

The In-Country Air War

1965—1972

As 1965 opened, there was a desperate feeling among American officials in Washington and Saigon that something had to be done to raise South Vietnamese morale and reverse the depressing political and military situation. In early January, General Khanh agreed to continue supporting Premier Huong, but at month's end he ousted Huong from office. South Vietnam's governmental turmoil did not end for another 6 months. During that period the military installed and removed a second civilian premier and, finally, ousted Khanh himself, who then went into exile. On 21 June, the Armed Forces Council installed Maj. Gen. Nguyen Van Thieu as the new chief of state and Air Marshal Ky as prime minister.

While the South Vietnamese were still struggling to organize a viable government, the Viet Cong launched a series of destructive attacks on allied facilities. Thus, in the early morning of 7 February 1965, enemy mortar and demolition teams struck with 81-mm mortars against the U.S. advisory compound and airstrip at the ARVN II Corps headquarters in the Pleiku area, killing 8 Americans and wounding more than 100. Five U.S. helicopters were destroyed and other aircraft damaged. An hour later the Viet Cong attacked and set fire to aviation storage tanks at Tuy Hoa airfield. Fortunately, there were no casualties.

These events triggered a meeting in Washington of the National Security Council and President Johnson's decision to order immediate retaliatory

air raids against barracks and staging areas in the southern reaches of North Vietnam. That same afternoon, although the target areas were covered by clouds, 49 aircraft from naval carriers struck North Vietnamese Army barracks at Dong Hoi. The USAF-VNAF portion of the retaliatory response was held up because of adverse weather. However, the next afternoon—accompanied by 20 F-100's flying flak suppression sorties—28 VNAF A-1's hit barracks at Chap Le. The President, emphasizing that these air strikes (Operation Flaming Dart) were reprisals for the earlier attacks, reiterated that the United States sought no wider war.

The enemy replied on 8 February when the Viet Cong struck Soc Trang airfield without inflicting casualties or damage. Two days later, however, they blew up a U.S. Army enlisted men's barracks at Qui Nhon, killing 23 Americans, 7 Vietnamese, and wounding many others. The Allies responded immediately, launching Air Force, Navy, and VNAF planes against NVA barracks at Chanh Hoa and Vit Thu Lu. Despite these strikes, the enemy was undeterred and announced he would continue to attack U.S. military installations throughout South Vietnam. The reprisal raids, however, did temporarily lift the sagging morale of the South Vietnamese.

In addition to mounting attacks against the Americans, Viet Cong troops managed to achieve impressive gains in the II Corps area. Whereupon, on 19 February General Westmore-



2

(1) Secretary McNamara (l.) and Gen. Earle G. Wheeler, Chairman, of the Joint Chiefs of Staff, visit Saigon on 25 November 1965, where they conferred with Lt. Gen. Nguyen Huu Co and Ambassador Henry Cabot Lodge. (2) Gen. Curtis E. LeMay, Air Force Chief of Staff (l.) consults with Gen. Paul D. Harkins, Commander, U.S. Military Assistance Command, Vietnam, in April 1962. (3) Gen. William H. Blanchard, Air Force Vice Chief of Staff (1.), Secretary of the Air Force Eugene M. Zuckert, and Gen. John P. McConnell, Air Force Chief of Staff.

1

3

© N.G.S.





1



3



4



2

(1) Prime Minister Nguyen Cao Ky (l.) confers with Lt. Gen. Joseph H. Moore, Commander, 2d Air Division. (2) Gen. John D. Ryan, Commander in Chief, Pacific Air Forces visits with Binh Thuy AB in Vietnam, September 1967, and greets Maj. Clifford R. Crooker, an O-2A FAC pilot. (3) Gen. George S. Brown, Commander, 7th Air Force, accompanies Secretary of the Air Force Robert C. Seamans on a tour of USAF activities in South Vietnam. (4) Gen. John D. Lavelle, Commander, 7th Air Force greets Gen. Creighton W. Abrams, Commander, U.S. Military Assistance Command, Vietnam.

land—invoking authority given him 3 weeks earlier to use jet aircraft under emergency conditions—sent 24 Air Force B-57's against the Viet Cong 9th Division's base camp deep in the jungles of Phuoc Long province along the Cambodian border. Two days later an Army special forces team and a Civilian Irregular Defense Group (CIDG) company were caught in a Communist ambush at the Mang Yang pass on Route 19. Supported by F-100 and B-57 strikes, which prevented the enemy from overrunning Allied forces, U.S. helicopters moved in and successfully evacuated 220 men who might otherwise have been lost.

The events of February 1965 marked a turning point in the history of the war, although the military situation in Vietnam remained discouraging. In Washington, officials no longer talked about withdrawing American military advisors. Instead, they now recommended deployment of additional U.S. forces to Southeast Asia, proposals which the President generally approved. While a campaign of air strikes against North Vietnam was being readied and launched, Washington also lifted major restrictions on air strikes within South Vietnam. On 6 March, Westmoreland received authorization to use U.S. aircraft whenever the VNAF could not respond on a timely basis. The former requirement that USAF planes carry Vietnamese crew members was dropped.

On 8 March the 9th Marine Expeditionary Brigade landed at Da Nang to secure American installations there. On 5 May the Army's 173d Airborne Brigade arrived at Bien Hoa to defend the military complex there. By the end of May 50,000 American troops were in South Vietnam, 10,000 of them Air Force, and more were to come. On 25 July the President, deciding that an even larger force commitment was necessary to save South Vietnam, authorized an additional troop build-up to 125,000 men.

As the American ground forces increased, so did U.S. air power. In February 1965, the Strategic Air Command deployed two B-52 squadrons to Andersen Air Force Base, Guam, for possible use over South Vietnam. In April the Air Force activated four O-1 squadrons in South Vietnam. The first U.S. Marine F-4B's arrived at Da Nang on 12 April and immediately began flying close air support missions. A number of Air Force tactical fighter and bomber squadrons also deployed to Vietnam on temporary duty assignments, which were later made permanent. In October 1965 the first of five F-100 squadrons moved to Bien Hoa and Da Nang. They were followed in November by F-4C Phantoms of the 12th Tactical Fighter Wing, which were based at Cam Ranh Bay, and experimental AC-47 gunships at Tan Son Nhut. By year's end, the Air Force had more than 500 aircraft and 21,000 men at eight major bases in South Vietnam.

Other SEATO nations also sent military, medical, or civic action units to South Vietnam. They included a 1,557-man Australian ground-air task force, a New Zealand howitzer battery, a Philippine civic action group, and the Queen's Cobra Regiment from Thailand. The largest third-country contribution came from the Republic of Korea which was not a SEATO member. It initially dispatched one infantry division and a marine brigade totalling 20,600 men by the end of 1965. Later, Korea sent a second infantry division to Vietnam.

Viet Cong/NVA strength also continued to grow and enabled the enemy to retain the initiative and ability to interdict almost any line of communications within South Vietnam they chose. For example, Communist forces during 1965 almost totally isolated the Central Highlands of South Vietnam. To help counter enemy activity, President Johnson on 1 April authorized Westmoreland to employ



Gen. Hunter Harris, Commander in Chief, PACAF, stops at Pleiku AB during an inspection of USAF units.

American troops not only to defend American bases but also to join with the South Vietnamese in taking the fight to the enemy. On the 18th, the giant Air Force B-52's were brought into play for the first time. Flying from Andersen AFB, they struck a suspected Communist troop base area in Binh Duong province north of Saigon. Although the initial attack was unsuccessful—ground patrols could find little damage before the enemy drove them out of the area—the operation marked the beginning of extensive B-52 operations throughout Southeast Asia (see also Chapter VIII).

Aware of the military weakness of South Vietnam, General Westmoreland decided the first phase of Allied operations should consist of a holding action in areas already under Saigon's control. Beyond those areas, he proposed a series of "spoiling attacks" against enemy positions to keep the Communists off balance while the Allied force buildup continued. That is, the emphasis was to be on "search and destroy" operations rather than to seize and hold new territory. Under this strategy, air power was called upon to support all major ground unit actions while also assisting small special forces reconnaissance teams and outposts collecting intelligence of Viet Cong/NVA activity along South Vietnam's Cambodian and Laotian borders.

The deployment of USAF, Navy, and Marine units to Southeast Asia during the first half of 1965 represented the greatest gathering of American airpower in one locality since the Korean War. More than 142,000 USAF combat sorties of all types were flown and in excess of 56,000 tons of munitions dropped on enemy targets. The joint USAF-VNAF effort alone accounted for an estimated 15,000 enemy dead and thousands of other casualties during the period.

The first major combat action involving American troops came in

August 1965 in I Corps. During Operation Starlight, elements of the 3d Marine Division detected and pinned down the 2d Viet Cong Regiment, which found itself trapped along the coastal lowlands of Quang Ngai province, 15 miles from Chu Lai. With their backs to the sea, the enemy fought a bitter 2-day battle during which they suffered more than 700 casualties. Pilots of the 3d Marine Air Wing effectively shut off escape attempts by the Viet Cong.

In the Central Highlands in II Corps, the North Vietnamese launched a large-scale attack against the Plei Me Special Forces camp in October. An enemy regiment of an estimated 2,200 troops began its assault on 18 October and tried vainly during the next 10 days to overrun it in the face of intensive USAF air strikes. On several occasions the ferocity of their attack carried enemy troops to within 20 yards of the stronghold, only to be beaten back. In support of the camp, Air Force pilots flew 696 sorties and dropped more than 1,500,000 pounds of bombs on the attackers.

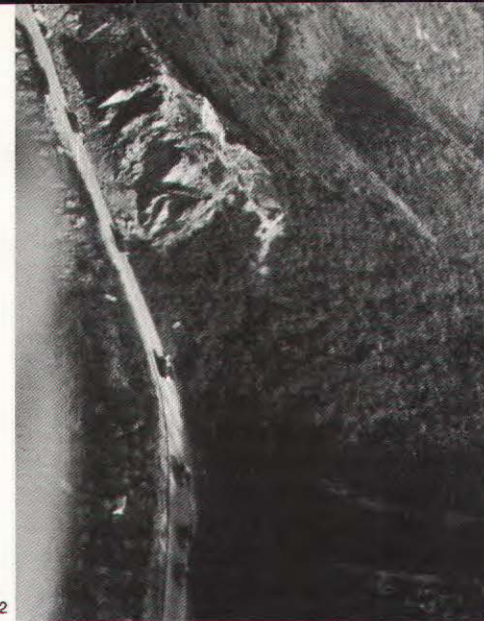
An even bloodier operation soon followed. Two NVA regiments were found in the Plei Me area, which set in motion a month-long American and ARVN search and destroy sweep which killed an estimated 1,800 enemy troops. This offensive was supported by 384 tactical air strikes, 96 B-52 sorties, and numerous night flare missions. The Communist troops fought hard, giving ground only grudgingly. However, the pounding from the air took a heavy toll, enemy resistance finally broke, and the survivors fled across the South Vietnamese border into Cambodia. But the allied side was not always successful. In November 1965 a South Vietnamese regiment, which had defeated the Viet Cong 281st Regiment, was overrun by the 272d Viet Cong Regiment, suffered heavy casualties and was put out of action. Its Vietnamese commander

Gen. Vo Nguyen Giap, North Vietnamese Defense Minister.





1



2

(1) 2d Lt. Edward Ridgley, CO, 3d Battalion, 9th Infantry Division, calls in an air strike. (2) An allied truck convoy heading for Khe Sanh. (3) Elements of the U.S. Army's 1st Infantry Division arrive at Vung Tau Bay on 13 July 1965 as part of the buildup of U.S. Forces in Vietnam. (4) ARVN troops march to helicopter prior to launching an operation against enemy forces in Can Tho, February 1966. (5) Australian airmen arrive in South Vietnam, August 1964. (6) Troops of the Korean Tiger Division prepare to board a C-130 at Qui Nhon AB for airlift to Phan Rang AB, May 1966. (7) An airman inspects aircraft ordnance prior to a mission. (8) Resupply drop at Ben Het, South Vietnam.

3





4



5



6



8



was killed in the battle.

During 1966 American troop strength continued to grow, reaching a total of 385,000. The allies also were bolstered by arrival of a second Korean infantry division and additional Australian and New Zealand forces. Other air equipment arriving in South Vietnam included an F-5 fighter squadron, two F-4 squadrons, and additional AC-47 gunships.

On 24 January 1966 fierce fighting broke out during search and destroy operations in I Corps involving some 20,000 1st Air Cavalry Division troops in Binh Dinh province and the U.S. Marines in the adjacent Quang Ngai province. Their objective was the 19th and 98th North Vietnamese Regiments and the 1st and 2d Viet Cong Regiments. The operations were highlighted by excellent cooperation among Air Force, Navy, Marine, and VNAF air crews who provided round-the-clock support. AC-47 gunships were especially effective at night in inflicting heavy casualties on the enemy. When the operations ended 6 weeks later, the Air Force had flown more than 1,100 combat support missions.

The only significant enemy success during the year occurred in March in the A Shau Valley when a Special Forces camp was overrun. Located astride a section of the Ho Chi Minh trail, two miles from the Laotian border and 60 miles southwest of Da Nang, the camp was defended by 219 Vietnamese irregulars and 149 Chinese Nung mercenaries, assisted by 17 American Special Forces advisors. Before dawn on 9 March an estimated 2,000 North Vietnamese regulars opened an attack on the outpost. Poor weather limited the number of sorties that could be flown the first day to 29. A CH-3C rescue helicopter managed to land and evacuate 26 wounded defenders that day. An AC-47 gunship reached the scene but was shot down; three of its six-man crew were rescued by helicopter, two were

killed, and one was missing in action.

On 10 March the NVA launched repeated assaults against the camp under cover of a thick overcast which hid the tops of the surrounding hills and mountains. Almost miraculously an A-1E pilot made his way into the valley through an opening in the cloud cover. Other aircraft followed him down and flew 210 strikes that temporarily slowed the enemy attack. According to one American survivor of the battle, tactical aircrews tried to hold off the enemy by flying strikes under such dangerous conditions that they "had no business being there." General Westmoreland later called the air support there one of the most courageous displays of airmanship in the history of aviation. The camp commander, Capt. Tennis Carter, USA, estimated the A-1E pilots of the 1st Air Commando Squadron killed 500 enemy troops outside the camp walls.

During the day's action, Maj. Bernard C. Fisher became the Air Force's first Medal of Honor recipient in Southeast Asia, when he made a daring rescue of a downed fellow pilot, Maj. D. Wayne Myers. Myers' badly damaged A-1E had crash-landed on the camp's chewed up airstrip. Major Fisher made a quick decision to try to rescue Myers. Covered by his two wingmen, Fisher managed to land his A-1 on the debris-strewn runway, taxied its full length, spotted Myers at the edge of the strip, wheeled around, picked him up, and then took off through a rain of enemy fire.

On the evening of 10 March, the camp was abandoned. Strike aircraft forced the enemy back while rescue helicopters went in and picked up the survivors. Of the 17 Americans, 5 were killed and the other 12 wounded. Only 172 of the camp's 368 Vietnamese and Nung defenders survived to be evacuated. The North Vietnamese suffered an estimated 800 deaths, most of them attributed to air strikes. As the last hel-



New Zealand artillery unit arrives in South Vietnam.

icopter departed, the enemy moved in and subsequently began developing the camp as a major logistic base with connecting roads to the Ho Chi Minh trail. Two years would elapse before any allied troops returned to retake the A Shau valley.

In mid-1966 General Westmoreland prepared to begin Phase II operations—a series of offensive actions aimed at blunting enemy advances into the highlands and neutralizing NVA/Viet Cong food and manpower resources in coastal regions. Planned to run through 1967, this phase emphasized Special Forces operations and employment of his fast growing USAF strength, now directed by his new Deputy for Air, Lt. Gen. William W. Momyer* (who also wore a second hat as commander of the Seventh Air Force, which replaced the 2d Air Division on 1 April). Long range ground reconnaissance patrols, working out of fortified base camps, infiltrated into enemy areas seeking weak spots and potential targets. In turn these base camps became the enemy's priority target.

On 2 June 1966 U.S. Army and ARVN elements moved against a North Vietnamese regiment at Tou Monong in the highlands of Kontum province. A vicious battle ensued which lasted 19 days and resulted in more than 500 enemy dead and decimation of the NVA regiment. Air units played a major role during the battle. At times, the opposing forces were so close that strike pilots were forced to try pinpoint bombing well inside the usual strike limitations. In one instance, a company commander called for and received air strikes on his own positions, which were being overrun. The strikes stopped the attack long enough for the Americans to establish a new defense perimeter.

A milestone of significance to General Westmoreland's operations was

17 June 1966, when the B-52's completed their first year of action over Southeast Asia. Westmoreland later wrote: "The B-52's were so valuable that I personally dealt with requests [for B-52 strikes] from field commanders, reviewed the targets, and normally allocated the available bomber resources on a daily basis." The MACV commander also "continued to urge that action be taken to substantially increase B-52 sorties."

About this time, two actions were taken to enhance B-52 flexibility of operation. The first of these involved introduction of the Combat Skyspot bombing system, whereby ground radar control units directed the big bombers over an enemy target and indicated the exact moment of bomb release. The system reduced planning time and provided a flexibility of operations which allowed diversion of the B-52's to targets of opportunity. The second innovation was establishment of a six-aircraft force of B-52's which was kept on continuous alert on Guam and which could be launched quickly whenever a battlefield situation required their assistance.

Another highlight of 1966 operations was the defeat of the Viet Cong 9th Division, which had an almost unbroken string of victories to its credit. In June and July, the 1st U.S. Infantry Division and the ARVN 5th Division—supported by tactical air units—launched attacks on the 9th, then massing for an attempt to seize the provincial capital of An Loc. In a series of five engagements, they soundly whipped the enemy division, forcing it to withdraw to sanctuaries deep in War Zone C, northwest of Saigon. It left behind more than 850 dead.

Subsequently, the 9th Division was outfitted with fresh troops and new equipment. In October—bolstered by the NVA 101st North Vietnamese Regiment—the 9th returned to action, this time in an operation aimed at a Special Forces camp at Suoi Da. It pur-

Royal Australian Air Force helicopter gunship goes into action against enemy troops.



*He succeeded General Moore on 1 July 1966.



sued a classic strategy—initiate an attack with a minimal force, trigger a rescue mission by relieving troops who would then be decimated by the main enemy force through ambushes and counterattacks. Initially, the scenario unfolded as planned. Four companies of U.S. mobile strike forces were heliborne into landing zones south and east of Suoi Da, where they were immediately attacked by the enemy. One company was overrun and the others had to withdraw or be evacuated by helicopter.

Responding to this pressure, Westmoreland committed some 22,000 troops from the U.S. 1st, 4th, and 25th Divisions, and the 173d Airborne Brigade. This triggered a raging 9-day battle with the enemy stubbornly holding his ground. Tactical air strikes came in so continuously that aircraft frequently were stacked 1,000 feet above each other waiting to drop their

bombs. Their pressure, plus the heavy pounding by the B-52's, finally broke the enemy's resistance. More than 2,500 tactical sorties were flown in support of the American troops, including 487 immediate requests for close air support. The B-52's flew 225 sorties. In addition to this strike support, 3,300 tactical airlift sorties delivered 8,900 tons of cargo to the ground forces and transported more than 11,400 men into and out of the battle zone.

By early November 1966, the battle was over. Allied forces had killed more than 1,100 enemy troops and wounded hundreds more and seized enormous quantities of weapons, ammunition, and supplies, including 2,000 tons of rice. The 9th Viet Cong Division was so badly whipped that it was unable to return to combat until the spring of 1967.

Taking stock at year's end, U.S.

A CH-3E helicopter airlifts troops on a mission against enemy forces, June 1968.

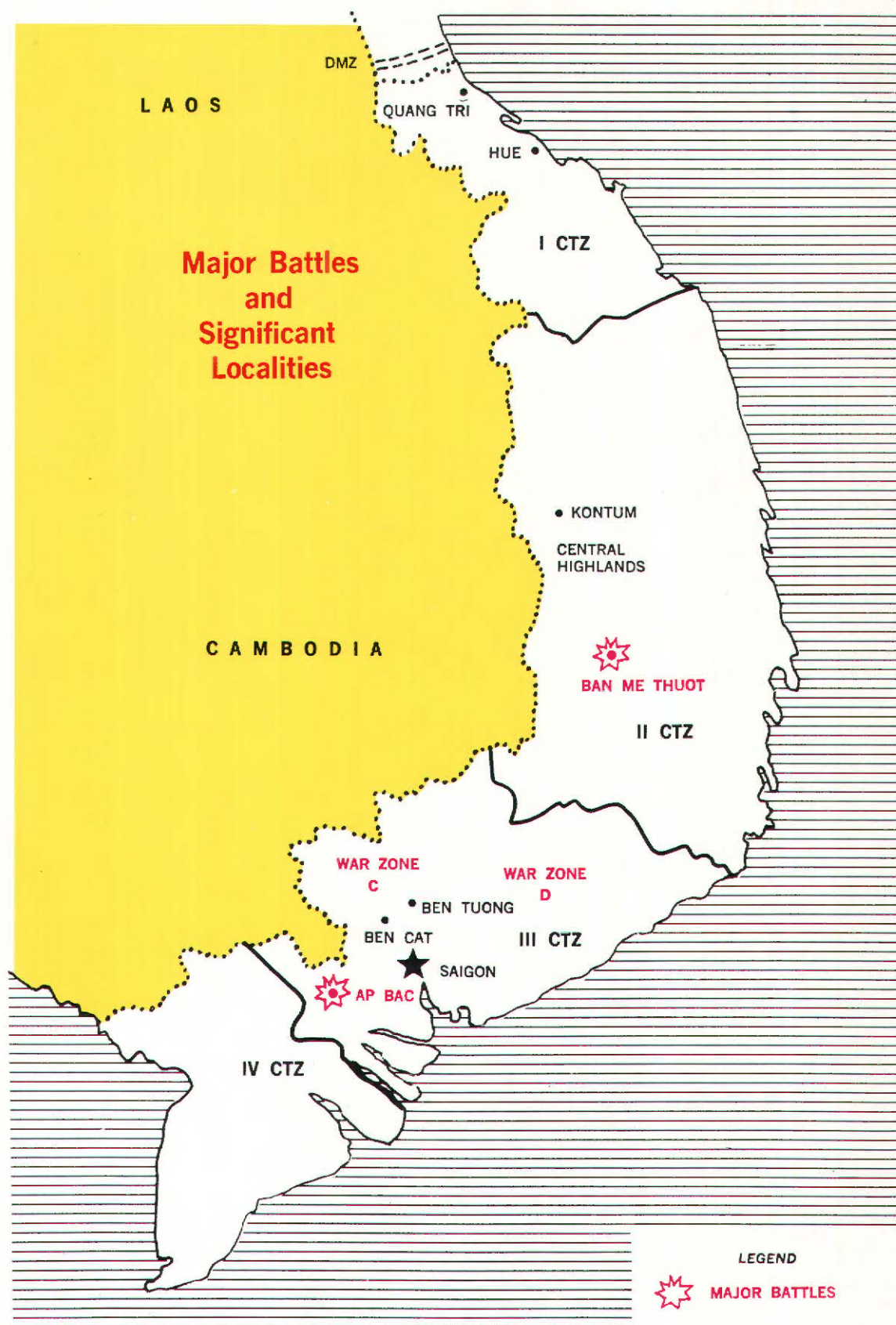


An Air Force cameraman photographs a machine gunner strafing an enemy position.

officials estimated that North Vietnam—in order to make up for the huge Viet Cong losses—had been forced to commit more than 58,000 NVA regulars and take over a greater share of the fighting, especially in the two northern corps areas. They estimated this boosted total enemy forces to 282,000—110,000 being North Vietnamese, 112,000 guerrilla troops, 40,000 political cadre, and 20,000 support personnel. That enemy morale was low was testified to by captured soldiers who complained about the allied heavy bombardment (especially those by the B-52's) and their personal hardships—inadequate food and supplies and long separations from home and family.

The increasing effectiveness of air power in 1966 was in large measure the result of improved tactics and weapons. Airborne forward air controllers developed an effective system

of visual reconnaissance. Assigned to specific geographic areas, they were able to identify changes in the landscape below which might indicate the enemy presence. Night reconnaissance operations were enhanced by several research and development programs and by refinement of existing instrumentation. A particularly useful device was the starlight scope, developed by the Army, which amplified starlight and moonlight so that its operator could see movement on the ground quite clearly at night. Infrared viewers also facilitated night aerial reconnaissance operations. Munitions introduced into the inventory included cluster bombs, each containing several hundred bomblets, and a delayed-action bomb capable of penetrating heavy tree cover and then exploding on the ground. Another tactic of importance was the routine employment of USAF fixed-wing gunships for night



hamlet defense. Their ability to remain aloft for many hours and to respond quickly to calls for close air support proved indispensable to hundreds of besieged posts, villages, and hamlets.

The Combined Campaign Plan

During 1967, as the buildup of U.S. forces in Vietnam continued, American strength in the war zone rose from 385,000 to 486,000 personnel and enabled the allies to continue to pursue the enemy. In accordance with a joint Vietnamese-American "Combined Campaign Plan," ARVN troops were given the mission of pacifying the countryside while U.S. and allied forces conducted combat operations against NVA and Viet Cong units.

A move to root out Communist forces in the Central Highland provinces of Pleiku and Kontum got under way on 1 January and continued periodically throughout the year. During the first 95-day phase, designated Operation Sam Houston, elements of the 4th and 25th Infantry Divisions concentrated on destroying the NVA's 1st Division operating from bases inside Cambodia. This was followed in April with the 6-month-long Operation Francis Marion. Finally, in November, there occurred the Battle of Dak To in Kontum province, supported by massive tactical and B-52 strikes—more than 2,000 in number. At times, the battle was fought so closely that napalm and cluster bomb units fell within 22 and 27 yards of friendly positions while larger 750-pounders were dropped within 77 yards. The Communists broke off the fight after losing more than 1,600 dead and sustaining many more wounded. MACV attributed more than 70 percent of the enemy casualties to air strikes.

In the III Corps area, U.S. and Vietnamese troops on 8 January 1967 launched another sweep into the "Iron

Triangle." This 60-square-mile jungle area contained the suspected location of the Viet Cong's 4th Military Region headquarters, which directed operations in the Saigon area. A 3-week offensive, it involved troops of the 1st and 25th Infantry Divisions, the 173d Airborne Brigade, and the 11th Armored Cavalry Regiment, plus ARVN forces. They succeeded in overrunning a vast "underground city," destroyed the enemy headquarters, and seized enough rice to feed 13,000 men for a year. They also seized almost a half-million pages of enemy documents and captured 213 enemy personnel. According to the U.S. Army ground commander on the scene, the air strikes—1,113 tactical and 102 B-52 sorties—were responsible for the majority of the 720 enemy dead.

The Iron Triangle offensive had barely ended when General Westmoreland initiated the largest operation of the year in the same corps area. It involved 22 U.S. and four ARVN battalions which were set into motion on 22 February against reoccupied enemy bases in War Zone C. It also saw the first American parachute assault of the war aimed at intercepting any enemy troops attempting to flee into Cambodia. Initially, the enemy sought to avoid combat but later began to challenge the American forces, paying heavily for it. According to their own captured casualty lists, the enemy sustained 2,728 deaths and several thousand wounded. The allied troops also captured 600 crew-served weapons, 800 tons of rice, and vast amounts of ammunition, medical supplies, and field equipment.

The Air Force flew more than 5,000 tactical strike sorties and 125 B-52 sorties during the 83-day operation. In all, USAF crews dropped 12,000 tons of munitions, much of it in a softening-up zone just ahead of advancing troops. USAF crews also airlifted 11,307 tons of supplies in 2,057 sorties. Both officers and men of the



Viet Cong guerrillas fire bolt action rifles against low-flying allied aircraft.

Army's 1st Infantry Division praised the air support in the following words: "We find the enemy, we fix the enemy, air destroys the enemy." High-ranking Viet Cong defectors later reported that the Allied operation was a major disaster for their side. Loss of the base camps in War Zone C led to large-scale deterioration of their forces throughout the III Corps area and a revamping of their operational tactics. Enemy main force units were forced to pull back into Cambodian sanctuaries, taking with them hospitals, supply depots, and training centers.

Military experts from China, Cuba, and North Korea reportedly visited South Vietnam in the spring of 1967 during Operation Junction City and apparently concluded that time was no longer on Hanoi's side. Communist forces had not won a single major battle in almost 2 years. U.S. firepower, especially tactical air, had decimated their main force strength. Desertion was rampant and the Viet Cong infrastructure was being destroyed.

It was against this background that General Giap and other North Vietnamese officials flew to Moscow in

March 1967 seeking additional military and economic aid. The Soviets subsequently announced they would send Hanoi "even more planes, high-altitude missiles, artillery and infantry weapons, together with factories, means of transportation, petroleum products, iron and steel and nonferrous metal equipment, food, and fertilizer." Indeed, the number of Soviet vessels reaching North Vietnamese ports rose from 122 in 1966 to 185 in 1967. In September Giap claimed in articles published in his armed forces newspaper, *Quang Doi Nhan Dan*, that the allied pacification program had failed. He forecast very heavy fighting ahead and a Communist victory. He did so in the context of a strategy which he claimed had drawn allied troops to remote areas, thus enabling Communist guerrilla forces to achieve victory in the heavily populated zones of South Vietnam.

But Giap's statements were an attempt at deception. Instead of relying on the badly battered Viet Cong forces, beginning in the spring and summer of 1967 he deployed 37 NVA battalions into the area just north of



Fire support in defense of an outpost near the Cambodian border.

the DMZ preparatory to launching a full-scale invasion of South Vietnam. The allies detected the threat and hastened completion of a line of fortified bases just south of the DMZ. On 6 April Giap made his first move, launching attacks against Quang Tri City and the neighboring towns of Lang Vei and Hai Lang. The North Vietnamese also opened up intense and continuous barrages of mortar and artillery fire against the allied bases near the DMZ. Shortly after, NVA troops began moving into position around Khe Sanh. On 16 May MACV called in tactical air power to silence enemy artillery in the area. Within 2 days, 30 sites were put out of action. General Westmoreland also deployed Army troops to the northern province of I Corps to support the Marines.

In a further effort to halt enemy shelling of the Marine border base at Con Thien, an air plan was devised and refined under the direction of General Momyer—its goal was the destruction of the Communist positions to the north. Designated Operation Neutralize, it began on 12 September 1967 and employed Air Force,

Navy, and Marine strike aircraft plus off-shore naval guns and Marine heavy artillery. During the 49-day operation, FAC pilots played a key role, flying dangerously close to enemy positions north of the DMZ and pinpointing them for strike aircraft. B-52's saturated NVA troop sites. Special long-range ground reconnaissance patrols were used whenever possible to enter target areas to assess bomb damage and locate additional targets. By the time the operation ended, more than 3,100 tactical and 820 B-52 sorties had been flown. Of these, 916 were under Combat Skyspot control because of inclement weather. The shelling of Con Thien dwindled away after Operation Neutralize succeeded in destroying 146 enemy gun, mortar, and rocket positions, and damaging 83 others.

These American offensive actions succeeded in blunting North Vietnamese efforts to prevent the Allied construction of the line of bases south of the DMZ and capped the failure of General Giap's Phase I strategy. His setpiece battles did not drain off American strength from populated areas, as hoped. Indeed, U.S. air pow-

er was more than adequate to defeat the enemy whenever and wherever he massed. The NVA next turned its attention further south to areas closer to its Cambodian sanctuaries, where it could more easily move out and harass Allied positions in South Vietnam. On 27 November the enemy hit at the village of Song Be in Phuoc Long province and two days later at Loc Ninh near the Cambodian border in neighboring Binh Long province. In both instances, they were soundly beaten.

During a visit to Washington in November 1967, General Westmoreland reported directly to the President and the American people. In an address to the National Press Club, he expressed confidence that the tide was turning and that the allies were winning the war. The enemy, he said, was staking his hopes on a tactical victory to influence American public opinion and force the United States to throw in the towel. By the end of 1967, the enemy had not achieved that goal but evidence was piling up of a noticeable buildup of his forces in their Cambodian and Laotian sanctuaries for yet another try.

The 1968 Tet Offensive

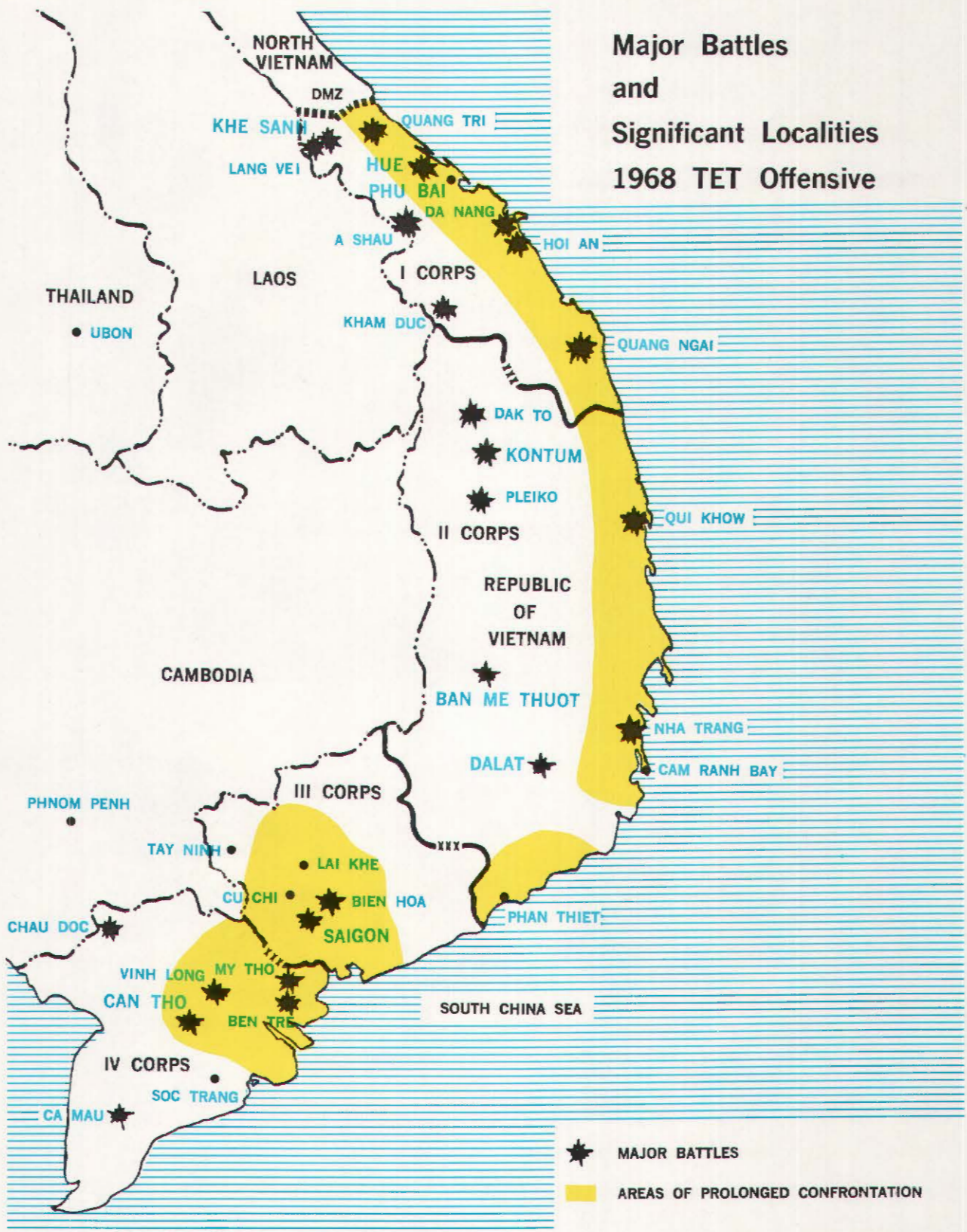
At the beginning of 1968, more than 486,000 Americans—56,000 of them U.S. Air Force personnel—were in South Vietnam. During this climactic year, the Air Force flew 840,117 combat sorties in support of allied ground forces. A new forward air controller aircraft, the OV-10A, made its appearance and night operations were enhanced by introduction of low-light-level television equipment and a laser guided bomb. The year also saw General Giap order implementation of Phases II and III of his offensive plan within 10 days of each other. One of his targets was the Marine base at Khe Sanh, selected—according to some ad-

ministration officials—as the place where Gia hoped to emulate his great Viet Minh victory over the French achieved 14 years earlier at Dien Bien Phu. Located on a plateau in the northwestern corner of I Corps and commanding the approaches to Dong Ha and Quang Tri City from the west, Khe Sanh was an important strategic post. By capturing it, the North Vietnamese would have an almost unobstructed invasion route in the northernmost provinces, from where they could outflank American positions south of the DMZ. Anticipating such an attack, General Westmoreland decided—and the members of the JCS agreed—to defend the base.

On 21 January 1968 the North Vietnamese unleashed a heavy mortar, artillery, and rocket attack on the Marine base and began assaulting outlying defenses west of it. This attack triggered Operation Niagara, an air campaign in defense of Khe Sanh. That day, nearly 600 tactical sorties (including 49 by the B-52's) were launched against enemy positions. Before the campaign ended 2½ months later, control of all tactical air units—Air Force, Navy, and Marine—had been centralized under General Momyer as the Single Manager for Air, effective 8 March. In the case of I Corps, Momyer made use of the Marines' direct air support center at Da Nang, enlarged it, and assigned non-Marines there. To coordinate tactical air operations, Seventh Air Force deployed a C-130E Airborne Battlefield Command and Control Center to the northern corps.

The extensive use of air power at Khe Sanh paid off. More than 24,000 tactical and 2,700 B-52 sorties dropped 110,000 tons of ordnance. The heavy air attacks—averaging 300 tactical sorties a day with a three-ship B-52 cell arriving overhead every 90 or so minutes during the height of the battle—destroyed enemy bunkers and supplies, exploded his ammunition dumps in the area, and caved in his

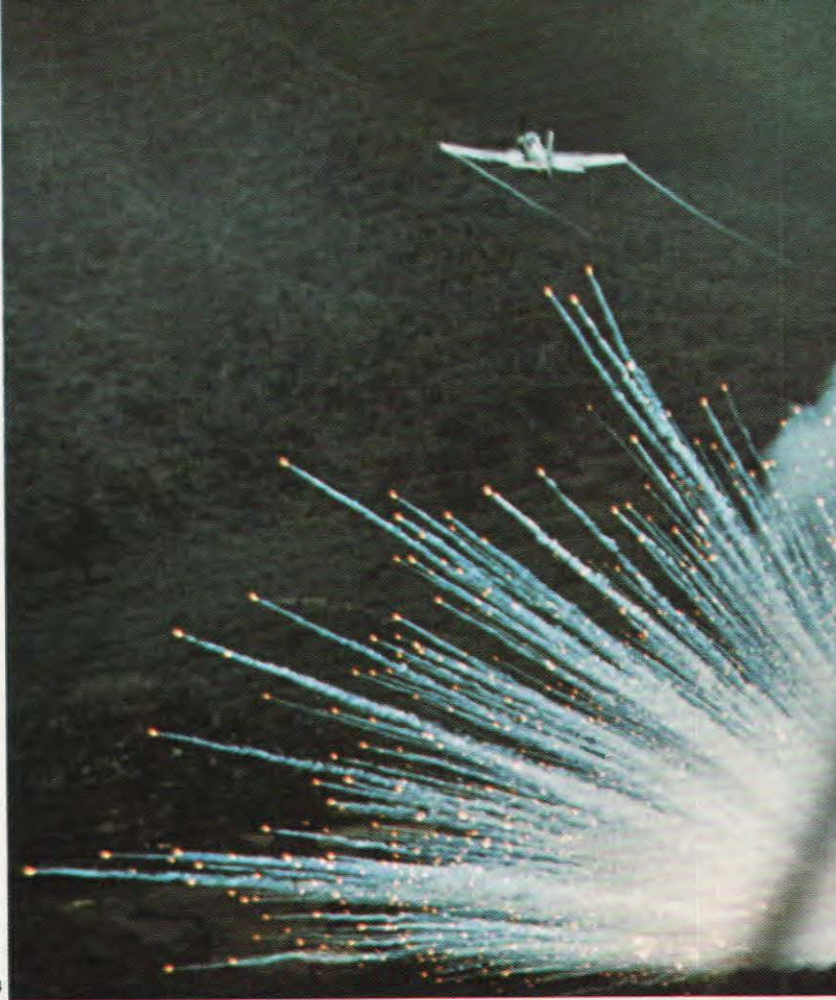
Major Battles and Significant Localities 1968 TET Offensive





3

(1) An EB-66 leads a flight of eight F-4 Phantoms on a bombing mission through a low overcast. (2) This painting depicts the daring rescue by Maj. Bernard C. Fisher of a downed USAF pilot, Maj. D. Wayne Myers, at a Special Forces camp in the A Shau valley, 2 miles from the Laotian border, in March 1966. For his feat, Major Fisher became the first Air Force Medal of Honor winner in Vietnam. (3) An F-100 Super Sabre fires rockets at enemy troops in South Vietnam. (4) An A-1E Skyraider attacks a Viet Cong target with a phosphorus bomb. (5) An A-1E attacks Viet Cong forces with 500-lb bombs.



4

5



tunnels near the Khe Sanh perimeter. At night, AC-47 gunships kept up a constant chatter of fire against enemy troops. Because of poor weather, about 62 percent of all strikes were directed to their targets by Combat Skyspot.

Nine days after the siege of Khe Sanh began, NVA and Viet Cong troops launched the Tet Offensive of 1968. In simultaneous attacks throughout South Vietnam, they struck at 36 of 44 provincial capitals, five of six autonomous cities, 23 airfields, and numerous district capitals and hamlets. Saigon and the old imperial capital of Hue were among the prime targets. This nationwide enemy offensive apparently had as its ultimate goal the disintegration of the South Vietnamese armed forces, to be followed—as Communist dogma had it—by the people rallying to the NLF. But that did not happen.

The initial fury of the attack did enable the enemy to seize at least temporary control of 10 provincial capitals, and he succeeded in penetrating Saigon, Quang Tri City, Da Nang, Nha Trang, and Kontum City. However, except for Hue, which took the allies several weeks of rugged fighting to clear, the enemy was ousted in two or three days. Most of 23 airfields attacked by the enemy were soon back in full operation.

Despite the heavy demands placed upon it to help defend Khe Sanh, the Seventh Air Force was still able to provide enough firepower to be a major factor in the defeat of the enemy offensive. Within Saigon and Hue, the Air Force launched carefully controlled strikes against enemy lodgments. Outside the cities USAF crews launched heavy attacks against Communist forces. Forward air controllers remained aloft around the clock directing strikes at enemy storage areas, troop areas, and providing close air support for allied units in contact with Viet Cong and NVA forces. At Hue,

only a trickle of essential supplies reached the besieged NVA troops. B-52's continued saturation raids on suspected enemy areas.

By late February it was evident that the Tet offensive had failed, and Hanoi's dream of a collapse of the South Vietnamese government and armed forces was chimerical. Instead, Viet Cong/NVA troops had suffered heavy losses—an estimated 45,000 men (8,000 of them in and around Hue alone). Unfortunately there also was a heavy civilian toll. More than 14,000 died, some of them (as in Hue) victims of NVA execution squads. Another 24,000 were wounded and 627,000 left homeless.

The extent and nature of the 1968 Communist Tet offensive proved to be a political disaster to the Johnson administration. The American people—who had only recently been assured the allies were winning the war—were shocked by the enemy's ability to strike throughout South Vietnam, even to the gates of the U.S. Embassy in Saigon. News accounts and particularly television films showing the devastation wrought by the enemy seriously hurt the administration. While additional U.S. troops were dispatched to bolster Westmoreland's forces, Washington attempted to speed up the previously planned third phase of American strategy, that is, to turn over most of the responsibility for the war to the South Vietnamese.

As domestic criticism of the administration reached a crescendo against the background of an earlier embarrassing incident—North Korea's seizure of the USS *Pueblo* on 24 January 1968 in the Sea of Japan—President Johnson on 31 March ordered a halt to all bombings north of the 20th parallel. He hoped this action would induce Hanoi to begin peace negotiations. At the same time the President announced he would not run for a second full term of office. Hanoi's leaders agreed to meet in Paris to begin the

discussions, but they also continued to pour troops into South Vietnam at the rate of about 22,000 per month.

By mid-April intelligence revealed another enemy buildup in progress around Hue. Accordingly, on 19 April the allies mounted Operation Delaware/Lam Son 216, aimed at destroying the NVA logistic base in the A Shau Valley and denying the enemy an essential source of supply and a line of communication for further operations against Hue. A Viet Cong colonel, defecting to the South the same day, disclosed plans for a terrorist attack against Saigon beginning 4 May. It proved the start of another nationwide wave of assaults against 109 military installations and cities, including 21 airfields. Once again, U.S. air power played a major role battering the weary enemy.

Although visibly weakened, the Communists continued to probe allied defenses. They established a stronghold at Cap Mui Lay on the coast just south of the Demilitarized Zone, and harassed nearby U.S. Marine positions with mortar and artillery fire. On 1 July a week-long well-coordinated bombardment by air, Marine artillery, and naval guns was begun against enemy positions. Almost 1,800 tactical and 210 B-52 missions saturated the area and destroyed some 2,000 Communist gun positions and structures. Shortly thereafter, alerted that 11 NVA regiments were massing for another assault on Saigon, Gen. Creighton W. Abrams (he succeeded Westmoreland on 11 June 1968) launched a large number of "spoiling operations" and air strikes. Electronic sensors, monitored by reconnaissance aircraft, girded the city to alert the allies to the expected attack. When finally launched in mid-August, the enemy assault proved quite ineffective and was easily repelled.

Three weeks earlier, on 23 July 1968, Maj. Gen. Robert F. Worley, Vice Commander of the Seventh Air Force,

was killed when an RF-4C jet he was piloting northwest of Da Nang was hit by ground fire and crashed. The second pilot in the plane ejected safely, however, and was rescued. General Worley became the second Air Force general killed while on an operational mission. The first, Maj. Gen. William J. Crumm, commander of SAC's 3d Air Division, died in a mid-air collision of two B-52's on 6 July 1967 (see Chapter VIII).

As part of Hanoi's continuing effort to influence American public opinion and the peace talks (which began in Paris in May but quickly bogged down), General Giap on 23 August sent 4,000 NVA 1st Army Division regulars against the Duc Lap Special Forces camp, located some 3 miles from the Cambodian border and 15 miles from Ban Me Thuot. The 2,500 South Vietnamese, Montagnards, and Americans defending the camp were taken by surprise and the perimeter breached. However, 30 minutes after the first call for help went out, U.S. Army helicopter gunships arrived in the area, followed 15 minutes later by AC-47 gunships. Placing the attackers under heavy fire, the AC-47's remained overhead spotting and "hosing down" enemy units as they appeared. Their effectiveness drew high praise from the defenders. In all, more than 100 gunship and 392 tactical air sorties were flown in support of Duc Lap. The senior Army advisor on the scene, Col Rex R. Sage, later credited USAF tactical air and gunships with having saved the camp from being overrun.

In October 1968, finally recognizing that it could not occupy and control the South Vietnamese countryside, Hanoi began withdrawing 30,000 to 40,000 troops. On 31 October, after receiving assurances from the North Vietnamese that "serious" talks to end the war would get under way in Paris, President Johnson ordered a halt of all bombings north of the DMZ effec-



2

(1) U.S. Army 7th Infantry trooper carries an M-60 machine gun past rubble of a residential section of Cholon, Saigon, following the 1968 enemy Tet offensive, January-February 1968. (2) Hue city officials help prepare victims of the Communist Tet Offensive for burial. (3) A Skyraider approaches Qui Nhon. (4) Smoke and dust obscure part of the Marine base at Khe Sanh, during North Vietnam's unsuccessful attempt to seize it in the 1968 Tet offensive. (5) Rocket attack on Duc To, 15 November 1967. (6) Weapons and ammunition seized from the enemy following the battle of Bong Son. (7) Vietnamese marines assemble Chinese-made 240-mm rockets, captured during an allied sweep northwest of Saigon, 1969. (8) A South Vietnamese outpost constructed in a tree-top served as a vantage point for ARVN rangers near Trunglap.



3



4



5

7

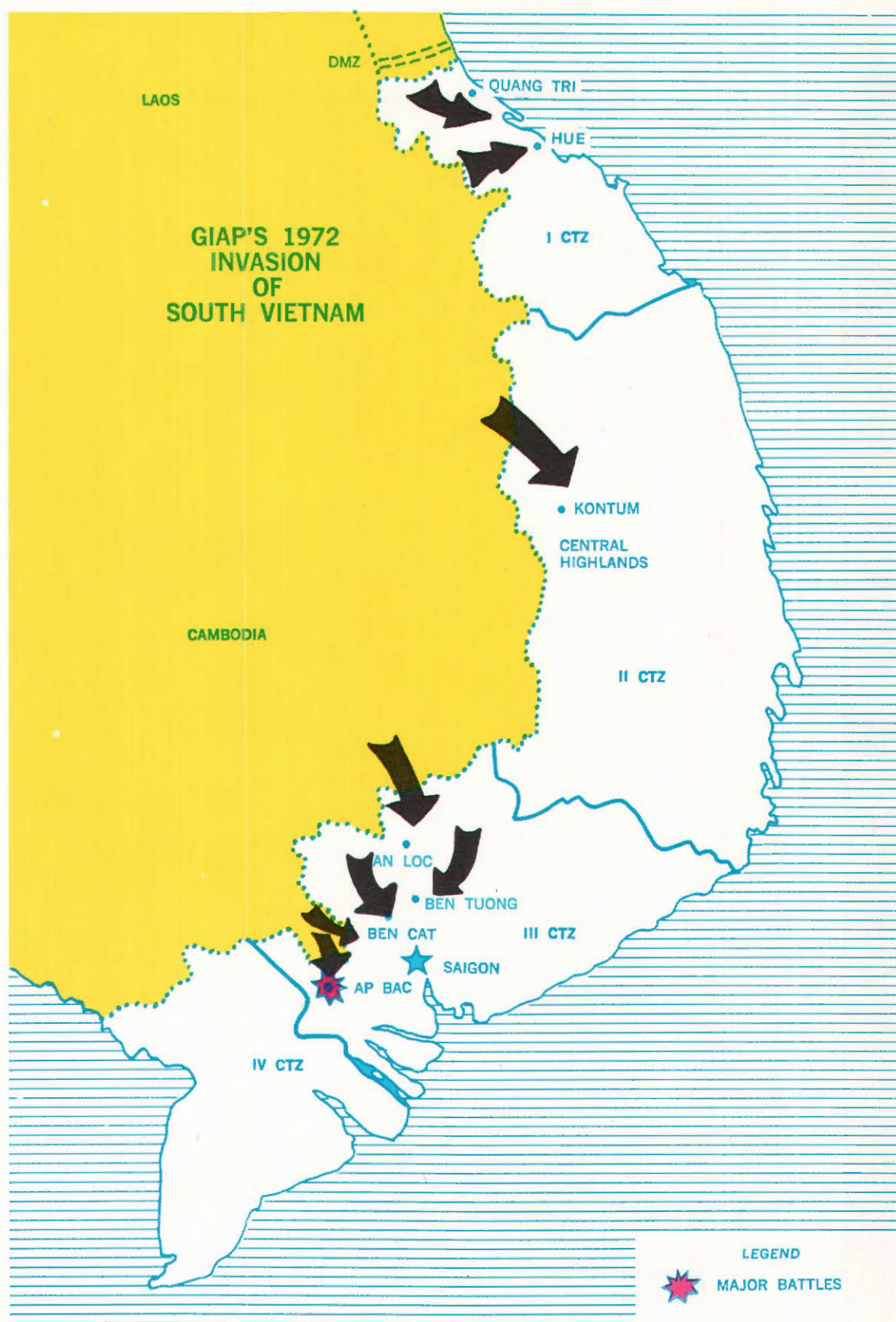


6



8





tive 0800 Washington time on 1 November. Beforehand, the U.S. delegation in Paris explained to Hanoi's representatives that the United States would end "all bombardments and all acts involving the use of force" but that U.S. air reconnaissance would continue. The Americans repeatedly used the above phrase in their talks with the Communists, arguing that reconnaissance was "not an act involving the use of force." The North Vietnamese accepted the phrase and used it in their statement to the international press after the cessation of the bombings.

Vietnamization and Withdrawal

A few days later Richard M. Nixon defeated Hubert H. Humphrey in the 1968 presidential elections. During the campaign Nixon had pledged to bring American troops home while winning an honorable peace. An obvious aspect of this policy was to speed "Vietnamization" of the war effort. In March 1969 Secretary of Defense Melvin R. Laird visited South Vietnam to discuss an accelerated buildup of the Vietnamese armed forces (see Chapter XX). Thereafter, President Nixon met with President Thieu and gained his approval for the buildup. On 8 June Mr. Nixon then announced his plan to withdraw U.S. combat troops. The first of these Americans departed Vietnam in July. By year's end 69,000 had been withdrawn.

Meanwhile, the Air Force not only continued to assist allied operations in South Vietnam against enemy forces in the border regions but soon emerged as the primary military arm to support the policies of Vietnamization and withdrawal. Thus, a multi-battalion helicopter-airborne Marine assault during May-June in the A Shau Valley was preceded by 94 preplanned sorties and 28 immediate sorties which

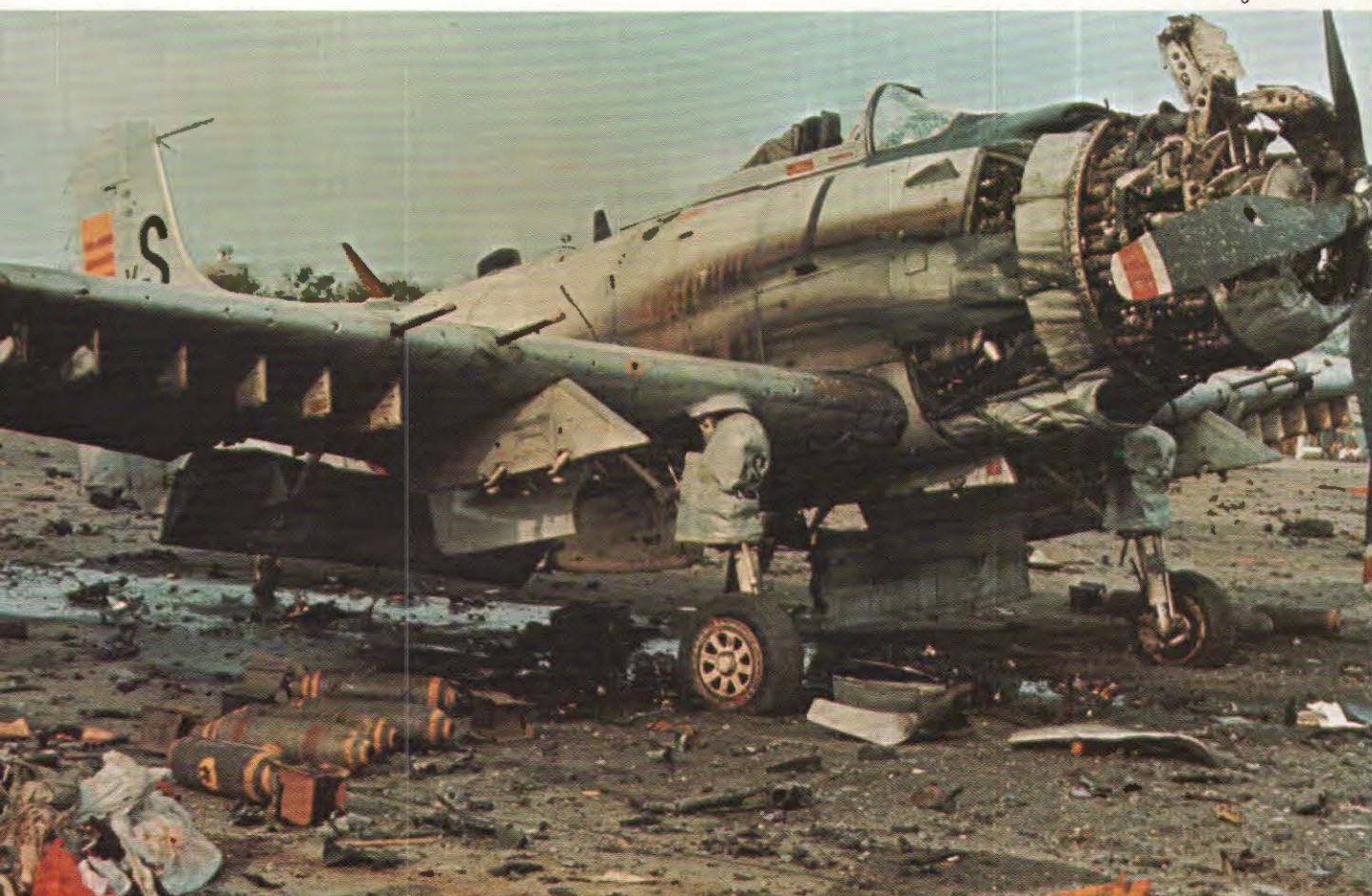
prepared the landing zone and provided air cover. The Commanding General, III Marine Amphibious Force, was unstinting in his praise of the USAF fighter pilots, air liaison officers, forward air controllers, and other participants. The Air Force also continued to support U.S. Army fire support bases, many of them situated in exposed positions. On 7 June, the enemy tried to overrun one of the bases astride a major enemy line of communication into Tay Ninh province. Responding to a call for help, USAF fighters struck the Communist force with bombs and napalm while gunships supported the action with flares and minigun fire. A subsequent sweep of the area revealed 323 enemy troops killed, all attributed to air power. Friendly casualties totaled seven wounded.

During the same period—between 8 May and 2 July 1969—the enemy launched an intensive attack on the Ben Het Civilian Irregular Defense Group camp. FAC's flew 571 sorties and AC-47's and AC-119's more than 100. Tactical air swarmed overhead in 1,828 sorties and SAC bombers, 804 sorties. Nearly 20,000 tons of bombs assailed the enemy day and night, in all kinds of weather, and finally forced the enemy to retreat.

In August 1969 the Air Force conducted "spoiling operations" in an effort to keep Communist troops off balance. Thus, when intelligence disclosed an enemy troop buildup in Bing Long province near An Loc and Loc Ninh—close to the Cambodian border in III Corps—B-52's struck numerous times and inflicted extensive damage on the enemy force. During the last months of the year, B-52 Stratoforts helped ARVN troops counter a major enemy threat in the Bu Prang and Duc Lap areas of Quang Duc province. In November the B-52's hit 57 enemy targets and struck 24 more during the first half of December. During the next 5 weeks the heavy bombers unloaded more than 30 mil-

B-52 Pilot







4

(1) Damage caused at the U.S. Embassy, Saigon, during the 1968 Tet Offensive. (2) Vietnamese Sgt Con Nha Tan and USAF Technical Sgt Richard H. Nelson, a weapons maintenance advisor, load flares aboard a C-47. (3) Damage caused by a rocket attack at Qui Nhon, 18 May 1965. (4) A civilian dashes water on the smoldering remains of his home following a Viet Cong rocket attack, Aug. 1966. (5) Maj. Bernard C. Fisher, Juna, Idaho (I.) and Maj. D. Wayne Myers, Newport, Wash., following the March 1966 rescue of the latter at an airstrip in the A Shau valley. (6) U.S. and Vietnamese A-1E pilots discuss a mission against the enemy, 1965. (7) A VNAF A-1H pulls away after unloading his ordnance on an enemy target.



5

6



7



lion pounds of bombs against enemy troop concentrations, staging areas, and fortifications. Indeed, in 1969 General Abrams came to depend more and more on USAF air power to keep the enemy from massing while U.S. forces withdrew and the Vietnamese armed forces buildup went forward.

In 1970, when the first USAF elements also began to leave Southeast Asia, the VNAF grew to 9 tactical wings and some 40,000 personnel and greatly expanded its training program. Its inventory of nearly 700 aircraft included A-1's, A-37's, F-5's, AC-47's, O-1's, and C-119's. Despite the enemy's reduced activity in South Vietnam, a noticeable buildup was detected in the "Fishhook" area of Cambodia, immediately across the border from Tay Ninh province. In response, the President authorized a major incursion into the enemy's Cambodian sanctuary by allied troops, supported by extensive American and Vietnamese tactical air units (see Chapter VII). However, both the U.S. and Vietnamese Air Forces also continued flying strike missions inside South Vietnam. By the end of 1970 the Air Force had flown 48,064 attack sorties, while the VNAF flew another 28,249—almost 40 percent of the total sorties over Vietnam.

Even as the U.S. withdrawal continued into 1971, the allies laid plans to send an ARVN invasion force into the southern panhandle of Laos to seize Tchepone on the Ho Chi Minh trail, destroy enemy forces, and interdict NVA traffic into South Vietnam and Cambodia. Crossing into Laos on 30 January 1971, the South Vietnamese were supported by a large tactical air fleet. The NVA reacted strongly, sending in large numbers of tanks, artillery, and AA weapons to fight the South Vietnamese. Elements of ARVN forces managed to reach the Tchepone area with the help of massive USAF B-52 and tactical air strikes. Casualties were heavy on both sides. The North

Vietnamese lost about 13,000 men and an estimated 20,000 tons of munitions. The South Vietnamese, having suffered 5,000 dead, retreated from Laos without achieving the initial objectives of the incursion.

By December 1971 the Air Force had reduced its inventory of fighter and strike aircraft in South Vietnam to 277 (from a high in June 1968 of 737). The number of personnel in-country also declined dramatically—from the 1968 peak of 54,434 to 28,791 at the end of 1971. By then the Vietnamese Air Force was responsible for about 70 percent of all air combat operations. The enemy—temporarily put on the defensive by the moves into Cambodia in 1970 and Laos in 1971—began deploying new NVA forces southward in preparation for another major offensive. They deposited a huge amount of supplies in their old sanctuary areas near the Central Highlands. U.S. intelligence detected the enemy buildup but NVA plans for the impending operation were unknown. In an effort to meet the threat, in mid-February 1972 hundreds of sorties were flown against NVA targets just north of the DMZ.

Some 6 weeks later—on 30 March 1972—the North Vietnamese launched a large, three-pronged invasion of South Vietnam, spearheaded by tanks and mobile armor units. One NVA force swept south across the DMZ, its goal apparently the conquest of the northern provinces and the seizure of Hue. The initial NVA surge led to the seizure of Quang Tri City. A second NVA force drove from Laos into the Central Highlands, and a third effort involved a drive from Cambodia into Binh Long and Tay Ninh provinces, northwest of Saigon.

Fierce fighting ensued on all three fronts, with tactical aircraft and B-52's launching repeated strikes against the advancing NVA armored units. The enemy's greatest success was in the northern provinces, but perhaps the



Soviet tanks.

most critical and potentially most disastrous battle occurred at An Loc. There, the badly outnumbered and outgunned South Vietnamese stood their ground within the besieged city and survived the heaviest enemy attacks of the entire war. They and the city were saved in large measure by air power, much of it supplied by the Vietnamese Air Force. More than 10,000 tactical and 254 B-52 strikes were flown in support of ARVN forces. Air Force gunships once again proved invaluable at night turning back attacking NVA troops. When the battle for An Loc was over near the end of June, the enemy force there had lost all of its tanks and artillery.

In the Central Highlands, the fight started out well for the Communists. Employing Soviet-built T-54 tanks and heavy armor, the North Vietnamese quickly seized control of much of Kontum province. The Air Force responded to this crisis by redeploying additional strike aircraft to South Vietnam and by considerably increasing fighter strength in Thailand. This bolstered force helped decimate enemy units, with AC-119 and AC-130 gunships being especially effective in the open highland country. By 1 June the North Vietnamese began withdrawing from some of their advance positions.

By the summer of 1972 the battles of An Loc and the highland regions were largely over, and attention turned to the northern provinces where the NVA had seized considerable amounts of South Vietnamese territory. Heavy air strikes had helped stop the enemy advance and destroyed much of his armored forces. But when the fighting wound down, the North Vietnamese were in control of much of the countryside below the DMZ plus a strip of South Vietnam's territory running along the Laotian and Cambodian borders. The major population centers, however, remained under the South Vietnamese. Still, North Vietnam retained substantial lodgements

within the Republic of Vietnam, which posed a continuing threat to the Saigon government.

From the U.S. point of view, perhaps the most heartening aspect of the enemy offensive—which cost North Vietnam an estimated 120,000 casualties and heavy equipment losses—was the performance of the Vietnamese Air Force. VNAF pilots—many of them with 4,000 hours of combat flying under their belts—demonstrated great skill and initiative in attacking the NVA. During 1972, they flew 40,000 strike sorties in support of ARVN ground forces, most of whose troops held on and fought valiantly. Some units did panic and abandoned Quang Tri City during the early phases of the Communist offensive, but the ARVN subsequently recaptured it.

Against the background of the massive NVA invasion of South Vietnam in the spring of 1972, President Nixon ordered renewed bombing of North Vietnam by both tactical aircraft and B-52's. On 8 May he also authorized the mining of the harbors and river inlets of North Vietnam to prevent the rapid delivery of replacement arms, munitions, and other war essentials from the Soviet Union and Communist China (see Chapter IV). This latest interdiction campaign against North Vietnam continued throughout the summer and early fall of 1972.

In October Dr. Henry Kissinger, the President's Special Assistant for National Security Affairs, returned from the Paris negotiations to inform the nation that "peace is at hand," and the bombing of North Vietnam was halted. Unfortunately, at the last moment the enemy balked over some of the cease-fire provisions, that is, Hanoi insisted that the United States install a coalition government in Saigon. A 2-month deadlock ensued, which led the President to order new and more drastic measures to end the war. On 18 December 1972, on his orders, the heaviest air attacks of the war were

Demolished VNAF C-47 following an April 1966 enemy mortar attack on Tan Son Nhut.



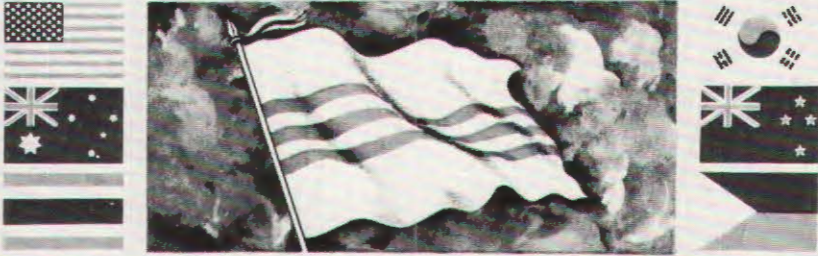


1

2

3

GIẤY THÔNG-HÀNH



SAFE-CONDUCT PASS TO BE HONORED BY ALL VIETNAMESE GOVERNMENT AGENCIES AND ALLIED FORCES
 이 안전보장패스는 월남정부와 모든 연합군에 의해 인정된 것입니다.
 รัฐบาลเวียตนามและหน่วยพันธมิตร ยินดีให้เกียรติแก่ผู้ถือบัตรผ่านปลอดภัยนี้.

(Front)



SAFE-CONDUCT PASS TO BE HONORED BY ALL VIETNAMESE GOVERNMENT AGENCIES AND ALLIED FORCES

MANG TÂM GIẤY THÔNG HÀNH
 này về cộng tác với Chính Phủ
 Quốc Gia các bạn sẽ được :
 • Đón tiếp tử tế
 • Bảo đảm an ninh
 • Giải ngộ tương xứng



TẤT GIẤY THÔNG HÀNH NÀY CÓ GIÁ TRỊ VỚI TẤT CẢ CƠ - QUAN
 QUÂN CHÍNH VIỆT-NAM CỘNG-HÒA VÀ LỰC-LƯỢNG ĐỒNG-MINH.

(Back)



4



5

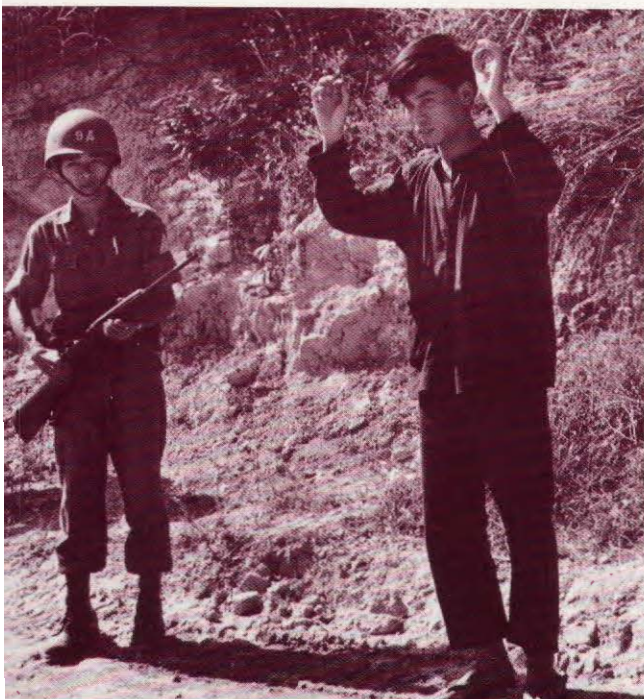
(1&2) Propaganda leaflet operations. (3&4) An enemy soldier holds a surrender leaflet. (5) A Vietnamese officer speaks to villagers of Ap Trung, northwest of My Tho. (6) South Vietnamese psychological warfare team hands out leaflets to villagers. (7) A Viet Cong surrenders to government troops after picking up a propaganda leaflet. (8) Airmen loading a leaflet bomb.



8



6



7

launched against military targets within Hanoi and Haiphong; on 29 December, the North Vietnamese agreed to proceed with the negotiations. A nine-point agreement was finally worked out and formally signed on 27 January 1973.

Under the agreement, U.S. forces would withdraw from South Vietnam and all prisoners of war would be returned within 60 days. The United States tacitly recognized that the North Vietnamese were in strength within the territory of South Vietnam. Indeed, for the first time, North Vietnam acknowledged that it had 100,000 troops in the northern and western parts of the Republic of Vietnam. Exactly on schedule, on 28 March 1973, the last American military personnel departed South Vietnam, and MACV headquarters was inactivated. Thus, after more than a dozen years, an active American military role in South Vietnam came to an end.



The Air War Against North Vietnam

As noted in Chapter II, the United States launched its first air strikes against North Vietnam in August 1964 in response to the attack on the Navy destroyer, *USS Maddox*. Navy carrier planes hit four North Vietnamese coastal torpedo bases and an oil storage facility. On 2 December, the President said he favored a limited air campaign against Communist lines of communication used to support the insurgency in South Vietnam. The second air strike against North Vietnam, nicknamed "Flaming Dart I," was launched by the Navy on 7 February 1965 after enemy mortar and demolition teams attacked U.S. and South Vietnamese military facilities near Pleiku. The following day, as part of this riposte, VNAF A-1's—accompanied by 20 F-100's flying flak suppression sorties and 28 VNAF A-1H's, commanded by Lt. Col. Andrew Chapman of the 3d Tactical Group 2d Air Division—dropped general purpose bombs on the Chap Le barracks. Several of the 20 accompanying USAF F-100's attacked enemy antiaircraft artillery (AAA) sites. Three RF-101's provided photographic coverage. On 11 February, a third air strike ("Flaming Dart II") was conducted by Navy, USAF, and VNAF aircraft against NVA barracks at Chanh Hoa and Vit Thu Lu. It was in response to another enemy attack, this time against U.S. facilities at Qui Nhon which killed more than 20 Americans.

A 19-day pause followed the second Flaming Dart strikes. When air attacks against the North resumed on 2 March 1965, they carried the appellation "Rolling Thunder." On that date, General Moore dispatched 25 F-105's and

20 B-57's—accompanied by KC-135 refueling tankers and other supporting aircraft—which hit an NVA ammunition depot at Xom Bong about 35 miles above the DMZ, causing heavy damage.

The Rolling Thunder campaign was substantially different from those of World War I and II, resembling rather the geographically limited air war over Korea. That is to say, President Johnson—determined to avoid a larger conflict with China and the Soviet Union—imposed stringent controls on air operations. The strikes had a three-fold purpose: to raise the morale of the South Vietnamese, impose a penalty on Hanoi for supporting aggression in the South, and reduce infiltration of men and supplies into the South. The air campaign also was based on the hope that the gradual destruction of North Vietnam's military bases and constant attacks on its lines of communications (LOC's) would bring its leaders to the negotiating table.

The restrictions imposed upon the Air Force made execution of Rolling Thunder strikes very complex. Coordination of USAF and VNAF air operations devolved upon General Moore and his successors. Besides being responsible to Washington authorities and the commanders of the two unified commands—Admiral Sharp and General Westmoreland—the 2d Air Division commander also was required to work closely with the U.S. ambassadors in Saigon, Vientiane, and Bangkok. In undertaking air strikes, political considerations were usually paramount. For example, squadrons based in Thailand could attack targets

Airmen load ammunition on a strike aircraft prior to a mission over North Vietnam.

in North Vietnam and Laos but not in South Vietnam. In June 1965 General Moore was assigned the additional job of serving as MACV Deputy Commander for Air Operations, but it did not greatly increase his authority or alter his responsibilities for three separate but related areas of operations—South Vietnam, North Vietnam, and Laos.

The President retained such firm control of the air campaign against the North that no important target or new target areas could be hit without his approval. His decisions were relayed through Secretary McNamara to the Joint Chiefs, who then issued strike directives to CINCPAC. The latter, in turn, apportioned fixed targets and armed reconnaissance routes among the U.S. Air Force, U.S. Navy, and the Vietnamese Air Force, with USAF crews normally providing air cover for the VNAF, which later withdrew from northern operations to concentrate on supporting ARVN forces within South Vietnam. In conducting operations over the North, the American crews were enjoined to minimize civilian casualties as much as possible. This policy—and the overall target restraints imposed by the White House and Pentagon officials—helped avoid in North Vietnam the heavy civilian losses that characterized bombings on both sides in World War II.

The initial air strikes were limited primarily to enemy radar and bridges between the 17th and 19th parallels. Later, the airmen were allowed to hit a number of other military targets below the 20th parallel. The first target hit above the 20th parallel, the Quang Soui barracks, was attacked on 22 May 1965 by Air Force F-105's and the first above Hanoi in late June. After mid-1965, the airmen were authorized to attack important bridges and segments of the northwest and northeast rail lines between Hanoi and the Chinese border. For an extended period, Washington exempted from attack

sanctuary areas around Hanoi and Haiphong, a buffer zone near China, surface-to-air missile (SAM) sites, and MIG bases located within the Hanoi-Haiphong areas. After the first few sporadic strikes, Rolling Thunder pilots on 19 March began flying strike sorties against individual targets and target areas on a weekly basis. Beginning on 9 July 1965, targets were programmed on a biweekly basis; after 1965 new targets were selected periodically.

The first Air Force tactical strikes were by aircraft already in South Vietnam and Thailand. As additional air units arrived, those assigned missions against targets in North Vietnam and Laos—and a portion of the B-52 fleet—were sent to six large airfields, some newly built, in Thailand. USAF strength in Thailand grew from about 1,000 personnel and 83 aircraft in early 1965 to a peak of 35,000 personnel and 600 aircraft in 1968. U.S. Navy aircraft and South Vietnam-based Marine aircraft also flew many missions over North Vietnam and Laos.

The principal Air Force tactical strike aircraft during Rolling Thunder operations was the F-105 Thunderchief. Mass-produced after the Korean War, it served throughout the war in Southeast Asia. A newer fighter, the twin-seat F-4 Phantom II manned by an aircraft commander and a weapons system officer,* initially was used in a combat air patrol (CAP) role. Committed to battle gradually, it flew its first strike mission at the end of May 1965 and its first armed reconnaissance mission in August. A third Air Force fighter, the twin-seat, swept-wing F-111A, reached Thailand in March 1968, underwent combat evaluation that year, and was withdrawn. Subsequently, in the latter stages of the war, this sophisticated night and all-weather aircraft returned to South-

*The latter was originally a trained pilot, but later USAF employed navigators.

east Asia and flew regular combat missions.

A number of older, lower-performance and more vulnerable aircraft were used briefly or sparingly over the North. The F-100 Super Sabre and the F-104 Starfighter saw action chiefly in a support role above the DMZ. Some Starfighters flew strike missions and the B-57 Canberra light bomber was employed largely in night operations. Eventually, all were withdrawn from northern missions, with the F-100 being used primarily for close air support in South Vietnam.

The B-52 Stratofortresses made their debut over North Vietnam in April 1966 with a strike near Mu Gia pass. During the next 6 1/2 years, these heavy bombers were employed against enemy targets in North Vietnam's panhandle, staying far away from the dangerous SA-2 missile sites located mostly in the Hanoi-Haiphong area. Based initially on Guam and later in Thailand, the B-52's were primarily employed to interdict North Vietnamese lines of communication leading to the DMZ and the Ho Chi Minh trail in Laos. On these missions, they normally dropped 25 to 30 tons of ordnance. Gen. John P. McConnell, LeMay's successor as Air Force Chief of Staff, remarked on the irony of the use of these strategic bombers to hit tactical targets. But it was only one of several improvisations introduced by the Air Force in waging the unorthodox air war.

The role played by SAC's KC-135 air refueling tankers proved vital to the execution of Rolling Thunder (see Chapter XI). Prior to 1965 they had been used primarily to refuel B-52's but they also had provided mid-air refueling service to tactical aircraft deploying from one part of the world to another. Gen. William W. Momyer, commander of the Seventh Air Force (1966-1968), observed that few airmen "foresaw that air refueling would become a basic part of the scheme of

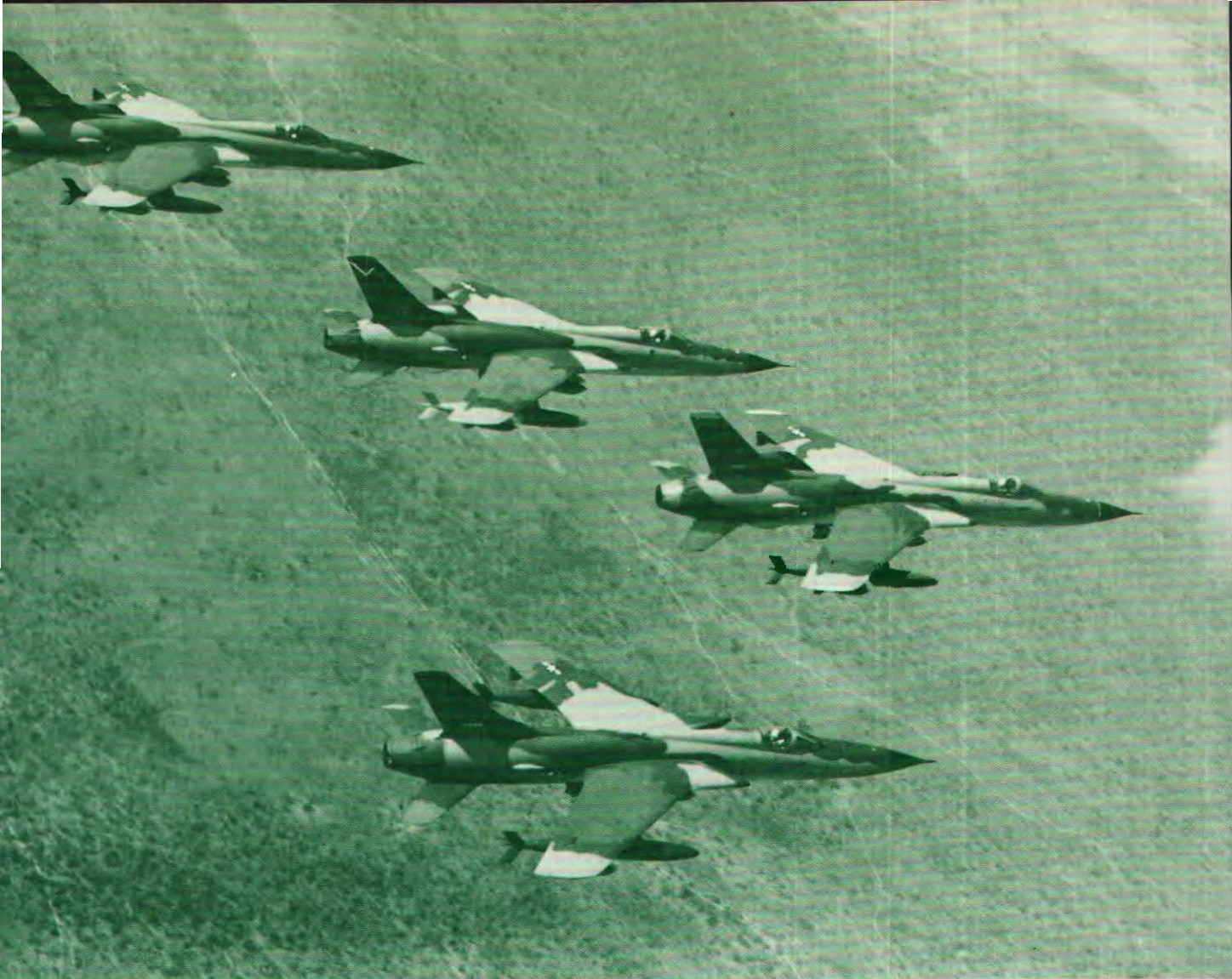
employment of fighter forces over North Vietnam." Since much of the USAF tactical air fleet was based some 350 nautical miles from their targets in the North, refueling was essential if the F-105's and F-4's were to deliver substantial ordnance loads on their targets. The KC-135's also enabled many fuel-short or damaged aircraft to return safely to their bases.

Among the problems facing U.S. airmen flying over North Vietnam were the heavy forests, the jungle terrain, and the annual northeast monsoon which was most severe from mid-October to mid-March. All affected operations over the North. They also placed a premium on the ability of reconnaissance aircraft to locate enemy targets and assess bomb damage. To obtain this information, the Air Force employed a number of manned and unmanned aircraft. Perhaps the most famous was the U-2, which first attracted worldwide attention in May 1960, when Soviet missilemen shot one down over central Russia while it was on a high-altitude reconnaissance mission. Later, in the fall of 1962, a SAC U-2 detected the first Soviet strategic missiles deployed in Cuba. In Southeast Asia, the U-2 flew reconnaissance missions over North Vietnam beginning in 1965 (see also Chapter XII).

Throughout the war zone, the Air Force also operated other reconnaissance aircraft, including the RB-57, the workhorse RF-101, the RF-4C, and drones. Some of these aircraft, equipped with infrared and side-looking radar, helped advance the technology of reconnaissance during the war. In 1965, SAC's Ryan 147D (and other model) drones made their initial flights over North Vietnam. Dropped from DC-130 transports, they were able to obtain photo intelligence over the Hanoi area. As North Vietnam began developing a modern air defense system, the Air Force also began using aircraft capable of obtaining

F-105's in Thailand.





1

2

3



FRESCO (MIG-17)

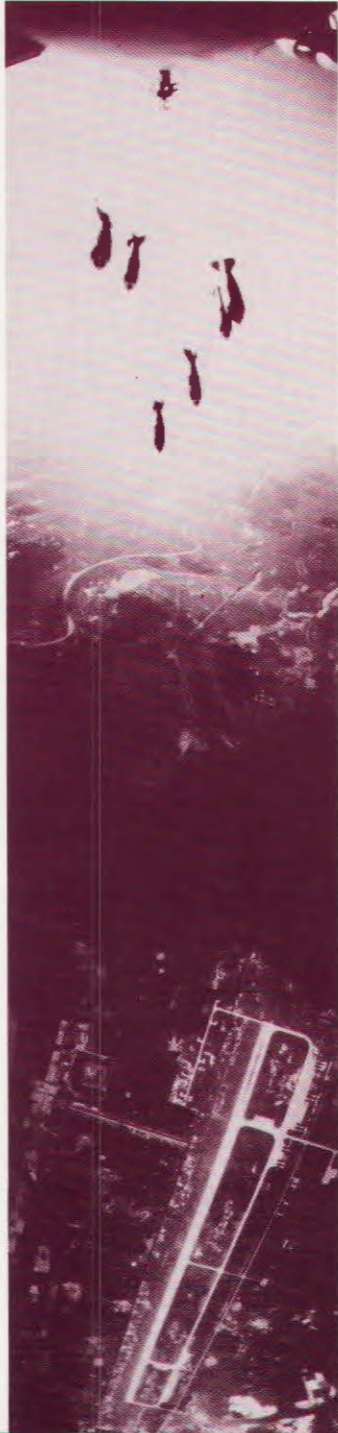


FISHBED (MIG-21)



4

5



6



7



(1) F-105's in Thailand. (2&3) An Air Force reconnaissance photo of Phuc Yen airfield near Hanoi shows MIG-17's and MIG-21's in revetments. (4) An F-4 Phantom. (5) President Johnson in October 1967 personally approved this first strike against enemy MIG's at Phuc Yen. (6) Kien Am airfield with MIG's in revetments. (7) Gia Lam airfield near Hanoi. It was off limits from attack throughout most of the War. L. to r.: AN-2 Colt, MIG-21, and MIG-17.

target data via various electronic methods.

Rolling Thunder, 1965-1968

From the first handful of strikes over the North in early 1965, Air Force and Navy attack sorties rose from 1,500 in April to a peak of about 4,000 in September. In October, with the onset of the northeast monsoon, they declined steeply. While the weather was good, U.S. pilots destroyed or damaged a variety of military targets: bridges, vehicles, rolling stock, barracks areas, supply and ammunition depots, ferries, watercraft, and antiaircraft artillery and radar sites. They bombed railroad tracks and roads to prevent the movement of men and supplies. The results of the air strikes could not be accurately assessed and became the subject of considerable debate. But they reduced or delayed the enemy's operations and infiltration into the South. They led the North Vietnamese to adopt the practice of travelling under cover of night and bad weather—taking full advantage of forested or jungle terrain. They also diverted considerable manpower and materiel to repair their roads, rail lines, and bridges and increased their antiaircraft defenses.

Because of the limitations imposed on air operations, war materiel from the Soviet Union, China, and other Communist countries flowed in easily through Haiphong and other North Vietnamese ports and over rail lines from Kunming and Nanning, China—all of which helped Hanoi to make up for its losses and which facilitated a rapid air defense buildup. During 1965, for example, North Vietnam's AAA inventory expanded from an estimated 1,000 guns to 2,000 pieces and about 400 antiaircraft sites by year's end. These consisted primarily of 37- and 57-mm guns but included a few 85-mm and 100-mm weapons as well.

Smaller but deadly automatic weapons—which inflicted much of the losses and damage to U.S. aircraft—also proliferated.

The Soviet surface-to-air missiles were first detected by a SAC U-2 aircraft on 5 April 1965. By year's end, USAF and Navy reconnaissance had pinpointed 56 SAM sites. The North Vietnamese, who took great pains to conceal them, readily abandoned sites to build new ones. By building a large number of sites, some of them equipped with dummy missiles to deceive USAF crews, they were able to use a "launch and move" tactic. They employed a similar tactic with their AAA guns. Another key element of Hanoi's air defenses was the North Vietnamese Air Force (NVAF), which was equipped with 50 to 60 MIG-15's and MIG-17's plus a few IL-28 bombers. Although the MIG's began challenging U.S. strike aircraft at an early date, they did not become a serious threat until 1966-1967. The sum of the enemy's array of AAA guns, automatic weapons, SAM's, and the MIG force—backed up by an expanding defense radar complex—enabled Hanoi to build one of the most formidable air defense systems ever devised.

On 23 July 1965, after several months of USAF operations against North Vietnamese targets, the first F-4C was downed by an SA-2 missile. Four days later, with Washington's approval, Air Force Thunderchiefs mounted the first strike of the war against the SAM's. In August, a Navy aircraft was downed by a SAM, which led to a series of special U.S. "Iron Hand" missions aimed at North Vietnam's rapidly expanding SA-2 sites. At first, most of them were in the Hanoi-Haiphong sanctuary area and thus could not be attacked, but others were emplaced along major rail and road junctions, bridges, and cities north and south of the North Vietnamese capital. In known SAM areas, Air Force pilots would drop to lower altitudes to



Crews flying strike missions over North Vietnam were continually hampered by heavy flak over the target areas.

avoid the SA-2's but this tactic made them more vulnerable to conventional AAA and especially to smaller automatic weapons. By mid-1965, the latter were credited with shooting down most of the approximately 50 Air Force and Navy aircraft lost over North Vietnam.

An electronic war subsequently ensued between U.S. tactical aircraft and the enemy's complex of radar-controlled AAA guns and SAM's and other defense radars. The Air Force employed specially equipped aircraft to counter SAM radars. Initially, fighter pilots relied on the electronically equipped EB-66's and "Wild Weasel" F-100's and F-105's to neutralize or warn them of radar emissions from enemy "Fan Song" equipment which signalled that they were being tracked or that a SAM firing was imminent. These countermeasures plus the SA-2's generally poor guidance system kept losses low. Thus, of the approximately 180 SAM's launched in 1965, only 11 succeeded in downing an aircraft, 5 of which were Air Force. Nonetheless, the inhibiting and harassing effects of the SAM's had considerable impact on air operations. After 1966, the fighters carried electronic countermeasure pods of their own. A number of EB-66's and Wild Weasel aircraft continued to be used, however.

The North Vietnamese Air Force, flying from airfields which Washington officials decided should not be hit because of their location in the heavily populated Hanoi-Haiphong area, was not a major threat to USAF pilots during 1965. Although North Vietnamese pilots shot down two F-105's in a surprise attack in April, throughout the year the American airmen clearly held the upper hand in aerial fighting. In June Navy pilots downed two enemy aircraft. On 10 July the Air Force scored its initial kills, when Captains Thomas S. Roberts and Ronald C. Anderson in one F-4 and Captains

Kenneth E. Holcombe and Arthur C. Clark in another were credited with the shoot-down of two MIG-17's.

Early in the year, several Air Force EC-121's were deployed over the Gulf of Tonkin to maintain a "MIG watch" over Southeast Asia. Flying missions off the coast of North Vietnam, these aircraft not only were able to alert U.S. fighter and support aircraft of approaching MIG's, but also served as airborne radar and communication platforms. They also warned American pilots who flew too near the Chinese border and they assisted air-sea searches for downed air crews. Later, the EC-121's equipment was employed in an integrated fashion with the Navy's seabased radars, enabling U.S. pilots to obtain a variety of additional timely information about the enemy's and their own air operations over the North.

The political restraints placed by the President on air operations over North Vietnam denied U.S. pilots certain advantages of surprise. Another problem was the relatively small geographical area overflowed by Rolling Thunder crews. It forced pilots to use specific air corridors going into (ingressing) and departing (egressing) a target, a task made all the more difficult by the need to avoid civilian casualties as much as possible. A third operational factor was the weather cycle in North Vietnam, which generally allowed optimum operations in late mornings or afternoons when clouds and fog were minimal or absent. All of these factors contributed to stereotyped American air tactics which the enemy quickly became aware of and which enabled him to deploy his AAA defenses to great advantage. Also, the relatively short duty tours created much turmoil in air operations. Experienced airmen were constantly departing and less experienced replacements arriving, which diluted both planning and flying expertise in the theater.

Shrike and Standard Arm missiles on an F-105.





1



2

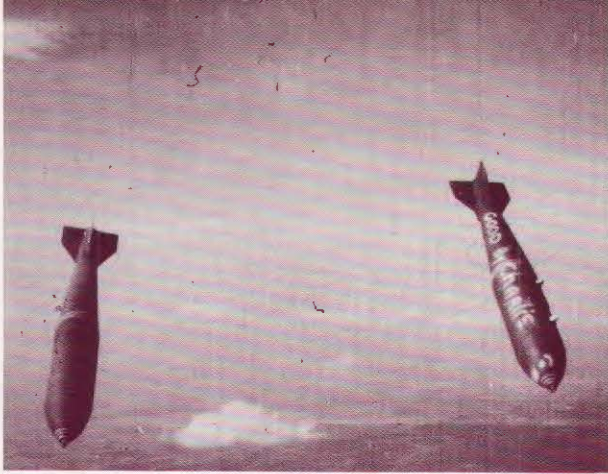


3

(1&2) Maj. Donald J. Kutyna flew missions over North Vietnam in an F-105 which he named the *Polish Glider* (3) F-111's and F-4's at Takhli AB, Thailand. (4) F-105 (color painting). (5) An F-105 unloads 750-lb bombs on North Vietnam's Hoa Lac airfield. (6) USAF strike aircraft destroy a North Vietnamese oil storage facility near Hanoi. (7) Captured enemy 37-mm AAA gun. (8) F-4E Phantoms arrive at Korat AB, Thailand, November 1968. (9) An EB-66 controls a flight of F-105's on a mission over North Vietnam's panhandle, July 1966. (10) Air Force bombers destroyed more than 30 enemy supply trucks in North Vietnam.

4





5

6



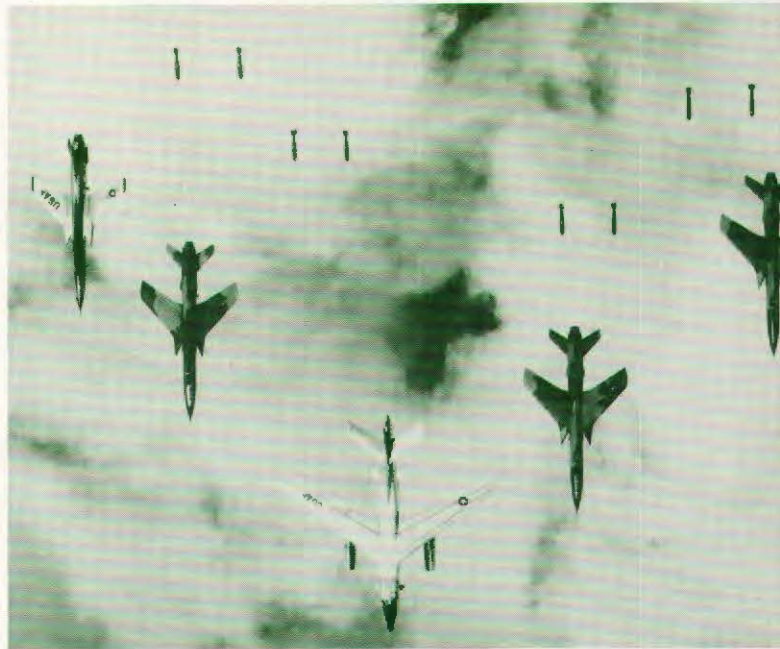
HA NOI 3.7 NM

7

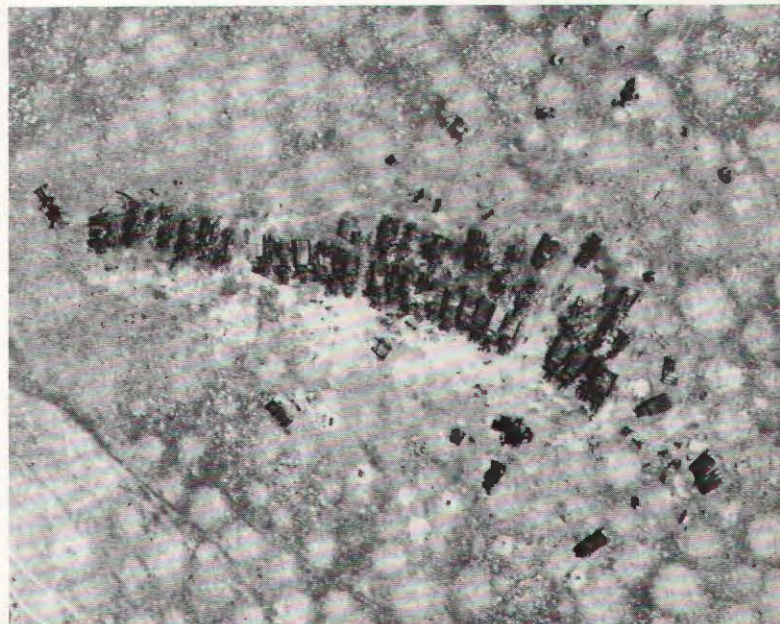


8

9



10



Rolling Thunder Route Packages in North Vietnam



To reduce mission interference between land-based Air Force and Navy carrier aircraft operating over North Vietnam, in December 1965—after consulting with Air Force and Navy officials—Admiral Sharp divided the bombing area into six major “route packages.” Generally, the longer-range USAF fighters attacked the inland route package targets; the shorter-range Navy aircraft concentrated on those near the coast. In April 1966, General Westmoreland assumed responsibility for armed reconnaissance and intelligence analysis of the “extended battlefield” area of Route Package I above the DMZ as it affected allied operations in South Vietnam. CINCPAC continued to control air operations in the other route packages.

The Bombing Pauses

During the first 2 years of operations over the North, President Johnson periodically ordered bombing pauses in an effort to bring Hanoi's leaders around to discuss a political settlement of the war. The first bombing pause of about 6 day's duration was ordered in mid-May. The second one began on Christmas Eve 1965 and continued until 30 January 1966. In both instances, North Vietnam did not respond to U.S. action and, indeed, used the bombing respites to rebuild its strength and speed the infiltration of men and supplies southward. USAF reconnaissance also disclosed major North Vietnamese efforts to repair damaged roads and bridges and to install more air defense weapons. President Johnson also approved briefer bombing standdowns, to permit celebration of the annual Vietnamese new year (“Tet”), Buddha's birthday, Christmas, and New Year's Day.

When U.S. diplomatic efforts to get the North Vietnamese to the conference table got nowhere, the President in the late spring of 1966 approved a series of heavier air strikes against

North Vietnam. Added to the approved target list were POL storage facilities at Haiphong, Hanoi, Nguyen Ke, Bac Gian, Do Son, and Duong Nham. Others included a power plant and cement factory in Hanoi, an important road-and-rail and road bridge on the northwest line, and an early warning and ground control intercept radar facility at Kep. The first major POL strike was conducted on 29 June 1966 when Air Force F-105's hit a 32-tank farm less than 4 miles from Hanoi. About 95 percent of the target area was destroyed. Navy aircraft struck another important POL facility near Haiphong.

Beginning on 9 July 1966, as part of an expanded Rolling Thunder program, U.S. aircraft bombed additional POL facilities, flew extended armed reconnaissance missions throughout the North (except for most of the Hanoi-Haiphong sanctuary area), and began heavier bombing of the northeast and northwest rail lines in Route Packages V and VI. Admiral Sharp assigned interdiction of the railroads to the Air Force. Additional pressure against the enemy was brought to bear on 20 July when the Air Force and Marines launched a new campaign (Tally Ho) against infiltration routes and targets between the DMZ and the area 30 miles northward in Route Package I. The U.S. air offensive expanded in the ensuing weeks, peaking at about 12,000 sorties in September.

By that time, Rolling Thunder had taken a heavy toll of enemy equipment, destroying or damaging several thousand trucks and watercraft, hundreds of railway cars and bridges, many ammunition and storage supply areas, and two-thirds of the enemy's POL storage capacity. Many sorties were flown against AAA, SA-2, and other air defense facilities, thousands of cuts were made in enemy road and rail networks. To counter this air campaign, Hanoi was forced to divert an

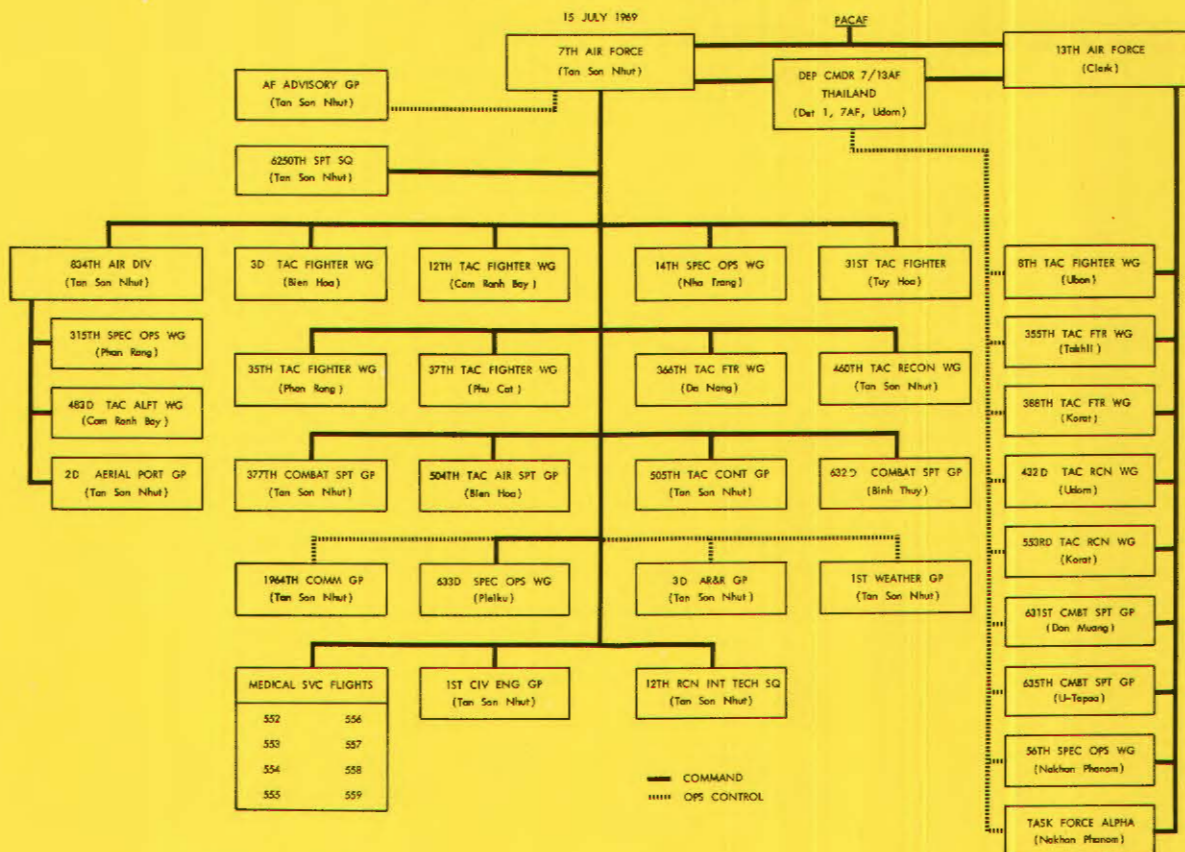


1



2

ORGANIZATION, 7TH AIR FORCE AND 7/13TH AIR FORCE





3

(1) Sgt Leonard B. Williams (left) works on F-100 converters at Phan Rang AB, South Vietnam. Sgt Philip J. Smith adjusts the drag chute cable (2) Col. Robin Olds, Commander, 8th Tactical Fighter Wing, is carried off by his men after completing his 100th mission over North Vietnam (3) B-52's drop bombs on a Viet Cong stronghold (4) F-4 Phantoms destroy 6 of 11 spans of the Lang Gai bridge in North Vietnam, 25 May 1972.



4

estimated 200,000 to 300,000 full and part-time workers to repair roads, railway lines, bridges, and other facilities, and to man its air defenses.

Although infiltration southward could not be stopped, U.S. commanders in South Vietnam credited the bombing with reducing the number of enemy battalion-sized attacks. A new Rolling Thunder program, dated 12 November, added more targets including the Van Vien vehicle depot and the Yen Vien railroad yards, both within the environs of Hanoi. These targets, struck by Air Force and Navy pilots in December 1966, produced collateral damage and civilian deaths which led to a political and diplomatic furor. By the end of 1966, U.S. tactical aircraft had flown about 106,500 attack sorties and B-52's another 280 over North Vietnam, dropping at least 165,000 tons of bombs.

The North Vietnamese accepted the tremendous losses and fought back. By dispersing and concealing much of their POL supply, they were able to reduce the full impact of the air attacks. Bad flying weather and extensive use of manpower enabled the North Vietnamese to keep open portions of the northern rail lines so that some supplies continued to flow in from China. More importantly, Haiphong and other ports—still off-limits to U.S. aircraft—daily unloaded thousands of tons of war materiel. Despite the air attacks, AAA and especially small automatic weapons took a rising toll of American aircraft, downing a total of 455 by the end of 1966 and damaging many more. The number of SAM sites rose to about 150 during the year, but improved flying tactics—plus the installation of electronic countermeasure (ECM) equipment on U.S. aircraft—reduced the effectiveness of the missiles.

Until September 1966 the North Vietnamese Air Force made only sporadic attempts to interfere with Rolling Thunder operations. But on 3 Septem-

ber NVN pilots went on the offensive. Equipped with MIG-21's carrying infrared-homing air-to-air missiles, they operated freely from five bases—Phuc Yen, Kep, Gia Lam, Kien An, and Hoa Loc—in the Hanoi area which could not be attacked. Confronted by daily MIG-21 challenges, General Momyer temporarily diverted Air Force F-4C's from their primary strike mission to exclusive aerial combat against the MIG's.

A favorite MIG tactic was to pop up suddenly and try to force the heavily laden F-105's to jettison their bombs before reaching their targets. To offset this, Sidewinder-equipped Phantoms flew at lower altitudes to enable their pilots to spot the MIG's earlier and then used their higher acceleration and speed in hit and run tactics. They avoided turning fights because the MIG's had great maneuverability. The EC-121's helped materially by alerting the F4's to the presence of the enemy aircraft. During 1966, U.S. fighters shot down 23 MIG's, 17 of them credited to USAF crews, as against a loss of 9 aircraft, 5 of them Air Force.

Early in 1967, Washington officials approved new Rolling Thunder targets closer to Hanoi. To protect vital industrial and LOC facilities, North Vietnamese pilots—operating with nearly 100 MIG's—were thrown into the air battle. To dampen their ardor, General Momyer and his staff devised a ruse nicknamed Operation Bolo. The details were worked out and executed by Col. Robin Olds, Commander of the 8th Tactical Fighter Wing. Baited by what appeared to be a normal Rolling Thunder strike by F-105's, the NVAF on 2 January suddenly found itself engaging F-4's in the largest aerial battle of the war to that time. Colonel Olds and his pilots shot down 7 MIG's in 12 minutes without losing an aircraft. Olds personally downed two of them. On 6 January 1967 the North Vietnamese lost two more MIG's.



Destroyed bridge in Laos, 1965.

Stunned by the losses, the NVAF stood down to regroup and retrain.

The American air offensive continued into March and April. On 10-11 March, F-105's and F-4C's hit the sprawling Thai Nguyen iron and steel plant about 30 miles from Hanoi. Air Force and Navy follow-up strikes also hit portions of the plant. The attacks disrupted but did not completely halt pig iron or steel production. Also, for the first time, Air Force jets struck the *Canal Des Rapides* railway and highway bridge, 4 miles north of Hanoi. Enemy pilots did not attempt to challenge American aircraft again until the spring of 1967, which saw 50 engagements fought in April and 72 in May, the largest 1-month total of the war. During the fierce May battles Air Force crews destroyed 20 MIG's—7 of them on the 13th and 6 on the 20th.

A revised Rolling Thunder target list issued on 20 July permitted air attacks on 16 additional fixed targets and 23 road, rail, and waterway segments inside the restricted Hanoi-Haiphong area. Bridges, bypasses, rail yards, and military storage areas were bombed in an effort to slow or halt traffic between the two cities and to points north and south. On 2 August 1967 Hanoi's famous Paul Doumer railway and highway bridge was hit for the first time. The center span was knocked down and two other spans were damaged. Struck again on 25 October, another span went down and finally, on 19 December, the rebuilt center span was dropped again.

Despite these successes, the North Vietnamese during the year managed to inflict a steady toll on the Air Force and Navy, and their MIG's were unusually aggressive. The increasing losses led Washington to approve—for the first time—the destruction of most of the MIG bases. Beginning in April 1967, Air Force and Navy pilots repeatedly bombed Kep, Hoa Lac, and Kien An airfields, destroying several MIG's on the ground in the process.

Many of the MIG's flew to nearby Chinese bases. On 16 August 1967, General Momyer told a Senate committee that "... we have driven the MIG's out of the sky for all practical purposes. . . ." However, the enemy aircraft returned with improved tactics, and the Johnson administration authorized an attack on Phuc Yen, their principal base.

By early 1968 neither U.S. air superiority, Rolling Thunder, nor air-ground operations within South Vietnam deterred Hanoi's leaders from continuing their efforts to destroy the Saigon government. Although suffering heavy manpower and materiel losses, the North Vietnamese were able to continue the conflict with the help of communist regimes in Moscow and Peking. Washington's military restraints—aimed at avoiding a wider war—permitted foreign military assistance to flow unhampered through the seaports of North Vietnam. In addition, the enemy had almost unrestricted use of Cambodian territory adjacent to South Vietnam for stockpiling supplies (much of it flowing in from Cambodia's major seaport at Kom Pong Som) and for resting and regrouping their troops.

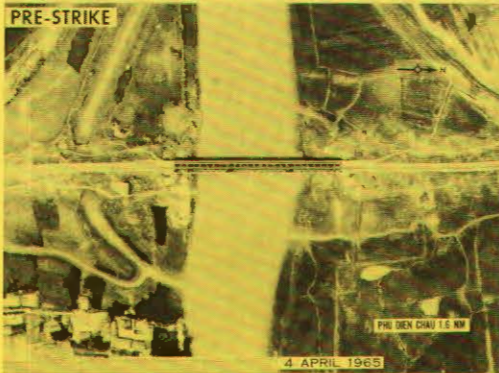
In taking advantage of the opportunities provided by American restraint, the Communists conceived a plan for a major offensive against the Republic of Vietnam in hopes of achieving a dramatic victory—such as they had won over the French at Dien Bien Phu in 1954—which would persuade Washington and Saigon to acknowledge their defeat. Whereupon, in late January 1968 they laid siege to the Marine base at Khe Sanh and then, at month's end, they launched the famous Tet offensive throughout South Vietnam. At Khe Sanh, the allies threw the enemy back with heavy losses. Elsewhere, after initial but brief gains, the enemy's nationwide offensive slowly sputtered out and was

An Air Force reconnaissance photograph of damage at Phuc Yen.

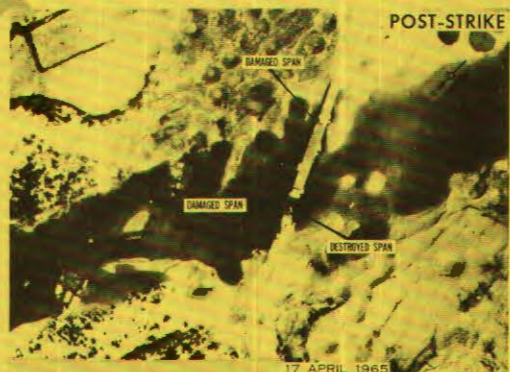


BRIDGE INTERDICTION NORTH VIETNAM

RAILROAD BRIDGE PHU DIEN CHAU 18-58-20N 105-34-55E



HIGHWAY BRIDGE NORTHWEST BAI DUC THON 18-04-05N 105-49-30E

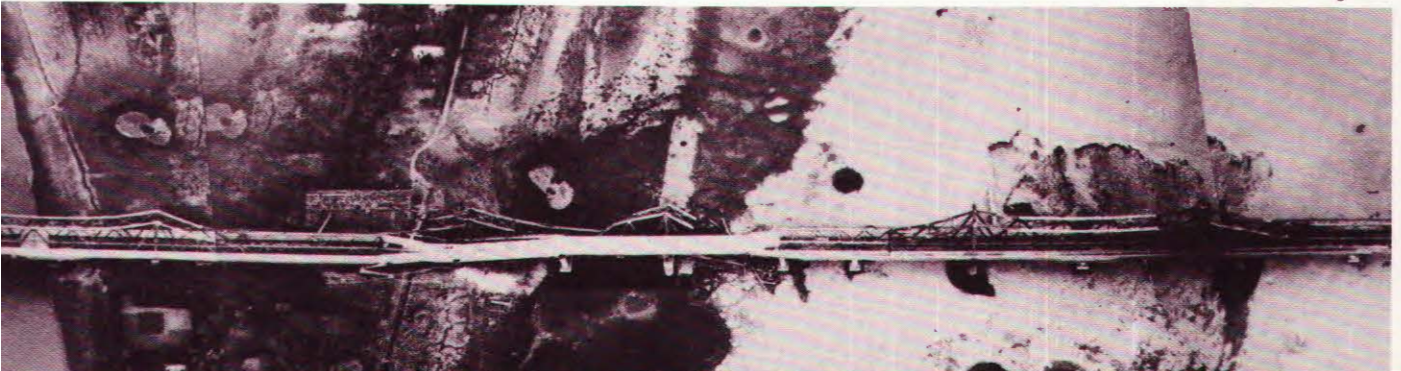


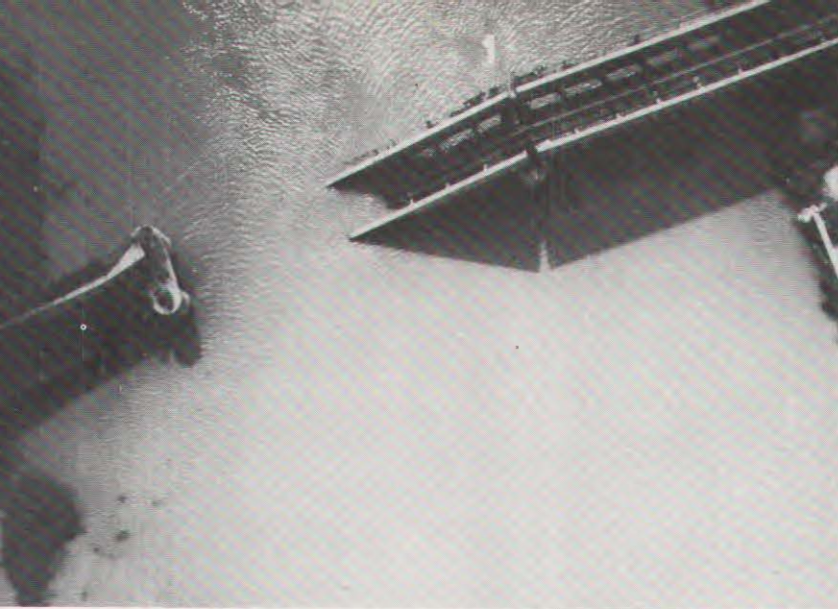
1

2



3



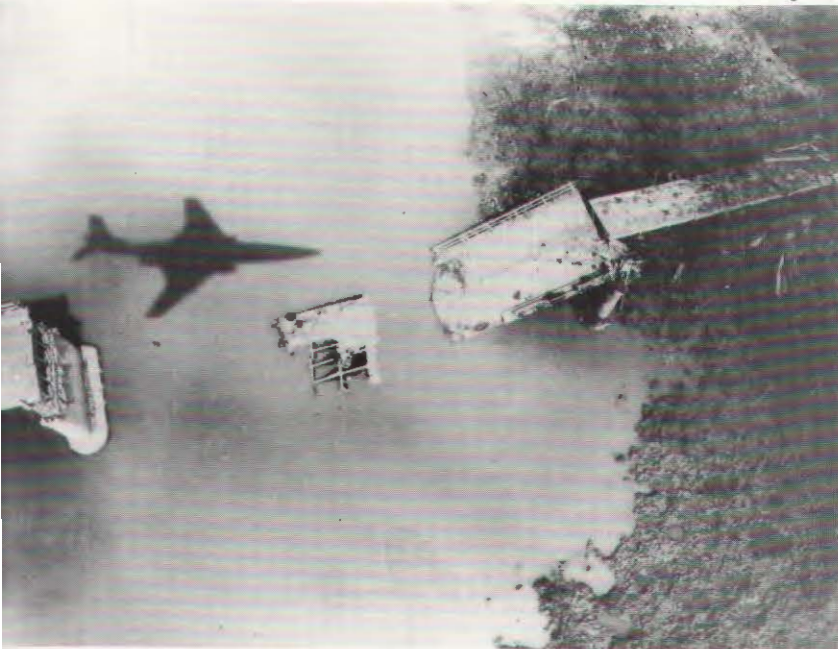


4

6



5



7



8



(2&3) USAF F-105's destroyed the Doumer Bridge on 18 December 1967. After the North Vietnamese rebuilt it, U.S. bombers destroyed it again in 1972. (4) RF-101 Voodoo pilot photographs a railroad bridge 135 miles south of Hanoi, April 1965. (5) An RF-101 casts a shadow over a missing span of the My Duc highway bridge in North Vietnam, 22 April 1965. (6) North Vietnamese highway bridge, destroyed by F-105's. (7) Destroyed highway and railroad bridge about 5 miles north-northwest of Dong Hoi, North Vietnam. (8) Destroyed bridge between Yen Bai and Bao Ha, North Vietnam, 22 May 1972.



1

(1&2) B-52 bombers destroyed the Kinh No railroad yard, 7 miles north of Hanoi, 27 December 1972. (3) 750- and 3,000 pound bombs impact on and near a railroad and highway bridge crossing the Canal des Rapides, 5 miles northeast of Hanoi. (4) Bomb damage caused by F-105's on the Thai Nguyen rail yard, April-May 1966. (5) An air strike on North Vietnam army supply depot, Thien Linh Dong, 16 June 1965. (6) B-52 bombers destroy the Ai No warehouse 18 December 1972 in the Hanoi area. (7) An Air Force strike on the Thai Nguyen thermal power plant in North Vietnam, 29 March 1967, knocked out the boiler plant (lower l.) and the administration building.

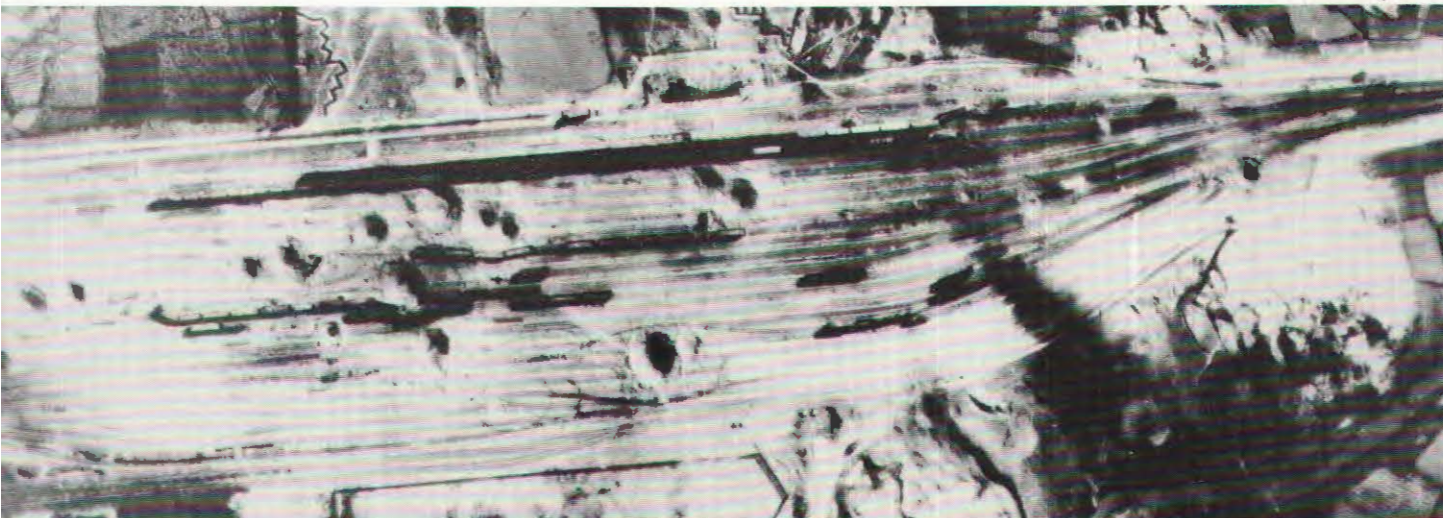


2

3



4



THIEN LINH DONG ARMY SUPPLY DEPOT

PRE STRIKE



POST STRIKE



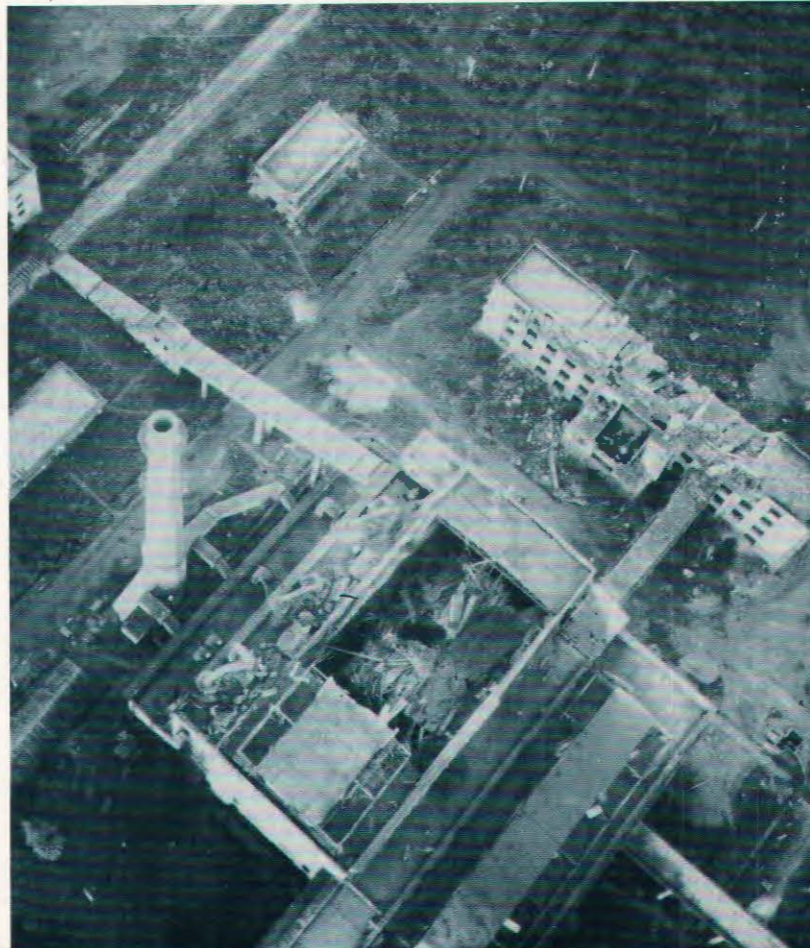
80 PER CENT OF BUILDINGS IN TARGET COMPLEX DESTROYED OR DAMAGED

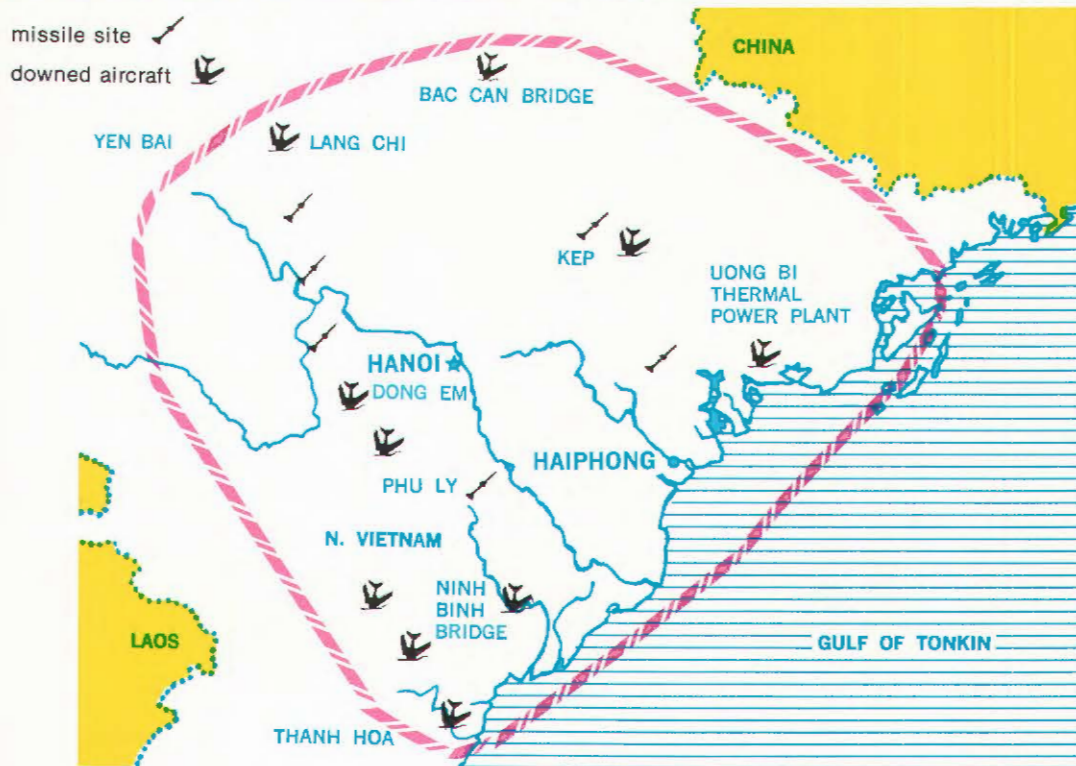
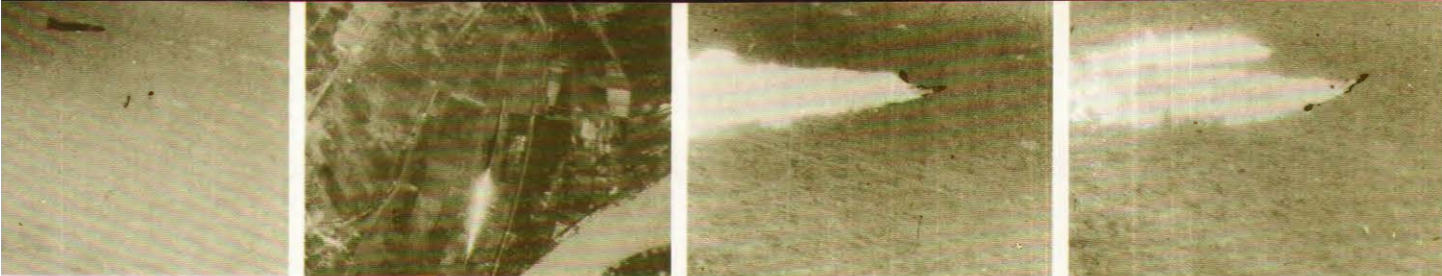
5



6

7



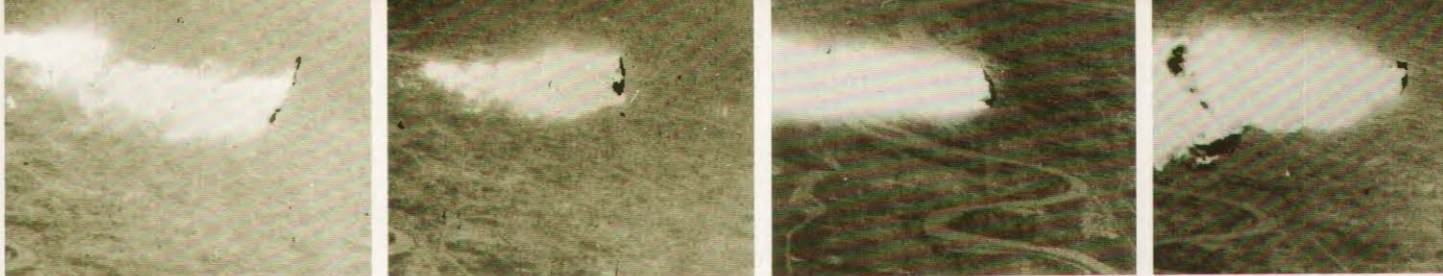


SURFACE-TO-AIR MISSILE ENVELOPE 1966

slowed, halted, and reversed. But if the North Vietnamese military campaign did not succeed, it did lead to a change in American war policies. As noted in Chapter III, President Johnson on 31 March ordered a halt to the bombing of North Vietnam north of the 20th parallel, then north of the 19th parallel. As a *quid pro quo*, the Hanoi regime agreed to meet with U.S. delegates in Paris to discuss an end to the conflict. In the meantime, the Air Force and other services virtually doubled their air strikes in the area

below the 19th parallel, interdicting enemy troop and supply movements across the DMZ into South Vietnam. They also stepped up raids against enemy positions in southern Laos.

In Paris, after many meetings and months of deadlock between the two sides on how to bring the war to an end, American and North Vietnamese representatives agreed on a certain "essential understanding" enabling President Johnson on 31 October 1968 to end all air, naval, and artillery bombardment of North Vietnam as of



A sequence of frames showing the destruction of a USAF RF-4C reconnaissance plane by an SA-2 missile, 12 August 1967. The 2-man crew, Lt. Col. Edwin L. Atterberry and Maj. Thomas V. Parrott successfully ejected and were captured and interned. Colonel Atterberry died in captivity.

0800 hours Washington time, 1 November. The understanding, as Mr. Johnson expressed it, was that the other side intended "to join us in deescalating the war and moving seriously towards peace."

Ninety minutes before the President's order was issued, Maj. Frank C. Lenahan of the 8th Tactical Fighter Wing made the last target run in an F-4D against a target near Dong Hoi. Thus, 3 years and 9 months after it began, Rolling Thunder operations came to an end. The Air Force and the other services had flown approximately 304,000 tactical and 2,380 B-52 sorties and dropped 643,000 tons of bombs on North Vietnam's war-making industry, transportation net, and air defense complex. Notwithstanding the variety of constraints imposed on air power, the post-1965 aerial assault on North Vietnam helped to reduce the movement of manpower and supplies going southward and contributed to the 1968 diplomatic efforts to lower the tempo of combat.

Except for Air Force and Navy reconnaissance missions, which were permitted in a separate understanding between the Americans and North Vietnamese in Paris, all air operations over the North ceased. Later—after President Nixon assumed office—U.S. retaliatory air strikes were launched against enemy air defense units which began firing at U.S. reconnaissance aircraft in violation of the above "un-

derstanding." In February 1970, after the North Vietnamese again fired upon U.S. reconnaissance aircraft, the President authorized certain "protective reaction" strikes against NVA anti-aircraft and SAM sites and also enemy airfields. When U.S. aircraft continued to receive ground fire, the President ordered "reinforced protective reaction" strikes on the enemy's air defense system.

The first of these latter missions were flown during the first 4 days in May 1970. Nearly 500 Air Force and Navy aircraft hit missile and AAA sites and NVA logistic facilities near Barthelmy pass, Ban Karai pass, and a sector north of the DMZ. During the next 6 months interim smaller strikes were flown. On 21 November the Air Force launched two major operations over the North. The first involved a joint Air Force and Army commando attempt to rescue American prisoners of war (POW's) believed confined at the Son Tay prison compound, about 20 miles northwest of Hanoi. Planned by Air Force Brig. Gen. Leroy J. Manor and Army Col. Arthur D. Simons, the volunteer commando force flew 400 miles from bases in Thailand to Son Tay in HH-53 helicopters, with A-1E Skyraiders and specially equipped C-130E's providing support. As it landed, Air Force and Navy aircraft launched heavy diversionary strikes in the area to distract the North Vietnamese. Members of the commando force

A North Vietnamese SAM missile.





3



(1) Enemy mobile AAA units near Haiphong. (2) An alert sends North Vietnamese pilots scrambling for their MiG aircraft. (3) A dummy SA-2 site in North Vietnam. (4) Soviet ships delivered not only thousands of trucks to the North Vietnamese but also tanks, rockets, and other implements of war. (5) North Vietnamese 37-mm gunners fire at U.S. jets, August 1965. (6) An SA-2 site in the Hanoi area.



4



5



SA-2 IN FLIGHT



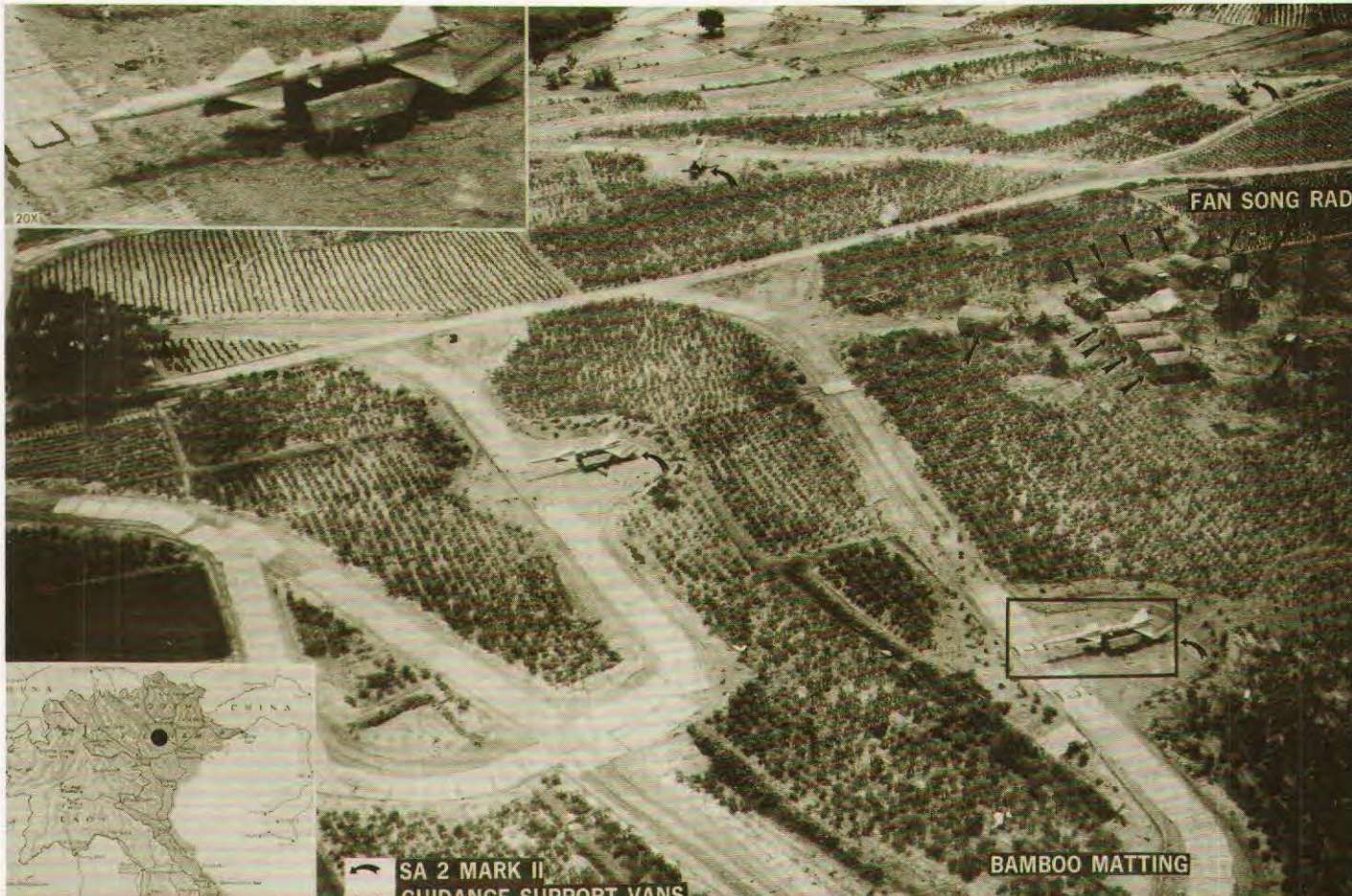
6

7

SHADOW OF SA-2 DETONATION



8



FAN SONG RAD

SA 2 MARK II
GUIDANCE SUPPORT VANS

BAMBOO MATTING

quickly discovered, to their dismay, that the prison compound contained no prisoners. During the 28 minutes the rescuers were on the ground, they killed about 25 North Vietnamese defenders. The only American casualty was an enlisted man who suffered a broken ankle. One helicopter was destroyed on landing.

About 6 hours later, the second operation of the day was launched after an RF-4 aircraft was lost. An armada of 200 Air Force and Navy strike aircraft—supported by 50 other planes—launched a major retaliatory strike in the vicinity of the Mu Gia and Ban Karai passes and the DMZ. Their targets included SA-2 missile sites, enemy trucks, and supply and transportation facilities. All aircraft returned safely to their bases.

During the 2 years after Rolling Thunder operations ended on 1 November 1968, the United States had flown more than 60 separate strike missions in retaliation to ground fire. When the North Vietnamese continued to fire at U.S. reconnaissance aircraft, Washington officials authorized stepped up "reinforced protective reaction" strikes. In February 1971, the Air Force launched Operation Louisville Slugger. Flying 67 sorties, USAF crews destroyed 5 SAM sites, 15 SAM missile transporters, and 15 vehicles in the Ban Karai pass area. On 21-22 March, the Air Force teamed up with the Navy in Operation Fracture Cross Alpha during which they flew 234 strike and 20 armed reconnaissance sorties against enemy SAM sites. In August 1971, in an effort to curb enemy road construction across the DMZ into Military Region I* in South Vietnam, Air Force jets flew 473 sorties, seeding the road with munitions and sensors. On 21 September, flying in poor weather, 196 U.S. tactical aircraft hit three POL storage areas

south of Dong Hoi, destroying about 350,000 gallons of fuel. It was the first all-instrument air strike, employing exclusively the long-range electronic navigation (LORAN) position fixing bomb system.

These intermittent protective reaction strikes—launched mostly in the southern panhandle of North Vietnam—did not affect Hanoi's efforts to rebuild and reconstitute its air force. By late 1971, it had an inventory of about 250 MIG's, 90 of them MIG-21's, and once more it prepared to challenge American operations over the North and, to a limited extent, over Laos. By this time the North Vietnamese Air Force was operating out of 10 MIG-capable bases, 3 of them located in the panhandle area. USAF and Navy pilots, who over the years had achieved roughly a 2 1/2 to 1 victory ratio over MIG fighters in aerial battles, saw the odds drop. However, this was attributed to the U.S. rules of engagement, which again exempted MIG air bases and to the geographical and electronic advantages possessed by the defenders rather than to the superiority of enemy pilots.

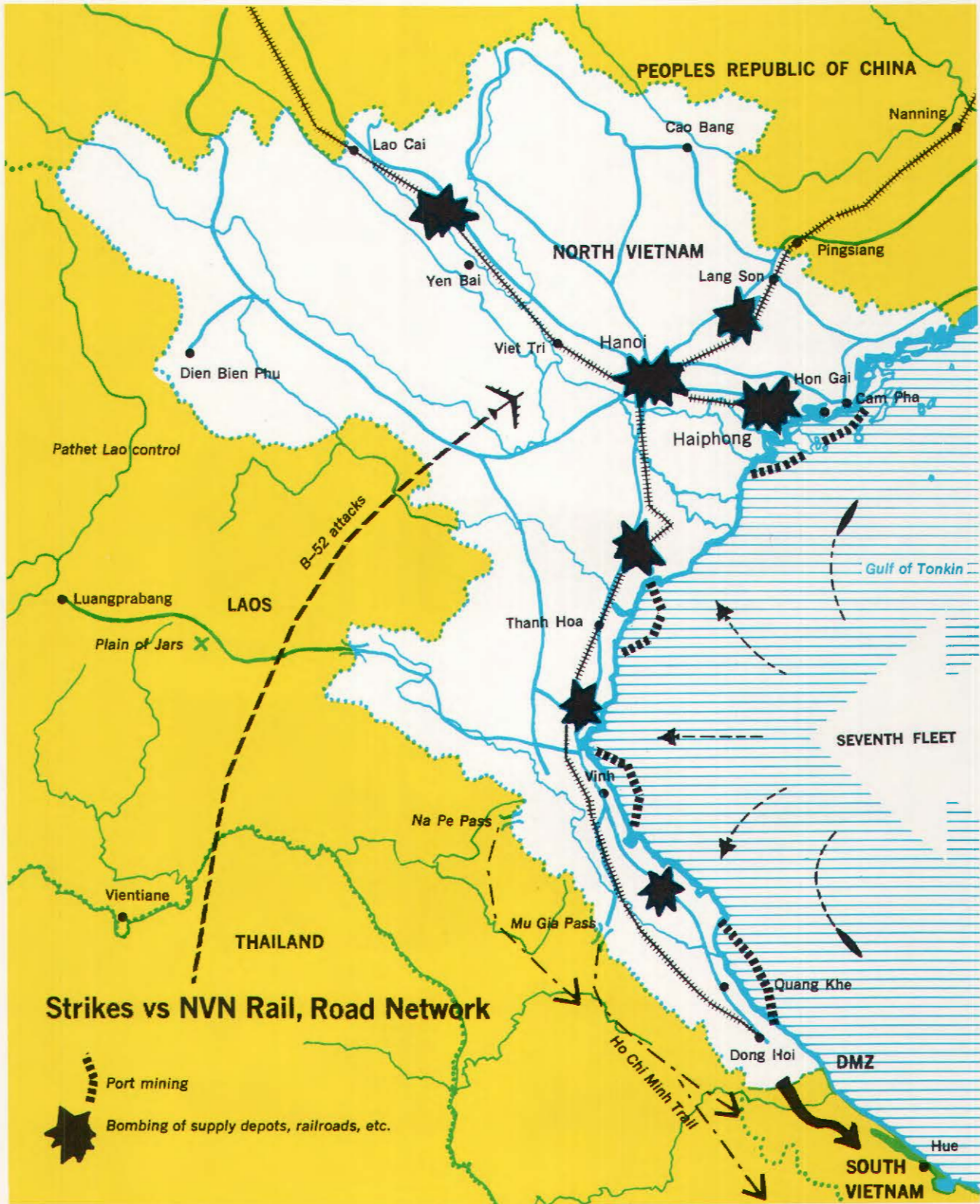
To counter the enemy air threat, EC-121 aircraft—which had redeployed from Southeast Asia after Rolling Thunder operations ended in 1968—were returned to the theater to resume their "MIG watch." Once again, as in 1967 when the NVAF last posed a serious threat to air operations over the North, USAF commanders urged that MIG air bases be attacked. Washington officials agreed, and on 7-8 November USAF and Navy pilots bombed airfields at Dong Hoi, Vinh, and Quan Lang. After neutralizing these air bases, U.S. pilots on 26-30 December launched the heaviest



Capt. Lawrence H. Pettit, 55th Tactical Fighter Squadron, discusses his MIG kill with his crew chief, Sgt Horace G. McGruder.

*The four corps tactical zones were redesignated Military Regions in July 1970.

USAF Linebacker II Offensive Against North Vietnam December 1972



air strikes since 1968—1,025 sorties—against a variety of military targets south of the 20th parallel.

The Communist Spring Offensive, 1972

Still hoping to end the war through negotiations, the Nixon administration kept a tight rein on its principal bargaining card—air power. Hanoi, however, was thinking in terms of another military offensive. By late 1971 evidence began to accumulate that Hanoi was planning a large-scale invasion of South Vietnam. Gen. John D. Lavelle,* who in August 1971 succeeded Gen. Lucius D. Clay, Jr., as Seventh Air Force commander, requested the recall of certain USAF units to the theater. By the spring of 1972, North Vietnam had assembled a force of about 200,000 men for a push into the South.

The invasion began on 29-30 March 1972, with some enemy forces rolling directly across the DMZ into Military Region I while others penetrated into Military Region II from Laos. All were supported by considerable numbers of tanks and other armored vehicles. The South Vietnamese army, although greatly improved since 1968, was still plagued by poor leadership and morale and was forced to retreat. U.S. air power—plus the strengthened Vietnamese Air Force—was thrown into the battle. Air Force F-105's, F-4's, A-7's, AC-130's and B-52's were joined by Navy and Marine aircraft in pounding the enemy daily between the 20th parallel in the North and the battle lines inside South Vietnam. Bolstered by aircraft reinforcements from the United States and elsewhere, attack sorties over the extended battlefield averaged 15,000 per month, almost two-thirds of the peak monthly rate in 1968.

* General Lavelle was recalled from his post in March 1972, charged with having authorized certain "protective reaction" strikes beyond those permitted by the rules of engagement. He was succeeded as Seventh Air Force commander by Gen. John W. Vogt.

A gun camera sequence shows the destruction of an enemy MIG-17, 3 June 1967, by an F-105 crew.



With Hanoi's forces ensconced inside South Vietnam and determined, despite heavy casualties, to maintain their positions below the DMZ, President Nixon on 8 May suspended the peace talks in Paris and authorized the launching of Operation Linebacker. For the first time, the United States imposed a naval blockade and mined the waters of Haiphong and other North Vietnamese ports. Simultaneously, the President authorized a renewal of air strikes throughout North Vietnam above the 20th parallel. Old and new targets were struck, including the rebuilt Paul Doumer bridge in Hanoi, bridges along the northwest and northeast rail lines from China, fuel dumps, warehouses, marshalling yards, rolling stock, vehicles, power plants, and a POL pipeline running from China. All recently emplaced SA-2 missile sites in or near the DMZ were destroyed as were many SA-2 and AAA sites further north.

To degrade or neutralize North Vietnam's rebuilt or new bristling air defenses, the Air Force made full use of its electronic technology. It employed EB-66's, Wild Weasel F-105's, and EC-135's to augment electronic countermeasure equipment used by most fighter aircraft. It also employed a profusion of laser and optically-guided bombs, which had been developed in the late 1960's. Mostly 2,000 pounders, the guided bombs enabled fighter crews to strike targets with great accuracy. Thus, the spans of the strongly defended Than Hoa bridge—which had withstood U.S. bombs for years and had cost the Air Force and Navy a number of downed aircraft—were dropped in one strike by an F-4 with guided bombs.

By June 1972 North Vietnam's offensive had stalled outside of Hue and elsewhere as South Vietnamese ground forces began to fight back. On 29 June, President Nixon reported that with the mining of the harbors and bombing of military targets in the

North—particularly the railroads and oil supplies—the situation “has been completely turned around.... The South Vietnamese are now on the offensive.” He reiterated his proposal of 8 May for an international ceasefire and the return of American prisoners of war, warning that the United States intended to bargain from strength. The peace talks resumed in Paris on 13 July. In the ensuing weeks, Saigon's forces, heavily supported by U.S. and VNAF air strikes, continued their offensive against the 200,000 enemy troops who had seized control of large portions of the South Vietnamese countryside.

Meanwhile, North Vietnamese pilots were reacting aggressively in the Hanoi-Haiphong area in an effort to drive American pilots out of the skies over their heartland. The renewed American-North Vietnamese air battles shortly produced several Air Force aces. On 28 August 1972, Capt. Richard S. Ritchie, flying an F-4D Phantom II, participated in his fifth shootdown and became the nation's second ace. (The U.S. Navy produced the first.) His weapons system officer, Capt. Charles DeBellevue, who had flown with Ritchie in three previous “kills,” became an ace on 9 September when he destroyed his fifth and sixth MIG's, becoming the first weapon systems officer to achieve this status. Capt. Jeffrey S. Feinstein, also an F-4 weapons system officer, became an ace on 13 October when he helped bag his fifth MIG. These were the only Air Force aces of the war. A Navy pilot and a WSO likewise became aces.

The 11-Day Air Campaign

On 23 October 1972, when it seemed that the Paris talks were leading to an agreement to end the war, the United States again halted air operations above the 20th parallel. Soon after, however, the negotiations



(1) Six F-4C crews pose before their planes in April 1966, following destruction of six MIG aircraft over North Vietnam. (2) The first MIG downed during the war was credited to Capt. Kenneth E. Holcombe and Arthur C. Clark, 10 July 1965. Flight commander Maj. Richard Hall gets a ride on the shoulders of the other flight members: (l. to r.) Capt. Ronald C. Anderson, Kenneth E. Holcombe, Capt. Harold Anderson, Capt. Arthur C. Clark, and Capt. Wilbure Anderson. (3) After their 3 June 1967 shootdowns of MIG-17's Capt. Larry D. Wiggins and Maj. Arthur L. Kuster review the tactics they used. (4) Col. Robin Olds, commander of the 8th Tactical Fighter Wing, and other airmen pose on the occasion of the unit's 15th air victory over enemy MIG's. (5) Capt. Jeffery S. Feinstein, a weapons system officer was credited with five aerial victories over enemy MIG's.





1



4



2

(1) 1st. Lt. Clifton P. Dunnegan, of the 8th Tactical Fighter Wing, shot down 1 of 7 enemy MIG's destroyed over North Vietnam on 2 January 1967. (2) Capt. Charles B DeBellevue, credited with six aerial victories, poses with Col. Scott G. Smith and Capt. Richard S. Ritchie, who became the first USAF ace in Southeast Asia. (3) The five general officers shown below are World War II aces with five or more enemy aircraft "kills" to their credits, for a total of 41½ victories-directed USAF operations in Southeast Asia during 1966-1967. They are: Lt. Gen. (later General) William W. Momyer (center, front), 7th Air Force commander. The others are (l. to r.), Maj. Gen Gordon M. Graham, vice commander; Brig. Gen. Franklin A. Nichols, chief of staff; Brig. Gen. Donavon F. Smith, chief of the Air Force Advisory Group in Vietnam; and Brig. Gen. William D. Dunham, deputy chief of staff for operations. (4) Maj. Robert G. Dilger, F-4C commander (r.) and his pilot, 1st. Lt. Mack Thies (center) report to their CO, Lt. Col. Hoyt S. Vandenberg, Jr., how they destroyed a MIG-17 during a dogfight over North Vietnam, 1 May 1967.

3



stalled amid indications that Hanoi might renew its offensive in South Vietnam. Whereupon, President Nixon ordered a resumption of air strikes above the 20th parallel. There followed a final 11-day bombing campaign, nicknamed Operation Linebacker II, which resulted in one of the heaviest aerial assaults of the war. The Air Force dispatched F-105's, F-4's, F-111's, and—for the first time, B-52's—over the heavily defended enemy capital and the adjacent Haiphong port. The tactical aircraft flew more than 1,000 sorties, the B-52's about 740, most of them against targets previously on the restricted list. They included rail yards, power plants, communication facilities, air defense radars, Haiphong's docks and shipping facilities, POL stores, and ammunition supply areas. They repeatedly bombed the principal NVAF MIG bases and transportation facilities.

The North Vietnamese responded by launching most of their inventory of about 1,000 SAM's and opening up a heavy barrage of AAA fire against the attackers, but USAF electronic countermeasures helped keep losses to a minimum. Of 26 aircraft lost, 15 were B-52's which were downed by SAM's. Three others were badly damaged. However, by 28 December the enemy defenses had been all but obliterated and during the last 2 days of the campaign, the B-52's flew over Hanoi and Haiphong without suffering any damage.

Deprived of most of their air bases, North Vietnamese pilots were able to launch only 32 aircraft of which 8 were shot down, 2 by B-52 tail gunners. Hanoi claimed the strikes on Hanoi-Haiphong produced substantial collateral damage and more than 1,000 fatalities. Considering the size of the air assault, the bombing was well controlled and not indiscriminate. Impacting fragments from enemy SAM's contributed to the destruction.



1



2



3



4



(Above) B-52 unloads its bombs.

On 30 December 1972, President Nixon announced in Washington that negotiations between Dr. Henry A. Kissinger and North Vietnam's representative, Le Duc Tho, would resume in Paris on 8 January. While the diplomats talked, American air attacks were restricted to areas below the 20th parallel. Air Force, Navy, and Marine fighters flew about 20 sorties per day with B-52's adding 36 to the daily total. On 15 January the United States announced an end to all mining, bombing, shelling, and other offensive actions against North Vietnam. On 23 January, the Paris negotiators signed a nine-point cease-fire agreement effective 28 January, Saigon time.

Thus, air power had played a significant role in preventing the complete takeover of South Vietnam by the northerners and in extracting an agreement to end the war. Between 1968 and 1972, more than 51,000 tactical and 9,800 B-52 sorties were flown

against the North, most during the two Linebacker campaigns. The tactical aircraft dropped about 124,000 tons of bombs and the B-52's about 109,000 tons, with their "Sunday punch" missions of late December 1972 being perhaps the most noteworthy. An even heavier rain of bombs pounded enemy forces in South Vietnam's Military Regions I and II.

In addition to the cease-fire, the 23 January 1973 agreement provided for the return of all American and allied POW's within 60 days, establishment of a commission to supervise truce and territorial disputes, the right of the South Vietnamese people to determine their own future peacefully, a promise of U.S. economic aid for the Indochina states, and an affirmation of the neutrality of Laos and Cambodia. The United States tacitly recognized the presence of about 100,000 North Vietnamese troops still entrenched in South Vietnam.

(1) Weather observer SSgt Ronald L. Galy and equipment repairman Sgt George F. Hammett, Jr., inflate a weather balloon in South Vietnam. (2) Maj. John A. Lasley and Sgt. Hammett prepare to operate a theodolite. (3) SSgt William E. Collins, chief observer of the weather detachment at Phu Cat AB, South Vietnam. (4) TSgt William S. Grady checks weather observation charts and satellite photographs.

