth of defense. This phase should be coordinated by higher commander from very beginning6. So the main task of naval forces should be conducted in its defense zone. The destruction of enemy forces should be more and more intensive, when the distance to the coast will becoming shorter and shorter.

**The goal of combat activities can be achieved in different ways.** First one is, when the defenders destroy the first echelon of the enemy ATF before it reaches the coast. The second way to achieve success means laying effective mine fields and making anti invasion obstacles, which can cause many losses, when the enemy ATF will try to breach and overcome them.

During this phase the naval forces (as participating forces) can (concentrating their main effort) conduct following tasks:
- destroying of big transport and landing shipping as well as landing crafts in the reloading areas and while approach of landing sites (first way);
- destroying of enemy MCM forces while they are making passages through anti invasion mine fields (second way);
- destroying of enemy fire support forces (first and second way);
- support of land forces while destroying already landed enemy landing forces.

**The consequence (expected result)** of activities conducted during an anti-amphibious operation (anti landing action) is breaking of enemy amphibious operation (landing action), which means resignation of the enemy to land. This can be achieved while all phases summing his losses. As a consequence of his losses the enemy will stop the operation. But usually this will be a consequence of confrontation of two ideas of opponent forces combat activities. The main feature of the third phase of operation will be rapid change of situation, mass use of forces, high tempo of combat and shortage of time for counteraction (e.g. maneuver with forces or use of reserve).

**The operational concentration of forces during an anti-amphibious operation** can consist of following unit concentrations:
- concentration for destroying enemy strike forces supporting the landing (operational protection forces, operational fire support forces);
- concentration for conduct of strikes against enemy ATF in embarkation areas and while movement;
- concentration for participation in defending the enemy ATF by approaching the coast;
- reserve of forces.

Taking into consideration previously listed requirements and conditions the branches of naval forces can be used during an anti-amphibious operation as follow:

**The surface strike forces** consist in the Polish Navy of missile frigates7, missile corvettes boats. From this combatants can be organized two homogeneous surface action groups. Such combatants are able, while heavy counteraction, to destroy with one salvo 6 to 7 enemy middle ships (destroyer or frigate) or even 10 such combatants, if the counteraction is weaker. Their missions will be conducted in close support of air force. The organized strikes and their sequence will depend on the defense potential of the enemy forces or on their potential to combat surface forces. Recently, special combatants are developed to survive in the littoral area and to carry out missions. They are called

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6 Means the appointed joint force commander.
7 They are not built for high-intensity multi threat warfare, but have very good range, excellent habitability, stealth and a good sensor suite. That makes them very well suited for the maritime presence role and rises the debate on what sort of mix of surface ship capabilities the Polish Navy requires to undertake the broad spectrum of tasks we are asked to fulfil.
Littoral Combat Ships (LCS`). A LCS should be "... an advance scout and hunter-killer for a battle force in high-threat environments" [2, p. 36-39].

The surface strike units should hit the enemy ATF as far as possible and first, in order to can strike for the second time. The most important targets for own strikes should be fire support combatants as well as the utility transport and amphibious ones. The combating of those will overwhelm the possibility to use helicopters for landing of forces and will disrupt the reloading of forces on smaller crafts. If enemy landing will be unsuccessful own strike units should try to stop the evacuation of enemy troops and to plaque them.

**The submarines** will act during an anti-amphibious operation as reconnaissance and strike units. Depending on the probably direction of threat the submarines should be posted as far as possible, in order to enable them to strike while embarkation or movement of enemy ATF. They can be used also while enemy evacuation. In order to be able to fulfil the second mission they should change their areas of action. One part of own submarines should get the task to lay offensive mine fields on the approaches to enemy embarkation sites or in probably formation areas as well as on his movement routes.

A very important element of the anti landing defense is the system of anti invasion mine fields, which may be lied on recognized main direction of landing. In the Polish Navy the landing ships and mine sweepers can lay mines. They can lay in one action a mine field, which consist of three mine lines and is 4 Nm long.

The system of anti invasion mine fields may consist of following elements:
- **The sea front mine field**, which is designated to engage combatants from fire support units with the probability of 0.8 to hit at least one mine;
- **The main mine field**, which is designated to engage landing combatants with the probability of 0.75 to hit at least one mine;
- **The coastal mine field**, which is designated to engage landing crafts with the probability of 0.3 to hit at least one mine.

The coastal units (naval engineers) of the navy can support the anti invasion activities with following actions:
- strengthening of coastal water strip with anti invasion mine fields;
- preparation of field-type barriers as well as other fortifications;
- combating of underwater diversion in harbors.

**The engineer support** will be conducted for example in the Polish Navy by coastal obstacle units, which will be organized from engineer and mine laying units. The main task of those units is to lay mine fields on the threatened strips of the coast as well as to supplement, renew and strengthen them. The combat concentration of the PMOZap usually consists of three echelons. The first and second one poses 3 to 4 amphibious crafts from the type **PTS** and have a reserve of anti invasion mines, which is enough for protection of 1 km coastal strip. The third echelon is armored with transporters, where are carrying mines for the other echelons. One PMOZap is able in 24 hour to prepare (lay) a system of anti invasion mine fields on a coastal strip, which is 24 km long. It consists of following mine lines:
- one mine line with anchor mines;
- two mine lines with ground mines;
- one mine line with antitank mines.

In order to make the effectiveness of mine fields higher will be organised support between naval engineer units and mine layers afloat. The system offshore mine fields will be coordinated with ashore ones as well as with anti invasion obstacles. Those activities will also be coordinated with action of land force engineers in order to widen the system towards land.

An important factor for all activities during an anti-amphibious operation (strikes, mine lying, preparation from obstacles and so one) is the reconnaissance of enemy intent. On element of the

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8 The average number of different mine types on the 1 nautical mile of the frontage of such system is 310 to 360 and the number of mine field protectors is 150.
9 So called: Przybrzeźnomorski Oddział Zaporowy (PMOZap) [4][5].
reconnaissance system is seaborne reconnaissance, which will be conducted by reconnaissance combatants, as well as by other units carrying out combat duty service missions and also air reconnaissance carried out by aircrafts.

The determinating element of the naval defense zone is a right organization of observation, which is the task of the surveillance points along the coast. There are 19 such points, which are equipped with monitoring and communication systems.

Electronic warfare during an anti-amphibious operation will be organized in order to disturb the function of enemy electronic assets situated on the surface action groups combatants, which are combating by own surface combatants. The second purpose of the use of radioelectronic assets is to make the work of own assets secure.

This goal will be achieved while enemy electronic assets (command, reconnaissance, fire control and navigation) will be destroyed or/and disabled. This can be achieved by following measures:
– to make the enemy difficult to detect and to spot own units by technical reconnaissance means;
– to deceive the enemy regarding configuration and activities of own surface action groups (SAGs);
– to disrupt and to deceive functions of warhead sections of missile;
– to defend own systems and electronic means against reconnaissance, disruptions and anti radiation and/or heat detection missiles.

In order to complete such missions should be engaged weapons and electronic means for SAG’s combatants as well as land borne naval assets.

CONCLUSIONS

To sum up, there are (in The Baltic in the last Decades of The Cold War ) trends to shift the centre of gravity with combating the amphibious task force from the phase of movement to the phase of assault. It results in strengthening of naval land component fire potential. It means use of coastal artillery- and missile units, which usually are included by naval forces as a separate branch called coastal artillery.10

When the goals (pointed by army component commander) of anti landing defense will be achieved, all services11 can start an counterattack and the navy will begin to conduct systematic combat activities in the naval defense area, in order to extend the area of sea supremacy.

When the goals of anti landing defense will not be achieved and enemy landing forces will land successfully and catch the bridgeheads, all remaining navy assets would probably participate in land borne anti landing defense (support of the army) commanded by joint force commander.

Abstract

The following paper reveals the trends according to the organized anti landing defense conducted as an anti amphibious operation, which had to take place at the last period of The Cold War in the closed maritime theatre like the Baltic. Paying attention on sequencing the operation, as well as the vocabulary regarding the terms connected with such action. On the one hand the article also takes into consideration the subject matter of participating forces, especially their characteristics and activities. On the other hand reveals the revitalization of long lasted existing principles of conduct of anti landing activities.

Zasady prowadzenia operacji przeciwdesantowych na Bałtyku po II Wojnie Światowej

Streszczenie

W artykule przedstawiono trendy dla morskich działań przeciwdesantowych, prowadzonych w ostatnim okresie zimnej wojny na scenie regionu Morza Bałtyckiego. Zwrócono uwagę na sekwencjonowanie operacji, jak również słownictwo dotyczące terminów związanych z prowadzeniem takich. W publikacji poruszono kwestię znaczenia układu sił w obszarze prowadzenia operacji morskich, a także skupiono się na ich charakterystyce i działalności oraz omówiono proces długotrwałej rewitalizacji istniejących zasad prowadzenia działalności przeciwdesantowej.

10 Except of Finland, where coastal artillery is a branch of the army.
11 As admiral Vern Clark said jointness is „Maximizing the advantages that we bring to the fight, optimizing and maximizing things that we are able to get from other services to make ourselves more combat effective, and vice versa” [1, p.2].
BIBLIOGRAPHY


5. Zasady i organizacja działania przybrzeżnomorskiego oddziału zaporowego, Mar. Woj. 1114/92.