MEMORANDUM FOR: The Director of Central Intelligence

SUBJECT: MILITARY THOUGHT (USSR): The Initial Strike in Armed Combat at Sea

1. The enclosed Intelligence Information Special Report is part of a series now in preparation based on the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal "Military Thought". This article cites the results of several naval exercises in dealing with the problems of combat at sea during an initial strike. These problems involve the employment of missile-carrying aviation, long range aviation and submarines, their tasks and targets. The author stresses the need for peacetime planning of the sequence of air and submarine actions, taking the position that tactical coordination of these elements is not an advantage to the naval forces. This article appeared in Issue No. 1 (71) for 1964.

2. Because the source of this report is extremely sensitive, this document should be handled on a strict need-to-know basis within recipient agencies. For ease of reference, reports from this publication have been assigned

William E. Nelson
Deputy Director for Operations

Page 1 of 17 Pages

APPROVED FOR RELEASE
DATE: DEC 2004

TOP SECRET
Distribution:

The Director of Central Intelligence

The Joint Chiefs of Staff

The Director, Defense Intelligence Agency

The Assistant to the Chief of Staff for Intelligence
Department of the Army

Director of Naval Intelligence
Department of the Navy

The Assistant Chief of Staff, Intelligence
U. S. Air Force

Director, National Security Agency

Deputy Director of Central Intelligence

Deputy Director for Intelligence

Deputy Director for Science and Technology

Deputy to the Director of Central Intelligence
for National Intelligence Officers

Director of Strategic Research

Director of Weapons Intelligence
Summary:

The following report is a translation from Russian of an article which appeared in Issue No. 1 (71) for 1964 of the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal "Military Thought". The author of this article is Captain First Rank N. Vyumenko, who draws upon the results of several recent naval exercises in dealing with the problems of combat at sea during an initial strike. These problems involve the employment of missile-carrying aviation, long range aviation and submarines, their tasks and targets. The author stresses the need for peacetime planning of the sequence of air and submarine actions, taking the position that tactical coordination of these elements is not an advantage to the naval forces.

End of Summary

Comment:

The author contributed a number of articles on naval matters to various publications, including the RESTRICTED version of Military Thought, from 1971 to 1974. The SECRET version of Military Thought was published three times annually and was distributed down to the level of division commander. It reportedly ceased publication at the end of 1970.
The Initial Strike in Armed Combat at Sea
by
Captain First Rank N. Vyuenenko

In the strategic plan for a war, and among the operations carried out by all branches of the armed forces, the initial operations of the navy in all naval theaters will play an important part. The main feature of a naval operation conducted at the outset of a war will be the delivery of powerful nuclear strikes against important enemy sea and shore targets and the conduct of aggressive combat actions against enemy naval forces on the seas and oceans.

The initial strike assumes great importance in the operations to rout enemy naval forces groupings operating in a sea (ocean) theater. At the outbreak of a war, missile-carrying submarines and long range aviation, like the rocket forces, will destroy with their strikes vitally important rear installations and strategic means of waging war and also important enemy troop installations and groupings deep in the interior of the theaters of military operations; the navy, using its submarines and aviation, must destroy with its first strikes the principal strike forces of the enemy navy carrying nuclear weapons at sea. Destroying nuclear missile submarines and aircraft carrier strike large units at the very inception of a war will deprive the enemy of the capability of carrying out in an organized manner his nuclear attack from sea to land which aims to inflict maximum damage on our naval forces, rocket forces, and ground forces, and of destroying important installations located both on the coast and in the interior of our country.

As is correctly observed in the Collection of Articles of the Journal "Military Thought" No. 1 (68) for 1963, the initial strike against the aircraft carrier and missile-carrying forces of the enemy navy must be considered a constituent part of the initial strategic strike of our armed forces. And it is an organic element of the operation and constitutes its inception. Let us set forth the considerations which are associated with the conduct of the initial strike at sea.

The initial strike by naval forces will be carried out by the command of each fleet. The basic data for organizing this strike will be the orders from the Commander-in-Chief of the Navy for the initial naval operation; these orders may specify the following: the deployment areas
for submarines and aircraft, the missions of the initial strike, the number and yields of the nuclear warheads allocated to a fleet, the times and procedures for receiving them on the ships (for delivering them to aircraft basing locations), the procedures for coordinating naval forces with strategic rocket forces, long range aviation, forces of Air Defense of the Country, and a coastal front.

Our fleets may concentrate the main efforts of their strikes in the Norwegian, Northern, Mediterranean, and Arabian seas, the northeast Atlantic, and the western Pacific. Regarding nuclear submarines, in the initial strike they can operate against targets located in any area of the world's oceans. Concerning such targets as carrier strike large units, the depth of the initial strike may extend from 1800 to 2000 kilometers from our coast.

The Supreme High Command may detail some of the long range aviation to reinforce the strikes of submarines beyond the limits of the zone of action of naval missile-carrying aircraft. In such a case, it will be best for the fleet commander to implement control over the actions of the long range aviation through the commander of the naval aviation.

Choosing the targets to be destroyed by nuclear weapons and determining the number of these weapons to be expended constitutes the basis of the plan for carrying out the initial strike against the enemy's navy at sea. To achieve highest effectiveness in the initial strike, it is necessary to use the maximum amount of forces and means, the greatest portion of the missile/nuclear weapons resources allocated for the initial operation. When submarines put out to sea, they will take their full complement of nuclear-armed missiles and torpedoes allocated for the entire operation and use them only when operating against capital ships. Aircraft must get missiles having nuclear warheads aloft, based on the consideration that two to three missiles are to be launched against each aircraft carrier.

The organization of the initial strike is decisively influenced by the nature of the strike target. In contrast to the strategic rocket forces, which will have to destroy fixed targets in the initial strike, the navy will have to deliver a strike against highly mobile targets.

Naturally, not all of the ships detected on the seas and oceans will become targets when the initial strike is delivered. As already noted above, the initial strike will be delivered against the aircraft carrier and missile-carrying forces at sea, i.e., against strike aircraft carriers...
and missile-carrying submarines. It would seem that destroying the targets mentioned would not pose special difficulty: we know the areas they maneuver in, the limit lines for the takeoff of carrier aircraft, and the launch areas for missile launchings. However, it is rather difficult to accomplish this in actuality. The high mobility of aircraft carriers over the vast expanse of the world's oceans and the secrecy with which missile-carrying submarines can navigate will significantly limit the choice of targets to be destroyed in the initial strike. They may be designated after it becomes obvious which of them constitutes an immediate threat. Systematic observation of these targets is to be established and carried out up to the moment the strike is delivered.

It is obvious that missile-carrying submarines cannot be considered, in the most general case, to be sure targets of the initial strike. Even when antisubmarine defense forces have been deployed ahead of time, we cannot be completely sure that a particular submarine unit has been detected before the outset of war and is being kept under constant surveillance right up to the delivery of the strike. Submarines can move so freely in the three-dimensional expanse of water that they can move out of the zone of surveillance without difficulty as soon as their crews suspect they have been detected by an enemy. This condition is so significant that it must be taken into account when deciding upon strike targets. With the existing level of development of submarine search means, the main body of enemy submarines may prove to be undetected at the moment of the initial strike, and therefore will not be a target of the strike, even though they will pose the threat of a surprise missile/nuclear strike at the start of a war. Some of the submarines, of course, will be destroyed in the initial strike.

The most favorable conditions for successful actions are created even before the enemy succeeds in delivering his initial strike. But this is extremely difficult to achieve, since our naval forces, even when they are deployed at sea beforehand, can use their weapons only upon receiving permission. And the nature of naval forces actions consists in the fact that submarines at sea and aircraft in the air will not receive the order to strike immediately, but after the Supreme High Command authorizes a fleet commander to employ his weapons or after an aggressor-initiated war becomes a fact. In the first case it may be that the naval enemy, not having succeeded in employing his own weapons, will be subjected to our navy's initial strike; but in the second case -- our strike may fall upon ships from which nuclear weapons delivery means have been launched. The results of such a strike will be inadequate since even before our strike the enemy will succeed in partially accomplishing the missions of his
sea-to-land nuclear attack. Nevertheless, the aircraft carriers and missile-carrying ships must be destroyed even if the enemy succeeds in forestalling us in the initiation of combat actions. The strike against these must be delivered in the shortest possible time. As a result of this, first, we will reduce our losses from subsequent enemy strikes; secondly, just by taking aircraft carriers out of action (because of damage), we will considerably lower their offensive capabilities and they will not be able to accomplish subsequent tasks. In sum, this will signify achieving considerable superiority in forces over the enemy at the very inception of war, which indisputably has great importance.

Let us dwell in somewhat more detail on the problems of reconnaissance. It is customary to assume that we know well the probable areas of operations of carrier strike large units in the Atlantic and Pacific oceans and in the Mediterranean Sea. Frequently doubts are expressed that our enemies are making no secret of the fact that they contemplate delivering a strike by sending up their carrier aircraft from carriers operating in the Norwegian and Northern seas, east of the Kurile Islands, or in the eastern part of the Mediterranean Sea. Carrier large units have been working out varied combat training tasks in these areas. But we must keep in mind that the enemy is deliberately trying to draw the attention of our command to these areas in order to create the impression that carriers must be located precisely in these areas at the moment of the initial strike when war begins. But in reality, at the beginning of combat actions enemy strike carriers will undoubtedly be deployed in those areas where their appearance is completely unexpected. Therefore, as soon as carrier large units begin to approach (even in peacetime) the takeoff phase line from which their aircraft can deliver a strike against targets in the territory of the countries of the socialist camp, we must immediately establish continuous surveillance over all aircraft carriers. The organization of this surveillance must be designed to provide all our naval strike forces with the necessary continuous information about the enemy.

As we know, present-day reconnaissance means are based primarily on the use of radar means. Aircraft and even submarines using such means for the detection and surveillance of the enemy will sometimes find it very difficult to classify the observed targets. Large ships and small ones, if the latter are equipped with special corner reflectors, produce an almost identical blip on radar set scopes. It is not always possible to determine the nature of a target visually. Other, even indirect signs which might also be used to determine the nature of a detected target, may be concealed by the enemy. In naval exercises there have been instances when a considerable part of the missile/nuclear means have been used, not
against carrier strike large units, which should be the targets of the
first-priority strikes, but against secondary or diversionary enemy ship
 groupings. Thus in an exercise of one of the fleets (September 1962),
missile-carrying aircraft delivered a strike, not against a carrier
 grouping, but in general against unknown targets (probably transports)
which were inadvertently navigating 200 miles north of the ships
representing the enemy. But no action whatsoever was taken against the
principal "enemy" ship grouping; the fleet command believed that it had
been destroyed and no longer posed any danger.

In exercises conducted by our fleets in recent years we have also
noted instances where the area of "enemy" actions has been known and
aviation large units have taken off on time; yet they did not succeed in
locating the "enemy". The initial flight of large units of long range
aviation in one of the fleet exercises (June 1962) can serve as an example
of this: these, not finding the carrier strike large unit, simulated
delivery of the strike against shore targets. Large units of long range
aviation did not operate any better in another exercise (September 1962).
Under combat training conditions, such unsuccessful actions merely caused
the trainees to be severely admonished by the leadership; in a real combat
situation such failures are fraught with extremely serious consequences.
To detect enemy naval strike forces in a timely manner, to conduct
continuous surveillance over them, to know their location exactly at any
given time -- these are the most important conditions for achieving success
when conducting the initial strike. Only by completely fulfilling these
requirements can we count on utilizing our forces effectively in the
initial strike.

The question arises, how can we best ensure the initial strike and
have it achieve high effectiveness? When carrier strike large units are
operating in generally dense combat formations it is relatively simple to
locate them and then, using an adequately sized detail of forces in the
initial strike, completely destroy them. But by now the enemy has been
preparing himself to employ his carrier strike large units and
missile-carrying ship groupings in dispersed combat formations. In doing
so, and to camouflage carrier strike groups, he has been establishing
special diversionary ship groupings whose blips on the scopes of naval
target search radars do not differ from the blips received from the carrier
groups. All of this, needless to say, will make it difficult to determine
the first-priority targets precisely and, consequently, to resolve the
problem of which targets we should concentrate our main efforts on
destroying.
In one of the war games conducted in 1962 by the Commander-in-Chief of the Navy, two carrier strike groupings operated jointly with four diversionary groupings. Right at the moment of the strike there arose great difficulty in determining against which two targets, out of the six detected, would nuclear weapons have to be used. In a combat situation it will prove even more difficult to solve a similar problem. It is apparent that in short periods of time, and what is more, not having any further clarifying reports, it will be very difficult to determine the true targets -- the carrier strike groups and aircraft carriers -- from among other ships. Obviously, in the initial strike we must endeavor to destroy all of the ship groups detected; in doing so, we increase our chances of putting the aircraft carriers out of action and of having our initial strike achieve superior results. True, our forces will be dissipated when used in this manner for a strike and the power of the attack against the aircraft carriers will be considerably less than that used when we make concentrated efforts, say, against two groups of ships rather than against six, as occurred in the aforementioned game. But even this will be enough to deprive carrier aircraft of the opportunity of taking off; it will decrease the mobility of our naval enemy and create conditions favoring the completion of his destruction as the operation develops further.

To achieve the speedy defeat of the naval enemy during the initial strike, units of naval missile-carrying aviation and of long range aviation must obviously be in a state of high readiness for flight. Missile-carrying aviation must also remain in immediate readiness for flight over an extended period of time in order to get airborne, should there be a surprise enemy attack, before missile/nuclear strikes are delivered against the airfields. To accomplish such a task, and while we are still in the period of threat, a portion of the missile-carrying aviation should be dispersed, utilizing natural-surface airfields and alternate airfields for this purpose.

In exercises conducted by the fleets in recent years, in a number of instances rear airfields located several hundred kilometers away from the primary ones were used for the dispersal of units of missile-carrying aviation. They tried to limit the use of forward airfields for the basing of strike aircraft during the threat period, forgetting that when missile-carrying aviation is based in distant areas, the time of deployment for a strike is artificially lengthened, the time for it to deliver a strike is delayed, not to also mention the fact that its radius of action is reduced. And moving aviation large units out to rear airfields does not guarantee them against being struck during the initial strikes of the enemy.
The experience of exercises has shown that it is more advantageous to have those large units of missile-carrying and long range aviation, which are cooperating with a fleet, in a high state of readiness for flight at forward airfields. When a direct threat of attack is discovered, these large units must get airborne and, in accordance with previously developed plans, they must be sent directly to the area of operations. Operational training confirms the expediency of designating phase lines; while aircraft are heading for these lines, and depending on the situation that is developing, they should receive clarification of their tasks.

As is known, submarines designated to participate in the initial strike are deployed in their operating areas in advance. In this case, their degree of readiness to deliver the initial strike must not be determined on the basis of the time spent in moving the major part of the submarines out to sea, but on the number of submarines that have been directly deployed at sea (in the ocean) and are capable of attacking the enemy immediately upon receiving an order from the command to initiate military actions. In this connection, a number of admirals, generals, and officers correctly believe that now in peacetime our submarines should continuously carry out combat patrols on the probable routes of forward movement of carrier groups and directly in those areas where they will employ their weapons against enemy aircraft carriers or missile submarines.

For patrols by nuclear submarines it is expedient to designate extensive ocean areas through which the enemy may deploy his forces. Submarines can detect targets on the approaches to narrows and straits, on the exits from bases, and in other areas. These boats should aggressively seek out the enemy and having found him, establish continuous surveillance and relentlessly follow him in readiness for immediate attack. They should also, adhering strictly to security, regularly report to the command the data on the current situation which is required in order to guide other submarines against the enemy.

To prevent mutual interference it is necessary to establish strictly defined zones of operations for each submarine. If this is not done it may happen that several submarines will conduct surveillance over a single enemy ship grouping while at the same time other ship groupings may remain outside the field of observation of our reconnaissance. Furthermore, by entering the zone of operations of other nuclear submarines or the deployment area of diesel submarines, reconnaissance-attack nuclear submarines will interfere with their operations and may give rise to the danger of attacking their own forces. We must also take into account the circumstance that when a target is being attacked with a nuclear weapon it
is not desirable, out of safety considerations, to have other submarines located in the vicinity of the area of the burst. The fleet command must strictly regulate the actions of submarines, and when they approach the zones of operations of other forces, transfer surveillance over the enemy to the latter.

Diesel submarines designated to participate in the initial strike must be deployed directly in those areas where it is most likely that enemy carrier strike large units or missile submarines are located.

It is expedient to put the diesel submarines in separate strike groupings which in case of need are capable of carrying out a maneuver or of redeploying rapidly to attack an enemy that has been detected. Upon detecting enemy carrier strike large units or missile submarines we should guide against them screens or tactical groups of diesel submarines so that at any moment, in case war begins, the greatest number of them may attack enemy ships within the shortest possible time. The more these submarines are able to participate in the initial strike, the greater the losses we will inflict on the enemy and the more quickly we will achieve the aims of the initial strike.

We must take into account all of the difficulties associated with guiding slow-running diesel submarines against fast-moving enemy ships. These submarines, which are significantly inferior in speed to the enemy and have limited reserves of power for submerged running, and, in this connection, have insufficient capabilities for concealing their actions, cannot, of course, accomplish this task as effectively as nuclear submarines. Large errors in determining the location of enemy ships in the ocean will also make it substantially more difficult to guide diesel submarines in a concealed manner. It might even turn out that under certain conditions of the situation they will not be able to participate in the initial strike.

As shown by the experience of Northern and Pacific fleet exercises, when aircraft carriers maneuvered in a well-calculated and speedy manner, diesel submarines were able to deliver their initial strikes with their own weapons against the enemy only 18 to 20 hours, and sometimes 36 hours, after combat actions had begun. Their actions were successful at the outbreak of the "war" in those cases where the aircraft carriers themselves passed through the zone of deployment of one or several of the screens or tactical groups of diesel submarines.
Taking this into consideration, and also the possible countermeasures of enemy antisubmarine forces against these submarines, we cannot assume that they will definitely participate in the initial strikes. These would be unrealistic assumptions, since they are based on great risk and conditioned by many attendant factors. Therefore, when determining the methods of action and the detail of forces to deliver the initial strike we have to rely mainly on highly mobile forces, and above all, on nuclear submarines and units of naval missile-carrying aviation and long range aviation.

The initial strike must be such that it cannot be countered by the enemy; it must be characterized by maximum speed of movement and an especially high concentration of nuclear power against the enemy's principal strike force groupings.

While still in peacetime we should develop the most advantageous sequence of actions under which each tactical group utilizes its weapons efficiently, achieving superior results at the lowest cost in losses. Since it is difficult to foresee ahead of time all aspects of the situation at the beginning of the initial strike, we must train the forces designated to participate in it taking into consideration the most probable alternative courses of action so that in a combat situation a minimum of time is spent choosing the method of delivering the strike.

The common principle underlying the basis for calculating the sequence of actions of forces in the initial strike boils down to the fact that the long-range and most powerful weapons should be used first of all, and then -- all other means of destruction possessing more limited tactical characteristics. Worthy of special attention is the establishment of the precise sequence in which large units of naval missile-carrying aviation and long range aviation use their weapons.

In fleet exercises conducted in recent years the axes of action of long range aviation and of naval missile-carrying aviation units were delimited. To strike enemy naval strike force groupings, certain axes were allocated to large units of naval aviation and other axes were allocated to large units of long range aviation. But it turned out that these latter large units were less prepared to strike the naval enemy than were the large units of missile-carrying aviation. Moreover, they have less experience in flying long distances over the sea and less training in determining the nature of naval targets and in recognizing them. As a result of this, long range aviation large units were unable to find their strike targets either in the Northern Fleet exercise or in the Pacific.
Fleet exercise, and therefore used their weapons either against alternate targets or against secondary groupings of "enemy" ships. It was also noted that these large units delivered their strikes against "enemy" groupings which had already been subjected to the strikes of naval missile-carrying aviation and submarine units. But those targets, whose destruction by long range aviation forces would have led to achieving the aims of the initial strike, were not subjected to any attack and the "enemy" was given the opportunity of continuing to deliver strikes with impunity against targets of the opposing side.

We believe it is possible to avoid such an unsystematic use of long range aviation in the initial strike if its large units are used jointly in a common formation with large units of naval missile-carrying aviation. It is also advisable to use first in the joint strike aviation units made up of aircraft with a long range of flight and armed with long-range cruise missiles having powerful nuclear warheads. With their missiles, intended for destruction of large-area targets, these aviation units will be able to considerably weaken carrier large units, break up their battle dispositions, and disorganize antiaircraft and antisubmarine defenses.

Following them, it is worthwhile for units of naval missile-carrying aviation and long range aviation to deliver a strike using medium-range missiles, including those with passive homing heads, against operating radar sets on enemy ships. And finally, after this, aircraft which have short-range missiles should use their weapons. By the sequence of actions set forth for aviation, enemy air defense forces will be considerably hampered in repelling a strike. At the same time, the organization of the aviation strike will be simplified, its reliability will be increased, and its effectiveness will rise sharply.

Aviation large units should be used on a wide front and on several axes in compact combat formations of separate tactical groups of aircraft, ensuring a high density of missile salvos with minimum time intervals between them. Frequent salvos rule out having the major part of the cruise missiles destroyed by the antiaircraft missile systems of the ships. The minimum time interval between missile salvos is determined on the basis of the requirement that the nuclear bursts of a preceding missile salvo do not put out of action the missiles of the succeeding salvo. Existing missiles allow us to vary within required limits the time intervals between successive missile launchings.

In our opinion, it is necessary to note the incorrect actions of long range aviation in strikes against carrier strike large units. In a number
of command-staff exercises it was proposed that TU-95 aircraft with cruise missiles be used singly. When strategic missile-carrying aircraft are thus employed, we cannot expect their actions to be successful.

For submarine forces a definite sequence of actions should also be typical. Nuclear submarines, having moved into contact with aircraft carriers even before war begins and having received the signal that military actions have begun, will immediately deliver a strike against the carrier large unit and attack it until they have completely expended their available combat reserve.

Diesel submarines should also head for the grouping of strike ships based on the reports of nuclear submarines and missile-carrying aviation. Submarines having missile weapons should be the first to deliver a strike. Submarines using torpedoes can complete the destruction of the enemy.

The problem of the most advantageous sequence for the strikes to be delivered by the various naval branch arms must be resolved taking into consideration the specific situation which will have developed at the moment of the initial strike. Frequently in exercises of recent years large units of naval missile-carrying aviation have been the first to deliver a strike against carrier groupings, followed several hours later by the attacks of submarines. But a similar sequence should not be adhered to everywhere. We cannot rule out the fact that in a number of cases nuclear submarines may be the first to attack. These alternatives are realistic and, as shown by the experience of the operational training of fleets, this sequence in the use of weapons may prove to be very advantageous, although we have not yet succeeded in achieving it.

During exercises, attempts to organize and carry out a simultaneous initial strike by submarine and aviation forces when they are tactically coordinated have proven unsuccessful. Such attempts have been undertaken repeatedly over an extended period of time. In almost all cases they have not led to the achievement of any substantial results. It turned out that aircraft operated independently, forestalling the strikes of the submarines since the latter were not able to approach enemy ships within the effective range of their weapons by the designated time. Regrettably, the boats would attack enemy ships with much delay, actually reducing to naught all of the command's work to organize a joint strike. This was caused by the fact that the locations of enemy and friendly forces were determined with large errors, and, because submarines moved slowly in comparison to aircraft, it was difficult for them to get out to the fast-moving strike groups of enemy ships. Obviously, achieving tactical coordination does not
confer any advantages on naval forces. Organizing this coordination can only give rise to an unjustified prolongation of the initial strike, which, of course, is extremely undesirable. To extend the duration of a strike signifies granting the enemy a "deferment", giving him the opportunity of either moving his forces outside the limits of the range of our forces or of effecting a regrouping of his forces and thereby deliberately making it more difficult for us to employ our forces in the strike.

We believe that organizing an initial strike on the principle "no one waits for anybody" is correct (this, by the way, has already been mentioned in the pages of our press). Under present-day conditions it is not expedient to spend time concentrating forces and redeploying them to the area of operations to deliver the initial strike. This is permissible, but only in particular circumstances, in subsequent actions during an operation.

Up to now we have been discussing the initial strike, which is accomplished primarily by an aviation large unit. But combat against missile-carrying submarines is so singular that it is difficult to give concrete recommendations on the employment of naval antisubmarine forces in the initial strike. In our opinion, the search for and destruction of enemy submarines are systematic actions which can constitute both a part of a naval operation and also the everyday activity of the navy.

As has been indicated, in the initial strike we can count on destroying only individual submarines, but even this does not constitute grounds for excluding a strike against detected underwater targets from the initial strike in the armed conflict at sea. When organizing the initial strike we should not be led to choose as the targets of our attacks those which have the same characteristics, such as aircraft carriers from the enemy's strike large units. Disrupting a nuclear attack from the sea against land can be accomplished only as a result of the combined delivery of a strike against aircraft carriers and missile-carrying submarines simultaneously by submarine forces, naval aviation, large units of long range aviation and antisubmarine aircraft, surface ships, and when possible, by coastal missile units. A powerful and timely initial strike is one of the important factors which can bring about the disruption of the aggressive intentions of a naval enemy and seize the initiative of actions at the very outset of the armed conflict at sea.

Let us set forth several considerations regarding the duration of the initial strike. The initial strike by naval forces cannot be looked upon as a one-time action. Its duration will depend on the scope of the
assigned task, the number of targets which are to be destroyed first of all, the complement of submarines deployed at sea and capable of participating in the attacks, the combat readiness level of the large units of naval aviation and long range aviation, the distance separating aviation bases from the targets of the action, and other aspects of the situation. Obviously, when the complement of naval missile-carrying aviation is limited, these aircraft will even be required to make repeated flights. The necessity for repeated actions may also arise in those cases when enemy carrier strike large units and missile-carrying ships, which possess high mobility, move temporarily outside the zone of action of our aviation and it is unable to deliver a strike against the enemy during the initial sortie.

The time period for fulfilling the initial strike depends significantly on the actions of the submarines sent out against the strike targets. Naturally, not all of the boats will be able to set forth on the attack at the same time. Some of them may be able to use their weapons immediately upon receiving the signal for the attack, but the remainder of those located in the target area will endeavor to establish direct contact with the enemy and only after this is done will they begin to organize their attack. This entire process may last several hours.

The simultaneous participation of submarines and aviation in the initial strike will increase its duration. But nevertheless we can indicate the minimum duration of a strike in which significant results can be achieved. If we estimate that boats will immediately attack targets upon receiving the signal to begin combat actions and that aircraft which had become airborne (when the war became a fact), will deliver their strike within three to 3.5 hours after this, then this will constitute the duration of a fleet's initial strike. The significant dependence of the duration of the initial strike on the air strike is governed by the fact that the yield of an air strike delivered by the forces of a single aviation large unit is enough to destroy a carrier strike large unit.

Operational training experience of the fleets does not provide examples for determining the time period for the fulfilment of an initial strike. Limitations imposed on the conditions of exercises conducted in the ocean have led to the fact that the initial strike has merged immediately with those subsequent actions which constitute the essence of a naval operation to destroy the enemy naval forces grouping at sea.

A few words on the participation of submarines armed with ballistic missiles in the initial strike. In our opinion, strikes by submarines
against shore targets should not be considered in the plan for the initial strike by naval forces. These boats will be included in the grouping of forces designated to deliver the initial strategic strike and their actions will be coordinated with those of the strategic rocket forces. They will accomplish their missions upon orders of the Commander-in-Chief of the Navy, while a fleet commander must simply provide them with a secure exit from their bases and "force a way" through the enemy antisubmarine lines.

* * *

Constant readiness for immediate actions for the purpose of disrupting an enemy nuclear attack from the sea and routing his naval strike forces in short periods of time are the fundamental requirements imposed on the Navy. The most important problem for admirals, generals, and officers of the Navy is to work out the methods of fulfilling the initial strike in a naval operation. This problem covers a wide range of questions, but we have limited ourselves to a discussion only of certain propositions. These propositions require further theoretical research and testing during the operational training of fleets.