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MONOGRAPH

12 March 1973

Research paper

OBSERVATIONS - AIRPOWER STRATEGY IN NORTH VIETNAM

By

LIEUTENANT COLONEL RUSSELL W. YOUNGBLOOD

USAF

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USAWC RESEARCH PAPER

OBSERVATIONS--AIRPOWER STRATEGY IN NORTH VIETNAM

A MONOGRAPH

by

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USAF

US Army War College  
Carlisle Barracks, Pennsylvania  
12 March 1973

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ABSTRACT

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↘ The air war in NVN was conducted without a well-defined strategy. Politically warped, indecisively applied and poorly targeted, tactical airpower provided little coerciveness to influence the enemy's behavior. Unfortunately the credibility of tactical airpower has suffered to the degree that future contingencies may be detrimentally affected in spite of the more viable policies employed by the president in Spring 1972.

International relations are a function of power politics. If a nation has power and at the same time declares a situation strategically vital to national interests, then the power should be applied quickly with well thought out objectives for each instrument of power employed. Military force applied quickly and decisively could well be more compassionate in the long run in terms of casualties and world opinion. It is suggested this could have been achieved in the Air War against North Vietnam by early application of an escalation type strategy incorporating controlled levels to include mining of both Haiphong Harbor and coastal waterways, severance of the main northern supply routes, destruction of NVN aircraft, the flooding of rice fields and interdiction against all key industry vital to the war effort. ↗

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## A CONCERN FOR THE FUTURE

It is obvious to even the casual reader that the public, academia, Congress, and news media became increasingly critical of the apparent results from US airpower as used in North Vietnam from 1965 to the major bomb halt in 1968. This disenchantment can have a decided adverse effect on our tactical aviation posture in terms of future weapon systems and associated equipment. Additionally, future planning for contingencies as reflected in the budget may not rely as heavily on airpower or its sophisticated weaponry as it should.<sup>1</sup>

Why such disenchantment? What caused heavy criticisms such as the statement by the former Commandant of the US Marine Corps, General David M. Shoup, in which he described the US bombing effort in North and South Vietnam as "one of the most wasteful and expensive hoaxes ever to be put over on the American people"?<sup>2</sup> US fighter pilots are among the best trained airmen in the world. The aircraft they fly are sophisticated and truly incorporate the highly desirable characteristics of flexibility, responsiveness, and massive ordnance delivery capability. These characteristics were even further enhanced by both a highly developed command and control system and the efficient incorporation of air-to-air refueling which substantially increased the combat radius of tactical fighter aircraft.

## WHAT, THEN HAPPENED?

Relying solely on unclassified information, one can piece together a scenario starting with the Gulf of Tonkin incident in August 1964. Twelve hours after NVN torpedo boats attacked a US destroyer, 64 tactical fighter aircraft attacked naval installations in 5 NVN ports, destroying or damaging 50 PT boats along with several petrol dumps. This action was not only fitting in terms of target selection, but powerful and timely in terms of response.<sup>3</sup>

Unfortunately, from the Tonkin incident on, airpower strategy went downhill. Because of political sensitivity, strategic targets in NVN struck by US aircraft were chosen in Washington on a weekly basis and needed tri-approval from the Office of the Secretary of Defense, the Department of State, and The White House. Some targets, referred to as "fixed," were listed individually and needed approval for each target to be hit or rehit.<sup>4</sup> From the start in 1965 of the bombing of NVN to its cessation in November 1968, this tight and cumbersome control over target selection by remote tacticians never loosened. The sometimes ghastly results of this "command and control" can be illustrated by the following examples:

(1) Although it was evident that aid from USSR and China was being transported to NVN at the "top of the NVN funnel" via the port of Haiphong and over rail from the North, the bombing initially concentrated on southern infiltration routes beginning in the panhandle and moved slowly northward.<sup>5</sup> In the



meantime, NVN proceeded to build its air defense system at an alarming rate, culminating in a defense network rated by some as third in the world (second only to the USSR and Israel).<sup>6</sup>

(2) It wasn't until June 1966, fully 16 months after the air war was initiated in NVN that fighter bombers were permitted to hit key oil storage areas in NVN. By this time, the thinking enemy had finessed US actions by dispersing the oil by building underground or fortified tanks near major transportation routes and placing thousands of smaller oil drums throughout villages and the countryside. Even after intensive bombing of main oil storage areas, it was estimated a four-month supply of oil was still available to NVN.<sup>7</sup> This, supplemented with continuing imports enabled NVN to meet ongoing requirements. It is possible the real and immediate failure of the POL strikes was reflected in the undiminished flow of men and supplies to the war in the South.<sup>8</sup>

(3) When Russian SA-2 SAM missiles and associated equipment were imported, the solitary area in which they were assembled and operationally checked out was not released as a target. Only after the SAM sites were established, operational, and ringed by lethal AAA were pilots authorized to attempt destruction of the SAM capability.<sup>9</sup> The number of operational SAM sites went from zero in 1965 to over 200 in 1967.<sup>10</sup>

(4) All Russian and Chinese AAA was repaired and serviced at a single installation in NVN, yet US planes were banned for several months from hitting it.<sup>11</sup>

(5) US pilots were forbidden to hit MIG airfields as the enemy aircraft and radars were first shipped into NVN. When target authorization was finally received, many aircraft were protected by revetments, heavy flak and underground fuel installations.<sup>12</sup>

(6) The main air defense center at Hanoi's Gia Lam airport was never authorized to be bombed from 1965 to 1968.<sup>13</sup>

(7) Interspersed within the bombing campaign of NVN were periods of partial or complete bombing halts. Each time, US intelligence recorded dramatically increased levels of materiel and men moving toward South Vietnam, as well as improvements in the air defense network.

(8) Gradualism and restrictions in the bombing campaign allowed the enemy time to adapt itself to the bombing, replenish and disperse its stock, diversify its transportation systems and improve its defenses. One CIA report in early 1966 noted "almost 80 percent of NVN's limited modern industrial economy, 75 percent of the nation's population, and the most lucrative military supply and LOC targets have been effectively insulated from air attack."<sup>14</sup>

Examples like these have prompted evaluations such as "with this track record of timid, inept and ineffective application of US airpower over NVN, it is small wonder any threat of force, either real or implied, is unlikely to yield any concessions from Hanoi."<sup>15</sup> The examples cited also cause wonder at the optimistic evaluations tendered by some of our major policymakers, from Mr. McNamara's famous prognostication in the early stages of the NVN bombing

campaign that our "boys will be home by Christmas" to a more recent statement by Henry Kissinger in 1969 to a group of war protestors, "If we have not ended the war six months from now, you can come back and tear down the White House fence."<sup>16</sup>

#### WHAT WAS OUR STRATEGY?

Top US officials, including the president have announced three main objectives for the air war in NVN.<sup>17</sup>

(1) To raise the morale of allied troops in SVN by denying the enemy a sanctuary.

(2) To limit the flow or substantially increase the cost of infiltrating men and supplies from NVN.

(3) To exact a penalty against NVN.

In discussion concerning these objectives, a high ranking USAF officer in the Office of the Secretary of Defense stated the objectives were quite limited, the decision was made in Washington that the main effort would be the war in the South and "the air campaign against the North was strictly complementary to the war in the South where it was expected the key decision would be made."<sup>18</sup> It was concluded air operations in the North, when viewed in this light, were "quite effective."

It is difficult to accept this optimistic evaluation. Russian and Chinese supplies to NVN exceeded damages caused by the war. Therefore in pure military terms NVN actually gained in prowess during the bombing. For example, January 1969 estimates placed NVN loss of capital stock and military facilities at \$770 million,

but aid from its allies totaled \$3 billion.<sup>19</sup> Infiltration of men to the South increased from 35,000 in 1965 to 89,000 in 1966 and to 150,000 in 1968. DOD estimated twice as many trucks were moving south in 1966 than before the bombing commenced.<sup>20</sup> Meanwhile the air defense posture ironically increased the number of operational SAM's from zero to over 200 in 1967 and anti-aircraft guns increased during the same time frame from 1,500 to 8,000.<sup>21</sup> A special seminar study, sponsored by the Department of Defense, concluded there had been an appreciable improvement in SVN morale immediately after the bombing started but it could never constitute a permanent support for morale.<sup>22</sup> There was no evidence that the bombing campaign in NVN further solidified the country of SVN in their war effort.

#### WHAT WERE THE NORTH VIETNAMESE DOING ALL THIS TIME?

As described earlier, the air war against NVN was a gradual and restricted program that included several pauses or respites. At no time from 1965 to 1968 did the infliction of pain from the air cause unexpected damage. The gradual application of power allowed the NVN to monitor international reactions and psychologically adjust to the bombings. Practically speaking, they had ample time to institute countermeasures as they created a strong defense, built bomb shelters, dispersed industry, erected alternate lines of communications and supply and negotiated increased aid from USSR and China. The centralized government and economy was decentralized as provinces became decisionmakers concerning their own self-sufficiency. When the first bombs began to fall in 1965,

steps were taken to disperse people from the cities, and by the summer of 1966, factories, schools, shops, and most government officials had left Hanoi.<sup>23</sup>

The government of NVN may have had assurances that USSR and China would continue needed supplies and assist with the rebuilding of NVN's economy after the war. This would have provided long range expectations to help weather out the current bombing damage. In any case, the protracted bombing in NVN probably helped solidify the resolve of the North Vietnamese people. Falling bombs were a constant reminder that the homeland was being threatened. Hardships forced each person to feel an importance in his contributions, no matter how small. Citizens were forced to turn to the local Communist Party for leadership, protection and means for survival. In fact, when the bombing stopped in 1968, tight discipline of the North Vietnamese may have loosened.<sup>24</sup> A study by the Jason Division (Institute for Defense Analysis) summarized, "the planners of the campaign exhibited a general failure to appreciate the fact . . . that a direct frontal attack on a society tends to strengthen the social fabric of the nation, to increase popular support of the existing government . . . ."<sup>25</sup> In a forward, one writer adds the corollary that "his principle of increasing citizenry resolve is even more applicable to a less developed country because of the lack of targets. He maintains this was clearly evident in NVN from as far back as 1965 as well as the Japanese failure in China (1930's and 1940's), the Dutch failure in Indonesia and in the actions of the French in Algeria."<sup>26</sup>

## OBSERVATIONS

It was with considerable confidence from recent history that the United States launched its bombing campaign against NVN in 1965. Airpower had been impressive in what was probably its first major aerial interdiction campaign in 1944. Launched against bridges, railroad marshaling yards and roads, a combination of allied high-altitude bombing and fighter attacks prevented the Germans from moving sizeable reinforcements, particularly armored divisions, into Normandy to contain the allied invasion of France. In Korea, airpower was never able to completely stop the flow of Chinese supplies, but it eliminated all of the rail and most of the truck traffic, reducing deliveries to the battle line to little more than the coolies moving at night could carry on their backs.<sup>27</sup> Unfortunately, similar success was not forthcoming from the bombing campaign in NVN from 1965 to 1968 for several reasons:

(1) The US Government had been engaged in low profile political dealings in Southeast Asia for many years prior to the start of large-scale military operations in Vietnam. The influence of these policies and policymakers were slowly enlarged to encompass and control the Vietnam conflict as it grew into a large military conflict. This resulted in an involvement of military into the fray rather than insertion of the military instrument to achieve specific objectives. It has been pointed out that sometimes the military should be given precedence over political to avoid defeat, otherwise the subordination of military to political might sacrifice success needed to obtain national purpose.<sup>28</sup>

The resultant confusion was compounded in the conduct of the air war in NVN by declaring the air campaign and strategy in the North as complementary to the war in the South. This declaration was amazing in view of the fact the United States held North Vietnam almost solely accountable for the entire South-east Asia problem.

(2) Some members of the news media, government and, as a result a portion of the general public, failed to understand the nature and limitations of airpower. It cannot take or defend ground, find and hit all targets (especially when they are hidden in the jungle or locations are not known) and it cannot always strike targets with precision in low visibility/poor weather. Specifically in NVN, airpower was confronted with a heavily foliated country of high jungle canopy that made concealment and camouflage easy. Compounding the interdiction problem in the 1965 to 1968 timeframe was the fact there was not sufficient heavy ground action in the South to require vast tonnages of supplies from the Hanoi-Haiphong complex to the battle areas. Both of these points, the unfavorable terrain and the low need for supply movement suggests the interdiction campaign should not be judged on its ability to directly impair the movement of men and supplies to SVN. There is no doubt, however, the continuing interdiction program made the supply lines slower and more costly.

Aside from the physical limitations of airspace, there are two psychological considerations. As previously mentioned, an enemy's will to resist can sometimes be strengthened

by aerial assault. Skill is required to devise a compelling action that does not have this self-defeating quality.<sup>29</sup> Secondly, some effects of airpower are intermittent. While it can disrupt economic, social, and political activity, it cannot directly enforce desired behavior in the war as ground forces can. Simply put, once the aircraft have passed the survivors are free to act as they choose unless they are incapacitated.<sup>30</sup>

Critics of airpower in NVN often refer to the highly sophisticated and expensive US aircraft and express their frustration by blaming the military for unsatisfactory results. It is important to consider that sophisticated aircraft flown by well-trained aircrews are ineffective unless an appropriate strategy is developed to take advantage of that sophistication.

(3) Airpower was applied in a hesitant and often timid manner due to the fear of intervention by USSR or China. Certainly expansion of limited war into general war is an omnipresent consideration. Memories of the "red horde" passing over its borders in Korea were evident in the minds of US policymakers. However, US intentions not to invade NVN were made perfectly clear. It was the approach of ground forces toward the Chinese border in Korea that precipitated violent Communist Chinese reactions; bombs dropping in NVN within 20 miles of China do not carry the same threat because the human element is missing. It has been suggested the Cuban specter was a significant factor in dissuading the USSR and Red China from major involvement. Despite US attacks on Hanoi while Kosygin was there, the blockade of Haiphong and many aerial



bombings close to the Chinese border, Moscow and Peking reacted with calculated calm. "Both had seen in Cuba that the specter of nuclear war was too dangerous to contemplate. Ultimately, Cuba made the Vietnam crises manageable."<sup>31</sup>

(4) From 1965 to 1968, airpower was not applied as a decisive instrument of power. As previously discussed, targeting decisions emanated from Washington and were characterized by detailed and positive control. Overall targeting strategy was cloaked in confusion, lacked clear objectives, was based on gradualism and at times was inept. The NVN people were able to adapt and easily continue the war under this strategy. The US strategy has been described as "asking them to change their mind because of a little more pain."<sup>32</sup>

Part of the blame can be placed on the times and the people. The combination of Mr. McNamara's philosophy to exercise significant control over both policymaking and the military contributed to poor strategy for airpower. Mr. McNamara felt the need to centralize major and minor decisionmaking at the highest level. Unfortunately, the characteristic of airpower and the tremendous development of communications provided two significant modes for this attempt. With the advent of computers, fast and secure communication lines and the development of a system to feed great amounts of information up the line, Washington fell prey to the temptation to attempt detailed direction of the air war in NVN. This consolidation of data couldn't reveal to high level decision-makers all the intricacies apparent to decisionmakers in the field

for on-the-spot action. Not only were all data and reports amassed upwards for decisionmaking but communications permitted individual sorties to be controlled downwards on a daily basis. This phenomena of decisionmaking and controlling the air war to minutia with highly developed communications weakened rather than strengthened overall strategy effectiveness. Ironically, the positive and instantaneous ability to make decisions created a permissive atmosphere of procrastination.

. . . each of them /US Presidents/ undoubtedly believed . . . that at some stage long before the actual 1968-1972 levels of violence were reached, he or his successor would have chosen either to win or to leave . . . both of which he was postponing at the moment in favor of staying . . . avoiding defeat, regaining a stalemate.<sup>33</sup>

#### DECISIVE POWER WITH COMPASSION

Of course, hindsight is a great help in suggesting how the 1965 air war should have been conducted in NVN, but most fighter pilots who watched the enemy build up a defense on sites not authorized to be hit, would probably argue they would have not needed hindsight--for the obvious.

In any case, the United States, a first-rate power, was negotiating with a fourth-rate power over the issue of the war in SVN. Negotiation or bargaining is not always the classically formal verbal type--Persuasion involves many types of effort, including the infliction of pain. The conduct of the Vietnamese war included this element of pain, applied as a coercive direct power to hurt. The idea was to create for the

enemy the prospect of cumulative losses that would become more than the local war was worth.<sup>34</sup> Unfortunately, administrators of the air war in the 1965 to 1968 timeframe misunderstood an important essence of the "pain theory"; the purpose is not to cause suffering and thereby hope for results, but to influence someone's behavior. To be truly coercive, violence must be anticipated and avoidable by accommodation.<sup>35</sup> This provides the bargaining element in the applied power. Senator Goldwater also believes in decisive power, but his philosophy is obviously different as evidenced by his statement: "If they'd handled the Vietnam War the way I wanted to handle it, Henry Kissinger wouldn't have to be traveling. I would have ended it in a month. I would have made North Vietnam look like a mud puddle."<sup>36</sup> Not much provision for bargaining here, but the shock of this statement points to the second important aspect of any strategy applied in NVN. We now live in an age of acute social awareness. Believe it or not, compassion must be considered during decisive displays of power in controlled conventional war.

#### IF WE HAD IT TO DO OVER AGAIN

NVN campaign policymakers should have heeded Henry Kissinger's remarks written in 1957,

Because we have won two world wars by outproducing our opponent, we have tended to equate military superiority with superiority in resources and technology. Yet history demonstrates that superiority in strategic doctrine has been the source of victory at least as often as superiority in resources.<sup>37</sup>

Keeping in mind the need for (a) timely decisive power, (b) clearly defined thresholds of pain, (c) flexibility for field commanders and (d) overall compassion, a different strategy could have been applied to the air war in NVN in 1965:

1. The Tonkin incident response was timely and appropriate. No need for change.

2. Give NVN seven days for formal commitment to cease all war efforts in SVN. Warn foreign shipping to evacuate the Haiphong harbor. Inform USSR and Red China of intent not to invade NVN.

3. Mine the Haiphong harbor and coastal waterways. Authorize main supply routes from China (to include railroads) to be continually hit as needed. Destroy all enemy aircraft in NVN. Interdict main supply routes in the panhandle. Therefore virtually all supplies and weapons into NVN would cease. No air defense buildup could occur and US airpower losses would be minimal for the remainder of the conflict.

4. Solicit NVN for meaningful negotiation. Warn of impending US decisive action that will cause great "pain."

5. Flood the rice fields by key dikes and dams. Keep the top of the funnel closed and continue interdiction on the main supply routes. Not many casualties are inflicted in NVN by this program but the coercive thresholds of pain are clear and meaningful.

6. Solicit NVN's compliance to end the war effort. Announce to the world at large that the United States stands

ready to prevent widespread starvation by supplying needed rice to NVN if demands are met. The decision for North Vietnamese people to starve is left as a sole responsibility of the NVN government. This type destruction by the United States would not kill or drown people.<sup>38</sup>

7. Request evacuation of the people from the main cities and around all key industrial sites.

8. Destroy all key industry vital to the war effort. Continue interdiction.

Proper and timely application of the above strategy would probably not require progression to the latter stages. NVN would clearly receive the message of US intentions/resolve. In the event all eight steps were required, the movement of supplies to the south would be heavily curtailed by the complete absence of petroleum, electricity, industry, and any motorized vehicles. NVN's main threat as a conduit of supplies into SVN would be ended. US airpower could roam NVN at will, facing only the air-to-air threat from NVN aircraft launched from China.

#### SPRING 1972--A BETTER STRATEGY

By March of 1972, USAF tactical air squadrons in Southeast Asia had been reduced from a peak of 41 in 1968 to 15.<sup>39</sup> Easter week-end the North Vietnamese launched a massive invasion into SVN and President Nixon took immediate and decisive action concerning airpower in NVN. He ordered a speedy increase in air assets, authorized the bombing in NVN to include the first use

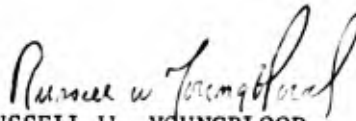
of B-52's in the Hanoi-Haiphong area, and in May directed a campaign to mine the ports of NVN along with interdiction of the "top of the funnel" to restrict supplies. The interdiction was established as an authorized target system rather than on a target-by-target basis as flown in the 1965 to 1968 timeframe. In this way, some commanders in the field were given much more flexibility as to when and how to hit what targets. Significant elements of the enemy's air defense system were attacked in order to minimize interference with the overall JS air offensive. It has been estimated this campaign had a much greater impact in four months on the enemy than the previous air campaign was able to achieve in three and one-half years.<sup>40</sup> Clearer evidence of the aerial success was seen in the NVN willingness to approach the negotiating table on a meaningful basis. President Nixon's approach at least partially included two additional ingredients that contributed to the increased results from the aerial effort; the demonstration of timely decisive power and the provision of flexibility in the field for commanders to make military decisions.

#### SUMMARY

The air war in NVN was conducted without a well-defined strategy. Politically warped, indecisively applied and poorly targeted, tactical airpower provided little coerciveness to influence the enemy's behavior. Unfortunately the credibility of tactical airpower has suffered to the degree that future

contingencies may be detrimentally affected in spite of the more viable policies employed by the President in Spring 1972.

International relations are a function of power politics. If a nation has power and at the same time declares a situation strategically vital to national interests, then the power should be applied quickly with well thought out objectives for each instrument of power employed. Military force applied quickly and decisively could well be more compassionate in the long run in terms of casualties and world opinion.

  
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