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AIR VIETNAM
KORAT
THAILAND

THAILAND
KORAT

THE SAIGON POST

Tuesday, March 24, 1953

Phnom Penh Postponed

Agas Talks

TEN DIABERS



VAN-CANH

THE NEWEST TELEPHONE

STATION

FOR COMMUNICATIONS

IN SAIGON

FOR THE U.S. ARMY

AND NAVAL AIR FORCE

AND MARINE CORPS

AND AIR FORCE

AND NAVY

AND MARINE CORPS

AND AIR FORCE

AND NAVY

Background photo by Paul Kennedy

THE VIETNAM WAR ALMANAC

By John T. Correll



To those who fought there, it seems like yesterday, but it was 40 years ago this August that the US Air Force deployed in fighting strength to Southeast Asia. The Air Force and the Navy flew their initial combat missions in late 1964 and early 1965.

The Vietnam War began in earnest in March 1965 with Operation Rolling Thunder, which sent US aircraft on strikes against targets in North Vietnam. Soon, our ground forces were engaged as well. Eight years would pass before US forces withdrew from the war, which had by then claimed 47,378 American lives.

It was a war we didn't win but one in which the US armed forces performed with honor, courage, dedication, and capability. On the 40th anniversary of its beginning, this almanac collects the numbers, the dates, and the key facts of the US Air Force experience in that war.

Southeast Asia



PEOPLE

US Military Personnel in Southeast Asia

	South Vietnam		Thailand	
	Air Force	All Services	Air Force	All Services
1960	68	875	44	319
1961	1,006	3,164	57	542
1962	2,429	11,326	1,212	4,353
1963	4,630	16,263	1,086	4,126
1964	6,604	23,310	2,943	6,505
1965	20,620	184,314	9,117	14,107
1966	52,913	385,278	26,113	34,489
1967	55,908	485,587	33,395	44,517
1968	58,434	536,134	35,791	47,631
1969	58,422	475,219	32,901	44,470
1970	43,053	334,591	27,858	36,110
1971	28,791	156,776	26,851	31,916
1972	7,608	24,172	35,856	43,168
June 1973	14	49	35,135	42,469



Forward air controllers directed air attacks in Vietnam.

The American military presence in Southeast Asia peaked in 1968. "Vietnamization" of the war began the next year, with the first US troop withdrawals in July 1969. All told, some 3.4 million troops from all branches of the armed services spent time on duty in Southeast Asia. Except for 1973, the figures on this chart are as of Dec. 31 each year. The "All Services" totals include Air Force, Army, Navy, Marine Corps, and Coast Guard.

Sources: MACV, MACTHAI, Department of Defense.



Pilots and crew chiefs worked together closely, preparing for air operations over Southeast Asia.



Security forces maintained a constant vigil against insurgent attacks on USAF bases.

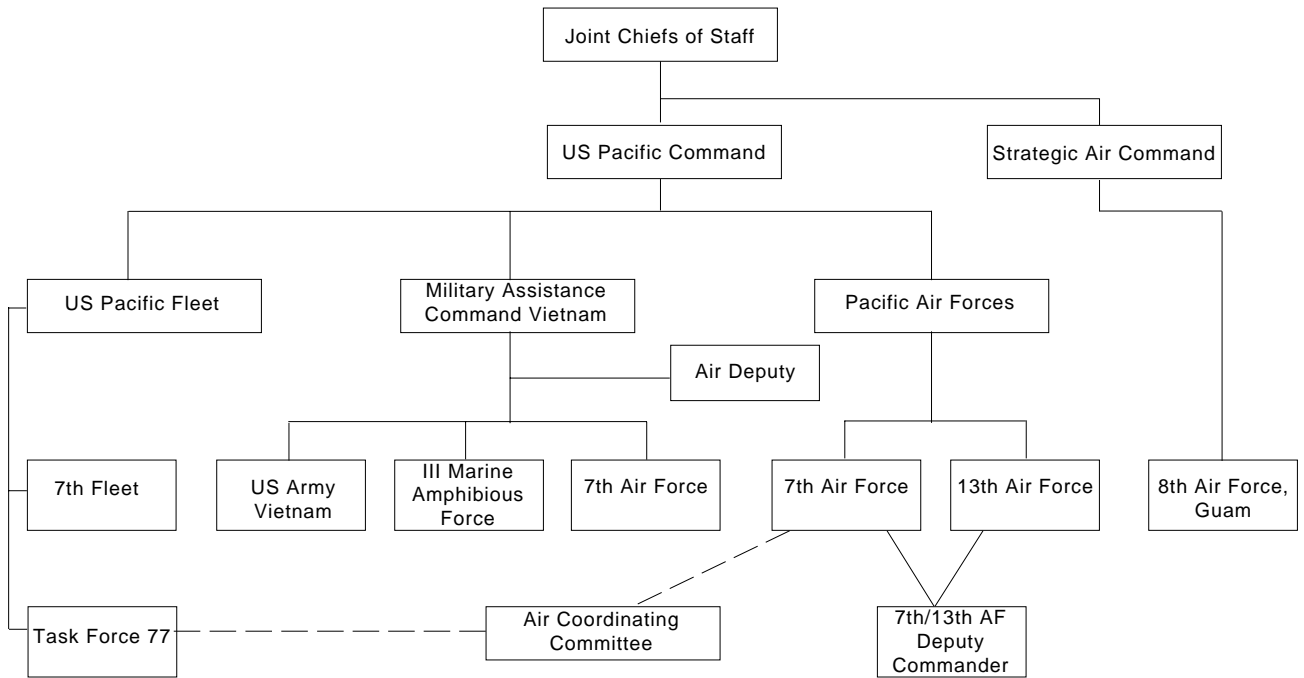


A1C Gale Mobley from the Medical Civic Action Program innoculates a Vietnamese child.

ORGANIZATION

Lines of Command

1966-72



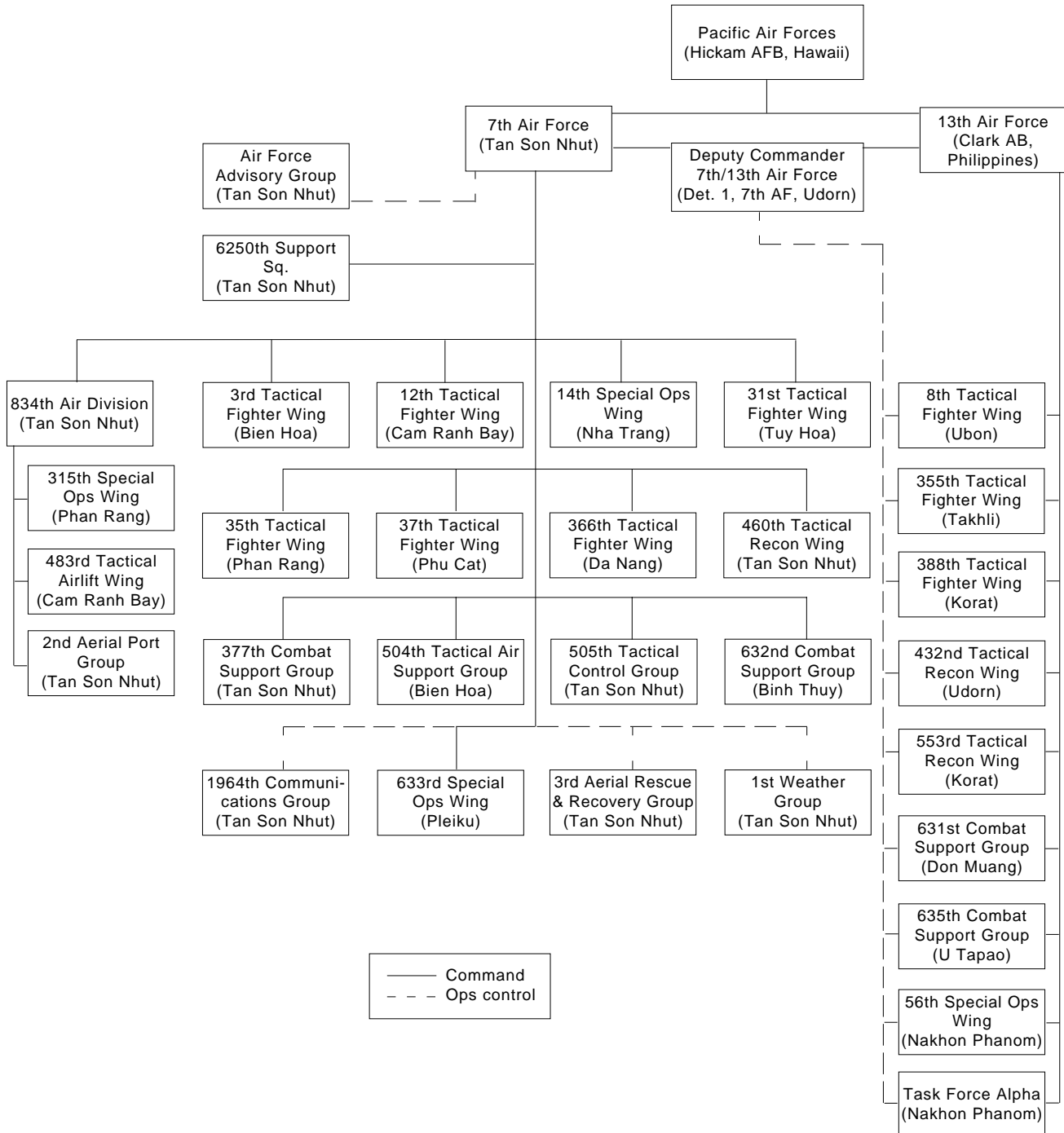
Source: Gen. William W. Momyer, USAF (Ret.), *Air Power in Three Wars*.

Military Assistance Command Vietnam was a subunified command of US Pacific Command, with Army, Marine Corps, and Air Force elements. MACV controlled the war in South Vietnam, but Pacific Command in Hawaii retained control of the war in North Vietnam, via Pacific Air Forces and Pacific Fleet. The commander of 7th Air Force was chairman of a coordinating committee for key operations in North Vietnam.

Seventh Air Force in Saigon was under operational control of MACV for operations in South Vietnam and Route Pack 1 (the southern part of North Vietnam), but 7th Air Force was controlled by PACAF for operations in North Vietnam (Route Packs 5 and 6A). Air Force wings in Thailand were part of 13th Air Force in the Philippines, but were under the operational control of 7th Air Force in Saigon. At Udorn AB, Thailand, 7th/13th Air Force was headed by a general officer who was deputy commander of both 7th and 13th Air Forces. Aircraft based in South Vietnam were used primarily in South Vietnam. Aircraft in Thailand were used in North Vietnam and Laos. Strategic Air Command retained control of B-52 bombers, tankers, and strategic reconnaissance aircraft.

7th Air Force and 7th/13th Air Force

July 15, 1969



Source: Carl Berger, *The United States Air Force in Southeast Asia, 1961-1973* (USAF).

The Commanders

US Pacific Command, Honolulu

Adm. Harry D. Felt	July 31, 1958	June 30, 1964
Adm. U.S. Grant Sharp	June 30, 1964	July 31, 1968
Adm. John S. McCain Jr.	July 31, 1968	Sept. 1, 1972
Adm. Noel A.M. Gayler	Sept. 1, 1972	Aug. 31, 1976

Pacific Air Forces, Honolulu

Gen Hunter Harris Jr.	Aug. 1, 1964	Jan. 31, 1967
Gen. John D. Ryan	Feb. 1, 1967	July 31, 1968
Gen. Joseph J. Nazzaro	Aug. 1, 1968	July 31, 1971
Gen. Lucius D. Clay	Aug. 1, 1971	Sept. 30, 1973
Gen. John W. Vogt Jr.	Oct. 1, 1973	June 30, 1974

Military Assistance Command Vietnam, Saigon

Gen. Paul D. Harkins	Feb. 6, 1962	June 20, 1964
Gen. William C. Westmoreland	June 20, 1964	July 1, 1968
Gen. Creighton W. Abrams	July 1, 1968	June 29, 1970
Gen. Frederick C. Weyland	June 29, 1970	March 29, 1973

7th Air Force, Tan Son Nhut AB, Vietnam

Organized April 1, 1966, replacing 2nd Air Division

Lt. Gen. Joseph H. Moore*	April 1, 1966	June 30, 1966
Gen. William W. Momyer	July 1, 1966	July 31, 1968
Gen. George S. Brown	Aug. 1, 1968	Aug. 31, 1970
Gen. Lucius D. Clay Jr.	Sept. 1, 1970	July 31, 1971
Gen. John D. Lavelle	Aug. 1, 1971	April 6, 1972
Gen. John W. Vogt Jr.	April 7, 1972	Sept. 30, 1973

*Moore was commander of 2nd Air Division from Jan. 21, 1963, to March 31, 1966. Seventh Air Force left Vietnam and moved its headquarters to Nakhon Phanom AB, Thailand, in March 1973.

7th/13th Air Force, Udorn AB, Thailand

Maj. Gen. Charles R. Bond Jr.	Jan. 6, 1966	March 31, 1967
Maj. Gen. William C. Lindley Jr.	June 1, 1967	May 31, 1968
Maj. Gen. Louis T. Seith	June 1, 1968	May 31, 1969
Maj. Gen. Robert L. Petit	June 1, 1969	March 5, 1970
Maj. Gen. James F. Kirkendall	April 15, 1970	Oct. 11, 1970
Maj. Gen. Andrew J. Evans Jr.	Oct. 12, 1970	June 30, 1971
Maj. Gen. DeWitt R. Searles	July 1, 1971	Sept. 8, 1972
Maj. Gen. James D. Hughes	Sept. 9, 1972	April 19, 1973

The commander was a deputy commander of both 7th Air Force and 13th Air Force. In March 1973, 7th/13th Air Force reverted to Det. 7 of 13th Air Force.



PACAF Commander Gen. John Ryan (l) meets with 7th Air Force chief Lt. Gen. William Momyer.



Army Gen. William Westmoreland (l) and Army Gen. Creighton Abrams (r) pin a fourth star on USAF Gen. William Momyer.



Gen. Lucius Clay Jr. (l) transfers command of 7th Air Force to Gen. John Lavelle in 1971.

USAF ORDER OF BATTLE

USAF Aircraft in Thailand and South Vietnam

	All Aircraft	F-105	F-4	B-52
1965	460	79	18	—
1966	889	126	188	—
1967	1,429	129	182	10
1968	1,768	108	218	28
1969	1,840	70	288	39
1970	1,602	65	212	44
1971	1,132	12	216	44
1972	989	30	355	54
1973	675	24	218	53

Figures are as of June 30 each year. Additional B-52s were based on Guam, the number varying from about 30 in 1965 to about 150 in 1972. In Thailand, the attack force included 65 A-7s and 45 F-111s by late 1972.

Source: Wayne Thompson, *To Hanoi and Back* (Smithsonian/USAF).



SAC B-52 bombers were the work-horses of the Vietnam War.



The F-105 Thunderchief was a key factor early in the war.

USAF Squadrons in Southeast Asia

	In 1968		In 1972	
	Squadrons	Aircraft	Squadrons	Aircraft
Vietnam				
Tactical Fighter/Bomber/Attack	23	408	—	14
Special Operations	11	204	1	24
Tactical Airlift	7	167	1	56
Tactical Air Control	6	280	2	125
Recon/EW	6	101	2	37
Rescue	3	40	2	18
Total Vietnam	56	1,200	8	274
Thailand				
Strategic Bombers, Tankers	2	66	—	142
Tactical Fighter/Bomber	13	239	11	371
Special Operations	5	85	4	45
Tactical Airlift	—	12	—	8
Tactical Air Control	2	41	3	58
Recon/EW/Drone Support	6	104	2	61
Rescue	1	21	1	30
Total Thailand	29	568	21	715
Total Southeast Asia	85	1,768	29	989

Figures are as of the end of FY68 and FY72.

Source: USAF Management Summary Southeast Asia, September 1973.

USAF Attack Aircraft

July 1968-December 1972

Bases in South Vietnam		1968		1969		1970		1971		1972	
		July 31	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30	Dec. 31
	A-1	3				2	2				
	AC-47	5	5	5							
	AC-119									4	5
	F-100	47	55	50	22	19					
	AC-47	4	3								
	F-4	54	49	47	42						
	A-1		2	3	11	9	2	2	2	2	
	AC-47	4	4	5							
	AC-119				6	9	8	4	5	3	15
	F-4	55	53	57	47	48	48	55	55		
	AC-47	7	9	13							
	AC-119			7							
	AC-47	3	3								
	AC-119			6	11	9	9	13			
	B-57	23	15	9							
	F-100	68	66	67	77	65	75	59			
	AC-47	4	3	3							
	AC-119				3	6	1				
	F-4			34	34	30	32	36			
	F-100	69	65								
	A-1	18	18	17							
	AC-47	3	4	3							
	AC-119			5	5	5	9	10			
	AC-119				4						
	F-100	88	74	86	88	86					
		455	428	417	350	288	186	179	62	9	20

Bases in Thailand

Korat	A-7										67
	F-4		20	40	34	32	27	32	38	53	31
	F-105	55	34	18			11	12	14	30	24
Nakhon Phanom	A-1	33	39	54	70	47	25	25	19	16	
	A-26	12	17	16							
	F-105						5	7	11	8	
Takhli	F-4									96	
	F-105	55	55	54	74	65	55				
	F-111										47
Ubon	A-1					2	1				
	AC-130	1	4	4	7	3	10	8	18	12	13
	B-57						9	10	10		
	F-4	74	72	73	67	67	73	56	73	100	106
Udorn	AC-47			2	3						
	AC-119					3					
	F-4	39	40	35	35	34	27	37	42	104	121
Total Thailand		269	281	296	290	253	243	187	225	419	409
Grand Total		724	709	713	640	541	429	366	287	428	429

Source: Col. Perry L. Lamy, Air War College, 1995.

OPERATIONS

Notable Air Operations

Operation	Dates	Description
Farm Gate	Oct. 1, 1961-July 28, 1963	Training and support for South Vietnamese Air Force.
Ranch Hand	Jan. 7, 1962-Jan. 7, 1971	Defoliation of jungle to expose Viet Cong sanctuaries, movements, and ambushes.
Barrel Roll	Dec. 14-April 17, 1964	Support of ground forces in northern Laos.
Flaming Dart	Feb. 7-11, 1965	Precursor to Rolling Thunder. Air strikes against North Vietnam in reprisal for Viet Cong attacks on US bases.
Rolling Thunder	March 2, 1965-Oct. 31, 1968	Sustained air campaign over North Vietnam.
Steel Tiger	April 3, 1965-Feb. 21, 1973	Interdiction of Ho Chi Minh Trail.
Arc Light	June 18, 1965-Aug. 15, 1973	Strategic Air Command B-52 strikes in Southeast Asia.
Bolo	Jan. 2, 1967	"MiG Sweep" in which seven North Vietnamese aircraft are shot down in 12 minutes.
Eagle Thrust	Nov. 17-Dec. 29, 1967	Huge airlift of troops and cargo from Ft. Campbell, Ky., to Bien Hoa.
Commando Hunt	Nov. 1, 1968-March 30, 1972	Intensified air strikes in southern Laos.
The "Menus"	March 18, 1969-May 1970	Covert bombing of Cambodia; series of missions named Breakfast, Lunch, Dinner, Snack, Supper, and Dessert.
Linebacker I	May 10-Oct. 23, 1972	Resumed bombing of North Vietnam, almost four years after end of Rolling Thunder.
Linebacker II	Dec. 18-29, 1972	Massive air strikes on Hanoi and Haiphong.

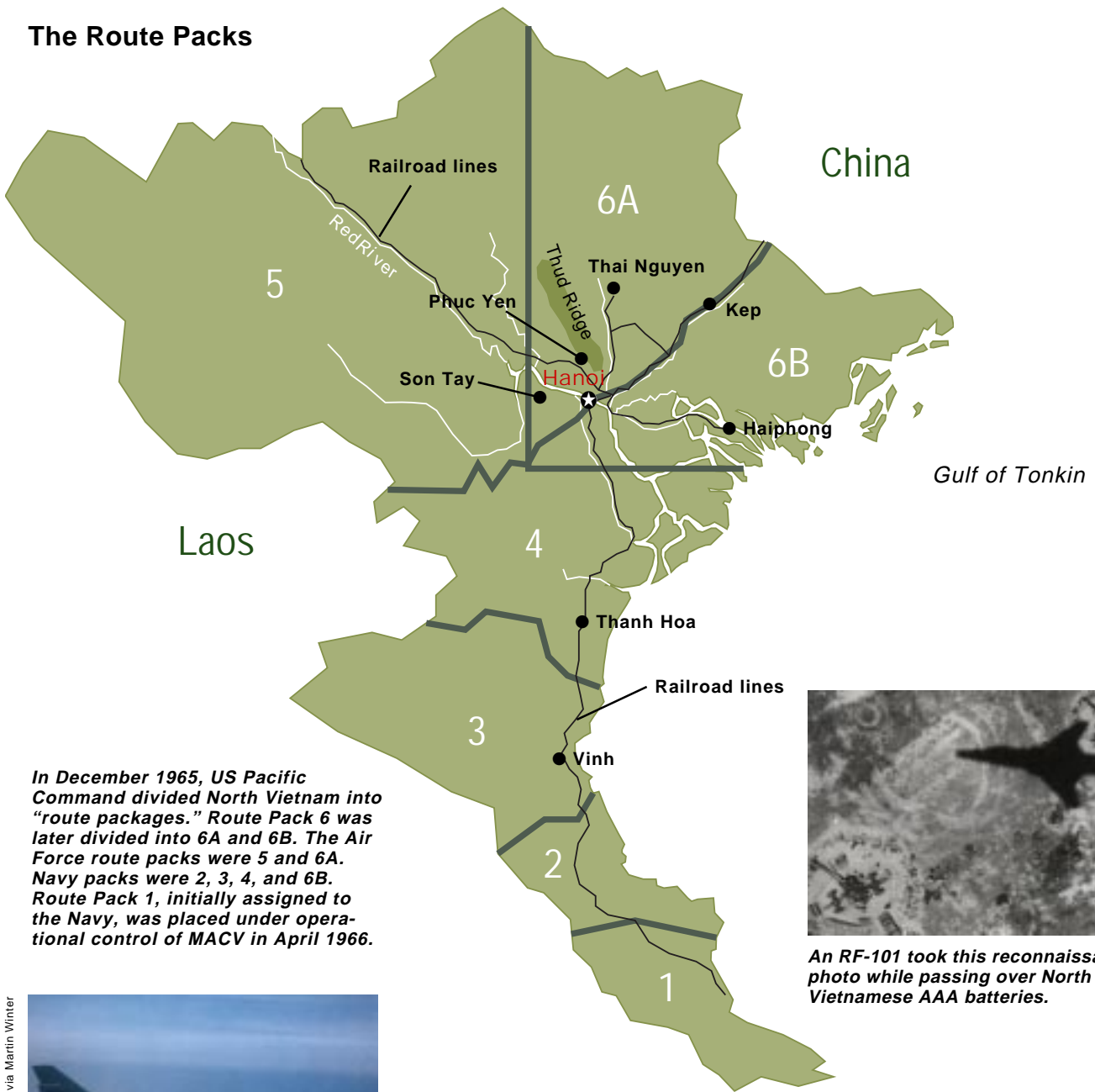
Attack Sorties in Southeast Asia

By US Air Force, Navy, Marine Corps, and South Vietnamese Air Force

	1966	1967	1968	1969	1970	1971	1972	January 1973
In North Vietnam								
USAF	44,482	54,316	41,057	213	699	1,195	16,785	729
USN	32,954	42,587	40,848	72	404	510	26,754	787
USMC	3,695	8,672	10,326	—	10	—	459	44
VNAF	814	127	—	—	—	—	—	—
In South Vietnam								
USAF	70,646	116,560	134,890	96,524	48,064	11,842	40,322	1,303
USN	21,610	443	5,427	5,744	3,895	2,124	23,505	4,149
USMC	32,430	52,825	64,933	49,823	24,146	2,250	13,833	1,160
VNAF	31,632	29,687	22,817	36,217	28,249	30,693	48,569	4,429
Other SEA								
Laos, Cambodia	48,469	44,450	75,274	144,343	125,120	116,790	45,608	5,751
B-52	5,235	9,686	20,568	19,498	15,103	12,554	28,380	2,769
Total	291,967	359,353	416,140	352,434	245,690	177,958	244,215	21,121

Source: Department of Defense report, November 1973.

The Route Packs



In December 1965, US Pacific Command divided North Vietnam into "route packages." Route Pack 6 was later divided into 6A and 6B. The Air Force route packs were 5 and 6A. Navy packs were 2, 3, 4, and 6B. Route Pack 1, initially assigned to the Navy, was placed under operational control of MACV in April 1966.



An RF-101 took this reconnaissance photo while passing over North Vietnamese AAA batteries.

Photo via Martin Winter



The F-100 Super Sabre performed close air support.



Photo via Martin Winter

An F-4 was armed with a new weapon that would change warfare—the laser guided bomb.

USAF Sorties in North Vietnam

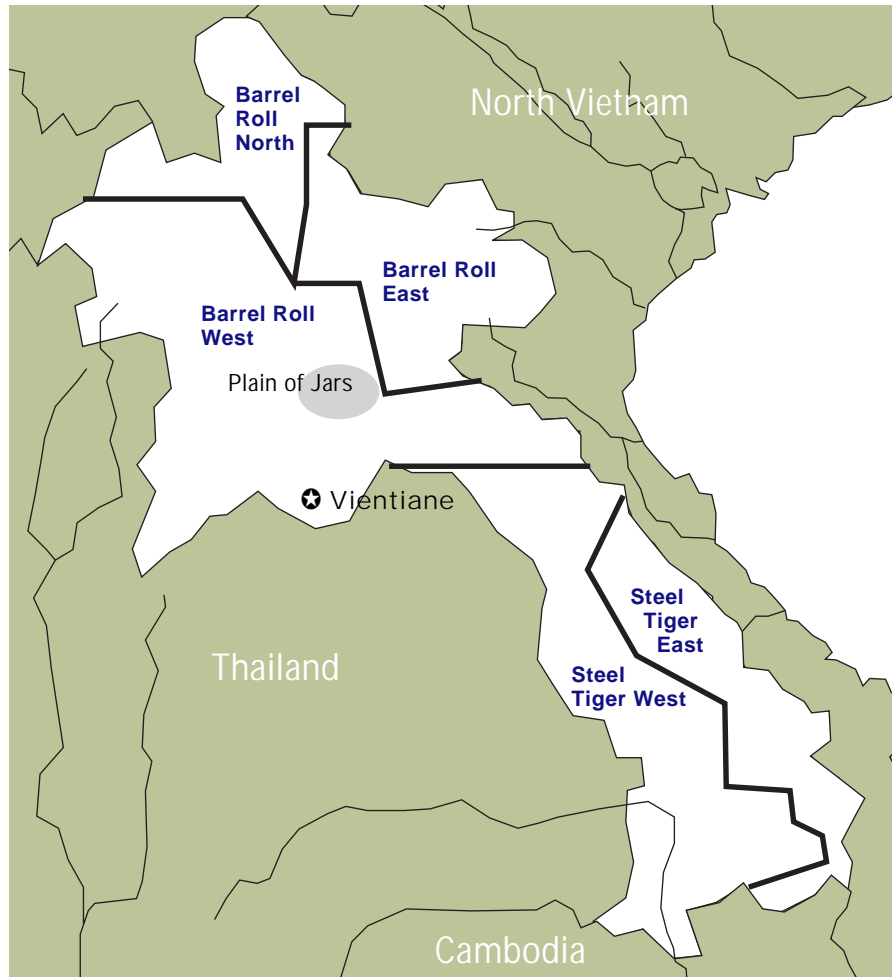
	Attack		CAP/ Escort	Recce	Combat Support	Total
	Fighters	B-52s				
1965	11,599	—	5,675	3,294	5,554	26,122
1966	44,482	280	9,041	7,910	16,924	78,637
1967	54,312	1,364	5,617	11,714	28,078	101,089
1968	41,057	686	3,015	7,896	24,027	76,681
1969	213	—	939	2,905	3,965	8,022
1970	699	—	2,806	3,320	4,849	11,674
1971	1,195	—	3,419	2,044	2,924	9,582
1972	17,096	4,440	9,658	1,965	4,655	37,815
1973	755	533	526	132	381	2,327
Total	171,408	7,303	40,696	41,180	91,357	351,949

Five gunship sorties (four in 1967, one in 1972) have been added to the "Total" column.
Source: Wayne Thompson, *To Hanoi and Back* (Smithsonian/USAF).

Air Operations in Laos

"Barrel Roll" in northern Laos and "Steel Tiger" in the south referred both to operations and to geographic designations. Steel Tiger East—also called "Tiger Hound"—was considered an extension of the fight in South Vietnam and was under the operational control of MACV. Pacific Command retained control in the rest of the country. The US ambassador to Laos exerted strong influence and constraints on all operations in Laos. Air operations, both south and north, were conducted by 7th Air Force, employing aircraft based in Thailand and South Vietnam. SAC B-52s also operated extensively in Laos.

Sources: Col. Perry L. Lamy, Air War College, 1995; Gen. William W. Momyer, USAF (Ret.), *Air Power in Three Wars* (USAF).



USAF MiG Victories

by Aircraft and Weapon

Aircraft	Weapons/Tactics	MiG-17	MiG-19	MiG-21	Total
F-4C	AIM-7 Sparrow	4	0	10	14
	AIM-9 Sidewinder	12	0	10	22
	20 mm gun	3	0	1	4
	Maneuvering tactics	2	0	0	2
F-4D	AIM-4 Falcon	4	0	1	5
	AIM-7 Sparrow	4	2	20	26
	AIM-9 Sidewinder	0	2	3	5
	20 mm gun	4	0	2	6
	Maneuvering tactics	0	0	2	2
F-4E	AIM-7 Sparrow	0	2	8	10
	AIM-9 Sidewinder	0	0	4	4
	AIM-9/20 mm gun (combined)	0	0	1	1
	20 mm gun	0	1	4	5
	Maneuvering tactics	0	1	0	1
F-4D/F-105F	20 mm gun	1	0	0	1
F-105D	20 mm gun	22	0	0	22
	AIM-9 Sidewinder	2	0	0	2
	AIM-9/20 mm gun (combined)	1	0	0	1
F-105F	20 mm gun	2	0	0	2
B-52D	.50 cal. gun	0	0	2	2
Totals		61	8	68	137



Maj. Ralph Kuster shot down this MiG-17 with his F-105's 20 mm guns.

Photo via Martin Winter

The Air Force fighter most successful against the MiGs in aerial combat was the F-4. The radar-guided AIM-7 Sparrow accounted for more of the victories than any other weapon.

Source: Carl Berger, *Aces & Aerial Victories* (USAF).

Bombing Halts and Pauses in Air Operations Over North Vietnam

May 12-May 18, 1965.

Purpose was to test Hanoi's response and willingness to negotiate.

Dec. 24, 1965-Jan. 31, 1966.

Christmas cease-fire, extended by Lyndon B. Johnson's "peace initiative." Hanoi failed to respond.

Feb. 8-13, 1967.

Cease-fire for Tet religious holiday. Perception was that Hanoi might be willing to negotiate. Instead, North Vietnam took the opportunity to move 25,000 tons of war materiel south.

Aug. 24-Sept. 4, 1967.

Cessation of attacks around Hanoi.

Jan. 29, 1968.

Unilateral 36-hour cease-fire for Tet. On Jan. 31, North Vietnam and the Viet Cong launched the Tet Offensive against bases all over South Vietnam.

March 31, 1968.

Halt of bombing north of 20th parallel. Under political pressure, the line was moved south to the 19th parallel.

Nov. 1, 1968-April 6, 1972.

Halt of all bombing of North Vietnam. Reconnaissance flights continued and attacks on them led to "protective reaction" strikes.

Jan. 15, 1973.

Suspension of mining, bombing, and other offensive operations against North Vietnam as Paris peace talks approached conclusion.

Jan. 28, 1973.

Cease-fire, prior to US disengagement from the war.

In addition, there were routine halts of 48 hours at Christmas and New Years, 1966-67 and 1967-68.

USAF Bomb Damage Assessment Claims in North Vietnam

	March 1965-October 1968		April 1972-January 1973	
	Destroyed	Damaged	Destroyed	Damaged
Vehicles	5,455	3,469	1,635	869
Tanks	—	—	38	20
Locomotives	17	59	1	6
Rail Rolling Stock	1,036	775	56	32
Watercraft	89	128	221	162
Bridges	1,305	1,794	250	55
Railroads	—	1,464 cuts	—	20 cuts
Roads	—	19,324 cuts	—	36 cuts
Ferry Slips	53	166	—	—
Oil Tanks	‡	‡	2,760	86
Buildings	5,938	4,570	1,207	369
Construction Equipment	—	—	35	32
Aircraft	96	25	36	6
Runways	—	19	‡	‡
AAA Sites	1,682	1,196	217	89
Field Artillery Areas	‡	‡	9	1
SAM Sites	80	93	40	5
Radar Sites	109	152	55	19



A Linebacker II strike by B-52s in December 1972 decimated this rail yard north of Hanoi.

Bomb damage assessment is both difficult and imprecise. These figures are better taken as a distribution of bombing effort rather than as an exact tally of the damage inflicted.

‡Targets bombed but not tallied in this period.

Source: Wayne Thompson, *To Hanoi and Back* (USAF).

USAF Air Munitions Consumption

vs. World War II and Korean War

	Millions of Tons
World War II	2.150
Europe (1.613 million tons)	
Far East (0.537 million tons)	
Korean War	0.454
Vietnam War	6.166

Source: USAF Management Summary Southeast Asia, September 1973.



At left, airmen prepare bombs for loading aboard a B-52. The BUFF at right had the capacity to carry all the bombs pictured.

THE ENEMY

North Vietnamese Air Force Combat Aircraft Inventory

	MiG-15/17	Il-28	MiG-19	MiG-21	Total
August 1964	36				36
December 1964	53				53
May 1965	56	8			64
December 1965	62	6		7	75
April 1966	63	8		15	86
December 1966	50	6		16	72
April 1967	75	6		16	97
December 1967	28			12	40
May 1972	80		33	93	206
October 1972	66		40	39	145



MiG-17s such as these photographed in 1966 were mainstays of the North Vietnamese Air Force.

North Vietnam's aircraft losses were promptly replaced. The MiG-19, supplied by the Chinese, did not appear until after the 1968 bombing halt. Deployment of the Il-28 light bomber in 1965 created concern that it might be used to attack bases in South Vietnam, but that never happened.

Source: Gen. William W. Momyer, USAF (Ret.), *Air Power in Three Wars* (USAF).

North Vietnamese AAA

Number of Guns in Each Route Pack

October 1967–March 1968

Route Pack	1	2	3	4	5	6A	6B	Total
Oct. 24, 1967	1,411	533	550	784	693	2,238	910	7,119
Nov. 29, 1967	1,270	514	525	707	686	2,084	784	6,570
Dec. 20, 1967	1,190	526	539	673	698	2,104	815	6,545
Jan. 10, 1968	1,177	529	561	540	695	2,140	815	6,457
Feb. 10, 1968	1,137	340	418	615	695	2,124	962	6,291
March 20, 1968	1,065	360	440	609	672	1,712	937	5,795

Although the SAM and MiG threats got more attention, about 68 percent of the aircraft losses were to anti-aircraft fire. As of March 20, 1968, North Vietnam had anti-aircraft artillery at 1,158 sites. A total of 5,795 guns were deployed, of which 4,802 were 37 mm to 57 mm and 993 were 85 mm to 100 mm.

Source: Gen. William W. Momyer, USAF (Ret.), *Air Power in Three Wars* (USAF).

North Vietnamese SAM Effectiveness

	Missiles Fired	Aircraft Lost	Effectiveness
1965	194	11	5.7%
1966	1,096	31	2.8%
1967	3,202	56	1.75%
1968	322	3	0.9%
1972	4,244	49	1.15%

North Vietnam deployed the Soviet-built SA-2 Guideline surface-to-air missile in 1965. Its effectiveness diminished as US airmen developed defensive tactics, added electronic countermeasures, and sent "Wild Weasel" aircraft to destroy, deter, and intimidate the SAM batteries. A few SA-3s, effective at lower altitudes, were introduced later in the war, as were shoulder-fired SA-7s, which were deadly against slow-flying aircraft in South Vietnam.

Source: Gen. William W. Momyer, USAF (Ret.), *Air Power in Three Wars* (USAF).



Enemy SAMs were a deadly threat. Shown here is the wreckage of a B-52 shot down near Hanoi.

CASUALTIES AND LOSSES

US Casualties in the Vietnam War

Aug. 4, 1964–Jan. 27, 1973

	Battle Deaths	Other Deaths	Wounds Not Mortal
Army	30,922	7,273	98,802
Navy	1,631	931	4,178
Marines	13,084	1,753	51,392
Air Force	1,741	842	931
Total	47,378	10,799	153,303

Totals for "wounds not mortal" do not include 150,332 persons who did not require hospital care.

Source: Department of Defense.

USAF Aircraft Losses in Southeast Asia

Feb. 1, 1962–Oct. 31, 1973

Aircraft	Combat Losses			Operational Losses	Total Aircraft Losses
	North Vietnam	Other SEA	Total Combat Losses		
A-1	18	132	150	41	191
AC-47	—	17	17	2	19
AC-119	—	2	2	4	6
AC-130	—	6	6	—	6
B-52	18	—	18	12	30
B-57	5	33	38	18	56
C/UC-123	—	21	21	32	53
C-130	2	32	34	21	55
F-4	193	189	382	63	445
F-100	16	182	198	45	243
F-105	282	52	334	63	397
HH-3	3	7	10	4	14
HH-43	1	9	10	4	14
HH-53	1	8	9	1	10
O-1	2	120	122	50	172
O-2	3	79	82	22	104
OV-10	—	47	47	16	63
RF-4	38	38	76	7	83
RF-101	27	6	33	6	39
Other	16	132	148	107	255
Total	625	1,112	1,737	518	2,255

"Other SEA" includes Laos, South Vietnam, Thailand, and Cambodia. B-52 losses include two at Kadena AB, Japan, and two at Andersen AFB, Guam, while supporting Arc Light operations.

Source: USAF Operations Report, Nov. 30, 1973.



Many lives were saved by effective aeromedical evacuation. Here, an Air Force flight nurse attends to wounded Marines transported from the battlefield.



A special operations forces gunner observes an HH-53 used for combat search and rescue missions.

USAF Aircraft Losses by Cause

Feb. 1, 1962-Oct. 31, 1973

Fiscal Year	Ground Fire	Ground Attack on Air Bases	Surface-to-Air Missiles	Aerial Combat	Other Combat	Operational	Total
1962-66	298	21	9	4	—	125	457
1967	276	6	26	16	—	77	401
1968	275	45	19	22	10	91	462
1969	234	14	—	—	1	77	326
1970	177	3	—	1	—	76	257
1971	73	1	2	—	—	27	103
1972	72	2	24	14	1	19	132
1973	38	4	30	10	9	25	116
1974	—	—	—	—	—	1	1
Total	1,443	96	110	67	21	518	2,255

Seven of the “other combat” losses shown here are listed in some accounts as aerial combat losses, which would raise that total to 74.

Source: USAF Operational Summary, November 1973.



Base security was critical. There were enemy incursions such as the one that destroyed this F-4.

USAF Sortie/Loss Rate in Three Wars

	Sorties	Aircraft Losses	Loss Rate/ 1,000 Sorties
World War II	2,362,800	22,948	9.7
Korean War	710,886	1,466	2.0
Vietnam War	5,226,701	2,257	0.4

In Southeast Asia, the Air Force flew twice as many sorties as the Army Air Forces did in World War II, but sustained less than a tenth as many aircraft losses.

Source: John Schlight, *The War in South Vietnam* (USAF).



Photo via Martin Winter

Lines of Air Force F-4s sit in their hardened revetments and hangars at a Southeast Asian base.

ACES AND HEROES

Vietnam War Aces

Number of Victories	Airman	Aircraft and Unit
6	Capt. Charles B. DeBellevue USAF, weapons system officer	F-4D (4), F-4E (2) 555th Tactical Fighter Squadron
5	Capt. Richard S. Ritchie, USAF, pilot	F-4D (3), F-4E (2) 555th TFS
5	Capt. Jeffrey S. Feinstein, USAF, WSO	F-4D (4), F-4E (1) 13th TFS
5	Lt. Randall H. Cunningham, USN, pilot	F-4J VF-96
5	Lt. William Driscoll, USN, WSO	F-4J VF-96



Captains Charles DeBellevue (far left) and Richard S. Ritchie, and Capt. Jeffrey Feinstein (right).

Sources: USAF, Internet.

Note: USAF awarded a full credit each to a pilot and his WSO for one enemy aircraft shot down.

Air Force Medal of Honor Recipients

Name	Hometown	Date of Action	Place of Action
Bennett, Capt. Steven L.	Palestine, Tex.	June 29, 1972	Quang Tri, S. Vietnam
Day, Maj. George E.	Sioux City, Iowa	Conspicuous gallantry while POW	
Dethlefsen, Maj. Merlyn H.	Greenville, Iowa	March 10, 1967	Thai Nguyen, N. Vietnam
Fisher, Maj. Bernard F.	San Bernardino, Calif.	March 10, 1966	A Shau Valley, S. Vietnam
Fleming, 1st Lt. James P.	Sedalia, Mo.	Nov. 26, 1968	Duc Co, S. Vietnam
Jackson, Lt. Col. Joe M.	Newnan, Ga.	May 12, 1968	Kam Duc, S. Vietnam
Jones, Lt. Col. William A. III	Warsaw, Va.	Sept. 1, 1968	Dong Hoi, N. Vietnam
Levitow, A1C John L.	South Windsor, Conn.	Feb. 24, 1969	Long Binh, S. Vietnam
Pitsenbarger, A1C William H.	Piqua, Ohio	April 11, 1966	Cam My, S. Vietnam
Sijan, Capt. Lance P.	Milwaukee	Conspicuous gallantry while POW	
Thorsness, Maj. Leo K.	Seattle	April 19, 1967	N. Vietnam
Wilbanks, Capt. Hilliard A.	Cornelia, Ga.	Feb. 24, 1967	Dalat, S. Vietnam
Young, Capt. Gerald O.	Anacortes, Wash.	Nov. 9, 1967	Khe Sahn, S. Vietnam



Maj. Bernard F. Fisher was the first airman to receive the Medal of Honor in the Vietnam War.



First Lt. James Fleming (l) and SrA. John Levitow receive their Medals of Honor from President Nixon.

CHRONOLOGY

USAF and the Vietnam War From the Tonkin Gulf Incident to the Cease-Fire

US forces had been engaged in South Vietnam in support and advisory roles since 1961. The Tonkin Gulf incident in 1964 was the spark that led to combat operations. Within months, American forces were at war.

Aug. 2, 1964.

The destroyer USS *Maddox* is attacked by North Vietnamese patrol boats in the Gulf of Tonkin.

Aug. 4, 1964.

Maddox and USS *Turner Joy* report being attacked by several fast North Vietnamese ships far out to sea, though claims of an attack were soon disputed.

Aug. 5, 1964.

In response to events of Aug. 2 and Aug. 4, President Johnson orders retaliatory air strikes against North Vietnam.

Aug. 7, 1964.

Congress passes Tonkin Gulf Resolution, authorizing “all necessary steps, including the use of armed force,” to repel attack, prevent further aggression, and assist allies.

August 1964.

USAF moves into Southeast Asia in force: B-57s from the Philippines to Bien Hoa; additional F-100s to Da Nang; F-105s from Japan to Korat, Thailand.

Nov. 1, 1964.

Viet Cong mortar attack on Bien Hoa.

Dec. 1, 1964.

National Security Council forwards options—including reprisals in North Vietnam for attacks in the south and increased air activity against North Vietnamese infiltration routes in Laos—to President Johnson.



Photo Bob Amos via Warren Thompson

F-105s refuel on their way to enemy targets.

Dec. 14, 1964.

US Air Force flies the first Operation Barrel Roll armed reconnaissance mission in Laos.

Feb. 7, 1965.

Viet Cong attack air bases in South Vietnam.

Feb. 7-11, 1965.

US and South Vietnamese aircraft strike targets in North Vietnam in retaliation for Feb. 7 attacks on bases in the south.

March 2, 1965.

Operation Rolling Thunder, the sustained air campaign against North Vietnam, begins.

March 8, 1965.

US Marines deploy to Da Nang to defend the air base. First US ground forces in Vietnam.

April 3, 1965.

Operation Steel Tiger, interdiction of Ho Chi Minh Trail in the Laotian Panhandle, begins.

April 3-4, 1965.

Air Force F-105s strike the Thanh Hoa Bridge, one of the most difficult targets of the war. They inflict damage, but fail to drop a span.

April 5, 1965.

SAM sites first detected in North Vietnam. US loses first aircraft to SAM on July 24.

June 18, 1965.

First Arc Light mission: SAC B-52s strike Viet Cong targets near Saigon.

Dec. 23, 1965-Jan. 23, 1966.

In Operation Blue Light, 231 C-141 flights airlift 3,000 troops and 4,700 tons of cargo from Hawaii to Pleiku.



Photo Shelly Hilliard via Warren Thompson

A 1965 Viet Cong attack on a base in South Vietnam.



C-130s resupplied the Marine garrison under siege at Khe Sanh.

April 1, 1966.

Seventh Air Force, with headquarters at Saigon, is organized as a subcommand of Pacific Air Forces.

Jan. 2, 1967.

In the famous “MiG Sweep” Bolo mission, F-4s from Ubon, Thailand, shoot down seven MiG-21s over the Red River Valley in North Vietnam.

Aug. 11, 1967.

Air Force F-105s bomb and temporarily close the mile-long Paul Doumer Bridge over the Red River at Hanoi.

Nov. 17-Dec. 29, 1967.

In Operation Eagle Thrust, C-141s and C-133s airlift paratroopers and equipment from Ft. Campbell, Ky., to Bien Hoa.

Jan. 1, 1968.

Battle of Khe Sanh begins. Air Force airlifters bring in an average of 165 tons of materiel daily during the 77-day siege.

Jan. 31, 1968.

North Vietnamese and Viet Cong launch Tet Offensive, attack bases all over South Vietnam, and undercut confidence and support for the war by the American public.

March 31, 1968.

President Johnson announces a partial halt of bombing missions over North Vietnam and proposes peace talks.



Strategic airlift, as provided by these C-141s, was critical to the war effort.

Nov. 1, 1968.

President Johnson halts all bombing of North Vietnam. Reconnaissance missions continue, as do “protective reaction” strikes if reconnaissance flights are fired upon.

March 18, 1969.

“Menu” operations begin. B-52s, operating under “special security and reporting procedures,” bomb North Vietnamese and Viet Cong sanctuaries in Cambodia.

October 1969.

Air Force Magazine cover story, “The Forgotten Americans of the Vietnam War,” ignites national concern for the prisoners of war and the missing in action.

March 6, 1970.

US military involvement in Laos is publicly acknowledged for the first time in a statement by President Nixon.



A flight of B-52s drops bombs on targets in North Vietnam.

Nov. 21, 1970.

Army-Air Force task force makes a daring attempt to rescue American servicemen from the Son Tay POW camp about 20 miles west of Hanoi.

March 30, 1972.

North Vietnam launches Easter Offensive, crossing the DMZ with more than 40,000 troops and 400 armored vehicles. The invasion is stopped and then turned back by US airpower.

April 6, 1972.

Bombing of North Vietnam, halted since Nov. 1, 1968, resumes.

April 27, 1972.

USAFF-4s strike Thanh Hoa Bridge with 2,000-pound TV-guided bombs, closing the bridge to traffic. Previously, 871 conventional sorties resulted in only superficial damage to the bridge.

May 10, 1972.

Operation Linebacker I, the sustained bombing of North Vietnam, begins.

May 11, 1972.

Air Force F-4s close the Doumer Bridge to traffic.

May 13, 1972.

Fourteen Air Force F-4s, with varying loads of 3,000-pound and 2,000-pound laser guided bombs, plus 500-pound gravity bombs, strike Thanh Hoa Bridge, taking out a span. The bridge is unusable for rail traffic for the rest of the year.

Dec. 18, 1972.

The US begins Operation Linebacker II, the 11-day bombing of Hanoi and Haiphong. Massive air strikes help persuade North Vietnam to conclude Paris peace negotiations.

Jan. 27, 1973.

The United States, South Vietnam, North Vietnam, and Viet Cong sign cease-fire in Paris. It becomes effective Jan. 28 in Vietnam.

Feb. 12, 1973.

Operation Homecoming, the return of 591 American POWs from North Vietnam, begins. All of the ex-POWs, who come from all military services, are processed through Clark AB, Philippines, to military hospitals in the United States, and from there they are quickly reunited with their families.

Feb. 21, 1973.

Laotians sign cease-fire. Bombing operations are halted, but communist cease-fire violations lead to B-52 strikes, which continue into April.

March 29, 1973.

MACV disestablished. Seventh Air Force moves to Nakhon Phanom AB, Thailand, and takes on dual role as US



Operation Homecoming saw the return of 591 US POWs who had been held until war's end.

Support and Activities Group and 7th Air Force. Seventh/13th Air Force reverts to Det. 7 of 13th Air Force.

Aug. 15, 1973.

Air Force A-7Ds fly last US combat mission of the war, attacking targets near Phnom Penh, Cambodia, late in the afternoon. An EC-121 from Korat, landing after the A-7s, earns the distinction of flying the last US mission of the war.

April 30, 1975.

Saigon falls to North Vietnamese forces, finally bringing the long conflict in Southeast Asia to an end.

PERSPECTIVES

Recommended Reading

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