



WAR IN RUSSIA

Player's manual · Version 1.1.0 · Tronsoft Games

A weekly campaign of the Eastern Front at army and corps level, in which rail gauge, weather and rations decide as much as the firing line.

Campaigns	Barbarossa (40 weeks), Fall Blau (32), The Long War (132)
Players	One, against a machine staff at three levels
Scale	One week a turn, one army or corps a counter, about 55 km a hex
Map	35 × 43 hexes, Baltic to Caucasus, 99 cities
Saving	Automatic each week, to the browser
Sound	Eight synthesized cues, switchable, nothing depends on them

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1. Beginning a campaign

The title screen asks three things: which campaign, which command, and how good the opposing staff is. Choose, then open the campaign. If a saved campaign is on this browser the title screen offers to resume it instead; a campaign is saved every week without being asked, and cleared when it ends.

The three opposing staff levels are Recruit, Regular and Staff officer. They differ in how accurately the machine estimates the strength in front of it, how well it picks between the attacks available to it, how firmly it can hold its formations to a plan, and how well it divides its rail tonnage. They are not given extra strength or free information: a better staff plays the same army better.

2. The sheet

The map is a staff sheet of European Russia from the Baltic to the Caucasus. It is projected from real coordinates rather than drawn by hand: coastlines, lakes, the Pripyat marshes, the Valdai and Donets ridges, the Carpathians and the Volga steppe are all in their places, ninety-nine cities sit on their own latitude and longitude, and twenty-three rivers are laid along the hexsides they actually follow.

Terrain

Ground	Movement	Defence	Digging
Sea	impassable	—	—
Cultivated	2	×1	1
Steppe	2	×0.85	0.8
Forest	3	×1.45	1.3

Deep forest	4	×1.7	1.4
Marsh	5	×1.6	0.7
Broken ground	3	×1.5	1.4
Mountain	5	×2.1	1.6
Lake	impassable	—	—

Movement is what a hex costs to enter in movement points. Defence multiplies the strength of anyone defending in it. Digging is how quickly a formation entrenches there.

Rivers and cities

A river runs along a hexside, not through a hex, and is paid for when it is crossed. A minor river is a delay; a major river is a serious obstacle and also shifts the combat table against anyone attacking across it. Cities come in four classes — depot, town, major and capital — which decide both how hard they are to take and what they are worth. The four capitals are Moscow, Leningrad, Kiev and Stalingrad; they are fortified regions and are very hard indeed.

3. The sequence of a week

Each turn is one week and runs in a fixed order. Everything in the first five steps happens before either side moves, so the weather and the state of the railways are known when orders are given.

- **Weather** is rolled separately for the northern, central and southern sectors.
- **Rail** is repaired and converted, and the working net is traced from the depots.
- **Supply** is traced from the working railheads and every formation is graded.
- **Production** is counted and **replacements** are sent forward.
- **Reinforcements** that are due this week arrive at their cities.
- **The Axis** moves and fights, then **the Soviets** move and fight.

You give orders in your own half of the turn. When you have finished, end the week; the opposing staff takes its half and the next week begins.

4. Weather

The three sectors have their own weather, rolled each week from the month's own distribution. The rasputitsa arrives in the autumn and again at the thaw, and it stops a mechanised army almost dead. Hard frost is good going: the ground is firm and both sides can move, which is why the winter fighting was not a pause.

Weather	Movement	Supply	Attack	Motorised
Clear	×1.00	×1.00	—	×1.00
Rain	×0.80	×0.88	—	×0.78
Rasputitsa	×0.42	×0.50	-1 col	×0.30
Snow	×0.70	×0.72	-1 col	×0.62
Hard frost	×0.95	×0.85	—	×0.90
Blizzard	×0.45	×0.44	-2 col	×0.38

Motorised formations are hurt worse than foot by mud and snow: a panzer corps in the rasputitsa is not a panzer corps.

5. Rail, gauge and tonnage

The railways are the whole of the logistics. Each side has its own picture of the net: a rail hex counts as working for a side only when that side has converted or repaired it and can trace it back to a depot. Captured track is not usable until it has been worked on, and the Russian gauge is wider than the European one, so the Axis converts track at roughly half the rate at which the Soviets repair their own. An Axis offensive therefore outruns its railheads and slows itself down; no rule decides that it should, it simply follows.

The three sector sliders divide the week's rail tonnage between north, centre and south. What one sector takes, the other two give up. The ration a sector gets is its share of the tonnage against what the formations standing in it need, and it multiplies everything those formations do. Concentrating tonnage behind an offensive is the single most useful thing you can do with the sliders; forgetting to move it when the offensive moves is the most common way to lose an army group's fighting power without losing a battle.

6. Supply

Supply is traced outward from every working railhead as a movement cost, not as a distance: forest, marsh and mountain are further away than the same number of hexes of open ground, and being inside an enemy zone of control is further still. That trace puts every hex into a supply band, and the band, multiplied by the sector ration, gives each formation its grade.

Grade	Reads as	Within cost	Combat	Movement
0	cut off	beyond 30	×0.30	×0.35
1	starving	up to 30	×0.55	×0.60
2	short	up to 19	×0.78	×0.80
3	adequate	up to 11	×0.92	×0.95
4	full	up to 5	×1.00	×1.00

Motorised formations lose more than foot at low grades, and replacements reach a formation through the same pipe its rations come down: a corps far from a working railhead is rebuilt slowly however much is in the pool.

The Supply overlay above the map shades the ground you hold by grade, darkest where supply is worst, and marks the working railheads themselves. Ground you do not hold is left clear, because it has no grade to report.

7. Movement

Each formation has movement points, reduced by its supply grade and by the weather. Select it and the hexes it can reach are marked. Entering a hex costs the terrain, plus the river if one is crossed, and a formation that moves into a hex next to an enemy stops there — a zone of control is a halt, not a wall.

A hex holds a limited stack, and the limit is larger in a city than in open country. Formations of the two sides never share a hex. Mobile formations — panzer, motorised, tank, mechanised and cavalry — keep some movement after an attack and can exploit a hole; foot cannot.

Formation	Combat	Movement	Armour	Motorised
Infantry corps	2.4	7	0	no
Mountain corps	2.3	7	0	no
Security division	0.95	6	0	no
Motorised corps	3	13	3	yes

Panzer corps	3.5	15	7	yes
Cavalry corps	1.75	10	0	no
Artillery command	1.55	6	0	no
Headquarters	0.45	10	0	yes
Rifle army	2	6	0	no
Guards army	2.6	7	1	no
Militia division	1.05	5	0	no
Tank corps	3.2	14	6	yes
Mechanised corps	2.7	12	4	yes
Engineer brigade	0.7	6	0	no

Combat is the value of one step of that kind of formation. Armour counts towards the shift for armour in the open.

8. Combat

Click a formation, then click an enemy hex outlined next to it. Every one of your formations adjacent to that hex which still has an attack left joins in; you choose the target and the staff works out who can reach it.

The attacking strength is compared with the defending strength to give a ratio, the ratio names a column of the table, shifts are applied to that column, and a ten-sided die is rolled. The result is printed in the ledger down the side of the screen exactly as it was worked out: the column, the shifts, the roll and the code.

Column shifts

- Armour attacking in open country, against a defender without it.
- Air superiority, which is heavily reduced by weather.
- Weather: mud and blizzard both shift against the attacker.
- Low supply on either side.
- A defender that is cut off.
- A major river crossed by the attack.

The table

Roll	1:3	1:2	1:1	3:2	2:1	3:1	4:1	5:1	7:1	10:1
1	A2	A2	A2	A1	A1	EX	D1R	D1R	D2R	D2R2
2	A2	A2	A1	A1	EX	D1R	D1R	D2R	D2R2	D3R2
3	A2	A1	A1	EX	D1R	D1R	D2R	D2R2	D3R2	D3R3
4	A1	A1	EX	D1	D1R	D2R	D2R	D2R2	D3R2	DE
5	A1	EX	EX	D1R	D1R	D2R	D2R2	D3R2	D3R3	DE
6	A1	EX	D1	D1R	D2R	D2R	D2R2	D3R2	DE	DE
7	EX	D1	D1R	D1R	D2R	D2R2	D3R2	D3R2	DE	DE
8	EX	D1	D1R	D2R	D2R	D2R2	D3R2	DE	DE	DE
9	D1	D1R	D1R	D2R	D2R2	D3R2	D3R2	DE	DE	DE
10	D1R	D1R	D2R	D2R2	D2R2	D3R2	DE	DE	DE	DE

Code	Meaning
A2	Attacker loses two steps.
A1	Attacker loses one step.
EX	Exchange: one step each.
D1	Defender loses one step and holds.
D1R	Defender loses one step and retreats one hex.
D2R	Defender loses two steps and retreats one hex.
D2R2	Defender loses two steps and retreats two hexes.
D3R2	Defender loses three steps and retreats two hexes.
D3R3	Defender loses three steps and retreats three hexes.
DE	Defender eliminated.

On top of whatever the table says, every attack grinds both sides down a little. There is no such thing as a free attack, and a week of small attacks at poor odds will wear an army out faster than the losses in the ledger suggest.

A defender ordered to retreat that has nowhere to go loses the steps instead. That is what makes a closed pocket lethal.

9. Encirclement

A formation that cannot trace supply is cut off. It fights at a fraction of its strength, loses more of that fraction every week it stays cut off, and eventually surrenders. Cutting an army off is therefore worth far more than pushing it back, and the mobile arm exists to do it. On the map a cut-off formation carries a filled mark; a formation merely short of supply carries an open one.

10. Entrenchment and fatigue

A formation that stays put digs in, up to a limit set by the ground, and an entrenched formation is much harder to shift. Moving throws the work away. Frozen ground slows digging for everyone, and in the first winter the Axis cannot dig at all: the army had no winter equipment, and the front it held that December was a line of positions it had not been able to prepare.

Attacking is tiring. A formation that has fought hard recently is worth less until it has had a quiet week, so an offensive kept up without pause loses its edge even when its losses are being replaced.

11. Production and replacements

Each side receives arms points every week. The Axis figure is broadly steady and declines slowly as the war goes on. The Soviet figure depends partly on the production cities still held, but only partly: the plants evacuated east in 1941 cannot be captured, and their share of the total grows through the war. Taking Soviet industry hurts the Red Army; it does not switch it off.

Points are spent first on replacements for formations already in the line and then on raising new ones. Stavka holds part of each week's output back for new armies rather than pouring all of it into the old ones, and mobilisation grows through the war: a trickle of new armies in 1941, a stream from 1942. New formations appear at depot cities in the interior and have to march to the front.

12. Winning

Points come from steps destroyed, formations shattered, and cities held at the end — an enemy city is worth more than one of your own. At the end your score is compared with par for the command you held, and par is the score a competent staff makes against another competent staff in that campaign. It is not a round number chosen to feel fair: it is measured by playing the campaign out repeatedly with a skilled staff on both sides and taking the average, including the campaigns that went badly.

Because the two commands are scored against their own pars, the Axis and the Soviets can both be played well, and beating par as the Soviets in Barbarossa is exactly as much of an achievement as beating par as the Axis.

A campaign also ends early if Moscow and Leningrad both fall, or if one side ceases to exist as a fighting force.

13. Controls

Action	How
Select a formation	Click its hex

Look under a stack	Click the same hex again
See what is in a hex	Hover over it
Move	Click a pale hex
Attack	Click an outlined hex
Pan	Drag, or the arrow keys
Zoom	Wheel, or the plus and minus buttons
Change the overlay	Sheet, Supply, Ground held, Sectors
Divide rail tonnage	The three sector sliders
End the week	End week, or Enter
Clear the selection	Escape
Save	Save. A campaign is also saved automatically each week
Sound on or off	The Sound button in the top bar
Volume	The slider beside it

14. Sound

The game has a voice, and it is a headquarters rather than a battlefield. Nothing in it is a recording: every cue is synthesized from noise and sine tones, and the whole set is a little over a hundred kilobytes.

Cue	When
A dry key press	A control is used
A card tick	A counter is picked up off the sheet
A pencil stroke	A formation moves
The duplicator striking	A result is printed to the ledger
Guns a long way off	An attack is resolved
A field telephone	A new week begins
A short resolved figure	The campaign closes at or above par
The same figure, falling	The campaign closes below par

The Sound button in the top bar switches audio off and the slider beside it sets the volume; both are remembered between sessions. Nothing plays until your first click, because a browser will not open an audio context before then. A turn that resolves a dozen attacks reports once rather than tearing, and repeats are slightly detuned so a run of the same cue does not sound mechanical.

Sound is decoration and the game does not depend on it. With audio switched off, in a browser without the Web Audio API, or with the sound files missing, the campaign plays exactly as it otherwise would.

15. Notes on the three campaigns

Barbarossa

Forty weeks from the frontier at dawn on 22 June 1941 to the thaw. Three army groups, one road net and one winter. As the Axis, Kiev is reliably yours and the question is what else you can reach before the rasputitsa and the frost; Moscow is a genuine prize and a genuine stretch. As the Soviets, the campaign is about trading ground for time without letting the pockets close, and about surviving to December, when the reserve and Far Eastern armies arrive and the German army is standing in the open without winter equipment.

Fall Blau

Thirty-two weeks from the summer of 1942. One army group goes to the Volga and another to the oil, and the flank between them is held by Romanians, Hungarians and Italians. The Axis objectives are in the south and the machine staff plays it that way; the temptation to be drawn north is yours alone to resist.

The Long War

A hundred and thirty-two weeks, from the frontier to the end of 1943. This is the hardest of the three to play and the least even of the three: the Axis holds a structural advantage in this model that par corrects for in the scoring but not in the feel of it, and most campaigns end before their full run. It is included for players who want the whole arc in one sitting rather than as the best-balanced contest of the three.

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