MEMORANDUM FOR: The Director of Central Intelligence

SUBJECT: MILITARY THOUGHT (USSR): Improving the Operational-Tactical Training of Military Engineers

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 reviews the operational-tactical training at an air defense academy. Since the tactical training of engineers does not meet modern command requirements, the author recommends applying a combined instruction method to the engineer curriculum to permit specialized training against a tactical background, and establishing bilateral links with the armed forces to incorporate troop experience into the program. This article appeared in Issue No. 3 (88) for 1969.

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
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Summary:

The following report is a translation from Russian of an article which appeared in Issue No. 3 (88) for 1969 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 Aviation Ye. Artyushenko. This article reviews recent operational-tactical training at the Air Defense Forces of the Country Military Radiotechnical Academy. Since the tactical training of engineers does not meet modern command requirements, the author recommends applying a combined instruction method to the engineer curriculum to permit specialized training against a tactical background, and establishing bilateral links with the armed forces to incorporate troop experience into the program.

End of Summary

Comment:

There is no information in available reference materials which can be firmly associated with the author. 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.
Improving the Operational-Tactical Training of Military Engineers
by
General-Mayor of Aviation Ye. Artyushenko

The importance of operational-tactical training of students at military engineer educational institutions has grown considerably at present. In this connection the program of these institutions must ensure that the students learn the fundamentals of operational art, the organization, armament and tactics of the arms of troops, and the basic conditions of staff work; and the students must develop the solid command and technical skills required in their service assignments, as well as the ability to use their acquired knowledge to solve the complicated problems of modern warfare. However, for a number of reasons the content and quality of tactical training still does not ensure the solution of these problems.

First of all, the fact is that the range of problems and disciplines directly or closely related to tactical training has considerably expanded in connection with the requirements for thorough knowledge of complicated combat and special equipment and the fundamentals of their use. New elements of theory, operational art, and tactics have emerged, which has led to an expansion of the curricula and complicated the organization of the study program.

Experience shows that it is now impossible for a single operational-tactical chair to cover all the curriculum problems and fully ensure thorough learning. This would involve changing the organizational structure and significantly increasing the amount of personnel of the chair, which would result in the creation of a cumbersome, barely manageable collective.

This situation is the reason for the search for new, more progressive training methods at the Air Defense Forces of the Country Military Radiotechnical Academy. Beginning with the 1965-66 academic year, the method of combined instruction of operational-tactical disciplines, widely used by command academies, was introduced. The essence of this method
Along with the operational-tactical chair, the profile chairs of the academy are called upon for the operational-tactical training of students. Depending on the specialization, each one provides instruction to students in separate subjects or divisions of the operational-tactical training program within the limits of its school hour time. The operational-tactical training chair concentrates its main efforts on the organization and training of divisions of the course for up to a regiment (separate battalion) of a particular arm of troops. But the profile chairs work on their own distinctive special course divisions, as well as problems involving the combat use of armament and the organization of combat performance in the subunits of an arm of troops.

Thus, for example, in teaching the course "Fundamentals of Training in the Conduct of Combat Actions by an Air Defense Division", the instructors of these chairs set forth the problems of organizing radioelectronic warfare, communications, anti-space camouflage and other subjects. In addition, using materials from tactical problems and short exercises worked out by the operational-tactical training chair, the profile chairs work out, or expand against the background of these problems and exercises, specialized subjects (problems) conforming to their own faculty profile.

Responsibilities for the teaching of measures for protecting the Air Defense Forces of the Country from weapons of mass destruction, are distributed among the chairs as follows. Protective measures of an operational-tactical nature, which are reflected in the decision of the commander on the organization and conduct of combat actions and in the combat actions plan, are studied under the direction of instructors of the chairs of operational-tactical training; and the weapons of mass destruction and protection of troops from them are studied against a single operational-tactical background. The profile chairs (independently or combined with the chair of weapons of mass destruction and protection of troops from them) teach the problems of the protection of radiotechnical means and the organization of the combat performance of subunits under conditions of the use of weapons of mass destruction.

Instructors of the profile, and frequently also of the special technical chairs, also take an active part in working out and conducting command-staff exercises, research games, and tactical-technical exercises, with the students and the permanent staff of the academy.
We have arrived at the conclusion that in planning and organizing the combined method of teaching operational-tactical disciplines, first of all the problems (subjects) taught by each chair involved should be defined and coordinated with the operational-tactical training program; and the problems (subjects) selected are included in the chair program and are adjusted to the academy curriculum. In this way, a single operational-tactical training program is worked out and each chair is given a definite teaching assignment.

The teaching methods and materials of combined training (lectures, systematic development, etc.) are discussed in inter-chair conferences of interested chairs with the active participation of the training department, and under the direction of the deputy chief of the academy or the chief of the operational-tactical training chair. The sequence and time frame for conducting combined training is determined by the semester calendar-subject plan of the operational-tactical training chair. Training conducted independently by each chair is planned by the usual procedures, in conformance with the program and curriculum.

The method of combined instruction of operational-tactical disciplines in a higher military engineer educational institution, in our view, offers a number of advantages. In the first place, it becomes possible to significantly expand the range of operational-tactical training subjects (problems) and increase the time spent working on them. The problems of organizing subunit combat performance and the use of arms and equipment, which are central to the overall operational-tactical training system, thus are more thoroughly developed. As a whole the level of tactical training is significantly raised, since not one, but several, chairs are engaged in it, which ensures continuity and sequence of study of these disciplines. In the second place, this method strengthens the scientific and teaching method relations between academy chairs and also ensures a higher quality of solution of tactical and technical problems in support of the training process and scientific research work. In the third place, it broadens the operational-tactical horizon of the teaching staff of the profile chairs, and the instructors of the operational-tactical training chair can devote more attention to the special problems of tactics and to mastering new models of technical equipment. And, in the fourth place, this method is conducive to the effective introduction of tactics into the programs of profile chairs, which to a significant degree specifically defines and improves their content, bringing it closer to the problems solved by the troops.
However, the introduction of the combined method still does not solve the problems of school hour limits, which are insufficient for tactical training at a higher military engineer educational institution.

Can additional time be found? Yes, we have reserves. Above all, we obviously should review the curricula of higher military educational institutions on the whole, and reapportion the time planned for studying each discipline according to its place and weight in the overall system of training broad-profile military engineers.

Of course, such a statement of the problem affects the interests of several leading chairs which play an important role in engineer training. But nevertheless it must be done for the good of the overall program since we are preparing not civilian specialists but military engineers who at any time may become commanders (or replace a commander in battle), and in the future may even become prominent military leaders.

There is also an urgent need to resolve the problem of developing textbooks and training aids for operational-tactical training and supplying higher military educational institutions with them, since at present each of these institutions, pleading a different number of hours allotted to the study of a course, and the various peculiarities of its programs, tries to develop and publish its own textbooks (training aids) independently.

This position, in our opinion, cannot be considered normal, since the various collectives of authors duplicate each other and as a result the students at higher military educational institutions of the same service study the same tactics using different textbooks (training aids). Furthermore, independently developed textbooks (training aids) often contain many deficiencies, different interpretations of the same problems, different terminology, etc.

In our view, the development and publication of textbooks (training aids) on basic operational-tactical training disciplines should be centralized for all higher military educational institutions of a given service. The command academy is the center in this case, but representatives to the staff of the authors' collective should be drawn from all the other interested higher military educational institutions. In order to avoid considerable discrepancies in school hours the various schools allot to the study of a given discipline, a single standard program should be devised for all higher and middle technical educational institutions. In writing these textbooks (training aids), the possibility of using them for the command training of generals and officers of a given
branch of the armed forces (arm of troops) should be provided for.

There is yet another effective method of upgrading the operational-tactical training in higher military engineer educational institutions, though insufficient use is made of it. This is a bilateral link between the chairs of these institutions and the armed forces. We know this kind of link is conducive to raising the effectiveness of the instructors and to incorporating advanced troop experience in the training process; and, in turn, the institutions will help the troops solve their problems. This is fully corroborated by the training work practiced at our academy.

With a view toward further broadening and strengthening these links it frequently is desirable: to assign the teaching staff of higher military engineer educational institutions as umpires or role-players in exercises and war games conducted by the troops; to call conferences and meetings organized according to the plans of the general staffs of the branches of the armed forces (i.e., meetings of arms of troops and services) and of formations; to make more use of the practice of having troop representatives address students and the teaching staff, and having representatives of higher military educational institutions give lectures and talks to the troops; to adapt for these institutions periodic information on the advanced experience of combat and operational-tactical troop training which would be useful in the training process.

Experience shows the realization of the measures given above depends not only on initiative and organization at the working level, but also on timely planning from above. In our view, the above is justified if at the beginning of the academic year the higher military educational institution is given (for a year or a period) such initial data as the place, time, and type of activities in which the institution representatives will take part, the number of these representatives, and when and to what exercises (war games) they can be assigned as umpires. The institutions would plan their work on the basis of this basic data. In our opinion, we should return to the practice of consolidating higher military educational institutions with specified troop formations (large units). Then we could more specifically discuss combining work by setting up links.

Operational-tactical training exercises at our academy (as in other higher military engineer institutions) are conducted basically by one chair. This chair is multiprofiled, since it includes more than a dozen different operational-tactical and other military disciplines. If such an organization of operational-tactical training answered the demands made on
it before (considering the broadening of the program with the same number of instructors), then now the teaching methods and scientific research of chairs will become complicated.

Since important changes have taken place in the organization of troops and in the theory of operational art and tactics in recent years, an urgent need has arisen to revise the direction of the operational-tactical training as well. It would be desirable to reorganize the existing chairs of operational art and tactics, setting up on their base two chairs: general tactics (tactics of arms of troops), and a special chair along the lines of the profile of one of the engineer academies. It also is very important that the organization of subunit combat performance and problems of the combat use of equipment be studied not only in the combined training system, but as an integral part of the course work of profile chairs of the academy. This requires changing the classification and the organic organizational structure of these chairs somewhat to create chairs of equipment and combat use.

Of course, there may be other variants of solving this problem. However, in all cases one should proceed from the principle of establishing multiprofiled chairs.

The instructor staff of the chairs largely determines the quality of operational-tactical training. In our opinion, the instructor staffs should be composed of experienced officers from the troops and, above all, commanders, chiefs of staffs, and officer-operators who have completed both a command academy and a higher military engineer educational institution. Combining instructors who have a command-staff training profile with those having an engineering education favorably affects the quality and thoroughness of the tasks the chair carries out. It should be emphasized that it is desirable to select instructors of operational-tactical disciplines (especially tactics of the arms of troops) from those arms of troops whose tactics are studied at a given higher military educational institution.

Staffing the chair, "Weapons of Mass Destruction and the Protection of Troops from Them", which makes a definite contribution to the operational-tactical training of students, should include officers with command-staff experience, doctors and engineers (including radioelectronics officers) along with chemical service officers. As the five-year experience at our higher military educational institution proved, this staffing principle is fully justified.
At the same time, it would be desirable for other organs, besides the chemical services of the branches of the armed forces, which are concerned with protection problems, to participate in teaching these subjects. Such a link would be conducive to greater incorporation of advanced troop experience in the training process.