[TS-HK-D2466]

NATIONAL SECURITY COUNCIL
WASHINGTON, D.C. 20506

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June 15, 1970

MEMORANDUM FOR

THE SECRETARY OF STATE
THE SECRETARY OF DEFENSE
THE DIRECTOR, CENTRAL INTELLIGENCE AGENCY

SUBJECT: Air Activity in Southeast Asia

The President has directed the preparation of an evaluation of our current air activities in Southeast Asia and alternative programs for FY 71.

This evaluation should:

-- describe current Allied air activity by mission and target in each operational area: South Vietnam, Southern Laos, Northern Laos, and Cambodia;

-- analyze the effectiveness of air activity in performing its major missions, as determined by its immediate effects (trucks destroyed, enemy killed, etc.) and the implications of these effects for the enemy's military capability in Laos, Cambodia and South Vietnam;

-- evaluate the effectiveness of alternative sortie levels and munitions loadings for each major mission in each operational area;

-- formulate alternative tactical air and B-52 programs for Southeast Asia in FY 71 and their rationales;

-- determine the force levels and mixes required for alternative air programs including some consideration of possible improvements in the efficiency of our air activities through changes in the aircraft, ordnance, etc. used;

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-- the budgetary requirements for alternative air programs.

This evaluation shall be prepared by the Vietnam Special Studies Group Working Group. The study shall be completed by July 15 and, following VSSG review, submitted to the President.

Henry A. Kissinger

cc: The Chairman, Joint Chiefs of Staff

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THE WHITE HOUSE

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ACTION

June 6, 1970

MEMORANDUM FOR DR. KISSINGER

FROM: Laurence E. Lynn, Jr.

SUBJECT: Air Activity in Southeast Asia

Several months ago, the President asked for an evaluation of the effectiveness of our interdiction campaign in Laos. More recently, you approved seeking permission for a VSSG review of our air activity throughout Southeast Asia.

This memo discusses the issues involved in our Laos campaign, also summarized in a memo for the President, and presents a study plan for the President's approval (Tab A).

Air Activity in Southeast Asia

With the cessation of the bombing of North Vietnam, U.S. air activity has been focused on three principal areas:

-- In North Laos, our support of the CIA's irregulars has required a rapidly increasing U.S. air effort with about 6,000 attack sorties per month.

-- In South Laos, continued interdiction of the enemy's infiltration involved about 7,500 sorties per month.

-- In South Vietnam, attacks on enemy base areas and support of Allied ground forces require about 13,500 sorties per month.

Each of these operational areas has its own distinct operational character. While I will discuss below the character of our interdiction campaign in Southern Laos, a similar, if not more expert, evaluation of our efforts in South Vietnam and North Laos is also needed. With the granting of authority for a small interdiction program in Northeast Cambodia, we also need to look

TOP SECRET

into the problems there, particularly those associated with the starting of a new enemy logistical system along the Se Kong and Mekong rivers.

Our Bombing Campaign in South Laos

Since its inception in 1964, the principal focus of our bombing campaign in South Laos has been on destroying supplies available for shipment to South Vietnam. To do this we attack moving trucks, truck parks, and storage sites with half or more of our average of 7,500 sorties monthly. The remainder of our effort is aimed at reducing the capacity of the Laotian road-net by attacking the roads themselves and the crews that attempt to repair them.

The air resources that we use to carry on this campaign include:

-- Gunships. These converted cargo planes (C-130 and C-123s) are equipped with side-firing guns guided by night observation devices and covert illuminators. They are used to attack moving trucks in largely undefended areas.

-- Slow-Moving Aircraft. These tactical aircraft (mainly A-1s and T-38s) are equipped with guns for straffing and conventional bombs but not special night observation devices. Like the gunships, they are used mainly to attack moving trucks in lightly defended areas.

-- Fast-Moving Aircraft. These tactical aircraft (largely F-4s) are largely equipped in the same manner as the slower tactical aircraft. They are used to suppress enemy AAA fire and to attack targets in defended areas, particularly during day-time.

The strengths and weaknesses of the U.S. interdiction effort in Laos, particularly against moving trucks, largely result from the operational characteristics of our aircraft:

-- Target Acquisition. Our tactical aircraft, except for the gunships, are unable to locate their own targets. Instead, targets are located by FACs [redacted] which then 25X1 illuminate or mark the area with flares and lead the fighter pilot to the target. The noise, delay, and illumination involved in locating

a target give the enemy warning of attack and time to take countermeasures.

-- Bombing Accuracy. Our tactical aircraft generally bomb from at least 2,000 feet during the night and higher during daytime. With unguided ordnance, the expected error during daytime when most bombing is done is about 300 feet for a slow-moving plane (A-1) and 500 feet for a fast-moving aircraft (F-4). During nighttime when there is bad weather the expected errors for both aircraft types are 1000 feet or more. These bombing errors are very large given the target size presented by a moving truck or the small storage dumps typical of Laos. With laser-guided bombs, these errors could be substantially reduced but only few bombs of this type are available and few planes are equipped to use them.

-- Bomb Lethality. Our standard 500-pound bomb has a lethal area of about 75 square feet against a truck. With this lethal area and the average nighttime bombing accuracy, it usually takes 10 500-pound bombs -- two full loads of a slow-moving A-1 -- to ensure the destruction of a single truck. For the fast-moving F-4, four sorties and up to twenty 500-pound bombs are required to accomplish this same result. While other types of bombs have a greater lethal area -- firebombs and bomblets -- conventional "iron" bombs are the most frequently used ordnance.

The enemy knows these characteristics of the U.S. aircraft and the tactics used in our bombing effort. He has put great effort and ingenuity into countermeasures that reduce the effectiveness of our bombing:

-- Weather. The enemy operates almost entirely at night or in bad weather when U.S. aircraft are unable to acquire targets visually without warning the enemy and when bombing accuracies are greatly reduced. Because the enemy roadnets are operated far below their capacity, the enemy can move required supplies without exposing them to interdiction during periods of daylight and good weather.

-- Dispersal. The enemy has dispersed his truck convoys and storage areas so as to reduce target size. Convoyed trucks are often spaced about 200 yards apart so that no more than one can be destroyed by a single aircraft. Small storage areas containing five to ten tons of supplies are sprinkled throughout the countryside.

-- Camouflage. The enemy has expertly camouflaged his truck and storage areas greatly increasing the difficulties of locating them in thickly-forested and mountainous Laos. While our [redacted] 25X1
[redacted] and roadwatch teams help to offset this enemy tactic, 25X1
they are not completely successful.

-- Bomb Countermeasures. The enemy has learned to locate and disarm the mines and delayed-fuse bombs we use. Against the MK-36 anti-vehicular mine, for example, the enemy knows the location of the mine because its tail assembly sticks out of the ground after impact. Because the mine uses a magnetic fuse, the enemy, knowing its location, can trigger it easily from a safe distance using a magnetic coil. While some delay and inconvenience is caused, the enemy does not suffer substantial losses.

-- Road Repair. The enemy has scattered road repair crews and materials along all the principal routes through Laos. While the U.S. attempts to forestall repair by the use of anti-personnel mines and delayed-fuse bombs, the enemy has been able to repair any damage to its roads in less than two days with only a few hours usually required.

Because of these effective enemy countermeasures and our technical limitations, the air interdiction effort has always been relatively inefficient though not without effect. To evaluate these effects, we turn next to a more detailed discussion of truck and supply destruction and road interdiction.

Truck Destruction

Because of these difficulties, U.S. pilots in Laos report that only one out of every five enemy trucks sighted in Laos is destroyed and only a fraction of the actual movement is probably sighted. However, in spite of this acknowledged inefficiency, our pilots also report that they destroyed more than 5,000 trucks per year in 1968 and 1969 and more than 5,000 in the current dry season.

While these pilot reports represent the best information available and, with minor adjustments, are accepted by the Air Force and DIA, they may seriously overstate our actual destruction of trucks for the following reasons:

-- Pilot Error. Rewarded on the basis of reported destruction, U.S. pilots have an obvious incentive to inflate the damage reported. While the pilots reports can be checked against the reports of FACs, there is little doubt that both probably seriously overstate the damage suffered by the enemy. Following the Korean War, detailed analysis showed that individual pilots reported as much as ten times as much destruction as had actually occurred because they tended to restrike over and over targets already destroyed. Because of poor visibility caused by the height, the weather, and effects of exploding bombs, pilots and FACs are often unable to accurately assess the damage they have caused.

-- Other Evidence. Post-strike photography has never revealed the large numbers of disabled trucks in Laos expected from pilot reports. Our best intelligence is that the enemy's total inventory of trucks in Laos (1000 to 1400 vehicles) is substantially less than the trucks reported destroyed even in some periods as short as a month.

For these reasons, I believe it is likely that our estimates of enemy truck losses, based on pilot reports, are probably substantially overstated. This judgment is informally shared by many individuals in the services.

Secondary Fires and Explosions

Besides attacking moving trucks, our bombing effort also hits enemy storage areas and truck parks. The assessment of damage done to these facilities is based largely on the number of secondary fires and explosions reported by U.S. pilots. During the current dry season, our pilots have reported about 20,000 secondary fires and explosions compared to 13,000 in the same period last year. In general, these secondary fires account for about two-thirds of the total supplies the DIA and the Air Force report that the enemy has lost through our air campaign.

However, there is no reliable means of checking these reported results or determining their significance in terms of enemy personnel and supply losses. For purposes of analysis, the Air Force and DIA assign an estimate of the supply tonnage lost in each secondary explosions but these estimates represent little more than arbitrary assumptions that cannot be independently corroborated and are undoubtedly subject to serious errors.

Enemy Supply Flows

Based on the uncertainties of the reported destruction, the intelligence community has been at odds over the extent to which enemy supplies in Laos are actually destroyed by our bombing effort and whether, given the known supply flows into Laos and consumption there, the enemy has more or less supplies available than he needs to meet his requirements in South Vietnam. The two principal views are:

-- The Air Force and DIA officially accept the pilot's reports of trucks destroyed and secondary explosions at face value. Extrapolating these effects into supplies lost to the enemy, they find that the enemy is losing or consuming in Laos more supplies than he has been bringing into Laos. They conclude, therefore, that the enemy has only maintained the flow of supplies into South Vietnam by depleting stockpiles previously built up in Laos.

-- The CIA believes that the actual supplies lost to the enemy are substantially less than reported by our pilots. [redacted] 25X1 [redacted] 25X1 they believe that the enemy loses about 25% of his supply flow in Laos and that consequently the enemy has more supplies available in Laos than needed to both supply South Vietnam and build substantial stockpiles in Laos.

Thus, there is a basic disagreement about the enemy's supply situation in Laos. Aside from the factors, such an overstatement of enemy losses already mentioned, the principal reason for supporting the CIA view is that our information on actual enemy supply flows into South Vietnam shows that the enemy is able to vary his supply flows greatly, increasing them to levels far beyond his minimal requirements even during periods of intense bombing. During January and February, 1970, the enemy's actual supply flows were almost four times the estimated requirements of VC/NVA forces in SVN during the same period. If these flows occurred, I believe that they prove beyond a reasonable doubt that our interdiction effort has not limited substantial increases in enemy supply flows. This direct evidence is corroborated by what we know of the capability of the enemy supply system: its excess road and truck capacity, and relatively low manpower requirements.

On the other hand, if the pilot reports and the Air Force/DIA view of their implications are correct, they form a strong argument that the interdiction campaign in South Laos has effectively forced the enemy to deplete his stockpiles of war material there and may have reduced enemy supply flows into South Vietnam below its requirements there for some periods.

Other Bombing Effects

Although our bombing may not effectively reduce enemy activity in South Vietnam, it does increase the resources required from North Vietnam and its allies to support its forces and continuously disrupts enemy logistical activity creating substantial managerial difficulties for North Vietnam.

The cost to North Vietnam consists of the supplies destroyed and men killed by our bombing. Since 1964, about 15,000 trucks and 70,000 tons of supplies with an estimated value of $167 million have been reported destroyed. While almost all of this material is provided by Hanoi's allies - not North Vietnam itself - it undoubtedly represents some loss to North Vietnam.

Because our bombing is directed mainly against logistical targets it has not cost the enemy dearly in manpower. Although the incidence of disease among infiltrating personnel is high, most of their personnel recover and few permanent losses (about 10% of the infiltrators) result from it. Likewise, while the North Vietnamese have to maintain some manpower in Laos to offset the effects of bombing that could otherwise be redeployed, the numbers involved (10,000 to 20,000 men) are not substantial.

In addition to increasing the cost to North Vietnam, the bombing in Laos also disrupts the flow of supplies to base camps in South Vietnam. While little is known on this point, I think that these disruptions probably have a very limited impact on enemy operations within South Vietnam itself, because the enemy has been able to maintain his overall supply flows at or above required levels. Though enemy supply shortages are reported in South Vietnam, they are usually caused by forward distribution problems - inadequate numbers of laborers, allied distraction of VC storage areas, and poor transportation - not an overall shortage of supplies coming from Laos.

Even though the disruptive and cost-increasing effects of our bombing are relatively slight, I nevertheless think that they are important enough so that some interdiction campaign can be justified.

There are, however, numerous improvements in our present campaign that would achieve these results at a decreased cost or increase our effectiveness at current expenditure levels.

Some possible improvements are:

-- Wet Season Bombing. The Air Force has usually continued its interdiction effort in South Laos during the wet season at only slightly-reduced levels (5,000 to 7,000 sorties monthly). Because the enemy has sharply reduced his supply activity during these periods, these sorties have been much less effective than sorties made during the dry season when targets are plentiful.

-- Aircraft. The fast-moving jet aircraft (F-4s) used by the Air Force are much less effective than either slow-moving (A-1 or A-20) or gunships (AC-130) aircraft at destroying enemy supplies. Nevertheless, because of its desire to keep fast-moving aircraft in its post war inventory, the Air Force has consistently redeployed slow-moving aircraft rather than fast-moving aircraft and has never deployed gunships in appropriate numbers. As a result, our interdiction effort is probably less effective and more costly than it needs to be.

-- Ordnance. The development of new ordnance suitable for Laos and the reduction of ordnance already developed suffers from many shortcomings. We still largely use conventional "iron" ordnance in Laos even though we have every reason to believe that CBUs, napalm and laser-guided bombs are more effective.

With DOD plans to reduce our overall air effort in Southeast Asia, it is critical that we develop as efficient an air effort in Laos as possible. However, even if our air activities in Laos were as efficient as possible, we would still face the difficult strategic problems created by a budgetary squeeze on our air activity including:

-- Determining the overall sortie level in Southeast Asia required to support our military and diplomatic strategy.

-- Allocating these sorties among the various operational areas and missions within those areas.

-- Funding the level of air activity that appears desirable on strategic grounds.

I have prepared a directive from you to the VSSG designed to start a study effort answering these questions. I suggest that you seek the President's support for the study and familiarize him to a greater extent with the nature of the problem.

RECOMMENDATION

That you forward the enclosed memo (Tab A) to the President asking his approval of a VSSG evaluation of air activity in Southeast Asia.

Approve_____ Disapprove_____

If you feel the memorandum for the President is unnecessary, I recommend you sign the study directive. (Tab B)

Attachments