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CENTRAL INTELLIGENCE AGENCY
WASHINGTON, D.C. 20505

28 April 1978

MEMORANDUM FOR: The Director of Central Intelligence
FROM : John N. McMahon
Deputy Director for Operations
SUBJECT : MILITARY THOUGHT (USSR): Organizing
Protection Against Weapons of Mass
Destruction Among Special Troops

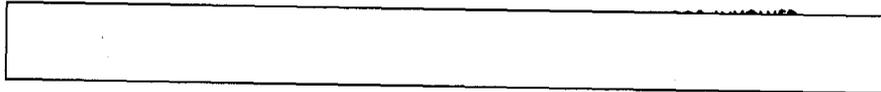
1. The enclosed Intelligence Information Special Report is part of a series now in preparation based on the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal 'Military Thought'. This article is primarily about the various ways that subunits and units of special troops operating independently in a zone of operations of an army and front can be alerted on time about areas of radioactive, chemical, and bacteriological contamination, resulting from enemy use of weapons of mass destruction. Also discussed briefly are the improved types of radio communications equipment and new transport means with which those units should be equipped. 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

John N. McMahon

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Intelligence Information Special Report

Page 3 of 9 Pages

COUNTRY USSR

DATE OF
INFO. Early 1966

[Redacted]
DATE 28 April 1978

SUBJECT

MILITARY THOUGHT (USSR): Organizing Protection Against Weapons of Mass Destruction Among Special Troops

SOURCE Documentary

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 Communications Troops A. Listrovoy. This article is primarily about the various ways that subunits and units of special troops operating independently in a zone of operations of an army and front can be alerted on time about areas of radioactive, chemical, and bacteriological contamination, resulting from enemy use of weapons of mass destruction. Also discussed briefly are the improved types of radio communications equipment and new transport means with which those units should be equipped.

End of Summary

[Redacted] Comment:

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. [Redacted]

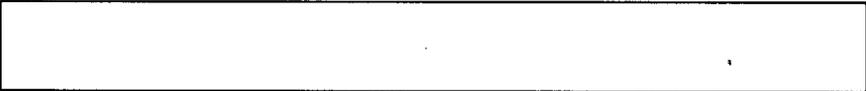
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Organizing Protection Against Weapons of Mass Destruction
Among Special Troops

by

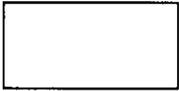
General-Mayor of Communications Troops A. LISTROVOY

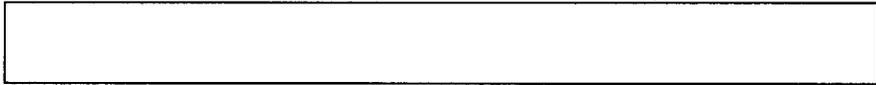
A number of manuals and guides contain only extremely brief instructions on organizing protection against weapons of mass destruction* of units and especially of independently operating subunits of special troops and certain services. It is assumed that the basic measures of protection and the methods of implementing them are the same for both special troops and combined-arms large units. However, in our opinion, the specific conditions of actions of units and subunits of communications troops, radiotechnical and engineer troops, the road traffic control service and many others require the carrying out of certain other protection measures.

These units and subunits fulfil tasks, not at full strength, but, as a rule, separately down to a platoon, squad, or crew. They are scattered over a very large area, actually encompassing the entire zone of operations of an army and front. For example, radio-relay sets of a front battalion are placed at a distance of 600 to 700 kilometers, and the radar sites of an air defense radiotechnical regiment are located at considerable distances from the staff of a unit. Control of a very considerable number of these subunits is, in many cases, carried out directly from the organization of the chief of communications troops, the chief of air defense, etc.

In certain units, communications with subunits are supported by radio at a distance of 12 to 15 kilometers, but sometimes the means for this are lacking. This is the case, for example, in a number of units of engineer troops, in rear services units and facilities, and, paradoxically as it may seem, in separate communications units, particularly in line-cable units while they are in the process of laying (or removing) lines, and others.

*For brevity, further reference to protection against weapons of mass destruction will be called simply protection.





For this reason, independently operating subunits of special troops may not receive a signal about radioactive, chemical, or bacteriological contamination. They are not equipped to independently conduct radiation and chemical reconnaissance due to an insufficient number of instruments and, consequently, they will not take measures for protection on time.

It is, for example, easy to envisage the total complexity of the situation for the chief of the front radio-relay station, the chief of the radar site, the traffic control post of a military road, and for the officer in charge of the combat engineer team, who must ensure the fulfilment of a very important task while their subordinate personnel are in an area which is rapidly becoming contaminated, and it is impossible to withdraw them. In addition to this, the monitoring and assessing of radioactive irradiation of personnel are greatly impeded because of the small number of dosimeter monitoring sets in units and because of the dispersal of subunits.

In our opinion, the conventional method of eliminating the aftereffects of nuclear strikes is unacceptable in these subunits, since the forces and means which could be enlisted for this will not normally be in immediate proximity to them. At present there are not enough productive means for decontamination treatment of personnel and for radiological decontamination (chemical warfare decontamination) of equipment within the special troops themselves. In testing the deficiencies in chemical defense units and special-purpose medical detachments, even the commander of a front will not be able to detail any considerable number of forces and means for eliminating the aftereffects. This can only be done in a practical manner by a reinforced platoon in a front and a small specialized detachment in an army. As a rule, the chief of special troops and services will not have reserves which can be sent to centers of destruction.

It is clear from what has been stated that it is necessary to do further work on matters of organizing and implementing the protection of units and subunits of special troops, especially those operating independently during an operation.

In our opinion the following should be done.

Chiefs of special troops and commanders of units must support the uninterrupted activity of forces and means directly subordinate to them while training for, and during, an operation. For example, the chief of air defense troops must provide for the carrying out of rescue work during the destruction of a radar site and for organizing the utilization of data



~~TOP SECRET~~



Page 6 of 9 Pages

from other sites; the chief of communications troops must see to the support of the activity of important communications installations in the area of contamination while simultaneously ensuring the safety of personnel located there. And so it should be in each branch of special troops. All these measures must be reflected in the plan of their combat employment.

A forecast of the radiation and chemical situation in the areas of interest should be conducted within the organization of the chief of special troops after nuclear and chemical strikes of the enemy, albeit using limited initial data. Computation and analysis stations or groups must issue such data without delay. All this work should take no more than 20 to 30 minutes. Specially trained officers of the organization can conduct calculations for forecasting, but it is still better to have a junior officer of the chemical troops on the T/O for this purpose. The data obtained must be relayed immediately to all independently operating subunits and units.

The commander and staff of the unit, which then takes charge of all subsequent support of measures for protection, enter into this activity at the same time or a little while later. If necessary, instructions about sending a detachment for eliminating the aftereffects of an enemy attack are transmitted to the commander of the closest unit. Special attention should be given to monitoring for the fulfillment of a combat task by subunits and units in the areas of contamination. Under these conditions, intermediate radio-relay stations, radiotechnical posts, traffic control stations at a crossing, and others are most often given preference. During this, the possible irradiation of personnel should be considered and appropriate measures should be taken. It is also necessary to calculate possible losses of personnel and equipment, which then can be specified by commanders of subunits and units.

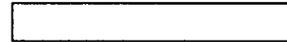
Having obtained data about a nuclear strike, the commander and staff of the unit first specify and assess (they basically forecast) the situation for independently operating subunits which are in the most dangerous area, they support the uninterrupted execution of the combat task and protection of personnel and equipment, they also regularly transmit information to the subunits, they have contaminated personnel relieved, and activate the reserves or they fulfil the task with forces of on-duty specialists alone.

The commander of subunits operating independently during an enemy attack determines the conditions for carrying out the combat task and the radiation (chemical) situation from senior chiefs in the nearest staffs or



~~TOP SECRET~~

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Page 7 of 9 Pages

in posts for chemical and radiation reconnaissance, and makes and puts into effect a decision for ensuring the execution of the combat task and the protection of personnel and equipment.

A new and labor-consuming problem for the organizations of chiefs of special troops is the immediate warning of units and subunits, whose personnel are threatened by the danger of contamination, and the transmission of instructions to them about subsequent actions. For this purpose, chiefs of special troops and services, and also commanders of units involved in the situation, must have communications by technical means with independently operating subunits. Besides this, it is necessary to employ a simple and intelligible method of warning -- top priority direct voice transmissions, transmission of coded messages over communications channels (according to the type of warning and air defense of air targets), and in a number of cases officers should be dispatched by helicopter.

In our opinion, the warning of independently operating subunits and units of special troops must include: reports about detected radioactive, chemical, and bacteriological contamination, the approach of a radioactive cloud and the possible formation of an area of radioactive (and also chemical and bacteriological) contamination; information about the time, place, type, and parameters of enemy nuclear bursts; notification of withdrawal of personnel and equipment from a dangerous area; the setting up of a quarantine or of the observance of and instructions regarding the procedure for ensuring uninterrupted combat activity.

It is most difficult to implement warning during a massive enemy attack. The experience of exercises and war games shows that in this instance from one-third to one-fourth of all independently operating subunits need warning. And transmitting the data, for example, via the organization of the chief of communications troops of a front takes 20 to 30 minutes, and in an army -- 15 to 20 minutes. If we also take into account the time needed for obtaining data from the computation and analysis stations, evaluating the situation, and making a decision, then it becomes clear how important it is to shorten these time limits.

For ensuring the safety of subsequent actions of subordinate units, the organization of the chief of special troops, besides transmitting the data mentioned previously, must organize for them regular information according to a specific system about the actual weather conditions and about the radiation, chemical, and bacteriological situation.



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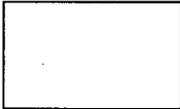
In our opinion, chiefs of special troops and commanders of units (of a battalion and above), regardless of the inherent characteristics of actions of subunits mentioned at the beginning of this article, need teams for conducting rescue work, medical-evacuation work, and decontamination treatment in centers of destruction. These could be called teams for eliminating the aftereffects of enemy attack. Ten to twenty men from the technical and administrative organization of a unit and an additional 20 to 30 men from a reserve subunit will form the permanent nucleus of these teams. Equipment will consist of several tractors (if possible with a bulldozer attachment), a motorized pump, a shower unit, means for reconnaissance, protection, and decontamination treatment, and other equipment. The team must be capable of conducting complete decontamination treatment of the personnel and equipment of one company within two to three hours.

In our opinion, to resolve some of the problems cited, serious changes should be carried out in the equipping and combat training of special troops, which can only be implemented centrally on the scale of the armed forces of the country.

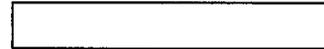
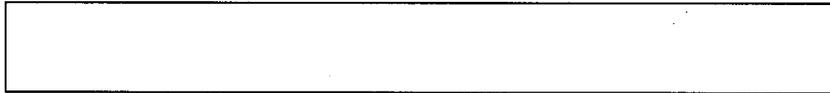
Calculations of the possible losses in special troop units convince us of the need for increasing their number and changing the proportion between the forces and means employed and the reserve, in order to react on a timely basis to abrupt complications in the situation. The matter of reinforcing these troops with specialists should also be examined and implemented by fully mobilized units and subunits which are sufficiently combat ready.

In support of reliable warning of special troops, it is necessary to introduce into the table of equipment of the units the most suitable radio sets (the R-105M type with power amplification stages and a telescoping antenna, which ensures a radius of operation of 40 to 60 kilometers at a place of halt) in order to maintain communications with all the main and independently operating subunits (from two-thirds to three-fourths of the total number of subunits).

Each independently operating subunit and even a squad should, in principle, have automatic indicators for radioactive and chemical contamination, since, in a number of cases, personnel cannot continually employ conventional devices. Because of the reduction in price of automatic indicators, they should be introduced into all independently operating subunits.



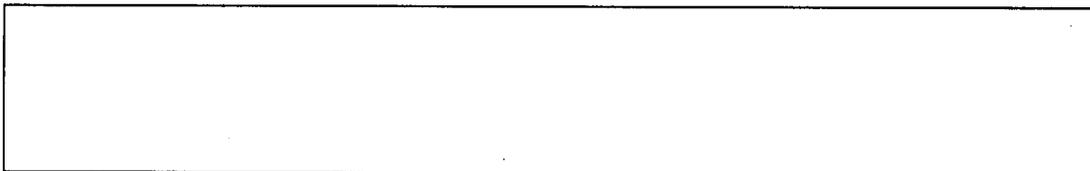
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Page 9 of 9 Pages

An extremely important problem which is difficult to resolve is the equipping of units with transport means which simultaneously serve as a work area and as a protective covering for personnel. In our opinion, most suitable are vehicles with special hermetically sealed bodies made out of an antiradiation plastic material (a type of fiberglass and reinforced cellular plastic) equipped with attachable tents of a special fabric. Another long-range plan is the use of hermetically sealed armored personnel carriers.

The complexity of suitably equipping units with communications, warning, and reconnaissance means is obvious. However, it is necessary at present and in the near future to find some kind of solution to the matter of warning independently operating subunits from the organization of the corresponding chief of special troops. This task can be facilitated considerably by conducting in the staffs centralized warning of various units and subunits about the danger of destruction and about the necessary measures for protection. As calculations have shown, the most economical way to do this is a radiotelephone warning, employing several high-powered simultaneous transmission shortwave radio sets of a front and army, and comparatively simple receivers which can be operated by the personnel of staffs of units and subunits without increasing their number.



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