Operation LINEBACKER II: A Retrospective

PART 6: LINEBACKER II

With an Introduction to the Series

SAC - LSU Shreveport

Report of the LSU Shreveport unit for the SAC Symposium, December 2, 2017

Gary D. Joiner, PhD. Ashley E. Dean

Prepared for
The Strategy Alternatives Consortium
Lt. General USAF, (ret.) Robert J Elder, Jr.
President/Founder

STRATEGY ALTERNATIVES CENTER

The project was made possible through Louisiana State University in Shreveport, which provides salaries
for researchers, office space, equipment, and technical support. LSU Shreveport also provides assistance
with graduate student positons as needed. Additionally, the project is made possible through the assistance
and mentoring of the Strategy Alternatives Consortium. The statements made and views expressed are
solely the responsibility of the author(s).

SAC - LSU Shreveport is a unit of Louisiana State University Shreveport.

© Copyright 2017 SAC – LSU Shreveport

All rights reserved. No part of this work may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from SAC – Shreveport.

Published 2017 by SAC – LSU Shreveport One University Place Shreveport, LA 71115

TABLE OF CONTENTS

Quotes	 i
About the Authors	 ii
Preface	 . iv
Abbreviations	 v
List of Figures and Tables	 . vi
Part 1: Introduction	 1
Part 1 Bibliography	 3
Part 6: LINEBACKER II	 4
Part 6 Bibliography	 . 49

QUOTES

Every SAM in Hanoi went off—just a fantastic barrage of SAMS!...and then the bombs started to hit...It was a continuous din of noise and shaking of the ground...We had a panoramic view over the courtyard roof of the prison...You could see the flashes of explosions on the overcast... they just keep coming and kept coming!...a constant barrage of sound, flash, and concussion...An awesome display of power...We were just pasting hell out of them for the first time.¹

Capt Bob Lilly, Prisoner-of-War (POW), 1965-1973

The first few times I experienced a B-52 attack it seemed, as I strained to press myself into the bunker floor, that I had been caught in the Apocalypse. The terror was complete. One lost control of bodily functions as the mind screamed incomprehensible orders to get out.²

The Viet Cong Minister of Justice Truong Nhu Tang

At the heart of warfare lies doctrine. It represents the central beliefs for waging war in order to achieve victory. Doctrine is of the mind, a network of faith and knowledge reinforced by experience which lays the pattern for the utilization of men, equipment, and tactics. It is the building material for strategy. It is fundamental to sound judgment.

General Curtis Emerson LeMay, 1968

The purpose of surprise is to strike at a time or place or in a manner for which the enemy is unprepared. Surprise can help the commander shift the balance of combat power and thus achieve success well out of proportion to the effort expended...³

Joint Publication 3.0 Doctrine for Joint Operations

We have the power to destroy his war making capacity. The only question is whether we have the will to use that power. What distinguishes me from [former President] Johnson is I have the will in spades.⁴

Richard Nixon to Henry Kissinger

¹ Luse Shackelford, and Ray, "Eleven Days in December: Linebacker Ii" (USAF Southeast Asia Monograph Series, Air University, 1977), V.

² Truong Nhu Tang, A Viet Cong Memoir (New York: Vintage Books, 1985), 168.

³ U.S. Joint Chiefs of Staff, *Doctrine for Joint Operations*. Joint Pub 3-0. (Washington: U.S. Joint Chiefs of Staff, 10 September 2001), A-2.

⁴ Henry A. Kissinger, White House Years (Boston: Little, Brown and Company, 1979), 1199.

One more observation needs to be made, which goes to the very heart of the matter. Only the commander who imposes his will can take the enemy by surprise....⁵

Carl von Clausewitz

The first, the supreme, the most far-reaching act of judgment that the statesman and the commander have to make is [rightly to understand] the kind of war on which they are embarking, neither mistaking it for, nor trying to turn it into, something that its alien to its nature. This is the first of all strategic questions and the most comprehensive.⁶

Carl von Clausewitz

The bastards have never been bombed like they're going to be bombed this time.⁷

President Richard M. Nixon, May 1972

In any two-week period you mention.8

General Curtis LeMay, July 1986, when asked if the United State could have won in Vietnam.

I never said we should bomb them back to the Stone Age. I said we had the capability to do it.9

General Curtis LeMay

In war there is never any chance for a second mistake.

Lamachus, 465-414 B.C.E.

⁵ Carl von Clausewitz, *On War* ed. by Michael Howard, Peter Paret. (Princeton, NJ: Princeton University Press, 1984), 200.

⁶ Clausewitz, On War, 89.

⁷ Richard Nixon, statement to White House Chief of Staff H. R. Haldeman and Attorney General John Mitchell, April 4, 1972.

⁸ Interview of Curtis LeMay by Manny-Ann Bendel, USA Today, July 23, 1986, 9A.

⁹ Gen. Curtis Emerson LeMay, in *Washington Post* interview published October 4, 1968.

ABOUT THE AUTHORS

Gary D. Joiner, Ph.D.

Dr. Gary Joiner received a B.A. in history and geography and a M.A. in history from Louisiana Tech University and a Ph.D. in history from St. Martin's College, Lancaster University in the United Kingdom. He is a professor of History at Louisiana State University in Shreveport and serves as the Chair of the Department of History and Social Sciences, where he holds the Mary Anne and Leonard Selber Professorship in History. He is the director at the Strategy Alternatives Consortium (SAC) LSUS and the Red River Regional Studies Center.

Dr. Joiner is the principal author of prior SAC LSUS White Papers, including *OPERATION SENIOR SURPRISE: The Secret Squirrels and the opening of Operation DESERT STORM, 9/11:*A Brief History and Case Study of America's Worst Terrorist Attack, and Deterrence: A Brief History and a Case Study in Cold War Practice, Part I: 1945-1953. He is the author and editor of thirty-four books, including: History Matters, Shiloh and the Western Campaign of 1862, One Damn Blunder from Beginning to End, Through the Howling Wilderness, The Red River Campaign: The Union's Last Attempt to Invade Texas, No Pardons to Ask or Apologies to Make, Little to Eat and Thin Mud to Drink, Mr. Lincoln's Brown Water Navy, The Battle of New Orleans: a Bicentennial Tribute, Red River Steamboats, Historic Shreveport-Bossier, Lost Shreveport: Vanishing Scenes from the Red River Valley, Historic Haunts of Shreveport, Historic Oakland Cemetery, Wicked Shreveport, and Legendary Locals of Shreveport. Dr. Joiner is also the author of numerous articles and technical reports, and has served as a consultant for ABC, the Associated Press, A&E Network, C-SPAN, the Discovery Network, Fox News, HGTV, the History Channel, MSCBC, MTV, SyFy Channel, and Louisiana Public Broadcasting, among others.

Ashley E. Dean

Ashley Dean received her B.A. in history and M.A. in Liberal Arts from Louisiana State University in Shreveport. She was the graduate researcher for SAC LSUS and is now the full time Assistant Director for the Consortium. She has co-authored and edited prior SAC LSUS White Papers, including OPERATION SENIOR SURPRISE: The Secret Squirrels and the opening of Operation DESERT STORM, 9/11: A Brief History and Case Study of America's Worst Terrorist Attack, and Deterrence: A Brief History and a Case Study in Cold War Practice, Part 1: 1945-1953. She recently published Victorian to Victorious: Women in the American Civil War in the 2016 edition of Janus, the journal of historical research published by the Department of History and Social Sciences at LSUS.

PREFACE

The Strategy Alternatives Consortium at Louisiana State University in Shreveport SAC LSUS) created a series of essays to commemorate the forty-fifth anniversary of the Operation LINEBACKER II, which, for America, all but ended the Vietnam War. These essays have been combined into a White Paper. All seven essays and the White Paper are available, free of charge, on the SAC LSUS website – www.lsus.edu/sac. The purpose is to assist professors, high school teachers, Air Force Association chapters, and ROTC units understand the campaign and put it in context of the time and the consequence it made in Air Force doctrine and subsequent political/military decisions.

Operation LINEBACKER II marked a seminal point in the Vietnam War. The campaign, sometimes referred to as "The Eleven-Day War," brought the North Vietnamese, with sincerity, back to the peace talks in Paris and all but destroyed their ability to wage a defensive war against American Airpower. Most historians and strategists agree that LINEBACKER II was a tremendously successful endeavor. There are some dissenters, who point to a lack of significant targets.

This series of essays examines the literature, the role of participants, presidential administrations, and military commanders and planners to provide an overarching examination of LINEBACKER II. They also provide both orthodox and dissenting opinions so that the reader may make up his or her mind concerning the subject.

The chapters cover a brief examination of the campaign, a discussion of the political climate from the end of World War II to through the decisions to execute Operation LINEBACKER and LINEBACKER II, an examination of strategic bombardment theory from World War II to the early years of the Vietnam War, strategic assets and micromanagement of those assets between 1965 and 1972, Operation LINEBACKER I, Operation LINEBACKER II, and, finally, the consequences and change in strategic thought brought forward by the campaigns.

The authors, Gary D. Joiner, Ph.D. and Ashley E. Dean, wish to thank Lane Callaway, the Eighth Air Force Historian, the good folks who handle the Freedom of Information Act (FOIA) requests at Barksdale Air Force Base, Louisiana and Maxwell Air Force Base, Alabama, for their often as for requests, and Lieutenant General Robert Elder (USAF retired) for guidance in this project.

Gary D. Joiner
Director, SAC LSUS
Louisiana State University in Shreveport
November 5, 2017

ABBREVIATIONS USED IN THE LINEBACKER II SERIES

AAA- Anti-Aircraft Artillery DIA- Defense Intelligence Agency AAD- Anti-Aircraft Defenses DMZ- demilitarized zone AAF- Army Air Force (United States) DOD- Department of Defense AB- Air Base DOE- Department of Energy ABM- Anti-ballistic Missile DRVN- Democratic Republic of Vietnam (North Vietnam) ACC- Air Combat Command ECM- electronic counter-warfare measures ADC- Air Defense Command ELINT- electronic intelligence **AEC- Atomic Energy Commission** EW- Electronic Warfare AFA- Air Force Association **EWO- Electronic Warfare Officer** AFB- Air Force Base FAS- Federation of American Scientists AFGSC- Air Force Global Strike Command HE- high explosive AFM- Air Force Manual ICBM- Intercontinental Ballistic Missile ALCM- Air launched cruise missile **IP- Initial Point** ARVN- Army of the Republic of Vietnam (South Vietnamese national army) IRBM- Intermediate Range Ballistic Missile BARCAP- Barrier Combat Air Patrols ISIS (IS, ISIS, ISIL, Daesh) - Islamic State of Iraq and Syria **BDA- Bomb Damage Assessment** JCS- Joint Chiefs of Staff BW-Bomb Wing (USAF) LGM- laser guided munitions CALCM- Conventional air launched cruise missiles MACV- Military Assistance Command, Vietnam CENTCOM- Central Command (US) MAD- Mutually Assured Destruction CH- CORONA HARVEST MAJCOM- Major Command CIA- Central Intelligence Agency MiG CAP- MiG Combat Air Patrol CINCPAC- Commander US Military Assistance Command Pacific MIRVs- multiple independently targeted vehicles COMUSMACV- Commander US Military Assistance Command Vietnam MIT- Massachusetts Institute of Technology **CONUS-** Continental United States NATO- North Atlantic Treaty Organization DEW- Defense Early Warning (radar **NSC-** National Security Council

NSM- National Security Memorandum

system)

NVA- North Vietnamese Army (North Vietnamese communist national army)

NVN- North Vietnam

PACAF- Pacific Air Forces

PAVN- People's Army of Vietnam (North Vietnamese communist national army)

PGM-Precision guided munitions

POL- Petroleum Oil and Lubricants

PRC-Peoples Republic of China

PTT- Post Target Turn

ROE- Rules of engagement

RP- Route Package

RT- Radar Troops

RTNAB- Royal Thai Naval / Air Base

SAC- Strategic Air Command

SAM- Surface to Air Missile

SAM-2- Surface to Air Missiles, model 2

SEA- Southeast Asia

SECAF- Secretary of the Air Force (U.S.)

SIOP- Single Integrated Operational Plan

SLBM- Submarine Launched Ballistic Missile

TAC- Tactical Air Command

TACAIR- Tactical Aircraft, Tactical Air, or Tactical Air Forces

TOT- Times on Target

UN- United Nations

UNSC- United Nations Security Council

USAAF- United States Army Air Force

USAF- United States Air Force

USS- United States Ship

USSBS- United States Strategic Bombing Survey

USSR- Union of Soviet Socialist Republics

VC- Viet Cong (guerilla communist force that cooperated with the PAVN/NVA)

WMD- Weapons of Mass Destruction

LIST OF FIGURES

Figure		Page
1.	Lt Gen Gerald Johnson	6
2.	LINEBACKER II targets in North Vietnam	8
3.	LINEBACKER II operations in North Vietnam	9
4.	B-52Ds prepare for takeoff in LINEBACKER II at Andersen AFB, Guam	10
5.	B-52Ds at U-Tapao RTNAB during LINEBACKER II	11
6.	B-52Ds at Andersen AFB, Guam	11
7.	B-52 cell diagram	12
8.	Ingress and egress of a target during the first three days of LINEBACKER II	13
9.	Routes to and from targets during LINEBACKER II	14
10.	B-52 cell during LINEBACKER II	15
11.	Gunner's station, B-52D	16
12.	Crew briefing, LINEBACKER II	17
13.	Day 2 mission target data	18
14.	SAM fragment damage on the pilot's cheek window during LINEBACKER II	19
15.	SAM-2, 1968	20
16.	SAM site	21
17.	SAM battery detail	21
18.	KC-135 Tanker at U-Tapao	23
19.	B-52D maintenance at Guam during LINEBACKER II	24
20.	Bomb damage assessment for Day Four of LINEBACKER II	25
21.	Chaff Corridor, LINEBACKER I	27
22.	Chaff Cloud, LINEBACKER II	27
23.	Hanoi's principal rail yard north of Hanoi	28

24.	Buffer zones prior to LINEBACKER II
25.	North Vietnam major rail system 30
26.	Bomb damage assessment of Haiphong Thermal Power Plant- West
27.	B-52D being re-armed at Andersen AFB, Guam
28.	Loading bombs onto B-52D during LINEBACKER II 33
29.	Republic F-15 Wild Weasel configuration 34
30.	F-111 and A-7 during LINEBACKER II
31.	Mission profiles of the December 26th raids 35
32.	Specific components of the December 26th raids
33.	Bomb damage assessment from December 27th raid 36
34.	Crew briefing, LINEBACKER II 38
	LIST OF TABLES
Table	
1.	LINEBACKER II Targets 39
2.	LINEBACKER II Sorties 40
3.	LINEBACKER II Losses 40
4.	Day-by-day record of all air crews lost during LINEBACKER II

PART 1

SERIES INTRODUCTION: OPERATION LINEBACKER II

In December 1972, in what was hoped to be the final weeks of the Vietnam War, President Richard M. Nixon ordered a massive bombing campaign against North Vietnam. The military campaign had strictly political origins. The Joint Chiefs of Staff (JCS) recommended in 1964 that North Vietnam be bombed and determined 94 targets that would wreck their ability to wage war. ¹⁰ President Lyndon B. Johnson, Secretary of Defense, Robert S. McNamara, and Secretary of State Dean Rusk balked at the idea, fearing a Chinese invasion as in Korea. ¹¹ This set the stage for civilian micromanagement of the military conduct of the war, troop strength, selection of targets, rules of engagement (ROE), and, to many commanders, observers and historians, the primary reason the war descended into the chaos that it became. ¹² McNamara, in his position since 1961 and never popular with the military, became a pariah to the JCS and the commanders who followed his orders. ¹³

North Vietnam invaded South Vietnam earlier that year using standard military tactics rather than guerrilla warfare. They hoped to take over the South Vietnamese government before U.S. forces, (deep into troop draw-downs) could hold them back. A series of long drawn out negotiations in Paris frustrated the Americans and the South Vietnamese. On December 13, North Vietnam suspended negotiations that attempted to establish a cease-fire agreement and return U.S. prisoners of war. At the same time, the U.S. Congress, tired of the political consequences of the war, determined to cut off funding for Southeast Asia military operations when members returned to Washington D.C. from their holiday recess in January 1973. 15

The bombing campaign, known as Operation LINEBACKER II, began on December 18 and lasted for 11 days. Air Force Strategic Air Command (SAC) B-52 bombers flew 729 sorties,

¹⁰ Richard H. Kohn and Joseph P. Harahan editors, *Strategic Air Warfare: An Interview with Generals Curtis E. LeMay, Leon W. Johnson, David A. Burchinal, and Jack J. Catton* (Washington, 1988), 123; Robert F. Futrell, *The United States Air Force in Southeast Asia: The Advisory Years to 1965* (Washington, 1981), 253-256

¹¹ Futrell, *The United States Air Force in Southeast Asia*, 253-256; Alain C. Enthoven and K. Wayne Smith, *How Much Is Enough? Shaping the Defense Program 1961-1969* (New York, 1971); Charles J. Hitch, *Decision-making for Defense* (New York, 1965).

¹² Kohn and Harahan, Strategic Air Warfare, 121.

¹³ Ibid. 122; William W. Momyer, *Airpower in Three Wars* (Washington. 1978), 90-98; Carl Berger, ed., *United States Air Force in Southeast Asia*, 1961-1973: An Illustrated Account (Washington, 1977), 74-89; U.S. Grant Sharp, *Strategy For Defeat: Vietnam in Retrospect* (San Rafael, Calif., 1978), 94-104; James Clay Thompson, *Rolling Thunder, Understanding Policy and Program Failure* (Chapel Hill, 1980); John Morrocco, *Thunder From Above: Air War 1941-1968* (Boston, 1984), 50-71; U.S. Department of Defense, *The Pentagon Papers: The Senator Gravel Edition*, 4 vols., (Boston, 1972), III, 284-286, 321-324, 332-334, 339-340, IV, 55-56, 68-70, 109-110, 138, 421-422.

¹⁴ Henry Kissinger, White House Years (Boston, 1979), 717-744.

¹⁵ In November 1973, Congress enacted the War Powers Resolution, which limited the President's ability to send troops back into the theatre of operations to 90 days without receiving congressional approval. See Guenter Lewy, *America in Vietnam* (New York, 1978), 202-222; John H. Sullivan, *The War Powers Resolution* (Washington, 1982), 31-42, 103-166, 179, 183; W. Hays Park, "Linebacker and the Law of War," *Air University Review* 34 (Jan-Feb 1983): 2-30.

and U.S. Navy and Air Force Tactical Air Command (TAC) fighter-bombers flew 1,000 sorties. ¹⁶ The SAC bombers, naval fighter-bombers, and TAC aircraft dropped 20,370 tons of bombs on North Vietnam. ¹⁷ They destroyed command and control structures, power generating plants, railroad marshalling yards and trackage, and destroyed military airfields, surface to air missile (SAM) assembly and storage facilities. At the end of the campaign, North Vietnam was largely in the dark, very low on ammunition, and had exhausted its supply of SAMs. ¹⁸ Although additional missions were planned and preparations made, President Nixon halted the bombing on December 29. ¹⁹ North Vietnam, without replenishment from China and the Soviet Union, agreed to return to negotiations in earnest. The results were merely a formality. The cease-fire agreement was signed on January 23, 1973 by Henry Kissinger for the United States and Le Due Tho for North Vietnam. ²⁰

Operation LINEBACKER II's strategy and tactics remain the topic of discussion and planning today, forty-five years later. It proved that the Air Force commanders' concept of ending the war in 1965 would work militarily, but largely due to the threat of Chinese intervention, was nullified. Once the JCS and Air Force commanders could set targets themselves and not answer to the White House staff (within reason), destruction of the North Vietnamese will and capacity to wage became evident. The operation also led to unanticipated consequences. SAC lost much of its prestige due to its inflexibility. Beliefs in bomber stream formation from World War II and Korea for conventional bombing missions proved problematic for SAC crews who were trained to follow orders blindly in their nuclear combat roles. Iron bombs soon gave way to precision guided weapons. The vulnerability of the B-52s to SAMs quickly led to changes in tactics, mission concepts, and a reduction in the numbers of the heavy bombers. More senior commanders were chosen from the ranks of the fighter pilots.²¹

¹⁶ James R. McCarthy and George B. Allison, *Linebacker II: A View From the Rock* (Montgomery, Ala., 1979), 39-89.

¹⁷ Ibid., 91-167.

¹⁸ Ibid.

¹⁹ Richard M. Nixon, RN, The Memoirs of Richard Nixon (New York, 1978), 717-744.

²⁰ Henry Kissinger, White House Years 740-744.

²¹ See Mike Worden, *Rise of the Fighter Generals: The Problem of Air Force Leadership 1945-1982* ((Montgomery, AL, 1988).

BIBLIOGRAPHY

- Berger, Carl, ed. *United States Air Force in Southeast Asia, 1961-1973: An Illustrated Account.* Washington: Office of Air Force History, 1977.
- Enthoven, Alain C., and K. Wayne Smith. *How Much Is Enough? Shaping the Defense Program* 1961-1969. New York: Harper and Row, 1971.
- Futrell, Robert F. *The United States Air Force in Southeast Asia: The Advisory Years to 1965*. Washington: Office of Air Force History, 1981.
- Hitch, Charles J. Decisionmaking for Defense. Berkeley: University of California Press, 1965.
- Kissinger, Henry. White House Years. Boston: Little, Brown and Company, 1979.
- Kohn, Richard H., and Joseph P. Harahan, eds. *Strategic Air Warfare: An Interview with Generals Curtis E. LeMay, Leon W. Johnson, David A. Burchinal, and Jack J. Catton.* Washington: Office of Air Force History, 1988.
- Lewy, Guenter. America in Vietnam. New York: Oxford University Press, 1978.
- McCarthy, James R., and George B. Allison. *Linebacker IL*· A View From the Rock. Montgomery, AL: Air Power Institute, 1979.
- Momyer, William W. Airpower in Three Wars (WWIL Korea, Vietnam). Washington: Department of the Air Force, 1978.
- Morrocco, John. *The Vietnam Experience: Thunder From Above, The Air War 1961-1968*. Boston: Boston Publishing Company, 1984.
- Nixon, Richard M. RN, The Memoirs of Richard Nixon. New York: Grosset and Dunlap, 1978.
- Park, W. Hays. "Linebacker and the Law of War." *Air University Review* 34 (Jan-Feb 1983): 2-30.
- Sharp, Ulysses S. Grant. *Strategy For Defeat, Vietnam in Retrospect*. San Rafael, CA: Presidio Press, 1978.
- Sullivan, John H. The War Powers Resolution: a special study of the Committee on Foreign Affairs. Washington, DC: Government Printing Office, 1982.
- Thompson, James C. *Rolling Thunder, Understanding Policy and Program Failure*. Chapel Hill, N.C.: University of North Carolina Press, 1980.
- United States Department of Defense. *The Pentagon Papers: The Senator Gravel Edition*, 4 vols. Boston: Beacon Press, 1971.
- Worden, Mike. Rise of the Fighter Generals: The Problem of Air Force Leadership 1945-1982. Montgomery, AL; Air University Press, 1998.

PART 6

LINEBACKER II

Peace talks between the United States and North Vietnam began on February 21, 1970, with President Richard Nixon's National Security Advisor Henry Kissinger negotiating for the Americans and Le Duc Tho, for the North Vietnamese.²² The three-year intermittent dialogue was largely frustrating for the Americans. The North Vietnamese relentlessly argued over minutiae such as the shape of the table, and if the South Vietnamese and the Viet Cong would be allowed to sit at the table.²³ Each time the American air offensives pressured the North Vietnamese into asking for concessions, the United States backed away from forcing an end to the war. The concept that a completely devastated North Vietnam might entice the Chinese to occupy it loomed large.

During the Lyndon Johnson presidency, micromanagement of military operations created an unmanageable environment to conduct the war. During most of his five years in office, President Johnson believed he could win the war with enough men and materiel. He failed. His consummate fear was a new version of the Korean War in which China sent in enormous numbers of troops. In the end, the Vietnam War broke him. He left a quagmire that completely overshadowed his great strides in domestic policy.

American foreign policy took a new shift in 1972, when President Nixon went to both Moscow and Beijing and a new sense of détente filled the air. Henry Kissinger believed the timing was right to reopen the Paris peace talks. Hanoi accepted, but Nixon, with recent diplomatic triumphs in Beijing and Moscow, and the November election nearing, decided he could use more airpower to push the North Vietnamese even harder. Kissinger was enthusiastic that the process might be nearing its end. Too soon, on October 26, 1972, he announced in a press conference in Paris and in three White House telephone conversations with the President that "We believe that peace is at hand. What remains to be done can be settled in one more negotiating session with the North Vietnamese negotiators, lasting, I would think, no more than three or four days."

North Vietnam had reason to believe otherwise. North Vietnam Army (NVA) troop levels reached between 150,000 and 200,000 within South Vietnam that same month. Although the Soviet Union and China were weary of the war, Le Duc Tho believed that if the Easter Offensive, launched earlier that year, could be sustained, the American presidential election might help their cause. They did not get their wish, but neither did President Nixon. Nixon handily won the November election, but the Republicans failed to carry Congress. According to several reports, the new Congress would invoke the War Powers Act, which would end all funding for the Vietnam War.

Kissinger was surprised on December 13 when Le Duc Tho halted the peace talks and returned to Hanoi for additional consultations.²⁹ He was furious at this tactic, stating "There was no intractable, substantive issue separating the two sides, but rather an apparent North Vietnamese determination not to

²²Stanley Karnow, Vietnam, A History (NY: Penguin Books, 1984), 638.

²³ Ibid.

²⁴ Mark Clodfelter, "Nixon and the Air Weapon," in *An American Dilemma: Vietnam*, *1964–1973*, ed. Dennis E. Showalter and John G. Albert (Chicago: Imprint Publishers, 1993).

²⁵ New York Times, January 25, 1973. Nixon tapes, October 26, 1972, telephone conversations. WHCA Sound Recordings Collection H-665, Richard M. Nixon Presidential Library and Museum, Yorba Linda, CA.

²⁶ Earl H. Tilford Jr., *Crosswinds: The Air Force's Setup in Vietnam* (College Station, TX: Texas A&M University Press, 1993), 153.

²⁷ Ibid. 148.

²⁸ The War Powers Resolution (also known as the War Powers Resolution of 1973 or the War Powers Act) (50 U.S.C. 1541–1548) limits United States to an armed conflict without the consent of the U.S. Congress.

²⁹ Henry A. Kissinger, *The White House Years* (Boston: Little, Brown and Co., 1979), 1441.

allow the agreement to be completed."³⁰ Simultaneously, The South Vietnamese government, opposed to the proposed terms of the ceasefire that was offered, began to make demands that the United States could not and would not meet.³¹ North Vietnam made a grievous error in interpreting Nixon's resolve.³² Henry Kissinger wrote in his memoirs, that Nixon was never more dangerous than when he was left with no remaining options.³³ If the President were to end the war on his own terms, he must do so before Congress returned in January 1973.³⁴

President Nixon took these myriad issues and used them to his advantage. He saw a limited set of goals ahead. First, he must bring the North Vietnamese back to Paris. In order to end the war before January "on our terms" and achieve a "peace with honor." Kissinger assessed the situation in his memoirs: "We had only two choices, taking a massive, shocking step to impose our will on events and end the war quickly, or letting matters drift into another round of inconclusive negotiations, prolonged warfare, bitter national divisions, and mounting casualties." There was only one weapon in the U.S. Air Force arsenal that could deliver the desired results, SAC's B-52s. Adequate numbers of the big bombers were already in theatre. They were highly accurate, could fly day or night in all kinds of weather, and carried immense bomb loads. They terrified the North Vietnamese. The issue was whether the President would allow them to attack the lucrative targets in and around the capital of Hanoi and the principal port of Haiphong. The same properties of the principal port of Haiphong.

The plan that became Operation LINEBACKER II was conceived as a winter continuation of Operation LINEBACKER, which was halted in October. LINEBACKER II operated with significantly less restrictive Rules of Engagement (ROE). The only major constraint was to avoid civilian casualties whenever possible.³⁸ Nixon gave Hanoi an ultimatum on December 15 to return to the peace talks within seventy-two hours "or else."³⁹ Prior to this message, the President ordered Admiral Thomas Moorer, Chairman of the Joint Chiefs of Staff, to prepare massive air strikes targeting major infrastructure in and around Hanoi, as well as docks and shipyards in Haiphong.⁴⁰ Nixon told Admiral Moorer, "I don't want any more of this crap about the fact that we couldn't hit this target or that one. This is your chance to use military power effectively to win this war, and if you don't, I'll consider you personally responsible."⁴¹ The Joint Chiefs of Staff originally planned for a three-day campaign with possible extensions. The aims were not as grandiose as those of the Johnson administration. This operation was to halt the fighting and allow the United States to exit gracefully. The operation placed massive pressure upon North Vietnam north of the 20th parallel.⁴² This plan included attacking both Hanoi and Haiphong. Seventy-two hours after Hanoi rejected Nixon's demand, Operation LINEBACKER II began. The President made overtures to Hanoi

³⁰ Earl H. Tilford, *SETUP: What the Air Force Did in Vietnam and Why* (Montgomery, AL: Maxwell AFB, Air University Press, 1991), 252; and Kissinger, *The White House Years*, 1444.

³¹ Kissinger, *The White House Years*, 1446.

³² Gregory S. Clark, "Linebacker II: Achieving Strategic Surprise" (Newport, RI: Naval War College, 2002), 7.

³³ Kissinger, *The White House Years*, 1446.

³⁴ Clodfelter, "Nixon and the Air Weapon," 173–74; Nixon, RN, 2:222–27, 230; Kissinger, The White House Years, 1411-12.

³⁵ Richard Nixon, *No More Vietnams* (New York: Arbor House, 1985), 158; John T. Smith, *The Linebacker Raids: The Bombing of North Vietnam*, 1972 (London: Arms and Armour Press, 1998),118.

³⁶ Kissinger, *The White House Years*, 1448.

³⁷ Tilford, SETUP, 254.

³⁸Ibid.

³⁹ Karnow, *Vietnam*, 667.

⁴⁰ Ibid.

⁴¹ Nixon, RN, 734: Smith, Linebacker Raids, 118.

⁴² Lewis Sorley, *A Better War: The Unexamined Victories and Final Tragedy of America's Last Years in Vietnam* (New York: Harcourt Brace and Company, 1999), 355.

offering meetings any day after the 26th of December, hoping to bring Hanoi back to the table and to soothe the South Vietnamese.⁴³

Strategic Air Command planners had several issues to consider. Not all of them had precedents during the Vietnam War. The decision to use B-52 was logical, as they were the largest bomb carriers in the U.S. inventory. They had been used in Vietnam since 1965, albeit on targets that were in jungles and in ground support roles. This mission necessitated a harkening back to the saturation bombing of World War II and, to a lesser extent, Korea. Dr. Futrell, one of the foremost intellectuals of Air Force doctrine, wrote "Although B-52 strategic bombers had long been committed to single-integrated operational plan (SIOP), general war strikes against route and terminal air defenses in the Soviet Union, the problem confronting them in the Linebacker II strikes . . . was immensely more complex." Lone bombers on nuclear missions did not have the same training on formation sorties. All SAC crews were extensively trained in nuclear missions, not World War II style missions. Lieutenant General Gerald W. Johnson, the commander of the Eighth Air Force, sent concept plan to SAC headquarters in November to conduct the more traditional bomber missions. The plan was designed to conduct "extensive attacks against Hanoi and Haiphong using multiple-bomber formations simultaneously attacking from different directions."



Lt Gen Gerald W. Johnson

Commander of the Eighth Air Force during Linebacker II

Figure 1. Lt. Gen. Gerald Johnson. Image Source: United States Air Force.

⁴³ Nixon, RN, 242–46.

⁴⁴ Robert Frank Futrell, *Ideas, Concepts, and Doctrine*: vol. 2, *Basic Thinking in the United States Air Force, 1961–1984* (Maxwell Air Force Base, AL: Air University Press, 1989), 2:296.

⁴⁵ William P. Head, War From Above the Clouds: B-52 Operations during the Second Indochina War and the Effects of the Air War on Theory and Practice, Fairchild Paper, (Maxwell Air Force Base, AL: Air University Press, 2002), 76.

Air Force Vice Chief of Staff John C. Meyer was concerned about civilian casualties and the President's mandate not to create them. At Rather than using Johnson's plan, Meyer had his staff create a variation. History would prove Johnson's plan to be superior and Meyer's plan to be far too constricting. Meyer's planners turned the new concept around in three days. The crews would fly in their three-ship cells as usual, but each cell must follow the planned course precisely and fly in a trail formation. To make the bombing more accurate, the cells must stabilize the flight path for four full minutes to avoid collisions. This was a direct reflection of World War II bombing missions over Germany and Japan. It sounded good on paper, but in practice ground defenses would potentially have a field day with bombers flying straight and level for four minutes. When the Eighth Air Force planners saw the changes, they estimated B-52 losses in the sixteen to eighteen percentile realms. Meyers used the SIOP plan estimated losses at three percent. Meyers used single aircraft sortie plans rather than formations of three-aircraft cells flying in trail formation over the same point on the ground at a predetermined and inflexible altitude. Both Johnson's and Meyer's plans targeted major "rail yards, storage areas, power plants, communications centers, and airfields located on Hanoi's periphery."

The B-52s stayed at least ten miles from Hanoi to reduce the potential of civilian casualties. Many targets were in urban areas. The precision needed to destroy the intended targets fell to the Seventh Air Force Navy and Marine tactical aircraft using "smart bombs" that would fall or glide to their destination with high degrees of accuracy. Most tactical strikes were launched during daylight hours and the B-52s hammered at night. There was to be no rest for the North Vietnamese.

LINEBACKER II was the campaign the Air Force generals wanted since 1965. It differed from LINEBACKER I significantly: "Where LINEBACKER I had been an interdiction campaign directed against supply routes throughout NVN, LINEBACKER II was a sustained maximum effort using airpower to destroy all major target complexes located in the Hanoi and Haiphong areas." Tactical, political, and strategic considerations changed the plans into three separate parts chronologically. "The first lasted from 18 to 20 December and featured 314 nighttime B-52 sorties against rail and supply assets around Hanoi. The second lasted from 21 to 24 December and focused 120 B-52 sorties against targets near Haiphong. The third phase followed the Christmas bombing pause and lasted from 26 to 29 December. These attacks marked an increased effort during which 295 B-52 sorties attacked 13 targets and five SAM sites around Hanoi." SAM sites around Hanoi."

⁴⁶ Futrell, *Ideas*, 2:296; Clodfelter, "Nixon and the Air Weapon," 178; Headquarters PACAF, Project CHECO, *Linebacker Operations*, *September–December 1972* (Washington, D.C.: Air Force History Office, 1974), 57–60; Report (S), Headquarters PACAF/OA, "Linebacker II Air Operations Summary, 18–29 December 72," March 1973. ⁴⁷ Futrell, *Ideas*, 2:296–97.

⁴⁸ Ibid

⁴⁹ Clodfelter, "Nixon and the Air Weapon," 178

⁵⁰ Ibid.; USAF interview of Lieutenant General Gerald W. Johnson by Charles K. Hopkins, April 3, 1973, AFHRA, File K239.0512-813, 6–7; Head, 78.

⁵¹ Clodfelter, *The Limits of Air Power*, 184–85.

⁵² Ibid.

⁵³ Maj Calvin R. Johnson, Headquarters PACAF, Project CHECO, *Linebacker Operations*, *September–December* 1972 (Washington, D.C.: AFHO, 1974), 55.

⁵⁴ Head, War From Above the Clouds, 79.



Figure 2. LINEBACKER II targets in North Vietnam. Source: Walter J. Boyne, "LINEBACKER II" *Air Force Magazine*, November 1997, 53.

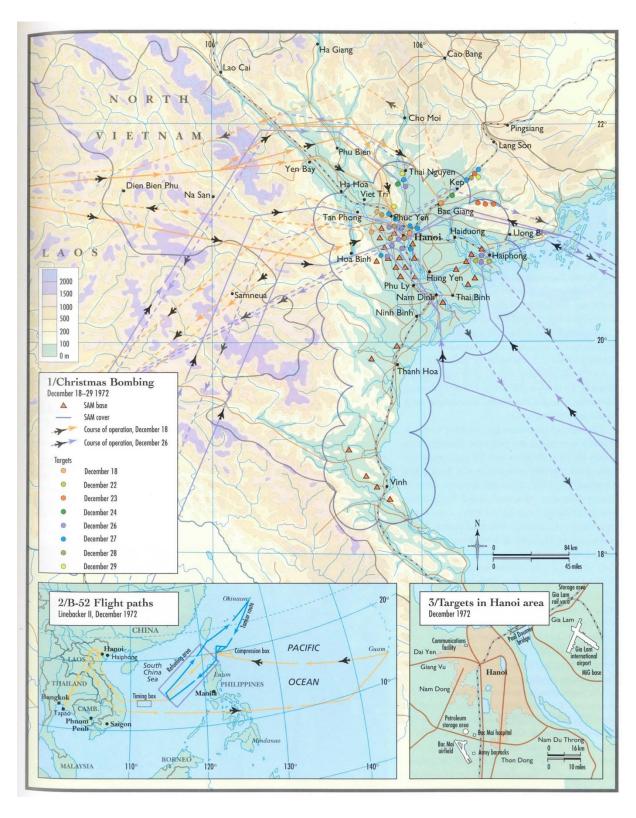


Figure 3. LINEBACKER II operations in North Vietnam. Harry G. Summers, Jr. *Historical Atlas of the Vietnam War*, 180.

North Vietnam had seven years to build up its defenses. It became, by 1972, "the most extensive and strongest integrated air defense system in the world." 55

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.⁵⁶

Prior to the first day's launch, Andersen Air Force Base on Guam was crowded with 99 B-52Gs and 53 B-52Ds. ⁵⁷ U-Tapao RTNAFB in Thailand was home to another 54 B-52Ds. ⁵⁸

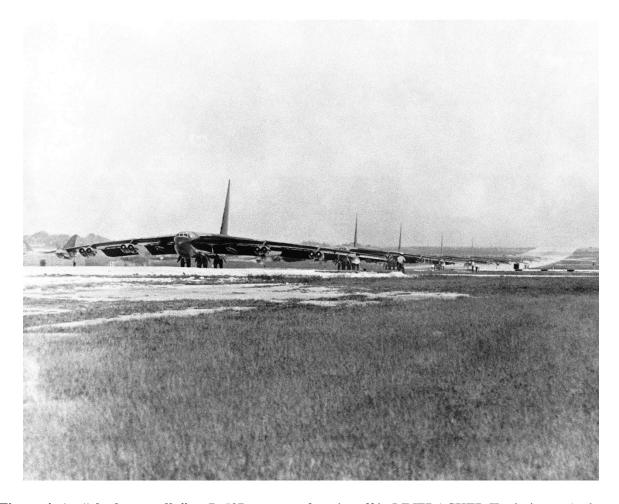


Figure 4. An "elephant walk," as B-52Ds prepare for take-off in LINEBACKER II mission at Andersen Air Force Base, Guam. Image Source: United States Air Force.

⁵⁵ Walter J. Boyne, "LINEBACKER II," Air Force Magazine, November 1997, 52.

⁵⁶ Ibid.

⁵⁷ Ibid., 54.

⁵⁸ Ibid.



Figure 5. B-52Ds on the ramp at U-Tapao Royal Thai Navy Air Force Base during LINEBACKER II. Image courtesy of Bill Fauth and United States Air Force.



Figure 6. B-52Ds at Andersen Air Force Base, Guam. Image Source: United States Air Force.

Day 1 – December 18, 1972

On the morning of December 17, which was the morning of December 18 on Guam, the Joint Chiefs of Staff sent the following attack message:

You are directed to commence at approximately 1200Z,⁵⁹ 18 December 1972, a three day maximum effort, repeat, maximum effort, of B-52/TACAIR strikes in the Hanoi/Haiphong area . . . Objective is maximum destruction of selected targets in the vicinity of Hanoi/Haiphong. Be prepared to extend beyond three days, if necessary.⁶⁰

Colonel James R. McCarthy, commander of the 43rd Strategic Wing, gave the pre-mission briefing at Andersen Air Force Base. His first words were "Gentlemen, your target for tonight is HANOI." The crews excited. They hadn't been "Downtown" thus far in the conflict. The missions were to be conducted using "press-on" rules, meaning that aircraft would press-on to their targets regardless of enemy SAM, AAA, or MiG activities. Formation flying was controlled at specified altitudes and a four-minute straight line flight before bomb drop. The first mission flew at night, at high altitude, using radar bombing and in three waves. Each wave arrived on target varying between four and five hours apart. Each wave consisted of three ship cell components (several comprising the wave), each at ten-minute intervals. Air-to-air intervals within each cell were from one to two miles with lateral spacing and 500 feet vertically.

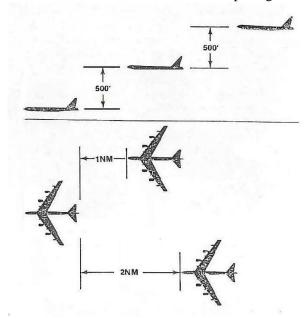


Figure 7. B-52 cell diagram. Source: Teixeira, "Linebacker II," 11.

12

⁵⁹ 1200Z or "Zulu" time is the universal time based on the Greenwich (England) Observatory. All time zones are east and west of the longitude of Greenwich. It allows for commanders anywhere on earth to coordinate time.

⁶⁰ Charles K. Hopkins, *SAC Bomber Operations in the Southeast Asia War*, 5 vols. (Lincoln, NB: Strategic Air Command, Offutt AFB, 1983), 4: 17.

⁶¹ McCarthy, View From the Rock, 50.

⁶² Leonard D.G. Teixeira, "Linebacker II: A Strategic and Tactical Case Study," (Maxwell Air Force Base, AL: Air War College, Air University, 1990), 17.

⁶³ McCarthy, *View From the Rock*, 32.

⁶⁴ Ibid., 46-47.

The mission planners selected a route coming from the northwest to allow the radar aiming points to be positively identified and to have minimal exposure to SAMs.⁶⁵ Following the bomb drop, the cells made a post target turn (PTT) that circled the aircraft over the target again.⁶⁶ Every cell of every wave attacked the same target, all along the same navigation track at the same altitudes. They used the same initial point (IP) to begin their final four-minute turn and the same point for their PTT. No aircraft could perform evasive maneuvers. This was for an overwhelming concern over possible air-to-air collisions. The plan also allowed for a maximum of forward electronic countermeasure jamming of enemy radars.⁶⁷

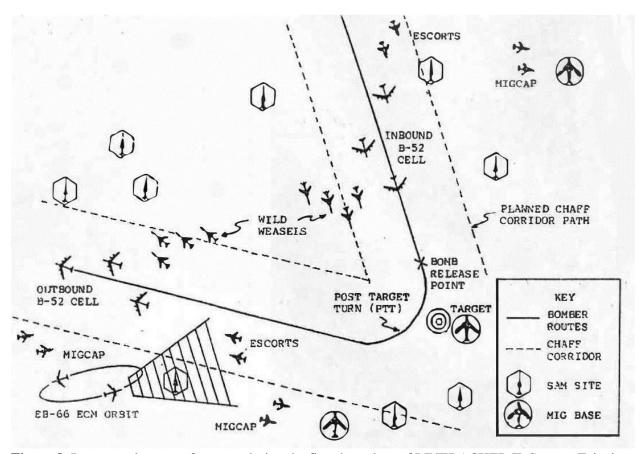


Figure 8. Ingress and egress of a target during the first three days of LINEBACKER II. Source: Teixeira, "Linebacker II," 11A and Karl J. Eschmann, *LINEBACKER: The Untold Story of the Air Raids Over North Vietnam* (New York: Ballantine, 1989), 31-42.

The B-52s could not conduct these missions alone. Numerous tactical air support (TACAIR) aided. They flew SAM suppression, swept enemy airfields, discharged clouds of chaff⁶⁸ to confuse enemy raiders, and provided close support to sweep the area of MiGs. F-4, F-111, and A-7 aircraft attacked enemy airfields

⁶⁵ McCarthy, View From the Rock, 41.

⁶⁶ Teixeira, "Linebacker II," 11.

⁶⁷See McCarthy, *View From the Rock*, 46-47 and Teixeira, "Linebacker II," 11, for the technical aspects of material in this paragraph.

⁶⁸ Chaff is composed of metallic or coated fiberglass ribbons that are dispensed and then free fall very slowly. This degrades enemy radar into believe that the return could be rain squalls, large flights of birds, or a hidden stream of bombers. Chaff worked best when there was no wind. If blown free of the entry or target zone, it became all but useless.

and SAM sites with cluster bombs to damage the runways, interfere with radar equipment, and damage roads used for resupplying ordnance.⁶⁹

Electronic surveillance aircraft gathered electronic intelligence (ELINT) data from enemy transmissions while others jammed enemy radars. Typically, F-4s would precede the BUFFs and lay clouds of chaff. Next in flight order were EB-66, EA-3, and EA-6 aircraft, used to create a wall of electronic noise in front of the bombers. They would orbit outside the flight paths of the bomber stream and provide constant electronic countermeasures (ECM) jamming. Hunter-Killer teams of pairs of F-4s and F-105 "Wild Weasels" swept nearby airfields and watched for SAM "Fan Song" radars to eliminate them before the batteries could fire. The Hunter-Killers would sweep ahead and to each side of the bomber stream. Lastly, other F-4s flew with and behind the bombers to provide MiG Combat Air Patrol (MiG CAP) duties, just as their forbearers had done in the skies over Germany and Japan.⁷⁰

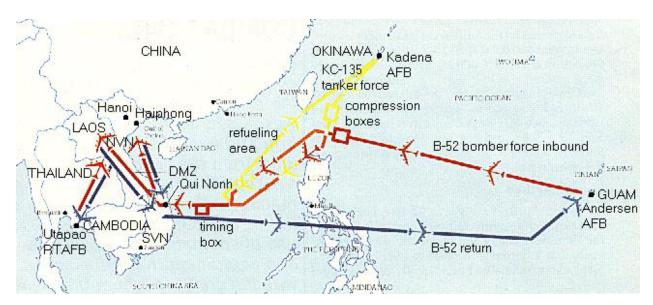


Figure 9. Routes to and from targets during LINEBACKER II sorties from Andersen Air Force Base, Guam and U-Tapao, RTNAFB, Thailand. Red lines are routes to targets. Blue lines are routes from targets. Yellow lines are KC-135 tanker routes and compression boxes (refueling tracks). Source: geocities.ws.

The targets for the first night included the Kinh No storage complex, the Yen Vien rail yard, the principal Hanoi radio station and three airfields on Hanoi's outskirts (Hua Lac, Kep, and Phuc Yen). The first wave of 129 B-52s included 54 G and 33 D models from Andersen Air Force Base and 42 D models from U-Tapao. The Wave I bombers from Andersen completed their prestrike refueling near the island of Luzon in the Philippines. Following this, they reported they had 20,000 pounds less fuel than they should have. This was the same amount needed as a reserve to return to Andersen. The Air Force

⁷⁰ See McCarthy, *View From the Rock*, 46-47; Teixeira, "Linebacker II," 11; Karl J. Eschmann, *LINEBACKER: The Untold Story of the Air Raids Over North Vietnam* (New York: Ballantine, 1989), 31-42 for the technical aspects of material in this paragraph.

14

_

⁶⁹ Teixeira, "Linebacker II," 11.

⁷¹ Headquarters SAC/History Office, *Chronology of SAC Participation in Linebacker II* (Lincoln, NE: Offutt Air Force Base: SAC/History Office, August 12, 1973), 95–96; Boyne, LINEBACKER II, 55.

⁷³ McCarthy, *View From the Rock*, 55-56.

responded by ordering KC-135s from Kadena Air Base on Okinawa to conduct post target refueling.⁷⁴ The same post target refueling missions were order for the second and third waves. The problem was the result of stronger than anticipated headwinds that increased the amount of fuel burned.⁷⁵ Following this mission, all subsequent Andersen sorties carried orders for additional fuel for inbound waves.⁷⁶



Figure 10. B-52D cell during LINEBACKER II. Note that have not yet spread to 500-foot vertical separation. Image Source: United States Air Force.

⁷⁴ Ibid.

⁷⁵ Teixeira, "Linebacker II," 12.

⁷⁶ McCarthy, *View From the Rock*, 56.

The first wave hit at 7:45 p.m. local time.⁷⁷ The second hit the same complexes at midnight and the third wave struck at 5 a.m.⁷⁸ Fifteen minutes prior to the arrival of each wave, the ground attack and ECM aircraft swept in, attacking the MiG airfields, operating radars, SAM sites and jammed all of the enemy's radio frequencies.⁷⁹ Staff Sergeant Samuel Turner, a tail gunner on Brown 03 became the first tail gunner in B-52 history to down a MiG-21.⁸⁰



Figure 11. Gunner's station on a B-52 D. Image source: United States Air Force.

⁷⁷ Chronology of SAC Participation, 95-96.

⁷⁸ Ibid

⁷⁹ Karl J. Eschmann, *The Role of Tactical Air Support: Linebacker II* (Maxwell Air Force Base, AL: Air War College, 1985) 56.

⁸⁰ Boyne, "LINEBACKER II," 55.

All three waves plastered their targets. The NVA fired 200 SAMs, but there was no observed AAA fire and MiGs. Although AAA fire and MiGs were present, they made no serious attempts to attack these bombers. The first night's attacks scored ninety-four percent hits on their targets. Three B-52s and one F-111 completely lost, with two more B-52s severely damaged. The loss rates were 2.3 percent, less than the anticipated loss of three percent. AA

Crew debriefings brought strong criticism toward the stringent use of World War II bomber formation tactics. ⁸⁵ The bomber stream stretched for seventy miles at the same altitudes over the same track. The crews also complained that although all cells used the same ingress and egress IPs and constant speed and altitudes, the PTT was the most dangerous part of the mission. ⁸⁶ By design, the BUFFs made a one hundred degree turn back over the target. This allowed the ground radars to get good images of the huge wing area and belly of the bombers because their internal ECM gear faced forward. ⁸⁷ Mission planners for the following day ignored the crews.



Figure 12. Briefing crews early in LINEBACKER II. Image Source: United States Air Force.

Day 2 – December 19, 1972

The mission for December 19 was the Thai Nguyen thermal power plant and Yen Vien rail yard complex using 93 B-52s.⁸⁸ Time compression between missions from Andersen were tight. Changes could not be cleared for the first two days. As the Day 1 crews were debriefed, the Day 2 crews headed to their

⁸¹ McCarthy, View From the Rock, 65.

⁸² Tilford, Crosswinds, 165–66; Clodfelter, Limits of Air Power, 186; McCarthy, View From the Rock 50–64: Chronology of SAC Participation, 95-96.

⁸³ McCarthy, View From the Rock, 65.

⁸⁴ Ibid.

⁸⁵ Robert E. Wolff, "Linebacker II: A Pilot's Perspective," Air Force Magazine (September 1979): 86-91.

⁸⁶ Ibid.

⁸⁷ Ibid.

⁸⁸ Clodfelter, "Nixon and the Air Weapon," 179; Chronology of SAC Participation, 106, 109–11, 121, 140–43.

aircraft. 89 The crews had different targets, but every other facet remained the same except for the increase in inbound refueling amounts. 90

The crews expressed concern of the identical mission tracks and altitudes. They were told under no circumstances were they to fly evasive maneuvers despite the SAM and AAA threat. The targets were very near the previous day's locations and the PTT was identical. Colonel [later General] McCarthy told them that level flight for four minutes was necessary for accuracy and that evasive maneuvering would destroy the forward ECM jamming from each cell.⁹¹ "He [McCarthy] issued an unpopular warning that any 43rd Strategic Wing aircraft commander who disrupted cell integrity to evade SAMs would be considered for court martial."⁹²

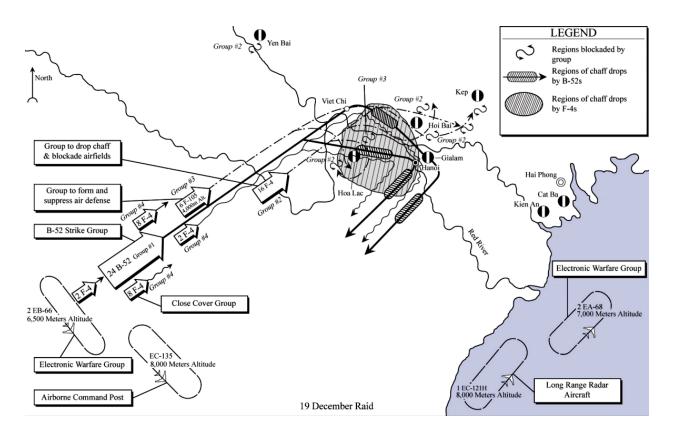


Figure 13. Day 2 mission target data, course, jamming, and WAVE tracks. Source: commons.wikimedia.org.

No changes in the plan were permitted until the first wave dropped their bombs on target. Then, and only then, were minor changes instituted. The cells still had to remain as a cohesive unit without evading SAMs. Every aspect of SAC training told these crews that if the bomb bay doors were to be opened a certain number of seconds before target, then that was gospel. The crews, now using conventional ordnance and flying in formation over SAM rich territory, squabbled over how early to open bomb bay doors before release. They were concerned that in the line up to target and the PTT, SAM missileers would have an

⁸⁹ McCarthy, View From the Rock, 67.

⁹⁰ Ibid

⁹¹ Ibid., 68; Teixeira, "Linebacker II," 13.

⁹² McCarthy, View From the Rock, 68.

easier time aiming at the massive wings and bellies of the BUFFs. This was especially true when the bomb bay doors were open and the cavernous bay filled with irregularly shaped bombs would offer enhanced returns on the SAM ground radar screens.⁹³

The NVA again fired about 200 SAMs at the bombers. Many of these were in volleys in hopes of hitting multiple aircraft and destroying cohesion within the formations. How more BUFFs were damaged but none were lost. With no losses on the second night, CINCSAC decided to keep with the successful model of the first two days, rather than creating a new attack plan. Mission planners believed that the North Vietnamese ground defenders had not recognized or defined the routing sequence for the raids and, knowing that change orders took valuable time, they prepared for the third day of raids using the same routes. This was a ghastly mistake and the aircrews would pay dearly for it.

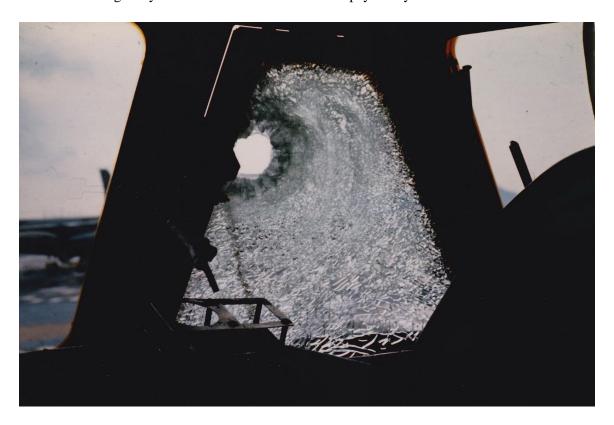


Figure 14. SAM fragment damage on the pilot's "cheek" window during LINEBACKER II. Image Source: United States Air Force.

Day 3 – December 20, 1972

Day three missions were composites of the first two days. The bombers were to strike the Kinh No petroleum oil and lubricant (POL) storage complex, the Yen Vien rail yard, the Thai Nguyen thermal power plant, and the Yen Vien rail yard complex. The planes approached from a narrow corridor from the northwest toward Hanoi. 97 During the prestrike briefing, some of the crews suggested making a slight PTT

⁹³ McCarthy, View From the Rock, 74.

⁹⁴ Teixeira, "Linebacker II," 14.

⁹⁵ McCarthy, View From the Rock, 77.

⁹⁶ Clodfelter, "Nixon and the Air Weapon," 179.

⁹⁷ Teixeira, "Linebacker II," 14.

and head straight for the Gulf of Tonkin to the safety of the Navy Task Force 77.98 According to Colonel McCarthy, the mission orders arrived late, coming from SAC headquarters at Offutt Air Force Bases.99 This created problems with the tactical support aircraft orders while SAC, TAC, Navy, and Marine commanders sorted out last minute changes.100



Figure 15. Soviet built Surface to Air Missile (SAM)-2 in 1968. Image Source; Marc Riboud.

The North Vietnamese gunners learned their lessons from the two previous days. Although some sources disagree, the SAM crews tended to let the first cell pass overhead or nearby and concentrate on Cells Two and Three, and later waves. ¹⁰¹ MiGs seemed timid. Rather than attacking the B-52s, they

⁹⁸ McCarthy, View From the Rock, 79.

⁹⁹ Ibid.

¹⁰⁰ Ibid.

¹⁰¹ See, for example: Supplemental History on Linebacker II (18-29) December, 43rd Strategic Wing and Strategic Provisional Wing, 72nd vol I (Andersen Air Force Base, Guam: 30 July 1972), iv.; Teixeira, "Linebacker II," 15, among others. The principal opponent to this theory was Marshall L. Michel, III, *The 11 Days of Christmas:* America's last Vietnam Battle (New York: Encounter Books, 2002), 243. Michel states that opposite is correct.

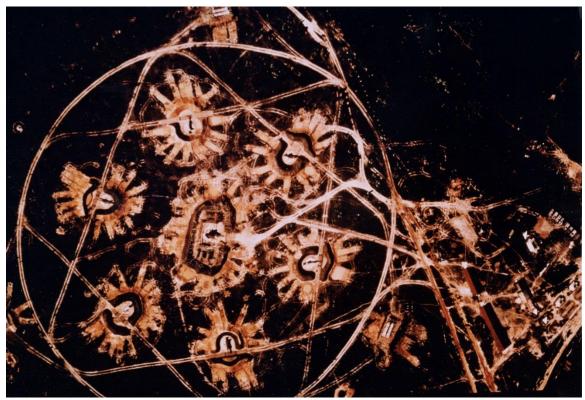


Figure 16. The classic "Star of David" pattern of a SAM site. Note the missiles loaded in each of the six launch sites. Image Source: National Museum of the United States Air Force.

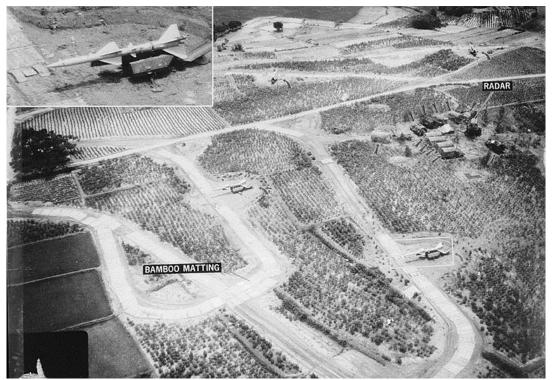


Figure 17. Detail of a SAM battery showing one of the launch sites and the ground radar installation. Image Source: United States Air Force and Air Power Australia.

shadowed them, providing airspeed and altitude information. 102 The AAA and SAM gunner could then estimate where to fire their weapons, as the BUFFs had to fly straight and level for four long minutes or when and where they would execute their PTT. 103 The ground defenses claimed four B-52G models and two B-52 D models destroyed and another B-52D seriously damaged. 104

President Nixon became livid when he heard of the losses on Day 3. He "raised holy hell about the fact that [B-52s] kept going over the same targets at the same times." ¹⁰⁵ General Meyer, too late, recognized the errors of his ways. The B-52s were the highest profile nuclear bombers in the arsenal. New orders were cut on December 22 for the December 24th and 26th missions. 106

All the B-52Gs lost on Day 3 had not been modified or upgraded with new ECM systems. Four of the downed bombers and one heavily-damaged BUFF were hit following bomb release.¹⁰⁷ Despite the great damage they inflicted upon their targets, a new plan must be formulated quickly. The B-52s could not continue with these tactics. Day 3 ended the first phase of LINEBACKER II. The next phase would bring different results.

Post-strike reconnaissance photos clearly showed that none of the SAM sites engaged had spare missiles. General Meyer had his planners target SAM sites and their storage areas in and near the inbound and outbound corridors. 108 General Meyer also moved mission planning to Guam under General Johnson. 109 SAM sites and storage dumps became the new primary targets. 110 The missions beginning the day after would avoid Hanoi and its environs and target the Port of Haiphong, but that was two days away. 111

Day 4 – December 21, 1972

General Meyer listened to the crews' concerns after the aircraft losses of Day 3. Changes were made operations and tactics. Gone were bomber streams seventy miles long with cells flying lock-step to those ahead of them. Gone too were 90 to 100 plane raids. World War II tactics did not work in the modern environment of SAM missiles, sophisticated ground radar, and MiG interceptors.

Meyer and his planners reduced the number of B-52s engaged to thirty.¹¹² While they worked on the complicated logistics, thirty U-Tapao BUFFs conducted the missions that day. No complicated air-toair refueling was necessary and the mission length was four hours. Crew briefings and debriefings garnered valuable input for the Day 4 missions:

There was finally unanimous agreement that tactics and routes should be varied so that the enemy defenders could not establish a pattern and predict routes of flight or altitudes. Several suggested changes were already in effect for the Day 4 strikes. Release time intervals between cells were compressed from ten to four minutes and then again to 90

¹⁰² Supplemental History on Linebacker II (18-29), iv.; Teixeira, "Linebacker II," 15. Again, Michel disagrees, Michel, The 11 Days of Christmas, 244-45.

¹⁰³ McCarthy, View From the Rock, 63

¹⁰⁴ Supplemental History on Linebacker II (18-29, iv. ff; Clodfelter, "Nixon and the Air Weapon," 179; Headquarters SAC/HO, Chronology of SAC Participation in Linebacker II, 106, 109–11, 121, 140–43.

¹⁰⁵ Clodfelter, "Nixon and the Air Weapon," 179; and McCarthy, Allison, and Rayfield, 121. 106 Clodfelter, "Nixon and the Air Weapon," 179.

Totalettel, Mixon and the Ali Weapon, 177.

Teixeira, "Linebacker II," 16.

Futrell, 2:297–98; Calvin R. Johnson, Headquarters PACAF, Project CHECO, *Linebacker Operations, September–December 1972* (Washington, D.C.: Air Force History Office, 1974), 64–66.

Clodfelter, *The Limits of Air Power*, 187; *Chronology of SAC Participation in Linebacker II*, 153–59, 185–86;

and McCarthy, Allison, and Rayfield, 91–98 (revised).

¹¹⁰ Clodfelter, The Limits of Air Power, 187; Chronology of SAC Participation in Linebacker II, 153–59, 185–86

¹¹¹ Clodfelter, *The Limits of Air Power*, 187;

¹¹² Supplemental History on Linebacker II (18-29), iv. ff.

seconds. Base altitude and altitude between cells were changed. Also, for the first time, the cells attacking Hanoi were to fly on across the high threat area without making the PTT, thereby flying "feet wet" to the Gulf of Tonkin for egress routing. Target selection for the bombing campaign was initially focused on maximum psychological and logistic impact. Now, with greater concern for the losses of Day 3, something had to be done about the SAMs. SAM storage sites finally became a prime target. ¹¹³



Figure 18. A KC-135 Tanker sits at the end of the runway at U-Tapao while a B-52D returns from a LINEBACKER II mission. Image Source: United States Air Force.

The thirty B-52Ds from U-Tapao were assigned three targets near Hanoi, six to Quang Te airfield, twelve to the Ven Dien supply depot, and twelve to the Bac Mai airfield/storage area. ¹¹⁴ The Quang Te and Ven Dien sorties dropped their bombs with many SAM firings, but no damage to the aircraft. However, the Bac Mai BUFFs had equipment problems with the lead aircraft's bombing radar failing, necessitating a reordering of the cell. ¹¹⁵ Scarlet One (the call sign for the lead aircraft) switched positions with Scarlet Two and moved back to trail Scarlet Three. Scarlet Three suffered another malfunction when its critical jammer overloaded and failed. ¹¹⁶ The plane was then perfectly visible to the ground radars. The SAM batteries near the airfield launched four missiles – the first two missed and the second pair hit the bomber. ¹¹⁷

¹¹³ Teixeira, "Linebacker II," 17-18.

¹¹⁴ Robert O. Harder, *Flying from the Black Hole: The B-52 Navigator-Bombardiers of Vietnam* (Annapolis, MD: Naval Institute Press, 2009), 229.

¹¹⁵ Ibid.

¹¹⁶ Ibid.

¹¹⁷ Ibid.

The next cell's leader, Blue One, was hit by a salvo of six SAMs with only thirty seconds before bomb release. Remarkably, the crew was able to eject. Although most of the crew were wounded, they all lived to survive the war. He had targets were struck within 15 minutes, a significant change from previous missions, with excellent bombing results. During Day 4, seventy-five tactical aircraft were in support. In On a tragic note, one of the downed B-52's bombs fell on the Bac Mai hospital, causing extensive damage. Twenty-five staff members were killed, including fifteen nurses. The patients had been evacuated just prior to the Hanoi raids. The North Vietnamese made the damage into a huge public relations bonanza.



Figure 19. Maintainers work the outboard engines of a B-52D at Guam during LINEBACKER II. Image Source: United States Air Force.

¹¹⁸ Harder, Flying from the Black Hole, 229.

¹¹⁹ Ibid.

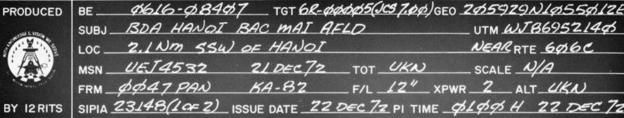
¹²⁰ Teixeira, "Linebacker II," 18.

¹²¹ Boyne, "LINEBACKER II," 55.

¹²² Michel, The 11 Days of Christmas, 173.

¹²³ John Morrocco, *Rain of Fire: Air War, 1969–1973*, ed. Robert Manning, Vietnam Experience Series (Boston: Boston Publishing Co., 1986), 157.





Bac Mai Airfield - BDA during Christmas raids. Declassified

Figure 20. Post-strike reconnaissance bomb damage assessment (BDA) image of the Day 4 strike taken the following day. Image Source: United States Air Force.

Day 5 – December 22, 1972

General Meyer gave orders concerning tactical changes to his planners on December 22nd for implementation on December 26.¹²⁴ The Commander-in-Chief of Pacific Air Forces) sent a message to the Seventh Air Force that "Events of the past four days produced significant B-52 losseswhich obviously are not acceptable on a continuing basis... Vary B- 52 flight altitudes with the chaff corridor on ingress. Change release altitudes and the ingress/egress headings on a daily basis." The plans for next three days were to target rail yards and POL storage facilities. 126

Again, thirty B-52s from U-Tapao carried out the missions. The cells feinted attacks against Hanoi and then turning, diverted on Haiphong. Each route and altitude was different.¹²⁷ All thirty B-52 approached and egressed over water at Haiphong, entering from the south but split into three tracks to approach their targets.¹²⁸ Each of the three aircraft components split again, then finally approach six separate targets, "staggered in time, distance, and altitude."¹²⁹

The SAM gunners were further confused due to F-4s spreading extensive chaff corridors and Navy aircraft using smart bombs on the SAM complexes to keep their Fan Song radars down. The F-4s used a different technique than that employed in LINEBACKER I. During LINEBACKER I, an F-4 would begin dispense chaff on a run-in to the Radar site, then turn roughly one hundred degrees away from the radar while the aircraft was directly overhead. The c chaff stream continued through the entire maneuver. This was thought to spread more chaff unevenly to confuse the gunners. The F-4s used a different technique during sorties in LINEBACKER II. The chaff cloud was concentrated directly over the Fan Song radar unit, making it thicker and more difficult to "burn through." As long as the winds were calm, the chaff gave the bombers a greater chance of attacking the target unless the ground gunners fired wildly, which they often did. The NVA launched forty-three SAMs, much less than one-quarter of the previous days' efforts. The attack plan overwhelmed the Haiphong defenders. The plan worked. Only one B-52 damaged, one destroyed, and an F-111was shot down over the Kinh No Railroad complex.

¹²⁴ Maj Calvin R. Johnson, *Linebacker Operations*, 1974, 62.

¹²⁵ Message (U), 221935Z DEC 72, AFSSO PACAF, to Seventh Air Force, December 22, 1972; Message (U), 222020Z DEC 72, CINCSAC, to CINCPACAF, December 22,1972.

¹²⁶ Harder, Flying from the Black Hole, 230.

¹²⁷ Chronology of SAC Participation in Linebacker II, 170–75, 187–90, 202–5, 223–27, 230; Clodfelter, The Limits of Air Power, 188

¹²⁸ Teixeira, "Linebacker II," 18.

¹²⁹ Ibid.

¹³⁰ Ibid.

¹³¹ William W. Momyer, Air Power in Three Wars (Washington, D.C.: GPO, 1978), 146.

¹³² Momyer, Air Power in Three Wars, 147.

¹³³ George R. Jackson, *Linebacker II – An Examination of Strategic Use of Airpower* (Montgomery, AL: Air War College, Maxwell Air Force Base, ND), 41-42.

¹³⁴ Chronology of SAC Participation in Linebacker II, 170–75, 187–90, 202–5, 223–27, 230

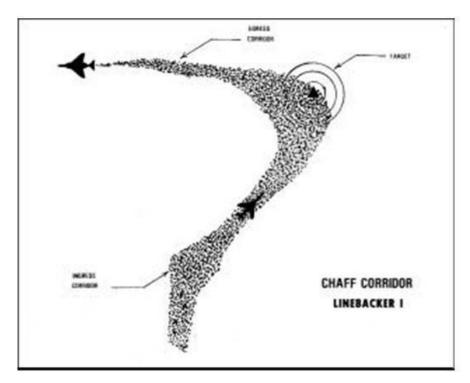


Figure 21. William W. Momyer, Air Power in Three Wars (Washington, D.C.: GPO, 1978), 146.

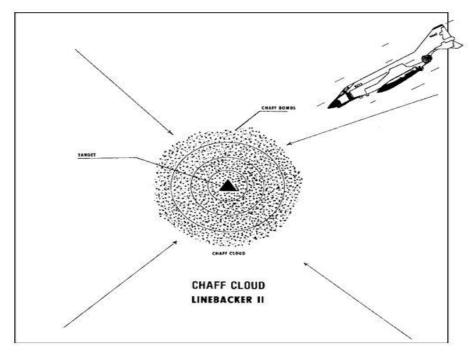


Figure 22. William W. Momyer, Air Power in Three Wars (Washington, D.C.: GPO, 1978), 147.

Day 6 – December 23, 1972

The mission planners had another surprise in store for the North Vietnamese. Rather than striking targets in and around Hanoi and Haiphong, the mission for night of December 23 attacked the Lang Dang railyards north of Haiphong and three SAM sites close to the Chinese border near the Chinese buffer zone established by the Johnson Administration.¹³⁵

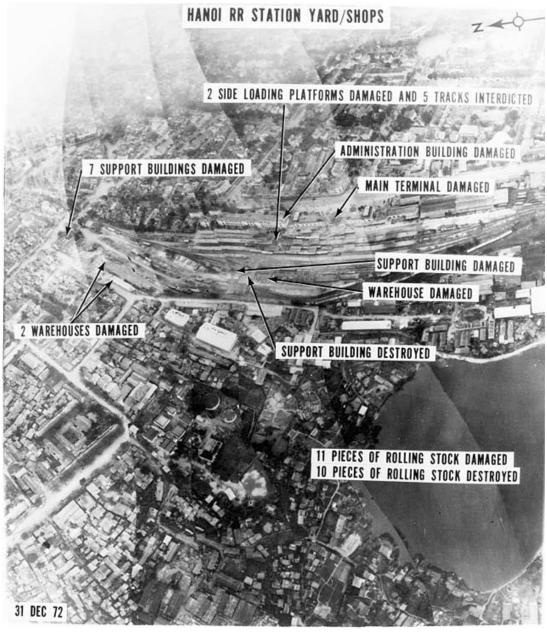


Figure 23. Hanoi's principal railyard north of Hanoi. Image Source: United States Air Force.

¹³⁵ Harder, Flying from the Black Hole, 230.

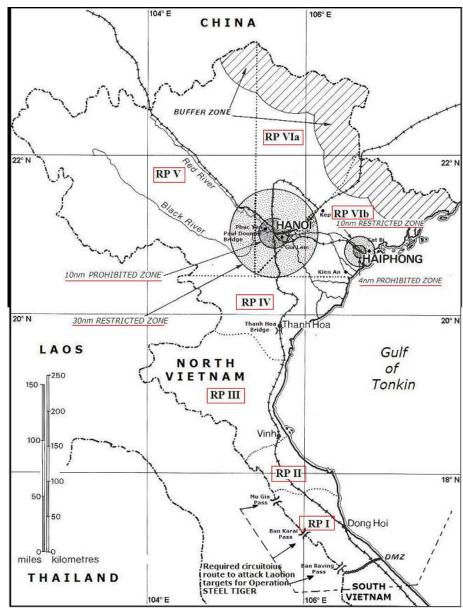


Figure 24. Buffer zones established by the Johnson Administration and retained by the Nixon Administration prior to LINEBACKER operations. Source: https://geographicalimaginations.com/tag/lyndon-b-johnson/.

The force mix for Day 6 included eighteen B-52Ds from U-Tapao and twelve from Andersen. ¹³⁶ Most Seventh Air Force tactical aircraft raids were canceled by inclement weather. ¹³⁷ Using B-52s against SAM sites offered different problems than the crews had experienced so far during LINEBACKER II. The bombers had to fly directly over the SAM sites to hit them. Their normal three-ship cell using ECM protection was dramatically reduced. ¹³⁸ For this strike only, the bomber cells split up into separate aircraft. The first aircraft of each cell would strike the same targets, and the same with the second and third aircraft. Enemy gunners were

¹³⁶ Harder, Flying from the Black Hole, 230.

¹³⁷ Head, War From Above the Clouds, 80; Eschmann, The Role of Tactical Air Support, 81-82.

¹³⁸ Teixeira, "Linebacker II," 19.

holding back and 'going to school' on the first cells so that they could zero in on follow-on cells. Hopefully, by the time the SAM sites realized they were the targets, it would be raining bombs. After bombs away, the cells intermingled at various altitudes and maneuvered using small changes in heading. The combination of no pre-strike activity, a feint attack on Hanoi and last minute turn toward their targets caught the North Vietnamese gunners off-guard. The North Vietnamese gunners only fired five SAMs and the B-52s received no damage.

Day 7 – December 24, 1972

The U-Tapao B-52Ds conducted all sorties on Day 7 and, again, for the fourth consecutive day, thirty BUFFs were launched. ¹⁴¹ The North Vietnamese had no idea from where the bombers would come; they simply knew that they would. The mission planners decided to return to the routes used on the first three days, flying northwest out of Laos. ¹⁴² The targets were the Thai Nguyen and Kep Rail yards and the Haiphong Thermal Power Plant West.



Figure 25. The North Vietnamese major rail system. Source: William W. Momyer, *Air Power in Three Wars* (Washington, D.C.: GPO, 1978), 210.

¹³⁹ Teixeira, "Linebacker II," 19.

¹⁴⁰ McCarthy, View From the Rock, 107-111.

¹⁴¹ Harder, Flying from the Black Hole, 231.

¹⁴² Ibid.



PRODUCED	BE \$616- \$999\$ 7 TGT 7R-60035 (JCS 8000) GEO 20 5143N1964021E
NOOK & WELL	SUBJ BOA HAIPHONG TPP WEST UTM XJ 74000575B
	SUBJ BOA HAIPHONG TOP WEST UTM XJ 740007583 LOC 1.2 NM NW OF CENTER OF HAI PHONG RTE 5C
	MSN BHQ 233 24 DECTZ TOT LIKN SCALE NIA
August Williams	FRM \$127 PAN F415Y FIL 3" XPWR 4 ALT UKN
BY I2RITS	SIPIA 23238 ISSUE DATE 25 DEC 72 PI TIME \$600 H 25 DEC 72

Figure 26. Bomb damage assessment of Haiphong Thermal Power Plant West following the raid on December 24, 1972. Image Source: United States Air Force.

The bombers arrived from the northwest, splitting into two waves on a southerly track. The B-52s then used multiple vectors to approach the targets. This maneuver allowed all of the aircraft to complete their bombing runs within ten minutes. How waves split into two formations again as they executed the PTT and then vectored in different headings. How bombers were lost during this mission; however, flak from AAA hit one BUFF, the only occurrence of hit of this kind during LINEBACKER II. How cells were engaged by MiGs during this mission. Airman First Class Moore shot down a MiG when he crossed too close behind one of the BUFFs. This was the second and final confirmed kill by a tail gunner.

Following yet another successful mission with no bomber losses, politics came back into play. President Nixon sent a message to Hanoi requesting a meeting on January 3. If they accepted, he promised to halt bombing north of the 20th parallel on December 31 and continue this commitment while talks continued. As a goodwill gesture, the President announced a 36-hour bombing halt during Christmas. Hanoi refused any response, but used the respite to reposition and resupply. President Nixon resumed the bombing on December 26.

Day 8 – December 26, 1972

December 26 saw a return to the massive raid structure of the first days of LINEBACKER II. In an early version of what would be called "Shock and Awe," 120 B-52s struck ten targets, all within fifteen minutes. Four waves comprised of 72 BUFFs hit four targets in and near Hanoi from four different directions. Additionally, another eighteen B-52s plastered the Thai Nguyen again. At the same time two other waves, each of fifteen bombers, attacked Haiphong simultaneously from the east and west. Accompanying the big bombers were 114 tactical aircraft. F-4s flew MiGCap and dispensed clouds of chaff, while F-105 Wild Weasels hit SAM sites when they turned on their Fran Song Radars. F-111s and Navy Vought A-7s pummeled airfields while Navy and Marine F-4s flew MiGCAP and BARCAP (Barrier Combat Air Patrols to protect the fleet).

The North Vietnamese fired volleys of SAMs, downing two B-52s. Day 8 was the largest effort in LINEBACKER II. It was evident that Hanoi could not withstand much more of this pounding. Shortly after the aircraft were recovered, the North Vietnamese told Washington that they were ready to resume talks between Henry Kissinger and Le Duc Tho on January 2. ¹⁵⁴ The agreed not to reopen any positions already discussed and resolved. ¹⁵⁵ President Nixon agreed not to bomb north of the 20th parallel once the BNorth followed through on these promises. ¹⁵⁶

¹⁴³ Teixeira, "Linebacker II," 20

¹⁴⁴ Ibid.

¹⁴⁵ Harder, Flying from the Black Hole, 231.

¹⁴⁶ Ibid

¹⁴⁷ McCarthy, Allison, and Rayfield, 99–123 (revised); *Chronology of SAC Participation in Linebacker II*, 170–75, 187–90, 202–5, 223–27, 230; and Clodfelter, *The Limits of Air Power*, 188.

¹⁴⁸ Head, War From Above the Clouds, 83.

¹⁴⁹ Ibid.

¹⁵⁰ Ibid.

¹⁵¹ Ibid.

¹⁵² Boyne, "LINEBACKER II," 56.

¹⁵³ Ibid.

¹⁵⁴ Tilford, Crosswinds, 168–69; Clodfelter, The Limits of Air Power, 188–89.

¹⁵⁵ Ibid

¹⁵⁶ McCarthy, Allison, and Rayfield, 121–39; idem, 126–44 (revised); *Chronology of SAC Participation in Linebacker II*, 122; Tilford, *Crosswinds*, 168–69; Clodfelter, *The Limits of Air Power*, 188–89; Clodfelter, "Nixon and the Air Weapon," 179–80.



Figure 27. A B-52D Big Belly being re-armed at Andersen Air Force Base on Guam during LINEBACKER II. Image Source: United States Air Force.



Figure 28. Loading bombs on one of the wing pylons of a B-52D during LINEBACKER II. Image Source: United States Air Force.



Figure 29. A Republic F-15 Wild Weasel configuration. Note WW designation on the tail. These elite crews were the deadly mongoose to the SAM cobras. Image Source: United States Air Force.



Figure 30. A General Dynamics F-111 and a Vought A-7 during LINEBACKER II. Image Source: Boyne, LINBACKER II, 56. Photo credit: Ed Skowron via Warren Thompson.

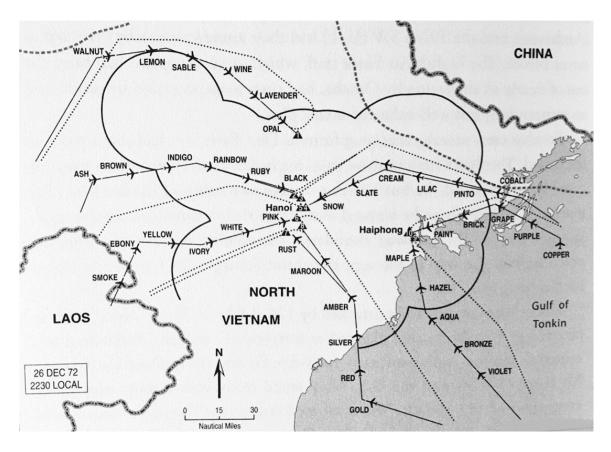


Figure 31. Mission profiles of the December 26 raids. Source: James R. McCarthy, George B. Allison, and Robert E. Rayfield, *Linebacker II*, vol. 6, *A View from the Rock*, USAF Southeast Asia Series, monograph 8 (Montgomery, AL, Maxwell AFB: Air War College, 1979).

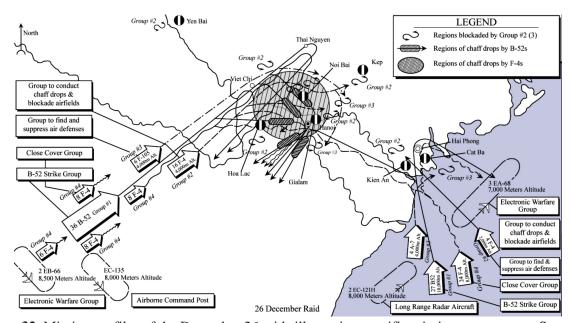


Figure 32. Mission profiles of the December 26 raids illustrating specific mission components. Source: commons.wikimedia.org.

Day 9 – December 27, 1972

Day 9 featured thirty B-52s from Andersen and thirty from U-Tapao. Twenty-one were G models and thirty-nine were D models. ¹⁵⁷ The targets were three SAM sites near Hanoi, the Van Dien supply depot and the Lang Dang, Duc Noi, and Trung Quang rail yards. ¹⁵⁸ "General Meyer [still stinging from the rebuke from the President], CINCSAC, wanted to ensure that the SAM sites were destroyed as quickly as possible, even if it meant using Stratofortresses to do it. He was still feeling pressure associated with the loss of our strategic bombers, and was being pressed into what was, to him, a violation of basic air doctrine." ¹⁵⁹ SAC planners, headed by General Meyer, violated this doctrine during the first three days of LINEBACKER II at great cost from inappropriate use of B-52s and the loss of their crews.

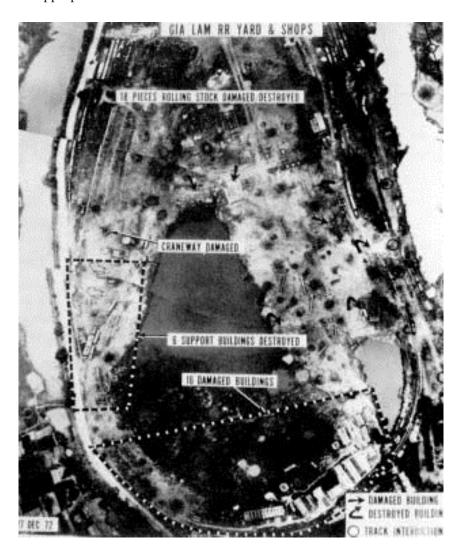


Figure 33. Bomb damage assessment, from the raid of December 27, of the Gia Lam Railyard from F-4 and F-105F Hunter-Killer teams destroyed a SAM site near the yard in Hanoi. B-52s hit rail targets further from the city center. Image Source: United States Air Force.

¹⁵⁷ Harder, Flying from the Black Hole, 237.

¹⁵⁸ Ibid

¹⁵⁹ McCarthy, View From the Rock, 150.

One of the first commandments for the employment of strategic air power is to initially destroy enemy air defenses and gain air superiority. Military and industrial targets can then be struck with little loss to the attacker. ¹⁶⁰

The North Vietnamese decided one more attempt at firing volleys of SAMs,, which downed two B-52s. Of the two stricken BUFFs was able to stay in the air long enough to return to U-Tapao. The crew made it back to the main runway, attempted to land, then went nose up and crashed.¹⁶¹

The bomber passed Charlie tower at eye-level, traveling so slowly that [Colonel Bill Maxon, commander of U-Tapao's maintenance wing] Maxson knew with a sinking feeling it was about to stall about 150 feet above the ground and with no runway left ahead of it. 'I simply cannot describe the horror I felt as I saw the wing navigation lights starting to rotate as the aircraft stalled, rolled and crashed upside down just off the end of the runway. After hours of struggle on the part of the aircrew to bring this shot up 'bird' back home safely, after all of the efforts by those of us on the ground to save her, we had lost. I had seen B-52s and other aircraft crash before, but never had I felt such anguish and helplessness and despair for the valiant crew.' 162

Both aircraft lost were D models flying as part of two-ship cells because one member of their three ship-cell had to abort enroute. ¹⁶³ Flight orders were that if one aircraft dropped out of formation, the other two would join with the cell in front of them and form a five-ship cell. ¹⁶⁴ Neither were able to join the larger formation.

Day 10 – December 28, 1972

The North Vietnamese agreed to President Nixon's demands to continue preliminary talks between Henry Kissinger and Le Duc Tho. The talks were to set to resume on January 2, 1973. These demands included not reopening any previously resolved topics. Nixon promised to cease bombing north of the 20th parallel, contingent on strict adherence to his demands. Nixon forcefully told Hanoi that time was running out. The President then ordered a bombing halt of all missions north of the 20th parallel to commence thirty-six hours later at 7 p.m. Washington time on December 29th. Until then, there were two more bombing missions to run.

The targets on Day 10 were essentially a repeat of Day 9: Three SAM sites and rail facilities. Sixty B-52s and 99 support aircraft hammered the targets. Captain John R. Allen later reported that "By the tenth day there were no missiles, there were no MiGs, there was no AAA— there was no threat. It was easy pickings."

Although the BUFFs could and did bomb in all kinds of weather, most of the SAM sites remained intact because these tactical aircraft could not visually spot them. Throughout the whole course of

163 Teixeira, "Linebacker II," 22.

¹⁶⁰ McCarthy, View From the Rock, 145; Teixeira, "Linebacker II," 23.

¹⁶¹ Michel, The 11 Days of Christmas, 197-99.

¹⁶² Ibid., 199.

¹⁶⁴ McCarthy, View From the Rock, 145.

¹⁶⁵Chronology of SAC Participation in Linebacker II, 122; Tilford, Crosswinds, 168–69; Clodfelter, The Limits of Air Power, 188–89; Clodfelter, "Nixon and the Air Weapon," 179–80.

¹⁶⁶ Teixeira, "Linebacker II," 25.

¹⁶⁷ Clodfelter, The Limits of Air Power, 189.

LINEBACKER II, there were only twelve hours of good daylight visual bombing weather in twelve days." ¹⁶⁸

Rather than the straight-ahead tactics of the previous nine days of missions, the formations returned to their SAC training, weaving and crisscrossing their paths. This aerial ballet required some cells and waves to execute flyovers while others executed sharp PTTs. All aircraft executed simultaneous initial Times On Target (TOT) and twenty-seven bombers flew (at different altitudes) within five miles of each other.



Figure 34. Briefing crews early in LINEBACKER II. Image Source: United States Air Force.

Day 11 – December 29, 1972

The missions for Day 11 mirrored those of the previous day. Sixty B-52s with 102 support aircraft attacked their targets in three waves, each with cells. Release times were coordinated and the bomb releases were simultaneous. The approach in to the targets were identical to Day 10.¹⁷¹ The NVA gunners had

¹⁶⁸ Hearings Before Sub-Committees of the Committee on Appropriations, House of Representatives, 93rd Congress (Tuesday, January 18, 1973) (Washington, GP0, 1973, 4.

¹⁶⁹ Teixeira, "Linebacker II," 25.

¹⁷⁰ McCarthy, View From the Rock, 155-59.

¹⁷¹ Teixeira, "Linebacker II," 26.

already launched almost all their missiles. On Day 11, only twenty-three SAMs were fired at the BUFFs. ¹⁷² No aircraft were damaged and all returned safely.

After all aircraft were recovered, CINCPAC received orders to terminate all military activity north of the 20th parallel that day, and President Nixon announced the resumption of the Paris peace talks. 173

TABLES

Table 1. LINEBACKER II targets. Source PACAF, table from Walter Boyne, :LINEBACKER II," 52.

Target	Planned	Sortie
Lang Dang railroad y	ard	86
Kinh No military com	plex	78
Yen Vien military con	nplex	63
Gia Lam railroad yar	d	54
Thai Nguyen TPP*		42
Van Dien supply dep	ot	39
Hanoi Radio		36
Thai Nguyen railroad	l yard	36
Bac Giang TSP*		33
Haiphong railroad sid	ding	27
Phuc Yen SAM stora	ge site	23
Hanoi POL storage s	ite	21
Trai Ca SAM support	t facility	20
Phuc Yen SAM supp	ort facility	18
Giap Nhi railroad yar	d	18
Duc Noi railroad yard	i	18
Haiphong POL stora	ge site	18
Haiphong transfer st	ation	15
Hanoi Bac Mai stora	ge site	12
Kep railroad yard		12
Trung Quan railroad	yard	12
Duc Noi storage site		12
Kep airfield		5
Quang Te airfield		6
Hoa Lac airfield		6
Phuc Yen airfield		6
VN 549 SAM site		2
VN 234 SAM site		3
VN 243 SAM site		5
VN 266 SAM site		5
VN 158 SAM site		2
VN 537 SAM site		2
VN 660 SAM site		2
VN 563 SAM site		2
Total	NAT CA	741
Source: Pacific Air Ford	es	
*TPP stands for The TSP for Transshipm		Plant;

¹⁷² McCarthy, View From the Rock, 155-59.

¹⁷³ Teixeira, "Linebacker II," 26.

Table 2. LINEBACKER II sorties. Source Walter Boyne, "LINEBACKER II, 54."

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.

Table 3. LINEBACKER II losses. Source Walter Boyne, "LINEBACKER II, 57."

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	Truang Quan rail yard	SA-2

Table 4. Day by day record of all air crews lost during LINEBACKER II and their status. Courtesy of www.linebacker2.com/page_2_59bi.html

Day 1 December 18, 1972					
	B-52 G "Charcoal 01" 340th BS, 97th BW, 72nd SW				
Bl	ytheville AFB, AR; Andersen AFB, Guam				
POSITION	NAME	STATUS			
Pilot	Lt. Col. Donald L. Rissi 🗶 🔣 💮	KIA			
Co-Pilot	1st Lt. Robert J. Thomas 🜟 📗	KIA			
Radar Navigator	Major Richard E. Johnson	POW			
Navigator	Capt. Robert G. Certain	POW			
EWO	Capt. Richard T. Simpson	POW			
Gunner	MSgt. Walter L. Ferguson 🔺 🔣	KIA			
В	B-52 G "Peach 02" 2nd BW, 72nd SW arksdale AFB, LA; Andersen AFB, Guam				
POSITION	NAME	STATUS			
Pilot	Major Clifford B. Ashley	Recovered			
Co-Pilot	Capt. Gary L. Vickers	Recovered			
Radar Navigator	Major Archie C. Myers	Recovered			
Naviastan	1st Lt Format E Standin	Recovered			
Navigator EWO	1st Lt. Forrest E. Stegelin	Recovered			
	Capt. James T. Tramel	Recovered			
Gunner Deputy Airborne Commander	MSgt. Kenneth E. Conner Lt. Col. Hendsley R. Conner	Recovered			
B-52 D "Rose 01" 99th BW, 307th SW Westover AFB, MA; Andersen AFB, Guam					
POSITION	NAME	STATUS			
Pilot	Capt. Hal K. Wilson	POW			
Co-Pilot	Capt. Charles A. Brown	POW			
Radar Navigator	Major Fernando Alexander	POW			
Navigator	Capt. Richard Cooper 🜟 🔠	KIA			
EWO	Capt Henry C. Barrows	POW			
Gunner	TSgt. Charlie S. Poole	KIA			

	F-111A "Snug 40"			
430th TFS, 474th TFW Takhli, Thailand				
POSITION	NAME	STATUS		
	Lt. Col. Ronald Jack Ward	KIA		
	Major James Richard McElvain	KIA		
	A-7C VA-82, USN USS America			
POSITION	NAME	STATUS		
	Lt. Carl T. Wieland	POW		
	DAY 2 December 19, 1972			
	OV - 10 A 20 TASS, 6498 ABW Da Nang, South Vietnam			
POSITION	NAME	STATUS		
Pilot	Capt. Francis Xavier Egan 🔻 🔢	KIA		
Observer	1st Lt. Jonathan F. Patterson	Recovered		
	DAY 3 December 20, 1972 B-52 G "Quilt 03" 456th BW, 72nd SW Beale AFB, CA; Andersen AFB, Guam			
POSITION	NAME	STATUS		
Pilot	Capt. Terry M. Geloneck	POW		
Co-Pilot	1st Lt. William Y. Arcuri	POW		
Radar Navigator	Capt. Warren R. Spencer	KIA		
Navigator	1st Lt. Michael R. Martini	POW		
EWO	Capt. Craig A. Paul	KIA		
Gunner	SSgt. Roy Madden	POW		
B-52 G "Brass 02" 42nd BW, 72nd SW Loring AFB, MA; Andersen AFB, Guam				
POSITION	NAME	STATUS		
Pilot	Capt. John D. Ellinger	Recovered		
Co-Pilot	Capt. Lawrence A Casazza	Recovered		
Radar Navigator	Major Charles E. Archie	Recovered		
Navigator	1st Lt. Robert A Clement	Recovered		
EWO	Capt. Silverio A. Barroqueiro	Recovered		

Gunner	TSgt. George H Schryer	Recovered
	B-52 D "Orange 03" 99th BW, 307th SW	
	Westover AFB, MA; Utapao, Thailand	
POSITION	NAME	STATUS
Pilot	Major John F. Stuart 🜟 📖	KIA
Co-Pilot	1st Lt. Paul L. Granger	POW
Radar Navigator	Major Randolph A. Perry 🜟 📖	KIA
Navigator	Capt. Thomas J. Klomann	POW
EWO	Capt. Irwin S. Lerner 🜟 📖	KIA
Gunner	MSgt. Arthur V. McLaughlin 🜟 📖	KIA/MIA
	B-52 D "Straw 02"	
	306th BW, 43rd SW March AFB, CA; Andersen AFB, Guam	
POSITION	NAME	STATUS
Pilot	Capt. Deverl H. Johnson	Recovered
Co-Pilot	1st Lt. James T. Farmer	Recovered
Radar Navigator	Major Frank A Gould 🔀 🔠	MIA
Navigator	Capt. Vincent F. Russo	Recovered
EWO	Capt. Paul J. Fairbanks	Recovered
Gunner	TSgt. James R. Barclift	Recovered
	B-52 G "Olive 01" 92nd BW, 72nd SW	
Fairchild A	FB, WA; Blytheville AFB, AR; Andersen AFB, Guan	n _
POSITION	NAME	STATUS
Pilot	Lt. Col. James Y. Nagahiro	POW
Co-Pilot	Capt. Donovan K. Walters	KIA
Radar Navigator	Major Edward H. Johnson 🜟 _	KIA
Navigator	Capt. Lynn R. Beens	POW
EWO	Capt. Robert R. Lynn 🜟 _	KIA
Gunner	A1C Charles J Bebus 🜟 _	KIA
Deputy Airborne Commander	Lt. Col. Keith R. Heggen 🜟 _	POW - died after capture
	B-52 G "Tan 03"	
	97th BW, 72nd SW Blytheville AFB, AR; Andersen AFB, Guam	
POSITION	NAME	STATUS

Pilot	Capt. Randall J. Craddock	KIA
Co-Pilot	Capt. George B. Lockhart	KIA
Radar Navigator	Major Bobby A. Kirby	KIA
Navigator	1st Lt. Charles E. Darr	KIA
EWO	Capt. Ronald D. Perry	KIA
Gunner	SSgt. James L. Lollar	POW
	A-6 A VA-196, USN USS Enterprise	
POSITION	NAME	STATUS
	Cdr. Gordon R. Nakagawa	POW
	Lt. Kenneth Hill Higdon	POW
	DAY 4	
	December 21, 1972 B-52 D "Scarlet 03"	
	22nd BW, 307th SW	
	March AFB, CA; Utapao, Thailand	
POSITION	NAME	STATUS
Pilot	Capt. Peter J. Giroux	POW
Co-Pilot	Capt. Thomas W. Bennet, Jr	KIA
Radar Navigator	Lt Col. Gerald W. Alley	KIA
Navigator	1st Lt. Joe Copack, Jr	KIA
EWO	Capt. Peter P. Camerota	POW
Gunner	MSgt. Louis L. LeBlanc	POW
	B-52 D "Blue 01" 7th BW, 307th SW Carswell AFB, TX; Utapao, Thailand	
POSITION	NAME	STATUS
Pilot	Lt. Col. John H. Yuill	POW
Co-Pilot	Capt. David L. Drummond	POW
Radar Navigator	Lt. Col. Louis H. Bernasconi	POW
Navigator	1st Lt. William T. Mayall	POW
EWO	Lt. Col. William W. Conlee	POW
Gunner	SSgt. Gary L. Morgan	POW
	A-6 A VA-75, USN USS Saratoga	
POSITION	NAME	STATUS

	Lt. Cdr Robert Stewart Graustein	KIA		
	Lt Cdr Barton Scott Wade	KIA		
	AC-130 A 16th SOS, 56th SOW Ubon, Thailand			
POSITION	NAME	STATUS		
	Capt. Harry Roy Lagerwall	KIA		
	Capt. Stanley Neal Kroboth	KIA		
	Major Paul Oswald Meder 🖈 🔠	KIA		
	Major Francis Anthony Walsh, Jr 💉 🔠	KIA		
	Capt. Joel Ray Birch	KIA		
	Capt. Thomas Trammell Hart, III 💉 🔠	KIA		
	Capt. Robert Leonel Liles, Jr.	KIA		
	2nd Lt. George D. MacDonald 💉 🔠	KIA		
	1st Lt. Delma Ernest Dickens	KIA		
	A1C Charles Frederick Fenter	KIA		
	TSgt. Robert Thomas Elliott	KIA		
	TSgt. John Quitman Winningham *	KIA		
	A1C Rollie Keith Reaid *	KIA		
	Sgt. Richard Williams	Recovered		
	Sgt. Carl E. Stevens	Recovered		
	DAY 5 December 22, 1972			
	F-111 A "Jackal 33" 429th TFS, 474th TFW Takhli, Thailand			
POSITION	NAME	STATUS		
	Capt. Robert D. Sponeybarger	POW		
	1st Lt. William W. Wilson	POW		
	DAY 6 December 23, 1972			
	F-4 J VMFA-333, USMC USS America			
POSITION	NAME	STATUS		

	Lt. Col. John K Cochran	Recovered
	Major H.S. Carr	Recovered
	EB-66 B 42nd TEWS, 388th TFS Korat, Thailand	
POSITION	NAME	STATUS
	Major Henry James Repeta	KIA
	Major George Frederick Sasser *	KIA
	Capt. William Robert Baldwin	KIA
	DAY 7 December 24, 1972	
	A-7 D 353rd TFS, 354th TFW Korat, Thailand	
POSITION	NAME	STATUS
Mid-air collision with Raven 01 - "Bird Dog"	Capt. Charles Francis Riess	POW
	Capt. Paul Vernon Jackson, III 🜟 🔠	KIA
	A-7 E VA-113, USN USS Ranger	
POSITION	NAME	STATUS
	Lt. Philip Spratt Clark, Jr.	KIA
	DAY 8 December 26, 1972	
Kincheloe A	B-52 D "Ebony 02" 449th BW, 307th SW AFB, MI; Seymour Johnson AFB, NC; Utapao, Thailar	nd
POSITION	NAME	STATUS
Pilot	Capt. Robert J. Morris, Jr.	KIA
Co-Pilot	1st Lt. Robert M. Hudson	POW
Radar Navigator	Capt. Michael H. LaBeau	POW
Navigator	1st Lt. Duane P. Vavroch	POW
EWO	Major Nutter J. Wimbrow, III	KIA
Gunner	TSgt. James R.Cook	POW
Robins	B-52 D "Ash 01" 22nd BW, 307th SW AFB, GA; Westover AFB, MA; Utapao Thailand	
POSITION	NAME	STATUS

Pilot	Capt. James M. Turner	KIA
Co-Pilot	1st Lt. Robert J. Hymel	Recovered
Dadan Navigatan		KIA
Radar Navigator	Lt. Col. Donald A Joyner	NIA
Navigator	Major Lawrence J. Marshall	KIA
EWO	Capt. Roy T. Tabler	KIA
Gunner	TSgt. Spencer L. Grippin	Recovered
	DAY 9	
	December 27, 1972 B-52 D "Cobalt 01"	
	7th BW, 43rd SW	
N	1ather AFB, CA; March AFB, CA; Andersen AFB, Guan	1
POSITION	NAME	STATUS
Pilot	Capt. Frank D. Lewis	POW
Co-Pilot	Capt. Samuel B. Cusimano	POW
Radar Navigator	Major James C. Condon	POW
Navigator	1st Lt. Ben L. Fryer 🜟 🔣	KIA
EWO	Major Allen L Johnson	KIA
Gunner	MSgt. James C. Gough	POW
	B-52 D "Ash 02"	
F	28th BW, 307th SW Ellsworth AFB, SD; Carswell AFB, TX; Utapao, Thailand	
POSITION	NAME	STATUS
Pilot	Capt. John Mize	Recovered
Co-Pilot	Capt. Terrence J. Gruters	Recovered
Radar Navigator	Capt. William E. North	Recovered
Navigator	1st Lt. William L. Robinson	Recovered
EWO	Capt. Dennis W. Anderson	Recovered
Gunner	TSgt. Peter E. Whalen	Recovered
Cumici	F-4 E "Desoto 03 "	Treesvered
	13th TFS, 432nd TRW	
	Udorn, Thailand	
POSITION	NAME	STATUS
	Major Carl H. Jeffcoat	POW
	1st Lt. Jack R. Trimble	POW
	HH-53 "Jolly 73 (1)	
	40th ARRS	

Nakon Phanom, Thailand

AC	Rick Shapiro	Recovered
Co-Pilot	Miguel Pierra	Recovered
Flight Engineer	Chuck Rouhier	Recovered
PJ	John Carlson	Recovered
PJ	Robert Jones	Recovered
Photographer	Jim Cockerill	Recovered
	F-4E "Vega 02" Udorn AB, Thailand	
	Capt John Wesley Anderson	POW
	1st Lt Brian Ward	POW
	A-6 A VMA (AW)-533, MAG-15, USMC Nam Phong, Thailand	
POSITION	NAME	STATUS
	Capt. Ralph Jim Chipman 💉 📖	KIA
	1st Lt. Ronald Wayne Forrester 💉 📖	KIA
	DAY 10 December 28, 1972	
	RA-5C RVAH-13, USN USS Enterprise	
POSITION	NAME	STATUS
	Lt. Cdr Alfred Howard Agnew	POW
	Lt. Michael Firestone Haifley	KIA
	DAY 11 December 29, 1972	
	EA-6 A VMCJ-2, USMC NAS Cubi Point, Phillippines	
POSITION	NAME	STATUS
	Capt. Hal L. Baker	Recovered
Co-Pilot	MSgt. Frederick E. Killebres	Recovered
* *		1 111111

BIBLIOGRAPHY

- Boyne, Walter J. "LINEBACKER II," Air Force Magazine (November 1997): 50-57.
- Clark, Gregory S. Linebacker II: Achieving Strategic Surprise. Newport, RI: Naval War College, 2002.
- Clodfelter, Mark, "Nixon and the Air Weapon," *An American Dilemma: Vietnam, 1964-1973*, ed. Dennis E. Showalter and John G. Albert. Chicago: Imprint Publisher, 1993.
- Eschmann, Karl J. *LINEBACKER: The Untold Story of the Air Raids over North Vietnam.* New York: Ballantine Books, 1989.
- Eschmann, Karl J. *The Role of Tactical Air Cupport: LINEBACKER II.* Maxwell Air Force Base, AL: Air War College, 1985.
- Futrell, Robert Frank. *Ideas, Concepts, and Doctrine: Basic Thinking in the United States Air Force,* 1961-1984. Maxwell Air Force Base, AL: Air University Press, 1989.
- Harder, Robert O. *Flying from the Black Hole: The B-52 Navigator Bombardiers of Vietnam.* Annapolis, MD: Naval Institute Press, 2013.
- Head, William P. War From Above the Clouds: B-52 Operations during the Second Indochina War and the Effects of the Air War on Theory and Practice. Maxwell Air Force Base, AL: Air University Press, 2002.
- Hearings Before Sub-Committees of the Committee on Appropriations, House of Representatives, 93rd Congress, Tuesday, January 18, 1973.
- Hopkins, Charles K. SAC Bomber Operations in the Southeast Asia War. Offutt Air Force Base, NB: Strategic Air Command, 1983.
- Jackson, George R. *Linebacker II—An Examination of Strategic Use of Airpower*. Maxwell Air Force Base, AL: Air War College, n.d.
- Johnson, Maj Calvin R. Linebacker Operations. Washington, D.C.: Office of Air Force History, 1974.
- Karnow, Stanley. Vietnam: A History. New York: Penguin Books, 1984.
- Kissinger, Henry. The White House Years. Boston: Little, Brown, & Co., 1979.
- McCarthy, James R., George B. Allison, and Robert E. Rayfield. *Linebacker II*, vol. 6, *A View from the Rock*, USAF Southeast Asia Series, monograph 8. Maxwell Air Force Base, AL: Air War College, 1979.
- Michel III, Marshall L. *The 11 Days of Christmas: America's Last Vietnam Battle*. New York: Encounter Books, 2002.
- Momyer, William W. Air Power in Three Wars. Washington, D.C.: Government Printing Office, 1978.
- Morrocco, John. Rain of Fire: Air War, 1969-1973. Boston: Boston Publishing Co., 1986.
- New York Times, January 25, 1973.
- Nixon, Richard. No More Vietnams. New York: Arbor House, 1985.

- Nixon tapes, October 26, 1972, telephone conversations. WHCA Sound Recordings Collection H-665, Richard M. Nixon Presidential Library and Museum, Yorba Linda, CA.
- PACAF. *Linebacker Operations, September-December 1972*. Hickam AFB, HI: PACAF HQ, Project CHECO/CH Division, Seventh Air Force, 1974.
- PACAF. *Linebacker II Air Operations Summary, December 18-29 72*. Hickam AFB, HI: PACAF HQ, Project CHECO/CH Division, Seventh Air Force, March 1973.
- Strategic Air Command. *Chronology of SAC Participation in LINEBACKER II*. Offut Air Force Base, NB: SAC History Office, 1973.
- Smith, John T. *The Linebacker Raids: The Bombing of North Vietnam 1972*. London, Arms and Armour Press, 1998.
- Sorley, Lewis. A Better War: The Unexamined Victories and Final Tragedy of America's Last Years in Vietnam. New York: Harcourt Brace and Company, 1999.
- Summers, Jr., Harry G. Historical Atlas of the Vietnam War. Boston, MA: Houghton Mifflin, 1995.
- Supplemental History on Linebacker II (18-29) December, 43rd Strategic Wing and Strategic Provisional Wing, 72nd vol I. Andersen Air Force Base, Guam: 30 July 1972.
- Teixeira, Leonard D. G. *Linebacker II: A Strategic and Tactical Case Study*. Maxwell Air Force Base, AL: Air War College, 1990.
- The War Powers Resolution, 50 U.S.C. 1541–1548.
- Tilford, Jr., Earl H. *Crosswinds: The Air Force's Setup in Vietnam.* College Station, TX: Texas A&M University, 1993.
- Tilford, Jr., Earl H. SETUP: What the Air Force Did in Vietnam and Why. Maxwell Air Force Base, AL: Air University Press, 1991.
- USAF interview of Lieutenant General Gerald W. Johnson by Charles K. Hopkins, April 3, 1973, AFHRA, File K239.0512-813.
- Wolff, Robert E., "Linebacker II: A Pilot's Perspective," Air Force Magazine (September 1979): 86-91.