BATTLE CENTURY XXI

Battles of twenty-first century is a set of rules allowing players to simulate any battle of the end of the twentieth century and twenty-first century. With new military inventions new rules will be applied to this system.

The game is set on company scale. The structures of units are authentic to organizational structures of units of NATO, Russia, Iraq and Ukraine. Three maps were included.

Bartoszyce in Poland. Polish-Russian border area.

Pierekop isthmus in Ukraine, where in 2014 Russian forces made annexation

Basra – Battle area of coalition and Saddam Hussein

System "B-21" will be expanded and presented on the pages of our magazine as standalone scenarios and boxed games. Our goal is to simulate every modern conflict and allow players to feel as real commander.

Unit tables with different kinds of weapons and equipment were attached to scenarios. Player can decide what kind of equipment will he use. Thanks to this method conclusions can be drawn about the quality of individual combat vehicles and army modernizations.

Wojciech Zalewski

1.0 GAME EQUIPMENT

[1.1] Map

The content of chart are maps made in that way, that allows for playing any kind of combat, starting from dogfights in the air, through land battles and ending at naval assault. Each hexagon(field) represents nearly 1km..

Company number

SPEC
3

Move points (MP) — 6

type of unit

Company number

1 2

brigade or battalion number

type of unit

Move points (MP) — 20
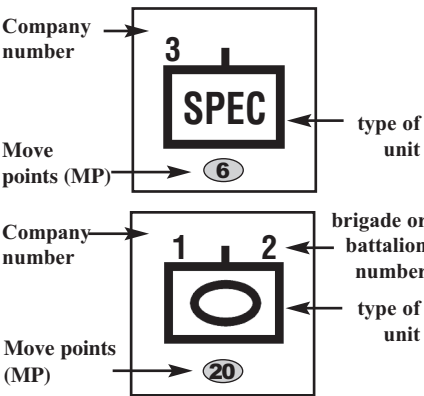
[1.2] Counters

the counters which represent combat units in company scale, artillery units – in squadron (or battery). Each unit has front and back. Adverse includes: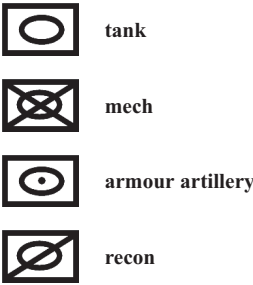 name and symbol some values. Numbers and names are authentic. Reverse includes side of conflict. Data such as strength, and number of efficiency levels and firing range can be found in tables included to relevant scenario. Movement information are printed on the unit's token.
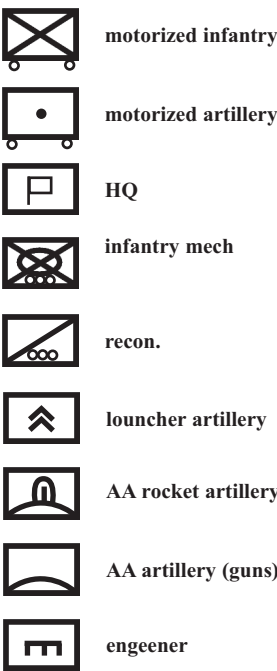
SP – strength points
EP – endurance points
MP – movement points
AFO – artillery Fire range (ZO)
FaR – Firing at Range
IZoF– Interior Zone of Fire (interior)
EZoF – Exterior Zone of Fire (exterior)
P – Armour
A – Gun
LM – Fighter
LB – Bomber
SM – Helicopters
LM – Fighter

2.0 DESIGNATION OF UNITS

ARMOUR and MECH.

tank

mech

armour artillery

recon

MOTORIZED

motorized infantry

motorized artillery

HQ

infantry mech

recon.

louncher artillery

AA rocket artillery

AA artillery (guns)

engeener

INFANTRY

infantry

teritorial troops

airborne

infantry helicopters

SPEC GROM, SEALS, SAS, SPECNAZ

AIR

helicopters

LM   LB lotnicze

Unit scale:
XX   – division
X   – brigade
III   – regiment
II   – battalion (art. Division)
I   – company (art. Battery)
•••   – platoon

# 3.0 THE PLAY

[3.1] Days, phases

Each play is divided to adequate number of days. Each day is divided to adequate number of turns. Detailed calendar for each scenario (stages track) is shown on the scenario chart. Each turns is divided to 16 phases. In every phase there are specific procedures to execute. It is forbidden to make procedures that are not in precise phase. Each turns is considered to be finished when all 16 stages are ended.

[3.2] Notions used in game

Initiative – it's a manmade notion. It helps to state an active player. Initiative indicates the player who is making first move .
combat table modifier - is a positive or negative number which during the search of battle results changes a rate between attacker/defender left or right. negative modifier changes the rate left, positive – right. whenever in combat the name MODIFIER is used it means that this is the modifier of table COMBAT RESULTS
Example
The attacker/defender rate is 1:1. modifier +3 changes the previous rate three positions to the right and gives the result 4:1. Applying modifier -2 at the same situation will give rate of 1:3.

1:3   1:2   1:1   2:1   3:1   4:1
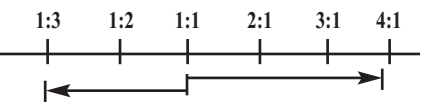
Unit's Ability to Move(movement) - is the number which means the maximum range(movement points) which unit can make during it's own movement phase. It depends on type of unit(armored unit usually has 20 MPs, airborn unit - 6 MPs, etc.) Unit's movement is shown in table or on a counter.
Units' strength is in strength points (SP) and it shows unit's combat ability. Strength is on units tables
Endurance points (EP) are used to represent training and experience of units and separate strength from their capability of receiving casualties. [3.6]
Artillery fire range (AFR) its a number which shows how far(hexes) can artillery unit fire. Can be found   in unit tables
For example:
II/1 AR has AFR = 18. it means that it can fire at every hex in 18 hexes radius (exclud-

ing the hex where unit stays)

Artillery fire strength (AFS) is in strength points and it indicates ability of artillery unit to fire at enemy unit, support own forces or making artillery barrage and other situations when artillery unit fires..

[3.3] Phases of game

A – player with initiative
B – player without initiative

1. Air phase – A player

At the beginning of this phase players deploy their air units on map. After applying influence of Anti Air artillery players check for results of missions of air units

2. Airborne assault phase - A player

in this phase player with initiative if he is having airborne or glider units can make airborne assault. In this phase enemy anti-aircraft artillery can fire at assaulting units and after this a "combat after drop" is taken place.

3. Artillery barrage phase - A player

during this phase player with initiative can make artillery barrages

4. Naval assault phase - A player

in this phase player with initiative can perform naval assault

5. Movement phase - A player

in this phase the player can move his units to the range limited by movement points (considering table TERRAIN INFLUENCE ON MOVEMENT AND COMBAT), and can make combat from march, lying minefields and perform other actions which require movement points.

6. Counterattack phase - B player

this is the phase in which the player without initiative can perform counterattacks (look 8.0)

7. Combat phase - A player

During this phase all units which are in ZoC of enemy units have to take action in direct combat (excl. [16.2.14],[7.1.3]). First players resolve counterattacks. Their order is designates by B player. Attacks of A player are resolved next – their order is designated by that player and his units are attacking.

8. Supply phase - A player

Player A checks supplies for his units.

9. Air assault phase – B player

analogical to phase 1

10. Airborne assault phase - B player

analogical to phase 2.

11. Artillery barrage phase - B player

analogical to phase 3

12. Naval assault phase - B player

analogical to phase 4.

13. Movement phase - B player

analogical to phase 5

14. Counterattack phase - A player

analogical to phase 6

15.Combat phase - B player

analogical to phase 7

16. Supply phase - B player

[3.4] Rounding

[3.4.1] Fractional numbers, which have appeared due to mathematic calculation, which have become form using conditions in the guide book we round in the way:

Example:

3,51 : 1 round up to 4:1

3,5 : 1 round down to 3:1

5,49 : 1 round down to 3:1

Example:

Attacking units have strength of 6 SP, defender has only 4 SP. Power ratio is equal 1,5 : 1. After rounding we get modifier of 1 : 1. If the result was higher than 1,5 (1,51 for example) modifier would be 2 : 1.

[3.4.2] Unless instruction says different every result of dividing strength of units in half is rounded up.

Example:

Tanks of strength equal 5 SP attacking in forest have only 3 SP

If instruction orders dividing more than once we round to full number at the end.

Example:

Tanks attacking at night from the woods divide their strength in half (night modifier) and then once again (forest modifier). After that calculations we round their SP to full number.

[3.4.4] The strength after rounding cannot be lower than 1.

When we divide Movement Points of unit and we get fractional number and instruction doesn't order to round this number, player can use "half" points.

Example:

Airborne unit after landing can use only half of their MP. If their normal number of MP is equal 5 than after landing on the road unit can move through 5 hexes (each costs 0.5 MP).

[3.5] Visibility

Rules of visibility relate to actions that require one unit to see another one on the different hex.

[3.5.1] Maximal visibility range is 4 hexes not including hex that unit is occupying.

[3.5.2] Unit always have visibility on adjacent hex unless this hex is above scarp.

[3.5.3] If on both fields between hexes are cities, forts, hills, mountains or forests – those heses are not visible for each other.

[3.5.4] Units stationed in the city, woods or fort are visible only for units on adjacent

hexes (exception - Reconnaissance units).

[3.5.5] Recognized enemy units are visible to end of next own battle phase.

[3.5.6] At night visibility is limited to adjacent hexes..

[3.6] Endurance levels

[3.6.1] Endurance levels – examples: infantry battalion: 5 SP -7 EP

✕	✕	4	3	2	2	1

kompania piechoty: 2 PS – 3 EP

2	1	1

kompania spadochronowa: 2 PS – 3 EP

2	2	1

kompania saperów: 2 PS – 2 EP

2	1

batalion piechoty: 6 PS – 6 EP

6	5	4	3	2	1

batalion komandosów: 5 PS – 7 EP

5	4	4	3	3	2	1

Examples above show how different units that have the same SP have different EP

[3.6.2] Units that suffered losses lower their EP [represented by grids at units table] by number equal to their loses.

Example:

Battalion on infantry has 5 SP (from point 1.). After losing 2 EP his SP is reduced to 4.

4.0 MOVEMENT

[4.1] Basic rules

[4.1.1] During movement phase each unit can be moved in any direction by using its movement points. When unit enters hex it must spend amount of movement points(see Terrain affect on movement and combat.

[4.1.2] Player can move as may units as he wants during own movement phase.

[4.1.3] During movement phase units can make other things which need using movement points.

[4.1.4] Units cannot move at the same time. Starting movement (or spending MP) with one unit means that previously moved unit has reached his destination. This rule do not apply to stacking units.

[4.2] Detailed rules

[4.2.1] Unit can't enter a hex with enemy unit (exception – solitary headquarters)

[4.2.2] Unit can't spend more movement points than it has but it doesn't have to spend all movement points

[4.2.3] Regardless of MP limit unit can always move to adjacent hex (restrictions of terrain accessibility applies).

[4.2.4] Unused movement points can't go to another stage

[4.2.5] Units can't give MPs themselves

[4.2.6] Going through allied unit doesn't cost any extra Movement points

[4.2.7] Unit crossing terrain type that is edge of hex (river, scarp) must spend additional MP (check table TERRAIN EFFECT ON MOVEMENT AND COMBAT) .More information about effects of terrain on movement of different types of units can be found in table TERRAIN AFFECT ON MOVEMENT AND COMBAT

[4.3] Road effect on movement

[4.3.1] Unit is moving along the road when between two adjacent hexes is the road.

[4.3.2] When unit is entering a hex with road from hex without road it spends MP for entering the terrain on which is the road.

[4.3.3] Entering or leaving inaccessible terrain unit must travel along the road.

5.0 UNITS CONCENTRATION /STACKING

terrain under scarp
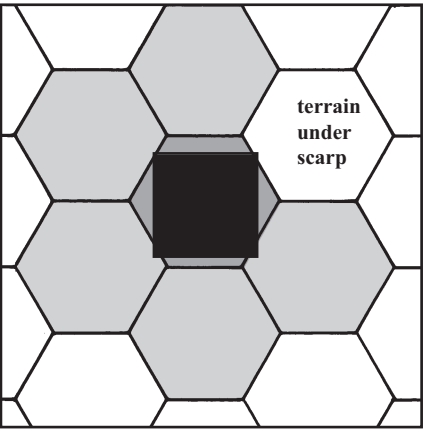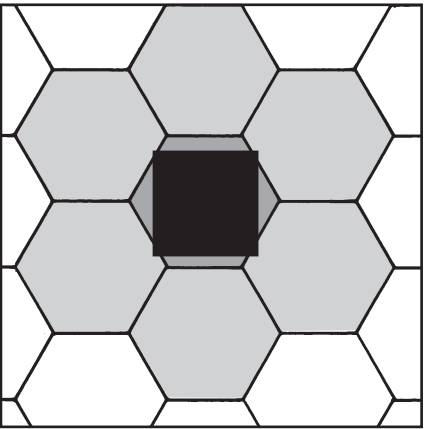
[5.1.1] In "B-21" in one square can be more than one unit. They are creating pile.

[5.1.2] One hex can be occupied by units of total 42 SP maximum. However, during direct combat maximum SP used by pile can't be higher than 36.

[5.1.3] in the pile there can stay units from other HQs

[5.1.4] creating and eliminating piles doesn't cost any MPs

[5.1.5] On the road at inaccessible terrain can stay only 24 SP of units. Any additional units must be able to access that kind of terrain

6.0 ZONE OF CONTROL (ZOC)

[6.1] Basic rules

[6.1.1] Zone o Control are 6 squares surrounding the square with unit. All units with SP of 4 and more has ZoC.

[6.1.2] ZoC doesn't affect fields above scarp if unit is below.

[6.1.3] ZoC doesn't affect hexes with lakes, sea, and other side of big rivers even through bridges (6.2.5).

[6.1.4] Units with strength 1 doesn't have ZoC.

[6.1.5] ZoC of armored and mechanized units does not include hexes with inaccessible terrain.

[6.2] ZoC's influence on movement

[6.2.1] When unit enters into enemy's ZoC it has to stop immediately. This point doesn't affect recon, commando units and other units, if another point allow that.

[6.2.2] Entering enemy's ZoC costs 1 extra MP

[6.2.3] During own movement phase unit can leave enemy unit's ZoC (1 MP) and enter another enemy ZoC (of the same unit or another) It can also move directly from one ZoC to another.
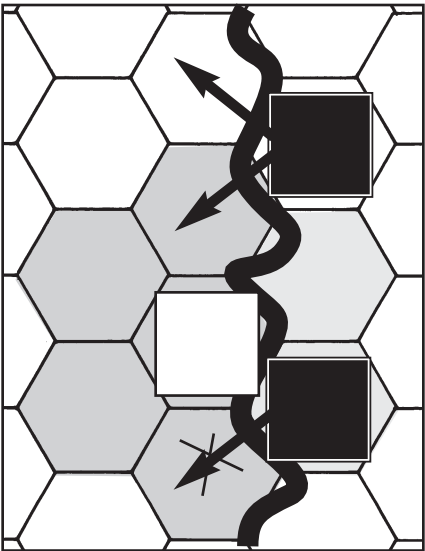
[6.2.4] Unit can't move in enemy's ZoC (except special forces)

[6.2.5] While crossing big river we assume that ZoC of enemy unit include fields on the other side of river unless because of its strength or properties it doesn't have ZoC..

7.0 COMBAT

Fights take place during combat phase and movement phase if player who is moving his units declares fighting from march.

[7.1] Basic rules

[7.1.1] Direct combat is only when opposing units are on adjacent hexes; this condition doesn't affect artillery which supports combat.

[7.1.2] Direct combat is being made in that way that in own combat phase(or other when direct combat takes place) the player shows which unit/s he wants to attack. Then both players secretly write strength points (including support) and then they are fighting.

[7.1.3] Every unit that starts battle phase in enemy ZoC must participate in direct fight, with exception of fortified units that don't have to attack.

[7.1.4] Attacker must fight with all enemy units that have attacking units in their ZoC.

[7.1.5] In one combat phase unit can fight once

[7.1.6] Enemy unit can be attacked simultaneously with number of units equal to adjacent hexes. In that case we sum up strength of all attacking units. Single unit can attack several enemy units if is adjacent to their hexes, in that case defender sum up SP of all defending units.

[7.1.7] Units from, at least one side has to stay on one square in precise fight. It is forbidden that units from both sides which are fighting in one fight, are on couple of hexes

[7.1.8] When several units are defending on one hex it is forbidden to attack them separately. In this case we resolve battle with one direct fight summing up strength of all defending units on that hex.

[7.1.9] When attacking units are on one hex it is allowed that each of them participate in different battle [see 7.4.7]

[7.1.10] If unit is attacked from two opposite directions, attacker receive modifier **+1**

If unit is attacked from 4 directions attacker receive modifier +1

5 directions - **+2** modifier

6 directions - **+3** modifier.

[7.2] Direct combat procedure

[7.2.1] Direct Combat procedure

a) after designating units which will fight, players compare their strength (including air support and artillery)

b) the result is modified by terrain, HQ and etc.

c) in the Combat Results Table an adequate column has to be found

d) attacker rolls 2 dices and aggregates result from both dices

e) The result of combat is on the intersection of the column and the result of the roll

f) Casualties after the battle are being checked: both players roll 2 dices and after summing numbers, and finding the right row in Casualties after Battle table the EP losses are established

g) Effects of direct combat are applied:
1) EP loss (see 7.2.6)
2) then retreats and pursuits can be applied

h) After applying results of battle attacking player indicates units that will participate in next battle, direct battles are being fought till conditions from points [7.1.3] and [7.1.4]

[7.2.2] Explanation of results in the table COMBAT RESULTS/
– -   no effect
A1 – attacker retreats by 1 square
A2 – attacker retreats by 2 square
A3 – attacker retreats by 3 square
B1 – defender retreats by 1 square
B2 – defender retreats by 2 square
B3 – defender retreats by 3 square
B4 – defender retreats by 4 square

[7.2.3] Results which are in the Casualties after battle table indicate a loss of Endurance Points. Player who suffered loses takes EP from all units which were fighting and divides casualties proportionally among those units. Looses of EP must be marked in table of units included in scenario. If retreating causes loses (e.g. through small river) analogically we take EP from all units that were forced to cross unfriendly terrain [7.4.6]

Example:
In attack participate stack of three tokens. Attacker lost 4 EP therefore each of attacking units looses 1 EP. Fourth point player can take from one unit that he chooses out of these three.

[7.2.4] When establishing casualties after battle by using Casualties after battle table we take attacker and defender strength used to calculate their strength ratio.

a) Modifiers from trenches, fortifications and terrain which have influence on the result in Combat Results table also have influence on casualties by moving adequate number of rows in Casualties after battle table for the defender – they increase attacker's loses and reduces defender casualties

b) Modifiers for commandos' night attack and surprising assault of airborne units change the row by one in CASUALTIES AFTER BATTLE table for the attacker; they both reduce loses of the attacker and increase loses of the defender.

c) Defending sniper units only increase losses of the attacker. Table row of CASUALTIES AFTER BATTLE table is modified by 1 for such instances.

Example 1:
Attacker has 36 SP, , defender has 21 SP, including 5 SP in artillery. After checking the result of battle each player roll dices to check enemy casualties. To see what are the attacker's loses we check in row 21-25, because defender strength is 21 and is this row. To see what are the defender's casualties we use row 36-40, because attacker had 36 SP. The row in which we look for casualties can be modified for defender's advantage, it depends on terrain where defender stays, trenches, fortifications. For example: modifier for city hex shows that when we check attacker's loses we change the row by 2 rows down and when we check loses for the defender we change the row by 2 rows up in the table. City modifier increases attacker loses and reduces defender's casualties at the same time.

[7.2.6] Units suffer casualties in specific order(hex on which losses take place):

a) losses caused by inability to retreat (on defenders hex) – each token looses endurance point for each hex he was forced to move but was unable.

b) losses caused by forcing stationary artillery to retreat (on defenders hex).

c) losses inflicted by attacking units (on defenders hex) accordingly to of CASUALTIES AFTER BATTLE table

d) Casualties caused by inability to retreat on full distance or by terrain (river inaccessible terrain) – are applied directly before entering hex that cause such losses.

Example:
Battle ends with B3(-2) result. If defender can retreat only 1 hex then first it losses 2 EP because of casualties inflicted by attacking unit (point c), than it retreats one hex and loose another 2 EP for not being able to retreat another 2 hexes.

Example:
Armored unit (4 EP) received B3(-2) result. During retreat on the second hex it must cross a small river. First this unit suffer 2 EP loss inflicted by enemy and next at first hex of retreat another EP is lost because of small

river. After that unit moves to next hex. If this unit was unable to cross small river (e.g. because of enemy ZoC) first it would loss 2 EP because of the attacker and than another 2 EP because of inability of retreating two fields and therefore would be destroyed (hex A). IF the ability to retreat was limited to 2 fields then this unit would loss 1 EP while moving through river and another one on the other side of the river because of inability to retreat on full distance and would be destroyed (hex B). The difference in this case is on the field on which the unit was destroyed.

[7.2.7] If player used special properties of some units (e.g. engineers) and than suffered casualties, the first EP of those losses must be subtracted from those units.

[7.2.8] Using special properties of some units (e.g. engineers) is non-mandatory. In such cases those units fight on normal rules (using only their SP).

[7.3] Terrain influence on combat

[7.3.1] Terrain influence during combat is shown by modifiers. Modifiers can be divided into surface modifiers (hills, woods etc.) and edge modifiers (rivers, scarps etc.) All information about types of terrain and their influence on combat are in TERRAIN INFLUENCE ON MOVEMENT AND COMBAT.

[7.3.2] Type of terrain, where defending unit stays influences on combat. The type of terrain, where attacking unit stays influences when the attack comes from swamp: attacker attacks with half of strength .

[7.3.3] Terrain influence on combat cumulates.

Example:
A is attacking trough small river X which is staying in forest. The attacker/defender ratio is 1:1, terrain influence: -1 for forest, -1 for small river; so the ratio will be 1:3.

[7.3.4] When attacked during one combat units are on couple hexes with different terrain we take modifier of hex with the strongest defending units. This hex is also taken under consideration when calculating any other modifier that influence combat and battle loses. When on two hexes stands units with equal strength we use modifier favorable for defender.

[7.3.5] Modifier of rivers and scarps is added only when majority of enemy forces attack through scarp or river.

Example:
IF unit A is attacked by units: X and Y with 4 SP (summed), through river, and unit Z with 5 SP which is not attacking through

river then river modifier doesn't apply. When attack is performed only by units X and Y then river modifier is applied. If on hex that unit Z is attacking from would be a swamp (strength of units attacking on swamps is divided in half) then during the attack of units X and Z river modifier would be applied.

[7.3.6] Tank units fighting on hex with buildings (city, town, village)and forest use with half of their SP rounded up.

[7.4] Retreat

[7.4.1] Unit which is forced to retreat, retreats by the prescribed number of squares from the hex on which it have fought.

If retreat by the prescribed number of squares can't be performed units must retreat maximal possible number of hexes.

Example:

2/1 received after battle B2 . The retreat route has be in that way, that after finishing the retreat the unit has to be 2 hexes from the position just before combat.

A – correct route, B – incorrect route.

[7.4.2] Retreating unit must withdraw in a way to suffer the smallest losses.
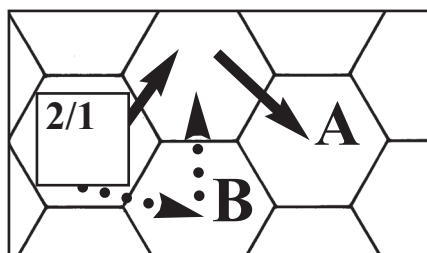
Example:

Unit A is attacked from march and got result B3. Player commanding that unit must withdraw in that way that unit will end up 3 hexes away from field that he is retreating from, and in a way to suffer smallest losses. If retreating on full distance is impossible, player withdraw on maximal possible range in a way to suffer the smallest losses.

Example

Tank squad from 10th Panzer Division (out of range of allied engineers) with 5 EP have to retreat (B3, -2). Only field that allows to withdraw by 3 hexes is field A. Retreating unit loses additional 3 EP by crossing the river and is eliminated. Elimination of unit occurs during crossing of the river (hexes B,D or E). If unit could not retreat by 3 hexess it had to retreat to hex B because in that way it loses least EP(1 EP for not retreating by 3 hexes and 2 EP for loses that were caused by attacking enemy, in total 3 EP are lost). If unit would withdraw on field C it would lose additional 3 EP by crossing the river (6 EP in total).

7.4.3. Retreating unit moves without movement point limit and terrain affect, but units cannot leave the map, cross big river, enter square in enemy's unit ZoC or enter forbidden terrain [4.3.3].

7.4.4 Retreating unit can move through squares with allied units when those units are in enemy ZoC – in that case retreating unit/stack loses 1 SP for entering every square in enemy ZoC.

7.4.5. If in retreating stack are units that cannot withdraw, they suffer all loses for not moving away and for direct attack from enemy. If this units are eliminated in that process rest of units retreat accordingly to point [7.4] and suffer other loses.

Example:

AA artillery (2 EP) and infantry unit is attacked on hex A. Battle is resolved and artillery gets result of B1 (-2) artillery unit loses 1 EP for inability to retreat and 1 EP dealt by enemy forces which causes elimination of that unit. Infantry unit receive remaining 1 EP of loses and retreats 1 hex away.

7.4.6 Retreating even one unit from stac causes whole stack to retreat.

Example:

I/22 and II/22 are standing on one hex and with III/22 are attacking 4th Panzer Battalion. As the result of battle they must retreat 1 hex away. If III/22 planned attack on 6th Panzer Battalion than this attack will not occur because III/22 must retreat with I/22 and II/22.

[7.5] Pursuit

[7.5.1] When unit is forced to retreat, then all victorious units which were fighting directly can pursue by moving the same route like the beaten unit with the same or smaller amount of squares to the amount of hexes for the beaten unit's retreat route.

7.5.2. Pursuing unit ignores enemy's units ZoC.

[7.5.3] If couple of beaten units fled in different directions then the pursue can be made alongside whichever retreat route.

[7.5.4] Units which makes pursuit has to stop on the first hex which doesn't belong to retreat route even when the hex isn't in enemy ZoC.

Example:

33 Recon can pursue retreating 79 eng. by it's retreat route (A) or stop on the first square which doesn't belong to retreat route (B, C, D, E, F, G). First 33 Recon has to enter the hex where stayed 79 eng before combat. Chase I is incorrect. If on Hex H would stand another enemy unit than pursuit would be possible only through hexes B

and C

[7.5.5] Pursuing unit moves without movement point limit and terrain affect. Pursuing unit cannot enter the square which is forbidden for it [4.3.3].

[7.5.6] Artillery units except SP Artillery cannot pursue.

[7.5.7] If the beaten unit is eliminated, then victorious unit enters the hex where was eliminated unit and then it can move 2 hexes in any direction, but the victorious unit will be affected by enemy ZoC.

[7.5.8]. In case of unsuccessful attack whole stack is retreating [7.4.7]

[7.5.9] If player attack hex that is occupied by units that retreated from previous battles they do not participate in battle but are effected by it's result.

Example:

4th and 6th Panzer Battalion attacked I/22 and II/22causing them to retreat by one hex. Retreating units have to move to III/22 (only possible route) loosing 1 EP. If another attack occurs, this time on hex occupied by III/22 this unit will fight alone without support of withdrawn I/22 and II/22, their SP is not included and if III/22 will be forced to retreat whole stack must move away. If withdrawn wouldn't be possible then all three units would suffer looses for inability to retreat.

[7.6] 7.6 Chase and retreat through river and stream

[7.6.1] Unit retreating through river loses additional EP accordingly to it's number.

24-13 SP – loses 2 EP

12-1 SP – loses 1 EP

If hex on which withdrawing unit is planning to retreat is not in range of allied engineers units lose additional 2 EP (per stack)

[7.6.2] Condition to deal this additional damage from point [7.6.1] while crossing small river is to perform successful chase to river line.

[7.6.3] Panzer and motorized units can perform chase through small river only when before battle they stood on field adjacent to river that they intend to cross and attacked unit stood on the other side of river. Together with chasing unit must stand allied engineering unit or pontoon column from the same brigade, corp or army. After crossing units that performed that action cannot continue pursuit, even if the enemy unit was destroyed. This rule do not apply to infantry, motorcycle and cavalry units.

[7.6.4] Pursuit through big river can perform only infantry, motorcycle and cavalry units. After crossing big river they cannot continue chase.

[7.6.5] Rules stated above do not apply if chase is performed through bridge or bridge-pontoon column..

[7.7] Ammunition

[7.9.1] Rules of ammunition are applied to specific units

[7.9.2] Ammunition is given to a unit at the beginning of each scenario. Number of available ammunition (AU) is given in scenario tables and can be modified if scenario allow that.

[7.9.3] Player whose unit fought or performed firing at range is obliged to note ammunition consumption by crossing out AMMUNITION UNITS (AU) from table:
- Firing at range – 1 AU
- March fight – 1AU
- Fight – 1 AU
For artillery:
- Barrage – 4 AU
- Single-handed fire – 2 AU
- Battle support – 1 AU
AU cannot be given to another unit

[7.9.4] If unit used all it's AU it can fight with only 1 SP

[7.9.5] After stage is finished units are given AU (no more that SP).

8.0 COUNTERATTACK

Purpose of counterattack is to force enemy to spread his forces, stop him from attacking or taking back lost positions.

[8.1] Basic rules

[8.1.1] If player wants to make counterattack, he must move only 1 hex and only to enemy ZOC.
Unit makes move to attack enemy unit.

[8.1.2] Counterattacking unit has to, during enemy combat phase, attack all neighboring squares (occupied by enemy units)

[8.1.3] Enemy of counterattacking player have to choose at least one unit from each hex that is counterattacked . Units fighting during counterattack can't fight during battle phase. If all units are designated to defend from counterattack then there is no fight during battle phase.

Example

Units 5pcz. Supported by 2 hmg attacked 2/1. Overwhelming dominance of Russian forces can lead to elimination of Polish unit, to avoid that 1 and 3/1 counterattacks. To defend from counterattack Poles designate 2 ckm – it must participate in fight with 1, 3/1 and attack on will be weaker. If Russians designated both units to defend from counterattack even when they win battle they cannot attack 2/1. Successful counterattack

of Polish units (B1 or better) means that Germans can't attack [7.4.7].

[8.2] Details

[8.2.1] Unit which is in the beginning of counterattack phase in enemy ZoC, can't counterattack. Counterattacked can't be unit that were adjacent to attacking unit before it's movement.

[8.2.2] Unit can't make counterattack from square where stays other allied unit.

[8.2.3] Fights with counterattacking units are made first in the beginning of the combat phase. Counterattacking units and units allocated to fight against counterattack can be supported with/by artillery and air units.

[8.2.4] After finishing all battles units that do not have ZoC [6.1.4], [9.2.3], [14.1.1] can be attacked. Battle can be performed only when both units didn't participate in battle in this phase..

9.0 ARTILLERY

Artillery can be devided by: movement type (motorized, non-motorized) and because of its purpose and combat characteristics (field, atiaircraft, antitank).
Field artillery are those artillery units that have fire range (AFO) attribute. This attribute is described in unit table. Mortars and rocket artillery is treated as field artillery.
Antitank artillery - units with antitank description on tokens
Antiaircraft artillery - units with antiaircraft description on tokens
Rules of artillery battles are described in chapter [9.0] and other types of artillery in chapter [10.0].

[9.1] Basic rules

[9.1.1] Artillery units can fight without need of being adjacent to enemy hex.

[9.1.2] Field artillery unit has a fire range shown on its counter there is also shown the strength of artillery unit

[9.1.3] Artillery unit isn't affected by effects of combat when fires at range.

[9.1.4] By the meaning of Artillery fire we understand: Single-handed artillery fire, artillery barrage, firing at beach-landing units, firing at naval units, supporting attack/ defence, situations when artillery unit fights directly on the rules of supporting attack/defence and situations mentioned in [18.9.3]

[9.2] Details

[9.2.1] During one stage, an artillery unit can fire once. The hex has to be in fire range of the unit.

[9.2.2] Artillery unit can only once per stage use artillery attack in one of form described in [9.1.4].
When player alredy used artillery or chooses not to use srtillery support then artillery unit do not participate in battle (when stationed with line unit) or fight in terms explained in [9.5.1]

[9.2.3] Field artillery don't have ZoC.

[9.2.4] Field artillery which is in enemy's ZoC can provide support for allied units and fire at all enemy units in range, when stays with other allied line unit on the same hexagon, in other case artillery fight directly.

[9.2.5] Non motorized field artillery which have moved during own movement phase, fires with half of strength but no less than 1 SP. Motorized artillery can move during own movement phase and provide artillery fire and fire at range with full strength.

[9.3] Supporting Attack

[9.3.1] If player wants to support attacking units with artillery fire, enemy unit has to be in range of allied artillery unit.

[9.3.2] During supporting player adds artillery strength points to strength points of attacking units.

[9.3.3] If artillery supports attack against several units, only one of attacked units has to be in range of artillery fire.

[9.4] Supporting Defense

[9.4.1] When artillery supports defending units, it uses half strength of its fire power which is added to strength of defending unit(s).

[9.4.2] In situation when the target of enemy attack are several units and if one of those units is in range of allied artillery unit, artillery can support with its fire those defending units.

[9.5] Direct Combat

[9.5.1] During direct combat in combat or other phases artillery units fight with 1/2 SP. This rule applies when artillery stands alone without any line unit [see 9.2.2].

[9.5.2] Field artillery stationing with line unit can participate in direct battle by supporting defense of this allied unit [9.4]

[9.5.3] Field artillery unit can participate in direct battle by supporting attack of allied unit [9.3]

[9.5.4] Artillery unit which is forced to retreat after the combat, loses extra SPs which are

adequate to the amount of squares to make the retreat (in addition to normal loses caused by battle) [see 7.2.6].

[9.6] Single-handed fire

[9.6.1] Artillery unit can make a single-handed fire in it's combat phase on enemy units or objects which are in range.
[9.6.2] A single-handed fire at enemy units can be made by unit(s), which together have at least 7 SP.
[9.6.3] Artillery unit(s) can fire only at visible or spotted/identified units.
[9.6.4] Artillery can fire at unit which was attacked by fighter or CAS (Close Air Support) units if the enemy unit still stays on the square where was attacked by planes.
[9.6.5] Single-handed fire at object can be made by unit(s), which have at least 7 SP.

[9.7] Artillery Barrage

[9.7.1] Artillery Barrage is a self-handed artillery fire which takes place in artillery barrage phase.
[9.7.2] Minimum 3 artillery units are needed to make the barrage and they have to have minimum 20 SP strength (all together)
[9.7.3] See also [9.6]
[9.7.4] If there are only rocket artillery (longer than 5 squares fire range) units we add +2 to the roll
[9.7.5] Artillery that performed barrage in next movement phase can not move.

[9.8] Effects of single-handed fire and artillery barrage

[9.8.1] Results of single-handed fire and artillery barrage are in the single-handed fire and artillery barrage table.
[9.8.2] Effects of single-handed fire and artillery barrage is affected by terrain (including fortifications where enemy unit stays. During checking the result of fire we add modifiers of terrain, fortifications from TERRAIN INFLUENCE ON MOVE AND COMBAT table.
For single-handed fire subtract dubled terrain modifier.
Example:
Engineer battalion is in woods. Woods are giving -1 modifier, so during the checking for artillery fire effect of dice we subtract 2.
9.8.3. If the strength of single-handed fire or barrage equals 15+25 SP, then we add +1 to the result – checking in row "15 and higher", if more than 25 we add +2.

10.0 ARTILLERY UNITS

[10.1] Anti-tank artillery (guns)

[10.1.1] During direct combat anti-tank artillery fight with full strength.
[10.1.3] Non-mechanized anti-tank artillery, when forced to retreat, loses same amount of efficiency levels that the hexes it had to move.

[10.2] Anti-aircraft artillery

Anti-aircraft artillery is splited into 2 groups: light , and rocket
[10.2.1] Light AA artillery doesn't affect strategic bombers, rocket artillery affect on every type of air units.
[10.0.2] Non-motorized rocket AA artillery that is forced to retreat loses EP like field artillery [9.5.5]
[10.2.3] After placing all air units and checking the weather influence there should be AA fire influence checked. Every player can fire at enemy's air units which are in 3 hexes radius; rocket AA guns can fire at air units which are in range of 7 hexes.
[10.2.4] AA artillery can shoot to one aircraft unit for each SP of that artillery.
[10.2.5] Firing at air unit: player who wants to fire at air unit chooses which air unit will be under fire, the makes a roll and checks for a result in Anti-Aircraft fire table. Effect of fire depends on: AA unit type, strength, range, type of air unit.
[10.2.6] We assume that LS or LB that bombards bridge occupies both hexes that bridge connects.
[10.2.7] Aircraft unit (other than LM) that is forced to retreat by AA artillery (result U) and is in range of enemy fighters remains on board for applying any other loses in SP as result of fighting with fighters [26.4.10]. Only after the unit can be removed (aborts mission) from the board.
[10.2.8] Targeting recon planes we use the same table that is used for fighter and bomber units. AA artillery units doesn't suffer any loses.
[10.2.9] After declaration of attack by player that has fighters (but before performing attack) and choosing non-fighter aircraft target, his opponent may use an AA unit (if there is any in range), and use it to attack enemy fighters. It is considered that enemy fighters are on the same square as their target (non-fighter air unit). This point is used also in 26.4.3
[10.2.10] AA artillery can fire at LM and LS:

− At the beginning of air phase – 26.2.1
− When during the attack hex attacked by enemy air units is in it's range – AA attack is made before aircraft attack.
[10.2.11] Land unit that has within 1 hex of it's position an enemy aircraft may perform anti-air attack using antiaircraft launchers. Result of 1 or 2 means aircraft lost 1 SP (for tank units only result 1).

[10.4] Rocket artillery

[10.4.1] During artillery barrage, or single handed fire when we check result of the fire we add **+1** to the roll if at least half of strength of firing units are rocket artillery..

11.0 RECONNAISSANCE UNITS

[11.1] Movement

[11.1.1] Recon unit can enter and leave in the same movement phase enemy's unit ZoC and can continue movement. When leaving enemy ZoC Recon unit has to spend 7 MPs extra; can leave and enter next enemy's ZoC.
[11.1.2] Recon unit can't move in the same enemy's unit's ZoC
Recon unit moves spending points accordingly to Effect of terrain on battle and movement table for gear that unit is using.
Example:
Recon unit using armored cars can't cross swamps..

[11.2] Surprise attack

[11.2.1] During own movement phase recon unit, thanks to it's speed can make surprising attack. This kind of attack can be made against units which aren't entrenched.
[11.2.2] Surprise attack can only be made by recon units (including motorcycles). This attack is like attack from march with rules from this chapter included; results of surprising attack are in RECON UNITS SURPRISE ATTACK table.
[11.2.3] By using this table we use full strength of those units with optional support of air units. During surprising attack we don't use modifiers
[11.2.4] During surprise attack we don't apply rules of FaR..

[11.4] Identifying units

[11.4.1] During own movement phase recon unit can make effort to identify enemy units; it costs 3 MP.
[11.3.2] Every square in 2 squares range from recon unit can be identified. Enemy

units which are in a city, woods, fort or in mountains can be recognized from adjacent square.

[11.3.3] Player who wants to identify enemy units shows the square with enemy units and makes a roll:

1-2 enemy units aren't recognized

3-6 – all units on this hex are recognized (counters are turned to abverse side)

modifications to the roll:

-1 if enemy unit is entrenched

-1 enemy unit is in woods, fort, city or mountains

[11.3.4] During identification on 2 hexes, there have to be a visibility line between recon unit and enemy unit [3.5]

[11.3.5] Recon unit in enemy ZoC can't perform identification at range of 2 hexes.

12.0 FORTIFICATIONS

[12.1] Field Fortification

[12.1.1] All line units and field artillery can build field fortifications. They are build during movement phase and costs all MPs

[12.1.2] Field Fortifications can't be build on swamps, and on mine fields.

[12.1.3] Field Fortifications can be build in enemy ZoC

[12.1.4] Field Fortifications are automatically destroyed when at the end of movement phase aren't any unit on them. Fortifications can be build many times on a square.

[12.1.5] Field Fortifications are automatically destroyed when enemy unit enters the square with Field Fortifications.

[12.1.6] Defending fortified unit gets -1 modifier at all directions

[12.1.7] Terrain and fortifications influence on combat cumulates.

[12.1.8] When unit is fortified a special counter which is showing fortifications have to be put under the unit counter..

13.0 NIGHT COMBAT

[13.1.1] Tank T-55, T-72, T-80 and BWP units can perform FaR at range of 1 hex.

[13.1.2] Casualties on mine field are twice higher at night

[13.1.3] before any direct combat players have to roll dice:

1 - extra modifier **-2**, attacker also loses **1 SP**

2 - extra modifier **-2**

3 - extra modifier **-1**

4 - attacker and defender loses **1 SP**

5 - no effect

6 - attacker gains +**2** modifier

extra casualty of 1 SP (result 1 or 4) is put after the battle

[13.1.4] During artillery barrage, in night stage we modify the result of roll by -2.

[13.1.5] At night stage unit can ignore enemy ZoC if it moves through own entrenched unit, extra cost for this move is 2 MP for non-motorised and 6 MP for other types of units

[13.1.6] in case of night attack of commandos player can skip point [13.1.3].

[13.2] Air and anti-aircraft at night

[13.2.1] Recon air units can't act during night

[13.2.2] Air transport acts the same like during day stages, except for supply drop - see 26.8.11

[13.2.3] Bomber units can bomb cities and can carry bombing missions - see 26.6.5, 26.6.6, 26.6.7

14.0 HEADQUARTERS

There are two types of headquarters in the game: divisional and brigade.

[14.1] Basic rules

[14.1.1] HQs don't have ZoC, but they have strength points and can attack and defend like regular units.

[14.1.2] HQs fight on normal rules.

[14.1.3] HQs are treated like motorized units they move with 20MP. HQ of Airborn troops are treated differently, they move with 5 MP and are considered infantry units.

[14.1.4] HQs can occupy hexes with other units on the rules of making piles

[14.1.5] If enemy unit enters in movement phase or during the chase a square with lonely HQ then HQ unit is eliminated

[14.1.6] Retreating unit's can't destroy HQ's

[14.1.7] If units standing together with HQ are eliminated and HQ can't withdraw than enemy units can enter field with HQ.

Example:

Occupying one hex infantry unit with 1 EP and HQ with 2 EP are attacked by enemy units from opposite sides. As the result of battle defenders got B1 and didn't suffer any loses. Both defender units loses 1 EP, that means infantry unit is eliminated. In that case attacker can enter hex with solitary HQ..

[14.2] Influence on Combat

[14.2.1] Headquarters modify battle with +1

modifier. Range of HQ is equal to it's EP.

[14.3] HQ elimination effects

[14.3.1] If HQ is eliminated during any time in the game, units subordinated to this HQ can move using only half of their MP until new HQ arrive.

[14.3.2] For each hex occupied by attacking units subordinated to destroyed HQ defender receives -1 modifier.

Example :

2nd infantry brigade lost it's HQ but is still attacking enemy unit. Attack on enemy hex from 3 fields means -1 modifier in defenders favor.

[14.3.3] When brigade HQ is destroyed units from different battalions belonging to that brigade cannot perform joint attacks until new brigade HQ arrives unless those units have less than 20 SP in total.

[14.3.4] After HQ destruction a new one can arrive after one full day at movement phase. HQs are entering map in the same places the supplies does.

15.0 FIRING AT RANGE

Leopard 2A4

Gun 7 7 5 3 | 7 Armour

1   2   3   4 km
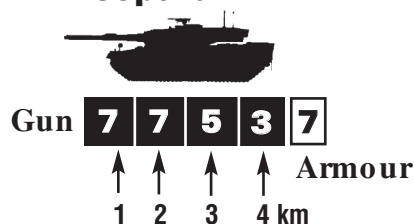
[15.1] Basic rules

[15.1.1] Firing at range can be performed by every unit with GUN.

[15.1.2] Target of FaR can be only units with ARMOR.

[15.1.3] Firing at range can take place in exterior zone of fire (EZoF 2,3,4) and interior zone of fire (IZoF)..

[15.1.4] During own movement, counterattack and combat phases armored and mechanized units can fire at range. Other units can provide fire at range during own movement and combat phases if they weren't moving and won't move in current phase.

[15.1.5] During enemy phases of attack, counterattack and movement all units can perform FaR.

[15.1.6] Performing FaR at own movement phase require spending 2 MP..

[15.1.7] Enemy unit that is target by FaR can counterattack if this unit can perform FaR at this phase [15.2].

[15.1.8] Every FaR is resolved separately. One token fires to another one.

[15.2] Details

[15.2.1] During one stage unit that can perform FaR any number of FaR's. It's limited only by ammunition and visibility.

Example:

At the beginning of own movement phase tank battalion may fire in interior zone to enemy mechanized infantry in his ZoC and then drive away not attacking those units..

**[15.2.2]** During movement phase unit that ended his movement can't be shot at in FaR in interior zone. And can't perform it either.

Example:

Allied tank unit enters ZoC of Russian AT artillery. Russians can't shoot to Allied unit in interior zone, but can do it earlier at exterior zone (if it's possible) Also tank unit even if still have some unused MP can't in movement phase shoot to enemy in interior zone. In this case fight in interior zone can be performed during battle.

[15.2.3] While performing counterattack FaR can be performed only at exterior zone and
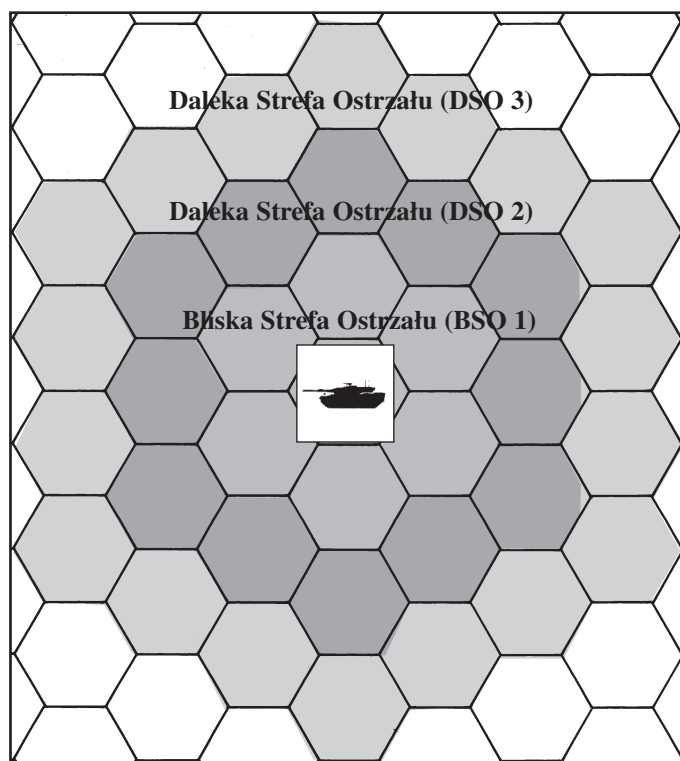
only by counterattacking units or only to counterattacking units. FaR at interior zone can be performed only during fight while counterattack. It is FaR performed at battle phase taking place after given counterattack phase (it is applied to point b) or d) from [15.2.1]).

Example:

Before or after counterattack unit can perform FaR at exterior zone and also can be target of FaR but only when in exterior zone of shooting unit. Unit cannot perform FaR if as the result of counterattack will be in ZoC of other armored unit or AT artillery. [15.2.5]

[15.2.4] It is forbidden to fire at enemy at exterior zone, when the unit which will fire is in enemy ZoC of unit that can perform FaR.

[15.2.5] During firing at range in exterior zone there has to be visibility between the firing unit and the target

Example:

Firing at range is possible, when 33rd tank battalion will decide to fire at 1st/501st first.

[15.2.6] Field and AA artillery, pontoon bridge columns, bridge columns, transport columns which are stationing with other line unit at terrain other than open can't be targeted by FaR unless commanding player declares that he want to participate in FaR [15.3.1].

[15.3] Procedure

[15.3.1] When FaR is taking place in interior zone both players indicate one or more units from (from hex that is being fired at) and only those units are affected by FaR. If all units were eliminated player must indi-

cate another group consisting at least one unit. This procedure is repeated until all units have performed FaR or all units from one side was destroyed.

[15.3.2] For every unit participating in FaR (interior zone: among units stated in [15.3.1]; exterior zone: among every unit stationing on hex that is being fired applying restrictions from [15.2]), commanding player chooses target and fires specified number of shots. Firing can be performed in any order – result of FaR (loses in EP) are counted when all units have fired.

[15.3.3] Unit can FaR several times, until the ammunition is depleted, but no more than unit's SP.

[15.3.4] If difference between GUN and ARMOR trait is bigger than -3 FaR is forbidden.

[15.3.5] Firing procedure:

1. from GUN trait of attacker we subtract ARMOR of defender.

2. From result of that calculation we subtract cumulated terrain (only surface modifiers), fortification and other modifiers [15.5]

Example:
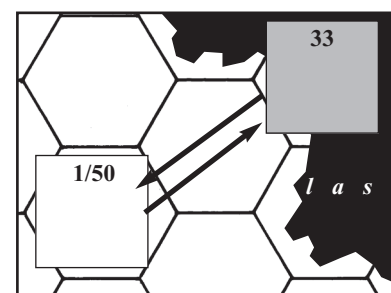
Attacked units are stationing on hills near river. Difference of GUN and ARMOR is lowered by terrain modifier for hills. River do not influence FaR.

3. attacking player rolls two dices and check for result in table FIRING AT RANGE. Result is shown on intersection of line designated in point b) and column indicated by dice roll.

Example:

Unit A (7SP, GUN = 5, ARMOUR = 4) and B (10SP, GUN =4 and ARMOUR = 4) are shooting to each other. First performing FaR is unit A. Difference between GUN of unit A and ARMOUR of unit B is +1. Player commanding unit A can roll two dices three times. For roll 6 and less unit B loses 1 EP. Analogical procedure is performed for unit B. Difference between GUN and ARMOR is 0 and commanding player may roll two dices 4 times. For each roll of 5 or less unit A loses 1 EP. After calculating all loses we take equal EP from units.

[15.3.6] If during FaR enemy unit is eliminated attacking unit can continue to fire to other enemy units.

Example:

Battalion of Russian T-72 shot 4 times. First attack caused enemy armoured grenadier battalion 2 EP of loses and this unit is eliminated. Russians can continue FaR to other German units (if there is such possibility).

[15.3.7] Point losses of units participating in FaR are taken after all units have finished shooting. At phase other than battle end of firing is indicated by declaration of both players (or when FaR is no longer possible). During direct fight, FaR ends when all units participating in battle have finished shooting..

[15.4] The influence of casualties suffered during firing at range

[15.4.1] Player whose unit had **suffered loses** during firing at range:

- until end of given phase unit stays on hex on which was fired at (exterior zone firing).

- the unit can be moved to neighboring hex at cost of 1 SP.

[15.5] Modifications of firing at range

[15.5.1] To check the final difference between ARMOR and GUN rates of units which are firing at range we add terrain effects. Terrain influence is cumulative like in direct battle but only surface modifiers are taken under consideration. Trenches are treated like terrain.

[15.5.2] Unit attacked by FaR in IZoF from two opposite sides modify its ARMOR by -1.

16.0 ATTACK FROM MARCH

[16.1.1] The combat can be made when an unit or stack neighbors enemy hex during movement phase. This type on combat can be made only when player whose movement phase takes decide to attack in such way. The procedure of fight is analogical to fight during combat phase with exception that all unit have to be on one hex. AfM can't be divided it's always attack on all units with ZoC covering hex that is assaulted.

[16.1.2] AfM can be performed by units that are standing on different hexes. They can stack together and perform AfM. Joining of troops can take place on hex that AfM will be performed from.

[16.1.3] To perform AfM all attacking units must spend 4 MP.

[16.1.4] During fight attacking units use 2/3 of their strength. Defender, if entrenched, uses full strength. If not – uses 2/3 of strength points.

[16.1.5] Attack from march through scarp, big river (except through bridge) is forbidden..

[16.2] Details

[16.2.1] Units which are attacking in movement phase can be supported by helicopter units which were attached before fight. Aircraft units use full SP.

[16.2.2] Attacker by attacking from march can't support his units with artillery (with exception of mechanized artillery that can support other troops during direct combat)

[16.2.3] Defender can use artillery support only when artillery is attacked directly.

[16.2.4] Artillery supporting battle use only 2/3 of SP

[16.2.5] Victorious unit can chase on the same rules in chapter 7.5.

[16.2.6] After AfM any movement of victorious unit is forbidden.

[16.2.7] Defender when forced to retreat (Bx result) even if he couldn't retreat loses it's ZoC from the result of the combat until next enemy unit or stack finish it's movement.

[16.2.8] Unit end it's movement when another unit starts.

Example:

A unit was attacked by unit B and had to retreat by 2 squares (B2). Attacker chased for 2 squares. If the next unit will be unit C, we can move him and ignore A unit's ZoC. If we decide to move unit D (after the com-

bat) and send him in different direction we lose benefit of "temporary disorganization" and C unit will have to stop in A unit's ZoC.

16.2.9. Unit can perform AfM and pursuit using [16.2.7]

[16.2.10] Units fighting during movement phase can also fight during next attack phase.

[16.2.11] At enemy's movement phase defender participate in AfM until he gets result of Bx

Example:

II/10 attack from march 1/1 DP. As the result of battle defender didn't get Bx result. If I/10 PzR attack 2/1 DP while in ZoC of 1/1 DP than he will fight with 1/1 DP and 2/1 DP.

Example:

11 Hus. AfM II/19 PGR. As the result German unit retreated by one square. Next moves 10 sk and entering hex adjacent to II/19 PGR AfM I/29 PGR. III/19 PGR can't participate in any AfM at this movement phase.

[16.2.12] Stack using [16.2.7] can't split until end of movement phase.

[16.2.13] Defender's units when forced to retreat can't retreat along the road unless those units were at city hex before battle. Units can also retreat using roads when there is no other escape route or they would suffer casualties (e.g. crossing small river)

[16.2.14[If attacking unit didn't force enemy to retreat and wasn't forced to retreat, it can voluntarily retreat by one square from the direction which it came.

[16.2.15[Attacking units that as the result of battle got result different than Bx can't participate in next own battle phase. może dobrowolnie, po zakończeniu walki wycofać się o jedno pole wzdłuż drogi, którą nadszedł.

17.0 AIRBORNE ASSAULT

Only specialized units like: paratroopers and commandos can make the assault.

[17.1] Assault procedure

[17.1.1] Airborne units can be dropped during the airborne assault phase, they are put on the map in a planned landing point/zone and then the influence of wind and additional change of drop are applied.

[17.1.2] Assaulting units are affected by the influence of wind. To check the landing point we roll a dice:

1-4 – unit missed the point/zone,

5- 6 – landed in designated area.

If the unit missed the target we should make

roll with dice to check in which direction the unit was carried. Numbers 1-6 show the direction of displacement.

Units carried by helicopters are not affected by wind

[17.1.3] In case of   night drops the radius of missing the target is wider. Numbers 1', 2', 3', 4', 5', 6' show on which hex units will land.

[17.2] Details

[17.2.1] Landing units can land without any loses in clear area. In case of dropping into other terrain squares they can suffer casualties – we use Casualties during the drop table.

[17.2.2] In case of landing on lake, unit suffers casualties and is placed on the closest land hex.

[17.2.3] In case of landing on sea square which isn't near land, the unit is eliminated.

[17.2.4] Result of anti-aircraft fire at dropping units, which are in range of those aa units (we take under consideration hex on which unit will land after applying rules from [17.1.2] and [17.1.3]) are in the ASSAULT CASUALTIES FROM AA FIRE table. (Result of dice sets number of lost EP of shot unit)

One AA unit can fire at landing units analogically to [10.2.4] during the airborne assault phase with consideration of previously performed anti-aircraft attacks. The procedure of the firing is check separately for every unit. One Airborne unit can be under fire from several AA units. Which unit will be fired at is designated by shooting player.

[17.2.5]   Combat after drop takes place when airborne unit lands on unit or on this unit's neighboring square. The combat is performed analogically to [7.2]. Attacking units use 2/3 of their strength.

a. If unit landed on hex adjacent to enemy player can:

- attack only with this one unit
- wait for other units landing nearby this unit and able to fight together.

If unit landed on enemy unit or stack or has to fight alone immediately after landing (order – [17.2.9]). Defender applies only modifiers of surface and fortifications. Defender can be attacked multiple times during airborne assault phase but always fight with whole stack (analogically to [7.1.8]).

[17.2.6] Before combat after drop and designation of attacking units, assaulting player must roll two dices.

a. Landing on neighboring square:

2, 3 – attacker loses 3 EP (more than 3 units

– loses 4 EP)

4-9 – no effect

10 – attacker gets modifier **+3**

11, 12 – attacker gets modifier **+5**

Landing on enemy's unit:

2-4 - attacker is eliminated

5-8 - no effect

9 – attacker gets modifier **+4**

10-12 – attacker gets modifier **+5**

This procedure takes place during first attack on unit(s) and only if line units or field artillery is attacked.

[17.2.7] Airborne units which have landed on armored unit with black or yellow stars modifier, loses extra 1 EP.

[17.2.8] Airborne unit that landed on enemy unit and didn't force it to retreat loses twice as much EP than LOSES AFTER BATTLE table indicates and is placed at whichever adjacent hex.

[17.2.9] After placing all airborne units on potential landing zones we:

a) check the influence of wind – see 17.1.2, 17.1.3

b) check the effects of AA fire – see 17.2.4

c) check the loses of assaulting units after drop 17.2.1

d) resolve combat after drop 17.2.5

Example:

Airborne assault units A, B and C were set on hexes adjacent to enemy AA artillery as fields of planned drop. We assume that this fields are an open terrain. After deployment of this units player chooses that first unit to perform assault will be unit A. This unit wasn't carried away and landed on planned field. Player looses 2 EP as result of AA artillery fire and puts unit on the map (no more loses during landing). Because other units can support unit A during attack player chooses not to attack and starts procedure of assault of unit B. This unit was carried away one hex from destination and landed on city hex out of AA artillery range. In this case unit suffers loses while landing and ends procedure of drop. Unit C is carried on hex with AA artillery. During firing unit loses 3 EP and perform combat after drop(first check for surprise modifier for air assault units). Battle is resolved and enemy artillery wasn't forced to retreat A2(-2) Assault unit loses 4 EP and is moved to adjacent hex and end assault procedure. Because there is no unit able to support unit A it attack alone (without roll for surprise of airborne drop). As the result of this battle enemy is forced to retreat A1 (-1) and loses 1 EP and withdraw one hex away ending procedure of airborne assault.

[17.2.10] Units which have fought in airborne assault phase can't move in the next

movement phase.

[17.2.11] Units which have fought in airborne assault phase but didn't force enemy to withdraw (didn't get result Bx) can't attack in next battle phase.

[17.2.12] Units which haven't fought during airborne assault phase can move with half of their movement ability in the next movement phase. Dropped units are considered as units that moved during movement phase no matter what procedure they used to land or fight.

Example: After assault, field artillery unit with 5 MP may move using 2.5 MP. If unit is not moving it supports attack with half of it's SP, just like field artillery unit that would move.

[17.2.13] Airborne unit can't land in area with enemy fighter planes.

18.0 BEACH LANDING

[18.1] Basic Rules

It is phase where assaulting units can come on shore (from barges to beaches).

[18.1.1] Order of procedures during beach landing.

a) barges are unloaded from Transport ships and troops are loaded in to the barges, barges are moving towards beaches and barges are placed on squares adjacent to squares with coastline.; in this part of phase units can be loaded from barges onto Troopships.

b) torpedo-boat movement and attack

c) artillery fire at landing craft units

d) unloading on beaches

[18.2] Details

[18.2.1] During the beach landing phase assaulting units can be unloaded from barges on to beaches.

[18.2.2] Every type of unit can land on a beach.

[18.2.3] After putting assault barges near coastline enemy can fire at them using artillery. Barges have to be in range of artillery fire. The result of firing is searched in ARTILLERY FIRE AT BEACH LANDING. Rule [9.6.3] is applied.

[18.2.4] If there is a enemy unit on a square where we want to land, a direct fight has to be made. Assaulting units fight with ¼ of their strength . Attacker is player who makes beach landing. If those units win the fight can take in chase only the square where was enemy unit.

If they lose and had to retreat, they suffer casualties like they couldn't retreat. Landing craft unit suffers losses in their

load capacity. The amount is the same as the units' loses.

[18.2.5] After landing in the nearest movement phase non-motorized units can move by using half of their movement points (round down) and motorized and armored can move by using ¼ of their movement points

[18.2.6] By using landing barges player can evacuate his units from beaches. At the beginning of movement phase barge unit has to be on sea hex which is next to hex with coast line(with beach). Infantry by using 2 MPs, motorized units, armored, recon units by using 6 MPs and field artillery by 4 MPs are loaded into landing craft units. In the same phase LC unit can move.

19.0 ENGINEER UNITS

These units can lay minefields, destroy minefields, build, rebuild and destroy objects..

[19.1] Basic Rules

[19.1.1] Engineer units are considered to be motorized infantry units but they can:
- cross streams (cost 2 MP)
- cross small rivers (cost 6 MPs extra),
- great rivers like foot infantry,
- scarps (5 MPs extra),
- move in mountains by spending 4 MPs,
- move through swamps by spending 3 MP

[19.1.2] Engineers of air assault units move like foot infantry.

[19.1.3] Engineer units can perform special Actions. Those Actions are:
- laying minefields and destroying them
- building, rebuilding bridges
- rebuild destroyed objects [22.3]
- helping in crossing through river while moving for units on one hex
- destroying objects
- attacking (two actions)

[19.1.4] Number of actions performed by engineering unit can't be bigger than it's actual SP

Example:

Engineers unit with 4 SP can during one stage put one minefield and perform destroying not more than 3 objects. It can also destroy 4 objects when mine field wasn't put up.

Example:

Engineering unit rebuilding bridge on small river must spend 1 action at moment entering river edge, and another one at next turn while crossing on other side of river rebuilding bridge.

Example:

Engineering unit helping with crossing the river units from 3 hexes must spend 3 actions.

[19.1.5] Engineering unit participating in battle influence fight with modifier of +1 but can't increase losses of defender.

[19.1.6] Engineers operating range is equal their EP. It's calculated by checking if by spending all MP engineering unit could move to field on which given unit is standing. [20.1.1] also is applied

Example:

Engineers of air assault division have 5 MP. Checking after landing it's operating range for allied unit that want to destroy bridge player must find out if by spending 5 MP (moving as foot unit) unit could enter hex occupied by that unit.

Engineers of infantry division have 8 MP. Checking it's operating range for allied unit that want to destroy airfield player must find out if by spending 5 MP (moving as motorized unit) unit could enter hex occupied by that unit. Doesn't matter if that unit had already moved, or will be moving**.**

[19.2] Details

[19.2.1] Before start of the game, player has to decide what his engineer companies (weaker than 3 SP) will do:

1) influence in fight (+1 modifier)
2) lay and destroy minefields
3) build bridges

Apart from chosen option, all engineer companies can rebuild and destroy objects and help in crossing rivers while moving.

[19.2.2] Engineer battalion which strength has been reduced to 2 SP becomes a subject of point 20.2.1.

[19.2.3] Two (or more) weakened engineer battalions can be treated like one battalion with strength equal to total amount of their strength.

20.0 MINEFIELDS

[20.1] Laying mines

[20.1.1] Minefields can be put only by engineer units or special artillery units.

20.1.2] Engineer units that is not moving during its movement phase can, by spending all its MP put a mine field on occupied or adjacent hex (but not field behind great river or scarp).

[20.1.3] Hex with mines is covered with "minefield" counter.

[20.1.4] It is forbidden to put minefield in enemy ZoC.

[20.1.5] If scenario rules don't say other-

wise through whole game engineering unit can't put more minefields than its doubled initial SP.
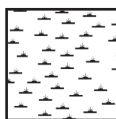
Example:

Engineers unit with initial strength of 4 SP can during one game put 8 minefields.

[20.1.7] Artillery unit with special ammunition type can lay minefield by shooting at one hex. This kind of action is resolved as single handed shooting.

[20.2] Minefields effects

[20.2.1] Unit which is entering minefield spends 3MPs (motorized)

[20.2.2] In case of entering by unit (allied or enemy) casualties should be checked in the table CASUALTIES ON MINEFIELDS.

[20.2.3] Player whose engineer unit has entered minefield is making a roll: 6 - 5– unit looses 1SP, rest – no effect,

Results from table CASUALTIES ON MINEFIELDS don't matter.

[20.2.4] An unit which is entering hex with minefield on which allied engineer unit stays, doesn't suffer casualties. The unit spends extra MPs (see 21.2.1).

[20.2.5] Units which are attacking from minefield are using half of their strength.

[20.3] Minefield disposal

[20.3.1] Minefield can be only disposed by engineer units

[20.3.2] When player wants to dispose of minefield his engineer unit has to stand on the hexwith mines and has to spend all it's MPs in the movement phase. Minefield is disposed (token is putted away) after fight phase has ended.

[20.3.3] Minefields can't be disposed in enemy's ZoC

[20.3.4] When disposing minefield engineering unit is nt participating in battle [9.5].

21.0 OBJECTS

As objects we use: bridges, roads, ports, airfields, mine fields, railroads and ferries..

[21.1] Destroying objects

[21.1.1] Objects can be destroyed by bombers and tactical bombers during air phase, by artillery during artillery barrage phase or during fight (single-handed fire phase)

[21.1.2] Effect of artillery fire is checked in table: DESTROYING OBJECTS BY ARTILLERY, effect of air attack is checked in tables STRATEGIC BOMBERS ATTACK or TACTICAL BOMBERS ATTACK ON OBJECTS.

[21.1.3] Objects on hexes with units can be destroyed.

[21.1.4] Destroyed object is covered with special "Z" (D) counter or taken away from the map.

[21.1.6] Objects can be destroyed during movement phase by engineering units. Destroying object costs 10 MP after entering hex with object. Unit which wants to destroy object has to be in range of allied engineer unit (from the same division, brigade, corps or army).

[21.2] Effect of destroying object

[21.2.1] estroyed objects can't be used.

22.0 22 BRIDGES (ROAD, RAILWAY, ON SMALL AND BIG RIVERS)

[22.1] Destroying bridges

[22.1.1] Bridge can be destroyed (blown up) by any line unit.

[22.1.2] Bridge can be destroyed only during movement phase and counterattack phase.

[22.1.3] Bridges are destroyed on the same rules as other object.

[22.1.4] To blow up bridge during own counterattack phase unit has to on one side of the bridge. To destroy the bridge player rolls two dices: result 2, 3 (total) means that bridge isn't destroyed. Other results mean that the bridge is destroyed.

[22.1.5] Bridge can be blown up only when:
1) both sides of the bridge are cleared from enemy
2) on opposite side stays enemy but own unit which will destroy the bridge was first near the bridge..

[22.1.6] Bridges can be destroyed by artillery and air forces, like other objects – see [23.1].

[22.2] Building and rebuilding bridges

[22.2.1] Bridges can be build or rebuild only by engineer units. Building (or rebuilding) can start when hex on the other side of bridge is free from enemy units and their ZoC or when allied unit is standing on that field.

[22.2.2] To build, rebuild bridge on big river:
a) engineer battalion in its movement phase takes square adjacent to river, on which it will build(rebuild) bridge.
b) in the next own movement phase battal-

ion moves to free square on the other side of the river
c) in the beginning of the next own movement phase bridge is considered to be build(rebuild).special counter with bridge should be put, in case of rebuilding counter which indicates destroyed bridge is taken off the map.

[22.2.3] Unit which is building bridge can fight but when it is forced to retreat it has to start the building procedure again.

[22.2.4] In case of building (rebuilding) bridge on small river we skip point [23.2.2.c.

[22.2.5] The number of engineer unit doesn't affect on speed of bridge building

23.0 AIR UNITS

In B-21 system aircrafts are grouped in squadrons, divisions etc. Counters represent strength and type. Air units can perform missions corresponding to their type. More information about air units can be found in description of air phase [3.3], AA artillery [10.2] and in chapter Air units and AA aritillery at night [13.2]. Helicopters are also described in this chapter.

[23.1] Basic Rules

[23.1.1] Every air unit has a certain amount strength points. Strength can be reduces by enemy AA guns or enemy fighters.

[23.1.2] Air units aren't affected by rules about ZoC.

[23.1.3] Air unit can make only one mission during stage.

[23.2] Procedure of using air units

[23.2.1] In the beginning of air phase, players note positions of their air units in secret. Than, both players put their units on the map accordingly to their notes.

[23.2.2] Players fight using indicated units. Those battles are resolved immediately. Later effects of AA is applied.

[23.2.3] After checking the result of anti-aircraft fire, air units of both sides can make planned air missions with direct order (shown below).
1. Combat between fighter planes helicopters.
2. Bomber attacks on cities, objects and units.
3. Air reconnaissance
4. Supply drop
5. Transporting units by helicopters

[23.2.5] After completing air missions and checking eventual casualties, all air units return to airfields (till next air phase) – air

units are put off the map.

[23.2.7] Helicopter units that wasn't used stay on map and can support other units (movement and attack phase),

[23.4] Fighter units

[23.4.1] Fighter unit are used to cover designated area from enemy air units and to cover allied air units.

[23.3.2] Fighter units can attack enemy fighters, helicopters, naval and land units on whole map.

[23.3.4] a) If fighter unit is placed in enemy's fighters zone, then the dogfight has to take place to see whose fighters will dominate over the area. Player with initiative shows his fighter unit which will be the main unit, then player without initiative designates his main fighter units from fighter units which are in range of the enemy's main unit. All fighter units which have their main fighter unit in range, can take action in the dogfight.

[23.3.6] To check the result of fight between fighters (dogfights) we sum up strength points of all fighter units which will fight and roll dice. The result is checked in DOGFIGHTS table.

[23.3.7] Player who has initiative is the attacking side.

[23.3.8] Symbols used in tables DOGFIGHTS mean:
U – unit returns to its airfield (terminates mission)
-1,-2,-3,-4 – loss of 1, 2, 3, 4 endurance points respectively
Results for attacker are shown before line and result for defender are shown after the line.

[23.3.9] After determining dogfight results, player should check loses of non fighter units which are going to make air mission in enemy's fighters range (zone).
The procedure affects those air units which are attacked by enemy fighters. To see what are the casualties of non fighter units we roll one dice. The result from the roll is divided by 2 (round down) – this result show amount of casualties in strength points.
All attacked non fighter unit (it doesn't matter if they had suffered any losses) abort their missions (they return to airfields).

[23.3.10] One fighter unit can attack any number of non-fighter units up to it's number of SP.

[23.3.11] non-fighter units that wasn't attacked by fighters can perform their missions.

[23.3.12] Fighter units can, during air phase attack land units. Results of those attacks can be found in SINGLE HANDED

FIGHTER ATTACKS table. Terrain modifier is subtracted from roll.

[23.3.13] Fighter units can attack (single handed) transport barges.. In that case losses are suffered by transport column and transported units. The result "z" is not considered.

[23.3.14] Fighter units affect land units in 7 km radius.

[23.5] Helicopters

[23.5.1] Helicopter units can be used to destroy objects, single-handed attack at land and naval units (air phase), support allied land units (movement phase – attack from march, combat phase), cover allied units from enemy PT-boats attack or tactical attack.

[23.4.2] To check results of single-handed attack of helicopter units we use SINGLE-HANDED HELICOPTER ATTACK/AIR-STRIKE.

[23.4.3] To check result of attack at objects we use HELICOPTER ATTACK/AIR-STRIKE AT OBJECTS.

Current object can be attacked by many HELICOPTER units; every attack is made separately.

[23.4.4] Helicopter units, which will support land units, are placed in air phase in the area where we want to support our land unit. Helicopter unit can support allied land unit which is in 8 hexes radius from the Helicopter unit. Allocating helicopter unit to land unit (to chosen combat) takes place just before chosen direct combat during movement or combat phase – helicopter unit is moved to the hex with supported unit.

[23.4.6] During the support of own units by helicopter unit we add the helicopter unit's strength to the strength of supported land units.

[23.4.7] helicopter unit can support allied unit once a stage. After completing mission helicopter unit returns to home airfield (till next air phase).

[23.4.8] During helicopter attack at naval units, the result from SINGLE-HANDED HELICOPTER ATTACK/AIRSTRIKE is multiplied by 10; this result shows percentage casualties of attacked naval unit.

[23.4.9] During checking for the result in SINGLE-HANDED HELICOPTER AT-TACK/AIRSTRIKE table we add effects of terrain, trenches and fortifications modifiers – like in case of SINGLE-HANDED ARTILLERY FIRE (ARTILLERY BARRAGE), with one exception:

– hills don't give the defender any modifier.

[23.6] Strategic bombers

[23.6.1] Strategic bombers can:

1) destroy objects

2) attack land or sea units

3) bomb cities

Maximum 3 Str Bombers units can bomb one hex; bombing takes place during air phase. Each Str. Bombers unit attacks separately (except point 26.6.4).

Next bombing takes place after checking effect of previous bombing.

[23.6.2] Str. Bombers can't bomb enemy units which are on neighboring squares to hexes with allied units.

[23.6.3] Terrains affects the result of bombing: from the result of dice roll we subtract the terrain modifier (if there is any modifier) described in EFFECT OF TERRAIN ON BATTLE table and modify result by fortifications and check the result in table STRATEGIC BOMBERS ATTACK.

[23.6.4] The SP of bombing units also affects the result of bombing – see STRATEGIC BOMBERS ATTACK table. To make the bombing more effective two weakened STR. bombers units can attack together with the sum of their SPs but they can't use Strength higher than 5 SP. If the bombing units which have more than 5 SP will suffer loses from AA fire then they can bomb together with strength 5 which is decreased by loses.

[23.6.5] During attack at night, before checking influence of enemy AA fire, the player should roll dice:

1-4 – the hex below Str. Bombers unit is bombed

5 – the neighboring hex is bombed

6 – bombers will bomb hex which is in 2 hexes radius from bombers position.

If there are results 5, 6 we use points 17.1.2 and 17.1.3 to check which square will be attacked. The bombing unit is moved to the hex (new target) and then we check the result of AA fire. If the bombers unit is moved to the hex with allied unit, the unit or object on this square (enemy decides) is attacked.

[23.6.6] Bombing units at night gives -1 to the result of dice roll..

[23.7] 23.6 Recon planes, drones

[23.7.1] At the end of the air phase identifying takes place. Camouflaged enemy units are put on the abverse side. Land unit which are on the same square with Recon planes are automatically identified (doesn't matter the terrain). All enemy land units which are in 2 hexes radius from the Recon planes and aren't in city, mountains, woods, forts can

be identified. Player who has recon planes shows the hex and enemy has to show which unit stay on the square.

[23.6.2] Recon planes can identify units at range not higher than their EP

[23.6.3] Recon planes unit can be attacked by AA artillery just before recognizing. If AA unit force recon planes to flee, the target of recognizing is not identified. Recon planes unit terminates it's mission and must return to airfield.

[23.6.4] AA unit can only once fire at recon planes unit during air phase.

[23.6.5] Recon planes unit which isn't in enemy fighter planes zone or wasn't forced to flee by AA unit, stays on the map (on the same hex) and recognizes: all enemy units which will enter (during movement phase) the hex with recon planes or adjacent to it (except when the terrain is: city, mountains, fort, woods) are recognized 26.7.3

24.0 SPECIAL FORCES

Special forces have „SPEC" mark on the counter. It includes: Seals, Grom, Formoza, Specnaz, SAS and others.

[24.1.1] When Special unit enters the hex it spends 1 MP on every terrain square exept mountains where entering costs 2 MP.

[24.1.2] Special units can make paradrop.

[24.1.3] During the BEACH LANDING commando unit is automatically moved to any shore hex in range of 8 hexes of transport unit which carried the Special unit. Unlike any other unit commando units can land on fields other than beach.

[24.1.4] Special unit doesn't have to stop in enemy Zone of control. entering the next square which is enemy's ZoC The Special units spends extra 2 MPs(day stage) 1MP (at night stage). Leaving enemy ZoC causes Special to spend 1 extra MP during day, but no extra points during night.

[24.1.5] At battle phases Specialunits are affected by enemy ZoC.

[24.1.5.] Special units can destroy objects by themselves. it costs 3 MPs.

Commando units attacking from swamps use full SP.

[24.1.6] When Commando Unit during night stage attacks single-handed without any support of allied units enemy unit it gains modifier +4 Point [13.1.3] is not applied.

Example:

A ranger battalion have attacked a German infantry battalion in a city square. Attacker strength: 4 , defender strength: 5, quotient is 1:1,1 after rounding is 1:1, by taking into account the night attack of commandos

modifier (+4) and the city modifier(-2) we get the rate 3:1.

25.0 Supplies

[25.1] Supply line

[25.1.1] Supply line is a line of hexes between supply base and unit.
[25.1.2] Supply bases are HQ of battalions.
[25.1.3] Supply line can't go through:
- mountains (unless it goes by road)
- sea
- slope/bank/scarp (unless it goes by road)
- river (unless it goes through brigde)
- lakes
swamp (unless it goes by road)
[25.1.4] Supply line cant go through hex with enemy unit or a hex in enemy ZoC. Supply line can go through the hex in enemy's ZoC when there is an allied unit on this hex.
[25.1.5] An unit has to be in range of 5 hexes from base to be supplied.
[25.1.6] Battalion HQ must have free line of hexes to brigade HQ free from enemy ZoC and FaR.

[25.2] Lack of supplies and its

consequences

[25.2.1] All units are considered to be supplied when they have a the supply line.
[25.2.2] Unit without supplies uses half of its strength in attack and motorized and armored units are using half of its MPs. Artillery units can't fire.
[25.2.4] Players check supplies of their units in supply phase.

26.0 PONTOON-BRIDGE COLUMNS

Pontoon bridge columns are military units equipped with river crossing (especially, small rivers and canals) tools.

[26.1] Basic Rules

[26.1.1] When the column enters a hex with river, it is conceded that a bridge is built. in the same movement phase allied units can cross the river spending extra: Armored and motorized - 5 MPs , field artillery - 2 MPs; other non motorized units can cross the river without spending extra Movement Points. During other stages crossing river where the columns are, doesn't cost extra Movement points.
[26.1.2] The pontoon bridge is terminated when the unit is eliminated or moved from the

river crossing site. During one stage one pontoon-bridge column cant't build bridge in more than one place.
[26.1.3] Supply line can go through small river only in place where there is the pontoon bridge.
[26.1.4] The column allows to cross big rivers for units - costs 1 extra MP,
[26.1.5] The same rules are affect bridge columns.

27.0 CAMOUFLAGE

[27.1.1] Every player puts his units on reverse side in the beginning of the game
[27.1.2] Units are recognized during combat
[27.1.3] Units can be recognized by recon units or recon planes
[27.1.4] After applying results of battle units are put reverse side up again (recamouflaged). Units on open surface or hills at range of LR can be camouflaged again only in next stage..

Example Firing at range:
Movement Phase - Two Russian companies entering the Polish tanks in the vicinity of Bagrationovsk (Prussian Iława). 5 company is already shot at the crossing of the border by the strengthened Polish first company of tanks (plan: 6, no effect), the Russians did not shoot, move on and again gets a shot at a distance of 3 fields (6 - no effect). Russians do not shoot, move on and again gets a shot at a distance of 2 boxes (6 - 1 loss PS), moves further losing an additional 1 PS [-2 JA] and enter 1 in SK Polish company. Poles must delete each 3 JA.
(Fight on the march in this example skipping, though of course it is possible).
Combat Phase - 6 Russian company decided to give up 10 shots (one factor, because the Pole is strengthened), hit 5 times. 5 Band scored 6 times hitting 4 times [-9 JA]. Total Pole lost as much as 9 PS. Pole gave 7 shots to both companies [-9 JA], of which 6 were accurate (each Russian company lost 3 PS). The company remained 5 5. PS (2 units of ammunition) in 6 companies 7 PS (0 JA). Russians now have a total of 6 PS (5 + 1), the Poles 5 PS. The ratio of forces 1: 1, and the fortifications of 1: 2. After the fight should also be deductible ammunition each unit having it. In subsequent phases (until the end of the stage) Russian 6 1 PS struggling company.
Notes:
When carrying out the WO in urban areas, as well as the strength of the armored division, just as his unit of ammunition (JA), divided by two. Holding tank 11 JA, after entering the town can use only 6.
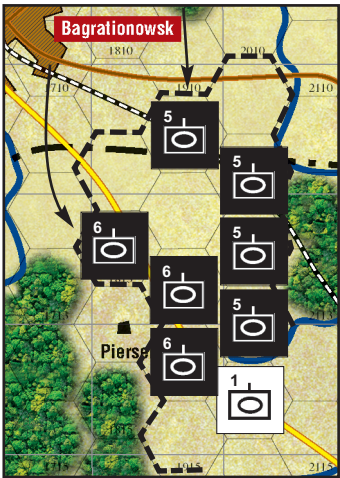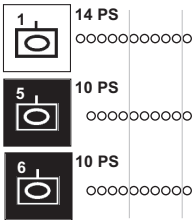
AA Artilelry influece on transport

Typ artylerii p-lot.	K6					
	1	2	3	4	5	6
guns	-	-1	-1	-2	U-3	U-3
rocket		-1	-2	-3	U-3	U-4

Results choose apply to air transport, and transport unit.

AA Artilelry influece on bomber

Typ artylerii p-lot.	RzuK6					
	1	2	3	4	5	6
rocket	-	-	-1	-1	-1	-2

Terrain influent fo movement and combat

terrain	combat influece	infantry	armour	mech.	recon.	artillery
	(artillery barage influece)	⊠	⊙ ⊠ ⊙	⊠ ⊠ ⊘	⊘	⊡
clear	0	1	2	3	2	4
stream	-1	+1	+4	+5	+3	+5
river, canal	-2	+2	+10	+14	+10	+14
big river	-4	W	W	W	W	not available
forest	-2(-2)	+1	+3	+4	+3	+6
bridge	depent of terrain	1	by road 1/2* by clear 2	by road 1/3 by clear 3	by road 1/2 w tere- by clear 2	by road 1/3 w tere- by clear 4
train line	depent of terrain	1	2	3	2	4
road	depent of terrain	1	1/2	1/3	1/2	1/3
secondary road	depent of terrain	1	1	1/2	1/2	1/2
town	-2(-2)	+1	+3	+3	+3	+3
swamp	1/2 atacking SP from a swamp	2	not available	not available	not available	not available
mountain	-3(-3)	3	not available	not available	not available	not available
scarp	-3	+2	not available	not available	not available	not available
ridges	-1(-1)	+1	+2	+3	+2	+3
small town village	-1(-1)	+1	+1	+1	+1	+1

* – on a swamp and forest, W – All MP.

RECON UNITS SURPRISE ATTACK

ATACKING SP	2 x D6								Defender = 1-6		
	2	3	4	5	6	7	8	9	10	11	12
1-5	A1(-1)	A(1)	-	-	-	-	-	B1	B1	B1	B2(-1)
6-10	A1	-	-	-	-	-	B1	B1	B2	B2(-1)	B2(-2)
11-15	-	-	-	-	B1	B1	B1	B2	B2(-1)	B2(-2)	B2(-1)
16+	-	-	B1	B1	B1	B1	B2	B2(-1)	B2(-2)	B2(-2)	B2(-2)

ATACKING SP	2 x D6								Defender = 7-14		
	2	3	4	5	6	7	8	9	10	11	12
1-5	A2(-1)	A1(-1)	A1	A1	-	-	-	-	B1	B1	B2
6-10	A1(-1)	A1	-	-	-	-	B1	B1	B2	B2(-1)	B2(-1)
11-15	A1	-	-	-	-	B1	B1	B2	B2(-1)	B2(-1)	B2(-2)
16+	-	-	-	-	B1	B1	B2	B2(-1)	B2(-1)	B2(-2)	B2(-2)

ATACKING SP	2 x D6								Defender = 15+		
	2	3	4	5	6	7	8	9	10	11	12
1-5	A2(-2)	A2(-1)	A1(-1)	A1	A1	A1	-	-	-	B1	B1
6-10	A2(-1)	A1(-1)	A1	A1	A1	-	-	-	B1	B1	B2
11-15	A1(-1)	A1	A1	A1	-	-	-	B1	B1	B2	B2(-1)
16+	A1	A1	A1	-	-	-	B1	B1	B2	B2(-1)	B2(-2)

A - Atacker, B - Defender

FIGHTER COMBAT

ARTILLERY FIRE

target strength 1-8 SP

Atacking SP	D6					
	1	2	3	4	5	6
7-10	--	--	-1	-1	-1	-2
11-15	--	-1	-1	-2	-2	-2
16-20	-1	-2	-2	-2	-2	-3
21+	-1	-2	-2	-2	-3	-3

target strength 9-16 SP

Atacking SP	D6					
	1	2	3	4	5	6
7-10	--	-1	-1	-2	-2	-3
11-15	-1	-2	-2	-2	-3	-3
16-20	-2	-3	-3	-3	-3	-4
21+	-2	-3	-3	-3	-4	-4

target strength 17-24 SP

Atacking SP	D6					
	1	2	3	4	5	6
7-10	-1	-2	-2	-3	-3	-3
11-15	-2	-3	-3	-3	-4	-4
16-20	-3	-3	-4	-4	-4	-5
21+	-3	-4	-4	-4	-5	-5

target strength 25 SP+

Atacking SP	D6					
	1	2	3	4	5	6
7-10	-2	-3	-3	-4	-4	-4
11-15	-3	-4	-4	-4	-5	-5
16-20	-4	-4	-5	-5	-5	-6
21+	-4	-5	-5	-5	-6	-7

Example:
Engineer battalion in the forest is attacked by artillery fire. A forest gives -1 modifier. This means that -2 is to be subtracted from the fire effect. If the battalion would have to lose 3 EPs then final loss is 1 EP. In case of artillery barrage the loss would be 2 EPs.

Atack SP	D6				Defenfer: 1-5	
	1	2	3	4	5	6
1-5	U-1/-	U-1/-	U/U	U/U	-/U-1	-/U-1
6-10	U-1/-	U/U	U/U	-/U-1	-/U-1	-/U-2
11-15	U/U	U/U-1	-/U-1	-/U-2	-/U-2	-/U-3
16-20	U/U-1	-/U-1	-/U-2	-/U-2	-/U-3	-/U-3
21-25	-/U-1	-/U-2	-/U-2	-/U-3	-/U-3	-/U-3
26-	-/U-2	-/U-2	-/U-3	-/U-3	-/U-3	-/U-4

Atack SP	D6				Defender : 6-10	
	1	2	3	4	5	6
1-5	U-2/-	U-1/-	U-1/-	U/U	U/U	-/U-1
6-10	U-2/-	U-1/-	U/U	U/U	-/U-1	-/U-2
11-15	U-2/-	U-1/U-1	U/U	-/U-1	-/U-2	-/U-2
16-20	U-2/U-1	U-1/U-1	-/U-1	-/U-2	-/U-2	-/U-3
21-25	U-2/U-1	-/U-1	-/U-2	-/U-2	-/U-3	-/U-3
26-	-1/U-2	-/U-2	-/U-2	-/U-3	-/U-3	-/U-4

Atack SP	D6				Defender : 11-15	
	1	2	3	4	5	6
1-5	U-3/-	U-2/-	U-2/-	U-1/-	U-1/U	U/U
6-10	U-2/-	U-2/-	U-1/-	U-1/U-1	U-1/U-1	-/U-2
11-15	U-2/-	U-2/-1	U-1/U-1	U-2/U-2	-1/U-2	-/U-2
16-20	U-2/-1	U-2/U-2	U-2/U-2	-1/U-2	-1/U-2	-/U-3
21-25	U-2/U-1	U-2/U-2	-1/U-2	-1/U-2	-/U-3	-/U-3
26-	U-2/U-2	-1/U-2	-1/U-2	-1/U-3	-/U-3	-/U-4

Atack SP	D6				Defender : 16-20	
	1	2	3	4	5	6
1-5	U-3/-	U-3/-	U-2/-	U-2/-	U-1/-	U-1/U
6-10	U-3/-	U-2/-	U-2/-	U-1/-	U-1/U-1	U-1/U-2
11-15	U-3/-	U-2/-	U-2/U-1	U-2/U-1	U-2/U-2	-/U-2
16-20	U-3/-1	U-3/U-1	U-2/U-1	U-2/U-2	-1/U-2	-/U-2
21-25	U-2/-1	U-3/U-2	U-2/U-2	U-2/U-2	-1/U-3	-1/U-3
26-	U-1/-2	U-3/U-2	U-2/U-2	-1/U-2	-1/U-3	-1/U-4

Atack SP	D6				Defender: 21-	
	1	2	3	4	5	6
1-5	U-4/-	U-3/-	U-3/-	U-2/-	U-2/-	U-1/-
6-10	U-3/-	U-3/-	U-3/-	U-2/-	U-1/-	U-1/U
11-15	U-3/-	U-2/-1	U-2/-1	U-3/U	U-2/U-2	U-1/U-1
16-20	U-3/-1	U-2/-1	U-3/U	U-2/U-2	U-2/U-2	-1/U-2
21-25	U-3/-1	U-3/-2	U-3/U-2	U-2/U-3	-2/U-3	-1/U-3
26-	U-3/-1	U-3/U-2	U-3/U-3	U-1/U-4	-1/U-3	-1/U-4

First result (before slash) refers to the attacker, results after slash refer to the defender.
-1, -2 – loss of 1 or 2 SPs respectively
U –unit abort the mission

BOMBER UNITS ATTACK

PS LB	nalot na:	rzut kostką					
		1	2	3	4	5	6
1	obiekt	-	-	-	-	-	-
	wojska	-	-	-	-	10	10
2	obiekt	-	-	-	-	-	-
	wojska	-	-	-	10	10	15
3	obiekt	-	-	-	-	-	Z
	wojska	-	-	10	10	15	20
4	obiekt	-	-	-	-	Z	Z
	wojska	-	10	10	15	20	20
5	obiekt	-	-	-	Z	Z	Z
	wojska	-	10	15	20	20	25

Values in the table show targeted units' % losses (stack SPs % lost). Z – object destroyed

AA Artillet against Gighter ans Helicopters

Typ artylerii p-lot.	Rzut kostką K6					
	1	2	3	4	5	6
guns	-	-	-	U-1	U-1	U-2
rocket	-	-	U-1	U-1	U-2	U-2
AA loses	-1	-1	-1	-	-	-

FIRING AT RANGE TABLE

Armour Gun different	2	3	4	5	6	7	8	9	10	11	12
+7	4	3	3	3	3	2	2	2	1	1	-
+6	3	3	3	3	2	2	2	1	1	1	-
+5	3	3	3	2	2	2	1	1	1	1	-
+4	3	3	2	2	2	1	1	1	1	-	-
+3	3	2	2	2	1	1	1	1	-	-	-
+2	2	2	2	1	1	1	1	-	-	-	-
+1	2	2	1	1	1	1	-	-	-	-	-
0	2	1	1	1	1	-	-	-	-	-	-
-1	1	1	1	-	-	-	-	-	-	-	-
-2	1	1	-	-	-	-	-	-	-	-	-
-3	1	-	-	-	-	-	-	-	-	-	-

LOSSES ON THE MINEFIELDS

SP units on mine field	D6					
	1	2	3	4	5	6
1-7	-	-	-	-1	-1	-1
8-18	-	-1	-1	-1	-1	-2
19-24	-	-1	-1	-1	-2	-2
25-28	-1	-1	-2	-2	-2	-3
29-32	-2	-2	-2	-2	-3	-3
33-36	-2	-2	-3	-3	-3	-4
37+	-2	-3	-3	-3	-4	-4

Values in the table shows EPs losses of the stack that enters mined hex. Engeneers – see [21.2.3]

ARTILLERY FIRE ON OBJECTS.

SP	D6					
	1	2	3	4	5	6
1-5	-	-	-	-	-	Z
6-10	-	-	-	-	Z	Z
11-15	-	-	-	Z	Z	Z
16-19	-		Z	Z	Z	Z
20+	-	Z	Z	Z	Z	Z

Z - Destroy

AIR and HELICOPTERS ATTACKS ON UNITS

Atacking SP	D6					
	1	2	3	4	5	6
1-3	-	-	-	-1	-1	-1
4-6	-	-	-1	-1	-2	-2
7-9	-	-1	-1	-2	-2	-3
10-12	-1	-1	-1	-2	-3	-3
13-15	-1	-2	-2	-3	-3	-4
16-17	-2	-2	-3	-3	-4	-4
18-20	-2	-3	-3	-4	-4	-5
21-23	-3	-3	-4	-4	-5	-5
24+	-3	-4	-4	-5	-5	-6

AIRBORNE LOSSES DURING THE DROP

for airborne units						
terrain	D6					
	1	2	3	4	5	6
ridge	-	-	-1	-1	-1	-1
mountain	-1	-2	-3	-4	-5	-6
forest	-1	-2	-3	-4	-5	-6
swamp	-1	-1	-2	-2	-3	-4
cities	-1	-2	-2	-3	-4	-5
lake	-3	-4	-4	-5	-5	-6
sea	-3	-4	-5	-6	-7	-7

– Values in the table show an unit EPs losses
– If unit lands on lake/sea hex it is placed on adjacent land hex after losses are taken, if no adjacent land hex exists then unit is eliminated.

AIR and HELICOPTERS ATTACKS ON OBJECTS

SP	D6					
	1	2	3	4	5	6
1	-	-	-	-	-	Z
2	-	-	-	-	Z	Z
3	-	-	-	Z	Z	Z
4	-	-	Z	Z	Z	Z
5	-	Z	Z	Z	Z	Z

- – None
Z – Destroy

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COMBAT TABLE

dice 2 xD6	less 1:4	1:4	1:3	1:2	1:1	2:1	3:1	4:1	5:1	6:1	7:1	8:1	9:1	10:1
2	--	--	B1	B2	B2	B2	B2	B3	B3	B3	B4	B4	B4	B4
3	A1	A1	--	B1	B2	B2	B2	B2	B3	B3	B3	B4	B4	B4
4	A1	A1	-A1	--	B1	B2	B2	B2	B2	B3	B3	B3	B4	B4
5	A1	A1	A1	A1	B1	B1	B2	B2	B2	B2	B3	B3	B3	B4
6	A2	A1	A1	A1	--	B1	B1	B2	B2	B2	B2	B3	B3	B3
7	A2	A2	A1	A1	A1	B1	B1	B1	B2	B2	B2	B2	B3	B3
8	A2	A2	A1	A1	A1	--	B1	B1	B1	B2	B2	B2	B2	B3
9	A2	A2	A2	A1	A1	--	B1	B1	B1	B1	B2	B2	B2	B2
10	A2	A2	A2	A1	A1	A1	--	B1	B1	B1	B1	B2	B2	B2
11	A2	A2	A2	A2	A1	A1	A1	--	B1	B1	B1	B1	B2	B2
12	A3	A2	A2	A2	A2	A1	A1	A1	--	B1	B1	B1	B1	B1

LOSES AFTER BATTLE

SP	2 x D6										
	2	3	4	5	6	7	8	9	10	11	12
1	1	1	-	-	-	-	-	-	-	1	1
2-3	1	1	1	-	-	-	-	-	1	1	1
4-5	1	1	1	-	-	1	1	1	1	1	2
6-10	2	1	1	-	1	1	1	1	1	2	2
11-15	2	2	1	1	1	1	1	1	2	2	2
16-20	2	2	2	1	1	1	1	2	2	2	3
21-25	3	2	2	2	1	1	2	2	2	3	3
26-30	3	3	2	2	2	2	2	2	3	3	3
31-35	3	3	3	2	2	2	2	3	3	3	4
36-40	4	3	3	3	2	3	3	3	3	4	4
41-45	4	4	3	3	3	3	3	3	4	4	4
46-50	4	4	4	3	3	3	3	4	4	4	5
51-55	5	4	4	4	3	4	4	4	4	5	5
56-60	5	5	4	4	4	4	4	4	5	5	5
61-65	5	5	5	4	4	4	4	5	5	5	6
66-70	6	6	5	5	4	5	5	5	6	6	6
71-	6	6	6	5	5	5	5	6	6	6	7

Example B ---- (indicating rows 11-15 to 21-25)

Example A ---- (indicating row 21-25)

Each player takes throw dice to Establish enemy losses;

Example:
A: defender loses roll
Attacker has 15 SPs and 3 combat modifiers. Defender loses are set by shifting initial 11-16 row 3 rows down. Final row is 26-30.
B: attacker loses
Defender had 24 SPs . Attacker loses are looked up by shifting initial 21-25 row by 3 rows up. Final row is 6-10.