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CENTRAL INTELLIGENCE AGENCY
WASHINGTON, D.C. 20505

18 November 1974

MEMORANDUM FOR: The Director of Central Intelligence

SUBJECT : MILITARY THOUGHT (USSR): Combat with Airlifts Across the Ocean

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 discusses the significance of strategic airlifts across the ocean in reinforcing troops with reserves and nuclear means during the concluding phases of military operation. The American capability in this regard is analyzed in order to lay the foundations for planning the best methods of disrupting such airlifts. Planning must include provision for: strikes by missile/nuclear means against airfields, bases, and concentration areas for heavy equipment; the destruction and neutralization of radiotechnical means of control and navigational support of the Military Airlift Command; and the interception and destruction of aircraft in flight. This article appeared in Issue No. 2 (81) for 1967.

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 [redacted]

William E. Nelson
Deputy Director for Operations

[redacted]

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Intelligence Information Special Report

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SUBJECT

MILITARY THOUGHT (USSR): Combat with Airlifts Across the Ocean

SOURCE Documentary

Summary:

The following report is a translation from Russian of an article which appeared in Issue No. 2 (81) for 1967 of the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal "Military Thought". The author of this article is Colonel N. Sopelev. This article discusses the significance of strategic airlifts across the ocean in reinforcing troops with reserves and nuclear means during the concluding phases of military operation. The American capability in this regard is analyzed in order to lay the foundations for planning the best methods of disrupting such airlifts. Planning must include provision for: strikes by missile/nuclear means against airfields, bases, and concentration areas for heavy equipment; the destruction and neutralization of radiotechnical means of control and navigational support of the Military Airlift Command; and the interception and destruction of aircraft in flight.

End of Summary

Comment:

Colonel N. G. Sopelev took part in a conference on Military Science Administration in the General Staff. (Zhurnalist #7, 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.

Combat with Airlifts Across the Ocean

by

Colonel N. Sopelev

The outcome of combat actions in the concluding period of operations in a theater of military operations (assuming, of course, that the concluding period does not terminate in the nuclear period) will depend, to a large degree, upon which of the sides most rapidly succeeds in reinforcing its operating groupings of troops with reserves and, above all, with nuclear means. For the accomplishment of this task, the American command attaches particular importance to strategic airlifts across the ocean. The planning of such deliveries is carried out by the Military Airlift Command (VTAK), which is organizationally a part of the Air Force and subordinate operationally to the Joint Chiefs of Staff. The Military Airlift Command has two transport air armies: the Eastern (which organizes airlifts across the Atlantic Ocean, with headquarters at McGuire AFB, New Jersey) and the Western (which carries out airlifts in the Pacific zone, with headquarters at Travis AFB in California). Over 550 transport aircraft of type C-118, C-124, C-130E, C-133, C-141 and others, make up these armies*. Furthermore, the Military Airlift Command has approximately the same number of auxiliary aircraft for the accomplishment of meteorological, aerial photographic, rescue, and other tasks involved in the support of airlifts across the ocean.

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*The present fleet of Military Airlift Command aircraft is being constantly updated. By mid-1969, they will have in service only large cargo capacity jet aircraft capable of non-stop flights across the Atlantic and the Pacific. By 1970, an even greater increase in Military Airlift Command capabilities is planned through the construction of aircraft that can land a load of 45 tons (or 750 soldiers), and have a range of 7500 kilometers and a speed of more than 900 km/hr. It should also be kept in mind that aircraft firms are studying the possibility of constructing missiles which could airlift troops to any part of the world considerably faster than can be done with aircraft. According to preliminary calculations, one missile could deliver 130 tons of cargo (or 1,200 fully equipped soldiers, to any point on the globe, within 30 to 40 minutes).

In addition, there are provisions for using the following for strategic airlifts: airborne landing transport divisions of the Air Force, civil aviation, Air Force reserves, and National Guard Transport aircraft (a total of up to 450 aircraft). By calling upon two divisions of Air Force airborne landing transport aviation which are permanently based in the US, the Military Airlift Command is capable in one trip of airlifting 6,500 tons of cargo or 36,000 persons (heavy equipment, not transportable by air, is already stored in Europe, in the Philippines, and on Okinawa).

There are four air routes for airlifting troops to Europe, Africa, and the Near and Middle East: the northern route--from Goose Bay in Canada, south of the 60th parallel, over Great Britain, to West Germany; the north Atlantic route--over Newfoundland, along the 52nd parallel, then likewise over Great Britain to West Germany; the central Atlantic route--from the US over the Azores to West Germany; the south Atlantic route--from the US over Bermuda to Africa, and on to the Middle East.

The airlifting of troops over the Pacific proceeds (after the Hawaiian Islands) along the following routes: one to Japan, the second to Okinawa, and the third to the Philippines. Honolulu, Midway, Johnston, Tachikawa, and others are used as intermediate airfields on this axis.

Along with a further technical development of transport aircraft and a comprehensive increase in the combat stability of airlifts across the ocean, the American command, during its many exercises, devotes considerable attention to practicing airlifts of complete large units of ground forces from the US to Europe and Asia. As the experience of these exercises has shown, flights are planned of individual aircraft to proceed simultaneously along several axes at 15 to 30 minute intervals at the most advantageous altitudes and cruising speeds. To support these flights, a complex system has been established of radiotechnical means of air navigation (the systems "Loran-A" and "Tacan", radio beacons, etc.), as well as control posts which handle the control and monitoring of flights.

From the above, it is obvious that combat with airlifts across the ocean has become very strategically significant. The successful accomplishment of this task will have a positive effect on the completion of an operation conducted in a theater of military operations. At the same time, the disruption of these airlifts is a very complex task.

First and foremost, attention is focused on the fact that the departure and intermediate air bases are located at great distances from the borders of the Soviet Union. Thus, the terminal points for the

offloading of troops and equipment are also great distances away. It must be added that on the deployment axes of the main installations of the Military Airlift Command systems in Europe and Asia there are considerable deployments of troop groupings which could offer opposition to our forces and means combatting airlifts. It is especially important to emphasize the situation wherein, after the period of decisive nuclear actions, our capabilities for calling upon forces and means to combat airlifts across the ocean may be very limited.

Under these conditions, we must find forces and means which can participate in the accomplishment of this task; and there must also be detailed planning for their use. Combat with airlifts must be organized in a manner that will make maximum use of all the capabilities for disrupting them while they are being organized and while they are being carried out. Provisions must also be made for: strikes by missile/nuclear means against airfields, bases, and concentration areas for heavy equipment; the destruction and neutralization of radiotechnical means of control and navigational support of the Military Airlift Command; and the interception and destruction of aircraft in flight.

The organization of reconnaissance is an important aspect in the accomplishment of this task. Reconnaissance has the responsibility for providing the command on a timely basis with precise coordinates of the strike targets, data on the size, axes, and nature of the airlifts, and the scope of the operation of radiotechnical means.

We believe this problem can be fully solved. If we conduct continuous observation during peacetime of the airlifts carried out by our probable enemies, we will not only obtain the necessary data for the organization of a strike, but we will also be able to judge the nature of the airlifts and the enemy intentions; and, in the end, we will be able to develop a sufficiently detailed plan for combatting airlifts both in the West, across the Atlantic Ocean, and in the East, across the Pacific. The point is that, at the present time, all the main installations of the Military Airlift Command--airfields, control posts and radiotechnical means--are stationary, operate continuously, and may be detected by radiotechnical and aerial photographic devices of aerospace reconnaissance.

When airlifts are begun during the course of the war, aerospace reconnaissance will have to refine the data on installations already known, uncover theretofore unknown airfields, and detect the location of newly deployed radiotechnical means. A decisive role here belongs to aerial photography and aerial radiotechnical reconnaissance. Moreover, we think

it possible, with the aid of aerospace means, both to photograph flying transport aircraft directly and to obtain a fix on them through radio direction-finding.

With the existing resolving capability of aerial photographic equipment which can cover a large area, it is possible to obtain data on course and air speed (and even on the type of aircraft), and, in the end, to determine the scale of the airlift as a whole. But for this, of course, the flight path of the aerospace reconnaissance vehicle must coincide with the axes of the transport airlifts.

The strategic nuclear forces are able to play a great role in the disruption of airlifts across the ocean. Even during the first nuclear strike, certain important Military Airlift Command installations (airfields, ground support means, air navigation, etc.) may be successfully neutralized with medium-range and intercontinental ballistic missiles.

It is advisable that the destruction of small radiotechnical means be assigned to the air forces, particularly to long-range aviation or, in some instances, to the Navy (mainly to naval missile-carrying aviation and to missile submarines). In doing this, it must be borne in mind that present long-range aviation can operate against targets located in Europe, Asia, and adjacent islands within the limits of the tactical radii of long-range aviation flights. The capabilities of future aircraft, with speeds significantly higher than the speed of sound, with vast operational radii and with powerful missile armament, will permit strikes to be delivered against Military Airlift Command installations in any part of the world. Furthermore, in the future it will be possible to call in aerospace vehicles to deliver strikes against Military Airlift Command installations; the crews of these vehicles will be able to conduct independent reconnaissance of the installations, evaluate them, and deliver a strike against them. Research shows that the use of aerospace vehicles to combat airlifts across the ocean is the most promising and economically advantageous means.

Combat against the radiotechnical means of the Military Airlift Command may be viewed as a constituent part of the combat conducted against enemy radioelectronic means in a theater of military operations. As is known, this combat envisages, along with other measures, various types of jamming against the operation of enemy radiotechnical means. For this purpose, it is already possible to use combined aircraft equipment which automatically searches and then jams operating radio means; this greatly inhibits the work of control post teams and aircraft crews. The deception

of crews in the air and of control post teams may prove effective in combat with the radiotechnical means of the Military Airlift Command. In our opinion, it is best that such deception be conducted by (besides the corresponding detachments in the system of strategic reconnaissance) specially trained crews in reconnaissance aircraft whose function, aside from the detection of radiotechnical means, the determination of their location by direction finding, and the discovery of the nature and parameters of their operations, also includes the conduct of deception radio traffic*.

Aviation missile strikes in conjunction with jamming and deception can substantially impede enemy airlifts across the ocean. At the same time, the enemy, anticipating strikes and various types of jamming, will doubtless adopt a number of protective measures. In particular, he may resort to the use of unsurfaced airfields and reserve means of control and navigation in nearly all areas. Finally, he may resort to aircraft flights without the use of ground radiotechnical means for air navigation but will rely on celestial orientation and, in some cases (for flights near shorelines or over islands), on visual orientation. All of this compels us to make provisions for the disruption of enemy airlifts not only by delivering strikes against ground bases, control posts, etc., but also by conducting combat in the air. This is all the more so because such combat may prove to be highly conclusive. For example, in the destruction of a C-141 aircraft, the enemy loses 40 tons of cargo or 154 persons. He suffers an even greater loss when a C-133 is brought down.

It is true, unfortunately, that the great distances of the flight routes from the borders of the Soviet Union decrease the possibilities for the use of fighter aviation. The task of destroying transport aviation in flight over the Atlantic and Pacific Oceans will become feasible with the development of new types of fighters with a large flight radius and capable of intercepting and destroying targets either autonomously or by using guidance data from specialized aircraft with radar equipment. Considering the distances of the areas of Military Airlift Command aircraft interception from airfields at which our aviation can be based, we estimate that the tactical radius of such aircraft must be not less than 3000 kilometers (in this case, the interception of transport aircraft is assured as they approach landing fields in England, France, Spain, and West

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*Under conditions of the strictest system of enciphered radio traffic, jamming and deception are a very complex matter: it is necessary to have information on communications and on the operating parameters of radiotechnical means, and also to have a clear understanding of all the professional subtleties in the work of radio operators in aircraft, control posts, etc.

Germany; or, in the Far East, as they approach Japan and the Philippines). We will note that newly developed light and very durable materials, and also the degree of power-to-weight ratio that has been achieved, allow us to consider the production of such aircraft as a matter of the near future. When this comes about, the aircraft can have a multi-purpose nature and can destroy not only aerial targets, but those on the sea and ground as well. Presently available experience in the use of fighter-mounted "air-to-air" missiles against ground targets shows that such a task is quite feasible.

In principle, it is also possible to find a solution to such a technical problem as the development of a multi-purpose aircraft--an aerospace fighter, capable of intercepting targets within a wide range of altitudes. In this case, by flight in the stratosphere and in outer space, it is possible to substantially increase its operational radius, to shorten the flight time to targets, etc. It is thought that such a version will be the most promising. The area of flight of the transport aircraft can be reached on the basis of reconnaissance data together with consideration of the forecast of their flight.

In combat with airlifts within the boundaries of the theater of military operations, an important role will belong to front aviation. In this case, its principal method of operation will be the independent search and destruction of enemy aircraft on airfields and in the air.

Aviation may also be called upon to destroy radiotechnical means and reconnaissance control posts, to perform jamming, and to employ deception against enemy crews. Especially effective will be strikes by rocket troops on landing fields, since the enemy will be forced to use alternate fields for landing, which will lead to a breakdown in the orderly process of the airlifts, to the adoption of additional measures, and to loss of time.

Considering the increasing capabilities of military transport aviation, US military specialists are speaking out with growing insistence on the conduct of airborne landing operations from the continental US to the enemy rear area without transfer of troops to the rear area bases of a theater of military operations. Such operations, in spite of the great complexity of their organization, are considered to be more advantageous from both a military and an economic point of view.

In organizing the disruption of such operations it is necessary to consider several special features. In particular, it will be necessary to have a rapid, large-scale concentration of the efforts of front fighter aviation along the axes of the airborne landing flight. This may be

attained by a prior rebasing of fighters to new airfields, and also by operating them at maximum range and landing at other airfields and by repeated flights from those airfields for the repulsion of an attack. The advantage of fighter aviation over surface-to-air missiles in this case is that the interception of transport aircraft may be carried out autonomously, without giving each fighter individual ground guidance to the target.

It must also be noted that a piloted fighter is capable of flying over areas strongly contaminated by radioactivity; the airspace over these areas could be used by the enemy for transport aviation flights to the area of the airborne landing. In many areas, especially over a water surface, there may not be a continuous field of radar detection (however, in areas where such detection exists, it may be out of action for comparatively long periods if nuclear weapons have been used). For this reason, under such conditions, fighters will be the sole force capable of successfully combatting military transport and other aircraft which support the airborne landing and the actions that take place therein. As the troops advance into the depth of enemy territory and as the fighters redeploy, the capabilities of the latter to intercept transport aircraft will increase.

In considering the forces and means capable of combatting airlifts across the ocean, it is appropriate to touch separately on the possible variants of their groupings. It is quite obvious that they must be concentrated in Europe and in the Far East.

In all probability, these will be two independent axes, on each of which the evaluation of enemy air communications and combat with airlifts must be carried out according to the plan of the Supreme High Command or else be assigned to the command in the theater of military operations (if such a command has been created). The command in the theater of military operations must have the means for reconnaissance, bomber and fighter aviation, as well as the forces and means for jamming and for conducting deception. The use of these forces and means must conform strictly to the overall course of the operation in the theater of military operations. Since the strike against the Military Airlift Command airfields and bases by rocket units must be coordinated with the strikes of the Strategic Rocket Forces according to the plan for the first and subsequent strikes, then the selection of airfields and other Military Airlift Command installations for the first strike depends on the nature of the airlifts at the moment of delivery of the strike. During the massive aviation strike which is planned to follow the strike by the rocket troops, the aviation units assigned to destroy Military Airlift Command installations will be in

operation. An attempt to organize a strike by the forces of aviation units to destroy installations of the Military Airlift Command independently of the actions of other units, would lead to a scattering of the forces and means needed to overcome the countermeasures of enemy air defense forces.

The jamming of radiotechnical means is inseparable from measures taken in accordance with the plan for combatting enemy radioelectronic means in the theater of military operations. The total complement of forces and means which are assigned to combat strategic airlifts in the East and West depends on the number of targets to be destroyed on each of these airlift axes, on the effectiveness of each means, and on the conditions of their employment.

Combat with these airlifts must also be coordinated with combat at sea conducted by naval forces, which, in providing support for combat with airlifts, can destroy floating bases, airfields, and other Military Airlift Command installations.