



HELLS GATE

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VICTORY
JOINT
GAMES

SIMULATING WAR

HELL'S GATE is just one of the EIGHT wargames published in Philip Sabin's new book **Simulating War** (Bloomsbury Publishing, 2012), the sequel to his acclaimed work **Lost Battles**.

The other games include:

- Second Punic War (multiplayer diplomacy)
- Roma Invicta? (Hannibal in Italy)
- Kartenspiel (Napoleonic card game)
- Big Week (US bombing raids)
- Fire and Movement (WW2 battalion attack)
- Block Busting (WW2 urban combat)
- Angels One Five (WW2 air combat)

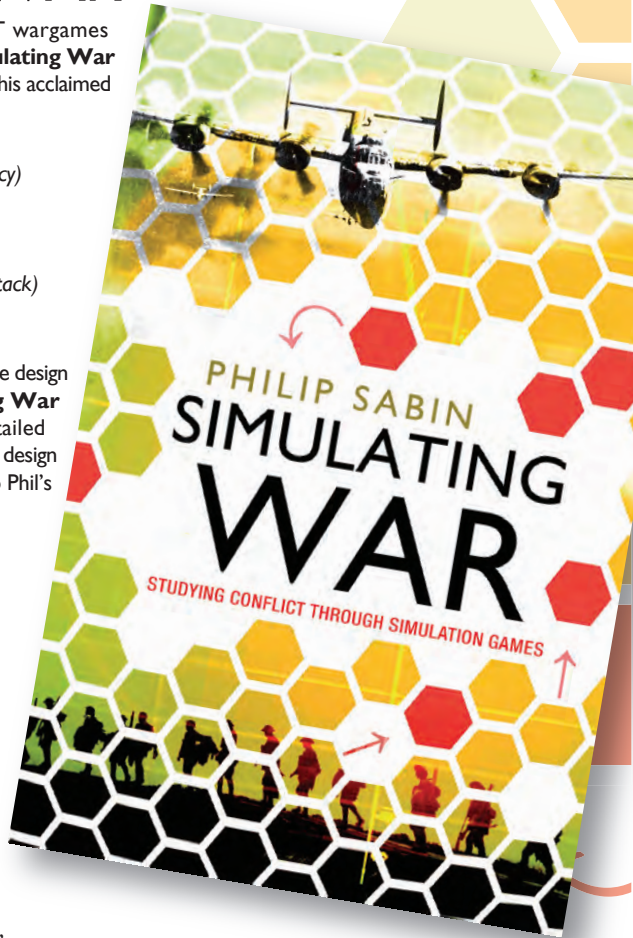
Besides the rules, components and extensive design notes for all of these games, **Simulating War** contains a further 100,000 words of detailed content giving you all the skills you need to design and run your own simple wargames, as do Phil's MA students.

Chapter headings include:

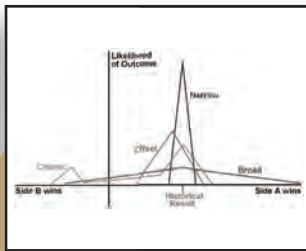
- Modelling War
- Accuracy vs Simplicity
- Educational Utility
- Simulation Research
- Designing the Components
- Modelling Conflict Dynamics
- Modelling Command Dynamics
- Integration and Testing

Simulating War offers a complete reference work and games compendium for the price of a single wargames mag. It is essential reading for all gamers.

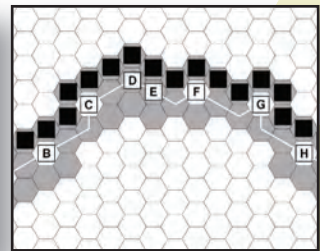
For more, Google 'Sabin Simulating War'.



Students using the Hell's Gate simulation in class



Possible distributions of outcomes for historical simulations



Zones of control as a means of reducing counter requirements

HELL'S GATE: THE KORSUN POCKET, 1944

Table of Contents

[0.0] USING THESE RULES	1
[1.0] INTRODUCTION.....	1
[2.0] GAME EQUIPMENT	1
[3.0] SEQUENCE OF PLAY	2
[4.0] ZONES OF CONTROL	3
[5.0] SUPPLY.....	3
[6.0] REINFORCEMENTS	4
[7.0] COMBAT.....	4
[8.0] MOVEMENT	7
[9.0] THE RECOVERY PHASE.....	7
[10.0] SET UP.....	7
[11.0] SPECIAL RULES	7
[12.0] HOW TO WIN	9
EXTENDED EXAMPLE	9
DESIGNER'S NOTES .INSIDE COVER	

[0.0] USING THESE RULES

New gaming terms, when **initially defined**, appear in **dark red** lettering for quick referencing.

The instructions for this game are organized into major “**Rules**” sections as shown in large **green CAPS font**, and represented by the number to the left of the decimal point (e.g., Rule 4.0 is the fourth Rule). These Rules generally explain the game’s subject matter, its components, the procedures for play, the game’s core systems, how to set it up, and how to win.

With each Rule, there can be “**Cases**” that further explain a Rule’s general concept or basic procedure. Cases might also restrict the application of a Rule by denoting exceptions to it. Cases (and **Subcases**) are an extension of a Rule shown in the way that they are numbered. For example, Rule 4.1 is the first Case of the fourth Rule; and Rule 4.1.2 is the second Subcase of the first Case of the fourth Rule.

Important information is in **red text**.

References to **examples** of a Rule or Case are in **blue text** and this font.

Text in **shaded boxes**, like this, provides the voice of the game’s designer, who is addressing you to explain an idea or concept that is not, itself, a Rule or a Case.

[1.0] INTRODUCTION

HELL'S GATE is a simulation game of the Battle of the Korsun Pocket in Ukraine, during January and February of 1944. Two players direct the German and Soviet forces as they seek to capture or regain territory and inflict losses on the opposing side while minimizing their own losses. The simulation is also easily playable solitaire for those who wish to study the dynamics involved.

[2.0] GAME EQUIPMENT

Parts Inventory

- 1 11x17” map with Turn Track
- 70 double-sided, laser-cut* game pieces
- 1 six-sided die (boxed edition only)
- 1 Rules booklet with a Reference Sheet on the back cover

*Some slight soot and discoloration can occur during the laser cutting process. If any of these pieces are missing or damaged, please email us at info@victorypointgames.com

A 6-sided die is needed for resolving battles.

[2.1] The Game Map and Scale

The game map shows the area of Ukraine where the battle took place. Superimposed over it is a hexagonal grid to regulate movement and the position of the playing pieces just as squares do on a chessboard.

We refer to each space on the map as a “**hex.**”



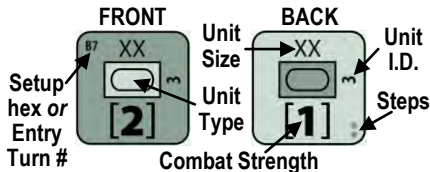
You will find explanations of the terrain features on the **Terrain Effects Chart** which, along with the **Turn Track**, is located on the game map itself. Other charts and tables are printed on the back of this Rules booklet for reference.

Scale: Each hex is approximately 20 kilometers across and each turn represents three days of real time.

[2.2] The Playing Pieces

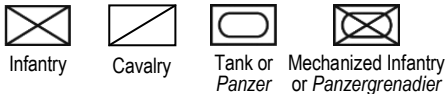
The square pieces, hereafter referred to as “**units**,” represent the actual military formations that fought in this campaign. Their numbers and symbols denote their strength and type.

Sample Units



[#] = **Defense** strength; this value is multiplied when **Attacking**

Unit Type Symbols



Unit Sizes

X = Brigade; **XX** = Division;
XXX = Corps

Thus, reading its I.D., Type and Size, the sample unit is the **3rd Panzer Division**.

Combat Strength measures a unit's value in battle as expressed in Strength Points; higher numbers are stronger. *A tank unit's [bracketed] strength value is used only when defending; its strength is always multiplied when attacking.*

Unit **size** and unit **identification** data are provided for historical interest only; they do not affect gameplay.

Steps measure losses in combat and are important for determining the winner (12.0). Bright-colored units have **two** steps, and paler units have **one** step each. The two dots in the bottom-right corner of some units indicate that it was originally a two-step unit that is currently reduced to its one-step side.

The German Player controls the **German** (field gray and black) units. The Soviet Player controls the **Soviet** (red and brown) units.

The remaining square, round and arrow-shaped pieces are “**markers**” used to indicate and help players remember the state or status of something.

Sample Markers



Game Turn / Weather



Out of Supply (OOS)



Retreated

[3.0] SEQUENCE OF PLAY

Note: The set up instructions (10.0) are toward the end of the Rules. This is because you should not “dive in” until you have looked at all the Rules and taken note of the Special Rules regarding the first three Game Turns (11.0).

How the Turns Work: Each **Game Turn**, the players alternate taking their respective **Player Turns**, Soviet first and German second. Each Player Turn consists of four **Phases** conducted in order, with the player completing all of the actions during one Phase before beginning the next Phase.

Soviet Player Turn

1. Soviet Supply and Reinforcement Phase. The Soviet player checks his units' supply status (5.0).

2. **Soviet Combat Phase.** The Soviet player initiates any desired battles against adjacent enemy units (7.0).
3. **Soviet Movement Phase.** The Soviet player may move any or all of his units in play (8.0).
4. **Soviet Recovery Phase.** The Soviet player removes any **Retreated** markers on his units (9.0).

German Player Turn

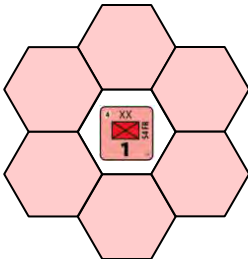
5. **German Supply and Reinforcement Phase.** The German player checks his units' supply status (5.0).
6. **German Combat Phase.** The German player initiates any desired battles against adjacent enemy units (7.0).
7. **German Movement Phase.** The German player may move any or all of his units in play (8.0).
8. **German Recovery Phase.** The German player removes any **Retreated** markers on his units (9.0).

Administrative

9. **Housekeeping Phase.** Advance the **Game Turn** marker one turn and roll for mud (11.2) or, if the eighth Game Turn was just completed, determine the winner (12.0).

[4.0] ZONES OF CONTROL

The six hexes immediately surrounding a hex occupied by a unit constitutes that unit's **Zone of Control** (or "ZOC").



This represents the vicinity where that unit projects its strength through active patrols, probing, and ranged firepower.

These adjacent hexes upon which a unit exerts its ZOC are called its **controlled**

hexes and inhibit opposing units' ability to trace supply (5.1) and retreat (7.6).

[4.1] Continuity: All units exert a ZOC at all times, regardless of the Phase, Player Turn or presence of enemy units.

[4.2] Effects: There is no additional movement cost to enter or leave a hex in an **enemy ZOC** (abbreviated **EZOC**). Terrain has no effect on ZOCs, nor is there any additional effect when more than one EZOC is exerted onto a hex.

[4.3] Mutuality: Adjacent opposing units are mutually affected by their respective ZOCs.

[5.0] SUPPLY

During your own Supply and Reinforcement Phase at the beginning of your Player Turn, you must judge the supply status of all your units. Each unit's supply status remains in effect until your next Supply and Reinforcement Phase (when it is judged anew).

[5.1] Tracing Supply: Units are in supply if they occupy a friendly **supply source** hex (i.e., one with that player's supply symbol in it) or can trace a supply line to one.

A **supply line** is an unimpeded chain of connected hexes of any length to a friendly supply source hex. A supply line cannot be into or through enemy occupied hexes. Neither can it be traced into or through an enemy supply source hex or a hex in an EZOC *unless* a friendly unit is also in that hex. That is, the presence of a friendly unit blocks EZOCs and enemy Supply Source hexes.

[5.2] Denoting Supply Status: When your units are not in supply during your Supply and Reinforcement Phase, place an **Out of Supply (OOS)** marker on them to indicate this status. If your previously unsupplied units can



again trace supply during this Phase, remove their respective **OOS** markers from play.

[5.3] Effects of Being Out of Supply:

Units with an **OOS** marker can move only **one hex per turn**. They also suffer adverse column shifts in combat (7.2).

Example: It is the beginning of the Soviet Supply and Reinforcement Phase and the embarrassed Soviet player checks the supply status of all his on-map units as shown here:



He is embarrassed because, during the previous turn, he advanced boldly to the west and captured his second **German Supply Source** hex (A6), but failed to completely eliminate the German units trapped and unsupplied themselves in C6. Because of this battlefield setback, the surviving German unit there exerts its EZOC onto the **Soviet Supply Source** hex in C7, thus blocking his two red tank and two red infantry units from tracing a supply line back to C7. As a result, these four units are all unsupplied and are now marked so, thus:



The three brown Soviet units, however, can all easily trace supply lines back to the **Soviet Supply Source** hexes behind them.

[6.0] REINFORCEMENTS

After judging your units' supply (5.0), place any friendly reinforcing units due to arrive that turn in their entry hexes at full-strength. These reinforcements and their entry hexes are shown on the Game Turn Track. They cannot be delayed, and may attack and move normally on their turn of arrival.

Cases

[6.1] Enemy Occupied Hexes: If the designated arrival hex is enemy occupied, those reinforcing units arrive instead in the nearest vacant or friendly occupied **Friendly Supply Source** hex (the owning player's choice if two such hexes are equidistant). If there are no eligible **Friendly Supply Source** hexes, the reinforcement is lost.

[6.2] The 24th Panzer Division: arrives on Game Turn 4 only on the condition that a Soviet unit has ever entered hex A2, A3, A4, A5 or A6 – otherwise, the unit never arrives.



The division is sent back to the crisis at Nikopol and never appears in the game.

[7.0] COMBAT

Your friendly units may combat enemy units during your Combat Phase, at which time you are the “attacker” and your opponent is the “defender” regardless of the overall strategic situation.

Conducting combat is voluntary. Attacks can occur only between units in adjacent hexes, and in any order that the attacker desires.

Procedure

During your Combat Phase, each combat is conducted by performing the following steps in order:

1. **Designation:** You designate which of your units are attacking and which hex they are attacking (see 7.1).
2. **Determine Combat Strengths:** Each player simultaneously totals the Combat Strengths of their respective units involved in that combat.
3. **Determine Odds Ratio:** Divide the attacker's strength total by the defender's strength total (from Step 2), dropping any remainder (or "fractions") to determine the appropriate odds column on the **Combat Results Table** (see the back of these Rules).
4. **Determine Column Shifts:** As required, shift the odds column (from Step 3) to determine the final odds column (see 7.2).
5. **All-Out Attack?:** If eligible, the attacker can declare an All-Out Attack (see 7.3).
6. **Determine Result:** Roll the die and consult the **Combat Results Table**; cross-index the row of the number rolled with the final odds column to determine the result.
7. **Apply the result** immediately.
8. **Conduct the next combat** if there are others yet to be resolved.

Cases

[7.1] **Restrictions:** Each friendly unit can only *attack* once per turn, and each enemy occupied hex can only *be attacked* once per turn. Friendly units in the same hex may attack into different adjacent hexes or not at all, and units in different hexes can combine to attack a mutually adjacent enemy hex in a single attack.

[7.1.1] **How Many Units:** A maximum of **two** units can **attack** across a single hexside, so additional units in an attacking hex would have to attack different hexes or not at all.

A maximum of **two** Soviet or **three** German units can **defend** in a single hex. If there are more than that many units defending in a hex, the *strongest* units defend.

[7.1.2] **Strengths:** *Defending* units always use their (current) printed Combat Strength.

Attacking tank or **panzer** units have their strengths **tripled** when attacking into a **clear** terrain hex, or **doubled** when attacking into a **woods** hex or the city hex of **Cherkassy** (F6).

[7.1.3] **Retreated Units:** Retreated units cannot attack.

Retreated units contribute nothing to the defense of their hex. They are ignored when defending a hex.

[7.2] **Column Shifts:** Each column shift is symbolized by left and right arrows (←, →). They are cumulative and each combat uses all of these that apply:

- ➡➡ If *all* of the unretreated units in the attacked hex are unsupplied.
- ➡ If *some*, but not all, of the unretreated units in the attacked hex are unsupplied.
- ← If the ground conditions are **mud**.
- ← If the defender is in a **woods** hex or the city hex of **Cherkassy** (F6).
- ← If *at least half* of the attacking units are doing so across river hexsides.
- ← If *some*, but not all, of the attacking units are unsupplied.



◀◀ If *all* of the attacking units are unsupplied.

Example: Units with a total combat strength of **12** attack a single unit with a combat strength of **1**, so the combat odds are **8:1** (which is the maximum allowed).

For the column shifts, the unit being attacked is unsupplied (➡➡), but it is defending in a woods hex (◀) and behind a river (◀) during mud conditions (◀).

The net effect is to apply one column shift to the left (◀) making the final, adjusted odds column **6:1**.

[7.3] All-Out Attacks: After the final odds column has been determined, the attacker may declare he is launching an All-Out Attack. An All-Out Attack uses the (higher) combat result to the right of the slash on the Combat Results Table.

Procedure

To declare an All-Out Attack, one attacking **two-step** unit of the owner's choice (which **must be a tank or panzer unit if possible**) is flipped to its one-step side. If no full-strength, two-step unit is attacking, an All-Out Attack is not allowed.

[7.4] Overconcentration: Attacks on hexes containing **five or more** units (*excluding* retreated units) automatically use the (higher) combat result to the right of the slash on the Combat Results Table. *There is no need for the attacker to declare an All-Out Attack on such defending hexes.*

[7.5] Combat Results: The number to the **left** of the slash shows how many Hits the defender suffers in a normal attack, while the number to the **right** of the slash shows the defender's Hits versus an All-Out Attack or as a result of an overconcentrated defense.

Procedure

Applying Hits: Typically, **Hits** are absorbed by losing as many steps from defending units as the combat result value indicates.

The defender chooses which of his units absorb Hits, with these restrictions:

- All untreated defending units, not just those that contributed their combat strength, are eligible to absorb Hits. Retreated units are not eligible to absorb Hits.
- Eligible two-step units must always take step losses in preference to one-step units. No unit in a combat can be completely eliminated while there are any intact two-step units there to take the losses.

Automatic Elimination: When a defending hex suffers more Hits than it has eligible steps to absorb, eliminate all the units in the defending hex and ignore the excess Hits.

[7.6] Retreats: Except in the case of automatic elimination (above), the defending units may absorb their final Hit, not as a casualty (i.e., a step loss), but by retreating all their remaining units to one or more adjacent hexes of the defender's choice instead.

Procedure

Units must retreat into hexes that are not in an EZOC (see 4.0), if possible. If no such hex is available to retreat into, only then can units retreat into friendly-occupied hexes in an EZOC.

Restrictions

Units may never retreat off the map, into hexes in an enemy ZOC that are not occupied by friendly units, or hexes that contain an enemy supply source, unless occupied by a friendly unit.

Friendly Supply Source Hexes: Units in a friendly supply source hex can only

retreat into *another* friendly supply source hex (provided that it is not in an EZOC, unless a friendly unit also occupies that hex).

Mandatory Retreats: Retreating is voluntary, except that **Soviet forces which suffer 2 or 3 Hits must retreat** to absorb the final Hit if they are able to do so.

Post-Retreat Effects

All retreated units have a **Retreat** marker placed on them to denote their status. It is removed during that player's Recovery Phase (see 9.0).



Retreated units (i.e., those marked with a **Retreated** marker) can neither attack nor move during their owner's Player Turn.

Ignore Retreated units in a defending hex; they do not contribute to its defense, nor can they absorb Hits.

Eliminate retreated units if all of the other defending units in their hex either *retreat* or are eliminated. *Thus, a unit with a Retreated marker cannot be retreated again; it is eliminated instead.*

Old Hands Note: There is no "Advance After Combat" in this game. Your Movement Phase follows combat, and your pieces can "advance" at that time.

[8.0] MOVEMENT

During your friendly Movement Phase, you may move none, some or all of your **unretreated** units **one hex** to any adjacent hex that does not contain an enemy unit.

[8.1] Restrictions: Units may never move off the board or enter a hex containing an enemy unit.

[8.2] Fast Units: If the ground conditions are still **snow**, then supplied **tank**, **panzer**, **mechanized** and **cavalry** (e.g., "fast") units can move up to **two** hexes



in succession, in any direction or combination of directions, as long as they do not enter an enemy occupied hex. **Cavalry** may make such two-hex moves *regardless of terrain*, but **tank**, **panzer** and **mechanized** units cannot enter two **woods** hexes or cross two **river** hexsides (though they may accomplish one of each on a two-hex move).

[8.3] Stacking: There is no limit on how many friendly units may occupy a single hex.

But there are limits as to how many units can *attack* or *defend* in a hex (7.1.1) and a risk for *overconcentration* (7.4).

[9.0] THE RECOVERY PHASE

During your Recovery Phase, remove all of the **Retreated** markers from your friendly units. This ends their effects.

[10.0] SET UP

First, sort the units by side: field gray and black for the Germans, red and brown for the Soviets. Create two nearby piles for the **OOS** and **Retreated** markers.

Next, turn all of the units so that their full-strength side is face up. All units are initially deployed onto the map showing their strongest side.

In the upper-left corner of every unit is its set-up location. This is either a letter-number combination (e.g., "A2") indicating that it sets up in the correspondingly marked hex on the map, or a circled number, indicating it sets up on the Game Turn Track in a box beneath that turn number. It enters play during its owner's Supply and Reinforcement Phase of that turn.

The **Game Turn / Weather** marker is placed with its 'snow' side up in the **1** box of the Game Turn Track.

After following these steps, the game begins by following the **Sequence of Play** until Game Turn 8 is completed, at which time, victory is assessed (12.0).

[11.0] SPECIAL RULES

GAME TURN 1

[11.1] **Game Turn One:** On the first Game Turn, apply these Special Rules:

- **During the Soviet Combat Phase**, all Soviet units may attack normally, but German units can only retreat into hexes containing friendly supply sources or other German units, and only then if the hexes are eligible for retreats and have suffered no Hits in earlier Soviet attacks. *That is, once the Soviets inflict a Hit against a particular hex, German units in later combat that turn cannot retreat there.*
- **During the Soviet Movement Phase**, only the three Soviet tank units may move. They *must* move so that they end the Soviet Movement Phase in different hexes from one another.
- **During the German Combat Phase**, only the two German panzer units that begin setup on the map, and the two Turn 1 German panzer reinforcements, can attack and the Germans suffer a maximum of **one** adverse column shift for being unsupplied (see 7.2), when attacking.
- **During the German Movement Phase**, only **one** German panzer unit (and no other units) can move.

GAME TURN 2



[11.2] **Game Turn Two:** On the second Game Turn, apply these Special Rules:

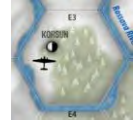
- **For the entire turn**, German units cannot move or retreat into **Tichonovka** (hex **B3**). *Place the*



reminder marker shown here on the map.

This is because of the small Soviet pocket of troops hanging on there from an earlier attack.

- **During the Soviet Supply and Reinforcement Phase**, Soviet supply lines cannot be traced more than **three** hexes to a **Soviet Supply Source** hex.
- **During Both Combat Phases**, both sides suffer a maximum of **one** adverse column shift for being unsupplied (see 7.2), whether attacking or defending.
- **During the German Movement Phase**, no German units that start in or are adjacent to **Korsun Airfield** (hex **E3**) can move unless a Soviet unit has ever entered a hex adjacent to **Korsun**.
- **During the Housekeeping Phase**, beginning on this turn **and for the rest of the game**, the German Player rolls a die to determine if the ground conditions have turned from **Snow** to **Mud**. On a  or a , flip the **Game Turn** marker to its Mud side before advancing it to the next Game Turn.



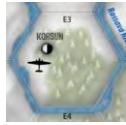
Any other result has no effect and causes this die roll to be repeated during the Housekeeping Phase of the following Game Turn, and so on each turn until Mud occurs.

Mud conditions remain in effect for the rest of the game. Mud limits all movement to one hex, and produces an adverse column shift in attacks.

GAME TURN 3

[11.3] **Game Turn Three:** On the third Game Turn, apply these Special Rules:

- **During the German Movement Phase**, no German units that start in or are adjacent to **Korsun Airfield** (hex E3) can move unless a Soviet unit has ever entered a hex adjacent to **Korsun**.



- **Beginning on this turn and for the rest of the game**,

German units defending in or attacking out of **Korsun** (hex E3), **Yanovka** (hex E2), or **Shenderovka** (hex D3) suffer a maximum of one adverse column shift for being out of supply (even in combination with attacks from other hexes), as long as **Korsun** (hex E3) contains a German unit at the moment when the attack takes place.



Korsun held supply dumps and an airfield for flying in supplies.

GAME TURNS 5 AND 7

[11.4] Game Turns Five and Seven:

On these two Game Turns, apply this Special Rule:

- **At the end of the Soviet Supply and Reinforcement Phase** on these turns (which are marked on the Turn Track by red symbols as a reminder), **one** reduced strength corps-size (XXX) unit on the map may be flipped back to its full-strength, two-step side, as long as it is in supply. That unit may then attack and move normally (unless, of course, it has a **Retreated** marker on it).

GAME TURN 8

[11.5] Game Turn Eight: On the final Game Turn, apply this Special Rule:

- **During either player's Movement Phase**, that player's unsupplied units

that do not move and are not inflicted with a **Retreated** marker can attempt to "break out to friendly lines" at the end of the Movement Phase, as long as there is at least one hex within a two-hex radius containing a supplied friendly unit (called a "**refuge hex**").

Procedure: Each evacuating unit rolls a die, adding one (+1) to the result for each such refuge hex it has available (so the modifier will be at least +1). If the modified roll is **5 or more**, that unit "breaks out;" the unit is removed from play but is NOT placed in the destroyed box. **On any other result**, the unit is placed in the destroyed box.

[12.0] HOW TO WIN

At the conclusion of the eighth Game Turn, play ends. Victory is determined as follows:

First the Soviets, and then the Germans, eliminate all friendly units that cannot trace a supply line (5.1) at that instant.

Second, each side scores:

- 1 Victory Point (VP) for each step of enemy units in its destroyed box
- 1 VP for each enemy two-step unit still on the map (or broken out) but with only one step remaining, and
- 2 VPs for each enemy supply source hex currently occupied by a friendly unit.

The *German* player then adds **10 VPs** to his score as a handicap to balance the game. The player with the higher total VPs wins.

EXTENDED EXAMPLE

Please set up the game as per Rule 10.0 and follow along with this example of the first Game Turn:

The first activity on Game Turn 1 is checking Soviet supply. Most Soviet units start off occupying **Soviet Supply Source** hexes, and the **254th** and **294th Rifle Divisions** can trace supply either to friendly occupied **E6** or to the vacant

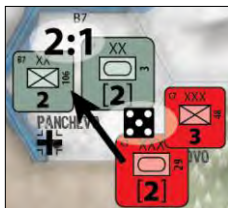
Cherkassy hex (F7) since it is not in a German unit's ZOC.

With no Soviet reinforcements due until next turn, play moves swiftly on to the **Soviet Combat Phase**. As happened historically, the Soviets decide to attack first with the Second Ukrainian Front (i.e., their seven strong units at the bottom of the map). The Soviet player's main effort will be against the **389th Infantry Division** in C6, but before that, the Soviets decide to attack B7 to inflict some attrition and to prevent the **389th** from retreating out of the encirclement.



The two German units in B7 have a combined defense strength of 4. The **75th** and **48th Rifle Corps** with a combined strength of 6 could attack them at odds of 3:2, but the Soviets decide to use the **29th Tank Corps** instead of the **75th Rifle Corps**. Since its basic combat strength of [2] is tripled when attacking into clear terrain, this gives it, plus the **48th Rifle Corps**, a combined attack strength of 9, enough to achieve 2:1 odds (since no column shifts apply). The Soviets could greatly increase their chances of success by declaring an All-Out Attack (7.3), but this would require them to sacrifice a precious step from their tank unit, so they opt for a normal attack instead.

On a die roll of 6, they get lucky and inflict 1 Hit on the Germans. The defenders could choose to retreat across the river into A6



(the only permissible direction since they already occupy a supply source hex, 7.6), but this would mean giving up the valuable position in B7 itself, so they opt instead to hold on and take a step loss. Both defending units are at two-step strength, so the obvious choice is to flip the **106th Infantry Division** to its reduced-strength side while keeping the **3rd Panzer Division** intact.

Marshal Konev now launches his main effort against C6. The **75th Rifle Corps** and **20th Tank Corps** contribute 9 strength in the clear terrain, and the **21st** and **26th Guards Rifle Corps** in D7 add another 7 points, just reaching the 16 points needed to make a maximum attack at 8:1 odds (again with no column shifts in effect). The Soviets could limit themselves to another normal attack, but analyzing the Combat Results Table reveals that this leaves a 2/3 chance of the **389th** surviving with a single Hit and foiling the planned breakthrough, so the Soviets instead play safe and flip the **20th Tank Corps** and declare an All-Out Attack.

On a die roll of 6, the defenders suffer 2 Hits. The first Hit must be taken as a step loss, and absorbing the second Hit in this way would destroy the division altogether, so the only

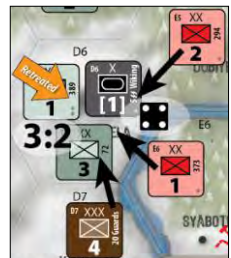


sensible option is to retreat. The unit would normally have to pull back to B6 or C5 (since these hexes are not adjacent to the enemy), but the **Special Game**

Turn 1 constraints

(11.1) mean that only **German Supply Source** hexes or those already containing a German unit are permissible retreat destinations. Now, B7 is immediately ruled out, as the units there have suffered a Hit of their own this turn in the previous battle, so there is no option but to withdraw the **389th** north to D6, after which a **Retreat** marker is placed on the unit as shown in the above illustration.

To try to widen the breach further, the Soviet player now turns against the **Smela**

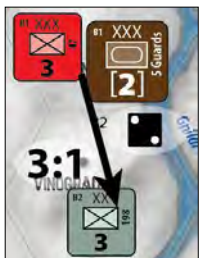


salient itself. However, only the **20th Guards Rifle Corps** remains in **D7** to conduct the attack, supported by the **373rd** and **294th Rifle Divisions** to the north. Their combined strength of **7** is not quite enough to achieve **2:1** odds against the **4** strength points of defenders (the retreated **389th** being ignored), but at least the column shift for the **Tiassmin** River will not apply, since fewer than half of the attacking units are affected by that obstacle. The Soviet player considers that an All-Out Attack at **3:2** odds would have a good chance of either hitting the **72nd Infantry Division** (presumably the German player's preferred step loss) or forcing a retreat to **D5** and so destroying the remnants of the **389th** altogether, but this would mean eviscerating the strong **20th Guards** unit in the process, so the Soviets settle for the long shot of a normal attack instead. On a roll of **3**, the attack inflicts **0** Hits and thus has no effect.

In the north, the **206th Rifle Division** could attack the screening forces of **Korps Abteilung B** at **2:1** odds, but it could not safely advance even if it pushed one of the German units back because then its own supply line to **G2** would be interdicted by the other unit, so it bides its time for the present.

The focus hence moves to **Vatutin's** second prong of the overall pincer movement. His main force at **B1** could focus its efforts either on the **34th** or **198th Infantry Division**.

The former unit occupies a valuable supply source hex, but it could retreat without opening a gap in the German line, so the Soviets attack the **198th** in **B2** instead. Only **two** units can attack across the single hexside (7.1.1), yielding **3:1** odds thanks to the tripling of the **5th Guards Tank Corps'** basic strength. Adding in the two one-step divisions in **C1** would push the odds to **4:1**, but would bring no net benefit because the cross-river combat penalty would also be triggered, shifting back the odds column just gained. Hence, the Soviets launch an All-Out Attack instead, and flip the **5th**



Guards to their reduced side. A die roll of **3** inflicts only **1** Hit on the **198th**. It could remain intact and retreat to **A2** (a **German Supply Source** hex not adjacent to a Soviet unit), but the Germans decide instead to take a step loss and keep their line intact.

Vatutin's only hope for a breakthrough now comes from the secondary attack by the **27th Army**. All three divisions could focus on the northern half of the **88th Infantry Division** in **D2**, but a better axis for the encirclement runs through **C2** further south, so the **180th** and **337th Rifle Divisions** attack there instead.



The basic combat odds are **3:1**, but the leftward shift because of the **woods** reduces this to **2:1**, and only a normal attack is possible because both Soviet units have only a single step. However, on a die roll of **6**, the attackers get lucky and inflict **1** Hit! The weak defenders have no choice but to retreat, and with **B2** barred to them because it has suffered a Hit itself in the previous battle, the only option this turn is to unite with the rest of the **88th Infantry** in **D2**.



Play now proceeds to the **Soviet Movement Phase**. On Game Turn 1, only the **three** tank units are allowed to move (11.1).

Vatutin redirects his depleted **5th Guards Tank Corps** from **B1** through **C1** and into **C2**, exploiting to the maximum the tanks' capacity to cross one river and enter one woods hex.

In the east, **Konev's** two tank corps must move to different

hexes (11.1), and the Soviets decide to send the depleted **20th Tank Corps** two hexes to the woods around **C5**, and the stronger **29th Tank**

Corps to **B6**. **C6** is left vacant because, even if garrisoned, it would be likely to fall to a panzer counterattack. With no **Retreated** markers on his units to remove during the **Soviet Recovery Phase**, this ends the Soviet player turn on a very dramatic note.

In the **German Supply and Reinforcement Phase**, the bad news dawns that the twin Soviet pincers have already cut the supply lines to all the units north of **B2** and **B7**, since both German front lines have been breached and there are no vacant hexes for supply passage which are not in the Zone of Control of (i.e., adjacent to) the Soviet spearheads at **C5** or **C2**. Hence, all German units in the north receive an **Out of Supply** marker to show that they are unsupplied, though their existing stockpiles mean that they will not suffer the full penalties until Game Turn 3 (see 11.1 and 11.2). The **11th** and **14th Panzer Divisions** now arrive as reinforcements in **B7** to join the two divisions already there, as shown below:



In the **German Combat Phase**, the Game Turn 1 restrictions (11.1) mean that only the four panzer units can attack. The **5th # Panzer Battalion** is too weak to hurt the **20th Tank Corps** because the **woods** and the lack of supply restrict its capabilities to a pointless normal attack at 1:1 odds.

However, in the south it is a very different matter. The maximum attack force of the two newly arriving panzer divisions has its strength tripled to **15** against the **29th Tank Corps** in **B6**. Unfortunately, this is not quite enough to achieve **8:1** odds, and the penalty for attacking across the **Turiya River** cuts the final odds to just **4:1**. The Germans decide to make an All-Out Attack by

flipping the weaker **14th Panzer Division** to its reduced side, but on a roll of **2**, they still only inflict 1 Hit on the enemy. The **29th** could hold in place and lose a step itself, but the Soviet player decides instead to keep it intact and 'retreat forwards' to **B5**, which is not adjacent to a German unit! The main penalty which it suffers is that it gains a **Retreat** marker which will constrain its actions next turn.



The **3rd Panzer Division** has no chance on its own against the strongly held woods around **C7**, so play proceeds to the **German Movement Phase**. Only one panzer unit is allowed to move on Game Turn 1 (see 11.1), and the obvious candidate is the strong **11th Panzer Division**. It could enter **B6** to follow up the **29th Tank Corps**, or even move on from there to **A5** (so avoiding the river hexesides on the route via **A6**), but the German player decides instead to take a risk and reoccupy **C6**, thereby re-establishing a direct link with the pocketed forces (as happened historically for a brief time).

During the **German Recovery Phase**, the **Retreat** markers on the **88th** and **389th** are removed, and Game turn 1 is complete.



Next turn, the **20th** and **29th Tank Corps** units will be unsupplied because of the

limitation of their supply lines to **three** hexes (see 11.2), despite their being able to trace a longer supply line via **Vatutin's** forces in **C2**.

The key question is whether the Germans will be able to keep hold of **C6** in the face of an all-out assault by **Konev's** arriving second echelon forces. There is only a 1 in 6 chance of them being able to resist the likely **6:1** All-Out Attack, and even if they do, the continuing movement restrictions around **Korsun (E3)** make a prompt evacuation of the pocketed forces problematic. With four German and two Soviet steps having been lost so far, the Germans face a hard struggle to recover from the continuing onslaught and to rescue their trapped men.

HELL'S GATE: THE KORSUN POCKET, 1944

DESIGNER'S NOTES

The Korsun Pocket is a classic encirclement battle from the Eastern Front. Like Stalingrad the previous winter, it has all the essential ingredients – awful Russian weather, slashing Soviet pincers, Hitler's stand fast orders, Luftwaffe resupply efforts, and desperate panzer counterattacks.

Unlike at Stalingrad, some of the trapped Axis troops did manage a messy breakout, making the situation even more dramatic and finely balanced. It is not surprising that there have already been a number of detailed simulations of this epic struggle.

For many years I have used simulation games to help my university students understand operational dynamics such as force-to-space ratios, but for this to be practical, I needed radically smaller and simpler designs that can be played by non-experts within a two-hour class. I designed **HELL'S GATE** to fit this bill, while still remaining as faithful as possible to the detailed history of the engagement as laid out in recent books by Glantz and Orenstein, Zetterling and Frankson, and by Nash.

The game's title echoes the nickname *Höllentor*, which the Germans gave to the area around Shenderovka (hex D3) where they were crammed into a *kessel* just a few kilometers across before the final desperate breakout through Soviet lines.

The rules use a simple system of alternating Player Turns, but with an unusual fight-move sequence that suits the positional nature of the fighting in the snow and mud. The combination of big hexes and weak Zones of Control allows the antagonists to duel over individual hexes without the artificialities that smaller

hexes and stronger Zones of Control can bring.

Both sides constantly face difficult tactical trade-offs – when and whether to launch more powerful all-out attacks at the cost of attrition to their attacking forces (especially their precious tanks), and whether to conduct a mobile defence or to hold their positions doggedly at the expense of similar attritional losses.

What comes through very clearly from this battle, and from the game, is the enormous impact of varying force densities – from several thousand troops per mile of front in the Soviet breakthrough sectors to only a few hundred troops per mile in the north of the salient. Instead of imposing the usual 'stacking limit' on each hex, the rules limit attacks across each hexside, thereby giving a more realistic representation of spatial dynamics. One sees immediately why Hitler's insistence on retaining a foothold on the Dnieper instead of withdrawing to a straighter and less overstretched line placed his forces in such peril.

I discuss the design of **HELL'S GATE** at far greater length in my new book *Simulating War* (see the ad on the inside-front cover) where this game was first published, so please read the book for more information on this and all the other simulations which I use in class.

- Professor Philip Sabin

GAME CREDITS

Game System Design: Philip Sabin

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SEQUENCE OF PLAY

Soviet Player Turn

1. **Soviet Supply/Reinforcement** Phase (5.0)

2. **Soviet Combat** Phase (7.0)

3. **Soviet Movement** Phase (8.0)

4. **Soviet Recovery** Phase (9.0)

German Player Turn

5. **German Supply/Reinforcement** Phase (5.0)

6. **German Combat** Phase (7.0)

7. **German Movement** Phase (8.0)

8. **German Recovery** Phase (9.0)

Administrative

9. **Housekeeping** Phase (12.0)

COMBAT SEQUENCE

1. Designation
2. Determine Combat Strengths
3. Determine Odds Ratio
4. Determine Column Shifts
5. All-Out Attack?
6. Determine Result on CRT
7. Apply Combat Result
8. Conduct Next Combat



Cannot attack, defend or move. Eliminated if the other units in their hex are eliminated or retreat; removed during Recovery Phase.



One hex movement per turn, maximum; negative combat shifts when some or all of the force is unsupplied.



Attacking strength **tripled** vs. a **clear** hex, or **doubled** vs. a **woods** hex or the city hex of **Cherkassy (F6)**.



COMBAT RESULTS TABLE

Die Roll	Odds Ratio (attacker : defender)					4:1		6:1	
	<1:1	1:1	3:2	2:1	3:1	5:1	7:1	8:1+	
1	0/0	0/0	0/0	0/0	0/0	0/1	0/1	1/2	
2	0/0	0/0	0/0	0/0	0/1	0/1	1/2	1/2	
3	0/0	0/0	0/0	0/1	0/1	1/2	1/2	1/2	
4	0/0	0/0	0/1	0/1	1/2	1/2	1/2	1/2	
5	0/0	0/1	0/1	1/2	1/2	1/2	1/2	2/3	
6	0/1	0/1	1/2	1/2	1/2	1/2	2/3	2/3	

#/# = Defender's normal / **All-Out** or **Overconcentrated** losses

Red # = If Soviet defenders, must retreat if eligible to do so (see 7.5)

- ➔➔ If **all** units in attacked hex are unsupplied*
- ➔ If **some**, but not all, units in the attacked hex are unsupplied
- ⚡ If **some**, but not all, attacking units are unsupplied
- ⚡⚡ If **all** attacking units are unsupplied*
- ⚡ If the ground conditions are **mud**
- ⚡ If defender is in **woods** or **Cherkassy (F6)**
- ⚡ If **at least half** of the attacking units are across **river** hexsides

*A maximum of only **one** shift applies on Game Turns **1** and **2**