**Eastfront Armored Combat with Miniatures (TAC-3 20mm)**

**Arnold Hendricks**

Many gamers hold that there is no basic difference between board and miniatures type games, aside from the superficial changes in scale and the use of models instead of counters. To try and determine, one way or another, if this is true the following game has been developed from the TSG Tactical Game 3. The designer, Mr. Hendricks, is basically a miniatures gamer with a wide background in board games. He does not consider this game as one of the “best” miniatures games around, but it should suffice to introduce the “miniatures” approach to those not familiar with it. We have other miniatures type games in progress. Your response to this one will decide what will be done with them. Reply on your feedback.

**T-34 TEST COUNTERS**

For those of our readers who do not have the inclination or the cash and/or the mechanical skill to obtain and assemble the plastic models usually used in games such as “T-34,” the ever-thoughtful editors of STRATEGY & TACTICS have included with this issue a reasonable facsimile of some of the units in “T-34.” Readers who are not miniatures “freaks” should use these paper facsimiles to test “T-34” before investing in a plastic armored division.

To assemble the counters, cut them out along the solid black lines, and fold them along the dotted black lines so that each counter forms a tent-like structure. Glue or tape them together at the base (see diagram).

**GAME SITUATIONS**

Miniatures lend themselves particularly well to use in tactical level games. Perhaps the main advantage of miniatures is the potential of the game situations to be easily put together by the players themselves. And that’s what you can do with “T-34.” That’s what you do in miniatures.

**DESIGNER’S COMMENTS**

Tac 3/20mm isn’t exactly the most detailed miniature WWII land wargame around. In fact, it is really just a direct steal from TACTICAL GAME No. 3 of the TSG. What I hope it will do is provide that real bridge between board and miniatures, to get each side of the fence partly on the other. Miniature wargamers are going to find having combat factors and a CRT a bit strange, while board wargamers are going to find all those tank models and painted figures weird too. In fact, the lack of hexagons alone is startling enough.

The rules are neither complex nor comprehensive, if anything they were designed to be clear. This game is a “quickie,” fast to set up, almost as fast to play. For those tactical historians with the “what if?”—it is a tool for endless answers. By now you should have enough organizational information to be able to set up various German and Russian formation using platoons and companies as building blocks. Pick your terrain and objectives, and have at it. If your imagination fails you, some reading into the real campaign and some of the battles should produce enough food for thought. For the fun-minded, I personally have a set of “orders” cards each containing an order of battle and a mission for one side. I set up a Russian and German deck before each battle, and thus players remain in the dark about enemy forces and objectives.

For those who find Tac 3/20mm just a nice take-off point for 1944 vintage land miniatures, note that S&T does indeed have considerably more detailed and simulation-oriented rules around. I know because I have designed and tested one set myself! Naturally, all it takes is a lot of little notices from you to produce them in an upcoming issue.

**RULES OF PLAY**

**VOCABULARY**

Unit: one playing piece (either a stand of men or a vehicle)
AFV: Any vehicle other than a truck or halftrack
Infantry: any infantry unit, including engineers and special types of foot troops
Heavy Weapons: any unit with an artillery piece, mortar, anti-tank gun, rocket, etc., etc.

**PROCEDURE OF PLAY**

Usually the Russian player will move first. Then the German player. After each player moves, both players fire all their units they wish to take aim of. The moving player fires all his units he desires first, then the other player fires his survivors. Thus the procedure for a full turn is:

Russians move, Russians fire, Germans move, Germans fire, Russians fire, Germans move, Germans fire, Russians fire.
This is a complete turn, which has two “moves” (one for each side) and four “rounds” of firing (two for each side).
Scale: each turn is 6 minutes of battle, each inch is about 85 meters.

**MOVEMENT OF UNITS**

You may move during your “move” as many of your units as you wish, including all or none. However, you must finish the move of one unit before starting that of another.

You may move a unit any speed up to its top speed, but never faster, and must take into account all delays and movement restrictions as given below:

You may never move through or onto any other unit friendly or enemy.

Certain terrain features will effect the movement of a unit:

- **HILL SLOPES**: any unit, but infantry, going up a hill slope takes three times as long. Thus for every one inch of slope climbed three inches of regular cross-country movement are used. There is no movement across the flat tops of hills, or moving downhill.
- **STREAMS**: crossing streams imposes the same delay as climbing slopes except infantry too are effected.
- **FORESTS**: rivers are impassible. Fords are considered streams for movement purposes.
- **BUILDINGS**: any unit can move through buildings, and there is no speed reduction for forests.

ROADS will allow units to move more quickly than normal:

- INFANTRY, HEAVY WEAPONS, AND HALFTRACKS move 2” on the road for every 1” of cross-country move expanded. (Otherwise, they desire.
- **TRUCKS** triple their cross-country speed while on roads. Both these categories can combine cross-country and road movement in any way they desire.
- **AFV's** have a 17” road bonus. However, to receive this bonus they MUST move at least half their movement rate on the road. When they finish moving this distance they are free to move up to 17” more free of charge to their cross-country rate.

All units, regardless of situation (unless pinned, see optional rules) may move at least 1” if they so desire.

Trucks and Halftracks may each carry one infantry or heavy weapon unit each. Tanks can carry only infantry units. Picking up (embarking) and dropping off (disembarking) a unit costs 4” of the carrying vehicle’s move. This vehicle must have 4” of cross-country movement left in order to embark or disembark units. Remember that you must move one unit at a time, and complete the move of one before starting another. Thus a unit cannot move “at both ends of the line” in the same turn, so to speak. Units that were both embarking and disembarking in the same turn cannot fire, and should have their weapons pointed away from the enemy to signify this.

German tanks carrying infantry cannot fire while infantry are aboard, and also should have their weapons pointed away to signify this. While a unit is being carried it is helpless and without defensive value, if the unit carrying it is destroyed, so is the unit being carried.

**FIRING**

To fire at the enemy a unit must have the target visible to it, must have an unobstructed line of fire, and must be within the maximum range of the firing unit.

In the basic game all units are deemed fully visible.
Most weapons have a flat trajectory of fire. Thus you may not fire through other units, buildings, or terrain features (such as hills, intervening forests, etc.). To make sure of this, sights from the firing unit to the target, if more than a quarter of the target is not visible from one point of view of the firing unit, assume it cannot be hit. You must have a CLE when firing.

Then measure the range from the firing unit to the target, and note the difference in elevation. The firing unit, the target cannot be hit.

You are allowed to have several units combine their firing factors at one target.

You are allowed to fire at the same target more than once provided you use separate units or group of units, because each unit can only fire once per round.

When firing you announce the target for each unit or group of units before checking line-of-sight and range. If for some reason the target selected cannot be hit, the firing units are assumed to have fired for that round and missed. You then go on to the next unit or group of units and select their target – it can be the same one!

To resolve firing that is legal, total the firing values of the units shooting. Compare this to the defensive value of the target (which may be doubled in certain circumstances, see below). This gives you a shooter-defender odds comparison, which you must reduce to its simplest form. Divide the defensive value into the firing value, and drop any fractions. Compare this number to “1” and you have it in its simplest form. Two PzKw tanks firing at a Russian infantry company have odds of 26-16, which is rounded to 1-1.

After determining the odds, consult the survival table and roll the die. Depending upon the odds and die roll, the target may survive or be destroyed. Don’t forget, if one unit misses, you can always have someone else who hasn’t fired yet, shoot at it.

TERRAIN AND DEFENSIVE VALUES

In a building all units inside combine their defensive values into one number, which is then doubled. This is the only effect buildings have in the game.

In forests each individual unit is doubled. Units may fire into forests or buildings, but may not fire through other units. Above have their defensive values cut in half. If the firing units are both above and below the target on the slope, the target keeps its normal defensive value.

TERRAIN AND FIRING VALUES

Any units that are firing at a range of 3” or less triple their firing value.

Any units that finish their turn in a stream and are firing at 3” or less have their firing values only multiplied by 1½ (ignore fractions) instead of 3.

Any AFV’s or Anti-Tank guns firing at any vehicle will double their firing values when firing at ranges over 3” but at or under half their maximum range.

RUSSIAN INFANTRY

Russian infantry always lacked good anti-tank weapons. Therefore, when firing at any AFV these units have a firing value of 2 instead of 5. This new value is still subject to all terrain and range alterations. Optionally guard Russian infantry can be given a value of 3 (depending upon whether you believe Soviet historians or not).

OVER-RUNNING

Any AFV or halftrack can overrun any one enemy infantry or heavy weapons unit. The victim must be on a flat, open ground; not on a hill slope (but it can be on a hill top), nor in rough terrain, nor in a building or a forest. The overrun unit may not cross a bridge or stream and overrun the enemy in the same move.

To overrun a unit, simply move the overrun unit directly onto your victim and finish your turn touching your victim and going further. You may not finish the turn upon the victim. No other unit can drive through the space of a dead overrun unit. The overrun unit may be overrun more than once (even if killed the first time).

When a unit is overrun, the “crushing” effect is immediately evaluated. The firing value of the unit firing is tripled, and compared to the regular defense value of the victim. The result is then resolved like normal firing, but immediately after the overrun unit finishes its particular move. Any other unit passing through the area of the overrun unit must behave as if it was overruning, even if the victim was already killed. Thus you cannot overrun a unit successfully and open up a hole for other units to move through.

MINEFIELDS

When a unit runs into a minefield the opponent (who had them all marked on a secret map before the game started) tells him of this fact. The victim must immediately stop once fully into the field. During the next firing round the owner of the field gets, he may “fire” the minefield just like a normal gun at the trespassing unit. The minefield has a value of 20, and other units are allowed to join in. On the next move for the trespassing unit, it can move 3” (or less if its maximum is less). If still in the minefield it must again stop and be attacked once more by the minefield, if not it may continue. A minefield only attacks once between moves of the trespassing unit, on the first firing round immediately after the contact is made. A minefield can attack an unlimited amount of times, and an unlimited amount of units in any one turn. Any unit that is overrun by the minefield must behave as if it was overruning, even if the victim was already killed. Thus you cannot overrun a unit successfully and open up a hole for other units to move through.

HIGH TRAJECTORY FIRE

German artillery (mortars, howitzers, rockets) operating with infantry units maintain a number of advantages. These include:

- Good enough communication procedures in fluid situations so that the infantry can often call up for artillery support and guide the fire to target although the firing guns could not see the target. Therefore, any target able to be fired upon by German infantry can also be fired upon by German artillery. The artillery firing upon the target do not have to be able to see the target in order to fire. But remember, the target does have to be within range of the infantry.

In multiple-player games, German commanders can use artillery units under their own command only: they may never fire at targets visible only to someone else’s command, and cannot “borrow” artillery support or guns from someone else.

In single player games players with a passion for complexity can also recreate this lack of cross-command artillery support networks. At the start of the game organize for each battalion certain artillery units, and give regimental artillery to battalions. The guns of each battalion operate separately, as in the model of minefield and overrun a unit successfully and open up a hole for other units to move through.

ARTILLERY OBSERVERS

Individual men are used in this rule as artillery observers. These, instead of infantry units, direct the artillery fire. Artillery observers may travel with any unit they desire, and when one unit passes next to the other and touches, the figure of the observer may be transferred to the next unit. Observers have no combat power of their own, and cannot share the fate of the unit they are attached to.

Observers can see “20”; in buildings this is increased to “25”, and on high hills to “30”.

German observers are attached at the rate of 2 per battalion, and 1 extra (the artillery officer) per regimental artillery battalion. Separate artillery battalions also have observers (1 for each). In the battalion each observer has the ability to call down all artillery in that battalion. Any regimental or independent guns attached to the battalion he controls. At the beginning of the game the German commander should make clear secret exactly who controls what. Regimental and independent artillery can remain under the control of their commanders, or be farmed out to the other battalions.

Rусские are allowed 1 observer for each infantry brigade, and 1 observer for each independent artillery battalion.

With observers all the other high-trajectory rules for both Russians and Germans are in effect. Note that observers considerably complicate the whole game, and should not be used by anybody less than an experienced die-hard artilleryman.

PINNING FIRE

Infantry and heavy weapons, being directly exposed to fire, will often take cover in battle situations and advance slowly or not at all. It is
assumed in this game that all troops are well enough trained to continue to move under fire to some degree. A poorly trained unit will stop completely when pinned down.

Whenever a "pinned down" result comes up on the survival table the unit is still living but pinned. Units that this happens to should be so noted (a straight pin stuck in the troop stand is a handy symbolic note). Pinned infantry units can only move 1" a turn and have no road bonus. Pinned heavy weapon units cannot move at all. After the movement turn for a player is finished all "pinned" markers from his troops should be removed. Unless the unit(s) are again pinned they are free to move their full rate on their next move. Pinned units are allowed to board trucks or halftracks, but not tanks.

AFV's can support infantry, thus protecting them from being pinned. To support an infantry unit, the AFV must finish its turn adjacent to the infantry, and vice versa. During the firing after the move, the infantry and/or heavy weapons cannot be pinned so long as there survives an AFV touching them.

Pinned units are unable to construct or clear minefields, and cannot dig in (fortify).

DIGGING IN

At the start of the game players may sometimes wish to fight a more static battle situation. In this case they might allow units to be dug in. In other games more daring players might allow digging in during the game. Units digging or dug should have imitation raw dirt, and perhaps camouflage nets on and about them to signify this fact. In the rules below, digging in and fortification is considered one and the same.

At the start of the game units are allowed to be fortified in a hasty or prepared manner. During the game units will only be allowed to make hasty fortifications. Construction of hasty fortifications takes 5 turns of work. Procedure for infantry building hasty fortifications is the same as for engineers laying mines (see Minefield rules, last paragraph). Only infantry and heavy weapons can make hasty fortifications during the game.

Prepared fortifications are just like having a building around you. Hasty fortification will double the unit fortified, but there is no combination of defense factors.

Fortification in houses or forests is not normally allowed because it takes a very long time. However, players may allow this, in which case units triple.

Fortified units can be considered to be worth twice their normal point value.

UNIT CONSTRUCTION-using models

All vehicles are generally assumed to be 2 1/4" x 1 1/4". The slight variation in size from this norm by 20mm vehicles is not important. The "Mintanks" line of vehicles is suggested as excellent and cheap scaled models, although they are more and more difficult to find. Some players may also prefer to glue pieces of figures realistically into turret hatches and driver's seats.

All German infantry and heavy unit stands should be 2 1/4" x 1 1/4". The 3 figures (a good norm for representative purposes) should be arranged so they are facing lengthwise down the stand, and the "front" is a 1" side of the stand. This is because the 1" side will probably be often facing the enemy in concentrated attack dispositions.

All Russian infantry and heavy weapon units should have stands 2 1/4" x 1 1/4". These stands should have 5 figures each, facing in the same way as the German stands.

3 1/16" balsa wood makes good stands. Imitation HO scale grass glued to the top around the feet of the men makes a realistic appearance, while sides of the stand should be painted a shade of green close to the color of the grass. German uniforms were Feldgrau (Gray-Green) which was closer to dark green than anything else. Russian uniforms were khaki, although often dirty, which is close to a tan color. Details of the figures and guns is up to the individual players, of course.

German vehicles were painted camouflage colors individually by their crews, and have no set color. Russian tanks were mostly forest green without any visible insignia. The Russians, fortunately for us, made extensive use of U.S. trucks (easy to find items in hobby stores).

Using 20mm scale, the rest of the game table can be set up using HO scale equipment.

Artillery observers are individual men without stands.

BLowing Bridges

After any engineer unit passes over a bridge it may try to blow it. When a bridge is declared "blown", roll the die:
1, 2, 3, 4: bridge is completely destroyed
5: bridge collapses, only infantry and 81 or 82mm mortars can cross it, and only at 3" per turn. (These units can be pinned while crossing, of course.)
6: charge fails and bridge remains intact.

If one engineer unit fails to do the job right, the next to pass over the bridge can try again.

Remember though, the bridge must be blown immediately after the move of that engineer unit.

SOFT GROUND & MUD

In soft ground or mud all units but infantry and mortars are slowed down. If the mud is bad enough to slow infantry and mortars, it is probably so bad that vehicles and other heavy weapons couldn't get through at all.

In soft ground or mud new overland movement speeds are in order, as follows:
Heavy Weapons (besides mortars): 0"
Trucks: 1"; Halftracks: 12"; AFV's: 20"
T-34/4: 16"; T-34/85, SU-85, PzKw V, J.Pz V, 12"; JS-I, JS-II, SU-100, PzKw IV, J.Pz IV, StuG III, 11": PzKw VIII, Hetzer; 8": PzKw VIb, J.Pz VI.

ARMORED CARS

Armored cars have the same movement rate and movement rules as trucks.

RULES FOR THE GAME TABLE

CAPACITIES

It is suggested that individual buildings should be allowed to hold any 3 German units or any 2 Russian units, but never troops of the same side. Buildings in a town should be within 3" of each other. Factories, state farms, and other conglomerates of buildings (perhaps 3-6 buildings large) should be formed so almost all the buildings are within 3" of each other so an accurate picture of street fighting can be formed.

FORESTS

It is also suggested that forests be given capacities and organized into sections, each section corresponding to the capacity of one building. This will simplify forest battles considerably. Forests in this game are considered to be relatively dense stands of trees.

HILLS

The common method of making hills on the game table: contours, leads to problems as to what is slope and what is hilltop. Players may wish to specify this before the game starts or use an alternate system. This writer builds up hills of wood and books, and then stretches over the top an imitation grass mat (as used in HO train layouts) which is carefully tacked down to the table at various key points so that ridges, valleys, slopes, and hill tops are all easily formed.

MULTI-COMMANDER GAMES

It is not recommended that players have more than one commander for every two feet of table space available. Players should also have at least a brigade (Russian) or regiment (German) of troops to command in an interesting game. With artillery rules command systems take on a vital role. Communication between commanders on the same side should either be during enemy moves via secret notes (can write one note per enemy move) or by verbal communication that can be clearly heard by the enemy.
## T-34

**UNIT COMBAT FACTORS**

(*) indicates unit-types given as paper models

<table>
<thead>
<tr>
<th>RUSSIAN UNITS</th>
<th>SPEED (inches)</th>
<th>RANGE (inches)</th>
<th>ATTACK FACTOR</th>
<th>DEFENSE FACTOR</th>
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</thead>
<tbody>
<tr>
<td>Infantry</td>
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<td>18&quot;</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>82mm Mortar</td>
<td>3&quot;</td>
<td>36&quot;</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>120mm Mortar</td>
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<td>75mm Gun</td>
<td>1&quot;</td>
<td>60&quot;</td>
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<td>2</td>
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<tr>
<td>150mm Howitzer</td>
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<td>36&quot;</td>
<td>24</td>
<td>2</td>
</tr>
<tr>
<td>76mm Gun</td>
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<td>85mm Gun</td>
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<td>42&quot;</td>
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### SURVIVAL TABLE

Basic odds:

<table>
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<tr>
<th>Die Roll</th>
<th>DA</th>
<th>1-1</th>
<th>2-1</th>
<th>3-1</th>
<th>4-1</th>
<th>5-1 or greater</th>
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</thead>
<tbody>
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<td>D</td>
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<td>D</td>
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<tr>
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<td>D</td>
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<td>D</td>
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<td>s</td>
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<td>s*</td>
<td>s*</td>
<td>s*</td>
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</tr>
<tr>
<td>6</td>
<td>s</td>
<td>s</td>
<td>s</td>
<td>s</td>
<td>s</td>
<td>D</td>
</tr>
</tbody>
</table>

**EXPLANATION:**

"DA": defender's value is greater than that of the attacker. If the defender's value is more than twice that of the attacker, the attacker automatically has no effect.

"D": as a result, this signifies that the target is destroyed.

"s": as a result, this signifies that the target survives.

"s*": as a result, this signifies that the target survives, however, using the optional "Pinned Down" rule it also means that infantry or heavy weapons units as targets are pinned down.
9/39 SOVIET RIFLE DIVISION—On paper it was a contemporary of the '39 German infantry division. In fact, it was more lavishly equipped than its German counterpart, having a light tank battalion the German unit lacked. Despite its bulk, it did not possess either the structural "unity" or the trained personnel to be as effective as the German division. This was shown when this type of division was severely mauled by the Finns during the 1940 war.

1939 GERMAN INFANTRY DIVISION—An updated version of the highly successful 1918 German STOSS (assault) DIVISION. Its major drawback was that it was not motorized. But in situations that did not require tactical mobility this unit was, in 1941, unbeatable. It possessed a highly efficient and powerful artillery component. Between 1941 and 1942 the size of various weapons, particularly anti-tank, increased from 37mm to 76 mm. Also, in late 1943 more 120mm mortars (direct copies of the original Russian design) appeared. This unit had about eight times as many radios as its Soviet equivalent.

"authorized" state", very little "fat" (c) wasted away quickly, few days of inter rifle division would half its "paper stripped of infantry," then either be completely wiped out or pulled out of (a process that cost a few weeks). S were not kept replacements as v divisions.
1944 GERMAN INFANTRY DIVISION—The Germans had suffered enormous personnel losses during their first two years in Russia, and could no longer keep their infantry units up to strength. Therefore, in late 1943, the “1944” infantry division was authorized. Practically every German infantry division reorganized under the new plan and as a result most divisions were “brought up to strength”. In addition, 16 new infantry divisions were organized (only 24 had been raised since June ’41 and 15 of these were “static” divisions for the west front). The major change was a reduction of the number of infantry battalions from nine to six (each regiment lost one battalion). The number of rifle platoons per company was reduced from four to three. In early ’44 further changes were made, with the number of men in the infantry squad reduced from 10 to 9 and the number of machineguns reduced from 15 to 13. Following the Russian model, the number of rear echelon personnel was cut considerably. The net result was that the total manpower was reduced 27% while the total “firepower” increased 25% (based on the original 1939 armament, but this had been increased because of an increase in the caliber of certain weapons, such as anti-tank guns and 120mm mortars. The actual increase in firepower was probably closer to 10%). The amount of artillery stayed the same while the amount of infantry decreased 32%. It was an emergency measure and it worked.

1941 SOVIET TANK BRIGADE—Basically, the problem with this unit was too many tanks and practically no infantry at all. Most units of this type were destroyed during ’41. The “new” ’42 tank brigade replaced it. The main changes were the addition of an infantry element and the elimination of the “fat” support troops. The 76mm gun battalion was also lost.
1941 SOVIET MOTO-MECHANIZED
BRIGADE—Basically a component of
the Moto-Mechanized Corps of 1941,
this unit had too many tanks and too
little infantry and support troops. By
1942 it had disappeared.

1942 SOVIET TANK BRIGADE—
Actually, in western armies this would
be considered a tank battalion with two
companies of infantry plus small anti-
tank and anti-aircraft units attached.
This combination of tanks and infantry
(all armed with SMG) was ideal, for the
infantry’s sole duty was to protect the
tanks from enemy infantry. The lack of
organic infantry in other nation’s tank
units often caused tanks to be caught
without infantry, an event which would
often cause more damage to the tanks
than to the infantry.

1942 SOVIET MOTORIZED RIFLE
BRIGADE—Basically nothing more than
a reinforced rifle regiment. In practice it
was much more. Because it was a
“mobile unit” it received the best in
men and equipment. Compared to a
German panzergrenadier regiment it
had: 5% more men, 210% more SMG,
12% fewer MG’s, 16% more mortars
(although only half as many 120’s), 20%
fewer “guns” and 41% fewer motor
vehicles. In other words, it was about
equal in firepower but inferior in mobi-
ility and flexibility. With the addition of
a 543 man Tank Regiment (41 T-34
tanks) this unit became a MECHAN-
IZED BRIGADE; which made it more
than a match for the panzerdivision.

1942 SOVIET TANK BRIGADE—
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This combination of tanks and infantry
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1942 SOVIET MOTORIZED RIFLE
BRIGADE—Basically nothing more than
a reinforced rifle regiment. In practice it
was much more. Because it was a
“mobile unit” it received the best in
men and equipment. Compared to a
German panzergrenadier regiment it
had: 5% more men, 210% more SMG,
12% fewer MG’s, 16% more mortars
(although only half as many 120’s), 20%
fewer “guns” and 41% fewer motor
vehicles. In other words, it was about
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K CORPS—This was one of the German divisions to be equipped with tank battalions as infantry motorized units. Added to these were units with 150mm anti-tank guns (which were used on almost all tanks) and 120mm mortars (belonging to the infantry division, despite the fact that the regiment now had only two (17% smaller) infantry battalions). This festored the infantry division was reorganized four infantry battalions to be produced by the Russians. This was the only advantage the old ‘39 infantry battalion had over the Germans. In terms of firepower it was superior to the German panzergrenadier division, and in almost all other categories it was superior. For example: 26% more manpower, 17% more infantry, 152% more AFV and 68% more guns." But the Russian unit had 19% less motorized transport. And this, coupled with its lack of overall firepower (due to the lack of any real artillery), did not give it the "depth" of the German unit. Still, it was one of the most efficient units to be produced by the Russians.

12/42 SOVIET MECHANIZED CORPS—At first glance it appears to be the Russian equivalent of the German panzergrenadier division. But its large tank component puts it in the same category with the German armored divisions. Probably the most powerful division size unit to be raised by the Russians. In terms of firepower it was superior to the German panzergrenadier division, and in almost all other categories it was superior. For example: 26% more manpower, 17% more infantry, 152% more AFV and 68% more guns." But the Russian unit had 19% less motorized transport. And this, coupled with its lack of overall firepower (due to the lack of any real artillery), did not give it the "depth" of the German unit. Still, it was one of the most efficient units to be produced by the Russians.

15 REGIMENT
12/42 SOVIET RIFLE BATTALION

16 1944 GERMAN INFANTRY REGIMENT

17 1944 GERMAN INFANTRY BATTALION

E REGIMENT—On paper, the Soviet battalion was about equal to the German ‘44 battalion in firepower, although it had some 90 fewer men. What gave the Germans an edge was their numerous divisional artillery, which was accustomed to working closely with the divisional infantry battalions. This was not the case with the numerous non-divisional artillery which often worked with Soviet rifle battalions. What this points up is that the infantry does most of the dying and the artillery most of the killing. Thus, despite the efficient organization of the 12/42 Soviet rifle battalion, these units were still smashed with depressing regularity by the more efficient German artillery. It was common for rifle battalions to be reduced to a few dozen men after a few weeks action.

1944 GERMAN INFANTRY REGIMENT—The chief differences between the ‘39 infantry regiment and the ‘44 version were a reduction of 45% in the infantry and a reduction of 38% in total manpower. The firepower of the new regiment, however, was 6% greater than the ‘39 unit. This was accomplished through the introduction of 120mm mortars and by not reducing the "heavy weapons" (76mm and 150mm infantry guns) belonging to the regiment, despite the fact that the regiment now had only two (17% smaller) infantry battalions where there were once three. One important weapon was reduced the 75mm anti-tank gun. German tank production was increasing so quickly that there were not enough of these weapons (which were used on almost all tanks) for the infantry divisions. Three were still allocated to each regiment, plus 36 88mm rocket launchers.
18

1942-45 SOVIET MOTORIZED RIFLE BATTALION

- 662 men
- 143 vehicles
- 104 SMG
- 12 MG
- 476G
- 8 MT
- 58 ATR
- 23 MG
- 10 SMG
- 100 132RL
- 450 85G

19

1942-45 SOVIET MOTORIZED ANTI-TANK BRIGADE

- 1850 men
- 114 men
- 6 SMG
- 2 MG
- 476G
- 8 MT
- 1 MG
- 104 SMG
- 24 132RL
- 100 132RL
- 64 SMG
- 132 Rcn

20

1942-45 SOVIET ROCKET LAUNCHER (M-13) BRIGADE

- 2698 men
- 808 men
- 104 SMG
- 21 MG
- 36 82Mtr
- 24 132RL
- 110 MT
- 25 AT
- 37G
- 2 MG
- 476G

21

1942-45 SOVIET ANTI-TANK REGIMENT

- 1210 men
- 64 men
- 6 SMG
- 2 MG
- 476G
- 8 MT

22

1942-45 SOVIET CAVALRY CORPS

- 18,700 men
- 465SMG
- 49MG
- 32 ATR
- 12 82Mtr
- 1144 men
- 465 SMG
- 49 MG
- 32 ATR
- 12 82Mtr

23

1942-45 SOVIET ANTI-AIRCRAFT ARTILLERY DIVISION

- 2000 men
- 37G
- 85G
- 397 men
- 620 men
- 102 SMG
- 110 SMG
- 16 MG
- 18 MG
- 16 37G
- 18 37G

24

1942-45 SOVIET ROCKET LAUNCHER (132mm) BRIGADE

- The customary use of Soviet artillery was a large scale bombardment of enemy positions with many guns firing as large a number of shells as possible in the shortest possible time. This was the lesson learned during World War I and was about where the Soviet artillery was at. Naturally, rockets fit perfectly into this type of operation. Each launcher fired all ten of its rockets at the same time. Thus one 132mm launcher could fire in a few seconds the same weight of shell as a 122mm howitzer would fire in ten minutes. Because the rockets had only about half the range of regular artillery they had to emplace closer to the front. The prominent back-blast of the rockets when they fired also gave away the unit's positions. For these reasons the rocket units were usually only used for large offensives and/or when the Russians had sufficient ground forces at the front to provide proper security for the rocket brigades and divisions.
22

1942-45 SOVIET SELF-PROPELLED ARTILLERY REGIMENT

46 men)

Rcn (17)

35/40 men
30/35 SMG
5 SU/JSU
76,85
100,122,152

NOTE: There were two basic types of
regiments, light and heavy. Their
respective strengths are given
separated like so-light/heavy.
Light units were SU 76 & 85,
heavy ones were SU 100 and up.

1942-45 SOVIET ARTILLERY CORPS—In 1941-42 only 20% of all Soviet artillery
was "non-divisional" (outside of the rifle
and motorcycle divisions). By early
'44 some 85% of the artillery was
concentrated in non-divisional units. A
year later nearly 75% of the artillery was
organized into artillery divisions and
brigades. Only four artillery divisions
were organized when the war started. By
late '42 there were 26. A year later there
were 80 (plus 73 separate brigades) and
after another year (late '44) there were
94 artillery divisions and 140 separate
brigades. The earlier divisions had only
168 guns. By the end of the war many
had an extra brigade attached to give the
division 356 guns. Most had 288. Up
till 1943 over half of the Soviet
artillery used for "breakthrough"
operations. Each corps could control as
many as 20-25 artillery brigades in the
form of divisions and separate brigades.
The brigades shown in the artillery
organization each 76mm
artillery division (or a few brigades) attached.

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23

1942-45 SOVIET ARTILLERY DIVISION

(9700 men)

Mtr
1705 men
135 SMG
57 MG
108 ATR
2063 men
255 SMG
39 MG
108 120Mtr
362 SMG
45 MG
303 MT
420 MT
408 MT

(255)

ATR (21)

27

1942-45 SOVIET MOTORIZED SUBMACHINEGUN BATTALION

3G

Rcn (110)

78 men
46 SMG
6 MG

SMG (403 men)

82 MTR (61)

45G (37)

22

28

1942-45 SOVIET RECONNAISSANCE BATTALION

75 men
25 SMG
11 Mg
5 HT

(220 men)

20

29

1942-45 SOVIET MOTORCYCLE BATTALION

73 men
32 SMG
24 MG
21 Mcl

(288 men)

82Mtr(36)

FT(22)

(7)
1942-45 SOVIET MOTORIZED AIRCRAFT DIVISION—Basically, nothing more than an artillery brigade. By the end of ‘43 there were 47 available. By that time the German air force had ceased to be much of a threat. These units are not counted as “artillery” divisions. Often used for anti-tank work.

1942-45 SOVIET CAVALRY CORPS—Although the cavalry corps was closer to the rifle corps than the mechanized corps in terms of “rigid” organization, it soon came to be the primary parent unit for the cavalry division. By 1944 a new type of unit was also developed, the “cavalry-mechanized group” which consisted of one cavalry and one mechanized corps. It was used during major offensives for exploiting breakthroughs over difficult ground (most notably during the 1944 Summer offensive through the swampy southern flank). The cavalry corps would often contain more tank and artillery regiments. Its organization as shown here was only “average,” although the deviation either way was usually not more than 5,000 men. Ten were available by 1944.

1942-45 SOVIET INFANTRY ARMY—In 1941 the Soviet armies were organized much like their western counterparts. But the shock of the initial German invasion forced them to throw most of their imported western organizational theories out. The rifle corps was abolished and the divisions were controlled directly by the army commander. The support units attached to organizational theories out. The rifle corps was abolished and the divisions were controlled directly by the army commander. The support units attached to “army” often had less combat power than a German infantry corps. But during 1943 the armies grew in strength. By late ‘43 they had, on the average, the strength shown above. But this strength could vary considerably. In very quiet sectors of the front the army would not only be stripped of most of its artillery (such as the really big artillery corps containing 1000+ men) but also of its supporting units. Many of these brigades were quickly destroyed (particularly the hastily formed “workers brigades” and similar formations). During the war some 354 rifle brigades were formed. By June ‘43 some 120 had been knocked out of action. At this point many that had proven themselves in action were gradually upgraded (with additional rifle battalions and supporting units) until they became rifle divisions. By the end of 1943 there were only 55 brigades left. Six months later only 17 remained and by the end of ‘44 only 11. The vast majority were upgraded to divisional status. The organization given here is the “average” for 1943, the year in which the brigades were most numerous.
1942-45 SOVIET RECONNAISSANCE BATTALION—Unlike the Germans, the Russians never organized special recon units of the size and combat power of the German "Panzeraufklärungsabteilung". Reconnaissance as the Germans carried it out was a highly specialized undertaking and, naturally enough, the Russians simply could not spare the capable manpower for it. Thus the Russian recon unit was little more than a reinforced "scout" unit. When the Russians chose to "fight" for information as the Germans often did, they would attach a tank brigade to the reconnaissance battalion.

1942-45 SOVIET TANK ARMY

1943-46 SOVIET TANK ARMY—The first units of this type (as shown above) were formed in 1943 (Spring/Summer). During late '42 there were also some "tank armies" but these were mainly collections of tank brigades and rifle divisions. The tank army was about equal in strength to a German "Panzerkorps" (full strength). By 1944 there were 6 tank armies. Each usually had two tank corps and one mechanized corps, plus attached units as shown above. During this period there were 26 tank corps and 11 mechanized corps.

Occasionally there would be two mechanized corps in a tank army, or a different combination of support units. Mechanized corps were often held in GHQ reserve as special exploitation forces or else paired with cavalry corps into cavalry-mechanized groups. The Russians never had more than eight or nine units (tank armies or "cav/mech groups") comparable to the German panzerkorps (of which, even in 1944, the Germans had 10 to 18). But the ones they did possess out-"blitzed" the Germans during 1943-45.
| T-34 |