

DOWNTOWN

The Air War Over Hanoi, 1965 to 1972



SCENARIO BOOK

Table of Contents

DOWNTOWN: HISTORICAL BACKGROUND	2	D7: THICK AS A BRICK	19
TIMELINE OF MAJOR EVENTS	4	D8: ALL TOMORROW'S PARTIES	20
ORDER OF BATTLE TABLES	4	D9: I WISH IT WOULD RAIN	21
ORDER OF BATTLE, TABLE A	4	D10: SMOKE ON THE WATER	22
ORDER OF BATTLE, TABLE B	5	D11: SUPERFLY	23
ORDER OF BATTLE, TABLE C	8	D12: WHAT'S GOING ON	25
ORDER OF BATTLE, TABLE D	9	D13: WILL THE CIRCLE BE UNBROKEN	26
ORDER OF BATTLE, TABLE E	10	D14: WALK ON THE WILD SIDE	27
ORDER OF BATTLE HISTORICAL NOTES	10	D15: GRAVEYARD TRAIN	28
INTRODUCTORY SCENARIO: SURFIN' BIRD	11	D16: WHERE ARE YOU NOW, MY SON?	29
D1: HERE, THERE AND EVERYWHERE	13	C1: THE MATCH GAME	30
D2: BEGINNINGS	14	C2: FALL ON YOU	32
D3: YOU KEEP ME HANGIN' ON	15	C3: THE DUST BLOWS FORWARD 'N THE DUST BLOWS BACK	33
D4: THE WHEEL OF HURT	15	DOWNTOWN DATES	35
D5: SPIRIT IN THE SKY	17	DETECTION LEVELS	36
D6: RESPECT	18	EXTENDED EXAMPLE OF PLAY	37



GMT Games, LLC
P.O. Box 1308, Hanford, CA 93232-1308
www.GMTGames.com

GMT Living Rules
4 September 2004

#0402

Downtown: Historical Background

Beginning in the early 1960s, communist North Vietnam (The Democratic Republic of Vietnam, or DRV) began sending arms and reinforcements to the guerrillas of the National Liberation Front (NLF) fighting a war of reunification in South Vietnam. To combat the NLF and shore up the regime in the south, the United States sent advisors, supplies and combat troops. A war escalated that would see American soldiers engaging NLF insurgents and North Vietnamese regular troops in the field.

The supply lines for the war ran south across the demilitarized zone (DMZ) separating North and South Vietnam, or via Laos and Cambodia along the infamous 'Ho Chi Minh Trail'. The source of these supplies was the People's Republic of China and the Soviet Union. The road and rail network of the north was vital for transshipping materiel south. The hub of this network was the national capital, Hanoi.

In August 1964, the 'Gulf of Tonkin Incident', a skirmish between DRV and US Navy ships, gave the United States a pretext to launch air strikes against the North. The objective, outlined by President Lyndon B. Johnson, was to discourage further "communist aggression" by launching punitive attacks against the DRV.

In late 1964 the Joint Chiefs of Staff drew up a list of targets to be destroyed as part of a coordinated interdiction air campaign against the North's supply network. Bridges, rail yards, docks, barracks and supply dumps would be targeted. However, President Johnson feared that direct intervention by the Chinese or Russians could trigger a world war and refused to authorize an unrestricted bombing campaign. Instead, the attacks would be limited to targets cleared by the President and his Secretary of Defense, Robert S. McNamara.

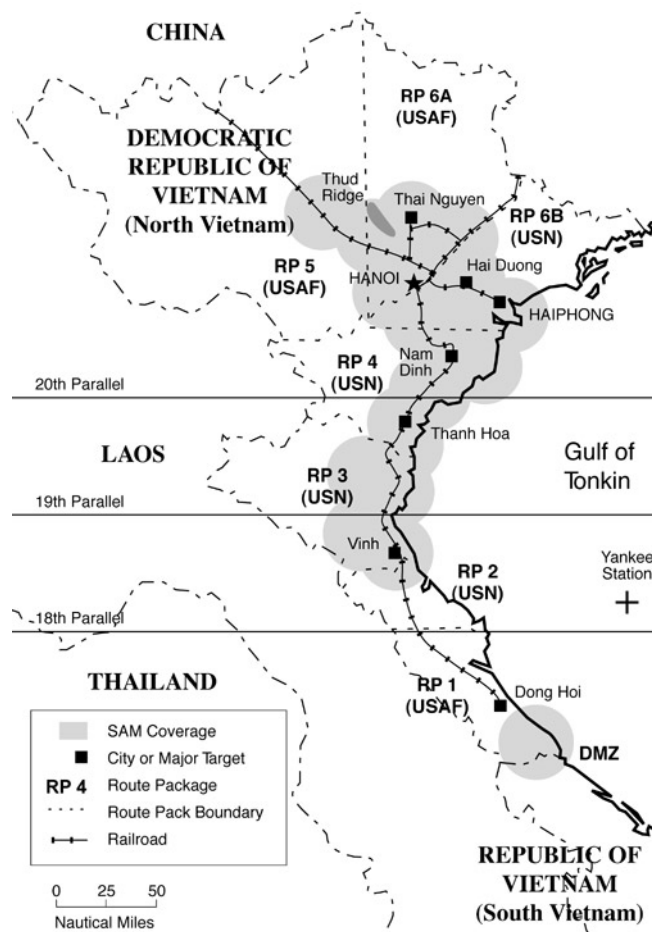
Beginning in 1965 Rolling Thunder was a sustained bombing campaign against North Vietnam. Early missions were against the south of the DRV, where the bulk of ground forces and supply dumps were located. Large-scale air strikes were launched on depots, bases and supply targets, but the majority of operations were "armed reconnaissance" missions in which small formations of aircraft patrolled highways and railroads and rivers, attacking targets of opportunity.

Afraid the war might escalate out of hand, Johnson and McNamara micromanaged the bombing campaign from Washington. Rules of Engagement were imposed to limit civilian casualties or attacks on other nationals, such as the Eastern Bloc-crewed supply ships in Haiphong harbor or the Soviet and Chinese advisors helping train the Vietnamese military.

However, the American policy of 'graduated response' — slowly ramping up pressure on the DRV leadership — meant that more targets became available to airmen to bomb. The bombing moved progressively northwards toward Hanoi. Exclusion zones were maintained around Hanoi and Haiphong to keep bombers away from the population centers, but eventually raids would be authorized even into these sanctuaries.

To keep the US Air Force and Navy out of each other's way the DRV was divided into air zones called 'Route Packages' (RPs), each assigned to a service. The area around Hanoi included Route Packages 5 and 6a (the USAF's responsibility) and 4 and 6b (the USN's). Strikes into RP 6a or 6b were reckoned to be the toughest of all. The Vietnamese, with Soviet and Chinese help, had built a formidable air defense system there. Initially this consisted of anti-aircraft artillery (AAA) and MiG fighter jets, but from mid-1965 this was supplemented by surface-to-air missiles (SAMs). A radar net now covered the country that could track incoming US raids and allocate SAMs or MiGs to attack them.

To survive in this lethal air defense zone the Americans adopted special tactics. Large-scale raids were assigned support aircraft to keep the MiGs away, jamming aircraft to degrade enemy radars, and 'Iron Hand' fighter-bombers to hunt down SAMs and suppress AAA. New electronics countermeasures devices were hurriedly deployed to protect aircraft from missile attacks.



North Vietnam and the Route Packages. The game map area starts just north of the 20th parallel.

By 1966 the air war in the higher Route Packages was getting hotter. Though most of the casualties came from AAA, there were an increasing number of encounters with SAMs and MiGs. MiGs were a particular problem because the Americans' poor radar coverage of the Hanoi region allowed obsolete jets such as the MiG-17 to get the jump on them. Airborne Early Warning aircraft had great trouble detecting MiGs at very low altitude.

Most of the USAF raids against the North came out of bases in Thailand. They would refuel over Laos before flying on to their targets. Sometimes the Americans would fly low and use prominent terrain features such as Thud Ridge to mask them from radar as they approached. After attacking the target—usually by dive-bombing—the raid would either head directly back to Thailand or exit over the relatively safe waters of the Gulf of Tonkin.

Navy raids would be launched from TaskForce 77's carriers cruising on Yankee Station. The complement of a carrier air wing was needed to form an 'Alpha Strike'. The Navy aircraft would usually take the shortest way into and out from the target.

Bombing halts became a feature of the war. Some of these were politically enforced, as President Johnson tried a 'carrot and stick' approach to coax the DRV into a peace agreement. Others were the fault of the weather that for six months a year made bombing near impossible. Attempts were made to overcome the weather by developing blind bombing techniques using radar or radio navigation systems, but at best they generated mediocre results and were often useless.

1967 saw America's most intense and sustained attempt to force the Vietnamese into peace talks. Almost all the Joint Chiefs' target list was made available to be attacked, and even airfields—previously off-limits—came in for a pasting. Only the center of Hanoi (nicknamed 'Downtown' after the Petula Clark song) and Haiphong harbor remained safe from harm. The Vietnamese reacted by becoming more aggressive with their MiGs and using AAA and SAM to rack up an impressive tally of US aircraft.

After two years of bombardment the Vietnamese were well equipped to handle US raids, having dispersed their supplies and developed the means to repair and rebuild the supply network after the raids had passed. Their strategy was long-sighted. They didn't have to defeat the Americans, merely absorb the punishment and outlast them.

By 1968 McNamara had become convinced that airpower could not win the war. In spite of the air campaign the Tet New Year holiday saw Hanoi and the NLF mount an offensive in the south. The Tet offensive was a military disaster for the North and their NLF allies, but it still broke the will of the American leadership. Hoping that Hanoi would enter into peace talks, President Johnson offered a bombing halt. The communists, licking their wounds after Tet, agreed to talks and the Rolling Thunder campaign came to an end.

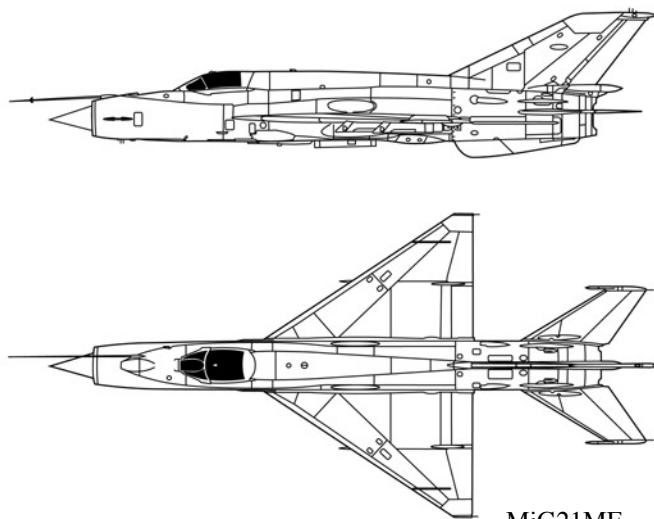
The period from 1968 to early 1972 saw little bombing in the North—mainly reconnaissance flights by the US. Peace negotiations with the Vietnamese became deadlocked. In 1969 Richard Nixon succeeded President Johnson. Nixon ordered the withdrawal of troops from the South as part of a scheme to disengage America from the war. Meanwhile, by diplomacy he was able to isolate Hanoi from its allies in China and the Soviet Union. One consequence of this was that Russia delayed the deployment of modern SA-3 SAM missiles to Vietnam.

In March 1972 the DRV launched another great offensive—this time with a conventional mechanized army. Early gains against the South Vietnamese were stemmed with the help of air power. In May Nixon ordered a full-scale offensive against the North—a gloves-off assault from the air. The new campaign was known as Linebacker.

The Linebacker campaign began with the mining of Haiphong harbor, followed by massive air raids against supply and infrastructure targets. The USAF raids were now bigger than ever, with huge fleets of support aircraft protecting a handful of bombers. Both Air Force and Navy now had access to a new generation of guided 'smart' munitions that were deadly accurate by comparison with old-style 'dumb' bombs.

With few restraints, the USAF and USN bombed the North at will. In spite of this, results against the Vietnamese supply system were disappointing. But battlefield reverses in the war down south (bolstered by massive air power) had worn the communists down to the point where they would accept a ceasefire. In October, Nixon ordered Linebacker to end. But, at the last moment the South Vietnamese president, Nguyen Van Thieu, sabotaged the peace agreement, hoping it would prevent a final American withdrawal.

In spite of the bombing halt, the war in the south continued while negotiators went around in ever-decreasing circles. Finally, Nixon's patience wore out and he ordered a "massive and brutal" series of night attacks on Hanoi, using B-52 heavy bombers. The attacks, titled Linebacker II, went badly at first due to poor planning and execution. In the first few days B-52 casualties were so high that the bombers were briefly forced away from the Hanoi area and it looked as if the campaign would be defeated. However, the battle was turned around by the adoption of better planning and tactics. The B-52s became unstoppable. The Hanoi leadership, sensing they could now do nothing to stop the bombing, agreed to the October ceasefire terms and to hand over US Prisoners of War. Nixon bullied Thieu into accepting the terms before halting the bombing. The air campaigns against North Vietnam were over.



MiG21MF

Timeline of Major Events

Aug 64. Gulf of Tonkin incident. Pierce Arrow reprisal raids launched.

Feb 65. Flaming Dart USN air raids on the DRV.

Mar 65. Rolling Thunder begins. Air attacks concentrate on targets in the Vietnamese ‘panhandle’.

May 65. Rolling Thunder 15. The first raid above the 20th Parallel is launched.

Jul 65. First US casualties to SAMs.

Sep 65. First raids into Route Package 6.

Apr-Jul 66. Rolling Thunder 50. First attacks into the Hanoi and Haiphong restricted zones.

Oct 66. F-105s begin to fly with ECM pod protection against SAMs.

Jan 67. Operation Bolo, a fighter sweep against the MiGs, is a great success. Attempts to repeat the success fail.

Feb-Apr 67. Rolling Thunder 54. Thai Nguyen works bombed for the first time.

Apr-Mar 67. Rolling Thunder 55. First attacks on Kep and Hoa Lac airfields. Targets near Hanoi opened up.

May 67-May 68. Rolling Thunder 57. The summer sees the heaviest bombing of the campaign, with airfields and transport targets near Hanoi and Haiphong attacked for the first time. The bombing slacks off after Nov 67 because of poor weather.

Apr-Nov 68. Attacks are restricted below the 20th then 19th parallel, before the President halts Rolling Thunder in November.

Nov 68-Mar 72. Bombing halt in all areas north of Route Package 1.

Mar 72. DRV Nguyen Hue ground offensive opens. US initiates Operation Constant Guard to reinforce air power in the region.

Apr 72. Operation Freedom Train attacks DRV targets up to the 20th Parallel.

May 72. Operation Linebacker opens. Haiphong harbor mined. Targets throughout the DRV are attacked in a sustained campaign lasting until October.

Oct 72. Bombing halt. Peace is declared to be at hand, but South Vietnam sabotages the peace agreement.

Dec 72. Linebacker II opens and lasts for eleven days, with a break for Christmas Day.

Jan 73. Peace agreement signed in Paris.

Mar 73. American prisoners of war held by the DRV, most of them aircrew, are released.

Order of Battle Tables

For much of the Rolling Thunder and Linebacker campaigns, the USAF and US Navy used standardized tactics and formations in raids against targets ‘Downtown’. The order of battle tables that follow depict typical formations. Unless otherwise indicated by Scenario Special Rules, players should use the orders of battle shown.

However, variations on these orders of battle were not uncommon. The tables list the most common variants, but these are not an exhaustive list of all the permutations. Some campaigns—in particular Linebacker II—do not employ standard formations. The orders of battle for these are described in the scenarios.

Using the Order of Battle Tables

Flights are listed in the following format:

Number of Flights times {number of aircraft in each flight} Aircraft Type, Tasking

EXAMPLE: a mission is listed as containing 2x {4} F-4C, CAP. This means the mission contains two flights of F-4C Phantoms, with four aircraft in each flight. Both flights are tasked with CAP.

If no aircraft type is listed and a task is listed [in square brackets], consult the order of battle table on how to determine the aircraft type based on the flight’s tasking.

EXAMPLE: It is an April 1967 raid. On Table A, a USAF MiGCAP mission is listed as 2x {4} [CAP], CAP. This means the mission comprises two flights, each with four aircraft. The aircraft type must be determined by looking at the Aircraft Types section of the table and following the instructions there. They say to roll a die. Checking the row for the raid date, it can be seen that a roll of 1-9 will mean both flights are F-4Cs, while a roll of 10 means the flights will be F-104s.

Order of Battle, Table A

USAF Raid, Rolling Thunder 1965-68

The following is a typical order of battle for a clear-weather daylight raid:

Pre-raid Forces

If no Pre-raid forces enter the map, the raid begins instead with entry of the main raid force.

Jamming Mission

2x {1} [Jamming], Jamming

2x {2} [CAP], CAP

If the US player opts to conduct off-map standoff jamming, the jamming flights are replaced with standoff jamming counters on a one-for-one basis and the CAP does not enter the map.

From October 1967 on delete the CAP flights from the mission.

Jamming Mission

3x {1} [Jamming], Jamming

From August 1967 on the US player receives this second mission. Two or more flights must be allocated to early warning jamming [27.5].

Main Raid Forces:

Iron Hand Mission

2x {2} F-105F WW, SEAD

Iron Hand missions are only available from December 1965 to April 1966, and from June 1966 to the end of Rolling Thunder.

From December 1965 to April 1966, use the following flights instead:

1x {1} F-100F, SEAD

1x {4} F-105D, SEAD

MiG CAP Mission

2x {4} [CAP], CAP

Prior to May 1967, delete one flight from this mission.

Strike Mission

4x {4} F-105D, Bombing

Prior to Jan 1967, delete one flight from this mission.

Post-Raid Forces

Recon Mission

1x {2} [Recon], Recon

Ordnance Loads

All bombing and Strike/CAP flights in a strike mission are loaded with bomb ordnance. Other ordnance types are permitted only by SSR.

All SEAD flights in an Iron Hand mission carry bombs and ARMs (if available). From June 1966 on the US player may select CBUs for SEAD flights.

Aircraft Types

Jamming, CAP and Recon tasked flights use the following aircraft types for all flights with the same task in that raid:

Jamming Tasks. Prior to October 1965 use only EB-66Cs in jamming missions. From October 1965 on, the first jamming flight in any jamming mission is an EB-66C. The remainder are EB-66B. From August 1967 on substitute EB-66Es for EB-66Bs.

CAP Tasks. Roll one die:

Apr-Dec 65. 1-8 use F-4C, 9-10 use F-104C.

Jan-May 66. Use F-4C.

Jun 66-Jul 67. 1-9 use F-4C, 10 use F-104C.

Aug 67 on. 1-6 use F-4C, 7-10 use F-4D.

Recon Tasks. Roll one die:

64-Oct 65. Use RF-101C.

Nov 65-Sep 66. 1-7 use RF-101C, 8-10 use RF-4C.

Oct 66 on. 1-5 use RF-101C, 6-10 use RF-4C.

USAF Order of Battle Variants

Use these variants only as directed by SSR.

Reinforcement Weasels. From August 1967 on, for large or important raids, Weasel forces were doubled in size. Double the number of flights in the Iron Hand mission.

Insufficient Weasels. From June 1966 to early 1967, when Weasel numbers were limited, standard F-105Ds were used to make up the numbers of aircraft in the suppression flights. Halve the number of Shrike shots for each flight in the Iron Hand mission.

Phantom Raid. From January to April and June to September 1967, F-4Cs began to fly Strike missions. If a raid is a Phantom Raid, delete the MiG CAP mission. Instead of the listed bombing flights, the Strike mission comprises the following forces:

2x {4} F-4C, Strike/CAP

Combined Raid. During the period of the Phantom Raids, where targets permitted F-4C Strike/CAP flights would attach themselves to F-105 raids for mutual protection. If the raid is a Combined Raid, add to the Strike mission the following forces:

2x {4} F-4C, Strike/CAP

Major Raid. Major raids had an additional strike flight. Increase Strike mission F-105D flights by one.

Bolo. In January 1967 fighter sweeps masquerading as bombing raids were launched against the MiGs. If the raid is a Bolo operation, all non-jamming flights in the raid use F-4C aircraft and are tasked with CAP.

Order of Battle, Table B

USN Raid, Rolling Thunder and Linebacker 1965-73

The following is a typical order of battle for a clear-weather daylight raid:

Pre-raid Forces

If no Pre-raid forces enter the map, the raid begins instead with entry of the main raid force.

Jamming Mission

2x {1} [Jamming], Jamming

If the US player opts to conduct off-map standoff jamming, the jamming flights are replaced with standoff jamming counters on a one-for-one basis.

Jamming Mission

?x {1} [Marine Jamming], Jamming

Marine Jamming Support. Roll one die. On a 7-9 add one Marine jamming flight. On a 10 add two jamming flights. On any other result there is no Marine jamming support.

Main Raid Forces

Iron Hand Mission

2x {2} [SEAD], SEAD

2x {2} [Armed Escort], Armed Escort

MiGCAP Mission

2x {2} [CAP], CAP

Strike Mission

4x {4} [Bombing], Bombing

2x {2} [CAP], CAP

If the CAP flights in the Strike mission are F-4s, treat their tasking as Armed Escort instead.

Post-Raid Forces**Recon Mission**

1x {2} [Recon], Recon

Ordnance Loads

All bombing flights in a strike mission are loaded with bomb ordnance. Other ordnance types are permitted only by SSR.

Armed Escort flights carry a bomb ordnance load. F-8s may carry rockets (see USN ADC note [j]).

All SEAD flights in an Iron Hand mission carry bombs and ARMs (if available). From Jan 1966 on the US player may select CBU's for SEAD and Armed Escort flights.

Aircraft Types

Determine the ID of the aircraft carrier from which the raid is launched and reference the table below. The carrier's entry lists the aircraft type assigned to each tasked flight in the raid.

EXAMPLE: The scenario states the carrier ID is: G—Bon Homme Richard. All Armed Escort and CAP flights in the raid are comprised of F-8E. All Bombing and Suppression flights are A-4C.

Historical Note: The Line Dates represent the first and last dates the carrier was on the frontline.

Armed Escort, CAP, Jamming and SEAD Flights. Where more than one aircraft type is listed, choose one aircraft type (only) to use for that task.

EXAMPLE: The scenario states the carrier ID is: K—Hancock. Select from either F-8C or F-8E for the Armed Escort flights. If F-8Es are selected, all Armed Escort flights use F-8Es.

Where no jamming aircraft type is listed, no jamming flights other than Marine support take part in the raid.

Bombing Flights. Where more than one aircraft type is listed, choose one of the following options:

- Choose one aircraft type to use for that task.
- Choose two aircraft types and assign two bombing flights to one type and two bombing flights to the other type.

If an aircraft type is marked with an asterisk (*) no more than two flights of that aircraft type may be assigned to bombing tasks.

EXAMPLE: The scenario states the carrier ID is: S—Kitty Hawk. The bombing flights may comprise either:

- Four flights of A-4C, or
- Two flights of A-4C and two of A-6A

Note that it is not possible to have four flights of A-6A as that aircraft type is marked with an asterisk.

If the aircraft type is listed as A-6A/C no more than one flight of A-6Cs may be used: the remainder must be A-6As.

ID	Line Dates	Carrier	CAP and Armed Escort	Bombing	Jamming	SEAD	Recon
A	5 Aug 64-21 Nov 64	Constellation	F-4B	A-4C	-	A-4C	RF-8A
B	18 Sep 64-12 Apr 65	Ranger	F-4B	A-4C	-	A-4C	RA-5C
C	28 Dec 64-2 May 65	Hancock	F-8C, F-8E	A-4C *, A-4E *	-	A-4C, A-4E	RF-8A
D	1 Feb 65-14 Oct 65	Coral Sea	F-4B, F-8D	A-4C *, A-4E *	EA-1F	A-4C, A-4E	RF-8A
E	10 Apr 65-4 Nov 65	Midway	F-4B, F-8D	A-4C *, A-4E *	EA-1F	A-4C, A-4E	RF-8A
F	8 May 65-25 Nov 65	Oriskany	F-8D, F-8E	A-4E	EA-1F, EF-10B	A-4E	RF-8A
G	28 May 65-16 Dec 65	Bon Homme Richard	F-8E	A-4C	EA-1F	A-4C	RF-8A
H	27 Jun 65-11 Nov 65	Independence	F-4B	A-4E, A-6A *	EA-1F	A-4E	RA-5C
I	5 Nov 65-20 Apr 66	Ticonderoga	F-8E	A-4C *, A-4E *	EA-1F	A-4C, A-4E	RF-8A
J	2 Dec 65-5 Jun 66	Enterprise	F-4B	A-4C	EA-1F	A-4C	RA-5C
K	17 Dec 65-10 Jul 66	Hancock	F-8C, F-8E	A-4C *, A-4E *	EA-1F	A-4C, A-4E	RF-8A
L	24 Dec 65-22 May 66	Kitty Hawk	F-4B	A-4C *, A-6A *	EA-1F	A-4C	RA-5C
M	13 Jan 66-5 Aug 66	Ranger	F-4B	A-4C *, A-4E *	EA-1F	A-4C, A-4E	RA-5C
N	14 Jun 66-9 Nov 66	Constellation	F-4B	A-4C *, A-4E *, A-6A *	EA-1F	A-4C, A-4E	RA-5C
O	30 Jun 66-26 Oct 66	Oriskany	F-8E	A-4E	EA-1F	A-4E	RF-8G
P	10 Aug 66-27 Dec 66	Franklin D. Roosevelt	F-4B	A-4C *, A-4E	EA-1F	A-4C, A-4E	RF-8G
Q	12 Sep 66-31 Jan 67	Coral Sea	F-4B	A-4C *, A-4E *	EA-1F	A-4C, A-4E	RF-8G
R	13 Nov 66-28 Apr 67	Ticonderoga	F-8E	A-4C *, A-4E *	EA-1F	A-4C, A-4E	RF-8G
S	4 Dec 66-22 May 67	Kitty Hawk	F-4B	A-4C, A-6A *	EA-1F	A-4C	RA-5C
T	18 Dec 66-20 Jun 67	Enterprise	F-4B	A-4C, A-6A *	EA-1F	A-4C	RA-5C

ID	Line Dates	Carrier	CAP and Armed Escort	Bombing	Jamming	SEAD	Recon
U	5 Feb 67-27 Jun 67	<i>Hancock</i>	F-8E	A-4C *, A-4E *	EA-1F	A-4C, A-4E	RF-8G
V	26 Feb 67-30 Jul 67	<i>Bon Homme Richard</i>	F-8C, F-8E	A-4C *, A-4E *	EA-1F	A-4C, A-4E	RF-8G
W	28 May 67-11 Nov 67	<i>Constellation</i>	F-4B	A-4C, A-6A*	EA-1F	A-4C	RA-5C
X	14 Jul 67-11 Jan 68	<i>Oriskany</i>	F-8C, F-8E	A-4E	EA-1F	A-4E	RF-8G
Y	25 Jul 67-29 Jul 67	<i>Forrestal</i>	F-4B	A-4E, A-6A*	EA-1F	A-4E	RA-5C
Z	28 Aug 67-20 Feb 68	<i>Coral Sea</i>	F-4B	A-4E	EA-1F	A-4E	RF-8G
AA	3 Dec 67-9 May 68	<i>Ranger</i>	F-4B	A-4C *, A-6A*, A-7A *	EKA-3B	A-4C, A-7A	RA-5C
BB	23 Dec 67-1 Jun 68	<i>Kitty Hawk</i>	F-4B	A-4C *, A-4E *, A-6A*	EA-1F	A-4C, A-6B	RA-5C
CC	26 Jan 68-23 Jul 68	<i>Ticonderoga</i>	F-8E	A-4C *, A-4F	EA-1F	A-4C, A-4F	RF-8G
DD	21 Feb 68-13 Sep 68	<i>Bon Homme Richard</i>	F-8E, F-8H	A-4E *, A-4F	EKA-3B	A-4E, A-4F	RF-8G
EE	22 Feb 68-26 Jun 68	<i>Enterprise</i>	F-4B	A-4E *, A-4F *, A-6A*	EKA-3B	A-4F, A-6B	RA-5C
FF	31 May 68-29 Oct 68	<i>America</i>	F-4J	A-6A *, A-7A	EKA-3B	A-6B, A-7A	RA-5C
GG	28 Jun 68-7 Jan 69	<i>Constellation</i>	F-4B	A-6A *, A-7A	EKA-3B	A-6B, A-7A	RA-5C
HH	23 Aug 68-9 Feb 69	<i>Hancock</i>	F-8H	A-4E, A-4F *	EKA-3B	A-4E, A-4F	RF-8G
II	10 Oct 68-30 Mar 69	<i>Coral Sea</i>	F-4B	A-4C *, A-4F *, A-6A *	EKA-3B	A-4C, A-4F	RF-8G
JJ	29 Nov 68-16 Apr 69	<i>Ranger</i>	F-4J	A-4F *, A-6A *, A-7A *	EKA-3B	A-4F, A-7A	RA-5C
KK	28 Jan 69-16 Aug 69	<i>Kitty Hawk</i>	F-4B	A-6A *, A-7A	EKA-3B	A-6B, A-7A	RA-5C
LL	4 Mar 69-1 Aug 69	<i>Ticonderoga</i>	F-8H, F-8J	A-4C *, A-7B	EKA-3B	A-4C, A-7B	RF-8G
MM	31 Mar 69-16 Jun 69	<i>Enterprise</i>	F-4J	A-6A *, A-7B	EKA-3B	A-6B, A-7B	RA-5C
NN	18 Apr 69-8 Oct 69	<i>Bon Homme Richard</i>	F-8J	A-4E, A-4F *	EKA-3B	A-4E, A-4F	RF-8G
OO	15 May 69-31 Oct 69	<i>Oriskany</i>	F-8J	A-4E *, A-4F	EKA-3B	A-4E, A-4F	RF-8G
PP	1 Sep 69-26 Mar 70	<i>Hancock</i>	F-8H, F-8J	A-4F	-	A-4F	RF-8G
QQ	12 Sep 69-17 Apr 70	<i>Constellation</i>	F-4J	A-6A *, A-7A	EKA-3B	A-6B, A-7A	RA-5C
RR	27 Oct 69-1 Jun 70	<i>Coral Sea</i>	F-4B	A-6A *, A-7A	EKA-3B	A-7A	RF-8G
SS	17 Nov 69-12 May 70	<i>Ranger</i>	F-4J	A-6A *, A-7B	EKA-3B	A-7B	RA-5C
TT	12 Apr 70-5 Nov 70	<i>Shangri-la</i>	F-8H	A-4C, A-4E *	-	A-4E	RF-8G
UU	2 May 70-20 Oct 70	<i>Bon Homme Richard</i>	F-8J	A-4E *, A-4F	EKA-3B	A-4E, A-4F	RF-8G
VV	26 May 70-8 Nov 70	<i>America</i>	F-4J	A-6A/C *, A-7E	EKA-3B	A-6B, A-7E	RA-5C
WW	14 Jun 70-22 Nov 70	<i>Oriskany</i>	F-8J	A-7A *, A-7B *	EKA-3B	A-7A, A-7B	RF-8G
XX	20 Nov 70-3 May 71	<i>Hancock</i>	F-8J	A-4F	EKA-3B	A-4F	RF-8G
YY	8 Dec 70-23 Jun 71	<i>Kitty Hawk</i>	F-4J	A-6A *, A-7E	EKA-3B	A-6B, A-7E	RA-5C
ZZ	28 Dec 70-9 Jun 71	<i>Ranger</i>	F-4J	A-6A/C *, A-7E	EKA-3B	A-7E	RA-5C
aaa	18 May 71-10 Oct 71	<i>Midway</i>	F-4B	A-6A *, A-7B	EKA-3B	A-7B	RF-8G
bbb	16 Jun 71-19 Nov 71	<i>Oriskany</i>	F-8J	A-7A *, A-7B	EKA-3B	A-7A, A-7B	RF-8G
ccc	16 Jul 71-24 Jan 72	<i>Enterprise</i>	F-4J	A-6A *, A-7E	EKA-3B	A-6B, A-7E	RA-5C
ddd	4 Nov 71-13 Jun 72	<i>Constellation</i>	F-4J	A-6A *, A-7E	EKA-3B	A-7E	RA-5C
eee	14 Dec 71-30 Jun 72	<i>Coral Sea</i>	F-4B	A-6A *, A-7E	EKA-3B	A-7E	RF-8G
fff	7 Feb 72-14 Sep 72	<i>Hancock</i>	F-8J	A-4F	EKA-3B	A-4F	RF-8G
ggg	8 Mar 72-4 Nov 72	<i>Kitty Hawk</i>	F-4J	A-6A *, A-7E	EKA-3B	A-6B, A-7E	RA-5C
hhh	30 Apr 72-12 Feb 73	<i>Midway</i>	F-4B	A-6A *, A-7B	EKA-3B	A-7B	RF-8G
iii	18 May 72-8 Jan 73	<i>Saratoga</i>	F-4J	A-6A *, A-7A	EA-6A	A-6B, A-7A	RA-5C
jjj	29 Jun 72-5 Mar 73	<i>Oriskany</i>	F-8J	A-7A *, A-7B	EKA-3B	A-7A, A-7B	RF-8G
kkk	14 Jul 72-28 Feb 73	<i>America</i>	F-4J	A-6A/C *, A-7C	EA-6B	A-7C	RA-5C
lll	3 Oct 72-28 May 73	<i>Enterprise</i>	F-4J	A-6A *, A-7E	EA-6B	A-6B, A-7E	RA-5C
mmm	9 Dec 72-30 May 73	<i>Ranger</i>	F-4J	A-6A *, A-7E	EKA-3B	A-6B, A-7E	RA-5C

Marine Jamming

Marine Jamming flights use the following aircraft types:

Jamming Tasks. Roll one die:

65-Oct 66. Use EF-10B

Nov 66-Nov 69. 1-5 use EF-10B, 6-10 use EA-6A

Dec 69 on. Use EA-6A

Order of Battle, Table C

USAF Night/Bad Weather Raids

Introduction

At night and during bad weather, in particular the ground mists and low, dense cloud of the northwest Monsoon, the USAF was unable to fly visual bombing raids. The Air Force campaign ground to a halt at night and in bad weather, so attempts were made to use blind bombing techniques to attack North Vietnam. The following section outlines these blind bombing operations:

Commando Nail

From April 1967, experimental raids were conducted under the codenames Operation Northscope (April-May 67) and Operation Commando Nail (July-October 67). These were made by modified F-105Fs with specially trained crews, known as 'Ryan's Raiders'. Later, (from summer 67 onward, dates are uncertain) F-4Ds would conduct night missions.

Commando Nail: Order of Battle

Raids at night and/or in poor weather may be designated Commando Nail raids.

Choose whether to fly F-105F Ryan's Raiders or F-4D in the bombing flight. The raid force comprises a jamming mission and strike mission, with the following units:

1x {2} F-105F or F-4D, Bombing

1x {1} EB-66C, Jamming

Commando Nail: Scenario Special Rules

1. The bombing flight will bomb using Radar Bombing capability (for F-105s, see USAF ADC note [Q]).
2. Because the US raid is so tiny, shift the DRV Detection Level three columns down for the duration of the raid.

Commando Nail Papa

Commando Nail Papa was the title for a series of daylight blind bombing missions flown from September-October 1967. These were flown like regular daylight raids (see Table A) except that they were led by F-105F 'Ryan's Raiders' acting as pathfinders.

Commando Nail Papa: Order of Battle

Use Table A to generate a daylight USAF raid. Add the following air unit to the Strike mission:

1x {2} F-105F, Bombing

The flight is a 'Ryan's Raider' (see USAF ADC note [Q]). It will bomb using Radar Bombing capability and acts as pathfinder for the remaining bombing flights.

Commando Club

Commando Club was the codename for a series of daylight blind bombing missions flown from October 67-March 68. These were led by F-105Fs modified with 'Combat Skyspot' radio navigation bombing equipment and acting as pathfinders.

Commando Club: Order of Battle

Use Table A to generate a daylight USAF raid. Add the following air unit to the Strike mission:

1x {2} F-105F, Bombing

The flight is a 'Ryan's Raider' (see USAF ADC note [Q]). It will bomb using Radio Navigation capability and acts as pathfinder for the remaining bombing flights.

LORAN

From August 1972 to the end of the war the USAF began to use a radio navigation bombing system named LORAN (Long Range Navigation). LORAN-equipped F-4Ds would act as pathfinders for bad-weather raids.

In general, the raids would attempt to bomb conventionally using visual bombing profiles where the local weather permitted. If there were no breaks in the cloud to permit visual attacks, the pathfinder flights would lead a blind bombing attack.

LORAN: Order of Battle

Raids in poor weather may be designated LORAN raids. All LORAN raids add the following to the main raid Strike mission:

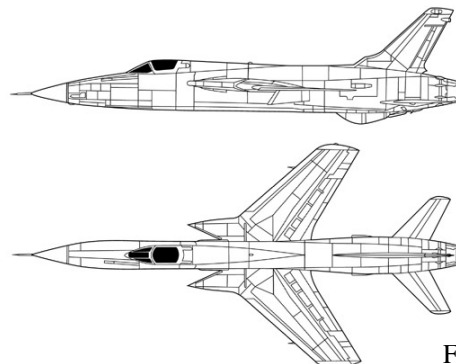
1x {4} F-4D, Strike/CAP

This lead flight comprises F-4D aircraft with Radio Navigation capability (see USAF ADC note [I]) that can act as a pathfinder for the other Bombing flights in the Strike mission.

Use Table D to generate a daylight USAF raid, using the Conventional Strike variant. Attach the pathfinder flight to the main raid Strike mission.

It is recommended that all units in the Strike mission should enter in close formation [see 17.62].

All LORAN raids use conventional bomb ordnance only. No PGM are allowed.



F-105D

Order of Battle, Table D

USAF Raid, Linebacker 1972

The following is a typical order of battle for a clear-weather daylight raid:

Pre-raid Forces

If no Pre-raid forces enter the map, the raid begins instead with entry of the main raid force.

Jamming Mission

2x {1} EB-66E, Jamming

If the US player opts to conduct off-map standoff jamming, the jamming flights are replaced with standoff jamming counters on a one-for-one basis.

Chaff Mission

2x {4} F-4D, Chaff Laying

2x {4} [CAP], CAP

Delete the CAP flights prior to June 1972.

Main Raid Forces

Iron Hand Mission

2x {2} [SEAD], SEAD

From September 1972 on add these flights to the Iron Hand mission:

2x {2} F-4E, SEAD

MiGCAP Mission

2x {4} [CAP], CAP

Strike Mission

2x {4} F-4D, Bombing

2x {4} [CAP], CAP

Strike mission composition is for a raid using Laser-Guided Bombs. Raids using conventional bombs have a different composition. (See order of battle variants.)

Post-Raid Forces

Recon Mission

1x {2} RF-4C, Recon

1x {2} [CAP], CAP

Ordnance Loads

All bombing flights in a strike mission are loaded with LGB unless it is a Conventional Strike, in which case they all carry conventional bomb ordnance. Other ordnance types are permitted only by SSR.

F-105G WW and F-4C WW only carry ARMs. F-4E assigned to SEAD carry bombs or CBU's only.

Flights assigned to chaff laying carry Chaff Bombs. From Jun 72 they carry Chaff Dispensers instead.

Aircraft Types

Bombing, CAP and SEAD tasked flights use the following aircraft types for all flights with the same task in that raid:

Bombing Tasks. Roll one die:

May-Sep 72. Use F-4D.

Oct 72 on. All strikes attacking with PGM use F-4D.

For conventional bomb strikes, 1-5 use A-7D, 6-10 use F-4D.

CAP Tasks. Roll one die:

1-4 use F-4D, 5-10 use F-4E.

SEAD Tasks. Roll one die:

May-Sep 72. Use F-105G WW.

Oct 72 on. 1-8 use F-105G WW, 9-10 use F-4C WW.

USAF Order of Battle Variants

Use these variants only as directed by SSR.

Enhanced Chaff Mission. *For attacks against the heart of the DRV air defenses, the complement of chaff layers was increased.* Enhanced chaff missions add the following forces:

1x {4} F-4D, Chaff Laying

Reinforcement Weasels. *For large or important raids, Weasel forces were doubled in size.* Double the number of F-105G flights in the Iron Hand mission.

Reduced Chaff Escort. *For some raids only a single F-4 flight was available. This was usually employed by splitting it into two elements.* If Reduced Chaff Escort is in effect, replace the CAP flights of the Chaff mission with the following:

2x {2} F-4, CAP

Conventional Strike. *Some two-thirds of USAF raids in Linebacker employed PGM (mainly Laser Guided Bombs). However, the shortage of critical Pave Knife laser-designation pods meant that the remaining third of strikes used conventional 'dumb' bombs.*

If a raid is a conventional strike, delete all the bombing flights in the Strike mission and replace with the following:

4x {4} F-4D or A-7D, Bombing

For the aircraft types used, see the Bombing Tasks section below. The bombing flights carry standard bomb ordnance.

Major Raid. *For important targets the complement of LGB-carrying bombers was increased.* Major raids delete all the bombing flights in the Strike mission and replace with the following:

3x {4} F-4D, Bombing

The bombers carry LGB ordnance.

Order of Battle, Table E

US Combat Search and Rescue 1965-73

For CSAR missions the following US forces are used:

USAF CSAR Mission

The USAF CSAR mission comprises:

- 2x {2} A-1, Rescue Support
- 2x {1} Helicopter, Rescue Support

From November 1972 replace A-1 flights with A-7D.

Aircraft carry bombs or CBU ordnance.

Use the Sandy 01 and Sandy 02 counters for the aircraft flights.

Use the Jolly 01 and 02 counters for the helicopter flights.

USN CSAR Mission

The USN CSAR mission comprises:

- 1x {1} Helicopter, Rescue Support

USN CSAR missions are set-up prior to the raid in any sea hex 8 or more hexes from a land hex. If the mission is triggered the helicopter flight may begin to move.

Use the Angel or Mother counters for the helicopter flights.

Order of Battle Historical Notes

USAF in Rolling Thunder

The USAF strike package was a sophisticated organization. At its core was a group of 'strikers'—flights of F-105 bombers bunched together and tasked with attacking the target. All other flights fulfilled a support role. Their job was to get the bombers through safely. With its emphasis on technology and teamwork, the strike package was a quintessentially *American* method of waging war.

Strikes would begin when standoff jamming flights, flying at a safe distance, positioned themselves to direct jamming down the path of the raid. CAP flights were pure fighters that would act as escorts to the strikers, or sweep ahead of them to clear MiGs out of the way.

Bringing up the rear were recon aircraft, which would zip through the combat zone, using high speed to evade MiGs and flak.

As the war lengthened and the DRV defenses improved, the strike support increased. Extra CAP flights were assigned for protection, and 'Wild Weasel' SEAD aircraft were tasked with hunting down SAM and Fire Can threats. By the end of Rolling Thunder the number of support aircraft had increased from one for every three strikers to almost one-to-one.

USN Alpha Strikes

Like the USAF the US Navy operated packages comprised of bombing aircraft and their support. These 'Alpha Strikes', as they were known, employed most of the complement of a carrier air wing.

All the aircraft in an Alpha Strike would come from the same carrier, though in the early stages of the war, jamming aircraft were in short supply and EA-1F jammers would 'cross-deck' from carrier-to-carrier as they went on and off the line. Jammers would also be supplemented by Marine aircraft flying from Da Nang.

Unlike the Air Force, the USN didn't have specialist aircrew flying the SEAD mission. SEAD was just another job naval aviators were expected to do. However, the Navy pioneered the use of new anti-radar weaponry such as the Shrike and Standard ARMs.

Navy CAP forces operated in two-aircraft flights. These were more effective than the four-ship USAF CAP flights. The Navy wasn't hobbled by the Air Force's obsolete 'Fluid Four' fighter tactics.

USAF in Linebacker

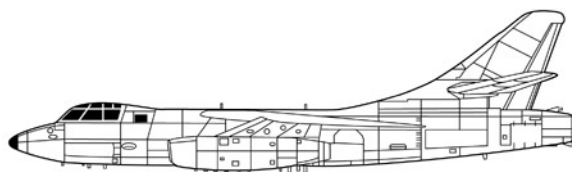
By Linebacker, the USAF strike package had evolved into its ultimate form.

More than 65% of raids now used Laser Guided Bombs for precision strikes against targets. But the Air Force only had a limited number of Pave Knife laser-designation pods. These pods presented a practical limit to the number of strikers that could attack a target. Pave Knife was such a precious resource that the USAF was prepared to go to extraordinary lengths to prevent their loss.

The need to protect Pave Knife meant the ratio of support aircraft to strikers soared. The quantity of CAP fighters doubled from its Rolling Thunder peak and SEAD forces were enhanced by teaming F-105 Wild Weasels with F-4E flights in 'Hunter-Killer' teams.

One of the biggest innovations was the addition of a group of chaff-laying aircraft. These would fly ahead of the raid and lay a corridor of chaff through which the main raid force would funnel. Chaff corridors proved so effective that losses to SAMs dropped radically and the DRV made special efforts to disrupt the chaff-laying flights with MiG attacks.

The Linebacker 'gorilla packages' were so huge that support at times outnumbered the striker aircraft by five or six to one. Allied with the new laser-guided bombs that offered a one-bomb one-kill capability this order of battle achieved astonishing results.



EB-66C

NEW PLAYERS START HERE

Introductory Scenario: Surfin' Bird

This scenario will familiarize you with how to move aircraft and conduct air-to-air combat. It will also introduce you to AAA barrage, dive bombing, and strafing.

In this scenario the US player controls a flight of A-4Cs while the DRV player flies a flight of MiG-17F fighters.

It is not necessary to read all of the *Downtown* rules to play. Begin by reading sections 2.1-2.3 and 2.8-2.9 to familiarize yourself with the game components. Then read sections 4-6 to learn how to move aircraft. Section 10 addresses the key concept of Detection. Read sections 11 (skipping 11.5) through 13 on air combat. Finally, read section 20 on Fuel. Those sections and the following rules are enough to get you into the game. Numbers in [brackets] below refer to the relevant sections of the Rule Book for reference.

Some of the following rules are cut-down versions of the rules set, so if you have any rules queries that are not answered here, consult the original rule section.

Anti-Aircraft Artillery (AAA) [14]

AAA Concentrations [14.1]. AAA concentrations are ground units that come in three densities: Light, Medium, and Heavy. Some AAA concentrations have been printed on the map. One additional Light concentration, represented by a counter, is available in this scenario. It remains hidden (i.e., not placed on the map) until activated, at which point it is revealed. Once revealed it cannot become hidden again.

AAA Activation [14.2]. Printed AAA concentrations start the game active. The inactive (i.e. hidden) concentration may activate at the beginning of the game or in the Admin Phase of any game turn. Otherwise, it activates the moment a US flight moves adjacent to it. When it activates place the counter on the map.

Flak Barrage [14.3]. Each active AAA concentration projects a flak barrage zone into its hex and all adjacent hexes. Roll a barrage attack on a US or DRV flight immediately each time the following applies to it, regardless of whether the target is detected or undetected:

- It enters a hex in a flak barrage zone as a result of movement or scatter.
- It changes altitude band in a barrage zone as a result of movement or scatter.
- It expends an MP turning in a barrage zone.
- It presses a dive bombing attack.
- It attacks an enemy flight in a barrage zone (Use the enemy flight's hex and altitude to resolve combat).

Resolving Flak Barrages [14.31]. Roll two dice on the AAA Table using the appropriate column for the AAA density, cross-referenced with the flight's altitude.

If more than one AAA concentration projects barrage into the hex, the DRV player chooses one concentration (only) to roll the barrage attack.

EXAMPLE: A flight moves into the barrage zone of a Light and Medium concentration. One barrage attack is rolled, using the Medium column. The Light concentration does not attack.

If the roll is equal to or greater than the number listed, the target flight is hit. Roll for damage on the Barrage column of the Flak Damage Table. Roll two dice and apply the barrage flak modifiers to obtain the damage result.

A 'D' result means one aircraft is damaged; 'C' that an aircraft is crippled, and 'K' that an aircraft is shot down. If more than one result is listed, all are applied to the flight.

Air-to-Ground Modifiers [14.32]. Flak barrage also applies a modifier, listed on the AAA table (in parentheses), to bombing attacks in which the bomb run passed through a flak barrage zone. Where more than one barrage zone affects the attack, apply the largest negative modifier.

MiG/AAA Deconffliction [14.53]. A MiG flight on the deck is immune to AAA attack unless it enters the flak barrage zone as a consequence of scatter.

Air-to-Ground Attacks [16-17]

The A-4 flight carries bombs to attack ground targets. In addition, it may make strafing attacks using its guns.

The flight is classed as laden [16.21] until all bombs are jettisoned or expended, at which point it becomes clean. A laden flight uses laden Movement Point and Maneuver values. As soon as it jettisons or expends all its bombs, it uses the clean values [6.2].

The bomb load is expressed as an attack strength, listed on the ADC (in this case, 2). When making an attack, the flight may expend some or all of the attack strength, in increments of whole or half strength points. When it makes an attack, the expended points are subtracted from the flight's strength. A flight may never exceed its current bomb strength in an attack.

EXAMPLE: A flight with bomb strength 2 makes an attack. It attacks and uses 1 strength point in the attack. This leaves the flight with 1 point of bomb strength remaining.

Attack Procedures [17.1]. The A-4 flight may attack a located NVA unit during the Movement Phase. It may not attack any other targets.

Ground targets are rated by their target profile [17.13], which modifies attacks against them. NVA units are profile D.

Bomb Runs [17.2]. To attack by dive bombing, the flight must first complete a bomb run. The flight starts its bomb run at an Initial Point (or IP), which can be any hex adjacent to the target. Announce the bomb run is starting, then move the flight directly into the target hex without turning. The flight may (but need not)

dive, but cannot climb. When the flight reaches the target hex at the desired altitude and after all flak attacks have been resolved, the attack takes place. Once the attack has been executed the flight finishes any remaining movement.

The attacker may announce they are 'pressing' an attack, which gives a bonus attack modifier. However, the defender gets an additional flak roll just before the attack [14.3].

Strafing Attacks are similar to dive bombing, except the flight must attack on the deck at combat throttle. Strafing flights use a bomb value of 0.5 per aircraft.

After a strafing attack, roll for depletion as if the flight had just been in air-to-air combat (do not modify the roll) [11.33]. A roll of 5 or less depletes the A-4C flight's guns.

Resolve Attacks [17.4] as follows:

(1) Calculate Attack Column [17.41]. Find the column the flight uses on the Air-To-Ground Attack Table by taking the declared bomb strength expended and multiplying by the number of undamaged aircraft in the flight to find the attack value. Use the highest numbered column that is equal to or less than the attack value.

EXAMPLE: The flight of two A-4Cs attacks an NVA unit, declaring 2 points of bomb strength. The attack value is 2 (the bombs) multiplied by 2 (number of undamaged aircraft) for a result of 4. It uses the 4 column of the attack table.

(2) Attack Roll [17.42]. Roll two dice and modify the roll as indicated. The flak modifier [14.32] applied to the attack is the largest one that applied in any hex or altitude band flown through on the bomb run. The result is an attack success value from 0 to 4.

(3) Resolve Damage [18.2]. Roll two dice and cross-reference with the column of the Damage Table corresponding to the attack's success value. The result is listed as follows:

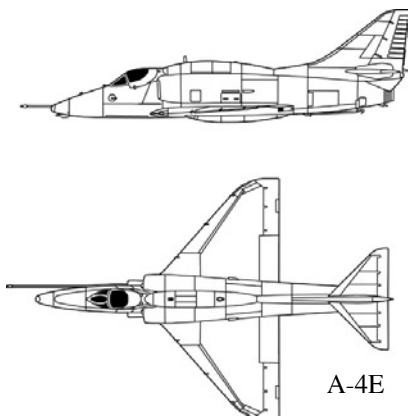
NE: No effect = No effect on target.

S: Slight Damage = NVA unit is suppressed (no effect in this scenario).

H: Heavy Damage = NVA unit is destroyed.

T: Total Destruction = NVA unit is destroyed.

That's it! You're ready to begin.



Surfin' Bird Scenario Background

The majority of sorties launched against North Vietnam were small operations known as 'route recons' or 'armed reconnaissance' missions. Individual flights would cruise along railroads, highways or rivers, looking for 'trade'. They might be briefed to look out for trucks one day, river ferries the next, or roadside fuel dumps the day after. In essence their job was to find likely targets and attack them.

This scenario depicts a typical route recon. A pair of A-4s from the *USS Coral Sea* are taking a trip along the coastal highway in October 1966, trying to rustle up some 'trade'.

Scenario Instructions

This is a daytime scenario. The target is somewhere on the highway between hexes 2715 and 3417, inclusive. Whenever the USN flight moves adjacent to one of the hexes on this highway, roll a die: on a roll of 2 or less, place an NVA Unit in that hex. Once a hex has been rolled for, do not roll for it again during the game. Any number of NVA Units may be placed on the map.

Set Up. Instead of following the Pre-Raid Sequence of Play [3.1], perform these steps:

- **DRV:** Secretly plot the location of one hidden Light AAA concentration on the DRV log sheet. It may be placed in any non-sea terrain hex.
- **DRV:** Place a 'Ready MiG' marker (representing a flight of two MiG-17F aircraft) on the airfield at Kien An.
- **USN:** Place one undetected flight of two A-4C aircraft along the map edge (hexrow 39) within five hexes of Entry Arrow 7. The flight may start at any altitude.
- **Both:** Fill out the flight logs. Each player must roll two dice on the Flight Quality Table, referencing the Pilot Training Level (USN: Regular; DRV: Rookie) to determine their flight's aggression rating. The DRV player also has one Dummy flight available [see 4.12].

Play. Follow the Raid Sequence of Play [3.2] on the playaids. Only the Detection, Movement, Fuel, Track, and Admin Phases need be played in this scenario. Note the following Detection levels and GCI Level:

Detection Levels: US: E; DRV: B

GCI Level: 3

The DRV player will have to take off with his MiGs to get them into action [9.43]. In any Movement Phase, place the flight counter on the map (on its undetected side) facing in the direction of the takeoff arrow printed in the airfield hex.

On the first turn of movement, the flight remains in the airfield hex on the Deck and cannot initiate air-to-air combat. On the second turn of movement, the flight moves MP equal to half (round up) of its speed. On the third and subsequent turns of movement the flight may move normally.

Victory Conditions

If an NVA unit is destroyed and no USN aircraft have been shot down, it is a US victory. If an A-4 is shot down it is a DRV victory.

Any other result is a draw.

After Surfin' Bird

Now you've finished **Surfin' Bird** you're ready to move on to the regular game. The following is a mini-program of rules learning and instruction you can use as a guide to ease you into the full game.

1. Read sections 14-14.3, 16, 17-17.4 and 18 (this covers AAA, air-to-ground attacks and target damage in their entirety). Also read section 27 which will tell you how to set up and play raids then play scenario **D2: Beginnings**.
2. When you have completed this scenario read section 14.4, 15, 19-19.2, 21, 22 and 24 (this covers Fire Can AAA, SAMs, defensive jamming, random events, weather and recon missions). Now play **D6: Respect**.
3. Read 17.5 and 19.3 (ARMs and standoff jamming) and you are ready to play a full-blooded Rolling Thunder scenario such as **D8: All Tomorrow's Parties**.

All the scenarios are in chronological order so try the Rolling Thunder ones first (**D1** to **D9**). Add in the Advanced rules when you feel ready to handle the extra detail and workload.

Try your hand at the Linebacker scenarios (**D10** to **D16**) when you are experienced with the game since these are the most complex of all. (You will need to learn section 19.4 on chaff for some of these.) It's recommended the full advanced rules are used with these scenarios.

However, only use section 32 (CSAR) if you're certain you can handle it. CSAR missions can substantially lengthen play.

D1: Here, There and Everywhere

Scenario D1. Scenario by Jean Foisy.

Background

On 24 July 1965 an F-4C flying CAP was hit and shot down by a Russian-supplied S-75 Dvina missile. This was the first attack by SAMs on US aircraft and the shootdown took Washington by surprise. American reconnaissance had been watching construction of the SAM sites for some time but President Johnson and Secretary of Defense McNamara were afraid of inflicting casualties on Soviet advisors at the sites and had determined to avoid further escalation. So through the spring and summer of 1965 attacks against the sites had been forbidden.

Now the SAMs had gone live a reprisal was necessary. On 27 July a large raid of F-105s was launched against the sites and nearby barracks where the SAM crews were living. However, the Thuds ran into a flak trap and four were shot down. Two more were lost in a collision on the way home. It was the costliest day of the air war so far and it was for nothing. The SAM sites turned out to be cleverly constructed wood and fabric dummies—a spoofing tactic the Vietnamese would become even more proficient at as the war continued.

Targets

The US player secretly rolls a die to determine their target.

Roll	Target	Hex	Profile	Organization
1	Lang Son railroad/ railway bridge (1 span)	0645	A	USAF
2-3	SAM site	0940	C	USAF
4	Phu Nien barracks	0944	C	USAF
5	Phu Tho bridge (1 span)	1041	B	USAF
6-7	SAM site	1339	C	USAF
8-9	SAM site	1537	C	USAF
10	SAM site	3526	C	USAF

Scenario Conditions

- **Date:** July 1965
- **Time of Day:** Day, 10:30 hrs
- **Detection Level:** US: F; DRV: C
- **GCI Level:** 1
- **Weather:** Southwest Monsoon, Clear weather
- **Open DRV Airfields:** Phuc Yen, 1529 (MiG-17); Kep, 1120 (MiG-17)

US Order of Battle

Use Table A for all Air Force raids. If the target is a SAM site, the Strike mission comprises:

6x {4} F-105D, Bombing

US Pilot Quality: Regular

DRV Order of Battle

Air Units

Basic MAPs: 6

Dummy flights: 2

Available aircraft types: MiG-17F

Reinforcements

VP	1	2	3	5	8
MAPs	+2	+4	+10	+14	-

Ground Units

SAM Battalions: 7 (set up 7 located)

Dummy SAMs: 2

Dummy Radars: 0

AAA Points: 6

Fire Can: 4

DRV Pilot Quality: Rookie

Scenario Special Rules

1. A located SAM battalion or dummy SAM must be set up in each of the following nine hexes: 0940, 1339, 1537, 3526, 2232, 2628, 2549, 2020 and 1324. The first four of these hex locations appear as targets in the target list. A raid against one of these hexes means that the SAM battalion or dummy SAM is the target of the raid. All SAMs and dummies are revetted.

2. If a dummy SAM is the target of a raid, the US player scores full victory points for its damage/destruction.
3. The US player may not use entry arrows 1, 7 or 8.
4. Subtract an additional 1 modifier from MiG Panic rolls [13.12].
5. No IRMs may be carried by F-105s.
6. Attacks against SAM sites may use CBUs but if the CBU option is taken the attack must take place from Deck altitude. Attacks from higher than this have no effect. (Early CBUs were altitude-restricted.)

Victory Conditions

Standard Victory conditions apply [27.8].

D2: Beginnings

Scenario D2. Scenario by Jean Foisy

Background

The US Navy's fourth air-to-air victory of the war was claimed by Lieutenant Commander Dan MacIntyre from the *USS Coral Sea*. In late 1965 the Navy was just beginning to explore the combat potential of the big Phantom fighter. MacIntyre was VF-151's assistant air operations officer, developing air-to-air tactics for the *Coral Sea's* air wing.

On 6 October 1965 the *Coral Sea* launched two strikes. MacIntyre escorted three flights of Skyhawks while a diversionary mission attacked Kep with two flights of Skyhawks and a flight of Crusaders as escort. In that mission MacIntyre shot down a MiG-17 (subsequently thought to be a Chinese Communist aircraft) with an AIM-7 missile.

MacIntyre would later take over the US Navy's Air Combat Maneuver training syllabus. It was the beginning of a program that would lead to the formation of the Top Gun fighter pilot's school.

Targets

Main target: Vu Chua railroad and highway bridge (1 span), hex 0918. Target profile: B

Diversionary target: Kep airfield, hex 1120. Target profile: B

Scenario Conditions

- **Date:** October 1965
- **Time of Day:** Day, 10:30 hrs
- **Detection Level:** US: F; DRV: C
- **GCI Level:** 2
- **Weather:** Do not roll for weather. Weather is clear with no haze or cloud.
- **Open DRV Airfields:** Phuc Yen, 1529 (MiG-17); Kep, 1120 (MiG-17)

US Order of Battle

USN only. The US player does not refer to the order of battle tables. Instead the USN force consists only of the following flights:

- 5x {4} A-4C, Bombing
- 2x {2} F-8D, CAP
- 2x {2} F-4B, CAP

US Pilot Quality: Regular (Exception: One F-4B flight is a Veteran.)

DRV Order of Battle

Air Units

- Basic MAPs: 12
- Dummy flights: 2
- Available aircraft types: MiG-17F

Reinforcements: None

Ground Units

- SAM battalions: 0
- Dummy SAMs: 0
- Dummy radars: 0
- AAA points: 4
- Fire Can: 0

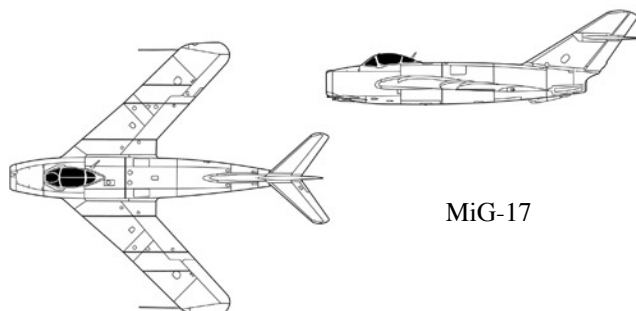
DRV Pilot Quality: Rookie

Scenario Special Rules

1. Both main and diversionary targets must be attacked. The USN player must construct two main raid forces from the flights available and enter them on the map at the same time. One of the raids is targeted at Vu Chua and the other at Kep airfield. Separate flightpaths for each raid must be plotted. At least one A-4 flight must be in each raid.
2. Reduce all printed Medium AAA concentrations on the map to Light, and all printed Heavy concentrations to Medium.
3. No more than two AAA points may be placed within two hexes of Vu Chua (hex 0918).
4. Do not roll for random events.
5. No photo-recon of the targets is necessary and no VPs are lost for lack of BDA [24, 27.82].

Victory Conditions

Standard victory conditions apply [27.8]. However, the target damage VPs earned by the US player is based on the heaviest damage to either the Vu Chua or Kep targets.



MiG-17

D3: You Keep Me Hangin' On

Scenario D3. Scenario by Lee Brimmicombe-Wood.

Background

Rolling Thunder 51 commenced in early July 1966 with the intention of smashing the DRV's reserves of Petrol Oil and Lubricants (POL). In spite of early successes, Vietnamese advanced planning had managed to disperse large stocks of POL around the country, so the attacks did not significantly diminish North Vietnam's fighting capability.

The DRV's MiG defenses at this time suffered from inexperience. The Ground Control Intercept system could not handle large numbers of aircraft and the Vietnamese were unable to integrate their fighters with the SAM network. The result was that raids would either be "MiG days" when the MiGs came up to fight but the SAMs kept quiet, or "SAM days" when the MiGs stayed on the ground and SAMs were the biggest threat.

Targets

The US player secretly rolls a die to determine their target.

Roll	Target	Hex	Profile	Organization
1	Thai Nguyen truck park	0628	D	USAF
2	Vu Chua railroad bridge (1 span)	0918	B	USAF or USN
3	Viet Tri POL storage	1337	D	USAF
4	Bac Giang POL storage	1421	D	USAF or USN
5	Duong Nham POL storage	2013	D	USN
6-7	Phuc Yen POL storage	1529	D	USAF
8-9	Haiphong POL storage	2411	D	USN
10	Co Trai railroad bridge (1 span)	2927	B	USN

Scenario Conditions

- **Date:** July 1966
- **Time of Day:** Day, 10:30 hrs
- **Detection Level:** US: E; DRV: B
- **GCI Level:** 2
- **Weather:** Southwest Monsoon, Clear weather
- **Open DRV Airfields:** Phuc Yen, 1529 (MiG-17, MiG-21); Kep, 1120 (MiG-21); Kien An, 2612 (MiG-17); Gia Lam, 2027 (MiG-17, MiG-21)

US Order of Battle

Use Table A for an Air Force raid or Table B for a USN raid. Carrier ID: choose from either O—*Oriskany* or M—*Ranger*.

US Pilot Quality

USAF: Regular

USN: F-8 flights—Veteran; all other units—Regular

DRV Order of Battle

Air Units

Basic MAPs: 23

Dummy flights: 2

Available aircraft types: MiG-17F, MiG-21F-13

Reinforcements

VP	1	2	3	5	8
MAPs	+3	+7	+10	+16	+23

Ground Units

SAM Battalions: 15 (set up 5 located)

Dummy SAMs: 3

Dummy Radars: 0

AAA Points: 9

Fire Can: 8

DRV Pilot Quality: Rookie

Scenario Special Rules

1. In the Early Warning Phase the DRV player should secretly decide whether the scenario is a 'MiG day' or a 'SAM day'.
2. If the scenario is a SAM day, no MiG flights may set up in the air or take off during the scenario. Dummies may set up as normal. However, dummy flights cannot regenerate during the scenario. Once removed from the map they do not reappear.
3. If the scenario is a MiG day, no SAM unit may turn on its radar or fire SAMs.
4. Only Jamming-tasked flights, SEAD-tasked flights and RF-101C flights are equipped with RWR [15.35]. All other US flights do not have RWR or defensive jamming capability.
5. USAF orders of battle use the Insufficient Weasel variant.
6. Due to a missile shortage, halve the number of Shrike shots available to USN SEAD flights.
7. No IRMs may be carried by F-105s.

Victory Conditions

Standard Victory conditions apply [27.8]. Double the VPs for all US aircraft and crews shot down by MiGs.

D4: The Wheel of Hurt

Scenario D4. Scenario by Terry Simo.

Background

Following the 1966 US congressional elections, the bombing of North Vietnam escalated in Rolling Thunder 52. Since attacks against the POL system were believed to have failed, bombing shifted to industrial targets. As the number of sorties increased the sortie rate numbers began to infect US thinking. Generals were hypnotized by the notion that activity equaled success. Careers were made or broken not on bombing results, but the number of sorties generated.

Suddenly, SAMs began to take a serious toll of Air Force Phantoms. This was because USAF F-4Cs had started flying

bombing missions into the upper Route Packs. The Phantoms didn't have the defensive jamming pods of the F-105 force and radar warning receivers (RWRs) were only beginning to be installed. The unprotected Phantoms were now increasingly attractive targets for the SAMs.

Losses rose until 2 December, when the US lost eight aircraft—five Air Force and three Navy—in a day. This was the worst day of the war for the air arms, who dubbed it “Black Friday”. 7th Air Force immediately prohibited F-4Cs without RWRs from operating near SAMs. Now the Phantom CAP could only protect the strikers to the edge of the SAM zones and go no further. A new chapter in the Vietnam air war had begun.

Targets

The US player secretly rolls a die to determine their target.

Roll Target	Hex	Profile	Organization
1 Kep POL Storage	1019	D	USN, 2 Dec
2 Ha Gia POL storage	1227	D	USAF, 22 Nov
3 Phuc Yen POL Storage	1529	D	USAF, 2 Dec
4 Phuc Yen POL Storage	1529	C	USAF, 5 Dec
5 Phuc Yen POL storage	1529	C	USAF, 8 Dec
Phuc Yen rail yard	1529	C	
6 Yen Vien rail yard	1826	C	USN, 13 Dec
7 Yen Vien rail yard	1826	C	USAF, 14 Dec
8 Can Thon POL Storage	2026	D	USN, 23 Nov
Van Dien depot	2228	C	
9 Van Dien depot	2228	C	USN, 14 Dec
10 Xuan Mai bridge (1 span)	2333	B	USN, 13 Dec

The organization column indicates the date the raid against that target was flown. Dates have SSRs relating to them.

Scenario Conditions

- **Date:** November/December 1966
- **Time of Day:** Day, 10:30 hrs
- **Detection Level:** US: E; DRV: B
- **GCI Level:** 3
- **Weather:** Northeast Monsoon, Clear
- **Open DRV Airfields:** Phuc Yen, 1529 (MiG-17, MiG-21); Kep, 1120 (MiG-21); Gia Lam, 2027 (MiG-17, MiG-21); Hoa Lac, 2035 (MiG-17, MiG-21)

US Order of Battle

Use Table A for a USAF raid or Table B for a USN raid. See SSRs for the Navy carrier IDs.

US Pilot Quality

- USAF: Iron Hand/CAP units—Veteran
Other units—Regular
- USN: F-8 units—Top Gun
Other units—Regular

DRV Order of Battle

Air Units

- Basic MAPs: 16
Dummy flights: 3
Available aircraft types: MiG-17F, MiG-21PF, MiG-21F-13

Reinforcements

VP	1	2	3	5	8
MAPs	+3	+7	+10	+16	+23

Ground Units

- SAM Battalions: 18 (set up 6 located)
Dummy SAMs: 4
Dummy Radars: 0
AAA Points: 6
Fire Can: 8

DRV Pilot Quality

- MiG-17 units—Rookie
MiG-21 units—Trained

Scenario Special Rules

1. All F-4C flights undergo an RWR equipment check before starting play. Roll one die. On a result of 1-2 the flight has RWR capability, otherwise it has none.
2. Insufficient Weasels is in effect for USAF raids (see order of battle variants).
3. In USAF raids equip one F-105 flight in the Strike mission with AIM-9B and task it with Strike/CAP. No other F-105s carry IRMs.
4. To the 22 Nov USAF raid add: 1x {4} F-4C, Strike/CAP.
5. The 23 Nov USN raid is a combined carrier strike using two carrier wings. Two USN raid forces may enter the map at the same time, each with a different target. The two USN carriers are: *Ticonderoga* (ID: R) and *Coral Sea* (ID: Q).
6. The 2 Dec USN raid is flown from the carrier *Coral Sea* (ID: Q).
7. The 2, 5, 8 and 14 Dec USAF raids are Major Raids (see order of battle variants).
8. The 13 Dec USN raid is flown from the carrier *Ticonderoga* (ID: R).
9. The 14 Dec USN raid is a combined carrier strike using two carrier wings. Two USN main raid forces are on the map at the same time—the second enters ten game turns after the first—each attacks the same target. The two USN carriers are: *Ticonderoga* (ID: R) and *Franklin D. Roosevelt* (ID: P).
10. Add 2 to the weather die roll. Any result greater than 10 uses the 10 result. Any cloud exists west of a weather front running from hex 0130 to 3911.

Victory Conditions

Standard Victory conditions apply [27.8].

D5: Spirit in the Sky

Scenario D5. Scenario by Terry Simo.

Background

The spring 1967 northeast monsoon lasted longer than expected. On 18 April the skies began to clear. The addition of vital industrial targets around Hanoi and Haiphong, such as the Haiphong cement plant, forced the Vietnamese to react to the American raids. For the rest of the month the battles were some of the fiercest of the whole Rolling Thunder campaign. MiGs and SAMs were out for vengeance. In April there were some fifty engagements between MiGs and US fighters and a record seventy-two the following month. American reports noted an increase in the MiG pilots' aggression and proficiency.

Through April and May MiGs constantly attacked US forces. The DRV's practice of "SAM days" and "MiG days" was over. The North Vietnamese now committed MiGs and SAMs almost simultaneously against US raids. A series of wild dogfights commenced across the Red River delta in which the Vietnamese took enormous casualties. Yet again they learned the lesson that they couldn't fight the Americans head-on.

Targets

The US player secretly rolls a die to determine their target.

Roll	Target	Hex	Profile	Organization
1	Thai Nguyen iron and steel complex	0628	B	USAF, 23 Apr
2	Kep airfield runway	1120	B	USN, 24 Apr
	Kep revetments		B	USN, 24 Apr
	Hon Gai railyard	2202	C	USN, 24 Apr
	Hoa Lac revetments	2035	B	USAF, 24 Apr
3	<u>Canal des Rapides bridge (2 spans)</u>	1927	A	USAF, 29 Apr
4	<u>Hanoi thermal power plant</u>	1929	B	USAF, 30 Apr
5*	<u>1-5 Hanoi Le Pap transformer</u>	1929	B	USAF, 25 Apr
	<u>6-10 Haiphong POL storage</u>	2411	D	USN, 25 Apr
6*	<u>6-10 Hanoi thermal power plant</u>	1929	B	USAF, 26 Apr
	<u>1-5 Haiphong POL storage</u>	2411	D	USN, 26 Apr
7	<u>Hanoi railyard and repair shops</u>	2028	C	USAF, 28 Apr
8	<u>Xuan Mai NVA Barracks</u>	2334	C	USAF, 19 Apr
9	<u>Haiphong East thermal power plant</u>	2410	B	USN, 20 Apr
	<u>Haiphong West thermal power plant</u>	2411	B	
10	<u>Haiphong cement plant</u>	2411	B	USN, 22 Apr

Target Notes: DR* indicates that an additional die roll is required to pick either the USN or USAF raid for that day.

The dates in the Service column indicate when the raid was flown. Dates may have SSRs relating to them.

Scenario Condition

- **Date:** April 1967
- **Time of Day:** Day, 10:30 hrs
- **Detection Level:** US: E; DRV: B
- **GCI Level:** 3
- **Weather:** Northeast Monsoon, Clear
- **Open DRV Airfields:** Phuc Yen, 1529 (MiG-17, MiG-21); Kep, 1120 (MiG-21); Cat Bi, 2510 (MiG-17); Gia Lam, 2027 (MiG-17, MiG-21); Hoa Lac, 2035 (MiG-17, MiG-21); Dong Suong, 2533 (MiG-17)

US Order of Battle

Use Table A for a USAF raid or Table B for a USN raid. See SSRs for the Navy carriers.

US Pilot Quality

USAF: Iron Hand units—Veteran; other units—Regular
USN: F-8 units—Top Gun; other units—Regular

DRV Order of Battle

Air Units

Basic MAPs: 26
Dummy flights: 3
Available aircraft types: MiG-17F, MiG-21PF, MiG-21F-13

Reinforcements

VP	1	2	3	5	8
MAPs	+6	+10	+13	+20	+32

Ground Units

SAM Battalions: 23 (set up 7 located)
Dummy SAMs: 5
Dummy radars: 1
AAA Points: 8
Fire Can: 9

DRV Pilot Quality

MiG-17 units—Trained
MiG-21 units—Regular

Scenario Special Rules

1. Iron Hand missions and 24 Apr F-4C strikers may carry CBU [17.61].
2. In the 19 Apr raid, delete one F-105 flight from the Strike mission.
3. For the 20 Apr raid, choose the order of battle from the following USN carriers: *Kitty Hawk* (ID: S) or *Bon Homme Richard* (ID: V).
4. The 22 Apr raid is flown from the carrier *Ticonderoga* (ID: R).
5. The 23 and 28 Apr USAF raids are Combined Raids (see order of battle variants).

6. The 24 Apr raids represent a coordinated attack on multiple targets at approximately the same time. There are three raids: a USAF raid and two USN raids. The USAF raid is a Phantom Raid (see order of battle variants) and its target is Hoa Lac. The first USN raid comprises a strike mission with 2x {4} A-6A, Bombing and 3x {2} F-4B, CAP. Its target is Kep. (This raid is launched from the *Kitty Hawk*, ID: S.) The second USN raid comprises a strike mission with 2x {4} A-4E, Bombing and 1x {2} F-8E Armed Escort. Its target is Hon Gai. (This raid is launched from the *Bon Homme Richard*, ID: V.) Both USAF and USN deploy one jamming mission per raid in their pre-raid forces (see order of battle table B and use EA-1F as the USN standoff jammers). Assign one recon mission to each target (see order of battle tables). No other forces are used in this raid.
7. The USAF raid for 25 Apr is a Major Raid (see order of battle variants). The USN raid for 25 Apr is flown from the carrier *Bon Homme Richard* (ID: V).
8. The USAF raid for 26 Apr is both a Major Raid and a Combined Raid (see order of battle variants). The USN raid for 26 Apr is flown from the carrier *Ticonderoga* (ID: R).
9. The 25 and 26 Apr scenarios may be played with both the USAF and USN raids on the map simultaneously. The first listed raid enters at 10:30 hrs and the second listed raid enters thirty game turns later at 11:00.
10. The USAF raid for 30 Apr is both a Major Raid (add one F-105 flight) and a Combined Raid (see order of battle variants).
11. Delete the MiG CAP mission entirely from the USAF raids of the 19, 23, 26 and 30 Apr.
12. For all USAF raids other than 24 Apr equip one F-105 flight in the Strike mission with AIM-9B and task it with Strike/CAP. No other F-105s carry IRMs.
13. On the 29 Apr 67 raid, increase the bomb strength of the F-105 flights to 3. This has no effect on the flights' laden maximum speed.

Victory Conditions

Standard Victory conditions apply [27.8]. For the 20 and 24 Apr raids, the US player should aggregate the Victory Points amongst the targets as per 27.81.

D6: Respect

Scenario D6. Scenario by Chris Janiec

Background

Many missions into the upper Route Packages were not large strikes. Commanders at all levels demanded photographs to monitor construction, repairs, stocks of war materials and other strategic activity in North Vietnam. Since the handful of satellites capable of obtaining these images were dedicated to observing targets where aerial surveillance was not an option (such as the Soviet Union) this task fell to the Air Force and Navy.

Day in and day out, reconnaissance aircraft, "alone, unarmed, and unafraid", flew missions into Route Packs 5 and 6 to satisfy the insatiable demand for photographs. Though their efforts received little public recognition, they were vital to US strategic direction of the war and the prosecution of the air campaign.

This scenario depicts one such mission, including the longest photo run in the theater.

Targets

Target A: Northwest railroad between hexes 0247 and 1728 inclusive.

Target B: Thai Nguyen-Kep railroad between hexes 0627 and 1019 inclusive.

Scenario Conditions

- **Date:** August 1967
- **Time of Day:** Day, 10:00 hrs
- **Detection Level:** US: D; DRV: B
- **GCI Level:** 3
- **Weather:** Southwest Monsoon, Clear
- **Open DRV Airfields:** Phuc Yen, 1529 (MiG-17, MiG-21); Kep, 1120 (MiG-21); Gia Lam, 2027 (MiG-17, MiG-21); Hoa Lac, 2035 (MiG-17, MiG-21)

US Order of Battle

USAF only. The US player does not refer to the order of battle tables. Instead the USAF force consists only of the following flight:

1x {2} RF-4C, Recon

US Pilot Quality: Regular

DRV Order of Battle

Air Units: None

Ground Units

SAM Battalions: 4 (set up 3 located)
 Dummy SAMs: 2
 Dummy Radars: 0
 AAA Points: 5
 Fire Can: 2

Scenario Special Rules

1. The US player must fly through or along the hexside of at least 90% of the hexes of one target (28 of 31 Target A, 10 of 11 Target B hexes) at Medium altitude to successfully complete the photo run. Changing altitude, turning greater than 30 degrees, executing anti-radar tactics [15.35], or performing SAM avoidance [15.43] negates coverage in the hex(es) where these maneuvers occurred.
2. The USAF may use entry arrow A.
3. Each SAM battalion has only one shot of ammo, not three [exception to 15.44].
4. The DRV may not upgrade printed AAA to Heavy density, nor may they purchase Heavy AAA concentrations.
5. Treat a Weather die roll of 9 as "None."

6. Do not roll for random events.

7. If using Advanced Jamming rules [19.51], ignore the clause that says USAF flights lose their noise jamming against SAM units if they comprise less than three aircraft; instead in this scenario they lose it if reduced to less than two [19.51a].

Victory Conditions

If a photo run is successfully completed on either target and no US aircraft have been shot down, it is a US victory. Any other result is a DRV victory.

Variant Scenario

The DRV occasionally sent MiGs up to attack US reconnaissance missions. In response, US F-4s sometimes escorted the photo aircraft. If both sides agree to play this variant, add the following aircraft to the scenario:

1x {2} F-4, CAP (roll one die to determine aircraft type:
1–6 F-4C; 7–10 F-4D)

F-4s are permitted to make BVR missile attacks [11.53].

F-4Ds carry AIM-4D IRMs.

DRV Air Units

Basic MAPs: 14

Dummy flights: 1

Available aircraft types: MiG-17F, MiG-21PF

DRV fighters are permitted to use slash attacks [11.52].

DRV Pilot Quality

MiG-17 units—Trained

MiG-21 units—Regular

Victory conditions remain unchanged.

D7: Thick as a Brick

Scenario D7. Scenario by Jean Foisy.

Background

By August 1967 the US Secretary of Defense, Robert S. McNamara, a once-hawkish advocate of bombing, had become convinced that the air campaign was failing and the military didn't know how to win. The military leadership, believing McNamara's defeatist stance would ruin them, rounded on him at John Stennis's Senate subcommittee, which was packed with hard-line supporters of the bombing.

The Stennis committee's support for the military forced President Johnson to abandon McNamara and escalate the bombing by opening up a swathe of new targets. Of the 46 additions to the Rolling Thunder 57 target list, 30 were highway and railroad bridges. US forces were ordered to sever communications between Hanoi and Haiphong and attack bridges in the exclusion zones around the cities. The Paul Doumer highway and railroad bridge had highest priority, as it was a vital link to the dockside where East Bloc ships were unloading supplies. On 11 August the US Air Force struck the bridge for the first time in the war. Ninety-four tons of bombs were dropped by three air wings, destroying a railroad span and two highway spans.

The Vietnamese MiG force had been quiet since June, when their bases had last come under attack. But in late August they came back fighting, armed with a new 'slash attack' tactic. MiGs contributed to the seven losses on 23 August that became known by the Americans as "Black Wednesday".

Targets

The US player secretly rolls a die to determine their target.

Roll	Target	Hex	Profile	Organization
1	Lang Dang rail yard	0615	C	USAF or USN
2	Dap Cau railroad and highway bridge (1 span)	1523	B	USN
3	<u>Yen Vien rail yard</u>	1826	A	USAF or USN
4-5	<u>Paul Doumer bridge (6 spans)</u>	1928	A	USAF
6	Chap Khe highway bridge (1 span)	2008	B	USN
7	<u>Hanoi rail yard and repair shop</u>	2028	C	USAF
8	Hai Duong rail bridge (1 span)	2217	A	USN
9	<u>Haiphong rail yards</u>	2410	C	USN
10	<u>Haiphong bridge (1 span)</u>	2411	A	USN

Scenario Conditions

- **Date:** August 1967
- **Time of Day:** Day, 14:00 hrs
- **Detection Level:** US: D; DRV: B
- **GCI Level:** 3
- **Weather:** Southwest Monsoon, Clear
- **Open DRV Airfields:** Phuc Yen, 1529 (MiG-17, MiG-21); Kep, 1120 (MiG-21); Gia Lam, 2027 (MiG-17, MiG-21); Hoa Lac, 2035 (MiG-17, MiG-21)

US Order of Battle

Use Table A for an Air Force raid or Table B for a USN raid. Carrier ID: choose from either W—*Constellation* or Z—*Coral Sea*.

US Pilot Quality

USAF: Iron Hand units—Veteran; other units—Regular

USN: F-8 units—Top Gun; other units—Regular

DRV Order of Battle

Air Units

Basic MAPs: 10

Dummy flights: 3

Available aircraft types: MiG-17F, MiG-21PF

Reinforcements

VP	1	2	3	5	8
MAPs	+3	+11	+16	+29	+42

Ground Units

SAM Battalions: 23 (set up 8 located)
 Dummy SAMs: 6
 Dummy Radars: 1
 AAA Points: 9
 Fire Can: 10

DRV Pilot Quality

MiG-17 units—Trained
 MiG-21 units—Regular

Scenario Special Rules

1. The USAF may use entry arrow A.
2. F-4Ds carry AIM-4D IRMs.
3. USAF raids equip one F-105 flight in the Strike mission with AIM-9B. No other F-105s carry IRMs.
4. A USAF attack on the Paul Doumer bridge is a Major Raid (see order of battle variants).
5. During raids on the Lang Dang rail yard, VP penalties for entering the Buffer Zone don't apply [9.3].

Victory Conditions

Standard Victory conditions apply [27.8].

D8: All Tomorrow's Parties

Scenario D8. Scenario by Lee Brimmicombe-Wood.

Background

October 1967 proved to be the last extended stretch of clear weather in Rolling Thunder. This was the high water mark of Rolling Thunder 57. In recent months many high-value fixed targets had been authorized by Washington, including the Hanoi bridges. In October they concentrated on the transportation network, in particular the railways between Hanoi and Haiphong.

MiGs continued to attack aggressively, prompting Washington to green-light attacks on MiG airfields including, at last, the main airbase at Phuc Yen. Meanwhile 7th Air Force authorized fighter controllers to use IFF interrogator information, making vectoring against the MiGs more effective. Vietnamese losses were high, but the MiGs were forcing US strike aircraft to jettison their bombs.

The Phuc Yen attack was a joint Air Force and Navy affair, mounted in the face of resistance from a loose alliance of unlikely opponents. General Momyer, commander Seventh Air Force, insisted the MiGs had been driven from the sky in the spring and that an attack was unnecessary. The CIA was opposed because of the 200 Soviet advisors believed to be at the base. Most curious of all was the legendary leader of the 8th TFW, Colonel Robin Olds, who during a visit to the White House on October 2 voiced

his opposition to striking the base: "I'd rather knock them out of the skies... I'd rather have them come from Phuc Yen, because I know where they are."

Targets

The US player secretly rolls a die to determine their target.

Roll	Target	Hex	Profile	Organization
1	Thai Nguyen rail yard	0728	C	USAF
2-3	Phuc Yen airfield runway	1529	B	USAF or USN
	Phuc Yen control tower		C	
	Phuc Yen aircraft revetments		B	
4	<u>Canal des Rapides bridge</u> (2 spans)	1927	A	USAF or USN
5	<u>Paul Doumer bridge</u> (6 spans)	1928	A	USAF or USN
6	<u>Paul Doumer bypass</u> <u>ferry</u>	1928	C	USAF or USN
7	Hai Duong bridge (1 span)	2117	A	USN
8	Hai Duong rail bridge (1 span)	2217	A	USN
9	<u>Haiphong shipbuilding</u> <u>facilities</u>	2410	C	USN
10	<u>Cat Bi airfield runway</u>	2510	B	USN
	<u>Cat Bi control tower</u>		C	
	<u>Cat Bi aircraft revetments</u>		B	

Scenario Conditions

- **Date:** October 1967
- **Time of Day:** Day, 10:30 hrs
- **Detection Level:** US: C; DRV: B
- **GCI Level:** 3
- **Weather:** Southwest Monsoon, Clear
- **Open DRV Airfields:** Phuc Yen, 1529 (MiG-17, MiG-21); Kep, 1120 (MiG-21); Gia Lam, 2027 (MiG-17, MiG-21); Hoa Lac, 2035 (MiG-17, MiG-21)

US Order of Battle

Use Table A for an Air Force raid or Table B for a USN raid. Carrier ID: choose from either X—*Oriskany* or Z—*Coral Sea*.

US Pilot Quality

USAF: Iron Hand units—Veteran; other units—Trained
 USN: F-8 units—Top Gun; other units—Regular

DRV Order of Battle**Air Units**

Basic MAPs: 13
 Dummy flights: 3
 Available aircraft types: MiG-17F, MiG-21PF

Reinforcements

VP	1	2	3	5	8
MAPs	+7	+10	+13	+19	+26

Ground Units

SAM Battalions: 25 (set up 8 located)
 Dummy SAMs: 4
 Dummy Radars: 1
 AAA Points: 8
 Fire Can: 11

DRV Pilot Quality

MiG-17 units—Trained
 MiG-21 units—Veteran

Scenario Special Rules

1. Subtract an additional 1 modifier from MiG Panic rolls [13.12].
2. F-4Ds carry AIM-4D IRMs.
3. USAF raids equip one F-105 flight in the Strike mission with AIM-9B. No other F-105s carry IRMs.
4. Half of all A-4 flights tasked with bombing may carry Walleye IEOGB.
5. Due to a Shrike shortage, USN aircraft decrease ADC Shrike shot values by one.

Victory Conditions

Standard Victory conditions apply [27.8].

D9: I Wish It Would Rain

Scenario D9. Scenario by Lee Brimicombe-Wood.

Background

In November 1967 the coming of the Northeast monsoon coated the Red River delta with thick cloud. With visual bombing permitted on just a few days each month, the Air Force tried to sustain the attacks by using blind bombing techniques. A radio beacon—designated Site 85—had just opened in Laos, permitting use of the Combat Skyspot bombing system. F-105Fs fitted with the system began flying as pathfinders to formations of bombers.

However, the attacks turned into tragedy. The USAF EC-121K ‘Rivet Top’ aircraft, with their integrated signals intelligence and IFF interrogation capability, had to stand down for modifications, leaving only the unmodified ‘College Eye’ EC-121D radar planes to cover the DRV’s airspace. This degraded the Air Force’s early warning capability at a time when MiGs were acting aggressively.

SAM units changed their radar frequencies to partially negate the American defensive jamming. The DRV also discovered that the pathfinder-led bombers would ‘bunch up’ for attacks, further reducing the effectiveness of their jamming.

Casualties were high, to the extent that the Air Force had to stop

using large bombing formations for Commando Club raids—now dubbed ‘Commando Kaze’ by the aircrews.

Targets

The US player secretly rolls a die to determine their target.

Roll	Target	Hex	Profile	Organization
1-4	Phuc Yen airfield runway	1529	B	USAF
5-6	Thuy Phoung barge construction yard	1829	C	USAF
7-10	Hoa Lac airfield runway	2035	B	USAF

Scenario Conditions

- **Date:** November 1967
- **Time of Day:** Day, 10:30 hrs
- **Detection Level:** US: E; DRV: C
- **GCI Level:** 3
- **Weather:** Northeast Monsoon, Poor weather
- **Open DRV Airfields:** Phuc Yen, 1529 (MiG-17, MiG-21); Kep, 1120 (MiG-21); Hoa Lac, 2035 (MiG-17, MiG-21); Dong Suong, 2533 (MiG-17)

US Order of Battle

Only USAF raids are flown. The raid is a Commando Club raid. Refer to Table C for the Commando Club order of battle.

US Pilot Quality

USAF: Iron Hand units—Veteran; other units—Trained

DRV Order of Battle**Air Units**

Basic MAPs: 13
 Dummy flights: 3
 Available aircraft types: MiG-17F, MiG-21F-13, MiG-21PF

Reinforcements

VP	1	2	3	5	8
MAPs	+6	+10	+13	+21	+29

Ground Units

SAM Battalions: 8 (set up 2 located)
 Dummy SAMs: 2
 Dummy Radars: 1
 AAA Points: 3
 Fire Can: 4

DRV Pilot Quality

MiG-17 units—Regular
 MiG-21 units—Veteran

Scenario Special Rules

1. Do not roll for the Early Warning level [27.5]. The level is always “A: Good Warning”.
2. The US raid may only use red entry arrows.
3. All CAP-tasked flights use F-4D. F-4Ds carry AIM-4D as their IRM weapon and are also armed with gun pods.

4. USAF raids equip one F-105 flight in the Strike mission with AIM-9B. No other F-105s carry IRMs.
5. US CAP flights may use MiG Screen BVR rules of engagement [11.54].
6. Subtract an additional 1 modifier from MiG Panic rolls [13.12].
7. US flights making a bombing attack lose defensive jamming against SAMs from the moment the bomb run is declared to the moment the attack is resolved.
8. When making SAM acquisition rolls halve (round down) all defensive jamming strengths.

Victory Conditions

Standard Victory conditions apply [27.8]. The US player doubles the VPs for damage inflicted on the target.

D10: Smoke on the Water

Scenario D10. Scenario by Jean Foisy.

Background

On 30 March 1972 the DRV launched its *Nguyen Hue* offensive against a South Vietnam weakened by the withdrawal of American GIs. President Nixon demanded a strong response to the invasion, ordering the massive application of US airpower. USAF and USN aircraft struck targets south of the Demilitarized Zone in support of forces engaged with the North Vietnamese Army. They also launched raids north of the DMZ up to the 20th Parallel.

A coordinated series of strikes on the DRV supply system in the upper route packages was ordered for 16 April and was named *Freedom Porch Bravo*. These included the first B-52 raids close to population centers. For a Vietnamese public unused to heavy bombing, this caused consternation and panic. To calm fears, Hanoi made a rash promise to shoot down one of the BUFFs, but most ordinary Vietnamese remained skeptical about their ability to do this.

On 9 May, the day before Operation Linebacker began, the USN mined Haiphong harbor without loss. This mining effort, combined with mines at other ports, halted all sea traffic into North Vietnam. From here to the end of the war, the DRV's only connection to the wider world were the thin ribbons of railroads and highways running north into China.

(Note: This scenario combines the events of *Freedom Porch Bravo* with the Haiphong mining in a 'mini-campaign'.)

Targets

The following lists the US targets for the raid.

Target	Hex	Profile	Organization
Nguyen Khe POL storage	1628	D	USAF
Gia Thuong storage area	1928	C	
Duc Noi storage area	1728	C	

Kien An ammunition depot	2612	D	USN
Kien An airfield runway	2612	B	
Do Son POL storage	2809	D	
Kien An POL storage	2612	D	USN (B-52)
Haiphong POL storage	2411	D	
Haiphong harbor (minefields)	2708	None	USN (mining)
	2608		
	2509		
Bac Mai storage	2129	C	USN
Van Dien vehicle storage	2327	C	
Gia Lam POL storage	1928	D	USAF, USN
Hanoi POL storage	2129	D	(B-52)
Quinh Loi SAM storage	2128	D	
Hoa Lac airfield runway	2035	B	USAF
Son Tay barracks and depot	1735	D	
Kep airfield runway	1120	B	USAF, USN
Bac Giang POL storage	1421	D	
Phuc Yen POL storage	1529	D	USAF
Viet Tri POL storage	1337	D	
SAM sites	?	?	USAF, USN
Trai Ca SAM storage facility	0626	D	USAF (B-52)
Thai Nguyen supply depot	0728	D	

Scenario Conditions

- **Date:** 16 April and 9 May 1972
- **Time of Day**
 - Night Raid 1: Night, No Moon, 05:00 hrs
 - Morning Raid: Day, 0700 hrs
 - Midday Raid: Day, 12:00 hrs
 - Afternoon Raid: Day, 16:00 hrs
 - Night Raid 2: Night, No Moon, 22:00 hrs
- **Detection Level:** US: C; DRV: A
- **GCI Level:** 4
- **Weather:** Northeast Monsoon, clear weather. Good contrast conditions apply in the morning and midday raids.
- **Open DRV Airfields:** Phuc Yen, 1529 (MiG-17, MiG-21); Kep, 1120 (MiG-21); Hoa Lac, 2035 (MiG-21); Yen Bai, 0248 (MiG-17, MiG-19, MiG-21)

US Order of Battle

There are four types of raids the US player may launch. USAF raids; USN raids; Mining raids and B-52 raids. Use Table D for a USAF raid or Table B for a USN raid. Carrier ID: choose from ddd—*Constellation*, eee—*Coral Sea*, fff—*Hancock*, ggg—*Kitty Hawk*.

B-52 Raids: B-52 raids are listed as USAF or USN raids. Use the Jamming, MiG CAP, Iron Hand and Recon missions from Tables D or B as appropriate (delete all Armed Escort flights) and replace the Strike mission with the following:

Strike Mission

6x {3} B-52D, Bombing

In addition, regardless of whether the raid is a USAF or USN raid, the pre-raid forces include a chaff mission comprising:

Chaff Mission

5x {4} F-4D, Chaff Laying

Mining Raid: Mining raids are USN raids. Replace the Strike mission with the following:

Strike Mission

2x {3} A-7A, Bombing

1x {3} A-6A, Bombing

US Pilot Quality:

USAF: Iron Hand units—Veteran; other units—Regular

USN: CAP/Armed Escort units—Top Gun; other units—Regular

DRV Order of Battle

Air Units

Basic MAPs: 26 or 0 (see SSR 3)

Dummy flights: 3

Available aircraft types: MiG-17F; MiG-19S; MiG-21PFM; MiG-21MF

Reinforcements

VP	1	2	3	5	8
MAPs	+4	+9	+18	+27	+36

Ground Units

SAM Battalions: 25 (set up 8 located)

Dummy SAMs: 4

Dummy Radars: 1

AAA Points: 10

Fire Can: 11

DRV Pilot Quality

MiG-17 units—Rookie

MiG-19 units—Trained

MiG-21 units—Regular

Scenario Special Rules

1. This scenario is a 'mini-campaign' comprising four raids, played one after the other. None of the campaign rules apply except for 28.43 (Persistence of Damage and destruction) and 28.44 (SAM Ammo).
2. The US player must perform four raids during the day: one of the two night raids and the morning, midday and afternoon raids. Choose whether the night raid is played first or last in the sequence. The night raid must be a B-52 raid. One of the other raids must be a mining raid. The US player may not play more than one B-52 or mining raid each. The remaining raids may be any mix of USAF or USN raids the US player chooses.
3. DRV MAPs are 0 for a night or morning raid and 26 for each other raid. Reinforcements can be purchased for all raids as usual, but the reinforcement VP for all four raids contributes to the victory conditions.
4. Where two or more targets are listed together, a raid can attack all those targets.

5. The mining raid must attack the three listed Haiphong harbor hexes. The bombing flights are carrying special mine ordnance (treat as bombs except they may only be used for mining hexes). To mine a hex, complete a level bombing run at Deck altitude with the hex as a target. Each aircraft that completes the bomb run lays a point of mines in the hex. No attack die roll is necessary.
6. Three SAM site targets are designated by the US player after the DRV has set up its defense on the map. Any three located sites may be treated as targets and score Victory Points for damage or destruction, even if they are dummies.
7. USAF strikes are Major Raids. (See order of battle variants.)
8. All F-4Ds tasked with CAP have IFF interrogators [11.54].
9. B-52 raids (only) may use Green entry arrows.
10. B-52 flights do not jettison ordnance as the result of air combat, MiG panic or morale checks.
11. In USN raids half of all flights tasked with bombing may use EOGB.

Victory Conditions

Assess victory conditions only after all four raids have been completed.

Standard Victory conditions for raid scenarios apply [27.8]; however, ignore the standard Victory Point awards for target damage. Instead, for each target in the target list, the US player scores 1 VP if it is heavily damaged (damaged for SAM sites) and 2 VP if it is totally destroyed. Score 1 VP for every three full mine points successfully laid.

EXAMPLE: The USAF raid attacking Nguyen Khe POL storage, Gia Thuong storage area and Duc Noi storage area can score a potential maximum of $3 \times 2 = 6VP$ if all are totally destroyed.

The Victory Level is calculated from the VP total as usual.

D11: Superfly

Scenario D11. Scenario by Gordon Christie.

Background

America responded to the DRV's 1972 spring offensive by rapidly reinforcing US air power in South East Asia, returning forces to Rolling Thunder levels. In an effort to halt the offensive without committing American ground troops an interdiction campaign was launched. President Nixon lifted many of the rules of engagement that had restricted US air power during Rolling Thunder. However, early attacks were frustrated by bad weather.

By early May the weather had begun to improve. The South Vietnamese were under heavy pressure and US air power had not yet turned the tide. So Nixon launched Operation Linebacker, a campaign against the North's supply network.

Both sides had used the years since Rolling Thunder to improve their forces. The DRV had many more MiGs available in addition to the formidable SAM and AAA defenses. The USAF had improved equipment, formations and tactics, most significantly with the introduction of the new precision-guided bombs, while the US Navy had invested heavily in air combat training at their Top Gun school.

On 10 May 1972 the USAF and USN struck the Red River Delta in force. The Vietnamese MiGs came up in massive numbers and the biggest air battles of the war began to play out in the deadly spring skies.

Targets

The following lists the US targets for the raid.

Target	Hex	Profile	Organization
Phuc Yen airfield runway	1529	B	USAF
Phuc Yen control tower		C	
Phuc Yen aircraft revetments		B	
Hoa Lac airfield runway	2035	B	USAF
Hoa Lac control tower		C	
Hoa Lac aircraft revetments		B	
<u>Bac Mai air defense center</u>	2129	A	USAF
<u>Paul Doumer Bridge</u> (6 spans)	1928	A	USAF
<u>Canal des Rapides Bridge</u> (2 spans)	1927	A	USAF
Bac Giang bridge (1 span)	1421	A	USAF, USN
Bac Giang railyard	1421	C	USAF, USN
<u>Hanoi railyard</u>	2028	C	USAF
<u>Yen Vien railyard</u>	1826	C	USAF
Kien An airfield runway	2612	B	USN
Kien An control tower		C	
Kien An aircraft revetments		B	
<u>Haiphong rail bridge (1 span)</u>	2411	A	USN
Hai Duong bridge A (1 span)	2217	A	USN
Hai Duong bridge B (1 span)	2117	A	USN
Hon Gai port	2202	C	USN

Scenario Conditions

- **Date:** 10 May 1972
- **Time of Day:** USAF raid: Day, 9:45 hrs
USN raid: Day, 12:50 hrs
- **Detection Level:** US: C; DRV: A
- **GCI Level:** 4
- **Weather:** Do not roll for weather. Weather is clear, good contrast conditions apply.
- **Open DRV Airfields:** Phuc Yen, 1529 (MiG-17, MiG-19, MiG-21); Gia Lam, 2027 (MiG-17, MiG-19, MiG-21); Kep,

1120 (MiG-17, MiG-19, MiG-21); Yen Bai, 0248 (MiG-17, MiG-19, MiG-21); Hoa Lac, 2035 (MiG-17); Duong Song, 2533 (MiG-17)

US Order of Battle

USAF raids do not use the standard Linebacker order of battle but consist of a pre-raid force, a post-raid force and two main raid forces:

Pre-raid Forces	
• Jamming Mission	4x {1} EB-66E, Jamming
• Chaff Mission	2x F-4E, Chaff Laying
• Iron Hand Mission	2x {2} F-105G, SEAD
• MiGCAP Mission	2x {4} F-4D, CAP
Main Raid Force A	
• Strike Mission	4 x {4} F-4D, Bombing 1x {4} F-4E, CAP
• Iron Hand Mission	2x {2} F-105G, SEAD
Main Raid Force B	
• Strike Mission	4x {4} F-4D, Bombing 1x {4} F-4E, CAP
• Iron Hand Mission	2x {2} F-105G, SEAD
Post-raid Forces	
• Recon Mission	1x {2} RF-4C, Recon 1x {4} F-4E, CAP

Use table B for USN raids. Carrier ID: ddd—*Constellation*, eee—*Coral Sea*, ggg—*Kitty Hawk*.

US Pilot Quality

USAF: Iron Hand units—Veteran; other units—Regular
USN: CAP/Armed Escort units—Top Gun; other units—Regular

DRV Order of Battle

Air Units

Basic MAPs: 60
Dummy flights: 4
Available aircraft types: MiG-17F; MiG-19S; MiG-21PFM; MiG-21MF

Reinforcements

VP	1	2	3	5	8
MAPs	+10	+15	+30	+40	+54

Ground Units

SAM Battalions: 23 (set up 7 located)
Dummy SAMs: 6
Dummy Radars: 1
AAA Points: 10
Fire Can: 12

DRV Pilot Quality

MiG-17 units—Rookie
 MiG-19 units—Trained
 MiG-21 units—Regular

Scenario Special Rules

1. The US player should secretly decide to play a USAF or USN raid. Select two target hexes from the list if the raid is a USAF raid and three if a USN raid.
2. USAF raids have two main raid forces, A and B (see US Order of Battle). Each main raid force has a separate target and plotted flight path. One main raid force must enter five game turns after the other does.
3. If the raid is a USN raid, generate three raid forces using table B (use a separate carrier for each). No Marine jammers support the raid. Pre-raid forces may enter at the same time, but the second main raid force must enter ten game turns after the first and the third force ten game turns after the second. Each main raid force has a separate target and a separate plotted flight path.
4. The bombing flights in USAF main raid Force A comprise three flights with LGB and one with EOGB. The flights in Force B all use conventional bombs. All USN flights use conventional bombs.
5. USAF F-4D CAP flights all use IFF Interrogators.

Victory Conditions

Standard Victory conditions apply [27.8].

D12: What's Going On

Scenario D12. Scenario by Lee Brimmicombe-Wood.

Background

Roger Locher had spent three weeks on the run after he was shot down on 10 May—the initial day of the Linebacker raids. Famished from lack of food, he was surviving in the hills near Yen Bai, where he'd parachuted from his burning jet.

On the morning of 1 June Locher heard a SAM site firing. Believing American aircraft to be nearby he tried his radio on Guard frequency and was picked up by a passing Phantom. Word was passed to the 40th Rescue and Recovery Squadron in Laos who launched a CSAR force to hunt for Locher.

The 'Sandy' Skyraiders and 'Jolly' helicopters crept into Yen Bai, supported by a CAP flight of Phantoms, but SAMs and MiGs kept the rescuers at bay. It wasn't until the next day, when General Vogt of 7th Air Force cancelled all raids into North Vietnam to launch a full-scale rescue mission, that Locher was finally snatched to safety.

Targets

Place a downed US crew marker in hex 0148. Place a -1 NVA counter in the same hex.

Scenario Conditions

- **Date:** 1 June 1972
- **Time of Day:** Day, 11:30 hrs
- **Detection Level:** US: C; DRV: A
- **GCI Level:** 4
- **Weather:** Southwest Monsoon, Clear
- **Open DRV Airfields:** Phuc Yen, 1529 (MiG-17, MiG-19; MiG-21); Yen Bai, 0248 (MiG-17, MiG-19; MiG-21)

US Order of Battle

Use Table E to generate a US Air Force CSAR mission. Add to the mission the following: 1x {4} F-4E, CAP

US Pilot Quality: Veteran

DRV Order of Battle**Air Units**

Basic MAPs: 13
 Dummy flights: 1
 Available aircraft types: MiG-17F, MiG-19, MiG-21PFM

Reinforcements

VP	1	2	3	5	8
MAPs	-	-	-	-	-

Ground Units

SAM Battalions: 1 (set up 0 located)
 Dummy SAMs: 0
 Dummy Radars: 0
 AAA Points: 1
 Fire Can: 0

DRV Pilot Quality

MiG-17 and MiG-19 units—Trained
 MiG-21 units—Regular

Scenario Special Rules

1. This scenario uses the detailed CSAR rules [26.3].
2. The CSAR mission does not roll for entry. It may enter on game turn 1.
3. Do not roll for crew capture until game turn 6. Roll normally each turn thereafter.
4. The SAM battalion does not have to set up within four hexes of Hanoi or Haiphong.
5. DRV air units must start ready at an airfield.

Victory Conditions

The US player wins if they recover the downed crewman and transport him off the map for no loss of aircraft. The DRV player wins if the downed crewman is not recovered and transported off-map. If the downed crewman is recovered, but one or more US aircraft are lost, the result is a draw.

D13: Will the Circle Be Unbroken

Scenario D13. Scenario by Lee Brimmicombe-Wood.

Background

The month of May 1972 couldn't be over fast enough for the pilots of the Vietnamese People's Air Force (VPAF). Dreadful losses and a number of friendly fire accidents had forced the VPAF high command to call a crisis meeting of fighter regiment commanders to examine deficiencies and make improvements. The discussions were rigorous and effective. Over-aggressive commanders and pilots were reined in. The policy of throwing defeated pilots back into battle, without properly learning their lessons first, was quietly dropped.

June 1972 came bright and clear, bringing more of the hated Yankee Air Pirates, and new attacks on the network of Russian-supplied early warning radars. But the VPAF was better prepared this time. The USAF chaff flights that were so effective against the rocket defenses came in for special attention from the MiGs. MiG-21s bore the brunt of the attacks, with aircraft of the 921st *Sao Dao* and 927th *Lam Son* Regiment taking the lead. Pilots such as the 921st's Do Van Lanh—nicknamed 'Ironbird'—were to carve out a reputation for themselves against the Americans in the summer. By the end of the month, MiG-21 pilots were to claim fourteen victories, though the enemy would only admit to seven of these.

Targets

The US player secretly rolls a die to determine their target.

Roll	Target	Hex	Profile	Organization
1-2	Thai Nguyen steelworks	0628	B	USAF
3	Viet Tri rail bridge (1 span)	1337	A	USAF
4	Bac Giang bridge (1 span)	1421	A	USAF or USN
5	Phuc Yen airfield runway Phuc Yen tower Phuc Yen revetments	1529	B C B	USAF
6	<u>Canal des Rapides</u> bypass (2 spans)	1927	B	USAF or USN
7	Duong Nham POL storage	1928	D	USN
8	<u>Bac Mai air defense</u> command HQ	2129	A	USAF or USN
9	<u>Haiphong rail and</u> road bridge (1 span)	2411	A	USN
10	Phu Ly rail bridge (1 span) Phu Ly highway bridge (1 span) Phu Ly truck park	3326	B B C	USN

Scenario Conditions

- **Date:** June 1972
- **Time of Day:** Day, 14:00 hrs
- **Detection Level:** US: C; DRV: A
- **GCI Level:** 4
- **Weather:** Southwest Monsoon, Clear
- **Open DRV Airfields:** Phuc Yen, 1529 (MiG-17, MiG-21); Kep, 1120 (MiG-21); Gia Lam, 2027 (MiG-17, MiG-19, MiG-21); Yen Bai, 0248 (MiG-17, MiG-19)

US Order of Battle

Use Table D for an Air Force raid or Table B for a USN raid. Carrier ID: choose from ggg—*Kitty Hawk* or iii—*Saratoga*.

US Pilot Quality

USAF: Iron Hand units—Veteran
Other units—Regular

USN: CAP/Armed Escort units—Top Gun
Other units—Regular

DRV Order of Battle

Air Units

Basic MAPs: 15
Dummy flights: 4
Available aircraft types: MiG-17F, MiG-19S, MiG-21PFM; MiG-21MF

Reinforcements

VP	1	2	3	5	8
MAPs	+5	+11	+15	+28	+35

Ground Units

SAM Battalions: 21 (set up 7 located)
Dummy SAMs: 4
Dummy Radars: 1
AAA Points: 10
Fire Can: 11

DRV Pilot Quality

MiG-17 and MiG-19 units—Trained
MiG-21 units—Veteran

Scenario Special Rules

1. F-4Ds tasked with CAP may use IFF interrogators.
2. Half of all USN flights tasked with bombing may use EOGB.
3. USAF raids on the Thai Nguyen steel works are Conventional Strikes (see order of battle variants). In all other USAF raids the bombing flights use LGB.
4. Set up four Early Warning Radar (EWR) counters in hexes 2510, 2027, 2035, 2252. EWRs are treated as non-firing Fire Can units. They start on the map with their radars switched on. If a radar is switched off for any reason, it stays off for the remainder of the raid. For every two Early Warning Radars that are switched off, the DRV detection level is column-shifted down by one. The US scores VPs for EWRs as if they were SAM battalions.

5. ARMs may not be used against Early Warning Radars unless the US player designates in the US Planning Phase that the flight can attack EWRs with ARMs. Such designated flights may attack EWRs with ARMs but cannot use their ARM weapons against SAM or Fire Can radars.

Victory Conditions

Standard Victory conditions apply [27.8].

D14: Walk on the Wild Side

Scenario D14. Scenario by Lee Brimmicombe-Wood.

Background

Hanoi. A freezing cold December night in 1972. At Air Defense Command Headquarters reports were flooding in from outlying radar regiments, tracking the streams of B-52s flying in procession toward the capital. The DRV commanders had feared this moment for the past eight years.

The American chaff bombers arrived first, but a mistake in American planning meant that chaff corridors intended to protect the BUFFs had dispersed or blown off-course. They would play no part in the coming battle. Then the F-111s arrived, barreling in at low-level to pin night fighters in their bases. They were followed ten minutes later by a wave of forty-eight BUFFs, creeping by the light of a full moon into airspace protected by the 361st Air Defense Division and the 921st *Sao Dao* Fighter Regiment at Noi Bai, where future cosmonaut Pham Tuan sat ready on the runway in his MiG-21.

The targets for the first wave were the major airfields in the Red River valley, and storage and rail yards near Hanoi. Even though they had no chaff protection the B-52s—in particular the upgraded B-52Ds—were pumping out jamming that nearly blanked out the SAM battalions' radar screens. However, the Vietnamese missile operators were to discover chinks in the BUFFs' electronic armor and exploit it for deadly effect.

Targets

The following lists the US targets for the raid.

Target	Hex	Profile	Organization
Kep airfield runway	1120	B	USAF
Phuc Yen airfield runway	1529	B	USAF
Kinh No storage area 1	1628	C	USAF
Kinh No storage area 2		C	
Kinh No storage area 3		C	
Yen Vien rail yard East	1826	C	USAF
Yen Vien rail yard West		C	
Hoa Lac airfield runway	2035	B	USAF

Scenario Conditions

- **Date:** 18 December 1972
- **Time of Day:** Night, Full Moon, 18:40 hrs
- **Detection Level:** US: D; DRV: A

- **GCI Level:** 4
- **Weather:** Do not roll for weather. There are dense cloud layers at Deck/Low and Low/Medium
- **Open DRV Airfields:** Phuc Yen, 1529 (MiG-21); Kep, 1120 (MiG-21); Hoa Lac, 2035 (MiG-21)

US Order of Battle

All forces are USAF. The US has the following forces:

Pre-raid Forces	
Jamming Mission:	2x {1} EB-66E, Jamming 2x {2} F-4D, CAP
Main Raid Forces	
F-111 Missions:	8x {1} F-111A, Bombing (see SSR 4)
BUFF Missions:	10x {3} B-52D, Bombing 6x {3} B-52G, Bombing (see SSR 5)
MiGCAP Mission:	2x {2} F-4D, CAP
Iron Hand Mission:	1x {2} F-105G WW, SEAD 1x {2} F-4E, SEAD
Iron Hand Mission:	1x {2} F-105G WW, SEAD 1x {2} F-4C WW, SEAD
Post-raid Forces	
	none

US Pilot Quality: Veteran

DRV Order of Battle

Air Units

Basic MAPs: 9
Dummy flights: 2
Available aircraft types: MiG-21MF

Reinforcements

VP	1	2	3	5	8
MAPs	-	+9	+18	+27	+36

Ground Units

SAM Battalions: 13 (set up none located)
Dummy SAMs: 0
Dummy Radars: 0
AAA Points: 0
Fire Can: 6

DRV Pilot Quality: Veteran

Scenario Special Rules

1. All MiGs begin the scenario on the ground. MiGs may not take off until one of the listed US targets has been attacked, or B-52s are within 10 hexes of Downtown Hanoi.
2. At least ten SAM battalions must set up within 4 hexes of Downtown Hanoi.
3. The US must attack all the listed targets. Split the US main raid F-111 and BUFF forces into a number of 'mini raids', each with its own target hex. See also SSRs 5 and 6.

4. F-111 flights are treated as eight ‘mini-raids’.
5. The B-52 flights must be divided into five ‘mini-raids’, each allocated to one of the target hexes. Each mini-raid comprises one Strike mission. B-52s must use radar bombing against their targets.
6. At least three B-52G flights in total must be allocated to the mini-raids on Yen Vien and Kinh.
7. US pre-raid forces may set up anywhere on the map, detected.
8. B-52s may not enter the map until game turn 5.
9. B-52 missions only enter via entry arrows A, B and C. The egress hex for each BUFF mission must be within 5 hexes of entry arrows 1 and 2.
10. B-52 flights must end each Movement Phase on their plotted flight path or they immediately abort.
11. All F-4Ds have IFF interrogators.
12. F-4Es are armed with CBUs.
13. The modifier for beacon jamming is +1, not +2.
14. B-52 flights do not jettison ordnance as the result of air combat, MiG panic or morale checks.
15. Do not roll for early warning. Early warning is ‘Good’ (use result A).
16. No photo-recon of the targets is necessary and no VPs are lost for lack of BDA.

Victory Conditions

Standard Victory conditions apply [27.8]; however, ignore the standard VP awards for target damage. Instead, for each of the eight raid targets in the target list, the US player scores 1 VP if it is heavily damaged and 2 VP if totally destroyed. The Victory Level is calculated from the VP total as usual.

D15: Graveyard Train

Scenario D15. Scenario by Jean Foisy.

Background

The DRV Air Defense Command was jubilant following the first three nights of Linebacker II. They had kept their word to the Vietnamese people that they could shoot down enemy B-52s. SAM defenses had inflicted horrific casualties on the BUFF forces. The Vietnamese believed they had pushed America close to defeat in a battle they referred to as an “aerial Dien Bien Phu”.

But the nighttime battles were exhausting the SAM battalions. A bottleneck in the assembly of fresh SA-2 missiles had resulted in critical shortages of the weapon. The SAMs had to stand down during the daytime, conceding the skies to USAF tactical aircraft that could roam at will. Meanwhile the Vietnamese airfields were in poor shape after the American bombing and those few MiGs that hadn’t been dispersed into the countryside were being kept at readiness for night fighting.

On 21 December the weather was bright and clear enough for the USAF to launch strikes with precision bombs. A series of small raids attacked targets simultaneously across the delta.

Targets

The following lists the US targets for the raid.

Target	Hex	Profile	Organization
Trung Quan rail yard	1726	C	USAF
Duc Noi storage area	1728	C	USAF
Hanoi thermal power plant	1929	B	USAF
Hanoi rail yard and repair shop	2028	C	USAF
Hanoi international radio receiver facility	2029	A	USAF
Giap Nhi rail yard	2228	C	USAF

Scenario Conditions

- **Date:** 21 December 1972
- **Time of Day:** Day, 11:50 hrs
- **Detection Level:** US: D; DRV: A
- **GCI Level:** 4
- **Weather:** Northeast monsoon. Do not roll for weather. There are dense clouds at Deck/Low east of a weather front between hexes 0135 and 3916.
- **Open DRV Airfields:** Phuc Yen, 1529 (MiG-21); Kep, 1120 (MiG-21); Hoa Lac, 2035 (MiG-21)

US Order of Battle

All forces are USAF. The US has the following forces:

Pre-raid Forces	
Jamming Mission:	2x {1} EB-66E, Jamming
Chaff Mission:	2x {4} F-4D, Chaff Laying 2x {4} F-4E, CAP
Main Raid Forces	
Strike Mission A:	6x {4} A-7D, Bombing 1x {4} F-4D, Bombing
Strike Mission B:	1x {4} F-4D, Bombing
Strike Mission C:	1x {4} F-4D, Bombing
Strike Mission D:	1x {4} F-4D, Bombing
Strike Mission E:	4x {4} F-4D, Strike/CAP
Strike Mission F:	3x {4} F-4D, Strike/CAP
Iron Hand Mission:	2x {2} F-105G WW, SEAD 2x {2} F-4E, SEAD
MiG CAP Mission:	4x {4} F-4E, CAP 4x {4} F-4D, CAP
Post-raid Forces:	
	none

US Pilot Quality: Veteran

DRV Order of Battle

Air Units

Basic MAPs: 0

Dummy flights: 2

Available aircraft types: MiG-21MF

Reinforcements

VP	1	2	3	5	8
MAPs	+9	+14	+18	+28	+42

Ground Units

SAM Battalions: 0

Dummy SAMs: 0

Dummy Radars: 0

AAA Points: 6

Fire Can: 6

DRV Pilot Quality: Veteran

Scenario Special Rules

1. Regardless of the early warning result all MiGs begin the scenario on the ground.
2. Because of the severe bombing, all DRV airfields are treated as minor airfields [9.41].
3. The US must attack all listed targets. The main raid strike missions A to F form six 'mini raids', each with its own target hex. Plot a separate flight path for each mini-raid.
4. US pre-raid forces may set up anywhere on the map.
5. CAP F-4Ds (only) have IFF interrogators.
6. One F-4D flight in strike missions A, E and F may use Radio Navigation Bombing and may act as a pathfinder for the rest of the mission.
7. The flights in strike missions B, C and D are each armed with LGB ordnance. All other flights use bomb ordnance or CBU's.
8. No photo-recon of the targets is necessary and no VPs are lost for lack of BDA.

Victory Conditions

Standard Victory conditions apply [27.8]. However, double the VP cost for shot down US aircraft. Also ignore the standard Victory Point awards for target damage. Instead, for each of the six raid targets in the target list, the US player scores 1 VP if it is heavily damaged and 2 VP if it is totally destroyed. (Exception: double the VP values for the radio receiver.) The Victory Level is calculated from the VP total as usual.

D16: Where Are You Now, My Son?

Scenario D16. Scenario by Lee Brimmicombe-Wood.

Background

The botched American attacks of the first few days of Linebacker II had left the campaign balanced on a knife-edge. The Vietnamese believed they were on the verge of victory if they could just hold out a little longer. President Nixon knew that another day of serious casualties amongst Strategic Air Command's B-52s would tip the scales. Congress would convene, money for the war would dry up, the American POWs in Hanoi would be abandoned. All hinged on the outcome of 26 December.

Brigadier Glenn R. Sullivan, commander of the B-52s at U-Tapao in Thailand, pulled SAC's fat out of the fire. Frustrated by poor tactics and micromanagement by SAC HQ in Nebraska he galvanized SAC to hand over to the local command of the 8th Air Force at Guam. Sullivan would later be airbrushed out of the SAC histories for rocking the boat.

Freed to plan the mission using their hard-earned experience, General Gerald Johnson's 8th AF staff rose to the occasion. Instead of the processional tactics and wave formations of the early B-52 raids they would now attack from multiple directions at once, with chaff corridors and massive tactical aircraft support.

The attack, when it came, was overwhelming. The North Vietnamese cut their losses. The very next day they contacted the US government and asked for talks.

Targets

The following lists the US targets for the raid.

<i>Target</i>	<i>Hex</i>	<i>Profile</i>	<i>Organization</i>
Thai Nguyen rail yard	0728	C	USAF
Kinh No rail yard	1528	C	USAF
Duc Noi rail yard	1728	C	USAF
Gia Thuong storage area	1928	D	USAF
Gia Lam rail yard	2027	C	USAF
Giap Nhi rail yard	2128	C	USAF
Van Dien truck repair depot	2228	C	USAF
Haiphong rail siding	2410	C	USAF
Haiphong transformer station	2411	B	USAF

Scenario Conditions

- **Date:** 26 December 1972
- **Time of Day:** Night, Full Moon, 21:20 hrs
- **Detection Level:** US: D; DRV: C
- **GCI Level:** 4
- **Weather:** Northeast Monsoon, clear

- **Open DRV Airfields:** Phuc Yen, 1529 (MiG-21); Kep, 1120 (MiG-21); Hoa Lac, 2035 (MiG-21)

US Order of Battle

Forces include USAF and USN units.

Pre-raid Forces	
Jamming Mission	3x {1} EB-66E, Jamming
Jamming Mission	4x {1} EA-6B, Jamming
Main Raid Forces	
BUFF Missions	21x {3} B-52D, Bombing 4x {2} B-52D, Bombing 15x {3} B-52G, Bombing (see SSR 3)
Iron Hand Mission	2x {2} F-105G WW, SEAD 2x {2} F-4E, SEAD
Iron Hand Mission:	2x {2} F-105G WW, SEAD 2x {2} F-4C WW, SEAD
Iron Hand Mission:	4x {1} F-111A, SEAD
MiGCAP Mission:	4x {4} F-4D, CAP
MiGCAP Mission:	4x {4} F-4D, CAP
Post-raid Forces: none	

US Pilot Quality: Veteran

DRV Order of Battle

Air Units

Basic MAPs: 9

Dummy flights: 2

Available aircraft types: MiG-21MF

Reinforcements

VP	1	2	3	5	8
MAPs	-	+9	+18	+27	+36

Ground Units

SAM Battalions: 23 (set up 7 located)

Dummy SAMs: 2

Dummy Radars: 0

AAA Points: 2

Fire Can: 8

DRV Pilot Quality: Veteran

Scenario Special Rules

1. All MiGs begin the scenario on the ground
2. The US must attack all the listed targets. Split the B-52 forces into 'mini raids', each with its own target hex. See also SSR 3.
3. The B-52 flights must be divided into nine 'mini-raids', each allocated to one of the target hexes. Each mini-raid comprises one Strike mission. B-52s must use radar bombing against their targets.

4. All the two-aircraft B-52D flights must be allocated to the mini-raids on Giap Nhi and/or Kinh No.
5. F-111 SEAD flights may only attack those SAM units that are located at the start of play. When an F-111 flight attacks it must release all its bomb strength on its target. Do not plot an entry hex for the SEAD mission. F-111s may enter on any hex within five hexes of an entry arrow. The US player may choose separate entry hexes for each flight and may enter them any number of hexes apart.
6. The US player may lay six chaff corridors on the map in the US Deployment Phase before the start of play. Each chaff corridor is 16 hexes long. Chaff corridors last for the duration of the scenario.
7. US pre-raid forces may set up anywhere on the map.
8. B-52s may not enter the map until game turn 3.
9. All F-4Ds tasked with CAP have IFF interrogators.
10. F-4Es are armed with CBU's and may not conduct blind-bombing attacks.
11. The modifier for beacon jamming is +1, not +2.
12. Because of the lack of generic counters, all B-52 flights are visually identified at the start of the raid. They do not jettison ordnance as the result of air combat, MiG panic or morale checks.
13. No photo-recon of the targets is necessary and no VPs are lost for lack of BDA.
14. The overwhelming attack degraded the DRV air defense network. Apply a -2 modifier to SAM acquisition rolls (do not apply the modifier to rolls to retain acquisition).

Victory Conditions

Standard Victory conditions apply [27.8]; however, ignore the standard Victory Point awards for target damage. Instead, for each of the nine raid targets in the target list, the US player scores 1 VP if it is heavily damaged and 2 VP if it is totally destroyed. The Victory Level is calculated from the VP total as usual.

C1: The Match Game

Campaign 1. Scenario by Lee Brimmicombe-Wood.

Background

Rolling Thunder 55 marked a new escalation in America's war against North Vietnam. For the past two years the DRV MiG bases had been off-limits to attacks—safe sanctuaries for the MiGs to flee to. To the immense frustration of American pilots, rules of engagement prevented them from attacking MiGs until they were in the air. Now the President had cleared them to go after the MiGs on the ground. Major airfields such as Kep and Hoa Lac were struck for the first time. Only the main base at Phuc Yen remained off-limits.

Power stations were another new target, with power plants hit across the delta, reducing the capacity of the North Vietnamese electricity grid and striking a blow against their industry. In response, the Vietnamese MiGs came up in numbers. They were aggressive and more skilful than before, but the Vietnamese were to learn yet again that they could not win a stand-up fight against the superior numbers of Americans. They were better suited to harry and hound the Yankee Air Pirates rather than battle toe-to-toe. Casualties amongst the MiG pilots mounted.

Targets

The following lists the US targets for the campaign.

Target	Hex	Profile	Organization	Campaign VP
Kep airfield runway	1120	B	USAF, USN	2/6/9
Kep control tower		C		1/4/6
Kep aircraft revetments		B		1/4/6
Xuan Mai insurgency school	2334	C	USAF	3/7/11
Thai Nguyen iron and steel complex	0628	B	USAF	3/7/11
Hoa Lac airfield runway	2035	B	USAF	1/4/7
Hoa Lac control tower		C		1/3/4
Hoa Lac aircraft revetments		B		1/3/4
Canal des Rapides Bridge (2 spans)	1927	A	USAF	3/7/11
Hanoi railroad repair shops	2028	C	USAF	2/6/9
Yen Vien Railyard	1826	C	USAF	2/6/9
Nguyen Khe POL storage	1628	D	USAF	3/7/11
Ha Dong Army barracks	2130	C	USAF	3/7/11
Hanoi railyard	2028	C	USAF	2/6/9
Hanoi thermal power plant	1929	B	USAF	3/7/11
Hanoi Le Pap transformer	1929	B	USAF	3/7/11
Duong Nham POL storage	2013	D	USN	3/7/11
Haiphong POL storage	2411	D	USN	3/7/11
Haiphong cement plant	2411	B	USN	3/7/11
Haiphong East thermal power plant	2410	B	USN	3/7/11
Haiphong West thermal power plant	2411	B	USN	3/7/11
Uong Bi power station	1909	B	USN	3/7/11

Bac Giang power station	1421	B	USAF, USN	3/7/11
Hon Gai railyard	2202	C	USN	2/6/9
Kien An airfield runway	2612	B	USN	1/4/7
Kien An control tower		C		1/3/4
Kien An aircraft revetments		B		1/3/4

Scenario Conditions

- **Date:** April 1967
- **Campaign Length:** 5 days
- **Detection Level:** US: E; DRV: B
- **GCI Level:** 3
- **Weather:** Northeast Monsoon, clear
- **Open DRV Airfields:** Phuc Yen, 1529 (MiG-17, MiG-21); Gia Lam, 2027 (MiG-17, MiG-21); Kep, 1120 (MiG-17, MiG-21); Hoa Lac, 2035 (MiG-17, MiG-21); Kien An, 2612 (MiG-17)
- **Campaign Type:** Joint

US Order of Battle

Use table A for USAF raids. Use table B for USN raids. Carrier ID: choose from R—*Ticonderoga*, S—*Kitty Hawk*, V—*Bon Homme Richard*.

US Pilot Quality

USAF: Iron Hand units—Veteran; other units—Regular
USN: F-8 units—Top Gun; other units—Regular

DRV Order of Battle

Air Units

MAP pool: 240
Dummy flights: 3
Available aircraft types: MiG-17F; MiG-21F-13; MiG-21PF

Ground Units

SAM Battalions: 23 (set up 7 located)
Dummy SAMs: 4
Dummy Radars: 1
AAA Points: 11
Fire Can: 10

DRV Pilot Quality

MiG-17 units—Trained
MiG-21 units—Regular

Scenario Special Rules

1. Choose any aircraft carrier for USN raids. No single aircraft carrier may be used more than five times during the campaign.
2. One of the USAF raids must be a Phantom Raid (see order of battle variants). Two (non-Phantom) raids may be Major Raids.
3. Iron Hand missions may carry CBU.
4. The US player may equip USN bombing-tasked flights with EOGB. If a raid uses EOGB at least two flights in the Strike

Mission must carry the weapons. The USN may not use more than 8 shots of EOGB during the campaign. EOGB are Walleye I.

5. The DRV may use defensive wheels and SAM LOAL tactics.
6. For all USAF raids equip one F-105 flight in the Strike mission with AIM-9B IRM and task it with Strike/CAP. No other F-105s may carry IRM.
7. For one USAF raid increase the bomb strength of the F-105 flights to 3. (This represents the new 3,000 lb bombs used primarily for bridge-busting.) This has no effect on the flight's laden maximum speed.
8. Each attack on airfield revetments reduces the DRV MAP pool total by one for each heavy damage result and two for each destroyed result. For example: if the Kien An airfield revetments are attacked three times for one heavy damage and two destroyed results, the MAP pool is reduced by 5.
9. The DRV player can prevent airfield attacks from reducing the MAP pool by declaring an airfield to be closed. (They abandon the airfield and send aircraft into dispersal.) They can do this prior to the start of the campaign or in any DRV Refit and Redeployment Phase. An airfield closed by this method stays closed, cannot be repaired and cannot takeoff or recover flights, for the remainder of the campaign.

Victory Conditions

Standard CVP awards for campaign scenarios apply. The victory total determines the victory level as follows:

VPs	Victory Level
170+	Decisive Victory. The operation is judged to be a great success for US arms. Enemy MiGs are forced to withdraw to China. The Joint Chiefs feel confident they are breaking the enemy's will.
140-169	Victory. The battle is an American success. Intelligence indicates significant damage has been inflicted on the DRV's military infrastructure. The enemy's MiG force has been subdued.
110-139	Inconclusive Operation. US objectives were not fully achieved. The attacks have been a grave disappointment. Targets will have to be restruck.
60-109	Defeat. US objectives were not achieved. The North Vietnamese are repairing the damage and appear able to resist indefinitely. The MiG forces are rampant.
< 60	Significant Defeat. The US forces fail to achieve their objectives. Hanoi proclaims a victory. The newly-aggressive MiGs threaten to rule the skies.

C2: Fall On You

Campaign 2. Scenario by Lee Brimmicombe-Wood.

Background

In the summer of 1967, a major effort was made to cut the lines of communication into Hanoi from China and Haiphong. The carrier *USS Constellation* was a part of this effort and in the months of June and July lost a total of four aircraft in the upper route packages.

Targets

The following lists the US targets for the campaign.

Target	Hex	Profile	Organi- zation	Campaign VP
Kep airfield runway	1120	B	USN	1/4/7
Kep control tower		C		1/3/4
Kep aircraft revetments		B		1/3/4
Hanoi thermal power plant	1929	B	USN	3/7/11
Phu Ly railroad bridge (1 span)	3326	B	USN	3/7/11
Van Dien SAM support depot	2228	C	USN	2/6/9
Uong Bi power station	1909	B	USN	2/6/9
Hai Duong bridge (1 span)	2217	A	USN	3/7/11
Pha Lai ferry	1818	C	USN	2/6/9
Haiphong bridge (1 span)	2411	A	USN	3/7/11
Haiphong ferry	2411	C	USN	2/6/9
Kien An airfield runway	2612	B	USN	1/4/7
Kien An control tower		C		1/3/4
Kien An aircraft revetments		B		1/3/4

Scenario Conditions

- **Date:** June 1967
- **Campaign Length:** 3 days
- **Detection Level:** US: E; DRV: B
- **GCI Level:** 3
- **Weather:** Southwest Monsoon, clear
- **Open DRV Airfields:** Phuc Yen, 1529 (MiG-17, MiG-21); Gia Lam, 2027 (MiG-17, MiG-21); Kep, 1120 (MiG-17, MiG-21); Hoa Lac, 2035 (MiG-17, MiG-21); Kien An, 2612 (MiG-17)
- **Campaign Type:** US Navy

US Order of Battle

Use table B for USN raids. Carrier ID: all raids use W—*Constellation*.

US Pilot Quality: Regular

DRV Order of Battle

Air Units

MAP pool: 80

Dummy flights: 3

Available aircraft types: MiG-17F; MiG-21F-13; MiG-21PF

Ground Units

SAM Battalions: 14 (set up 3 located)

Dummy SAMs: 2

Dummy Radars: 0

AAA Points: 6

Fire Can: 6

DRV Pilot Quality

MiG-17 units—Trained

MiG-21 units—Regular

Scenario Special Rules

1. The DRV must set up at least six SAM battalions within four hexes of Hanoi.
2. The US player may equip USN bombing-tasked flights with EOGB. If a raid uses EOGB at least two flights in the Strike Mission must carry the weapons. The USN may not use more than 8 shots of EOGB during the campaign. EOGB are Walleye I.

Victory Conditions

Standard CVP awards for campaign scenarios apply. The victory total determines the victory level as follows:

VPs	Victory Level
60+	Decisive Victory. The campaign is a great success. The DRV's lines of communication are severed and Hanoi is isolated from Haiphong.
47-59	Victory. The attacks have reduced supply movements between Hanoi and Haiphong. The campaign is judged a success.
37-46	Inconclusive Operation. US objectives were not fully achieved. The attacks have been a grave disappointment. Targets will have to be restruck.
21-36	Defeat. US objectives were not achieved. The North Vietnamese continue to move freely along their lines of communication.
< 20	Significant Defeat. The US forces fail to achieve their objectives. The LOCs have barely been dented. Hanoi proclaims a victory.

C3: The Dust Blows Forward 'n the Dust Blows Back

Campaign 3. Scenario by Lee Brimmicombe-Wood.

Background

May 1972. Linebacker saw US airpower return to the Red River delta in force. Navy airplanes from Task Force 77 pounded the countryside from the coastline up to the northeast rail line while General Vogt's 7th Air Force employed massive strike formations against the DRV air defenses. New tactics, such as chaff corridors, allowed American aircraft to penetrate unharmed to the very heart of Downtown Hanoi.

The primary targets of Linebacker were the supply arteries running into and out of Hanoi. Attempts were made to cut highways and railroads, and isolate Hanoi from Haiphong and China. Attention was also paid to the air defense system, hitting the airfields and encouraging the enemy to disperse their MiG force into the countryside.

Precision munitions were a Godsend to the Americans. Gone were the days when vital bridges had to be struck and struck again to take them down. With the new bombs one attack could do the job. The only North Vietnamese countermeasure was to rebuild the bridges and roads as fast as they could be bombed—to create bypass bridges or underwater causeways that were invisible from the air. Ingenuity underlay the Vietnamese reaction to American technological superiority and they were to build a myth of defiance around it.

Targets

The following lists the US targets for the campaign.

Target	Hex	Profile	Organization	Campaign VP
Phuc Yen airfield runway	1529	B	USAF	2/6/9
Phuc Yen control tower		C		1/4/6
Phuc Yen aircraft revetments		B		1/4/6
Kep airfield runway	1120	B	USAF	2/6/9
Kep control tower		C		1/4/6
Kep aircraft revetments		B		1/4/6
Hoa Lac airfield runway	2035	B	USAF	1/4/7
Hoa Lac control tower		C		1/3/4
Hoa Lac aircraft revetments		B		1/3/4
Bac Mai air defense center	2129	A	USAF	3/7/11
Paul Doumer Bridge (6 spans)	1928	A	USAF	2/6/9
Canal des Rapides Bridge (2 spans)	1927	A	USAF	3/7/11
Bac Giang bridge (1 span)	1421	A	USAF, USN	3/7/11
Bac Giang railyard	1421	C	USAF, USN	2/6/9
Bac Giang POL storage	1421	D	USAF, USN	2/6/9

Target	Hex	Profile	Organization	Campaign VP
Gia Lam railroad repair shops	1928	C	USAF	2/6/9
Hanoi railyard	2028	C	USAF	2/6/9
Kep railyard	1019	C	USAF	2/6/9
Nguyen Khe POL storage	1628	C	USAF	2/6/9
Phuc Yen POL storage	1529	C	USAF	2/6/9
Yen Vien Railyard	1826	C	USAF	2/6/9
Kien An airfield runway	2612	B	USN	1/4/7
Kien An control tower		C		1/3/4
Kien An aircraft revetments		B		1/3/4
Haiphong POL storage	2411	D	USN	3/7/11
Haiphong rail yard	2410	C	USN	2/6/9
Haiphong rail bridge (1 span)	2411	A	USN	3/7/11
Nam Dinh supply depot	3521	C	USN	1/4/7
Phu Ly railroad bridge (1 span)	3326	B	USN	3/7/11
Phu Ly highway bridge (1 span)	3326	B	USN	3/7/11
Hai Duong bridge (1 span)	2217	A	USN	3/7/11
Me Xa bridge (1 span)	2117	A	USN	3/7/11
Hon Gai port	2202	C	USN	2/6/9

Scenario Conditions

- **Date:** May 1972
- **Campaign Length:** 5 days
- **Detection Level:** US: C; DRV: A
- **GCI Level:** 4
- **Weather:** Southwest Monsoon, clear
- **Open DRV Airfields:** Phuc Yen, 1529 (MiG-17, MiG-19, MiG-21); Gia Lam, 2027 (MiG-17, MiG-19, MiG-21); Kep, 1120 (MiG-17, MiG-19, MiG-21); Yen Bai, 0248 (MiG-17, MiG-19, MiG-21); Hoa Lac, 2035 (MiG-17); Kien An, 2612 (MiG-17)
- **Campaign Type:** Joint

US Order of Battle

Use table D for USAF raids. Use table B for USN raids. Carrier ID: choose from ddd—*Constellation*, eee—*Coral Sea*, ggg—*Kitty Hawk*, hhh—*Midway*.

US Pilot Quality

USAF: Iron Hand units—Veteran; other units—Regular

USN: CAP/Armed Escort units—Top Gun; other units—Regular

DRV Order of Battle

Air Units

MAP pool: 300

Dummy flights: 4

Available aircraft types: MiG-17F; MiG-19S; MiG-21PFM; MiG-21MF

Ground Units

SAM Battalions: 25 (set up 8 located)

Dummy SAMs: 4

Dummy Radars: 1

AAA Points: 14

Fire Can: 12

DRV Pilot Quality

MiG-17 units—Rookie

MiG-19 units—Trained

MiG-21 units—Regular

Scenario Special Rules

1. As per rule 28.31 there is only one USAF raid per day, which can be a morning or afternoon raid.
2. Choose two out of the four listed carriers. Only these carriers may be used for USN raids. No carrier may be used for more than six raids during the campaign.
3. One of the USAF raids must be a Conventional Strike (see order of battle variants). One raid may be an Major Raid. One raid may use Reinforcement Weasels.
4. The US player may equip USN bombing-tasked flights with LGB or EOGB. If a raid uses LGB or EOGB at least two flights in the Strike Mission must carry the weapons. The USN may not use more than 16 shots of EOGB during the campaign. EOGB are Walleye II.
5. USAF F-4D CAP flights all use IFF Interrogators.
6. All A-7 flights from the *Kitty Hawk* tasked with Bombing reduce their bomb strength to 2.5 and carry Shrike (1). Bombing-tasked flights equipped with Shrike may attack any SAM or Fire Can unit; however, they may not deviate from their plotted flightpath and all other Bombing task restrictions apply.

Victory Conditions

Standard CVP awards for campaign scenarios apply. The victory total determines the victory level as follows:

VPs	Victory Level
130+	Decisive Victory. The operation is judged a stunning American success. Morale is high. US pilots believe the DRV has taken a beating and the war will soon be over.
111-129	Victory. The battle is an American success. Intelligence indicates significant damage has been inflicted on the DRV supply system.

- 91-110 **Inconclusive Operation.** US objectives were not fully achieved. The attacks have been a disappointment. Targets will have to be restruck.
- 60-90 **Defeat.** US objectives were not achieved. The North Vietnamese are repairing the damage and appear able to resist indefinitely. Supplies to the southern campaign continue to move with the minimum of disruption.
- < 60 **Significant Defeat.** The US forces fail to achieve their objectives. Hanoi proclaims a victory. There are significant doubts in Washington that America can save South Vietnam.

Downtown Dates

This is a summary of date-related rules and notes that appear in the rules, ADCs and order of battle (OOB) tables.

1965

- Jul** RF-101 defensive jamming available [USAF RF-101 ADC]

1966

- Jan** USN may select CBUs for SEAD flights [OOB Table B]
- Apr** Shrike ARM available [16.11; USAF F-100 ADC; USN A-4 ADC]
- Jun** USAF may select CBUs for SEAD flights [OOB Table A]
- Jul** USN A-4, F-4, F-8, RA-5 RWR and defensive jamming available [USN A-4, F-4, F-8 and RA-5 ADCs]
- Aug** Shrike ARM receives phosphorous target marker [17.54]
- Oct** F-105 RWR and defensive jamming available [USAF F-105 ADC]
RF-101 RWR available [USAF RF-101 ADC]
- Nov** USAF F-104 RWR available [USAF F-104 ADC]

1967

- Jan** MiG orbit points used for the first time [9.1]
SAMs can perform LOAL attacks [15.51]
Walleye I EOGB available [16.11]
USAF F-4 defensive jamming available [USAF F-4 ADC]
USAF may mount Bolo operations (Rolling Thunder Campaigns only) [28.83]

- Mar** EOGB available to A-4s [USN A-4 ADC]
- Apr** USAF F-4 RWR available [USAF F-4 ADC]
DRV can use defensive wheels [7.11]
- May** USAF F-4s may carry Gun Pods [USAF F-4 ADC]
- Aug** DRV can use slash attacks [11.52]
- Sep** AAA may be set-up on Thud Ridge [27.61]
- Nov** USAF MiGCAP missions can operate a MiG Screen [11.54]
- Dec** USAF begins to use beacon jamming [19.54]

1968

- Mar** Standard A ARM available [16.11]
- Apr** Standard B ARM available [16.11]
EB-66C Spot Jamming capability available [USAF EB-66 ADC]
- May** Standard A ARM available to F-105s [USAF F-105 ADC]

1969

- Jan** Standard B ARM available to F-105s [USAF F-105 ADC]
- Mar** A-6B PAT-ARM capability available [USN A-6 ADC]

1971

- Dec** IFF interrogators available on F-4D [USAF F-4 ADC]

1972

- Jan** The distance at which DRV flights interfere with SAM attacks drops from 5 hexes to 3 [15.42]
Walleye II EOGB available [16.11]
- Jun** Chaff dispensers available [OOB Table D]
- Aug** USAF begins flying two raids per day (Linebacker campaigns only) [28.31]
- Oct** R-3S missiles available to DRV MiG-19s [DRV MiG-19 ADC]
- Nov** A-1 Sandy CSAR forces replaced by A-7D
A-6C LGB capability available [USN A-6 ADC]
- Dec** USAF can use green entry arrows (Linebacker II raids only) [8.11]
IFF interrogators available on F-4E [USAF F-4 ADC]

Detection Levels

The following is a summary of the changes in DRV and US Detection Levels by month and year, included for your information. Where this table differs from a scenario, the scenario always takes precedence.

DRV Detection Levels

The DRV employed an ever-expanding network of ground-based radars in the years from 1965 to 1972. This was backed by a corps of ground observers who would visually track raids and pass information back by telephone to the Air Defense Command HQ in Hanoi. Here, radar and visual plots would be filtered and collated to build an air picture. The HQ staff could then assign targets to the rocket forces (SAM units) and direct MiGs to their targets.

<i>Date</i>	<i>Detection Level</i>
1965	C
1966-1969	B
1970-1972	A

The Detection Level is reduced by one for bad-weather raids. This reflects the contribution of the ground observers.

US Detection Levels

The US was highly reliant on electronic detection.

The USAF employed ground radars on the Thailand/Laos border, but these could not pick up targets at low altitude over the Red River. From 1965 EC-121D 'College Eye' radar aircraft, operating under the callsign 'Disco', would fly tracks over the Gulf of Tonkin or Laos to provide additional warning and direct fighters against MiGs. Low-level coverage was better than the ground stations, but still MiGs would get lost in the 'ground clutter' on the Air Force's radar scopes.

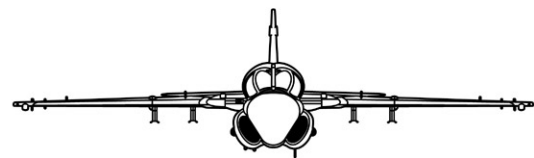
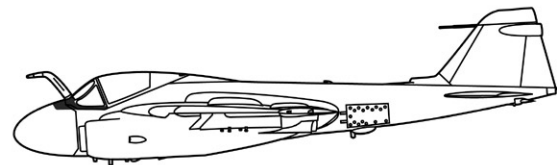
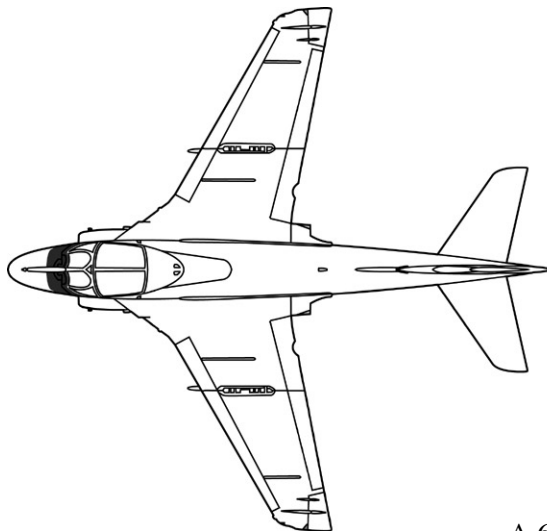
From July 1966 USN radar ships in the Gulf of Tonkin, codenamed 'Red Crown', could cover much of the Red River Valley and supply warnings to aircraft. However, the further away MiGs flew from the sea, the more Red Crown's low-level coverage degraded.

The USAF's EC-121 fleet was continuously improved during the war. IFF interrogation devices were added to track the MiG identification transponders. Initially this information had to be used sparingly to prevent the system being compromised, but later, use of IFF became more 'active'. The arrival of the EC-121K 'Rivet Top' added a vital signals intelligence (SIGINT) capability, and in the summer of 1972 'Teaball', a highly classified SIGINT source monitoring the DRV's MiG radio frequencies, was introduced.

<i>Date</i>	<i>Detection Level</i>	<i>Notes</i>
Apr 1965-Jun 1966	F	Disco introduced
Jul-1966-Apr 1967	E	Red Crown introduced
May 1967-Sep 1967	D	IFF tracking introduced. Rivet Top debuts.
Oct 1967-Jul 1972	C	Active IFF tracking
Aug 1972	B	Teaball introduced

In Nov 1967 Rivet Top aircraft were stood down for modifications. (Drop detection to E for the month.)

From Sep 1972 onwards the DRV began to realize the US was tracking their IFF and took countermeasures. (Drop detection to D from Sep to Dec 1972.)



A-6 Intruder

Extended Example of Play

The following is a detailed example of play, concentrating on two game turns—turns 4 and 5—from an actual playtest game. Directions are given as compass directions from north.

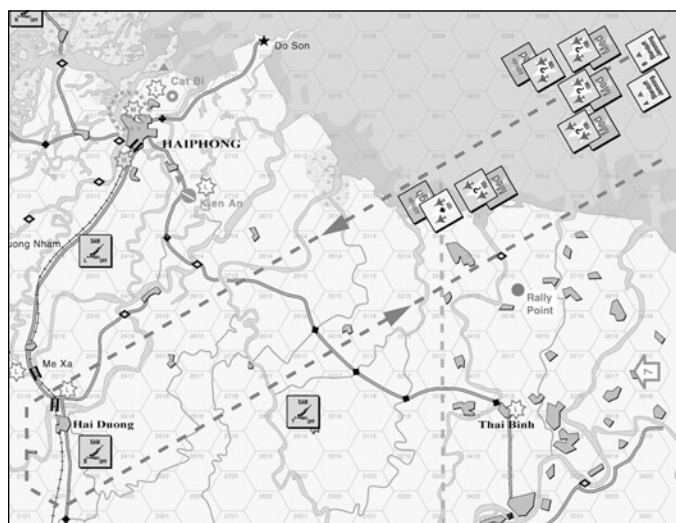
The scenario is *D7: Thick as a Brick*, set during August 1967. See that scenario for the background.

Summary of Set-up and Initial Turns

The DRV player sets up a comprehensive defence covering Hanoi, Haiphong as well as other major US targets, such as the steel works at Thai Nguyen and the bridge at Hai Duong. The US player rolls the Hai Duong bridge as the target for a US Navy strike. Referring to the order of battle tables, the US player launches a Navy Alpha strike from the *USS Coral Sea*.

For this Navy raid two flights of two F-4B aircraft provide MiGCAP (Callsign Showtime, using generic flight counter #100 and Old Nick, using flight counter #101; in this account we will reference flights by the formula ‘callsign/counter’).

Two further two-ship flights of F-4B (Tempest/102 and Killer/103) fly Armed Escort equipped with CBU to suppress SAMs and AAA threatening the strike force. Two flights of A-4E equipped with Shrike ARMs (Silverfox/104 and Clansman/105) are detailed to arrive one game turn behind the lead CAP. These ‘Iron Hand’ forces will deal with SAM threats. The main strike force consists of 4 flights each of four A-4Es (Bulldog/108, equipped with CBU to suppress the flak over the target, Diamond/109, Dogear/200 and Redcock/201, hauling regular bombs), which are covered by two further pairs of F-4Bs (Switchbox/106 and Taproom/107) flying CAP escort. The main strike is plotted to enter one game turn after the Iron Hand to exploit the narrow window of opportunity provided by the defence suppression force.



This is the US raid at the end of game turn 2. The dashed line represents the plotted flightpath (which is unknown to the DRV player). The broad shape of the incoming USN raid is becoming clear to the DRV, though the target (the bridge at Hai Duong) remains uncertain.

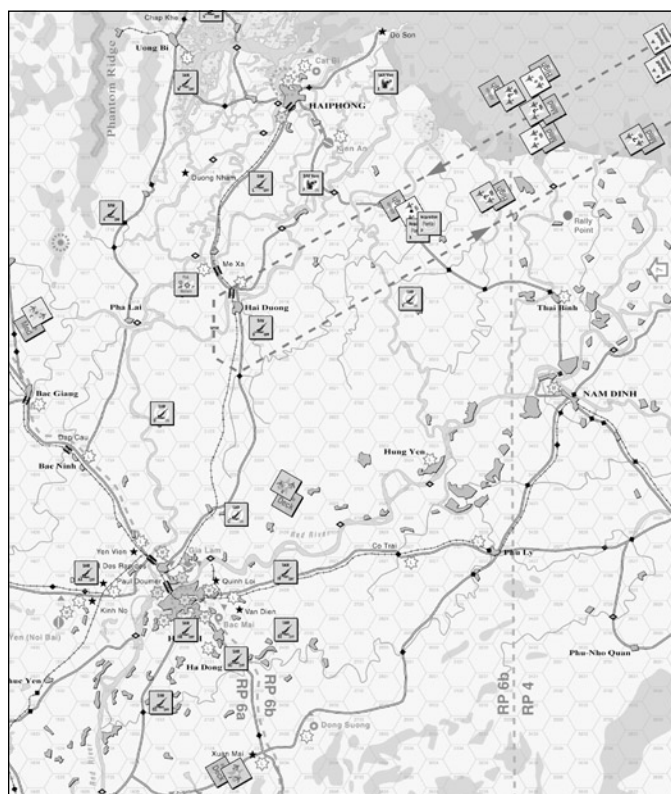
The US plans a straight ingress to the target with a tightly compressed strike package to minimize the DRV's chances to get their MiG force into position before the strikers enter the SAM zone.

The Early Warning Phase results in a Minimal warning for the DRV. No MiGs start airborne, though two flights are on alert at Kep and Hoa Lac. This is a difficult result for the DRV. They must now scramble their MiGs into position against the Navy.

Game Turn 1 sees the MiGs take off from Kep and Hoa Lac together with a dummy flight from Phuc Yen. The lead USN MiGCAP and Armed Escort flights enter at medium altitude, undetected by the DRV due to the Minimal early warning. Just short of the coast the CAP climbs to high altitude.

The lead Phantoms go ‘feet dry’ on Game Turn 2 as the Iron Hand force enters the map. MiG counters C, U and J accelerate to combat speed and head for the action on the deck, trying to keep below the US radar cover. Despite this, the US gets lucky, detecting MiG C, which has just launched from Kep, and revealing it as a real MiG, not a dummy.

On Game Turn 3 the US moves Showtime/100 flight to cover the MiGs at Kep. The DRV responds by climbing MiG C to medium altitude. SAMs start to light up, though SAM Y (hex



This shows the situation around the Hanoi defenses at the end of Game Turn 3. Three MiG counters (only two of which represent aircraft) are setting course to take on the vanguard of the Navy CAP.

2918) fails to acquire the undetected Killer/103 flight. SAM P in 2514 does better and gets a partial acquisition on Old Nick/101 while a new SAM, X, in 2810 comes online to get an acquisition on Old Nick. Finally, the hidden medium-density AAA in 2017 becomes active.

Game Turn 4

Random Events Phase. Roll 10: AAA Ambush on the deck. There's no effect as there are no US flights on the deck.

Jamming Phase. The standoff jamming markers (both EA-1F 'Electric Spads') do not move.

Detection Phase. All of the US undetected flights are at medium and high altitude. The DRV's detection level is B. With no modifiers the DRV must roll 10 or greater to detect a Navy flight. Silverfox/104, the A-4E Iron Hand flight, is detected.

The two undetected DRV flights on the deck both have -5 modifiers (for deck altitude flight) in their favor. The US detection level is D, which means a roll of 18 or more is needed. With these slim odds it's no surprise the US player fails to pick the flights up.

Tactics Note: The DRV is wise to keep their flights low, in the ground clutter where they are unlikely to be detected.

Movement Phase. The DRV decides to move first. However, they draw an initiative chit with a value of 0 for their first segment. Play passes to the US player.

The US initiative chit is 2. They must move two flights. Armed escort flight Killer/103 moves to hex 3016, positioning itself for a bombing run on the located SAM site in 2918 next turn. Flight Showtime/100 moves to hex 2913/NW at high altitude. The CAP bides its time, waiting to see what the DRV does. Play passes back to the DRV.

DRV initiative is 1. MiG C (from Kep) climbs to 1617/S at high altitude. It's coming up for a fight! Play passes to the US.

US initiative is 3. The Navy strike mission enters the map. They are undetected at medium altitude, and flying in trail, ending their moves at: 3710/NW (Bulldog/108), 3809/NW (Diamond-109), 3909/NW (Dogear/200). The remainder of the strike mission remains off-map. Play passes to the DRV.

DRV initiative is 2. MiG counter U in 2424 moves to hexside 2522/2622 facing ESE. It remains undetected. On the deck, MiG J climbs to low on hexside 2333/2433 facing ESE. As the MiGs have all finished movement, all the US flights can finish their moves.

Flight Taproom/107 stays at medium altitude and moves to hex 3414. Armed escort flight Tempest/102 moves to hexside 3110/3111 facing N.

CAP flight Old Nick/101 moves to 2517/N at high altitude, eight hexes away from MiG C. SAM battalions engage the CAP en route. SAM X in 2810 fires at 5 hexes range as Old Nick passes through hex 2815. The attack roll has a -1 modifier for partial acquisition and rolls an 11 for no effect. The defending F-4s have deception jammers and some offboard standoff jamming

by EA-1F jammers worth a +1 modifier. The defense roll results in no effect. SAM P in 2514 also takes a shot as the flight passes through 2616. The shot is again resolved with a partial acquisition modifier and the aid of +1 standoff jamming. Both attack and defense rolls result in a miss.

The final US moves of Game Turn 4 see the Iron Hand attack the SAM sites which have just engaged.

A-4 SEAD flight Silverfox/104 at medium altitude moves to 3312, turns 30 degrees right (to N), moves to hexside 3211/3212 and lofts a Shrike ARM at SAM X in 2810. Since Silverfox is detected, the SAM has a chance it might shut down its radar before the missile hits. A morale roll of 7 scuppers that idea and the Shrike attacks. On the PGM column of the Air-to-Ground Attack Table the US player rolls 19 (!). The modifiers are -4 for a lofted launch and -2 for an unlocated SAM, resulting in a modified 13 for a success value of 2. A roll of 16 on the Damage Table damages the SAM. A lucky hit! Silverfox/104 completes its move to hexside 3011/3012 facing N.

The second SEAD flight, Clansman/105 moves to 3114, turns 30 degrees right to N and lofts a Shrike at SAM B in 2514 from hexside 3013/3014. The SAM also fails to shut down. The US player rolls 15 with a -6 total modifier (lofted/unlocated) for a 2 attack success but then has a miserable roll of 6 resulting in no effect against the SAM.

Finally, CAP flight Switchbox/106 enters undetected at medium altitude and moves to 3612/NW.

Fuel Phase. No flights used dash movement, so there is no fuel reserve use.

SAM Location Phase. SEAD flight Clansman/105 tries to locate SAM P in 2514. As the radar is still on Clansman can claim modifiers of +1 for their Radar Warning Receiver and +5 for the SAM launch counter on the SAM site. A roll of 6, modified to 12, locates the site.

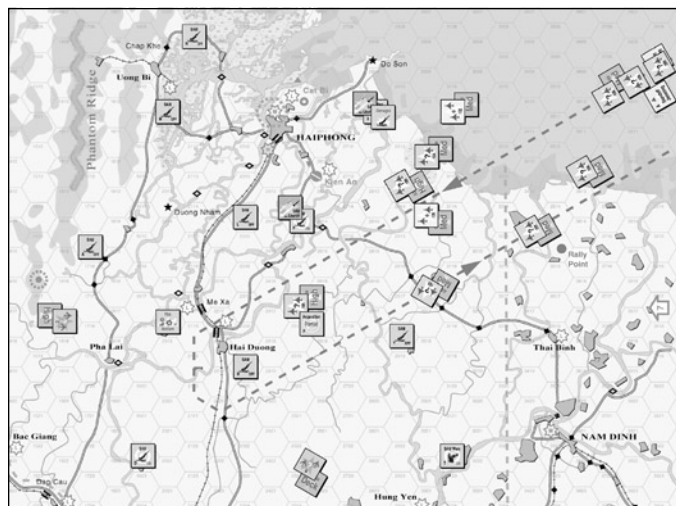
Track Phase. The US player rolls 5 at detection level D, losing track of all DRV diamond flights. The track on MiG C lost and it becomes undetected again.

The DRV player rolls 16 at detection level B, losing track of all spade flights. Both Old Nick/101, Silverfox/104 and Taproom/107 become undetected.

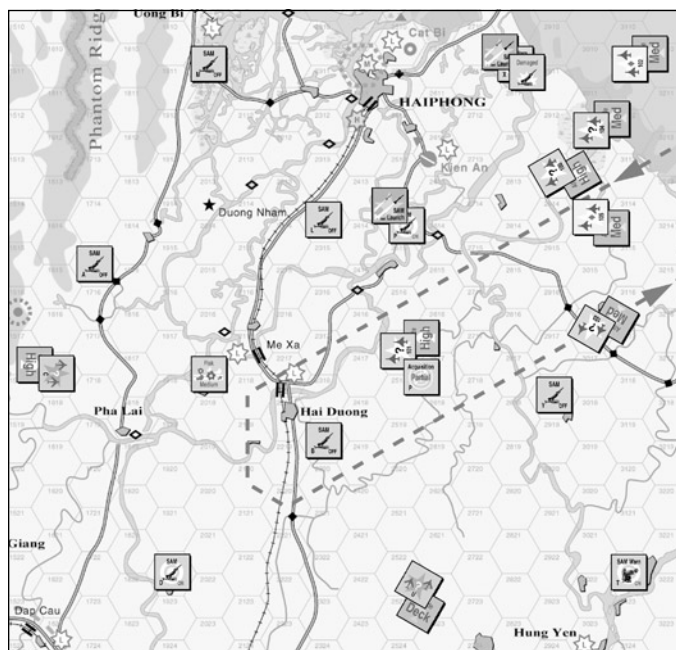
SAM Acquisition Phase. SAM P in 2514 stays on and tries to retain partial acquisition on Old Nick/101. Modifiers are -3 defensive jamming and -1 standoff jamming. A roll of 7 on the Target Acquired column of the SAM Acquisition Table is modified to 3. The SAM barely retains partial acquisition.

A new unlocated SAM, T, comes on in 3122. SAM T attempts a quick acquisition on Killer/103. With modifiers of -3 defensive jamming; -1 standoff jamming and -3 quick acquisition on the Target Detected column of the SAM Acquisition Table, a roll of 9 fails to acquire the target.

Administration Phase. The only major event in this Phase is that the SAM in 2918 shuts down. A new game turn starts.



The situation at the end of Game Turn 4. The main strike has entered in the southeast corner. The Armed Escort and SEAD have fanned out to engage the SAMs, only two of which remain lit up. Due to a fortunate Shrike ARM shot, the SAM battalion just to the west of Do Son has been damaged and is now out of the action. The undetected MiG flight from Kep is approaching Pha Lai and is going head-to-head with a Phantom CAP flight near Hai Duong at high altitude.



A detail of the developing situation. SAM X is damaged. SAM P is vulnerable to a second Shrike shot from Clansman/105. CAP flights Old Nick/101 and Showtime/100 are at high altitude, ready to dash and engage MiG C. Killer/103 is gearing up for an attack on the located-but-shut-down SAM in 2918. Or is it a dummy radar?

Game Turn 5

Random Events Phase. The random events roll results in a AAA Ambush on the deck. As there are still no US flights on the deck there's no effect.

Jamming Phase. The standoff jamming markers do not move.

Detection Phase. The DRV rolls to try and detect Old Nick/101, Silverfox/104 and Taproom/107 they lost track of the previous Track Phase. A 10 or greater is required on two dice. Rolls of 8, 14 and 3 mean only Silverfox is detected. The DRV also fails to pick up the other CAP flight, Showtime/100, but does detect Killer/103, Switchbox/106, and the main strike comprising Bulldog/108, Diamond/109 and Dogear/200.

The US player rolls for detection on the three MiG counters. Flight U on the deck gets -5 deck modifiers for a roll of 18 or greater to detect. Flight J at low altitude gets a -3, needing a roll of 16 or better. The US fails to pick either up. MiG C at high altitude requires a 13 or better roll, but the US fails to roll this too. However, MiG C is in radar search parameters from Old Nick/101. The base roll is 12 or greater and there's a -2 modifier for being 9 hexes away. A roll of 14 just manages to detect the MiG flight.

Movement Phase. The DRV elects to move first. They pull a 2 initiative chit and must move 2 flights. A new MiG flight, B, takes off from Gia Lam airport. MiG C moves to 1919, facing S. Play passes to the US.

The US initiative chit is 3. The SAM in 2918 is sitting close to the egress route and needs to be taken out if possible. Armed Escort flight Killer/103 braves the SAM's organic flak in a dive-bombing run from an initial point on the hexside 2917/3017. The US player sweats a bit when the flak rolls 16 and scores a hit as the flight reaches low altitude. The flak damage roll on the barrage column just misses with a roll of 11 (modifiers were +1 for being on a bombing run). Because the flight was attacked by flak barrage, it is visually identified and its generic counter (counter 103) is removed and replaced with the Killer flight counter.

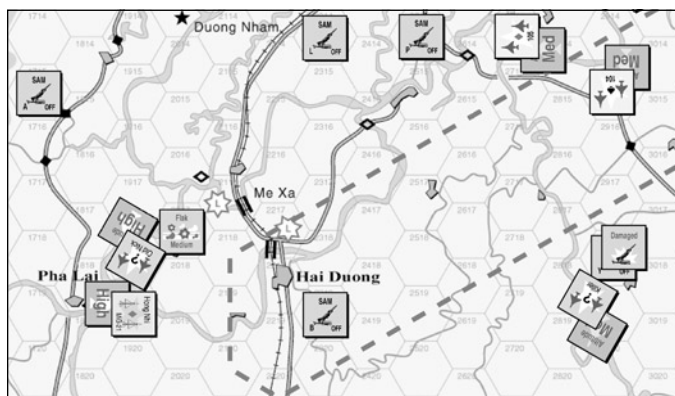
Killer then attacks the SAM site with cluster bombs. The F-4Bs have a bomb strength of 1, doubled by the effect of CBU's versus SAMs to 2. This is multiplied by the number of undamaged aircraft (2) to get a total attack value of 4. The modifiers are -1 attack modifier for the flak interference and -1 for bombing from Low altitude. There's a +1 modifier for attacking an unrevetted SAM site for a total of -1 modifiers. Rolling on the 4 column of the Air-to-Ground Attack Table an unimpressive roll of 8 (modified to 7) gets a 2 attack success. An 11 is rolled on the Damage Table, obtaining a Slight damage result which is enough to put the SAM and its radar (assuming it's not a camouflaged dummy SAM site) out of action. Killer's Phantoms climb out to medium altitude and finish movement on the 2818/2919 hexside.

The US player still has two flights to move on this initiative chit. Iron Hand flight Clansman/105 now moves to 2914 next and lofts a Shrike at SAM battalion B in hex 2514 which has a partial acquisition on flight Old Nick/101. The SAM rolls low on

its morale roll and shuts down its radar, removing the acquisition marker from Old Nick. Clansman/105 ends its turn in 2714/N. The remaining SEAD flight, Silverfox/104 moves to hex 2915/W to deal with SAMs to the west in the area of Nam Dinh. Play passes to the DRV.

DRV initiative chit is 1. MiG J moves to 2431/2532 hexside facing ESE and climbs to medium altitude, setting itself up for a dash at the strike. The MiGs are clearly feeling aggressive today!

The US initiative is 4. The strike mission continues moving northwest to 3312, 3411 and 3511. At last Old Nick-101 makes its run. The flight pushes up its afterburners to dash speed and homes in on MiG C. It travels through hexes 2016, hexside 1917/2017 and 1918, which are all in the barrage zone of the Medium AAA in 2017. The DRV has to roll 17 of better to get a hit, and three rolls of 4, 7 and 15 don't cut it. Old Nick attacks the MiG from 1918, facing WNW at high altitude.



The situation at the time the air combat starts. Old Nick has just engaged the MiG. Both flights are now visually identified. Note that because the Phantom flight is undetected, it stays on its undetected side.

MiG C is detected but the F-4Bs of Old Nick flight are not. The Phantoms engage with a dice roll of 15, needing a 9 or better and possessing a +1 modifier for their aggression value. The MiGs fail their engagement roll. They roll 11 but need 15 against the undetected Phantoms, while their aggression value gives them a +0 modifier. The net result of the rolls (attacker engages, defender does not) is surprise against the MiGs, which are revealed as a single MiG-21.

Air-to-air combat is now resolved. The Phantoms roll for shots on the 2 column of the Maneuver Table. The modifiers are: +1 for geometry, +3 for surprise, +1 for aggression differential, -1 for maneuver differential. A roll of 12 (modified to 16) gives two shots. The MiG rolls on the 1 column of the Maneuver Table. The MiG's modifiers are: -1 for geometry, -1 for disadvantage, -1 for the aggression differential and +1 for the maneuver differential. A roll of 8 modified by -2 pretty much means no shots for the Vietnamese player.

The F-4 shots are now resolved. The Phantoms declare they are using AIM-9D infrared missiles as this is their best weapon (their AIM-7E Sparrows have a lower combat value). The first shot damages the MiG (dice roll 10, modified by +3 for AIM-9D

weapon, +1 for additional undepleted weapons = 14 or a damage result). the second shot kills it (dice roll 13, modified to 17, kills on a 16-19). The MiG flight is removed from the board.

The Phantoms roll for ammo depletion and run out of AIM-9Ds on a die roll of 2. Now they roll a morale check with modifiers of +1 (aggression value) and a +1 (surprise). A poor roll of 8 is modified to a 10, resulting in disorder on the flight. Their aggression rating is modified by -1 down to +0. After the battle they scatter to hex 1818/NW at medium altitude and have a Maneuver marker placed on them. With 4 US flights moved, play now passes back to the DRV.

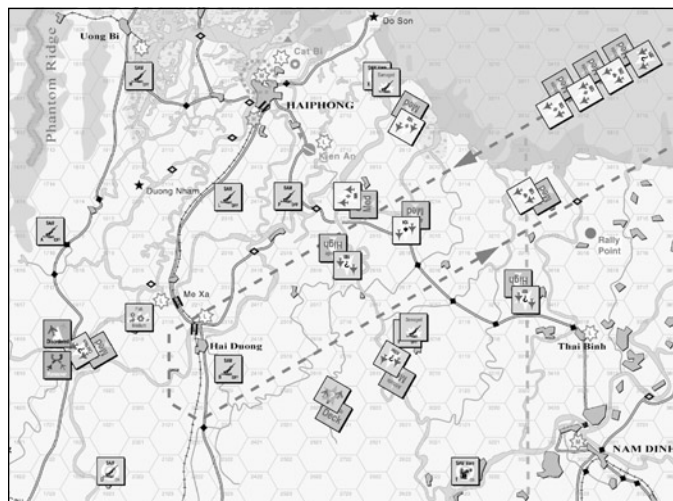
The DRV initiative is 1. MiG flight U moves to hexside 2619/2720, facing ESE on the deck. Play passes to the US player.

The US initiative is 2. With the threat from MiG C removed, the US repositions the CAP to cover the MiGs coming from the Hanoi area. Showtime/100 moves to 2716/W at high altitude and Taproom/107 moves to 3317/W, also at high altitude.

The DRV initiative is 2, but they have only 1 flight left to move. MiG flight J moves to hexside 2628/2729, facing ESE at low. Play passes back to the US.

The US player can now move his remaining units. Tempest/102 moves to 2912/WNW and Switchbox/106 to 3314/NW. Finally, Redcock/201 enters the map undetected and ends movement on 3710, bunched up with the rest of the main strike.

It's the end of the Movement Phase. The lead Skyhawks are about to cross the beach and the Thunder rolls on...



Situation at the end of Game Turn 5's Movement Phase, with two SAMs and a MiG flight taken out of the action and the main strike approaching the coast.

End example of play



GMT Games, LLC

P.O. Box 1308, Hanford, CA 93232-1308 • www.GMTGames.com