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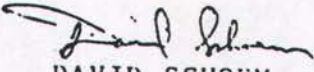
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Contemporary
Historical
Examination of
Current
Operations
REPORT

APPROVED FOR
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RULES OF ENGAGEMENT (U)

1 JANUARY 1966 - 1 NOVEMBER 1969

31 AUGUST 1969

HQ PACAF

Directorate, Tactical Evaluation
CHECO Division

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PROJECT CHECO REPORTS

The counterinsurgency and unconventional warfare environment of Southeast Asia has resulted in the employment of USAF airpower to meet a multitude of requirements. The varied applications of airpower have involved the full spectrum of USAF aerospace vehicles, support equipment, and manpower. As a result, there has been an accumulation of operational data and experiences that, as a priority, must be collected, documented, and analyzed as to current and future impact upon USAF policies, concepts, and doctrine.

Fortunately, the value of collecting and documenting our SEA experiences was recognized at an early date. In 1962, Hq USAF directed CINCPACAF to establish an activity that would be primarily responsive to Air Staff requirements and direction, and would provide timely and analytical studies of USAF combat operations in SEA.

Project CHECO, an acronym for Contemporary Historical Examination of Current Operations, was established to meet this Air Staff requirement. Managed by Hq PACAF, with elements at Hq 7AF and 7AF/13AF, Project CHECO provides a scholarly, "on-going" historical examination, documentation, and reporting on USAF policies, concepts, and doctrine in PACOM. This CHECO report is part of the overall documentation and examination which is being accomplished. Along with the other CHECO publications, this is an authentic source for an assessment of the effectiveness of USAF airpower in PACOM.



MILTON B. ADAMS, Major General, USAF
Chief of Staff

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FOREWORD

During the period 1966-1969, there were three categories of rules which controlled the employment of airpower in the Southeast Asia (SEA) conflict. The Rules of Engagement (ROE) were promulgated by the Joint Chiefs of Staff and sent through channels to the operational commands. Covering all of SEA, these Rules of Engagement defined: geographical limits of SEA, territorial airspace, territorial seas, and international seas and airspace; definitions of friendly forces, hostile forces, hostile acts, hostile aircraft, immediate pursuit, and hostile vessels; rules governing what could be attacked by U.S. aircraft, under what conditions immediate pursuit could be conducted, how declarations of a "hostile" should be handled, and the conditions of self-defense.

The second set of rules was designated Operating Restrictions, which were contained in the CINCPAC Basic Operations Orders. These rules included prohibitions against striking locks, dams, hydropower plants, fishing boats, houseboats, and naval craft in certain areas; prohibitions against strikes in certain defined areas such as the Chinese Communist (ChiCom) buffer zone or the Hanoi/Haiphong restricted areas; conditions under which targets might be struck, such as validation requirements, when FACs were required, distances from motorable roads; and conditions under which napalm could be used, when CS was authorized, when ground fire could be returned.

Finally, Operating Rules were issued the Seventh Air Force for Laos and Route Package I (RP I) since July 1967 when the Commander, United States

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Military Assistance Command, Vietnam (COMUSMACV), delegated most of the operating responsibility in these areas. Operating Rules that had been established, especially for Laos, concerned the use of Forward Air Controllers (FACs), the return of ground fire, the use of the AGM-45 (SHRIKE) missile, restrictions against mine-type munitions, and the requirements for navigational position determination.^{1/}

Although, in theory, these three types of rules were distinct, in practice, they were almost always referred to collectively as "Rules of Engagement." This report retains this policy, since the formal distinctions were not always honored in message traffic and further, a report unifying the three types of limitations presents a compact picture of the restraints upon airpower that were in existence.

A detailed reconstruction of the many twists and turns of the rules in the period of 1966-1969 is at this point in time both impossible and undesirable. A general pattern of development can be seen and it is this evolution that gives unity to "Evolution of the Rules of Engagement." At few other points in the conduct of war are national policies and military operations focused as sharply as they appear in the Rules of Engagement. It is fair to say that the rules are national policy translated to the battlefield. Each change, or threat of change, to the U.S. political relationship with other nations, whether Allies, enemies, or potential enemies, was reflected in a corresponding alteration of the Rules of Engagement for the Vietnam conflict. In addition, the rules were often modified in response to local tactical or strategic requirements. Finally, there were a number of cases during these years in

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which the attempt to improve the image of the war on the home front dictated change. This report attempts to highlight examples of these three sources of change in the Rules of Engagement which illustrate the continuing validity of the maxim that "war is an extension of national policy."^{2/}

The ultimate story of the political background to changes in the rules must await a detailed investigation of the files at the highest level of government. This report traces their evolution primarily from an operational viewpoint, with only general attempts to link them to political decisions.

Unlike the earlier CHECO report entitled "The Evolution of the Rules of Engagement,"^{3/} this report employs a geographical, rather than a strictly chronological arrangement by treating separately the development of the rules in the three physical areas of U.S. military involvement in SEA: North Vietnam, Laos, and South Vietnam. This arrangement produces a more valuable historical picture for those interested in the restrictions affecting particular air campaigns. Yet, it must be borne in mind that developments in one area often affected the others, particularly in the border areas.

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CHAPTER I
NORTH VIETNAM

The policy of gradualism which characterized the ROLLING THUNDER (RT) bombing campaign over North Vietnam (NVN) since its inception in 1965 continued until the bombing halt late in 1968. The first summer of ROLLING THUNDER operations over the north (1965) was followed by a bombing moratorium which lasted from 23 December 1965 through 30 January 1966. The bombing pause was designed as a backdrop to a major peace offensive on the part of the United States, but it failed to elicit adequate signals that Hanoi was willing to move the conflict from the battlefield to the conference table.^{1/} Consequently on 31 January 1966, air attacks on the north were resumed.

It was recognized by military commanders that the limited nature of air operations in 1965, as reflected in restrictive Rules of Engagement, had not produced the desired result of leading Hanoi into negotiations. The bombing halt produced similarly negative results. At the Commanders Conference held in Honolulu between 17-31 January 1966, a stronger approach was suggested. Three tasks were proposed to accomplish the objectives of the forthcoming 1966 ROLLING THUNDER campaign:^{2/}

- . Reduce, disrupt, and harass the external assistance being provided to NVN.
- . Destroy in depth those resources already in NVN which contributed most to the support of aggression. Destroy or deny use of all known permanent military facilities. Harass and disrupt dispersed military operations.
- . Harass, disrupt, and impede movement of men and materials through southern NVN into Laos and SVN.

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The conferees made it clear that although they recognized the interrelationship of all three tasks, they believed that successful accomplishment of the first two would have the greatest impact on the enemy. Disruption of external assistance would require attacks on, and the mining of harbors and ports of Haiphong, Hon Gay, and Cam Pha, as well as interdiction of the two main rail lines leading from the Chinese Border to Hanoi. The task of destroying resources already in NVN must concentrate on POW system, power plants, and military facilities. The interdiction effort in the southern part of NVN was less destructive of war-making resources, but was, nevertheless, a vital part of the overall package of tasks.

While the military commanders in Hawaii were arriving at these conclusions, Defense Secretary Robert S. McNamara saw things differently. The Defense Department was satisfied that the limited 1965 ROLLING THUNDER offensive had achieved its objectives and that the campaign should continue at the same level. To DOD eyes, the primary objectives of bombing NVN were to strengthen the morale of the South Vietnamese by showing U.S. determination and continued support; to reduce the flow of men and equipment from the north to the south, or to increase the cost of that flow to the North Vietnamese by bombing infiltration routes and the military sources of supply; and to put political pressure on NVN to halt their subversion campaign in the south. The Defense Secretary recognized the key to achieving these objectives in the interdiction of the lines of communications (LOCs) in southern NVN rather than in attacks on entry ports and military storage supplies farther north.^{3/}

Consequently, the Rules of Engagement for the 1966 summer campaign closely

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resembled those of the previous year. Armed reconnaissance was authorized south and west of a line running due west from the coast at latitude 20° 31'N to longitude 105° 20'E, then due north to a point 30 NM from the ChiCom Border, then southwesterly to the Laotian Border. Air operations north and east of that line (RP VIA and VIB), which is in the area containing the three major water entry ports into NVN and one of the two major RR lines from China, were severely circumscribed. (Fig. 1.) Armed reconnaissance by U.S. aircraft was authorized against naval craft along the NVN coast north of 20° 31'N only if fired upon first by recognized NVN naval craft which were within the 3-NM limit of the NVN coast or offshore islands. Aircraft were to avoid a 30-NM circle from the center of Hanoi and a 10-NM circle around Haiphong. Attacks were forbidden in a zone along the ChiCom Border 30-NM wide from the Laotian Border east to 106° E and 24-NM wide from there to the Gulf of Tonkin. Attacks on populated areas and on certain types of targets, such as hydropower plants, locks and dams, fishing boats, sampans, and military barracks were prohibited. The suppression of SAMS and gun-laying radar systems was prohibited in this area as were attacks on NVN air bases from which attacking aircraft might be operating.^{4/} In military eyes, these restrictions had the effect of creating a haven in the northeast quadrant of NVN into which the enemy could with impunity import vital war materials, construct sanctuaries for his aircraft, and prop his AAA defenses around the cities of Hanoi and Haiphong.

In a 1967 interview in "U.S. News and World Report", a French journalist and editor, Rene Dabernat, said that Communist China had informed the United States in the spring of 1966 it would not become involved in the Vietnam war,

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if the U.S. refrained from invading China or North Vietnam, as well as bombing North Vietnam's Red River dikes. Dabernat said that statements by President Lyndon B. Johnson and other U.S. officials demonstrated they had "agreed to these conditions." The State Department replied with a "no comment" to this information, but officials acknowledged that the U.S. had received a number of messages from Communist China through a number of third parties.^{5/} In the same month, a newspaper article written by Edgar Ansel Mowrer stated the U.S. had a promise from Red China not to intervene in Vietnam as long as the U.S. refrained from attacking Red China, blockading Haiphong, and invading North Vietnam. In a hearing before the Senate Subcommittee on Appropriations on 27 January 1967, Secretary McNamara was questioned about this newspaper article. He said, "There is no agreement, formal or informal, with Red China relating to the war in South Vietnam in any form whatsoever that I know of." In the same hearing, Gen. Earle G. Wheeler, Chairman of the Joint Chiefs of Staff, declared that he had "no other information" on the subject.^{6/}

The fact that the Rules of Engagement for the ROLLING THUNDER operation were weighted in favor of the third task (interdiction), and against the other two (disruption of external assistance and destruction of resources), did not escape the attention of the military commanders. At the Honolulu Requirements Planning Conference in June 1966, CINCPAC noted that the two major elements of the January concept for an effective air campaign had not been authorized.^{7/}

Even while this conference was in session, CINCPAC was recommending to the JCS that the highest priority be given to strikes against POL facilities in NVN. On 22 June 1966, JCS directed that airstrikes commence two days later

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against seven POL storage areas in NVN including those around Hanoi and Haiphong. The political sensitivity of this escalation was appreciated by the JCS and the Secretary of Defense and mirrored in the rules set down for the operation. Damage to merchant shipping was to be avoided. Ships in the Haiphong Harbor were to be attacked only in retaliation and only those that were clearly North Vietnamese. The piers which served the Haiphong POL storage areas were not to be attacked if a tanker were berthed off the end of the piers. Measures to be taken to minimize civilian casualties included the striking of targets only when weather conditions permitted visual identification and through maximum use of electronic countermeasure (ECM) support to hamper SAM and AAA fire control.^{8/}

Marginal weather delayed the first POL strikes until 29 June. Follow-up strikes against the Hanoi/Haiphong complex were made on 30 June and 1 July 1969. It was estimated that two-thirds of North Vietnam's POL storage capability was destroyed in this three-day period.

The political value gained from strict adherence to the Rules of Engagement during these strikes was illustrated several days later in a letter sent by United Nations Ambassador Arthur J. Goldberg, to the President of the Security Council, in which he stated:^{9/}

"In recent attacks on petroleum facilities every effort has been made to prevent harm to civilians and to avoid destruction of nonmilitary facilities. The petroleum facilities attacked were located away from the population centers of both Hanoi and Haiphong. The pilots were carefully instructed to take every precaution so that only military targets would be hit. Moreover, to assure accuracy, the attacks have been scheduled only under weather conditions permitting clear visual sighting."

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On 5 July 1966, President Johnson told newsmen that every precaution had been taken to spare civilians during the raids. ^{10/} At a news conference on 20 July 1966, the President stated: ^{11/}

"The men who conducted the bombings on the military targets, the oil supplies of Hanoi and Haiphong, did a very careful but very perfect job. They hit about 90 percent of the total capacity of their storage, and almost 70 percent of it was destroyed. We were very careful not to get out of the target area, in order not to affect civilian populations."

Throughout 1967, the ROLLING THUNDER program escalated not only in the skies above North Vietnam, but also as a political issue in the halls of national decision. The Basic Operations Order for RT, issued by CINCPAC on 8 April 1967, contained Rules of Engagement which closely resembled those of the preceding year. Armed recon was authorized from the Provisional Military Demarcation Line (PMDL) north to the ChiCom Buffer Zone. Use of classified ordnance was not authorized. Locks, dams, fishing boats, houseboats, and sampans were not to be attacked. Coastal armed recon north of 20° 42' N was authorized only against ships that were clearly of NVN registry which were within 3 NM of the NVN coast and which fired first. The 30 NM restricted area and 10 NM prohibited area around Hanoi remained in effect. The restricted area around Haiphong was still a 10-NM circle around the city. Strikes within these restricted areas could be made only against targets specifically mentioned in the Operations Order or the succeeding Execute Orders for ROLLING THUNDER. When conducting strikes in the Haiphong area, extreme caution was to be taken to avoid endangering foreign shipping. No change was made to the boundaries of the ChiCom Buffer Zone. Aircraft engaged in immediate pursuit

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were authorized to pursue enemy aircraft into the Buffer Zone, but in no event closer than 12 NM of the ChiCom Border. However, when engaged in immediate pursuit of enemy aircraft, U.S. aircraft were not authorized to attack NVN air bases from which aircraft might be operating.^{12/}

The RT Execute Orders during the first few months of 1967 brought about a gradual liberalization of rules and targets. RT 53-54 (Jan-Feb) authorized strikes against dispersed POL and SAM support areas within the Hanoi/Haiphong restricted areas.^{13/} In April, RT 55 contained an expanded list of targets including the POL storage area, ammo depot, and cement plant in Haiphong, and the RR/Highway Bridge, RR repair shops, and transformer in Hanoi. It also authorized strikes against the Hoa Lac and Kep Airfields east and northwest of Hanoi, but limited these to small and random harassment strikes designed for attrition of aircraft and disruption of support facilities. A strike of about eight attack aircraft or less was considered small. For the first time, aircraft engaged in immediate pursuit of enemy aircraft were permitted to attack airfields, in this case, Hoa Lac and Kep.^{14/}

These changes to the rules represented a gradual expansion of the bombing phase of the war. For some, however, the expansion was too gradual. In January 1967, CINCPACFLT, in a Targeting Concept Review, stated that the whole RT effort should not be expended on transient targets but that the closing of the Port of Haiphong should be first.^{15/} During the same month, retired Gen. Curtis E. LeMay, in an interview in Washington, said that he would start the progressive destruction of NVN support and supply bases by closing the Port of Haiphong and other ports.^{16/} The joint CINCPACFLT/CINCPACAF concept of

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operations, published in April 1967 for RP VI, noted that: ^{17/}

"The primary objective in denying external assistance to NVN is the closure of the Haiphong Port and, in conjunction with this, the objective of preventing the enemy from diverting his resupply effort to the NE and NW rail line and/or the Hon Gat and Cam Pha Ports. Until authority is received which will allow the closing of the ports, no meaningful military campaign can be launched which will achieve the objective of denying external assistance."

The Secretary of Defense, however, did not share this enthusiasm for denying external assistance to North Vietnam. In his opinion, the limited bombing approach was successful when weighed against its stated objectives. During testimony before Congress in August 1967, the effectiveness of the bombing policy and Rules of Engagement came under discussion: ^{18/}

"Senator Margaret Chase Smith: If you (Secretary McNamara) had read the testimony of the witnesses who have appeared so far in these hearings, you would have noted that they were virtually unanimous in concluding that if the restrictions and prohibitions against certain targets had not been in effect these past two years, the air campaign against the north would not only have been more efficient and effective but more importantly, would most probably have reduced our casualties in the south. Would we in effect have experienced fewer casualties in the south had these restrictions and prohibitions not been imposed against the bombing of the north?"

"Secretary McNamara: Senator Smith, it is my very firm opinion that regardless of what other merit there might have been for following a different practice of air activity against the north in the past, it would not have reduced our casualties in the south."

Further, it was the Secretary's view that an intensive air campaign designed

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to interdict completely war-supporting materials might result in a direct confrontation with the Soviet Union. Bombing of the port facilities, he said, or mining of the harbors would seriously threaten Soviet shipping. Mining the harbors would be an act of war requiring advance notice to third parties, who would be justified in regarding this as notice of the existence of a state of war in the sense of international law.^{19/}

There was justification for sensitivity on this point and for strict adherence to the Rules of Engagement. Two months earlier, on 2 June 1967, an F-105 from the 355th Tactical Fighter Wing at Takhli RTAFB had strafed the Russian ship "Turkestan" along the NVN coast 40 NM northeast of Haiphong. The subsequent investigation noted that the Rules of Engagement for attacking coastal shipping northeast of Haiphong did not permit attacks on any commercial vessels coming into or moving out of Haiphong Harbor, even though they were within the 3-NM limit. The only exception to this was in case the vessel fired first on U.S. aircraft. In that event, return fire was authorized. The pilot testified that he had received fire from a nearby flak site and thought he was also fired upon by the vessel. He stated there were no identifying marks on the vessel and that he saw no flags.^{20/}

As a result of this incident, the Commander, Seventh Air Force, in a personal message to each commander, reminded them that airstrikes were not authorized within a 10-NM radius of the Port of Haiphong and that the area within a 4-NM radius of Haiphong was now established as a prohibited area. No strikes were to be conducted, he added, in port areas where incidents involving foreign shipping might occur.^{21/} In the course of his congressional testimony,

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the Secretary of Defense made use of the incident to buttress his argument against intensification of the air campaign and the mining of NVN harbors. ^{22/}

With the publication of the Execute Order for RT 57 in July 1967, a major change in targeting took place. For the first time, attacks were authorized against targets in the ChiCom Buffer Zone and within the Hanoi, Haiphong circles. Nineteen targets were identified in the Buffer Zone; 21 within the 30-NM Hanoi circle; and 9 within the 10-NM Haiphong restricted area. ^{23/} Authority to strike additional targets within these areas was added in August 1967, with the guidance that in the interest of obviating charges of escalation, either from foreign or domestic sources, it was desired that these additional authorities be exercised in a measured manner. The rules for these strikes called for the commanders to exercise every feasible precaution in conducting air strikes in the ChiCom Buffer Zone to preclude penetration of the ChiCom Border and avoid engagements with ChiCom MIGs except in self-defense over NVN territory. Commanders were also to utilize experienced pilots, provide adequate electronic capability and targets were to be attacked only when the weather conditions enabled positive identification of the target. ^{24/} The most active bombing of the year--and of the war--occurred during August 1967.

The ROE contained in the ROLLING THUNDER Operations Order for 1968, published in December 1967, indicated the forthcoming bombing campaign would remain as limited as it had been in the past, and that the weight of effort would continue to be placed on interdiction of LOCs into RVN from the north. Although armed reconnaissance was once again authorized from the PMDL to the ChiCom Buffer Zone, its implementation was modified by the earlier restrictions

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against striking populated areas, locks, dams, hydropower plants, watercraft, sampans, and houseboats. Prohibitions were repeated against attacking naval craft north of $20^{\circ} 42' N$ and outside of the 3-NM limit of the NVN coast or offshore islands unless fired upon. Authorization was still withheld for aircraft engaged in immediate pursuit to attack NVN bases from which the pursued aircraft might have been operating. The mining of waterways and deep draft harbors north of $20^{\circ} 00' N$ was forbidden. Prohibited areas remained unchanged: ^{25/} 10 NM around Hanoi, 4 NM around Haiphong, and the ChiCom Buffer Zone.

No ordnance was to be expended in these prohibited areas unless specifically directed in the frag orders. Strike and recon aircraft were authorized transit and immediate pursuit into the Haiphong and Hanoi prohibited areas if operational requirements dictated. In the ChiCom Buffer Zone, flight paths of strike aircraft were not allowed to approach closer than 20 NM of the ChiCom Border east of $106^{\circ} E$ and no closer than 30 NM west of that meridian. The flight paths of reconnaissance (BLUE TREE) aircraft were not to approach closer than 20 NM to the ChiCom Border. Aircraft engaged in immediate pursuit were authorized to penetrate the Buffer Zone but not the ChiCom Border. SAR and RESCAP aircraft were not permitted to operate closer than 3 NM of the ChiCom Border, except when the risk of engagement was small and there were clear prospects of successful recovery. ^{26/}

The 30-NM and 10-NM restricted areas around Hanoi and Haiphong, respectively, remained in effect. Strikes were authorized in these areas against NVN craft or NVN units which fired upon U.S. aircraft en route to or from missions. Extreme caution was to be exercised in the Haiphong area to avoid endangering

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foreign shipping. Transit of these areas was authorized as necessary to conduct air operations. Immediate pursuit into the restricted areas was also permitted.

Two control areas existed on the NVN/Laotian Border: (1) a Radar Control Zone (RCZ) encompassing the area within NVN immediately adjacent to the Laotian Border and extending 10 NM into NVN and running from the DMZ northward to 19° 30' N; and (2) the Laotian Buffer Zone of the same width as the RCZ extending northward from 19° 30' N to 22° 00' N. The Rules of Engagement for the RCZ prohibited U.S. forces from striking targets unless under positive radar control. In conducting these strikes, aircraft had to be vectored to target coordinates, or to the initial coordinates of an armed recon route and released for mission accomplishment. Conventional aircraft, which were performing as strike/FAC aircraft, were permitted to strike in the RCZ without radar control, if it were not available. Missions flown elsewhere in the NVN, outside the DMZ and RCZ, had to be radar vectored, until the aircraft was positively established as being outside these areas prior to being released for mission accomplishment.^{27/}

This rigidity of the Rules of Engagement for the coming campaign was the subject of a message sent on 28 March 1968, from CINCPACAF to the 7AF Commander.^{28/} Current restrictions within which U.S. forces must operate in North Vietnam, stated CINCPACAF, collectively represent an impressive picture of the limitations on the effectiveness of forces now in place in Southeast Asia. The present restrictions, disadvantageous to Allied forces operating in an extremely difficult air defense environment, were serving enemy aircraft to advantage. The total impact of these various self-imposed restrictions was providing the enemy a sanctuary situation which he was using to great advantage in Hanoi, Haiphong,

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and throughout the LOC structure in North Vietnam. It was inconsistent from a military point of view to build up and reinforce U.S. forces in SVN without major relaxation of existing restrictions on the U.S. air and naval offensive against NVN.^{29/}

This annual plea for more bombing latitude and for a relaxation of the Rules of Engagement was smothered by a presidential decision three days later. On the evening of 31 March 1968, President Johnson made the twin surprise announcements that he would not be available for the presidential nomination that summer, and that "he had ordered our aircraft and surface vessels to make no attacks on North Vietnam except in the area north of the DMZ where the continuing enemy buildup directly threatens Allied forward positions."^{30/} The Chief Executive had placed outside the reach of American airpower precisely that area which military judgment considered to be the most essential to strike. On 1 April, airstrikes north of 20° N were discontinued and two days later the line was moved one degree southward. Limited aerial reconnaissance into NVN and the Gulf of Tonkin continued to be authorized. But aircraft operating over the Tonkin Gulf had to remain over international waters at all times. Immediate pursuit of enemy aircraft over NVN territory or territorial waters was not permitted. Maximum care was to be taken not to overfly ChiCom territory.^{31/}

A JCS message declared that effective at 1300Z (2100H Saigon time) on 1 November 1968, all offensive operations against NVN and the DMZ and within the claimed 12-NM territorial waters would be terminated. The ROE for the post-bombing period were established and permitted immediate pursuit into NVN territorial seas or airspace in response to hostile acts and in pursuit of any

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vessel or aircraft whose actions indicated with reasonable certainty that it was operating in support of the VC/NVN insurgency in SVN. U.S. naval and air forces engaged in immediate pursuit of the NVN naval and air elements were not authorized to attack other unfriendly forces or installations encountered, except in response to an attack by them and then only to the extent necessary for self-defense. ^{32/} A second JCS message, also dated 1 November 1968, authorized the destruction of SAM and AAA weapons, installations, and supporting facilities in NVN south of 19° N which fired at Allied aircraft from across or from within the DMZ. ^{33/} In a clarification of this rule later in the month, permission to destroy aggressive SAM and AAA sites and facilities in NVN was extended to those which fired at Allied aircraft over Laos ^{34/}

Thus ended the ROLLING THUNDER campaign. In early 1968, just prior to the 1 April 1968 bombing halt, many officials believed the campaign of graduated pressure through the use of U.S. airpower had reached a point which appeared just short of allowing maximum application. Authority had been extended to allow airstrikes to within 10 NM of Hanoi and within 4 NM of Haiphong. All major industrial production had been halted, nearly all of the major bridges had been laid in the water, all airfields except Gia Lam had been attacked, and there was open discussion in the U.S. through the news media to close the Port of Haiphong. In short, NVN was facing another summer season of good weather conditions and increased U.S. airstrike activity. ^{35/} The 1 April bombing halt, and even more so the complete cessation of bombing on 1 November 1968, cut short this development.

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SUMMARY OF ROE FOR ROLLING THUNDER

The Rules of Engagement for ROLLING THUNDER from beginning to end faithfully mirrored the political aims and limited military objectives of this air campaign. In the strictly military sphere, the ROE established sanctuaries/ restricted areas within which airstrikes could not be conducted. Havens were provided within enemy territory which were used to cache, import, replenish, launch attacks, and to use for political propaganda whenever the sanctuary was inadvertently violated. Interrelated target systems were never authorized. The overriding consideration for avoidance of population centers precluded attacks on military targets in important cities such as Nam Dinh and Thanh Hoa. The agricultural sector of the NVN economy was protected. Anti-dike and anti-crop campaigns were not undertaken. Third country shipping was protected to an extent that prohibited attacks or mining activities against NVN's three major ports.^{36/} Taken collectively these restrictions, while reducing potential effectiveness of airpower, contributed to the national policy as determined by the Commander-in-Chief.

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CHAPTER II

LAOS

After the November bombing halt in NVN, the focus of air operations centered more than ever on Laos. The basic American policy toward this country had been set in 1961 by President John F. Kennedy's decision to attempt to neutralize Laos through political agreement, while retaining enough strength among pro-Western and friendly military forces in the Mekong River Valley to protect the flanks of Thailand. The major U.S. military effort was to be concentrated against the North Vietnamese in South Vietnam. This decision to attempt the neutralization of Laos was based largely on the assumption that the USSR and the U.S. shared a common interest in keeping Laos neutral and outside the ChiCom sphere of influence.^{1/}

By 1966, the conflict in Laos had, in effect, become two wars, each with a somewhat different objective and different Rules of Engagement. In the northern war, the USSR had failed to restrain the NVN. The conflict in the northeastern provinces along the border of NVN was bound up with the traditional Tonkinese interest in that area. During the earlier French colonial period, two of these provinces were actually administered from Hanoi rather than from Vientiane. It was not until 1942 that they were turned over to Vientiane and the Laotian entity. The NVN insurgents in these provinces operated through a front, the Pathet Lao (PL), which was controlled from Hanoi. This northern war was one of position and maneuver. The US/Royal Laotian Government (RLG) objective was to take and hold terrain, and in so doing to expand the influence of the RLG throughout northern Laos. By so doing, it was hoped the RLG would be in

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a position of strength if, and when, it participated at the conference table.^{2/}

U.S. air operations in northern Laos supported this objective.

The other Laotian war, in the Southern panhandle, initially had different objectives. It was directly associated with the NVN support of its operations in SVN and was a war of attrition, infiltration, and interdiction along the Ho Chi Minh Trail. The few tribal inhabitants of this eastern mountain area did not front for the NVN--it was completely an NVN operation. NVN soldiers guarded the trail structure; NVN engineers did the road building; NVN coolies carried the supplies down the trail. Whereas the objective of U.S. air operations in the north was the preservation of the flank of Thailand, in the panhandle, it was the interdiction of supplies which passed from NVN to SVN.

The dual nature of the conflict was reflected by the division of the country for the purpose of air operations into two sectors, the northern BARREL ROLL (BR) area and the southern STEEL TIGER (SL) region. The line separating these operating areas ran from the Nape Pass (18° 27' N/105° 06' E) on the NVN/Laotian Border, westward to 18° 20' N/103° 57' E on the Thai/Laotian Border. The ROE for both BR and SL were established by CINCPAC and the American Embassy (AmEmb), Vientiane. MACV coordinated with and obtained approval from AmEmb, Vientiane, for the conduct of air operations by PACOM forces and kept the American Embassy in Bangkok fully informed of the use of Thai-based aircraft.^{3/} Seventh Air Force was the operating agency for airstrikes in Laos and the rules established by the commander were designated as "Operating Rules."^{4/} By presidential directive, the U.S. Ambassador to Laos was responsible for all U.S.

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activities in support of the RLG. The key role played by the American Embassy, Vientiane, in determining the Rules of Engagement, helps to explain the nature of the rules during this period.

The BR/SL Rules of Engagement for 1966 and the first two months of 1967 were relatively simple. (Fig. 2.) Seven armed recon areas were created along the NVN/Laotian Border. They were lettered A through G running north to south. Within these areas, U.S. aircraft could strike without further permission any targets of opportunity that were outside villages and within 200 yards of a motorable trail or road. Targets farther than 200 yards from a motorable road could be struck only with permission and under FAC control, or when gunfire was first received from the target. Outside these armed recon zones, fixed targets and targets of opportunity could be struck only if they were validated RLAF "A" or "B" targets (APP. I), approval had been obtained from the Air Attache, Vientiane, the Assistant AIRA, Savannakhet, or an authorized FAC with a Lao observer on board who possessed validation authority, or if gunfire had been received from the target.

FACs were required under a variety of situations, notably on close air support missions, when called for by the AmEmb, Vientiane, when striking within five KM of the Cambodian Border, and on all night strikes against fixed targets unless they were controlled by ground radar (MSQ).⁵ Aircraft without FAC or MSQ assistance had to confirm their position by radar or tactical air navigation (TACAN). Prior to entering or exiting SL armed recon areas, aircraft had to establish radio/radar contact with the appropriate ground-controlled intercept (GCI) site. Classified ordnance was prohibited. Napalm could be employed in

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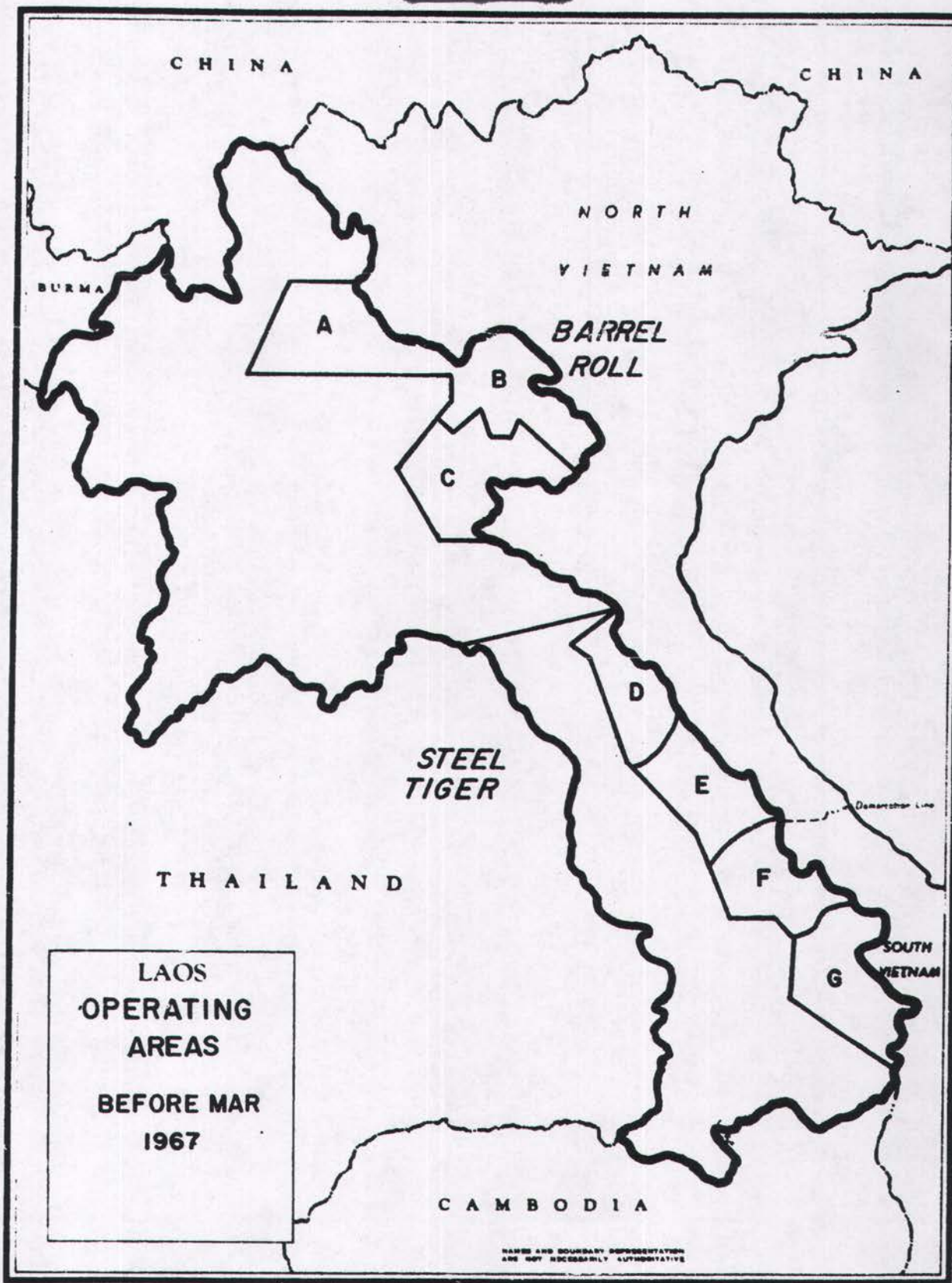


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BR/SL under FAC control, along infiltration routes within the SL area, against validated RLAF numbered targets and against motorized vehicles, but not against truck parks or other targets of opportunity.

The political situation in the north led to restrictions against air attacks on certain areas. Under no circumstances was ordnance to be expended on the villages of Sam Neua, Khang Khai, or Xieng Khouangville even in response to hostile fire. Camp fires and civilian habitations were not to be attacked. Populated areas were to be avoided to the maximum extent possible. Vientiane and Luang Prabang were to be skirted by at least 25 NM; restricted areas with a radii of 10 NM and heights of 15,000 feet were created around the friendly villages of Savannakhet, Attopeu, Thakhet, Saravanne, and Pakse.^{6/}

Within the restricted Attopeu circle ran Route 110, a major avenue of infiltration. In a meeting held at Tan Son Nhut AB in November 1966 among MACV, 7AF, and AIRA representatives to clarify the Rules of Engagement for Laos, the Air Attache representative said that he had intended no restriction to armed recon along Route 110 within this 10-NM circle. The Basic Operations Order was subsequently changed to allow armed recon within this portion of the restricted area.^{7/}

During the third week in February 1967, further restrictions were placed on air attacks within the BR area. Nearly all of these restrictions were temporary and were motivated primarily by political considerations. After Soviet questions concerning strikes on Khan Khai had arisen, the rule for that village was strengthened to create a six-NM restricted area around the town. A temporary restricted area was also placed around Xieng Khouangville, because

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the International Control Commission (ICC) had been invited to the village to discuss USAF bombing in Laos. No armed recon was authorized on the south side of the Nam Ou River because friendly forces were operating in the area. ^{8/}

In March 1967, a major change of zones and Rules of Engagement for the SL area resulted from a series of highly publicized Short Round incidents near the Laotian/SVN/NVN Borders. On 12 February, the friendly Laotian village of Muong Phalane was inadvertently attacked by three F-105 aircraft. The intended target was a highway bridge 24 NM northeast of Muong Phalane. Three Laotian civilians were killed and nine injured. Eleven houses were destroyed and thirty damaged. The incident was an apparent case of target misidentification. Muong Phalane is on the 130° radial of the Nakhon Phanom (NKP) TACAN at 68 NM; it has a bridge in the center of the village. The bridge against which the F-105 flight was fraggged was on the 113° radial of the NKP TACAN at 69 NM. The final report of investigation stated that apparently the pilot inadvertently tracked outbound on a heading of approximately 130° and sighted a target which by sheer coincidence was the same distance from NKP as his intended target. The mission was under no outside control such as FAC or COMBAT SKYSPOT. ^{9/}

Another Short Round incident occurred on 2 March when the RVN village of Lang Vei was struck by two F-4C aircraft. The flight leader's intended target was a group of trucks believed parked alongside a road under the trees. The flight had been released by an airborne FAC to conduct armed recon in the TIGER HOUND area of Laos, along the RVN Border. Six 500-lb. bombs, four LAU-3A rocket pods, and CBU-2 bomblets were expended on the village of Lang Vei which was obscured by the forest canopy. Eighty-three RVN civilians were killed, 170

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were wounded, and the village was 60-70 percent destroyed. The attack was made under conditions of reduced visibility caused by haze and the approaching sunset. But the primary cause was navigational error. The flight leader's TACAN was inoperative. A reading taken from the wingman's instrument was misinterpreted. The flight believed itself to be 24 NM from Lang Vei and over Laos rather than over RVN.^{10/}

In an attempt to reduce the number of these incidents, the SL area was rezoned early in March 1967.^{11/} (Fig. 3.) The armed recon line was rescinded and four north-south zones were created, each with its own Rules of Engagement. The former TIGER HOUND Special Operating Area along the Laos/NVN/SVN Border was redesignated as Zone I and remained a free fire area with the same Rules of Engagement as before. The AmEmb, Vientiane, authorized armed recon in this zone without FAC control on all roads, trails, paths, and rivers; airstrikes were allowed against all forms of enemy activity outside 500 meters of active villages. Seventh Air Force, however, insisted on the use of a FAC in Zone I, even though the AmEmb, Vientiane, did not, because "to the guy in the air the line on the map means nothing. He could never be sure there wasn't going to be a violation."^{12/} This decision was proof of one of the main drawbacks of the new division--its complexity.

Any validated RLAF "A" or "B" targets, as well as any area from which ground fire was received, could be attacked. Prior to conducting strikes without FAC control, the pilot had to confirm his position by radar or TACAN as being within Zone I. Aircraft unable to establish a positive fix by use of available navigational aids prior to entering this zone had to abort unless FAC

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directed. Normally, strikes were not to be made within 1 KM of the known location of friendly teams or units.

ARC LIGHT strikes within Zone I required prior validation by Vientiane based on photo coverage and normal intelligence justification. Mine-type munitions (MK-36, M-28, and Gravel) could be delivered only on selected targets as approved by Vientiane and directed by 7AF; or under FAC control on RLAF validated targets; or against motorized vehicles; or against an area from which ground fire was being received, unless this area were an active village. No airstrikes could be conducted closer than five KM of the Cambodian/Laotian Border ^{13/}

Immediately west of this free fire area was Zone II, which stretched from 17° 40' N, south to the Cambodian Border. This corridor was entered from NVN by two of the three major doorways to the Ho Chi Minh Trail--Mu Gia and Ban Karai passes. Since it was more populous than Zone I, the ROE for Zone II were slightly more restrictive. Targets of opportunity could be attacked day or night, as long as they were within 200 yards of a motorable trail or road and outside of villages. Outside of this 200-yard limit targets could be struck only if they were validated RLAF priority "A" or "B" targets. With the exception of active villages, any area from which ground fire was received could be struck without FAC/MSQ control. Searchlights could also be attacked, if it were positively determined they were of the high intensity antiaircraft type and were located in proximity to authorized strike areas. Wide-beam boats and barges which were engaged in military activities could be struck under FAC control. ^{14/}

The next area to the west, Zone III, extended from the point on the

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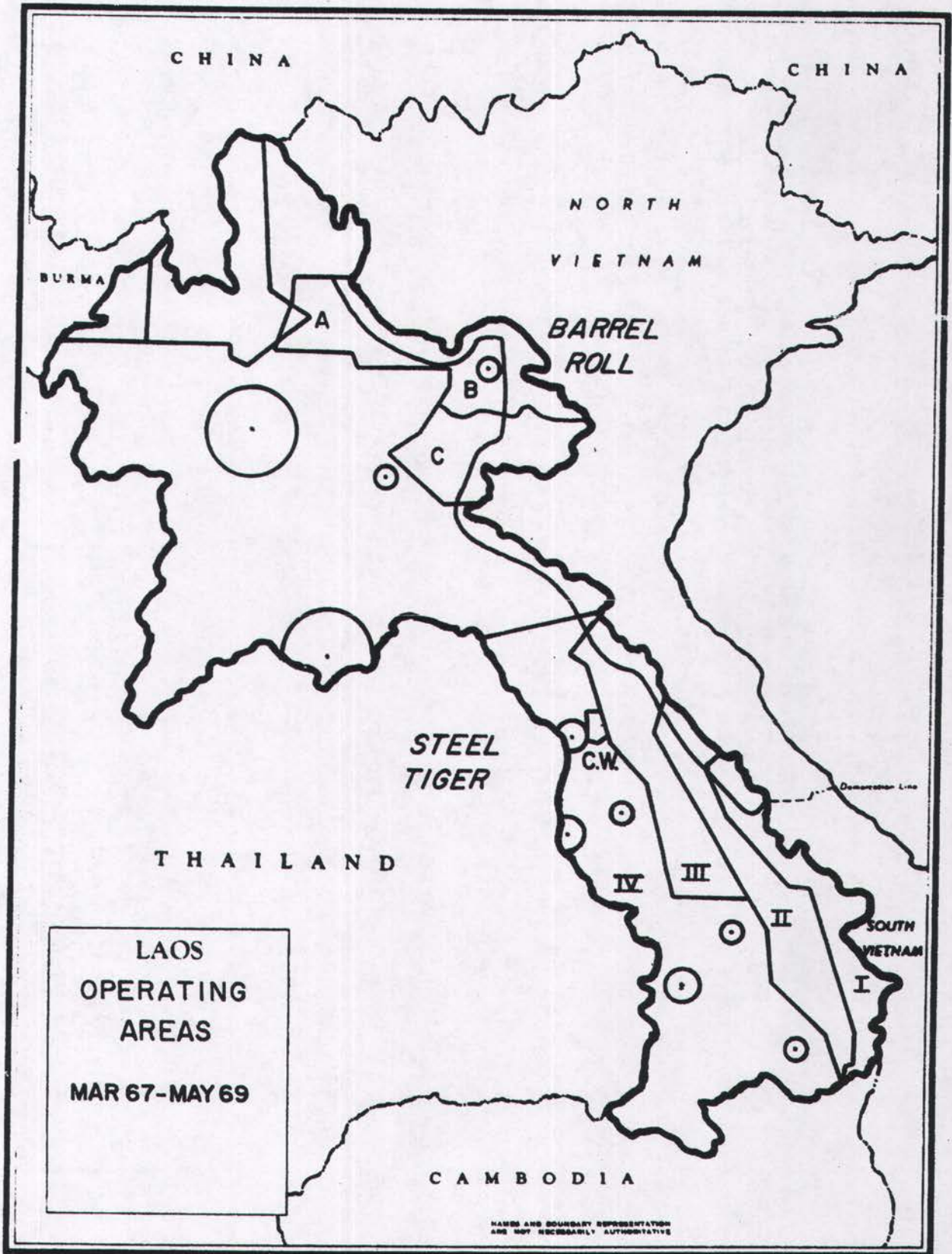


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NVN/Laotian Border where the northern limit of RP II joined the northern boundary of SL down to 16° 00' N. The entrance from NVN into Zone III was Nape Pass, the third major starting point of the Ho Chi Minh Trail. The Rules of Engagement for this zone were even more restrictive than those for Zones I and II. Targets, regardless of their location, could not be struck without FAC or MSQ control. The only allowable exceptions to this rule were areas from which ground fire was received and where high-intensity antiaircraft searchlights were located in proximity to authorized strike areas. Targets outside villages could be struck, if they were within 200 yards of a motorable road or trail. Farther than 200 yards, targets could not be attacked, unless they were either validated RLAF "A" or "B" targets, approved by one of the AIRAs, or approved by a Lao observer aboard a FAC or Airborne Battlefield Command and Control (ABCCC) aircraft. The remaining rules were the same as those for Zones I and II.^{15/}

In the funnel-shaped, northern end of Zone III, a special area was set aside for the training of Road Watch Teams (RWT). No strikes were permitted in this area unless the pilot was in positive radio contact with one of the ground RWTs through a FAC or the ABCCC.

The remaining area was designated as Zone IV. This was the region that contained the bulk of the native population of southern Laos. While the spine of the Annam Mountain Range ran through the first three zones, the fourth zone was largely an area of plains, bounded on the west principally by the Mekong River Valley. The major towns of the Laotian panhandle were located in this region--Savannakhet, Saravane, Thakhek, Attopeu, and Pakse. Since the NVN objective in the panhandle was the creation and maintenance of LOCs

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running down the mountain range from NVN into Cambodia and RVN, and the U.S. objective was its interdiction, Zone IV was largely ignored by these countries. Consequently, the Rules of Engagement for airpower in Zone IV were the most restrictive of any in SEA. All strikes within this zone had to have the double safeguard of AIRA approval and FAC control. Strikes could be directed only by Raven or Nail FACs. There were two exceptions to this rule: (1) two English-speaking, Lao ground Forward Air Guides (FAGs) in the immediate area of Attapeu were authorized to request and direct U.S. airstrikes without prior AIRA validation; and (2) helicopters or escort aircraft actively engaged in Search and Rescue (SAR) missions could return ground fire, but not outside 1,000 meters in all directions from the exact location in which the SAR operations were being conducted.

Twenty-one miles northwest of Saravane, Route 23, a major link of the Ho Chi Minh Trail, left Zone III and entered Zone IV. The Zone III Rules of Engagement followed it into Zone IV, until it disappeared into the 10 NM restricted circle around Saravane.

Restricted areas remained in effect around the five villages already designated in Zone IV, and to them was added a sixth--Muong Phaiane. Aircraft could not approach within 10 NM or 15,000 feet of these towns. A small, special operating area called CRICKET WEST (CW) was marked off within Zone IV, twenty miles east of NKP along the Zone III/Zone IV boundary. Within CW, each target had to be validated prior to a strike, either by an airborne Lao FAC or by radio request to the Assistant AIRA, Savannakhet. All strikes had to be under FAC control except when ground fire was received.

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BARREL ROLL / STEEL TIGER RESTRICTIONS 1967 - APR 1969

TGTS

200 YDS-

200 YDS+

OUTSIDE VILLAGES

INSIDE VILLAGES

WIDE BEAM BOATS

ORDNANCE

MINE TYPE

NAPALM

CS

SYSTEMS

CSS

COMMANDO NAIL

| | ZONE | | | | SOA RT 110 | BR A/R | BR (OTHER) |
|----------|----------|----------|--------------|----------|---------------|-----------|---------------|
| | I | II | III | IV | | | |
| | O | O | F | FA | O | O | F |
| | O | A | F/CSS A/V | FA | X | A/V | F A/V |
| 500 O | O | O | F | FA | O | O | 500 F |
| X | X | X | X | FA | X | X | X |
| O | F | F | F | FA | N/A | 30 O | F |
| | | | | | | | |
| A | A | A | A | A | A | A | A |
| A/V F | A/V F | A/V F | A/V F | A/V F | A/V F | A/V F | A/V F |
| SAR | SAR | SAR | SAR | SAR | SAR | SAR | SAR |
| | | | | | | | |
| 500 O | A/V | A/V | A | A | A/V | A/V | O+F |
| X | X | X | X | X | X | X | X |

LEGEND

V - Validated RLAF A or B Target
 O - No Restriction
 X - Not Allowed
 F - FAC Required

N/A - Not Applicable
 A - Approval Required
 (Vientiane/Savannakhet/Raven FAC)
 CSS - Authorized

SAR - IN SUPPORT OF SAR OPERATIONS ONLY

FIGURE 4

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Far to the south near the Cambodian Border, Route 110 crossed Zone IV from west to east and then entered Zone I. Although two-thirds of this road was in Zone IV, the Zone I rules applied to all of it. ^{16/}

In the northern war, the three armed recon zones along the Lao/NVN Border, designated A, B, and C, remained unchanged. The Rules of Engagement for these areas were identical to those of SL Zone II. In the rest of BR, outside these armed recon sectors all targets had to be validated and strikes had to be FAC controlled. A-1 aircraft were authorized to FAC for themselves, if they had been briefed by the Udorn Controlled American Source (CAS) or, if not briefed by the CAS, against validated RLAFF targets, or when they were in contact with an authorized CAS team chief or Raven FAC. A list of the CAS team chiefs authorized to validate targets and control strikes was provided in the 7AF Operations Order.

Prohibited areas defined by a circle with a 25-NM radius remained in effect around Vientiane, the political capital, and Luang Prabang, the royal capital. No ordnance could be expended within a 6-NM radius from the center of Khang Khay nor on the town of Sam Neua.

No free zone existed in Laos for jettisoning live ordnance. In case of emergency, all ordnance except napalm could be dropped under visible conditions on any motorable trail, road, ford, or bridge within the BR armed recon areas and Zones I and II in STEEL TIGER. Napalm could be jettisoned on certain specified road segments in Laos under radar control. ^{17/}

The total effect of these 1967 changes to the Rules of Engagement was to

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make them more complex and possibly more restrictive. In usage, some of the rules proved impractical. An example of the restrictiveness of the ROE may be seen in the rule requiring validation of targets. Three major ROE hampered ARC LIGHT operations in central and southern Laos. Strikes could not be made on targets that were within three KM of friendly forces such as RWTs or suspected PW camps. In addition, no ARC LIGHT strikes could be executed within five KM of the Cambodian Border. Finally, there could be no shrines, temples, national monuments, places of worship or active huts and villages within the target area. It was this final rule that created most of the problems for obtaining validation for lucrative ARC LIGHT targets. According to Seventh Air Force records, the average time consumed between identification of an area and the clearance to strike was 15.5 days. A large portion of this time (6.8 days) was used for administrative processing, transmission of the validation request, and awaiting Vientiane's response. Since success of these missions required timely strikes in response to the most recent intelligence available, the existing administrative processes and Rules of Engagement combined to reduce the timeliness and effectiveness of B-52 bombing. ^{18/}

The problem of validation time was thoroughly discussed at a conference at Udorn RTAFB in September 1968. The 7AF figures indicating that it took Vientiane from three to five days to process nominations for strikes, and eight to ten days for renominations, were refuted by the AmEmb representative. Embassy records indicated its response in most cases was within one or two days, except when extensive analysis of friendly personnel or RWT activity necessitated longer periods of time. As a result of these discussions, a decision was made

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to streamline the validation procedures. The 7AF representative proposed the creation of Special ARC LIGHT Operating Areas (SALOAs), each of which would contain several target boxes capable of being validated en masse. The Vientiane American Embassy representative reluctantly agreed to this proposal. Although validation time rose to 25.5 days (7.0 days at Vientiane) after the creation of the SALOAs,^{19/} this was partially explained by the fact that larger numbers of targets were validated at once. Validation time continued to be a problem,^{20/} with tactical as well as strategic airstrikes.

In October 1968, the Air Attache in Vientiane issued a list of rules and restrictions pertaining to the BR area. This list highlighted the complexity which had crept into the Rules of Engagement. JCS-imposed restrictions included those against operating in BR areas Alpha, Bravo, and Charlie within 10 NM of the NVN Border, armed reconnaissance on certain designated routes, COLLEGE EYE, Hot Pursuit, air operations adjacent to the ChiCom Border, and ARC LIGHT. The AmEmb, Vientiane, controlled ordnance, target validations, PW camp restrictions, defoliation, and ground and Raven FAC operations. Seventh Air Force imposed tactical AF release altitude restrictions for high threat areas, and command and control procedures governing Laos strikes.^{21/}

The profusion of areas in Laos, the narrowness of the zones, and the lack of outstanding geographical/navigational features created problems with the new arrangement. In July 1968, the Commander, 7AF, proposed simplification of the rules, so that the ROE for Zone I would be extended to Zones II and III; the Zone III rules would be put into effect in Zone IV and CRICKET WEST.^{22/}

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Although these proposals were not acted upon, the problems of complexity and restrictiveness came up at a meeting at Udorn RTAFB two months later. The purpose of the meeting was to iron out the ground rules for the forthcoming COMMANDO HUNT campaign in SL Zone I. Discussions among the Ambassadors to Laos and Thailand and the Commanders of 7AF and 7AF/13AF ranged across the entire spectrum of existing ROE and the problems created by them. ^{23/}

The continuing problem of validation time came up for discussion. Referring to ARC LIGHT strikes, the DCS, Intel, 7AF, commented: ^{24/}

"It took on the average of 5-8 days to get the first ARC LIGHT box validated. However, one ARC LIGHT box for 12 B-52s against the average of 75 truck parks will only give you about a 30% probability of hitting the trucks. So you need 3 boxes for B-52s. And in order to get validation for restrike another 5-8 days are entailed. So as a consequence of the whole administrative problem, the need to build these targets and get them off to SAC, we were able to get only a fraction of the effort we wanted. I would hope that in our future discussions we could iron out some procedures that would help us in our next campaign."

The Deputy Chief of Staff, Intelligence, also stated much time had been lost in Zone II, due to the inability to get validation for COMBAT SKYSPOT. The Ambassador to Laos replied that he was unaware of any problems with the validation system and knew that AIRA had validated targets as quickly as six minutes after acquisition. It was his opinion that the existing machinery for validation was good--it was a question of proper usage, and briefing of personnel required to use it. ^{25/}

A major factor hurting the truck kill ratio, in the opinion of 7AF, was

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the requirement for FAC verification and clearance for strikes against visual sightings. The element of surprise, essential when dealing with perishable targets, was lost due to the overt nature of the FAC mission, which gave the enemy ample warning to evade by driving off the road. The FAC requirement for identification of trucks was unnecessary because "the only ones running around are NVN."^{26/} The Ambassador replied that some of the Rules of Engagement were not too well understood. In Zones I and II the FAC requirement was not too important and, except for several specific areas of suspected PW camps, could be removed. Two factors made it necessary to continue the requirement for FACs in Zone III. One was the presence there of RWTs and Commando units. The other was the friendly population of the area which provided logistical support to the RWTs.

On the question of munitions, 7AF requested relaxation of some of the restrictions. The CS agent was an excellent area denial weapon and was needed to slow down the enemy's effort at repairing his roads. Yet, its use was not authorized anywhere in Laos. The Ambassador agreed to refer the question of using the CS agent to higher authority at Washington but, knowing the feeling in the State Department about it, he was sure they would not buy it. Further, given the propaganda aspects of the weapon, he knew that Souvanna Phouma would not be too eager about it.

In Zones II and III, only targets of opportunity within 200 yards of a motorable road could be struck. The Ambassador interpreted the 200-yard limitation this way:^{27/}

"Many of your [7AF] people have interpreted that to mean that if there's a truck park over 200 yards away from a

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known road, it's excluded. This is not so. If the truck got from the road to the truck park, it is ipso facto a motorable road or trail. So anyplace that you find a vehicle, you can assume that it got there on something that is fair game. If you find a truck you can assume it motored there, it didn't drop there."

No change in the Rules of Engagement for the COMMANDO HUNT campaign resulted from these discussions.

Cessation of bombing over NVN on 1 November 1968 brought about a change in the rules for the Laotian/NVN Border area. Immediately after the halt, a positive control area 10 NM wide was created inside Laos, along the border, to protect against inadvertent penetration of the NVN airspace.^{28/} Several days later, the JCS authorized U.S. aircraft "to destroy SAM or AAA weapons, installations, and immediate supporting facilities in NVN south of 19° which fire at our aircraft over Laos."^{29/}

In December 1968, the requirement for FAC or MSQ control of AC-47 gunships in Laos was waived to permit the accomplishment of the AC-47 mission.^{30/} During the same month, mine-type munitions, such as the MK-36, BLUs, and Gravei were approved for use in Laos, but only on targets validated by the American Embassy.^{31/} The importance of Zone II, through which wound a major portion of the Ho Chi Minh Trail, was highlighted by a change in the rules pertaining to the use of napalm. Whereas in Zone I, napalm could not be used against gun emplacements unless ground fire was received, in Zone II it could be used against gun emplacements even though ground fire was not received.^{32/}

A major consolidation of the Rules of Engagement for Laos was achieved in

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1969. At an April meeting at Vientiane, representatives of AmEmb, Vientiane, MACV, and 7AF agreed to reduce the four SL zones to two, separated by a line running north-south down the center of the Laotian panhandle. The new division became effective on 11 May. (Fig. 5.) East of this line was a new area designated STEEL TIGER EAST which comprised areas formerly known as Zones I, II, and part of III, and the Special Operating Area along Route 110. The Rules of Engagement for SL/East were essentially the same as those for the former Zone II. Armed recon without FAC control was authorized within 200 meters of all routes when fragged by 7AF or cleared by ABCCC. Targets of opportunity more than 200 meters from a motorable road could be struck only when controlled by FACs and when validated by the American Embassy, Vientiane. Radar bombing was authorized against any targets having prior embassy approval. Ordnance, except napalm and mine-type munitions, could be dropped armed or safe under visual conditions on any road, trail, ford, or bridge. Napalm was authorized for use under FAC control against motorized vehicles and AA and automatic weapons firing at the aircraft. It could also be used against other validated targets. With the exception of vehicles, it could not be used against targets of opportunity. Mine-type munitions and area denial weapons were authorized as validated and directed by 7AF. No gas weapons could be used in Laos except for use in SAR missions.

Active villages were to be avoided by 500 meters when conducting airstrikes unless fired upon or when high-intensity AA searchlight illumination was received. Ground fire could be returned from any area, except within 500 meters of a confirmed PW camp. F-105 aircraft were authorized to carry antiradiation

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(SHRIKE) missiles (AGM-45).

The area west of this line was designated STEEL TIGER WEST and the Rules of Engagement were essentially those of the former Zone IV. Armed recon was not authorized. All strikes required a FAC or Forward Air Guide. No radar bombing or napalm would be used unless specifically authorized by the AmEmb, Vientiane. Ground fire could be returned only by aircraft actively engaged in CAS EXFIL/INFIL and Air Force SAR operations. This authorization was limited to an area 1,000 meters in all directions from the exact location in which these operations were being conducted. ^{33/}

The April conference was less successful in changing the Rules of Engagement for the BR area. The Alpha, Bravo, and Charlie areas remained armed recon zones, with the same ROE as in the newly designated STEEL TIGER EAST. In the Alpha area, Route 19 was authorized to be struck. All LOCs in Bravo were approved for armed recon. In Charlie, Routes 6, 61, and 7 could be struck. A Special Operating Area (SOA) northwest of Khang Khai was designated a Free Strike Zone. When fragged or cleared into this Free Strike Zone by ABCCC, aircraft could attack all forms of military activity outside of 500 meters of an active village without FAC control. ^{34/}

The presence of Chinese road construction crews in the northern and northwestern regions of Laos led to the creation of yet another restricted area. Following the 1962 agreement of Laos, the Chinese offered to assist the Laotian Prime Minister, General Phoumi Nosavan, by building roads for him leading from China into Laos. The Prime Minister agreed. For more than five years,

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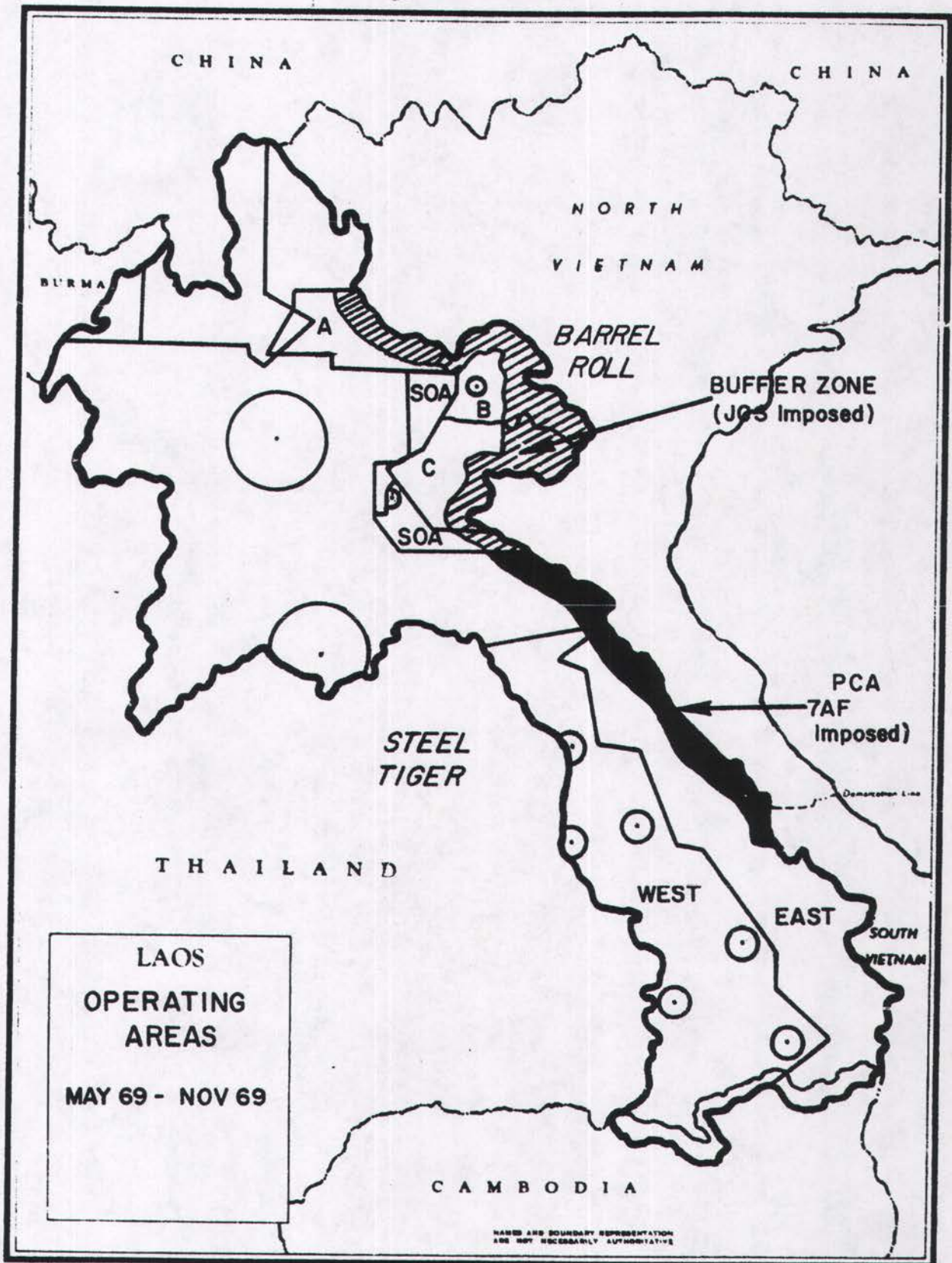


FIGURE 5

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no construction took place but, in 1968, the ChiComs began to fulfill their promise and Souvanna Phouma was helpless to stop them. They built a major highway which ran east - west slightly above the 21st parallel from the Dien Bien Phu area in NVN across the top of Laos to the Chinese Border near Ban Botene. This in effect separated the northern province of Phong Saly from the rest of Laos. Early in 1969, they were engaged in constructing a road southward toward Pak Beng. To avoid international incidents in this area, U.S. aircraft were prohibited from conducting airstrikes or low level photo reconnaissance missions without special approval of the American Embassy, Vientiane, north of a line along the 21st parallel from the ChiCom Border to the western edge of the armed recon area Alpha.

The Buffer Zone along the Laos/NVN Border remained in effect with the same Rules of Engagement as before. No strike could be conducted within 10 NM of the NVN Border or east of 104° 15' E, between 19° N and 21° 15' N, unless authorized by CINCPAC and directed by 7AF. Even with this authorization, strikes had to be made under the electronic surveillance of COLLEGE EYE and under FAC control. Further, COLLEGE EYE monitor was required for all strikes in BARREL ROLL.

A surge of NVN/Pathet Lao (PL) activity in BARREL ROLL during the summer of 1969, which was climaxed by the enemy capture on 27 June 1969 of Muong Soui, 90 miles north of Vientiane, brought about a modification of the role of airpower in northern Laos. Prior to this summer offensive, USAF aircraft had been used in BARREL ROLL almost solely for close air support of troops in contact. With the fall of Muong Soui and the resultant threat to Luang Prabang and Vientiane,

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airpower took on the additional role of interdiction; the war in BARREL ROLL assumed certain aspects of the war to the south in STEEL TIGER.

Two main avenues of supply snaked into BARREL ROLL from North Vietnam. Route 7 entered Laos from North Vietnam through Barthemy Pass and ran westward through the Plaine des Jarres and on to Muong Soui. Farther north, Route 6 and its tributaries connected North Vietnam with Sam Neua, the PL headquarters in this northern province, and from there ran south to a juncture with Route 7. In addition to these main arteries, numerous trails and bypasses were being developed to supply the NVN/PL troops in Laos.

At a conference at Vientiane in August 1969, proposals were made for changes to the Rules of Engagement to bring them in line with the fluid situation. For two months, recommendations and comments followed. In September, the new rules were approved by JCS, and put into effect by CINCPAC on 27 September 1969 ^{35/}. The areas were realigned so as to be more consistent with cultural and geographical features (Fig. 6). At the same time, the new areas and rules provided for sufficient clearance between friendly forward positions and armed reconnaissance areas.

BARREL ROLL was divided into three areas: North, East, and West (Fig. 6). Of the three, BARREL ROLL North contained the most restrictive rules. No airstrikes nor YANKEE TEAM (tactical reconnaissance) operations were permitted, unless the American Embassy at Vientiane requested them and CINCPAC and JCS approved. In BARREL ROLL WEST, all targets had to be validated and controlled either by a FAC or a FAG, or employing all-weather bombing. No ordnance could

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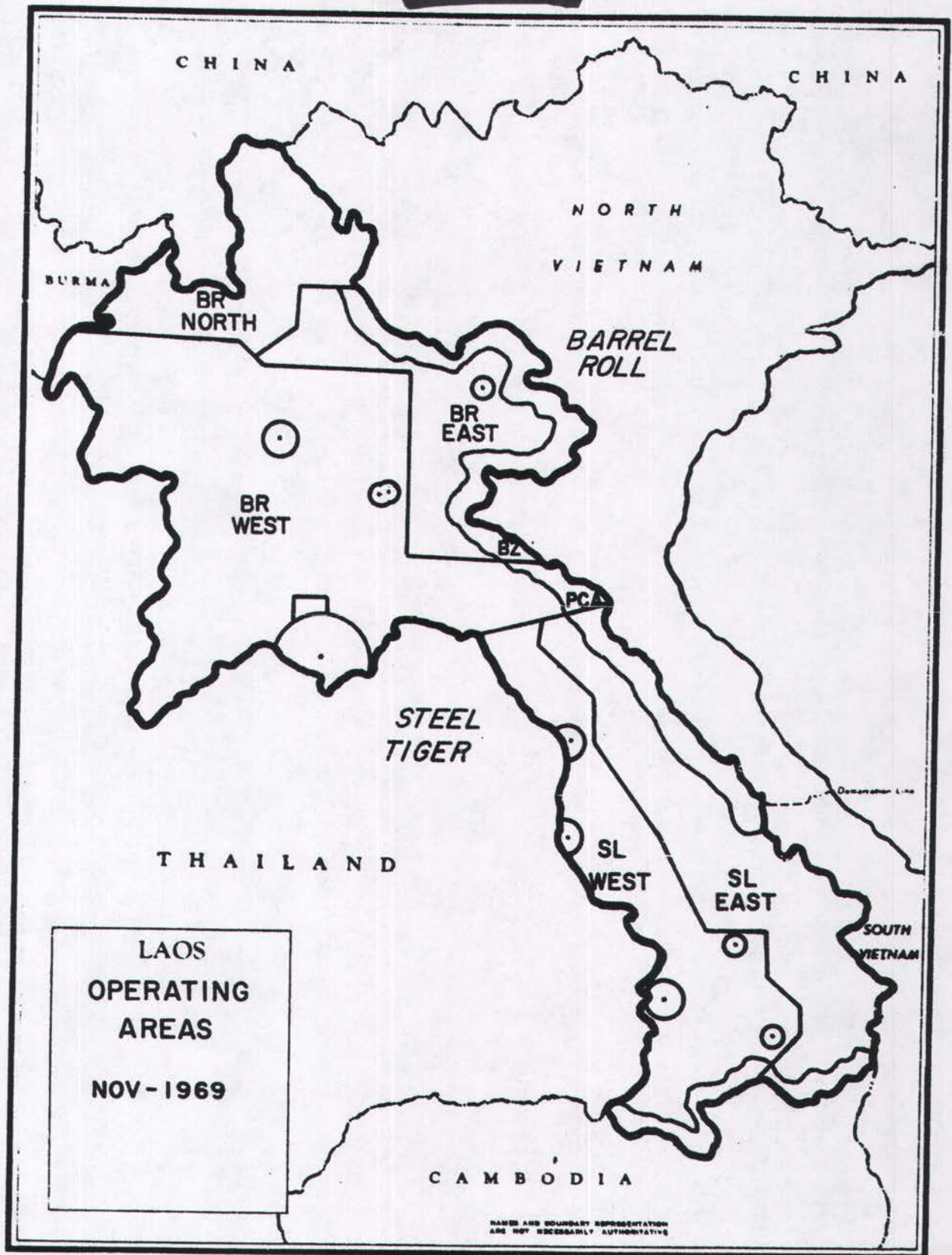


FIGURE 6

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be dropped on Khang Khai or Phuong Savan. Embassy authorization was required before napalm could be used. The 24-NM prohibited circle around Vientiane was extended to cover the Nam Gum Dam construction project. The circle around Luang Prabang was reduced to 10 NM.

The main NVN LOCs were in BARREL ROLL EAST and the greatest changes in the Rules of Engagement occurred there. The A, B, and C armed reconnaissance areas were replaced with a solid zone to within 10 NM of the NVN Border in which armed reconnaissance without FAC control was authorized within 200 meters of all LOCs. Outside the 200-meter limit, strikes had to be validated and controlled by a FAC/FAG. Ground fire could be returned anywhere in BARREL ROLL EAST except into the town of Sam Neua. The total effect of these changes was to simplify the areas and rules and to provide more flexibility to the interdiction effort.

The line separating SL EAST and SL WEST was adjusted slightly westward. The rules for these sectors were essentially the same as those established for BR EAST and BR WEST, respectively.

The covert nature of U.S. air operations in Laos kept such operations out of the limelight of U.S. public opinion. Accordingly, the Rules of Engagement were shaped less by the need to create a favorable impression at home than by the restrictions laid down by the 1962 agreement and the necessity of avoiding damage to the image of Souvanna Phouma among his people. For these reasons, the U.S. Ambassador to Laos became the focal point in ROE determination.

Between 1966 and 1969, the ROE for Laos shifted from the relatively simple

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rules in existence before 1967, to more complex ones between 1967 and mid-1969, and back again to simpler arrangements by the end of 1969. The rule that appeared to have created the greatest consternation was the need to obtain validation of the targets from Vientiane and the time required for this validation. ^{36/}

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CHAPTER III
SOUTH VIETNAM

The Rules of Engagement for air operations in RVN remained relatively constant throughout the period 1966-1969. These rules were conditioned by the fact that in-country air activity was directed toward close air support (CAS) of ground forces and by the frequency of combined ground operations involving U.S., Free World Military Assistance Forces (FWMAF), the Army of Republic of Vietnam (ARVN), and the Vietnamese Air Force (VNAF). During this three-year period, there was one shift of emphasis worthy of note. As a result of the mounting number of Short Round incidents, particularly during the 1968 TET offensive, the rules issued late in 1968 contained "additional provisions to enhance Short Round prevention."^{1/}

The agency responsible for the Rules of Engagement pertaining to RVN was MACV, whose directive (525-13) contained the rules for the use of artillery, tanks, mortars, naval gunfire, riverine forces and air and armed helicopter support. The rules governing air support were further specified by 7AF's Regulation 55-49, which laid down the rules for the control of airstrikes and the duties of the FAC and pilots of strike and recon aircraft.

The basic requirement was the approval of the province chief or a higher RVN authority for strikes by U.S. aircraft. This was often tempered by the pilot's judgment at the time of the strike. In Specified Strike Zones--areas designated by MACV--where no friendly forces or populace existed, airstrikes did not require further RVN clearance. Targets could be attacked on the

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initiative of the US/FWMAF commanders. U.S. strike aircraft had to be controlled, in order of preference, by either a U.S. FAC, a VNAF FAC, or COMBAT SKYSPOT. When control by FAC or COMBAT SKYSPOT was impossible, targets could be designated by the commander of a ground unit or by the US/FWMAF pilot of an aircraft supporting the ground unit. In addition, targets could be designated by the US/FWMAF/RVNAF pilot of a MedEvac or supply aircraft which was required to operate in the vicinity of a hostile village or hamlet.

One set of rules governed air attacks on villages and hamlets, another controlled strikes within urban areas. Fixed-wing aircraft CAS missions that involved strikes on hamlets and villages had always to be controlled by a FAC and had to receive US/RVN/RVNAF clearance before the attack could be conducted. If the airstrike were not conducted in conjunction with an immediate ground operation, the inhabitants of the village were to be warned of the impending attack either by leaflets or a loudspeaker. Sufficient time was to be provided for the inhabitants to evacuate the village. When the attack was carried out in conjunction with a ground operation, no warning was necessary if the ground commander judged that such a warning would jeopardize his mission.

The ROE for attacks on known or suspected VC/NVA targets in urban areas were necessarily hedged in by greater restrictions to avoid unnecessary destruction of civilian property. In addition to the requirement for FAC control, approval had to be obtained from either the Corps Commander or the U.S. Field Force Commander. This also held true for U.S. airstrikes in support of RVNAF. In all cases of air attacks on urban areas, leaflets and loudspeakers were to be employed to warn the civilian population and to attempt to secure their

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cooperation and support. The use of incendiary-type munitions was prohibited unless destruction of the area was unavoidable and friendly survival was at stake. AC-47 gunships could be employed without a FAC to fire on targets designated by the ground commander responsible for the tactical situation.

Since the mission of U.S. aircraft operating in-country was largely close air support, detailed rules were in force to prevent Short Rounds. The FAC had to be acquainted with the exact location of all friendly forces near the target. To do this, he had to have a thorough knowledge of the ground scheme of maneuver and receive the appropriate ground commander's clearance prior to clearing strike aircraft. Friendly forces on the ground were responsible for marking their position for each flight of strike aircraft and for remarking them as often as it was required. The FAC was responsible for marking the target and the ground commander for confirming the accuracy of the target-mark. If in the opinion of either the ground commander, the FAC, or the strike pilot, the target was inaccurately or poorly marked, the FAC was to remark it before the strike aircraft could be cleared to expend ordnance. If the position of friendlies could not be marked due to lack of marking material or for tactical reasons, the FAC was to ask the ground commander to accept responsibility in the event of a Short Round.

The success of a mission depended heavily upon reliable communication and complete understanding among the FAC, ground commander, and strike pilot. The FAC communicated with the ground commander to coordinate marking, receive ground clearance prior to clearing strike aircraft, advise the ground commander of all pertinent aspects of ordnance delivery, and to advise the ground

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commander when all ground elements were to take protective cover. FAC radio contact with the strike pilot was needed to insure that the strike pilot was given a thorough briefing on all aspects of the mission. The FAC had to supply the strike pilot with prominent ground references from which he could ascertain surface distances, friendly locations in relation to the target, characteristics of the target area, local weather conditions, final clearance for the strike, or discontinuance of the mission.

When an airstrike was conducted in support of an ARVN unit the rules called for the FAC to be assisted by a VNAF FAC or VNAF observer to aid him in directing the airstrike. In the event the VNAF FAC had language difficulty, the U.S. FAC was to assume control of the strike. When requested by the VNAF FAC, the airstrike was to be stopped.

The strike pilot was enjoined by the Rules of Engagement to always be under control of the FAC or other designated control agency. He had to have visual contact with the target or target marker and be positive of the position of friendly troops. Strike pilots were authorized to defend themselves against ground fire when the source of the fire could be visually identified, when the strike could be positively oriented against the source, and when the fire was of such intensity that counteraction was necessary.

Pilots of strike aircraft were to avoid flying over friendly populated areas when armed. When conditions made overflight of friendly positions necessary, the ground commander was to be notified so that he could determine the risk versus the desired results. All armament switches were to remain in the

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"safe" position until entrance into the target area.

Helicopters could attack urban areas only when directed by the responsible ground commander. Only specific buildings (point targets) which were positively identified by the pilot could be struck. The engagement of target areas in urban areas was prohibited. Door gunners could fire only when authorized by the aircraft commander. Pilots of helicopters could defend themselves against ground fire when the source of fire could be visually identified, when the attack could be positively oriented against the source, and when the fire was of such intensity that counteraction was necessary.

The rules for jettisoning munitions were very specific. Munitions could be jettisoned "safe" only in designated areas except during inflight emergencies. During night or Instrument Flight Rule (IFR) conditions, aircraft had to be under positive radar control while jettisoning. During day Visual Flight Rules (VFR), drops were to be monitored by radar whenever possible. During an in-flight emergency, munitions could be jettisoned "safe" in other than designated jettison areas, when there was an immediate threat of injury to the crew or damage to the aircraft. Every effort was to be made to insure that jettisoned munitions did not impact into or near inhabited areas. CBU dispensers and expendable rocket launchers were to be jettisoned in the immediate vicinity of the target after expenditure of munitions. Water areas within or adjacent to the target area were to be utilized whenever possible to deny the enemy access to the dispenser tubes or unexpended ordnance.^{2/}

When air operations involved religious monuments or public buildings in

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RVN, special Rules of Engagement applied: ^{3.}

"The enemy has shown by his actions that he takes advantage of areas or places normally considered as nonmilitary target areas. These areas are typified by those of religious background or historical value to the Vietnamese. Where it is found that the enemy has sheltered himself in places of worship such as churches and pagodas or has installed defensive positions on public buildings and dwellings, the responsible senior brigade or higher commander in the area may order an air attack to insure prompt destruction of the enemy. The responsible commander must identify positive enemy hostile acts either in preparation or execution. Weapons and forces used will be those which will insure prompt defeat of enemy forces with minimum damage to structures in the area."

An exception to this policy was made for the Palace Compound in the Hue Citadel. In the case of this national monument, commanders were enjoined to use massive quantities of CS crystal.

Since 1966, COMUSMACV published a quarterly consolidation of the Rules of Engagement applicable to the borders of the RVN and the DMZ. Specific restrictions fluctuated with changes in air operations in neighboring countries. In the DMZ, before the bombing halt, authority was granted to conduct airstrikes within the zone against clearly defined military activity ^{4.} After the halt, aircraft were prohibited from crossing the DMZ. ^{5.} In the event that SAMs or AAA were fired at friendly aircraft over RVN, friendly forces could destroy the enemy's weapons, installations, and immediate supporting facilities. Immediate pursuit was authorized into NVN territorial sea or airspace in response to hostile acts and in pursuit of any vessel or aircraft that was operating in

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support of the VC/NVA insurgency. U.S. naval and air forces engaged in immediate pursuit of NVN naval and air elements were not authorized to attack other unfriendly forces or installations, except in response to an attack by them, and then only to the extent necessary for self-defense. Aeromedical evacuations in support of any authorized ground operations in the DMZ were permitted.^{6/}

To the west, aircraft were prohibited from crossing the Cambodian Border without specific authorization from COMUSMACV. Strike aircraft could not operate within five KM of the Cambodian Border without FAC or MSQ control. All FACs operating in the vicinity of the border had to determine their position from charts of a scale of 1:50,000 or larger. All organizations responsible for planning or execution of missions within five KM of the border had to have posted in Operations a 1:250,000 or larger scale chart on which the Cambodian Border was distinctly marked, on the RVN side, to the depth of five KM. Aircraft supporting border outposts were permitted to operate as necessary in the outpost area, but could neither fire nor fly across the border. All aircraft on missions within five KM of the Cambodian Border had to be tracked by radar, which could advise them of their position relative to the border and of any impending penetration.

Along the RVN/Laotian Border, aircraft were not permitted to cross the border into Laos without prior approval of COMUSMACV. All operations planned near the border had to be reported in advance to COMUSMACV. In an emergency, U.S. forces could take appropriate countermeasures, including airstrikes against enemy forces firing from the Laotian side of the border.^{7/}

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EPILOGUE

The Rules of Engagement for American airpower between 1966 and 1969 reflected the political situation in each of the three major areas of military conflict in SEA. The political decision to avoid adverse public opinion and to avoid the possibility of direct confrontation with Communist China and Russia dictated a less than total bombing campaign against North Vietnam. Accordingly, the Rules of Engagement prohibited the bombing of certain areas and the use of certain ordnance. The covert nature of operations in Laos, coupled with the need to avoid political embarrassment to Premier Souvanna Phouma required strict control of the air effort in Laos. This control was exercised through the American Ambassador to Vientiane, who played a major role in formulating the Rules of Engagement. The status of American airpower as an instrument of RVN policy placed limits on its exercise in South Vietnam.

Despite differences of opinion regarding the wisdom of American policy in these three areas, it seems clear that the Rules of Engagement allowed airpower to serve that policy well, while at the same time depriving airpower of a true test of what it could accomplish.

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APPENDIX I

TERMS OF REFERENCE

FIXED TARGETS Caves, truck parks, open storage buildings, ferries, cantonment/barracks, trenches, and bunkers.

IMMEDIATE PURSUIT Pursuit initiated in response to actions or attacks by hostile aircraft or vessels as defined in the Rules of Engagement. The pursuit must be continuous and uninterrupted and may be extended as necessary and feasible over territorial/international airspace/seas as prescribed.

PMDL Provisional Military Demarcation Line.

RLAF TARGET CATEGORY Either:
"A" - an RLAF target on the Active Target List which has been approved by AmEmb, Vientiane, and can be struck without further approval.
"B" - Same as "A" except the target is considered inactive. If there are signs of activity, it can be struck without further approval.
"C" - Listed on the Active Target List in "hold" status for political reasons. Must obtain specific AmEmb, Vientiane, approval for strikes.

SALOA Special ARC LIGHT Operating Area.

TARGET OF OPPORTUNITY Target of a military nature such as vehicles, troops, active AA/AW, bridges, fords, etc. not specifically designated in the frag orders.

TERRITORIAL SEAS A belt or sea adjacent to a coastal state three miles in breadth measured from the low water mark along the coast. However, in the stages claiming over three miles, that distance shall be observed for the Rules of Engagement, as if it were the width of their territorial seas. The following are the states' claims with regard to their territorial seas.

- (1) Thailand - 6 miles presumed
- (2) Cambodia - 5 miles
- (3) South Vietnam - 3 miles presumed
- (4) North Vietnam - 12 miles presumed
- (5) Communist China - 12 miles

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| AAA | Anti-aircraft Artillery |
| AA/AW | Aircraft Artillery/Automatic Weapons |
| ABCCC | Airborne Battlefield Command and Control Center |
| AIRA | Air Attache |
| AmEmb | American Embassy |
| ARVN | Army of Republic of Vietnam |
| BR | BARREL ROLL |
| BZ | Buffer Zone |
| CAS | Close Air Support |
| CBU | Cluster Bomb Unit |
| ChiCom | Chinese Communist |
| CINCPAC | Commander-in-Chief, Pacific Command |
| CINCPACAF | Commander-in-Chief, Pacific Air Forces |
| CINCPACFLT | Commander-in-Chief, Pacific Fleet |
| COMUSMACV | Commander, U.S. Military Assistance Command, Vietnam |
| CW | CRICKET WEST |
| DMZ | Demilitarized Zone |
| DOD | Department of Defense |
| ECM | Electronic Countermeasure |
| FAC | Forward Air Controller |
| FWMAF | Free World Military Assistance Forces |
| GCI | Ground-Controlled Intercept |
| ICC | International Control Commission |
| IFR | Instrument Flight Rule |
| JCS | Joint Chiefs of Staff |
| KM | Kilometer |
| LOC | Line of Communications |
| MACV | Military Assistance Command, Vietnam |
| MedEvac | Medical Evacuation |
| NE | Northeast |
| NKP | Nakhon Phanom |
| NM | Nautical Mile |
| NVA | North Vietnamese Army |
| NVN | North Vietnam |
| NW | Northwest |

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| PL | Pathet Lao |
| PMDL | Provisional Military Demarcation Line |
| POL | Petroleum, Oil, and Lubricants |
| PW | Prisoner of War |
| RCZ | Radar Control Zone |
| RESCAP | Rescue Combat Air Patrol |
| RLAF | Royal Laotian Air Force |
| RLG | Royal Laotian Government |
| ROE | Rules of Engagement |
| RP | Route Package |
| RR | Railroad |
| RT | ROLLING THUNDER |
| RTAFB | Royal Thai Air Force Base |
| RVN | Republic of Vietnam |
| RVNAF | Republic of Vietnam Air Force; Republic of Vietnam Armed Forces |
| RWT | Road Watch Team |
| SAC | Strategic Air Command |
| SALOA | Special ARC LIGHT Operating Area |
| SAM | Surface-to-Air Missile |
| SAR | Search and Rescue |
| SL | STEEL TIGER |
| SOA | Special Operating Area |
| SSZ | Special Strike Zone |
| SVN | South Vietnam |
| TACAN | Tactical Air Navigation |
| USSR | Union of Soviet Socialist Republics |
| VC | Viet Cong |
| VFR | Visual Flight Rule |
| VNAF | Vietnamese Air Force |

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