MEMORANDUM FOR THE SECRETARY OF DEFENSE

Subject: Effects of Accelerated Interdiction in North Vietnam


2. (U) The referenced study discussed the expected results that an intensified interdiction program against North Vietnam would have upon Democratic Republic of Vietnam (DRV) support of combat in South Vietnam. The study concluded that a reasonable degree of success in the air campaign in the north could be expected which, in turn, would effectively deny adequate support to an increased level of insurgency in the south. However, time precluded the determination, in quantitative terms, of such an effect. In response to your request, a detailed analysis of the effects of an accelerated interdiction program against North Vietnam has been made.

3. (U) The objective of the strategy, as stated in the referenced study, is to cause the Viet Cong/Democratic Republic of Vietnam (VC/DRV) to stop the war or to make them ineffective if they seek to pursue it. The study presupposed that operations supporting this strategy will be carried out without restriction, restraint, or delays due to planning uncertainties.

4. (U) One of the elements of the basic strategy in the reference is to deny adequate logistical support to the enemy. It is intended that this denial be achieved by a combination of the following actions:
a. Reducing the amount available at the source, by a more concentrated effort in North Vietnam, thus reducing the amount available for movement.

b. Reducing the amount of materiel entering South Vietnam, or at least disrupting current operations as to timing, by air interdiction of present movement and/or establishment of some types of anti-infiltration barrier.

c. Raising the intensity of combat to that level where VC/DRV consumption rates of heavy items, principally ammunition, could not be sustained by present efforts, thus causing a loss in effectiveness or greater effort on his part.

5. ROLLING THUNDER results through June show that this operation, as conducted to date, has not achieved either the military purpose of causing the DRV to cease and desist, or the political purpose of bringing the DRV to the conference table under circumstances favorable to the United States. As a result of constraints, i.e., on targeting and weight of effort, the military and economic effect of the bombings have been minor in relation to total capacity in North Vietnam, nor has the limited interdiction of DRV LOCs in the ROLLING THUNDER program appreciably curtailed the delivery of the small amount of support required by the VC/DRV forces in South Vietnam. However, this air strike program against the DRV can be expanded to a full-scale air campaign against selected military and industrial targets and interdiction of land and sea LOCs, which would result in a greater reduction in the amount of materiel available and the flow of this materiel to the insurgents. Concurrent offensive operations against the VC/DRV forces in South Vietnam, if successful in causing the enemy to engage in heavy combat, would compound the problem of external support required to sustain the insurgencies by causing an increased resupply requirement. An examination of the support required by the VC/DRV forces under heightened combat conditions is contained in Appendix A. An Illustrative expanded air strike program against the DRV, designed to achieve the objectives stated above, is attached in Appendix B.

6. A quantitative analysis of the estimated effects of the accelerated interdiction program upon VC/DRV capabilities is attached in Appendix C. The conclusions of this analysis are:
a. Stepped-up interdiction efforts against the DRV target system would significantly affect industrial and commercial activity in the DRV and place in serious jeopardy the viability of the nonagricultural sector of the North Vietnamese economy.

b. Accelerated air interdiction of LOCs and other combat support facilities in North Vietnam and Laos cannot reduce the flow of supplies to VC/PAVN forces below that necessary to support present or somewhat expanded levels of combat activity in South Vietnam. Significant limitation of DRV capability for further expansion of support, however, can be achieved (see Appendix C).

c. The infiltration routes cannot be interdicted to the extent that some logistic support could not reach the VC and PAVN forces in South Vietnam. The adverse impact of our intensified interdiction efforts upon the economic life and upon the morale of the people of North Vietnam could cause the DRV leaders to choose between meeting the requirement for increasing support to the VC/PAVN and diverting the diminished flow of imports to increasing domestic needs. The time required to reach such a decision point would depend upon the scope and effectiveness of the effort of the communist countries (particularly Communist China) to offset the effects of the US interdiction program.

d. Sustained air interdiction if accompanied by a mining campaign and other effective maritime control measures appears to afford a significant means of applying pressure across the board against DRV LOCs and could stop any significant flow of heavy war material into North Vietnam.

e. Unless a large-scale Chinese communist and/or Soviet military and economic assistance program were initiated, residual DRV logistic capabilities would be insufficient to support a PAVN conventional invasion of South Vietnam or Laos; or to support widespread "stage three" combat operations by total VC/PAVN forces within South Vietnam. Under these circumstances it is probable that VC/PAVN forces in the RVN would attempt to continue to refuse combat, except under conditions favorable to them.
At this point, our ability to seek out the enemy through intensified intelligence and reconnaissance activities would be the critical factor in forcing him to use his logistical stocks.

7. [redacted] In summary, an expanded program of interdiction would probably not stop the flow of supplies required by current or somewhat expanded levels of VC/PAVN activity; it might, however, restrict the increased flow required to sustain a major step-up in operations.

3. [redacted] The air interdiction campaign under consideration is only one of several actions required to support the over-all strategy for South Vietnam. The Joint Chiefs of Staff are considering and will forward at an early date a "Concept for Vietnam" which encompasses the broad aspects of the military actions required to destroy the DRV will and capability to support insurgency in South Vietnam and to eliminate the Viet Cong threat to the GVN. The Joint Chiefs of Staff recommend that interdiction be viewed as an integral and essential part of this total US military campaign against the insurgency in Southeast Asia.

For the Joint Chiefs of Staff:

SIGNED,

EARLE G. WHEELER
Chairman
Joint Chiefs of Staff

Attachments
APPENDIX A

VC/DRV EXTERNAL LOGISTICS REQUIREMENTS

1. (D) Present Requirements. The present level of insurgent activity in South Vietnam generates a requirement for approximately 13 short tons per day of external logistical support. The introduction of any full-strength PAVN divisions would increase this requirement by 12 short tons per day per division at the current low levels of combat.

2. (D) Requirements at Increased Level of Combat

   a. Tactical operations in South Vietnam call for offensive operations against the VC/DRV forces, which would generate a marked increase in the present 13 short tons external support required per day. If the VC/DRV units could be made to engage in a markedly intensified level of combat, their approximately 147-battalion equivalents (including elements of the PAVN 325th Division) would require approximately 147 short tons per day of external support. The introduction of any full-strength PAVN divisions would increase this requirement by approximately 100 short tons per day per division.

   b. It is seriously doubted that the VC can be made to engage at the level of combat required to generate this marked increase in support requirements. Our offensive operations can increase the VC requirement to some extent; however, the amount is primarily a function of their choosing.
APPENDIX B

AIR STRIKE PROGRAM AGAINST NORTH VIETNAM

1. Concept. The concept, simply stated, is to conduct an air strike program against North Vietnam (NVN) which increases in intensity and severity of damage over the period to accomplish the objectives of the program. This program completes initial strikes against the remaining fixed targets in the Democratic Republic of Vietnam (DRV), and concurrently conducts an intensified armed reconnaissance effort to maintain interdiction of the LOCs and to sustain the desired damage levels against targets previously struck.

   a. The initial phase consists of completion of the encirclement of the Hanoi-Phuoc Yen area by conducting strikes against key fixed installations in the Haiphong-Hon Gai complexes, the severance of the primary LOCs leading into China, and mining DRV territorial waters of the major port approaches. This initial action would be accompanied by an extension of the day and night armed reconnaissance missions to the northwest and the northeast from the present limited geographical area. The objective of the armed reconnaissance would be to harass recovery efforts, and sustain interdiction to include attacks against junks, barges, and shipping on inland and coastal waterways and in DRV ports. This initial program should bring home to the population that the heartland of North Vietnam is now the only area left untouched, and that this will remain a sanctuary only at our choosing. In conjunction with initial attacks against fixed targets and armed reconnaissance, restrikes would be conducted against targets previously struck but which have a high residual value.

   b. The second phase consists of an initial series of strikes to neutralize the SA-2 SAM sites and to eliminate...
the MIG/IL 28 threat. This is to be followed by strikes against the primary military targets in the Hanoi-Phuc Yen area and an expanded armed reconnaissance program throughout all of North Vietnam.

c. The third phase completes attacks against POL and electric power plants, continues attacks on other military targets, and initiates attacks against important industrial installations in the Hanoi-Haiphong area. Concurrently, the armed reconnaissance program is increased throughout the DRV with primary emphasis on maintaining the interdiction of land and sea LOCs to reduce the movement of war supplies into the country from China and out of the country to support the Pathet Lao and Viet Cong.

d. The fourth phase consists of a clean-up of unstruck targets, restrike of targets with a high residual value, and a further intensification of the armed reconnaissance program with the objective of sustaining military pressure in order to cause the DRV to cease and desist supporting the insurgencies in Laos and the Republic of Vietnam.

e. A follow-on phase, consisting of an armed reconnaissance program, restrikes on fixed targets to maintain appropriate neutralization, and strikes on new targets, would be continued for an indefinite period.

2. (4) Weight of Effort. The present ROLLING THUNDER bi-weekly program consists of approximately 1,000 strike sorties, divided about equally between fixed targets and armed reconnaissance. To accomplish the air strike program against the DRV, as outlined in paragraph 1 above, requires an increase in the weight of effort to about 1,975 strike sorties for each two-week phase. The follow-on phase would require approximately 1,200 sorties weekly with the preponderance of effort devoted to armed reconnaissance.
3. The strike, restrike and armed reconnaissance sortie totals for each two-week phase are tabulated below.

<table>
<thead>
<tr>
<th>PHASE</th>
<th>FIXED TARGETS</th>
<th>ARMED RECC</th>
<th>RESTRIKES</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>802</td>
<td>1,000</td>
<td>150</td>
<td>1,952</td>
</tr>
<tr>
<td>II</td>
<td>802</td>
<td>1,000</td>
<td>150</td>
<td>1,952</td>
</tr>
<tr>
<td>III</td>
<td>778</td>
<td>1,050</td>
<td>150</td>
<td>1,978</td>
</tr>
<tr>
<td>IV</td>
<td>646</td>
<td>1,150</td>
<td>200</td>
<td>1,996</td>
</tr>
<tr>
<td>Subsequent</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,400</td>
</tr>
</tbody>
</table>

NOTE: Fixed target sorties are based on approximations used in current ROLLING THUNDER computations. Armed reconnaissance sorties are estimates based on extending area coverage and increasing weight of effort on key routes.
APPENDIX C

ESTIMATED EFFECTS OF ACCELERATED INTERDICTION
PROGRAM AGAINST VC/DRV LINES OF COMMUNICATION

BACKGROUND

1. Since North Vietnam (DRV) produces only minor quantities of manufactured goods, including war material, the nation is dependent upon external sources, primarily Communist China, for the bulk of its requirements for these products. The most important logistic routes for the movement of these vital supplies into North Vietnam are the two railroad lines connecting Communist China with the Hanoi-Haiphong complex. Military supplies and equipment enter the DRV at both Dong Dang and Lao Cai, but the route through Dong Dang, NE of Hanoi, is believed to be the primary route. At the present time movement of supplies by rail is probably supplemented by use of the several roads leading from China to North Vietnam and by seaward cargoes entering the major port at Haiphong and also possibly at other minor ports. From Haiphong, manufactured goods and military equipment are distributed by rail and truck to Hanoi or are sent to the south, including South Vietnam, directly by sea.

2. North Vietnamese support to the Viet Cong (VC) has been and continues to be covert. This support is provided in the form of both men and material infiltrated by three general methods:
   a. By land routes from the DRV through Laos and Cambodia into South Vietnam.
   b. By waterborne traffic utilizing rivers and canals in the DRV, southern Laos, Cambodia, and South Vietnam.
   c. By seaward traffic originating in the DRV and proceeding to selected coastal areas in South Vietnam currently under the control of the VC.
DISCUSSION

3. ( ) In order to supply VC/DRV troops in the RVN (i.e., 69,000 main force VC and elements of the PAVN 325th Division), it is estimated that the DRV must provide and transport an average of 13 short tons per day to South Vietnam. In addition, the PAVN is believed to require 60 short tons of supplies per day for its forces deployed in the southern portion of North Vietnam and 21 short tons per day for Pathet Lao/PAVN troops in southern Laos. US/RVN air strikes over the past several months on the transportation facilities of North Vietnam and Laos have reduced the capabilities of the DRV transportation systems, but not below the tonnages the communist forces require for conduct of operations at their present low level.

4. ( ) A great intensification of air strikes against lines of communications targets in the DRV, including rail and highway facilities on the line connecting North Vietnam with China would affect significantly the industrial sector of the economy, but it is believed to be virtually impossible to halt completely the flow of vital war materiel to North Vietnam. This is the conclusion reached also by a recent CIA study of this question. Even if the attacks were to destroy the major DRV petroleum storage facilities, it is considered that by increased utilization of manpower, inland waterways, and more primitive means of transportation, the DRV would retain sufficient logistic support capacity to support the present level of North Vietnamese, Viet Cong, and Pathet Lao operations. The level of CHICOM assistance to the North Vietnamese required to overcome US interdiction efforts against DRV lines of communication cannot be estimated with any degree of accuracy at this point. Nevertheless, there...
appears to be a serious doubt that, unless a massive Chinese Communist and/or Soviet military and economic assistance program was initiated, the residual transportation capacity in North Vietnam (after essential military requirements have been met) would be adequate to transport the goods needed to support national requirements. For example, it is estimated that if all of the JCS numbered rail LOC targets were successfully interdicted, the total DRV rail capacity would be reduced from 5,800 short tons per day to a negligible amount. Likewise, intensified interdiction of highway through routes and inland waterways would drastically reduce delivery of supplies to VC bases in South Vietnam. Moreover, the cumulative effect of the prolonged US/RVN interdiction effort is likely to magnify the adverse effects generated by the air strike program. Sustained air interdiction if accompanied by a mining campaign and other effective maritime control measures appears to afford a significant means of applying pressure across the board against DRV LOCs and could stop any significant flow of heavy war material into North Vietnam.

5. From an original pre-strike capacity to deliver an estimated 4,000 short tons per day (STPD) to the Hanoi-Haiphong complex via highway LOCs, post-strike capacity, limited further by wet season conditions, would be reduced to less than 900 STPD. Of this reduced amount, at least 800 STPD could be delivered from the Hanoi-Haiphong area southward. Considering continued interdiction, deteriorating road conditions, and requirements for PL/PAVN needs in the Plaines des Jarres, supplies able to be delivered to the Vinh area would be reduced to 320 STPD with a backlog of about 200 STPD piling up (or diverted to seaborne delivery) near the Phu Dien Chau area. The land LOC system below Vinh would be capable of passing only 200 STPD, leaving over 100 STPD backlog in the Vinh area which could be diverted to seaborne or inland waterway LOCs. With further reduction in land route capacity southward, only 160 STPD could be moved forward with equal portions of 80 STPD going south on Routes 1 and 101, and 80 STPD southwest to the Lao border.
6. With an estimated PAVN DMZ force requirement of 60 STPD, a surplus of only 20 STPD is available for passage over North Vietnamese Route 102 to Laos Route 92. Reducing throughput capacity by a further 50% at the principal choke-point at Mu Gia Pass, a remainder of only 40 STPD is available for movement southward on the Route 12/23 axis. Of this figure, 21 STPD are allocated for support of PL/PAVN forces in the Laos Panhandle, leaving only 19 STPD to reach Route 92 via Route 9. With the combination of 20 STPD arriving over Route 102 (parallel to the DMZ), it is estimated that 39 STPD would be available for delivery to the Viet Cong via Route 92. This amounts to a reduction of 90% of the approximate 400 STPD capacity of this means of access before interdiction. See Annex for schematic diagram of estimated LOC capacities after interdiction.

7. As stated above (paragraph 3), it is estimated that current VC/PAVN forces in South Vietnam require approximately 13 tons of supplies per day from sources outside the RVN. This requirement can easily be met from the 39 STPD route capacity at the southern end of Route 92 in Laos. Moreover, it is probable that at least part of the surplus capacity has been utilized by the VC/DRV/PL to stockpile reserve supplies in southeast Laos, in VC base areas in South Vietnam, and in eastern Cambodia. In response to increased US/Allied combat operations in South Vietnam, the VC/DRV have several options open to them: (a) Utilize their Route 92 logistic corridor to its full estimated capacity of 39 tons per day to permit an intensification of VC/PAVN combat activities with existing forces. (If the estimated VC requirement of 13 tons per day from external sources is accurate, then the 39 tons route capacity would permit a three-fold increase in the level of combat by existing VC/PAVN forces in...
South Vietnam. (b) Reinforce existing VC/PAVN troop strength in the RVN with up to an additional 20,000 to 30,000 men. (Since each additional 10,000-man increment would require an estimated 12 STPD from the DRV, 36 STPD plus the current 13 STPD requirement would be within the estimated 39 STPD capacity of the Lao corridor supplemented by an estimated 10 STPD infiltrated by inland waterway and sea.) (c) Undertake a combination of intensified actions by VC/PAVN forces in the RVN, plus moderate reinforcements by additional infiltration from North Vietnam.

8. It is estimated that the 147 VC/PAVN battalion equivalents would require about 147 tons of supplies per day if they could be forced to engage in a moderate level of combat. The 39 ton per day capacity of the Laos corridor route would obviously be incapable of meeting this 147 ton per day requirement. It is believed that, in addition to the land corridor route, infiltration of supplies is occurring through VC/DRV use of inland waterways in Laos and Cambodia and by seaborne traffic along the coast of Vietnam. Although available evidence is insufficient to place a quantitative value on the tonnages of supplies infiltrated into South Vietnam through use of these latter two methods, it is improbable that actual tonnages delivered would come close to meeting the 147 tons per day required. It is possible, however, that these latter two methods could add as much as 10 tons per day to the estimated 39 ton capacity of the Laos land corridor. In addition to the methods described in detail above, it must be recognized that demonstrated communist ability to utilize improvised logistic procedures over alternate routes could materially add to the tonnages deliverable by conventional means. Undoubtedly, the VC/DRV also recognize their inability to meet the logistical demands of a vastly accelerated level of combat action within South Vietnam.
Vietnam. Therefore, their most probable course of action under the new circumstances will be to continue to choose carefully the times and places for engagements with US/RVN/Allied forces. In coping with larger US forces employed in a more aggressive fashion, it is probable that the VC would seek to avoid the kind of engagements which risked a serious communist defeat. Instead, they would probably concentrate on harassments intended to bleed and humiliate US forces, trapping and destroying isolated units where possible. In addition, the VC would almost certainly continue to attempt the piecemeal destruction of vulnerable ARVN units and isolated installations whenever opportunities presented themselves, with the aim of further eliminating ARVN enclaves in remote provincial and district capitals. By careful selection of vulnerable targets the VC could measurably increase their stocks of captured supplies.

CONCLUSIONS

9. ( ) Stepped-up interdiction efforts against DRV target systems would significantly affect industrial and commercial activity in the DRV and place in serious jeopardy the viability of the nonagricultural sector of the North Vietnamese economy.

10. ( ) Accelerated air interdiction of LOCs and other combat support facilities in North Vietnam and Laos cannot reduce the flow of supplies to VC/PAVN forces below that necessary to support present or somewhat expanded levels of combat activity in South Vietnam. Significant limitation of DRV capability for further expansion of support of the VC, however, can be achieved.

11. ( ) Sustained air interdiction if accompanied by a mining campaign and other effective maritime control measures appears to afford a significant means of applying pressure across the board against DRV LOCs and could stop any significant flow of heavy war material into North Vietnam.
12. ( ) The infiltration routes cannot be interdicted to the extent that some logistic support could not reach the VC and PAVN forces in SVN. The adverse impact of our intensified interdiction efforts upon the economic life and upon the morale of the people of North Vietnam could cause the DRV leaders to choose between meeting the requirement for increasing support to the VC/PAVN and diverting the diminished flow of imports to increasing domestic needs. The time required to reach such a decision point would depend upon the scope and effectiveness of the effort of the communist countries (particularly Communist China) to offset the effects of the US interdiction program.

13. ( ) Unless a large-scale Chinese communist and/or Soviet military and economic assistance program was initiated, residual DRV logistic capabilities would be insufficient to support a PAVN conventional invasion of South Vietnam or Laos; or to support widespread "stage three" combat operations by total VC/PAVN forces within South Vietnam. Under these circumstances, it is probable that VC/PAVN forces in the RVN would attempt to continue to refuse combat except under conditions favorable to them. At this point, our ability to seek out the enemy through intensified intelligence and reconnaissance activities would be the critical factor in forcing him to use his logistical stocks.

14. ( ) In summary, an expanded program of interdiction would probably not stop the flow of supplies required by current or somewhat expanded levels of VC/PAVN activity; it might, however, restrict the increased flow required to sustain a major step-up in operations.