15.0 DESIGNER'S NOTES

Khe Sanh, 1968 began as a return to roots. That is, my very first published game, now almost thirty years ago, was a game covering the Vietnam war. I wished to do something in the modern period, and my Crisis: Sinai had centered on armored operations. The other major aspect in modern warfare is the existence of a helicopter-rich environment. Vietnam is clearly a venue for intensive helicopter action. When I cast about for a more specific subject, what occurred to me was a game centering on the northern portion of what used to be South Vietnam, the region known as "I Corps," or "Eye Corps." Thus my initial design concept consisted of an I Corps game emphasizing helicopter operations.

As the design work progressed it became clear that the Eye Corps theme remained too broad. With the strong insurgency component in Vietnam combat, combined with the fact that Eye Corps repeatedly became the seat of more conventional military operations, we could not avoid a game that would have to encompass the full range of counterinsurgency/regular warfare activity. Moreover, Eye Corps had been the scene for a number of distinct military campaigns, especially between 1966 and 1972. To design a game with that much scope would make it less distinguishable from some Vietnam games already in print, while a game covering that many campaigns quickly grew to boxed game proportions. The Eye Corps subject was not suitable for treatment in the format of a magazine game.

At that point I stepped back, looking for a battle action in Eye Corps with a distinctive flavor. The siege of Khe Sanh quickly came to mind. It is probably the largest pitched battle of the Vietnam War, certainly one of the most important to Americans. A couple of games on Khe Sanh exist but they focus on the actual siege of the combat base, with a succession of battles for several surrounding hills, the Khe Sanh village, and the Special Forces (Green Beret) camp of Lang Vei. I did not want to duplicate that approach, and it is also true that a close-in battle game like that offered less scope a for the helicopter tactics I wished to feature in the design. However, the attack to relieve Khe Sanh, called Operation PEGASUS, encompasses enough geographic scope to give the helicopters their due, while also featuring good battle action in the attempt to break the siege of the combat base. Thus, Khe Sanh became the subject for this game. For those who want to replay the siege there is a scenario starting with the battle actions around Khe Sanh and Lang Vei. The core of the game, however, lies in the Pegasus scenario.

As a tactical/operational simulation I have used *Khe Sanh*, 1968 as vehicle for a modern period adaptation of the game system I innovated in several World War II designs (*Warsaw Rising, Monty's D-Day, Fortress Berlin*). This features what I term an integrated maneuver-combat system. That is, units have modes optimized for either movement or fighting, with their vulnerabilities and combat value changing with their disposition. For the Vietnam era, it became natural to add that units are only able to perform the air assault function when in maneuver mode.

Also desirable in this game system is the way it dispenses with the mathematical inconvenience of calculating odds ratios. A simple subtraction of attacker strength from that of the defender creates a factor differential that is all that is necessary to use the combat results table. Other aspects may modify the die roll used to resolve combat but the method is simple and straightforward. In keeping with the fluidity of combat in the Vietnam War, the outcome of combat gives "advantage" to either player and does not necessarily eliminate units from the game.

Although this game system is well established in my body of design work, it is probably less familiar to gamers accustomed to conventional design approaches. I have therefore grouped the usual elements of movement and combat into a basic game, one that is associated with the Khe Sanh Siege scenario. The subtleties of helicopter tactics are linked to the Pegasus scenario in the Advanced Game.

In the Khe Sanh, 1968 combat system there is only a very limited role for Operations Effort (i.e., the Bid). The bid only increases the CRT column for final resolution, and only at high levels of operations effort. The bid does not help a defending unit. Elimination results occur as low as the second column (Column B) of the Lower CRT Matrix used for final resolution. There are numerous such elimination results. On the "J" column, for example, within the 2-12 dice results range, 5 results call for elimination. Even if the enemy has higher morale, 3 of those results would still be possible, i.e., a 1/3 chance. The K column has less opportunity, reflecting reduced chances when attackers over-concentrate firepower. So how does the US/GVN player even get on the J column vs. NVA dug in say, in mountains? The best way to kill NVA in the mountains without using the entire fixed wing airforce is instead to use [large] Heliborne Assaults. These can get you up to Column "D" or even "E" on the Lower Matrix as a starting point (even if the NVA have a PF of 7+). From there you need to generate column shifts for CAPs, surrounds, combined arms, unit integrity, operations level and tactical air to shift the odds columns right towards column "I" or "J". Note that while a CRT Tactical Result of 5, 6 or 7 (not a dice roll) against a defender is always an Elim, it's not easy to roll those results naturally when the defenders are in the mountains with their -4 DRM, but use your gunships (+1 DRM per gunship) to offset some of the terrain penalty.

Air Assault tactics in the Vietnam War involved the advantage of an incredible degree of mobility and surprise action but had the drawback that inserting airmobile troops made them especially vulnerable. Moreover, operations were linked quite symbiotically with the "Landing Zones" (LZs) where troops touched ground. The airmobile mechanics in *Khe Sanh*, 1968 are intended to portray these features of the reality.

Also significant in simulating a Vietnam subject, and going beyond basic tactical fluidity, is the frequent shifting of the initiative. US/GVN forces grasped the initiative when they went over to offensive operations, but quite frequently the NVA/VC dictated the pace and locale for combat. To permit shifting of initiative I have structured a game turn consisting of Impulses. The number of Impulses and order in which they are taken can vary, and every turn players contest the Initiative. Some gamers may recognize this mechanic as an adaptation of the bidding system I innovated in my designs Campaigns of Robert E. Lee as well as The Army of the Heartland. Originally developed in a Civil War context, this technique nevertheless works very well for Vietnam also. For solitaire play I suggest the use of two dice in two different colors: designate one color for each side; high roll wins the Initiative for the turn and takes an Impulse using up the amount of Operations Effort set by the die roll; in case of a tie roll again. Again this particular game mechanic has been built into the Advanced Game.

There are aspects of Vietnam I would like to have covered in greater detail, such as the interplay between guerrilla and conventional operations. That would have required a larger game than what is possible in a magazine format, however. I believe what we have is a good mixture, and have minimized missing elements by selecting a campaign about as conventional as it got in the Vietnam War. Enjoy *Khe Sanh, 1968.* I commend it to you.

John Prados

COMBAT RESULTS TABLE

UPPER MATRIX

Attack Type		Point Superiority									
Surprise Assault	-10	-5	0	5	8	12	16	20	24	30	≥ 36
Close Assault	-10	-5	0	5	8	12	20	36	48	≥ 60	
Mixed Assault	-5	3	12	20	25	36	45	55	60	70	≥ 80
Heliborne Assault	-30	-20	-10	-5	0	5	8	12	16	20	24
HIF	0	12	24	36	48	60	72	84	≥ 96		
Anti-Aircraft	-1	0	1	2	3	4	5	6	7	8	≥ 9
B-52			1				2		3		

Adjusted Protection Factor											
0	С	D	D	E	F	G	Н	I	I	J	J
1	С	С	D	D	Е	F	G	Н	I	I	J
2	В	С	С	D	D	E	F	G	Н	I	I
3	В	В	С	С	D	D	E	F	G	Н	I
4	A	В	В	С	С	D	D	E	F	G	Н
5	A	A	В	В	С	С	D	D	Е	F	G
6		A	A	В	В	С	С	D	D	Е	F
≥ 7			A	A	В	В	С	С	D	D	E

LOWER I	MATRIX				Fron	Upper M	latrix					
Dice Roll	A	В	C	D	E	F	G	H	I	J	K	Dice Roll
≤ -7	5/0	4 / 0	4/1	3 / 0	3 / 1	2/0	2/0	2 / 1	1 / 0	1 / 0	0 / 0	≤ -7
-6	4/1	4 / 1	3/0	3 / 1	2/0	2/0	2 / 1	1 / 0	1 / 0	0 / 0	1 / 1	-6
-5	4/0	3 / 0	3 / 1	2/0	2/0	2 / 1	1 / 0	1 / 0	0 / 0	1 / 1	1 / 1	-5
-4	3 / 0	3 / 1	2/0	2/0	2 / 1	1 / 0	1 / 0	0 / 0	1 / 1	1 / 1	0 / 1	-4
-3	3 / 1	2/0	2/0	2 / 1	1/0	1 / 0	0 / 0	1 / 1	1 / 1	0 / 1	0 / 1	-3
-2	2 / 0	2/0	2 / 1	1 / 0	1 / 0	0 / 0	1 / 1	1 / 1	0 / 1	0 / 1	1 / 2	-2
-1	2/0	2 / 1	1 / 0	1 / 0	0 / 0	1 / 1	1 / 1	0 / 1	0 / 1	1 / 2	0 / 2	-1
0	2 / 1	1 / 0	1 / 0	0 / 0	1 / 1	1 / 1	0 / 1	0 / 1	1/2	0 / 2	0 / 2	0
1	1 / 0	1 / 0	0 / 0	1 / 1	1 / 1	0 / 1	0 / 1	1 / 2	0 / 2	0 / 2	1/3	1
2	1 / 0	0 / 0	1 / 1	1 / 1	0 / 1	0 / 1	1/2	0 / 2	0 / 2	1/3	0/3	2
3	0 / 0	1 / 1	1 / 1	0 / 1	0 / 1	1 / 2	0 / 2	0 / 2	1/3	0/3	0/3	3
4	1 / 1	1 / 1	0 / 1	0 / 1	1 / 2	0 / 2	0 / 2	1/3	0/3	0/3	1 / 4	4
5	1 / 1	0 / 1	0 / 1	1 / 2	0 / 2	0 / 2	1/3	0/3	0/3	1 / 4	0 / 4	5
6	0 / 1	0 / 1	1 / 2	0 / 2	0 / 2	1/3	0/3	0/3	1 / 4	0 / 4	0 / 4	6
7	0 / 1	1 / 2	0 / 2	0 / 2	1/3	0/3	0/3	1 / 4	0 / 4	0 / 4	1/5	7
8	1 / 2	0 / 2	0 / 2	1/3	0/3	0/3	1 / 4	0 / 4	0 / 4	1/5	0/5	8
9	0 / 2	0 / 2	1/3	0/3	0/3	1 / 4	0 / 4	0 / 4	1/5	0/5	0/5	9
10	0 / 2	1/3	0/3	0/3	1 / 4	0 / 4	0 / 4	1/5	0/5	0/5	1/6	10
11	1/3	0/3	0/3	1 / 4	0 / 4	0 / 4	1/5	0/5	0/5	1/6	0/6	11
12	0/3	0/3	1 / 4	0 / 4	0 / 4	1/5	0/5	0/5	1/6	0/6	0/6	12
13	0/3	1 / 4	0 / 4	0 / 4	1/5	0/5	0/5	1/6	0/6	0/6	1/7	13
14	1 / 4	0 / 4	0 / 4	1/5	0/5	0/5	1/6	0/6	0/6	1 / 7	0/7	14
≥ 15	0 / 4	0 / 4	1/5	0/5	0/5	1 / 6	0/6	0/6	1/7	0 / 7	0/7	≥ 15

Attacks at less than the differentials provided are not allowed. Players cannot voluntarily reduce their differentials or odds columns.

Results to the left of the slash award CAPs to the defender and have tactical effects on the attacker; those to the right give CAPs to the attacker and have tactical effects on the defender.

TERRAIN EFFECTS CHART (TEC)

	Terrain Type	GROUND COST	Helicopter Cost	STACKING LIMITS ⁸	PROTECTION FACTOR 1	COMBAT DRM
1124	Clear	2 MP	1 MP	3/3	+0	-0
1517	Road	1 MP	1 MP	Other Terrain	Other Terrain	Other Terrain
071	Bridge	+0 MP	+0 MP	Not Applicable	No Effect	No Effect
	Town	1 MP	1 MP	4/5	+1	-3
0610 H .	Old French Fort	1 MP	1 MP	4/3	+1	-3
Quar	Rock Quarry	1 MP	1 MP	3/3	+1	-3
1140	Paddy ²	3 MP	1 MP	3 / Not Applicable	+1	-2
1816	Highland ²	4 MP	1 MP	3 / 3	+2	-3
950	Mountain ³	6 MP	1 MP	3 / 3	+3	-4
1406	Stream ⁴	+1 MP	+0 MP	Not Applicable	See note 4, below	-1
Viet	River ⁴	Cross at Bridges	+0 MP	Not Applicable	See note 4, below	-1
* FB	Fire Base ⁵	Other Terrain	Other Terrain	4/5	+3	-4
* CB	Combat Base ⁵	Other Terrain	Other Terrain	4/5	+4	-4
COMBAT	VC Combat Village ⁶	Other Terrain	Other Terrain	4	+3	-4
	South China Sea	Prohibited	1 MP	Prohibited	Not Applicable	Not Applicable
	Mode Change	+2 MP	Not Applicable	Not Applicable	Not Applicable	Not Applicable
thor	Enter/Exit a Hot LZ	Other Terrain	+2 MP	Other Terrain	Other Terrain	Other Terrain
1Z	Create an LZ ⁷	Not Applicable	+3 MP	Other Terrain / 3	Other Terrain	Other Terrain

1 Use the *single* most advantageous terrain for the defender vs HIF and Arc Light attacks (except for streams and rivers, see below). 2 Armor and armored cavalry units may enter highland and paddy hexes only when following along roads. 3 Armor, armored cavalry and mechanized units may not enter mountain hexes. 4 Streams and rivers halve Fire Strengths of all units assaulting across them (fractions ignored) except helicopters and unit/base Artillery Fire Strengths. Protection Factor increases and Combat DRMs are cumulative with all other terrain effects for defender's hex. 5 Fire and combat bases are printed on the map and increase the stacking limit for ground units in the hex to 4 (an LZ marker placed on one allows up to 5 helicopters to be based there). Base Artillery Fire Strength is halved when firing at more than ½ of maximum range *or* when being assaulted. See map's Base Capabilities Chart for other properties. 6 Viet Cong combat villages are represented by unit counters and increase the stacking limit for ground units in the hex to four, and have other properties as specified on the map's Base Capabilities Chart. 7 An LZ marker can be created in any non-town/non-base hex except paddy and South China Sea hexes and allows up to three helicopter units to be based there. 8 If there are two maximum stacking values in a box, the first value is for Ground Units and the second is for Helicopter Units.

CRT LOWER MATRIX MODIFIERS SUMMARY

	Combat Advantage Points	1 →	For attacker for each 2 CAPs he expends. Do not use for HIF attacks.
	Flank Attack	1 →	For attacker if conducting flank attack against defender. Do not use for HIF attacks.
S	Defender Surrounded	1 →	For attacker if defender is surrounded by attacking enemy ground units or their ZOCs. Do not use for HIF attacks. Helicopters may not be used to claim this modifier.
FŢ	Combined Arms	1 →	For attacker if he has combined arms attacking the defender's hex. Do not use for HIF attacks.
V SHIFT	Armor Superiority	1 →	For attacker with at least one armor or armored cavalry unit attacking. Defender negates with at least one armor, armored cavalry or mechanized unit present in hex. <i>Do not use for HIF attacks.</i>
COLUMN	Unit Integrity	1 →	For attacker for each participating HQ. Defender can negate any 1 attacker column shift granted (for any reason) for each defending HQ that is participating. <i>Do not use for HIF attacks</i> .
COL	Airpower	← 1 →	For attacker <i>or</i> defender for each Air Strike used by US/GVN player in his favor. <i>Do not use for HIF attacks.</i>
	Local Observers	1 →	For attacker when he conducts HIF attacks (only) and has at least one friendly ground unit adjacent to the defending target hex.
	Operations Level 5	1 →	For attacker whose side is at Operations Effort level 5. Advanced Game only.
	Operations Level 6	2 →	For attacker whose side is at Operations Effort level 6. Advanced Game only.
S	Terrain	- ?	As listed in the TEC for the terrain the defender is in.
IFIER	Morale	- 2	If one of the defender's units has the highest Morale Rating. No effect if attacker does.
IFI	Anti-Aircraft Regiments	+ 1	For each NVA AA regiment conducting AA Fire (only) against US/GVN helicopters.
OD	Gunship Helicopters	+/-1	Per helicopter gunship, whichever benefits the US/GVN player in the combat.
MC	NVA Sappers	+ 2	If NVA player uses Sappers against a Base/fortification.
IE	Arc Light Target	+ 1	For each unit more than 1 in a hex attacked by an Arc Light Strike.
Ω	Each Shift Above K	+ 1	Per column shift to the right of column K.

CRT TACTICAL RESULTS

Result	Ground Combat CAP Award / Effects	Anti-Aircraft Combat CAP Award / Effects
0	0 / No Effect	0 / No Effect
1	1 / No Effect	0 / No Effect
2	2 / Opponent must Disrupt	0 / No Effect
3	3 / Opponent must Disrupt or Retreat 2 hexes	0 / Helicopter Aborted: Immediately remove to off-map with its load
4	4 / Opponent must Disrupt and Retreat 2 hexes	0 / Helicopter Aborted: Immediately remove to off-map with its load
5	5 / Opponent is Eliminated	5 / Helicopter Destroyed: Helicopter (and its load) is destroyed
6	6 / Opponent is Eliminated	6 / Helicopter Destroyed: Helicopter (and its load) is destroyed
7	7 / Opponent is Eliminated	7 / Helicopter Destroyed: Helicopter (and its load) is destroyed

Note If all defending troops retreat from a hex or are eliminated, one or more of the surviving attacking units can advance to occupy it (advance after combat). This action must be taken immediately, before the attacker begins to resolve any further combats in his Combat Segment.

IMPULSE OPERATIONS EFFORT CAPABILITIES

OPERATIONS	MOVEMENT AL	LOWANCE in MPs	HELICO	COLUMN SHIFTS	
EFFORT LEVEL (OE)	Movement Mode Mechanized / Other	Combat Mode Mechanized / Other	Missions Permitted	Total Movement Distance in Hexes	Lower Matrix see note
1	10 / 6	6 / 4	1	20	None
2	16 / 12	8 / 6	1	25	None
3 Basic Game level	24 / 18	12 / 8	2	30	None
4	30 / 24	16 / 10	2	35	None
5 costs 5 CAPs	36 / 30	20 / 12	3	Unlimited	1 →
6 costs 6 CAPs	42 / 36	24 / 14	3	Unlimited	2 →

Note Column shifts apply only to Assaults and HIF combat and only in the player's own Combat Segment.