Intelligence Information Special Report

COUNTRY USSR

DATE 8 February 1976

SUBJECT

MILITARY THOUGHT (USSR): Chemical Weapons for Repulsing an Amphibious Landing
Chemical Weapons for Repulsing an Amphibious Landing
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Chemical weapons are one of the most powerful means of mass destruction. In modern warfare they may be employed successfully in all types of combat operations on land and at sea, particularly for repulsing an enemy amphibious landing. When used correctly these weapons are capable of inflicting massive casualties and routing a landing force in the shortest possible time, with the expenditure of fewer forces and means than would be possible using conventional weapons.

The targets of chemical weapons strikes will be enemy troops taking part in amphibious and airborne landings. The strikes will be conducted in concentration and waiting areas, particularly at airfields at the moment when troops are emplaning, and when troops are boarding assault transports at points of embarkation.

The best time to strike enemy troops in concentration and waiting areas is immediately after they have arrived at these areas and points when they have not yet constructed the necessary system of shelters, or when they are on the march to embarkation points. The strikes can be carried out simultaneously and in sequence. In the latter case the strikes will have the effect of wearing down survivors, which also is extremely important under the given conditions.

All types of toxic agents may be used to destroy personnel at concentration and embarkation points. However, the greatest effect will be achieved by using highly toxic nerve gases and other persistent agents. Thus, if type R-55 (VR-55) and R-33 agents (in aerosol form) are used, not only will casualties be produced by the vapors and droplets of the agents, but there will be contamination of the terrain, the combat equipment and materiel of the landing force, assault landing means, amphibious tanks, armored personnel carriers and motor vehicles or aircraft. The contamination of these means and equipment with the type R-55 agent practically precludes their subsequent use. Even after the surfaces of ships and vehicles have been decontaminated, the toxic substances that have been absorbed into the paint will evaporate and create dangerous levels of concentration.
Very favorable conditions for the effective action of chemical weapons against an enemy exist when repulsing an amphibious landing. At the moment when troops are being moved from transport ships into assault landing means and amphibious vehicles, and even when helicopters are being loaded to airlift troops from ships to the shore, a large number of people will be exposed on the decks and the ships' compartments will not be sealed. In addition, the landing force will be subject to the effects of the fire means of the antilanding defense during this period. All of this will make it more difficult for the landing force to organize chemical warfare protective measures.

Chemical weapons can be employed effectively against enemy personnel in the assembly and deployment areas of the assault landing means, amphibious ships and vehicles during the formation of assault waves, and when waves of assault landing means and amphibious vehicles are moving toward the landing points, particularly if the landing is being carried out with open landing craft. The advantage of employing toxic agents under these conditions is emphasized by the fact that the destruction of such small targets as assault landing means and amphibious combat vehicles is a difficult task for aircraft and artillery if they employ conventional types of weapons. At the same time, nuclear strikes will be delivered primarily against ships and troop transports located on distant approaches to the landing areas.

As the assault landing means approach the shore, personnel will come out of the crew spaces onto the decks and begin to make preparations 15 to 20 minutes before the scheduled landing. This is an opportune moment to hit the personnel with toxic agents through the respiratory organs and exposed areas of skin. The same conditions for inflicting casualties exist while a landing force is fording and while the forward detachments are landing, when they are still bunched together at the landing points and cannot take advantage of any types of shelter.

In addition, chemical weapons can be used advantageously to destroy airborne or helicopter landing forces in the drop (landing) zones, or those enemy troops who have landed, in the course of the battle on shore.

The type of toxic agent to be used against the forward detachments and subsequent echelons of a landing force, helicopter and airborne landing forces in landing (drop) zones and the subunits of a landing force that are consolidating on shore will be determined by the plan of the defensive battle. In order not to restrict the actions of one's own troops allocated to the counterattack or counterstrike, such agents as R-35 and R-2 may find
broad use in a number of cases.

In view of the relative fluidity of a battle to repulse an amphibious landing, it is our opinion that fast-acting toxic agents should be used first in all situations.

The main forces responsible for delivering chemical strikes against a landing force at concentration and embarkation points will be long-range aviation, while on the open seas this will be the task of the rocket troops, front aviation and, in addition, mine-laying and torpedo aircraft and the missile units and artillery of the navy's coastal defense.

Missiles with chemical warheads may be used to destroy landing forces on troop transports when they are being loaded onto assault landing means and when the latter are moving toward the shore. Air-burst chemical bombs and aircraft chemical sprays may best be used to destroy landing forces on troop transports and assault landing means as well as on the shore. The ability of aircraft to reach their targets at low altitudes and conceal their flight behind terrain features creates favorable conditions for unexpected chemical attacks against assault landing means using aircraft chemical sprays (KhVAP-500) with type R-53 or R-55 agents. Landing forces on shore can be destroyed most effectively by chemical percussion bombs with R-33 agents (KhAB-250-M-62P) and small fragmentation-chemical bombs OKhAB-5 (from RBK-250) filled with R-55.

Chemical artillery shells may be used primarily to destroy forces that have landed on shore and helicopter and airborne landing forces by artillery strikes against the areas of maximum concentration of personnel. Air-burst chemical artillery shells of the KhS type filled with R-43A will be employed when conducting fixed defensive fire against forces in landing means. In addition, during ricochet firing the artillery in this case may use fragmentation-chemical shells of the KhSO type filled with R-55.

Let us make a comparative evaluation of the effectiveness of chemical weapons employed in air strikes against an amphibious landing battalion. A strike by 12 aircraft conducted when the force is embarking on transports may disable up to 40 to 50 percent of the personnel. A strike by 14 aircraft conducted when the force is moving from transports to landing means will disable up to 40 to 50 percent of the personnel of the battalion and up to 50 percent of the transport crew. If 38 aircraft are used against a landing force located in landing means in an assault wave assembly and forming area, up to 40 to 50 percent of the battalion personnel will be disabled; a strike by 56 aircraft against a landing force
moving in landing means toward the shore will disable up to 50 to 60 percent of the battalion personnel. These expected losses will be inflicted under conditions of an unexpected chemical strike using KhAB-250-M-62 bombs with type R-55 agents. These data show that approximately identical results can be achieved with a smaller expenditure of one's own forces and means if chemical weapons are employed against a landing force during embarkation and when the force is moving from transports onto landing means.

Chemical weapons will also be highly effective when used against a retreating enemy following an unsuccessful landing attempt and in destroying surrounded units and subunits of a landing force, since under these conditions the enemy troops will be unable to employ effective chemical warfare protective measures and will suffer great losses.