MEMORANDUM FOR: The Director of Central Intelligence
FROM: William W. Wells
Deputy Director for Operations
SUBJECT: MILITARY THOUGHT (USSR): Certain Questions of the Employment of Rocket Troops in a Landing Operation

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 assesses capabilities for transporting tactical and operational-tactical missile battalions by sea for landing operations, indicating the unsuitability of using civilian ships for this, and the need to build special landing ships as well as employ air transport. Also, in regard to providing troops with missiles during a landing operation, the advantages of air over seagoing transport are emphasized. This article appeared in Issue No. 1 (77) for 1966.

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 W. Wells
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MILITARY THOUGHT (USSR): Certain Questions of the Employment of Rocket Troops in a Landing Operation

Summary:
The following report is a translation from Russian of an article which appeared in Issue No. 1 (77) for 1966 of the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal "Military Thought". The author of this article is General-Mayor of Artillery A. Sapozhnikov. This article relates the experience of exercises in organizing and conducting landing operations employing rocket troops under the conditions of the Far Eastern Theater of Military Operations. The author examines the question of transporting tactical and operational-tactical missile battalions by sea, focusing on the requirements for this in ships, the procedure for carrying out the transport, and the subsequent actions of the troops. In connection with this he points out the unsuitability of the civilian ships used in the exercises and proposes building special landing ships as well as employing air transport. He further discusses the procedure for providing troops with missiles in a landing operation, indicating in this the advantages of air over sea transport means.

Comment:
In 1975, General-Leytenant of Artillery Aleksey Mitrofanovich Sapozhnikov was identified as Chief of the Central Artillery Officers Course in Kazakov. The author also collaborated with Lieutenant Colonel S. Ostroumov on "The Employment of Operational-Tactical Missiles for the Destruction of Enemy Amphibious Landing Forces" in Issue No. 3 (82) for 1967 . 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.
Certain Questions of the Employment of Rocket Troops in a Landing Operation

by

General-Mayor of Artillery A. Sapozhnikov

Questions of organizing and conducting a landing operation were repeatedly raised in 1964 and 1965 in the pages of the Collections of the Journal "Military Thought". The present article has the aim of generalizing some of our experience in the employment of rocket troops in an operation of this type carried out under conditions of the initial period of a war in the Far Eastern Theater of Military Operations.

The further development of the rocket troops, and the putting of new missile systems and the control means into service have substantially increased the capabilities of a front to defeat the enemy in a landing operation.

At the same time, under the conditions of the Far Eastern Theater of Military Operations, the use of front rocket troops in the initial strike has become difficult considering the great distance separating the enemy's islands from our mainland. In the exercises conducted, only S-5 battalions were allocated for this, with their siting areas located in the vicinity of the shore so that the flight trajectory of the missiles passed over the expanse of water. In the initial nuclear strike the principal role devolves upon the Strategic Rocket Forces. In view of the limited possibilities of utilizing front rocket troops because of the considerable distance separating enemy islands from the mainland, the Strategic Rocket Forces can be allocated to carry out tasks directly in support of a front landing operation, and specifically: to destroy the enemy's means of nuclear attack; to neutralize his antilanding defense; to destroy reserves, aircraft on airfields, and control posts; and to destroy naval bases. In order to accomplish this, the Strategic Rocket Forces must allocate specific nuclear resources.

Front and army missile brigades were moved out to siting areas 60 kilometers away from the loading areas (ports) in readiness to carry out tasks of antilanding defense of the seacoast and to strike the enemy while the first echelon of the troops making the landing are being transported by sea. Subsequently, two or three hours before boarding the transports, the
brigades moved out to the waiting areas. Tactical missile battalions were in the concentration areas of the motorized rifle divisions and tank divisions designated to operate as a part of the amphibious landing force.

The experience of exercises has revealed that in order to transport a tactical missile battalion a shipboard area of 700 square meters is needed and that to transport an operational-tactical missile battalion 1,100 square meters are needed. Civilian steamships allocated to transport missile large units and units by sea must have holds of appropriate dimensions and booms with the necessary lifting capacity (for tactical missile units -- no less than 20 tons, for operational-tactical missiles -- 50 tons). The transport of missile units must be organized in a manner that will ensure their survivability during the sea transit and their capability for engaging in combat actions immediately after disembarking.

Tactical missile battalions must be landed immediately after the regiments of the first echelon of the divisions and their transportation has to be effected on two transports: on one transport -- two batteries, the battalion headquarters, and the technical support platoon (minus one squad); on the second transport -- a battery with the squad from the technical support platoon of the battalion (a transport vehicle and a vehicle-mounted crane). This arrangement ensures that each subunit of the battalion can operate independently in case they are landed in different areas and also increases their survivability. The battalion reconnaissance group should be landed in the complement of the first-echelon regiments so that by the time the battery is landed, the preparation of the siting area will have been completed.

In the exercise the army missile brigade was transported together with the divisions of the army's second echelon. In doing so, in order to increase the range at which the enemy could be struck during the conduct of combat actions on the islands, a battalion from the front brigade was included in the complement of the army brigade.

To transport an operational-tactical missile battalion also requires two transports. The cranes it lacks are provided by the technical battery of the brigade and the mobile missile technical base. Subunits (squads) of the technical battery of the brigade headquarters and a meteorological station can be transported with the battalion.

The brigade's reconnaissance group was sent beforehand to the area of combat actions with the divisions of the army's first echelon. In so doing, special attention must be devoted to topogeodetic support because,
as a result of the delivery of nuclear strikes, the geodetic network, especially in enemy islands, may be destroyed to a considerable extent. Therefore, subunits with gyrocompasses must be included in the complement of the reconnaissance groups which will ensure the missiles can be oriented on any point of the land surface.

Missile units can be unloaded from the civilian steamships immediately at the ports or else with transshipment at a roadstead. The experience of exercises shows that unloading at a port permits a tactical missile battalion to achieve readiness on an average of four to five hours after arriving in port, and an operational-tactical missile battalion -- in six to eight hours. When unloading is done in a roadstead (with equipment and missiles transshipped initially to self-propelled barges of the "Tankist" type) a tactical missile battalion is ready to launch in six to 10 hours, and an operational-tactical missile battalion -- in 10 to 16 hours.

After unloading on the shore, the missile units in the assembly areas were brought to Readiness No. 3 and moved out to the siting areas in order to deliver strikes against enemy targets on the islands. The designation of assembly areas after unloading was brought about by the considerable time required to unload missile subunits from the ships, and by the necessity of moving them out from under possible enemy strikes and of carrying out work to prepare the launch batteries for launchings.

Destruction of the enemy on the islands prior to the landing of the landing forces is achieved by a massed strike by the Strategic Rocket Forces, long-range and front aviation, front rocket troops, and naval means, as well as by subsequent strikes delivered during the sea transit of the troops. But we must not count upon having in all cases completely destroyed the enemy with these strikes. Furthermore, the combat effectiveness of the island groupings may have been restored by lifting troops from the continent. Therefore, immediately before the landing of both amphibious and airborne landing forces, our strategic means must deliver strikes against the most distant targets.

To directly neutralize and destroy individual surviving enemy groupings on the coast may require the conduct of fire support. The experience of exercises has revealed that shipboard artillery is inadequate to fulfill this task. Therefore, it is necessary to use ground artillery, especially rocket launchers, to conduct fire directly from on board the ships. Multiple rocket launchers can also be employed to destroy enemy antilanding obstacles in the water and on the shore. As the landing force is put ashore, its actions can be supported both by shipboard artillery and
by the artillery of large units; the latter, after landing, deploys on the shore and immediately opens fire.

After front and army missile brigades and tactical missile battalions are landed on an island (the mainland), their actions do not differ from the actions in an offensive operation conducted on a coastal axis. In cooperation with other means of destruction they destroy the enemy's nuclear attack means and his aircraft on airfields, they inflict damage on his troop groupings, destroy groupings that have been encircled or pressed to the sea, and battle enemy amphibious landing forces in the event that these are landed from the mainland to the rear of our advancing troops.

Providing troops with missiles in a landing operation poses no small difficulty. In the exercises carried out, missile technical support for the front troops was accomplished in the following manner.

The tactical missile battalions of the first-echelon motorized rifle divisions had two missiles each and those of the second-echelon divisions and the subsequent echelons had one missile per launch battery. The missiles were shipped together with the launchers on the same transport. All of the remaining missiles, mated to their warheads, were delivered by air transport (AN-8 and AN-12 aircraft).

The required number of warheads, delivery vehicles, and missile propellant components were shipped with the operational-tactical missile battalions. To move the missiles, the battalions were provided with airfield-depot trailers. After unloading on the shore, the missiles were fueled and mated by non-T/0 crews of the battalions, for which purpose one oxidant and fuel servicing vehicle was attached to each crew. The bulk of the operational-tactical missile resource was delivered to the islands by air transport. In connection with this, it is necessary to have in the complement of the front a special military transport aviation unit (of the separate missile transport battalion type) with aircraft and helicopters equipped for the shipment of missiles and warheads.

All of the missiles planned for launching as the first-echelon army accomplished its immediate task were prepared in the mobile missile technical bases on the spot and then delivered to the islands. Later, the warheads and missiles were prepared both on our own territory and on the islands; for this it was planned to ship an army mobile missile technical base with the second echelon of the army, and a front missile technical base -- with the second echelon of the front.
Missile propellant was delivered both by sea and air transport in special containers. In order to provide missile propellant in a timely manner to the missile units which had landed on the islands, a branch of the front missile propellant depot was shipped in advance.

In order to rapidly reinforce the battalions which had landed with subunits of the mobile missile technical base, the transporting of assembly teams in Mi-6 helicopters was put into practice. For this purpose, assembly room equipment and fixtures were installed in the helicopters beforehand, and in the upper part of the room was fastened a device replacing the crane for transferring articles. A squad of the technical battery, equipment, and tanks of compressed air were also shipped by helicopter. The missile preparation work was carried out in the airfield-depot trailers.

The exercises confirmed that it is advisable to have an army mobile missile technical base of the composite type in order to prepare both tactical and operational-tactical missiles. This will enable us to reduce the time required to deliver missiles to a missile brigade and ensure the army's complete independence in matters of missile technical support, which is particularly important when conducting combat actions on islands 700 to 900 kilometers away from the front's main forces.

The experience of the exercises conducted has led to the conclusion that the transport of rocket troops by sea in a landing operation utilizing inadequately adapted civilian steamships does not ensure the necessary speed in building up fire superiority over the enemy. The round trip time for seagoing vessels under the indicated conditions ranges from seven to nine full days. Therefore, we fully support the view that we must build special landing ships to ensure rapid shipments and high speed in landing the motorized rifle (tank) troops and their tactical missile battalions which are operating in the first echelon of an amphibious landing force.

At the same time, when resolving the question of transporting missile large units and units in a landing operation we should orient ourselves primarily toward air transport, which should be the primary means of delivering missiles, warheads, and missile propellant. Air transport not only allows us to reduce the time needed to deliver missiles and their components to the troops, but also requires fewer restrictions than shipments by sea. AN-22 aircraft and V-10 helicopters now enable us to carry out such shipments, and future prospects for developing transport aircraft and the missile helicopter systems will completely solve the problem of transporting rocket troops in a landing operation.
Transporting missile large units and units by air allows them to be landed together with the operational landing forces, which will not only ensure the rapid establishment of fire superiority over the enemy on the islands and the successful accomplishment of the tasks assigned to the airborne landing force, but in a number of cases will afford us the opportunity of delivering strikes against installations of the enemy's antilanding defense in support of the landing of the amphibious landing forces.

Further treatment of the questions of employing missile large units and units in a landing operation by carrying out practical measures for the shipment of missile systems, warheads, missiles, and missile propellant components by air and seagoing transport will allow us to most fully exploit the might of the front rocket troops in order to decisively rout the enemy in his territory in the initial period of a war.