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15 March 1977

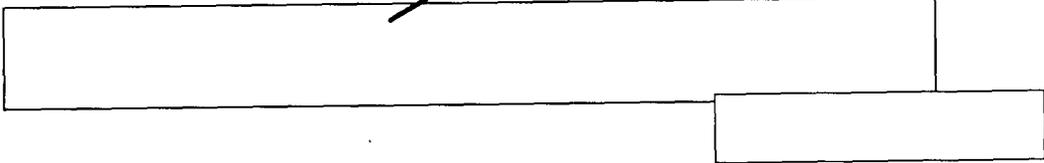
MEMORANDUM FOR: The Director of Central Intelligence
FROM : William W. Wells
Deputy Director for Operations
SUBJECT : MILITARY THOUGHT (USSR): Certain Matters
of the Organization of Military Science Work
in Fleets and Flotillas

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 a general review of military science organization and work in the fleets and the effect of computers on this work. The authors recommend that military science departments be incorporated into the fleet staffs which would be responsible for organization, research and publication of military science work, and that existing voluntary military science societies be continued to supplement official work in this sphere. This article appeared in Issue No. 2 (72) 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 W. Wells

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Intelligence Information Special Report

Page 3 of 10 Pages

COUNTRY USSR

[Redacted]

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SUBJECT

MILITARY THOUGHT (USSR): Certain Matters of the Organization of Military Science Work in Fleets and Flotillas

SOURCE Documentary

Summary:

The following report is a translation from Russian of an article which appeared in Issue No. 2 (72) for (1964) of the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal 'Military Thought'. The authors of this article are Captain 1st Rank I. Argunov (deceased) and Engineer Captain 1st Rank V. Skugarev. This article is a general review of military science organization and work in the fleets and the effect of computers on this work. The authors recommend that military science departments be incorporated into the fleet staffs which would be responsible for organization, research and publication of military science work, and that existing voluntary military science societies be continued to supplement official work in this sphere. End of Summary

[Redacted] Comment:

Engineer Captain 1st Rank Valentin Dmitriyevich Skugarev has been identified as a Candidate of Naval Sciences. He has written several articles in various Soviet publications and has co-authored a book on 'Management in the Soviet Navy'. 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.

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Certain Matters of the Organization of Military Science
Work in Fleets and Flotillas

by

Captain 1st Rank I. Argunov (deceased)
Engineer Captain 1st Rank V. Skugarev

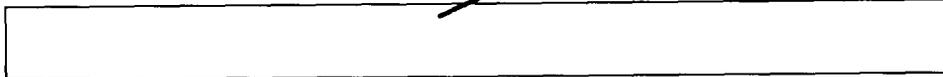
The widespread introduction of new means of combat into the navy in the mid-1950's called for a concentration of efforts not only by military science personnel, but by all command personnel, in solving the most important problems of operational art and tactics of the navy, and improving and developing new methods and forms of combat employment of naval forces. However, the special organs needed to aid in the successful accomplishment of these tasks were not at the disposal of the staffs.

In 1956, therefore, military science groups were created in all fleets and in the Red Banner Caspian Flotilla, and were made immediately subordinate to the chiefs of staff. They ensured the carrying out of the instructions of the command in the sphere of organizing, planning, and directing military science work in the navy; they directly synthesized and worked out the most important individual problems of the combat employment of fleet and flotilla forces; they implemented the most valuable military science projects that had been completed; they carried out an exchange of experience in creative work, and of military science and military technical information in the navy; they provided organizational methodological assistance in the work of voluntary military science groups; they monitored the state of military science work in formations, large units, and on ships; and they took part in summing up and working out the immediate tasks of military science work. In addition, the military science groups monitored and provided methodological assistance to the organization of historiography in large units of the navy.

The experience of the work of the military science groups in the navy and in the armed forces shows that they were very helpful in improving the quality of military science work. It became an organic requirement in the official duties of command and executive personnel in the fleets, and occupies an important place in the overall system of operational, combat, and political training.

We must also mention the great creativity of the work performed by the military science groups, especially in connection with the preparation and holding of military science conferences. Officers of the military science





groups generalized the material of these conferences, took part in the drafting of integrated scientific research works jointly with representatives of training institutions and scientific research facilities, and prepared and published bulletins, collections of articles on combat training, information sheets, and other materials.

When conducting exercises and games in the fleets, military science groups were included in the staffs of the directing bodies and took active part in analyzing the progress of the exercises and in the preparation of the materials on their results. Thus, military science groups have taken the first steps in the scientific study of modern operations and battle.

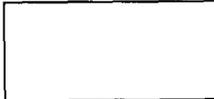
Because, however, of the changed nature of military actions at sea and the huge volume of research they perform, the "manual labor" of scientific personnel in this area has become ineffective. The further development of naval theory has required the large-scale introduction of computer equipment into the navy, and the use of mathematical methods of analyzing modern naval operations and combat actions.

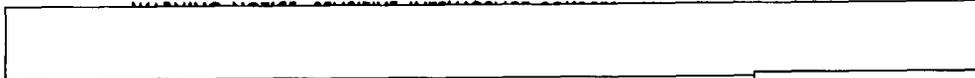
Beginning in 1960, in the practice of operational and combat training of the fleets, means of minor automation and mechanization began to be more widely introduced, while during the organization of control of naval forces staffs began to use computer equipment. Scientific research became an integral organic part of operational and combat training.

During the conduct of exercises and games, experimental automation sections were created in the staffs of fleets, to perform operational-tactical calculations and prepare possible ways of solving problems associated with the use of the forces and means of the fleet. In view of the small number of experienced scientific cadres, instructors of the naval academy were brought in to do this work, as well as scientific personnel from naval institutes, including civilian specialists in mathematics. The staffs of the fleets essentially formed non-T/O operations groups for operations research for the period of conducting the exercises.

We think it is also interesting to note that in the army and navy of the United States of America, T/O operations research groups numbering up to 50 men have long since been established in the largest tactical large units, army groups, fleets, and flotillas.*

* G. Gilman. Operations Research in the U.S. Army. "Information Sheet" No. 3, Military Unit No. 30895, p. 16.





The experience of military science work has urgently required that the organizational structure of the military science organs in the fleets be brought into accord with the nature and volume of new tasks. However, as we know, the reverse has happened. In 1961, the military science groups of the fleets were reorganized into military science sections of three men, and in the Red Banner Caspian Flotilla this type of group was abolished altogether. And this was done at a time when the content and volume of research had grown immeasurably as a result of the introduction of electronic computer equipment into the fleets.

Naturally, with such a limited complement the military science sections are unable to fulfil the tasks entrusted to them. In view of the small number of sections, their organizational activities have been sharply reduced. This could not help but affect the state of all military science work conducted in formations and large units of the fleets.

It should be noted that this situation has already been discussed in the collections of the Journal "Military Thought".* It was emphasized, in particular, that the reorganization of military science groups into ineffectual sections led not only to the weakening of military science work among the troops, but also to the loss of military science personnel. The work involved in putting together the military science groups and strengthening them with qualified and experienced officers essentially went for nought. Unfortunately, the suggestion that the appropriate organs of the Ministry of Defense reexamine this question went unheeded.

Experience has shown that organizational forms and methods of military science work are continually changing as a result of the growing amount of computer equipment in staffs, formations, and large units, and also because of the further expansion of the volume of scientific research. Now, operations research, making extensive use of methods of mathematical analysis, is the main element in military science work.

The working out, improvement, and widespread introduction of means of automation and mechanization into the work of the control organs of all levels of command, the development of methods of using electronic computer equipment, the mastery of methods of operations research, and the wide use of them in the basic spheres of activity of the fleets and flotillas, are all becoming an integral aspect of the scientific and practical activities of military science organs of the fleets and flotillas.

* Collection of Articles of the Journal "Military Thought", No. 1 (62), 1962, p. 163.

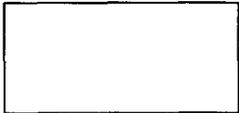


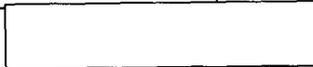


In view of the requirements of the November Plenum of the CPSU Central Committee on centralizing the direction of scientific research activities, we believe that one of the most important conditions for the further development of military science work in the fleets and flotillas is the establishment in the fleet staff as quickly as possible of a single sufficiently skilled department of military science work with a laboratory for operational-tactical research.

The tasks entrusted at present to the military science sections, and also to the recently created computer groups of the fleet staffs, might be:

- planning and organizing military science work in the fleet;
- studying the optimal forms and methods of conducting operations and battle with the aid of modeling on electronic computers;
- the mathematical basing and calculations for the new tactical methods developing in the fleets for employing forces and means, as well as for the basic provisions of guidance documents (regulations, instructions, and rules) for the combat activity of submarines, naval missile-carrying aviation, and surface ships;
- the accumulation, systematization, and processing of various statistical data in the fleet necessary for the performance of operational-tactical calculations, and the development of tables, graphs, and other documents facilitating the work of the operators at the command post of the fleet commander;
- the development of methods and programs for solving operational-tactical and engineer-technical problems arising in the fleets in the course of day-to-day activities, as well as the resolving of these problems through the efforts of specialists of the department with the aid of computers, and the delivery to the users of the appropriate recommendations;
- seeking and developing ways of automating and mechanizing the main processes involved in operational and combat training;
- carrying out integrated scientific research work jointly with educational institutions and scientific research facilities of the navy;
- organizing the publication and reproduction of the most important scientific works in the navy for the purpose of exchanging scientific information;
- monitoring military science and historiographical work in formations, large units, and units;
- organizing the training and improvement of the skills of specialists in the fleet in servicing computer equipment and using methods of operations research in military science work.





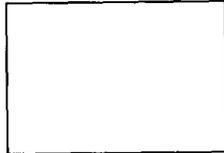
Taking account of the specific conditions in each fleet, and the tasks of military science work enumerated above, it is also possible to determine the T/O strength of the department. The department must include the existing military science section and computer group, and an appropriate number of specialists for operations research, mathematics, computers, etc.

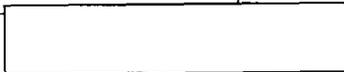
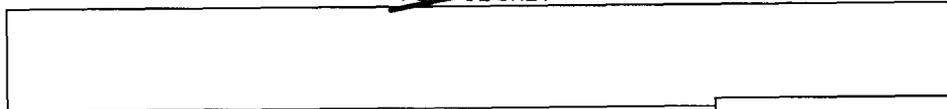
The department must be provided with means of minor automation and mechanization, and manned with servicing personnel to perform typing, drafting, and duplicating work, as well as to provide it with a small printing plant to publish informational science materials. It is advisable to place this department directly under the chief of staff of the fleet, since it will be the main military science organ called upon to carry out organizational and scientific research functions for the entire fleet.

Changes in the nature and volume of tasks of military science work in fleets and flotillas also require further improvement of its organization in formations and large units. Even now (and especially if a department of military science work is created), the allocation of one officer to combine performing the functions of organizing and developing basic measures of military science activities in the staffs of formations and large units with other work is inadequate.

Military science work in formations and large units of the fleet has expanded considerably. It includes the theoretical development and introduction of new methods of using modern weapons, technical means, and naval equipment, and provides for research on the basis of generalizing and analyzing the experience of operational and combat training, and theoretical and applied questions of the operational-tactical use of formations and large units. Along with the reorganization of the military science organs in the staffs of fleets, the need has now arisen to create scientific research organs within the T/O of formations and large units. In our opinion, it is advisable to have scientific research groups in the staffs of formations (aviation, fleet rear services, flotilla, and naval bases of the first category), while in the staffs of large units there should be scientific research sections. These military science organs must be staffed with officers possessing good operational-tactical, mathematical, and engineer-technical training.

Under present-day conditions, when military science work must be fully responsive to the nature of military actions at sea, and must continually try to find new ways and possibilities of further developing naval theory, we must make use of all possible forms of creative activity and involve wide circles of officers, admirals, and generals of the fleet in it.





The question therefore arises as to how the voluntary military science societies should function. What is their place in the overall system of military science work?

Various points of view have been expressed in our military press. Some believe that the societies in their present form are unnecessary, since their role is quite insignificant. It is therefore proposed that in the organization of military science societies we shift from the principle of which large unit (unit) they belong to, to the principle of creating them according to specialties (navigators, gunners, mine specialists, communications personnel, etc.).* There is also another point of view. The voluntary military science societies, it is said, have already played their role, and in view of the fact that it is difficult to separate military science work from operational and combat training, and that it has become a matter of direct concern to the command, it is felt advisable to abolish them completely in formations, large units, and units.

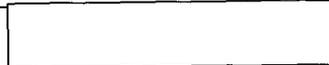
It seems to us that neither the first nor the second point of view has sufficient justification.

The fact is that if we shift to organizing the military science societies according to specialty, they will inevitably turn into narrowly specialized organizations isolated from one another and not connected with the operational and combat training of their formations, large units, and units. Commanders and chiefs will be removed from the direction of these societies, since it will be transferred to flag rank specialists who, moreover, do not have sufficient orientation in accomplishing the tasks of military science work as a whole. Coordinating and directing the activities of such societies toward resolving the most important current problems will prove to be extremely difficult.

As to the assertion that military science societies in formations, large units, and units have already lost their significance, it appears unfounded for the following reasons. The elimination of the voluntary military science societies as public organizations could lead to the removal of a large number of officers of large units and units from participation in military science work, and to the loss of such mass and highly important forms of military science activity as: the preparation and conduct of military science conferences on military historical themes; the writing of memoirs and combat histories of units and ships; the preparation and conduct of bibliographic analyses of military historical

* Naval Collection No. 8, 1959, pp. 58-60.





and military theoretical works; the discussion of scientific works completed by the members of the society; the dissemination of military science and military technical knowledge, and also of the combat traditions of the Soviet Armed Forces; the giving of lectures and reports in the system of lecture groups and agitation propaganda collectives; the conducting of excursions; the setting up of showcases of military science work, etc.

Furthermore, this would lead to a narrowing of the front of scientific research in general. The activity of the voluntary military science societies cannot possibly replace military science work which is conducted on an official basis. But it does contribute to the accomplishment of tasks of official military science work and it supplements it. We therefore believe it necessary to make the work of the voluntary military science societies as active as possible, using those forms of organization which are most applicable to them.

