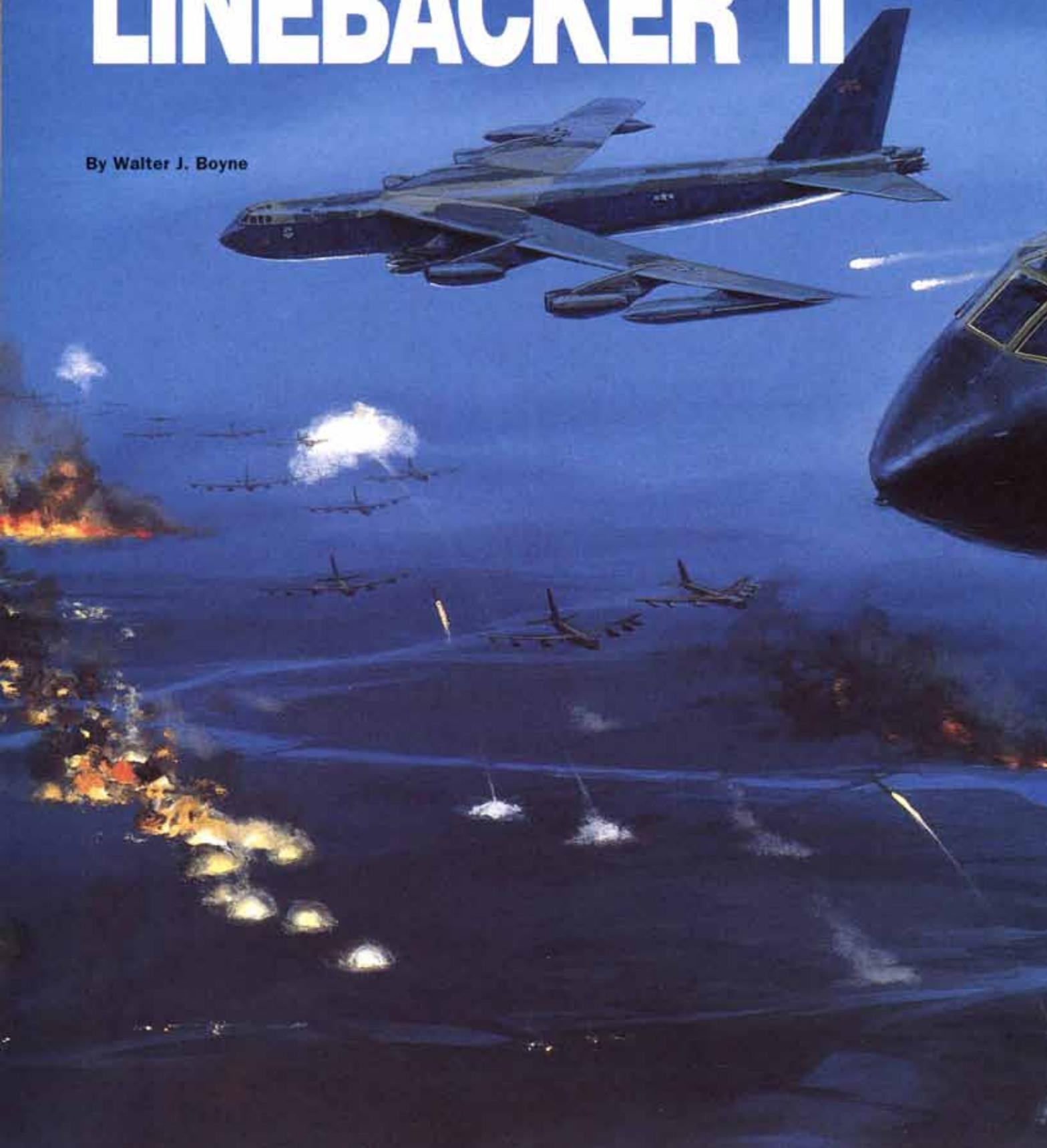


Not since World War II had bombers been employed in an operation of this scope. After 11 days of bombing, Hanoi was ready for peace negotiations.

LINEBACKER II

By Walter J. Boyne





Artist Jack Fellows captures a sense of the scale of Linebacker II in his work titled "High Road to Hanoi," which features B-52 bombers during one mission over North Vietnam.



A B-52D leads a force of B-52Gs as the bombers start out from Andersen AFB, Guam, on the long flight west for Linebacker II. During the intensive 11-day campaign, B-52s flew more than 700 sorties against 34 key targets.

IN 1965, the Air Force entered direct combat in Vietnam, despite the fact that its leaders had always opposed involvement in Southeast Asia. It fought in an outstanding manner, though hampered by highly political rules of engagement that violated all principles of airpower. As it fought, the Air Force gathered the expertise it needed to combat an enemy whose strength grew year by year, fueled by virtually unlimited support from the Soviet Union and China.

In December 1972, 25 years ago next month, the intransigence of the tough and resilient North Vietnamese foe finally exposed the total failure of gradualist war policies set in motion years before by President Lyndon B. Johnson and Secretary of Defense Robert S. McNamara. In fact, the North's thorough defeat of South Vietnam's forces convinced Hanoi that it need not seriously pursue peace negotiations with the United States in Paris. Military victory was within its grasp.

For Washington, the situation was inordinately bleak. The process of "Vietnamization" and US military force withdrawal had reduced the American ground presence to about 26,000 troops—too few to win a major battle but enough for a huge contingent of prisoners in an inglorious defeat. President Richard M. Nixon called upon the Air Force to save the situation. It did so with a powerful, 11-day bombing campaign, Operation Linebacker II. The campaign unfolded

over the 12-day period of December 18–29, 1972. Because there was a one-day stand-down on Christmas Day, the operation came to be known by many as "the 11-Day War."

Seven Years Late

When President Nixon gave the order the Air Force collectively saluted and went to work, pleased at last to be carrying out the strategy it had advocated from the start—concentrated, sustained air attack against the enemy heartland. In 1965, that enemy heartland had been virtually defenseless and could have been attacked at will. Now, after a huge buildup, it was shielded by the most extensive and strongest integrated air defense system in the world.

The size and strength of those defenses were so great that many believed the B-52 heavy bomber, backbone of the Air Force's long-range force, would not be able to survive encounters with it. By 1972, North Vietnam had amassed a defense that included 145 MiG fighters, 26 SA-2 Guideline surface-to-air missile sites (21 in the Hanoi–Haiphong area), a heavy concentration of anti-aircraft artillery, and a complex, overlapping radar network that served an efficient and many-times-redundant command-and-control system. In addition, the radar network secretly had been improved in recent times by introduction of a new fire-control radar that improved the accuracy of the SA-2 weapons.

Targets Hit by B-52s

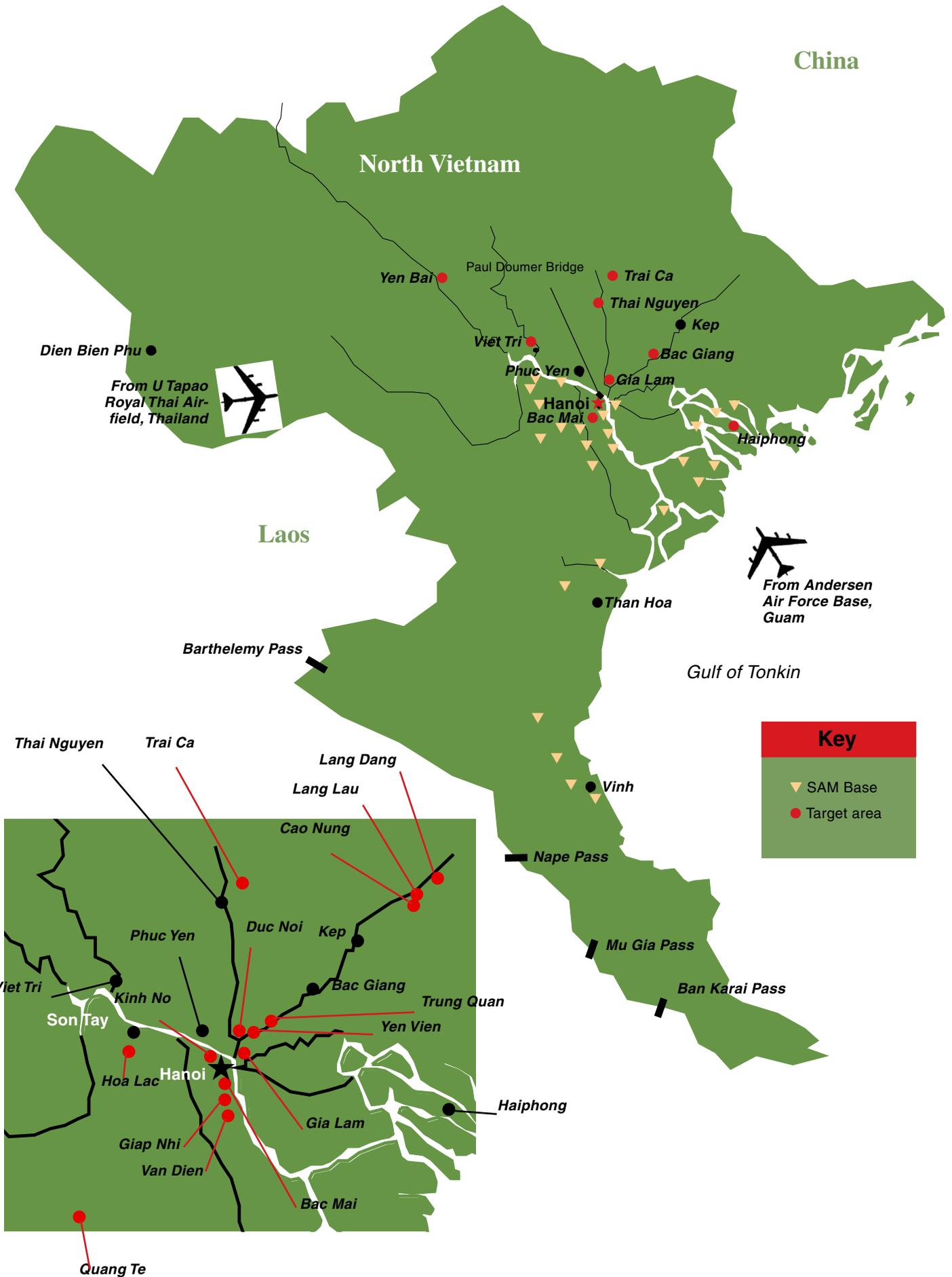
Target	Planned Sorties
Lang Dang railroad yard	86
Kinh No military complex	78
Yen Vien military complex	63
Gia Lam railroad yard	54
Thai Nguyen TPP*	42
Van Dien supply depot	39
Hanoi Radio	36
Thai Nguyen railroad yard	36
Bac Giang TSP*	33
Haiphong railroad siding	27
Phuc Yen SAM storage site	23
Hanoi POL storage site	21
Trai Ca SAM support facility	20
Phuc Yen SAM support facility	18
Giap Nhi railroad yard	18
Duc Noi railroad yard	18
Haiphong POL storage site	18
Haiphong transfer station	15
Hanoi Bac Mai storage site	12
Kep railroad yard	12
Trung Quan railroad yard	12
Duc Noi storage site	12
Kep airfield	9
Quang Te airfield	6
Hoa Lac airfield	6
Phuc Yen airfield	6
VN 549 SAM site	3
VN 234 SAM site	3
VN 243 SAM site	3
VN 266 SAM site	3
VN 158 SAM site	3
VN 537 SAM site	2
VN 660 SAM site	2
VN 563 SAM site	2

Total **741**

Source: Pacific Air Forces

*TPP stands for Thermal Power Plant; TSP for Transshipment Point.

All previous air campaigns, including the initial Linebacker carried out in May–October 1972, were "limited," designed to interdict the overland routes by which the North resupplied its regular units and Viet Cong forces operating in South Vietnam. Linebacker II was to be different. The intent was to destroy all major target complexes in the Hanoi and Haiphong areas, using two distinct types of efforts, both of which had to contend with the monsoon season. An all-weather force of heavy B-52s and smaller F-111



Linebacker II Total Night USAF Sorties

Day/Date	B-52 Attack	SEAD	CAP/Escort	Chaff	Total
1: Dec. 18	129	17	63	22	231
2: Dec. 19	93	19	61	24	197
3: Dec. 20	99	18	55	26	198
4: Dec. 21	30	13	23	9	75
5: Dec. 22	30	15	27	15	87
6: Dec. 23	30	13	12	3	58
7: Dec. 24	30	16	22	16	84
8: Dec. 26	120	18	34	23	195
9: Dec. 27	60	23	32	23	138
10: Dec. 28	60	7	28	23	118
11: Dec. 29	60	11	33	25	129
Totals	741	170	390	209	1,510

Of 741 planned B-52 sorties, 12 were aborted. The Air Force SEAD (Suppression of Enemy Air Defenses) mission was carried out by F-105, F-4C, and F-4E fighters. CAP (combat air patrol), escort, and chaff dispersal were carried out by numerous types. In addition, US Navy and US Marine aircraft flew a total of 277 night support sorties in A-6, A-7, and F-4 aircraft.

attack aircraft would bomb by night while tactical aircraft would continue to press daytime attacks.

Air Force officers carefully shaped the list of targets so that the bombers could avoid civilian collateral damage and, most particularly, avoid damaging installations housing American POWs. As it turned out, one of the valuable side effects of Linebacker II was the boost in morale it brought prisoners as they saw their Communist captors tremble at the explosions and realized that at long last, the United States was fighting the war as it always should have been fought.

The initial orders calling for the Linebacker II effort specified three days of intensive effort, with a strong prospect of continued bombing. Throughout the Pacific theater, Air Force headquarters, flight lines, supply depots, barracks, mess halls, and all the other elements of a fighting force throbbed with preparatory activity. The flight line at Andersen AFB, Guam, was jammed with an enormous force of 99 B-52Gs and 53 B-52Ds. The mission from Guam would run about 12 hours and require in-flight refueling. At U Tapao Royal Thai Airfield, Thailand, another 54 B-52Ds were available. The mission from U Tapao would take only about three to four hours and did not require in-flight refueling.

All of the D models of the BUFFs had received the latest electronic countermeasures modifications, while only half of the G models had been so

modified. This would prove to be an unfortunate and at times fatal difference, because the unmodified G models turned out to be vulnerable to SAMs.

Double Duty

Air Force tactical air units were called upon for double duty. They were to fly in support of the nighttime bomber attacks then go on to conduct a vigorous attack effort in the daytime. In the course of the campaign's 11 days, tacair units flew 530 daytime sorties, including 126 for suppression of SAM complexes, 273 for MiGCAP

[MiG Combat Air Patrol] or escort, 85 for chaff dispersal, and 46 other types of missions. By night, tactical air units flew 769 sorties, including 170 SAM suppression, 390 MiGCAP/escort and 209 chaff.

The effectiveness of the US tactical force's precision guided munitions was greatly diminished by poor weather over the North. Still, when the campaign was over, Gen. John W. Vogt Jr., commander of 7th Air Force, would rate one precision guided weapon to be equal in worth to 100 "dumb bombs." The tactical air units also received excellent support from US Navy and Marine Corps aircraft.

As Linebacker II operations unfolded, a number of critical elements played a role in the execution of the attacks, including routes, spacing, altitudes, bomb loads, and basing. The routes to and from the targets were governed by many factors, including disposition of surface-to-air missile sites, the proximity of the Chinese border, and strength of the prevailing winds. Flight tactics called for formations of three B-52s, separated by 500 feet in altitude and one mile in horizontal distance.

Unlike bomber forces in the Korean War, the B-52s were under the command of Strategic Air Command, not "chopped" to the theater commander. SAC headquarters had ordered aircraft commanders not to take evasive action in the face of threats from either SAMs



Displaying a full internal bomb load, this B-52D was one of 54 marshaled at U Tapao Royal Thai Airfield, Thailand, during Linebacker II. In all, B-52s would drop 15,000 tons of bombs.

Hank Marjos via Warren Thompson

or MiGs during the long run in from the initial point to bombs away. The speed and direction of the turn after the bomb drop was designed to get the bombers out of SAM range as soon as possible. The tactics were needed primarily because SAC wanted to preserve electronic countermeasures integrity of the three-ship formations while making sure that only military targets were hit.

It took nearly two hours for 87 B-52s from Guam to taxi, take off, and become airborne on the afternoon of Dec. 18, 1972. They then were joined in the attack by 42 additional B-52s flying out of U Tapao, forming the largest attacking bomber force assembled since World War II. The B-52 targets on the first day were Kep airfield, Hoa Lac airfield, Phuc Yen airfield, Kinh No vehicle repair site, Yen Vien rail yards, Hanoi railroad repair facility, and the main Hanoi radio station. The F-111 force was assigned missions against nine targets.

The North Vietnamese leaders had expected a US air attack, but they were shocked by the intensity of the assault on Dec. 18. Reacting swiftly, the forces of the North used their SAMs effectively and quickly began to concentrate their efforts on the post-target turn.

SAM Dangers

This turn was the point of greatest B-52 vulnerability, for three reasons. First, it was here that the North Vietnamese radar had the greatest chance to “burn through” the B-52 cells’ combined electronic countermeasures protection. Second, a banking B-52 presented a greater radar cross section to the defenders. Finally, the turn would reverse the benefits of the wind, transforming a 100-knot tailwind into a head wind that slowed down the enormous aircraft.

On Day 1 of the campaign, the Communist forces fired more than 200 SAMs, often sending them up in four- or six-weapon volleys. Once, the air was filled with more than 40 SAMs. On that day, the US lost three B-52s, two from Andersen and one from U Tapao, as well as one F-111. The losses were lighter than had been expected and were not considered unacceptably high. For the entire 11 bombing days, the BUFF crews upheld the Air Force tradition of never being



Hank Marinos via Warren Thompson

This U Tapao B-52D shows the distinctive black underside favored at the time for night missions. Clearly visible also is the left wing outboard pylon (at right in photo) loaded with extra bombs for Linebacker II missions.

turned back from an assigned mission, pressing on regardless of the ferocity of the enemy attack. On Day 1, SSgt. Samuel Turner, tail gunner on Brown 03, also shot down a MiG-21, the first in B-52 combat history.

Tactics were revised slightly on Day 2 of the attack, but routes remained the same. Bomber cell altitudes were lowered to 34,500 and 35,000 feet, the better to place the B-52s more securely within the chaff corridors being laid by the F-4s. Time separation between cells and between Times Over Target (TOTs) was increased to four minutes. Evasive action was authorized on both inbound and outbound routes. The results of the changes seemed to be positive. On Day 2, the North launched some 180 SAMs at the 93 attacking B-52s, but no losses occurred.

On Day 3, tragedy struck. Only 90 of 99 planned B-52s sorties were effective and six BUFFs were shot down. Two Gs and one D were lost in the first wave and an identical number were downed in the third wave. Three were struck prior to bomb release and three afterward; four went down near Hanoi while two made it out of North Vietnam. None of the lost B-52Gs had been modified to carry the new AN/ALT-22 ECM equipment. In the first three days of the campaign, five unmodified Gs and only one modified G had been lost. Of the total of nine B-52s lost to date, five had been hit during their turn off the target.

This constituted an unacceptably high seven-percent loss rate. Even so, Gen. John C. Meyer, the commander in chief of SAC, made the tough decision to press on, calling for even heavier strikes on SAM sites and storage areas. His decision proved to be correct, for the enemy had been hurt, too, and now was rapidly expending SAMs.

Tactics were altered again, too; cell separation and TOTs were compressed to 90 and 120 seconds, respectively. The altitude separation between cells was increased, and withdrawal routes were changed, enabling some bomber streams to withdraw directly toward the Gulf of Tonkin. Electronic warfare officers received authorization to add an ALT-28 ECM transmitter to their system with the intent of jamming the SAM downlink frequency.

On Day 4 of the campaign, attacks were staged by only 30 heavy bombers, all D models from U Tapao. Planning was simplified and a total of 75 tactical aircraft were available for support. Two B-52s were lost to SAMs in an attack on Bac Mai airfield.

On each of the next three days—Days 5, 6, and 7—USAF carried out attacks with packages of 30 B-52s, losing none. The Air Force was making good use of its experience and new tactics (including altitude changes, multiple approach paths, and the selection of new targets outside the Hanoi–Haiphong area) to confuse the North Vietnamese defenders. On Dec. 24, the seventh day of the air campaign,



North Vietnam fired some 1,240 SAMs, but tactical forces like this pair of USAF F-105Fs armed with AGM-45 Shrikes helped keep US losses low during Linebacker II.

A1C Albert Moore, a gunner on Ruby 03, shot down a MiG.

Wrong Signal

US bombing forces stood down on Christmas Day in order to give planners a chance to review events so far and give the crews some rest. Politically, the stand-down was like the previous bombing halts, a well intended “signal” that negotiations were in order. Once again the North Vietnamese interpreted the respite as a sign of American weakness, and they spent the day feverishly restocking their SAM sites with missiles.

The next day, Day 8, the bombing resumed. All of the previous experience gained was exploited in new tactics. Seventy-eight B-52s in four flights attacked Hanoi simultaneously from four different directions. At the same time, 42 aircraft in three other flights struck Haiphong, North Vietnam’s principal harbor and transshipment point for military supplies.

The compressed nature of the attack intensified the difficulties of the 114 tactical support aircraft. However, they executed the mission flawlessly. The versatile USAF F-4 Phantom served as the MiGCAP and also dispensed the dense chaff blanket necessary to shield the B-52s from enemy radar. Phantoms and the redoubtable Republic F-105 Thunderchiefs suppressed SAMs in the dangerous Wild Weasel mission.

Aging EB-66s were forced by the

heavy SAM threat to operate farther than desired from the target area, but they nonetheless provided efficient ECM support. F-111s and Vought A-7s attacked northern airfields. KC-135 tankers furnished fuel to all types of aircraft, often moving well into a combat area to reach aircraft in trouble. The Air Force Linebacker II team was completed by C-130 search and rescue aircraft, HH-53 Jolly Green Giant helicopters, and EC-121s.

The Navy and Marines both supplied F-4 aircraft for the MiGCAP and BARCAP [Barrier Combat Air

Patrol], while A-6s attacked designated targets. Even though there was still no centralized control of all air assets, the Navy and the Air Force worked together closely.

The attack on Day 8 went off with precision, although two B-52s were lost because of the heavy increase in SAM firings.

The United States Air Force had now established a clear ascendancy over the North Vietnamese defenders. Sixty B-52s were dispatched on each of the three remaining nights of the campaign, Days 9, 10, and 11. Two B-52s were shot down on Dec. 27, one going down in North Vietnam and the other making it back to Thailand, where the crew bailed out.

Under Siege

On the final day of the campaign, Day 11 on Dec. 29, USAF crews—both bomber and support—were at the peak of their form while the enemy was in obvious distress, able to fire only a total of 23 SAMs. Where once they had salvoed six SAMs at a time, they now were reduced to individual snap shots. They were almost out of SAMs, their MiGs were shut down, and their radar and communication links were disrupted. In short, they were at the mercy of the United States.

The US had proved decisively that B-52s, supported by tactical air assets, were an effective force, able to meet and defeat the enemy. In the



US tactical forces numbered 114, including USAF F-111s and A-7s, such as these shown here, primarily used to attack airfields. Tacair units flew support at night, but also pressed the attack during the day—flying 530 sorties in all.

miserable prisons in which they were held, American prisoners of war experienced an unimaginable elation at seeing their brutal captors frightened and suddenly polite.

The result of Linebacker II was exactly what had been predicted by those who had advocated full application of airpower against North Vietnam: a military victory. The badly shaken North Vietnamese accepted that the war was at a stalemate, returned to the negotiating table in Paris, and signed the Paris Peace Accords on Jan. 27, 1973. Within 60 days of the signing, 591 American POWs were released and back in the United States.

In Linebacker II, SAC's B-52s had flown 729 sorties out of a total of 741 planned sorties and dropped 15,000 tons of bombs. North Vietnamese forces had fired about 1,240 SAMs. The Air Force lost 15 B-52 bombers, which amounted to a loss rate of less than two percent. Of 92 B-52 crew members involved in the losses, 26 were recovered, 25 came up missing in action, 33 became prisoners of war, and eight were either killed in action or later died of wounds. In addition, the US lost two F-111As, three F-4s, two A-7s, two A-6s, one EB-66, one HH-53, and one RA-5C.

As soon as Hanoi signaled it wished to resume peace negotiations, Linebacker II raids immediately ceased. Some in the Air Force argued that this was a mistake; if the United States continued the attacks, they maintained, North Vietnam would have to accept a military defeat. Instead, they secured at the peace table a political victory that they would in due course translate into a full-scale military conquest of South Vietnam.

Not long after the end of Linebacker II and the formal return of the US prisoners of war, United States forces at last formally disengaged from the war in Southeast Asia. There then followed what Henry Kissinger described as a "decent interval" of about two years, after which Hanoi, knowing that it no longer faced any realistic threat of another Linebacker II, invaded South Vietnam across a broad front. The Communist forces entered Saigon on April 30, 1975, and unified the two Vietnams under Hanoi's totalitarian control.



Bruce Chavis via Warren Thompson

USAF Aircraft Losses Dec. 18–29, 1972

Date	Type	Call Sign	Target (Mission)	Cause
Dec. 18	F-111A	Snug 40	Hanoi Radio	unk.
Dec. 18	B-52G	Charcoal 01	Yen Vien complex	SA-2
Dec. 18	B-52G	Peach 02	Yen Vien complex	SA-2
Dec. 18	B-52D	Rose 01	Hanoi Radio	SA-2
Dec. 20	B-52D	Quilt 03	Yen Vien complex	SA-2
Dec. 20	B-52G	Brass 02	Yen Vien complex	SA-2
Dec. 20	B-52G	Orange 03	Yen Vien complex	SA-2
Dec. 20	B-52D	Straw 02	Gia Lam rail yard	SA-2
Dec. 20	B-52G	Olive 01	Kinh No complex	SA-2
Dec. 20	B-52G	Tan 03	Kinh No complex	SA-2
Dec. 21	B-52D	Scarlet 03	Bac Mai airfield	SA-2
Dec. 21	B-52D	Blue 01	Bac Mai airfield	SA-2
Dec. 22	F-111A	Jackle 33	Hanoi port facility	unk.
Dec. 23	EB-66C	Hunt 02	(non-combat)	engine out
Dec. 26	B-52D	Ebony 02	Giap Nhi rail yard	SA-2
Dec. 26	B-52D	Ash 01	Kinh No complex	SA-2
Dec. 27	F-4E	DeSoto 03	(strike escort)	MiG-21
Dec. 27	F-4E	Vega 02	(MiGCAP)	MiG-21
Dec. 27	HH-53	Jolly Green	(rescue)	small arms
Dec. 27	B-52D	Ash 02	SAM site	SA-2
Dec. 27	B-52D	Cobalt 02	Truong Quan rail yard	SA-2

Source: Pacific Air Forces

To Air Force observers, the events of 1975 pointed up a classic case of "what might have been." To them, full application of airpower in a Linebacker II-type campaign in 1965, a decade earlier, would have achieved military victory, prevented the long

and costly US involvement in Southeast Asia, saved South Vietnam as a nation, and allowed the US to escape the calamitous effects that the Vietnamese war has afflicted on America ever since. ■

Walter J. Boyne, former director of the National Air and Space Museum in Washington is a retired Air Force colonel and author. He has written more than 400 articles about aviation topics and 28 books, the most recent of which is Beyond the Wild Blue: A History of the United States Air Force, 1947–1997. His most recent article for Air Force Magazine, "Hap," appeared in the September 1997 issue.