Preparation for Battle on the Russian Front

This is a description of the process used to create a scenario for a battle on the WWII Russian Front. Although some mistakes were made while playing the game—which are duly noted—I hope the overall result will be to cause an interest in wargaming WWII scenarios using a hex playing area. Hexes make movement easier and firing quicker with the overall result of speeding up the game.

I especially want to thank Clay Cooper for the idea of using re-enforcement and breakdown rules. Clay used these ideas in a North African scenario presented at Bayou Wars in New Orleans this summer. An article detailing the game appeared 6/15/2007 at this website: grid_based_wargames@yahoogroups.com.

After reading the first draft of the WWII Hex Rules, Clay suggested the addition of a random events chart. The possibility of a random event creates a bit of tension and suspense since either side can be affected by the results.

The rules are called the WWII Hex Rules because they can be adapted to cover other theaters of the war. The purpose of the rules is to produce a WWII land game that is relatively fast, easy, and fun. It is difficult to make simple rules. “What if” questions cause the rules to expand and appear more complicated than they actually are.

The first requirement was a hex board. Any size would do as long as it was compatible with the size of the figures and models. Last Christmas my daughter gave me a 6’x 4’ Hotz-Mat (http://hotzartworks.com/) with 5” hexes, and my 1/72 figures and models fit perfectly.

I don’t have a table wide enough for the hex mat, and I’m getting too old to crawl around on the floor, so I put the mat on the bed in the guestroom. Of course, the pillows had to be removed and my wife extracted a solemn promise to restore the room to its pre-battle condition as soon as possible. The bed was about the right height and worked very well.

Dice? Colored dice were used because it was easier for me to keep up with the process. I already had the dice anyway, so I used them.

The markers were inexpensive. Small, ½” white plastic rings called “cabone rings“ (found in the sewing section at Wal-Mart) were used for hit markers, and ¼” red pom-poms (found in the crafts section at Michael’s) were used for breakdown markers.

The scenario resources included many books, history channel programs, and movies. (Cross of Iron and Enemy at the Gates were personal favorites.)
Figures and models were no problem either. Any size would have done, but I chose the 1/72 scale since I already had them on hand. A box of 1/72 plastic soldiers usually will provide enough figures for six infantry units with four figures to a base. I formed each infantry unit by using Elmer’s white glue to attach four or five figures to a 2.5” x 2” mat board base. Each base had been painted with Hauser medium green acrylic craft paint, dried, coated with Elmer’s white glue, or Woodland scenic glue, and sprinkled with sand. When dry, Hauser medium green paint was lightly dry-brushed across the sand to produce a grassy look. Anti-tank guns and their crews were mounted to prepared bases in the same manner. The artillery units required slightly larger bases.

Games using 15mm figures mounted for Flames of War would look great also. Or, if you do not want to invest the time and money in sculptured figures, the paper soldiers on Junior General (http://www.juniorgeneral.org/) might offer an inexpensive alternative.

The model tanks were primarily from an old collection of 1/87 Roco AFV’s; the SU-85’s were die-cast metal models found years ago in a grocery store toy section; and the anti-tank guns and artillery came from 1/72 scale model kits.

Five-inch terrain hexes were cut from flannel rectangles—also found in the Wal-Mart and Hobby Lobby craft sections: cashmere tan for built-up areas (BUA’s), brown for hills, dark green for woods, and camel tan for obstacles (mines, wire, and tank traps). Strips of blue flannel were cut to represent the stream.

Information in the rules and resource books was used to make a Combat Chart listing the defensive values, movement, and offensive strength of the different kinds of units involved on the Russian Front. The units chosen for this scenario were then recorded on a Re-enforcement List in numbers that made both sides fairly equal in strength.

Not all AFV’s are covered in every book, and some of the information may be slightly different in different sources. In this event, the information that worked best for the scenario was used. For example, information about the SU-85 was found on pages 324-5 of the Appendix of Armoured Fighting Vehicles by Philip Trewhitt. (I bought this book at Barnes and Nobles for less than $8.00 a few years ago, and I saw it on the rack for the same price last week—a different cover but the same book.) The SU-85 had a maximum armor of 75mm, which, according to the rules, gave it a defensive value of [3], and an 85mm gun, which gave it a range and firepower of 4-3-3. Although it counts as an anti-tank vehicle, it had the power of a T-34 tank. This was important to remember when trying to match the German firepower with that of the Russians.

Setting up the game was relatively simple. The hex-mat was spread over a bed and divided into three parts. Since the mat has 13 and 14 hexes lengthwise, I was unable to divide the mat into equal sections. Short pieces of masking tape were used to mark the middle of the fifth and tenth hex. This left 4 complete hexes on each end, and 4 or 5 complete hexes in the center. There were also four split hexes between the sections on both ends.

The section at the foot of the bed was designated Red, the center was White, and the section at the head of the bed was Blue. On the maps in the following battle report, the left side is Red, the center is White, and the right side is Blue.

The random placement of terrain was achieved by standing about a yard from the foot of the bed and tossing the flannel hexes Frisbee
style onto the mat. If you are good at this, you may want to throw with the less dexterous hand to get a more surprising layout. Each terrain hex was placed on the mat hex that it covered the most upon landing, and hexes that were partially over the edge of the playing area or off the board—three in this case—were removed. Small model houses, trees, and hills were placed on the appropriate hexes. The five-inch hexes were large enough to allow both the figures and the models to occupy the same hex by scooting the trees or houses around when necessary.

Before the game began, hexes on the edges of the board in each section were occupied by two foot infantry units, one machine gun unit, and one mortar unit. This scenario represented a German armored attack, so the Russians had one towed 76mm anti-tank gun off the edge of each section and the Germans had one tank off the edge of each section. The Germans fielded a Tiger between two Mk IV’s and had two Mk III’s in the re-enforcement pool. Even if both sides had been identical at the beginning, the re-enforcement roll in the first turn would have changed that.

In order to follow their movements on the map, all of the units in the Battle on the Russian Front were given designations, which were printed on the computer, cut out, and taped to the back of the bases with masking tape. A red and a green die were thrown and the green die won. The Germans would begin the game positioned at the bottom of the map. Units were placed on the board, on the edge, and in the re-enforcement pool. After that, everything was ready to begin.

Equipped with tanks versus anti-tank guns, the Germans jumped to an early lead in the first part of the game. The Russians held on by their nails and—with the help of timely re-enforcements—eventually evened up the score. The Germans finally pulled out a victory in the beginning of the tenth turn, but it is fair to say that it could have gone either way. The game turned out to be very interesting and enjoyable.

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**WWII HEX RULES**

*By Mike Crane*

**PURPOSE**
- Simulate a WWII land battle
- Fast, Easy, Fun

**EQUIPMENT**
- A hex mat to be used as the playing board
- Dice:
  - Re-enforcement die: 1d6 (yellow)
  - Activation dice: 3d6 (red, white, blue—R, W, B)
  - Random event die: 1d8 (black)
  - Battle dice: two differently colored sets of battle dice: e.g. 4d6 (red), 4d6 (green)
  - Breakdown die: 1d8 (white)
• Markers: Hit and Breakdown  
• Figures and models: infantry (foot and half-tracks), machine guns, mortars, anti-tank guns (towed and self-propelled), tanks, and artillery (towed and self-propelled).  
• Terrain hexes: light tan built-up areas (BUA’s); brown hills, green woods, blue streams; tan obstacles  
• Rules: WWII Hex Rules  
• Combat Chart: A list should be made of all units available in the scenario recording their defensive values, movement rates, and offensive values.

**Defensive values**

Infantry units are composed of individuals who are able to go to ground and are difficult to see and eliminate; therefore, infantry units, machine gun units, and mortar units have a defensive value of [4]. Infantry in half-tracks move farther, but have the same defensive value as foot infantry.

The defensive value of other units is determined by the maximum thickness of their armor.

<table>
<thead>
<tr>
<th>Armor</th>
<th>Thickness Range</th>
<th>Defensive Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light</td>
<td>01mm—66mm</td>
<td>[2]</td>
</tr>
<tr>
<td>Medium</td>
<td>67mm—99mm</td>
<td>[3]</td>
</tr>
<tr>
<td>Heavy</td>
<td>100mm (+)</td>
<td>[4]</td>
</tr>
</tbody>
</table>

**Movement rate** is determined by the speed of the unit: slow—1, 2; fast—3.

**Offensive values**

Infantry units incorporate grenades, rifles, and bazookas and have an offensive range and firepower value of 3-2; i.e., 3 dice are rolled when attacking an adjoining hex, and 2 dice when firing at a target two hexes away. Range and firepower for machine gun units is 3-3 and for mortar units is 2-3.

The offensive value of other units is determined by the gun. These distances do not represent the total range of these weapons, but an effective range due to lack of visibility, variation in topography, etc.

<table>
<thead>
<tr>
<th>Armor</th>
<th>Range and Firepower</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light</td>
<td>20mm—37mm = 3-2-2</td>
</tr>
<tr>
<td>Light Medium</td>
<td>45mm—50mm = 3-3-2</td>
</tr>
<tr>
<td>Light Heavy</td>
<td>57mm (British 6 pdr) 75mm = 3-3-3</td>
</tr>
<tr>
<td>Medium</td>
<td>76mm and German 75mm AT gun = 4-3-3</td>
</tr>
<tr>
<td>Medium Heavy</td>
<td>85mm = 4-4-3</td>
</tr>
<tr>
<td></td>
<td>75mm KwK 40 L/48 on Mk IV, StuG III = 4-4-3</td>
</tr>
<tr>
<td></td>
<td>75mm KwK 42 L/70 on Mk V Panther = 4-4-4</td>
</tr>
<tr>
<td>Heavy</td>
<td>88mm—90mm = 4-4-4-4</td>
</tr>
<tr>
<td>Artillery</td>
<td>100mm (+) = 3-3-2-2-1-1</td>
</tr>
</tbody>
</table>

[Options: The distance for all these weapons may be extended on the Combat Chart by repeating the last number and adding it to the range; e.g., 3-2-2 would become 3-2-2-2 and 4-4-4-4 would become 4-4-4-4-4. Or, only weapons located on a hilltop might have their range extended as indicated above.]

• Re-enforcement List. A list must be prepared of all re-enforcements available to each side in the scenario arranging them in the order they will arrive on the board. To save time, models of the units should be placed in a re-enforcement pool using the same arrangement.
SETUP
- Divide the length of the hex mat into three equal or nearly equal sections.
- Place the terrain hexes on the mat in random order and put terrain models on top of the terrain hexes.
- Place 2 foot infantry units, 1 machine gun unit, and 1 mortar unit in each section (R, W, B) on the first row of hexes along the edge.
- If the scenario calls for other units to be present at the beginning of the game, place them off the playing board beside the appropriate section. For example, if one side is to engage in an armored attack, 1 tank might be placed beside each section, and 1 AT gun might be placed beside each section of the opponent.

PROCEDURE
- Re-enforcement
- Activation
- Random event
- Movement
- Firing
- Battle

RE-ENFORCEMENT
- The Re-enforcement Table: the number rolled on each 1d6 indicates the unit type
  1 = 1 infantry unit (foot or mechanized);
  2 = 1 machine gun unit;
  3 = 1 mortar unit;
  4 = 1 anti-tank unit (towed or self-propelled);
  5 = 1 tank unit;
  6 = 1 artillery unit (towed or self-propelled).

- The first re-enforcement:
The first re-enforcement is different from the others because it occurs automatically in the first turn. As many as 9 units—3 for each section—may arrive for each side. Three d6 are rolled for each section of the board. Use the Re-enforcement Table above to determine which types of units will be drawn from the re-enforcement pool for each section.
- All re-enforcements after the first turn:
  Begin each turn after the first turn by rolling 1d6 to determine if further re-enforcements become available. A roll of 5 or 6 = yes. If a 5 or 6 is rolled, roll 3d6 (R, W, B). Each section is eligible to receive one re-enforcement unit. The color of the die and the number on each die determines the section and the type of unit according to the Re-enforcement Table above.
  Re-enforcement units are removed from the re-enforcement pool and placed off the edge of the appropriate section in the order named on the Re-enforcement List. If the pool has no units of the type called for, the roll is considered as a miss.
  A re-enforcement unit may enter the playing board when its section is activated and the player chooses to move it. When entering play, it may move the normal number of hexes and fire or battle in the normal manner.

ACTIVATION
- Activating a section:
The playing board is divided into three sections—Red, White, and Blue. Roll 3d6 (R, W, B). The color of the die with the highest number will indicate the section to be activated.
If the high numbers of two dice are tied, both sections will be activated. If all three dice are tied, all three sections will be activated.

- **Activating units:**
  The high number that determines the section to be activated will also determine the number of units that may be activated within that section; e.g., if the blue die has the high number of 5, then the blue section will be activated and 5 units in the blue section—including re-enforcement units—may move, move and fire, fire, move and battle, or remain stationary and battle an enemy in an adjacent hex; i.e., whatever activity is allowed for that particular unit.

- **A unit that is positioned on a split hex between two sections may be activated by either section.**
  (There are four split-hexes on each side of the playing board as well as the split hex areas extending off the board.)

**RANDOM EVENT**

- One black d8 is rolled at the same time as the activation dice. A result of 1 indicates the occurrence of a Random Event to take effect before movement begins.

To determine the nature of the random event, 1d6 is rolled and the number is matched with the corresponding number on the Random Event Chart. To determine which side in the section will be effected, roll 1d6 from each side’s battle dice. The side with the high number will be effected by the Random Event.

**The Random Event Chart**

1 = The self-propelled unit (*) closest to the enemy will break down immediately.
2 = The infantry unit closest to an enemy unit will surrender.
3 = The infantry unit closest to an enemy unit will panic and retreat 4 hexes.
4 = Three of the units closest to the enemy will receive an off-board artillery bombardment consisting of 3 dice each.
5 = One breakdown marker or 3 hit markers may be removed from units.
6 = An aircraft attacks a unit with 3 dice and continues to attack other units in the section until a 1 or 2 is thrown on one of the battle dice or all of the units in the section have been attacked. (It is not necessary to have a model plane on the playing board, but it does look nice.)

- If more than one unit is closest to the enemy, roll a die for each unit and the unit rolling the high die will be selected.

**MOVEMENT**

- **Normal movement:**
  Foot infantry, machine gun units and mortar units may move up to 2 hexes. Foot infantry may move 1 hex and fire/melee. Machine gun and mortar units may not move and fire/melee in the same turn. Mechanized infantry may move 2 hexes and fire/melee or 3 hexes without battling. Towed units move 1 or 2 hexes without fire/melee. AFV’s move 2 or 3 hexes according to the vehicle’s speed and fire/melee.

- **Information in the Combat Chart section of the rules should be used to make a Combat Chart listing movement for each unit in each scenario.**

- **Units may not move through other units or occupy the same hex as another unit.**

- **Units may move across the line separating one section from another. However, if they stop within a different section, they can only move again when the section they are in is activated.**

- **Movement modifications**
  - **Terrain:** All advancing units stop upon entering a hex with a built-up area (BUA), a hill, woods, or a stream. Retreating units do not stop at these hexes, but receive 1 hit marker upon entering the hex. (See Retreat.)
Advances may continue and streams may be crossed on the turn after an advancing unit has stopped on the hex.

Rivers are much more restrictive than streams and should be identified as small or large rivers before the game begins.

Small rivers require time for a unit to find and prepare a ford to cross. Advancing units must stop on a small river hex and may cross only after rolling a 5 or 6 on 1d6. Whenever a ford is found, a piece of cardboard or flannel should be placed across the stream to identify it. Other units may then use the ford hex as a bridge to cross when advancing or retreating. More than one ford may be found in a section.

Large rivers may only be crossed by using bridges, boats, or amphibious craft. A boat or amphibious craft may be moved into a river hex and act as a bridge on the following turn. Boats and amphibious craft move 2 hexes and have a defense value of [2].

Obstacles: Hexes that have models indicating the presence of mines, wire, or tank traps cannot be entered until the obstacle has been destroyed. Foot infantry units must attack the obstacle from an adjoining hex. The obstacle has a defensive value of [2].

Break down: Units that are self-propelled are subject to mechanical breakdown. Self-propelled units are indicated by an asterisk (*) on the Re-enforcement List. Before moving a self-propelled vehicle, roll a white breakdown die (1d8): a roll of 1 = a breakdown. Place a breakdown marker on or near the unit and allow no further movement. The unit may continue to fire normally until the vehicle is eliminated.

If a re-enforcement unit receives a breakdown result while trying to enter the board, it is removed from play and is not counted as a score by the opponent.

Retreat: A retreat is one full move back toward the starting edge of the board; e.g. foot infantry retreats 2 hexes; a T-34 retreats 3 hexes; a Tiger retreats 2 hexes, etc.

If a unit retreats off the board, it is removed and its loss counts as a score for the opponent. A retreat roll against a broken down unit causes the crew to abandon the vehicle, and the vehicle is removed from play as a score for the opponent.

A self-propelled vehicle must roll a breakdown die (1d8) before retreating. If a 1 is rolled, the vehicle breaks down and is abandoned by the crew. The unit is removed from play and is counted as a score by the opponent.

If a unit is blocked by other units and is unable to complete a required retreat, the blocked unit must surrender and be removed from play. The surrendered unit counts as a score for the opponent.

A retreating unit does not stop at a hex with a BUA, a hill, woods, or a stream without a bridge. Instead, 1 damage marker is added to the unit when it touches the hex. If a unit is in one of these hexes when it is forced to retreat, it receives 1 hit marker before retreating.

A retreating unit may only cross a river at a ford, a bridge, or boat/amphibious craft hex.

**FIRING**

- When a unit fires or engages in a close combat melee, the attacking unit and the target are identified before rolling the number of dice listed in the Combat Chart.

- Firing table for each d6 rolled:
  1-3 = miss
  4 = target retreats one full move
  5 = 1 hit
  6 = 2 hits

- Total the number of hits and apply hit markers to the targeted unit. When the number of hits exceeds the unit’s defensive number, the unit is destroyed and removed from play. A unit’s defensive number is recorded on the Combat Chart within brackets [#].
• Terrain modifications.
  BUA’s, woods, and hills block the line of sight and cannot be fired through by infantry, machine
guns, anti-tank guns, and tanks. However, mortars and artillery can fire over these obstacles.
Attacking units reduce the number of dice they throw against enemy units on a hill, in woods, and
within BUA hexes: infantry –1; anti-tank guns and tanks –2. Mortars and artillery are unaffected.
Although units must stop when entering hexes with BUA’s, woods, and hills, they can still fire
normally after stopping.
Units in a stream hex without a bridge cannot fire or battle.
• If within range, activated units in one section may fire on units in another section; e.g., artillery in the Red
section could fire into the White section.

BATTLE/MELEE
  • The process for melee is the same as for firing, but the attacker may occupy a vacated hex if the enemy is
destroyed or is forced to retreat. Tanks may occupy a vacated hex and attack again if there is an opposing unit in
an adjacent hex. This can only be done once per turn.
  • Hills, woods, and BUA’s reduce the dice of attacking infantry by 1 and attacking anti-tank guns and
tanks by 2. Mortars and artillery are not affected by the terrain.

VICTORY CONDITIONS
  • The game ends immediately whenever one side destroys 10 enemy units.
Explanation of the Devices Used to Write This Article

Each unit has a unit ID and each ID has three parts: nationality, type, and number. The first letter indicates the nationality: G for German and R for Russian. The second part identifies the type of unit: I for infantry; Mg for machine gun; M for mortar; AT for anti-tank gun; T for tank; and A for artillery. The third part is a number and represents the order in which the unit will be placed on the board. Some units have a fourth element, an asterisk (*). An asterisk means the unit is mechanized, or self-propelled. All tanks have an asterisk, and infantry, anti-tank, and artillery may have one. An infantry unit with an asterisk is mounted in a vehicle. For example, in this game, GI7* would identify a German infantry grenadier unit in an SdKfz 251 half-track.

Each side begins its turn with a throw of five dice listed in this manner: [2] (4, 2, 6) {3}. The first [2] is the re-enforcement die, the second set (4,2,6) are the activation dice with the numbers rolled listed in red, white, and blue order, and the last {3} is the random event die. In the text, battle dice are also enclosed in parentheses, but the rolls are listed from the smallest number to the greatest.

RUSSIAN FRONT COMBAT CHART

<table>
<thead>
<tr>
<th>Key: UNIT</th>
<th>DEFENSIVE VALUE</th>
<th>MOVEMENT AND OFFENSIVE VALUE</th>
</tr>
</thead>
</table>

**GERMAN UNITS**

**INFANTRY**
Foot [4] move 2 and no battle; move 0-1 and battle 3-2.
Half-track* [4] move 3 and no battle; move 0-2 and battle 3-2.
Machine gun [4] move 1 or 2 and no battle; move 0 and battle 3-3.
Mortar [4] move 1 or 2 and no battle; move 0 and battle 2-3.

**ANTI-TANK**
76mm [2] move 1 or 2 and no battle; move 0 and battle 4-3-3
88mm [2] move 1 or 2 and no battle; move 0 and battle 4-4-4-4
Stug III* [3] move 3 and battle 4-3-3
Jadgpanzer* [4] move 2 and battle 4-4-4-4

**TANK**
MkIII* [2] move 3 and battle (50mm) 3-2-2 (75mm) 3-3-3
MkIV* (48L) [3] move 3 and battle 4-4-3
MkV* Panther [4] move 3 and battle 4-4-4
MkVI* Tiger [4] move 2 and battle 4-4-4-4

**ARTILLERY**
105mm+ towed [2] move 1 or 2 and no battle; move 0 and battle 3-3-2-2-1-1
Wespe* 105mm [2] move 3 and battle 3-3-2-2-1-1

**SOVIET UNITS**

**INFANTRY**
Foot [4] move 2 and no battle; move 0-1 and battle 3-2.
Half-track* [4] move 3 and no battle; move 2 and battle 3-2;
Machine gun [4] move 1 or 2 and no battle; move 0 and battle 3-3.
Mortar [4] move 1 or 2 and no battle, move 0 and battle 2-3.
ANTI-TANK
57mm [2] move 1 or 2 and no battle; move 0 and battle 3-3-3
76mm [2] move 1 or 2 and no battle; move 0 and battle 4-3-3
SU-85* [2] move 3 and battle 4-4-3

TANK
T-34/76* [2] move 3 and battle 4-3-3
T-34/85* [3] move 3 and battle 4-4-3
KV-1* [4] move 2 and battle 4-3-3
IS III* [4] move 2 and battle 4-4-4-4

ARTILLERY
122mm+ towed [2] move 1 or 2 and no battle; move 0 and battle 3-3-2-1-1
Self-propelled [4] move 1, 2, or 3 and no battle; move 0 and battle 3-3-2-2-1-1

*mechanized – must roll 1d8 for breakdown before moving; 1= breakdown.

BATTLE ON THE RUSSIAN FRONT
RE-ENFORCEMENT LIST

German
5 halftracks (GI7*, GI8*, GI9*, GI10*, GI11*)
3 machine guns (GMg4, GMg5, GMg6)
4 mortars (GM4, GM5, GM6, GM7)
1 88mm (GAT1), 2 StuG III’s (GAT2*, GAT3*), 3 towed 75mm AT guns (GAT4, GAT5, GAT6)
2 Mk III’s (GT4*, GT5*)
1 Wespe 105mm (GA1*), 2 105mm (GA2, GA3)

Russian
3 foot infantry (RI7, RI8, RI9), 3 halftracks (RI10*, RI11*, RI12*)
4 machine guns (RMg4, RMg5, RMg6, RMg7)
4 mortars (RM4, RM5, RM6, RM7)
3 SU-85’s (RAT4*, RAT5*, RAT6*)
4 T-34/85’s (RT1*, RT2*, RT3*, RT4*), 4 T34-85/76’s (RT5*, RT6*, RT7*, RT8*)
3 122 mm (RA1, RA2, RA3)