

1.0 INTRODUCTION & DESIGNER'S NOTES

1.1 Land Without End: The Barbarossa Campaign, 1941 (LWE) is a two-player, low-to-intermediate complexity, strategic-level simulation of the German attempt to overrun and destroy the Soviet Union in 1941. The German player is on the offensive, attempting to win the game by rapidly seizing key locales. The Soviet player is primarily on the defensive, but the historical situation also requires he prosecute almost continuous counterattacks throughout much of the game. Game play encompasses the period that began with the Germans launching their aggression on 22 June 1941, and ends on 7 December of the same year. By that time it had become clear the invaders had shot their bolt without achieving their objectives. The game may end sooner than the historic termination time if the German player is able to do significantly better than his historic counterpart by advancing so quickly he causes the overall political, socio-economic and military collapse of the Soviet Union.

1.2 Game Scales

Each hexagon on the map represents approximately 20 miles (32 km) from side to opposite side. The units of maneuver for both sides are primarily divisions, along with Axis satellite and Soviet corps (and one army) of various types. The effects of the general air superiority enjoyed by the Germans throughout much of the campaign are built into the game's movement and combat rules. Each full game turn represents one week.

1.3 Halving

The general rule concerning the halving of numbers in the game is, whenever any such division takes place, all remainders are rounded down. Thus, for example, "half" of three is one, and "half" of two is one. There is one exception to that general rule, however, in that, if it's a combat factor of "1" being halved, half of one is one, provided only a single unit's combat factor is being halved. That is, no single unit's combat factor is ever reduced below one for any reason or combination of reasons. If there were two or more units in the same battle and both are to be halved, all the involved units' com-

bat factors are first added together so only one division and rounding is made.

1.4 North

The compass rose printed on the map shows its relationship to magnetic north. Whenever a compass direction is referenced in these rules it should be understood the north side of the map is comprised of the hexes 1007 to 4801, inclusive. The east side of the map is comprised of the hexes 4801 to 4853, inclusive. The south side is 4853 to 1048, inclusive, and the west is 1048 to 1007, inclusive. The corner hexes are therefore all part of two map sides.

1.5 German & German-Side Units

If a rule is said to apply to "all German-side units" or "all units of the German side," it means German nationality and Axis-satellite units—Italians, Hungarians and Romanians—are equally affected by it. If a rule is said to apply only to "Axis-satellite units," it applies only to Italian, Hungarian and Romanian units. If a rule is said to apply only to "German units," it applies to all units of that side other than Axis-satellite corps. The "Spanish" division in the game is considered fully German for all purposes.

1.6 Designer's Notes

This new game, *LWE*, began as a second-edition redesign of the classic east front mini-monster of the 1990s, *Proud Monster*. As the *LWE* project advanced, however, the design took on a life of its own, until the final product really came to represent a "complete reimagining" of the older game. I ended up taking an approach that didn't enhance the older game as much as it simply supplanted it. Hence the new title and "second edition" suffix.

In the years since the publication of the original *PM*, I've gotten feedback from those who played it a lot, as well as from some who didn't play it a lot. Those in the first group were usually keen to share their many insights into the game's overall system, particular rules mechanics, its historicity and play balance. Those in the second group were (mostly) also eager to share their insights on the same matters, but were kept from doing so because they lacked either the space needed to keep it set up or the time needed to play it, or both.

In sum, then, what I've worked to design here is an entirely new and better *Proud Monster* that, while still generating a sense of big-Hollywood-production cinematic drama, can be set up atop even a student desk in a dormitory, and can be played to completion by two experienced gamers in no more than one long sitting. Further, despite its smaller size, I think you'll find this new version still has the same whip-snake action, dramatic and sudden reversals of fortune, teeth-gritting tension, as well as all the full-on frontal, hammer-and-tongs combat savagery.

If the old *PM* could be said to have been the quintessential "mini-monster," then *LWE* is perhaps best described as a "micro-monster." That is, though in overall component size and rules bulk it isn't much bigger than a typical *S&T* issue game, the key features of its system and its historic scope work to lend it a sweep and grandeur that makes it feel 'monstrous' (and I mean that in the best possible way).

Those of you who maintain a strong liking for *PM* shouldn't feel compelled to give up that game for this one. Even the most dedicated monster-gamers don't always have the time and space needed for those larger efforts; so *LWE* should work nicely to give you an operational-level east front fix when you're living through those fallow periods between Monster Game Cons. And, if you've a mind to do so, you can swap rules sections back and forth between *PM* and *LWE* until you get one or another version exactly the way you like it.

That's the overall approach I adopted for this project. Just as it's been in all my design and development work over the decades, my goal has been to deliver the most historicity, strategic variability, as well as entertainment value, for the least rules bulk, while at the same time providing a play experience that's tense and enjoyable for both commanders. All that having been said, I've used what I've learned through my continued study and contemplation of the history of this campaign, as well as of the art and craft of wargame design, to further clean, smooth out and simplify the rules to this game.

Players of *PM* will note the most change has taken place in the area of the rules covering supply, the capture of

Moscow, and the Stalin line. At the same time, gone from both sides' orders of battle is all the sub-divisional stuff, while rifle corps now make a strong showing on the Soviet side. The three sources that led me to those new approaches are listed below. I'd actually owned and studied all of them, except the Glantz book, for years before starting to work on LWE. It was Glantz's 2001 Barbarossa book that finally tipped me over into making a new assessment of what all these sources had really taught me about the strategic and operational conduct of this campaign. Those new assessments then resulted in this set of wargame rules.

Bodenstein, Werner. Supply in Far Reaching Operations. La Fox, IL: The War

Room, Inc., no date. Reprint of post-war US Army POW interrogation, c.1945.

Glantz, David M. Barbarossa: Hitler's Invasion of Russia, 1941. Charleston, SC: Tempus Books, 2001. ISBN: 0-7394-1797-5.

Glantz, David M. Stumbling Colossus: The Red Army on the Eve of World War.

Lawrence, KS: Univ. of Kansas Press, 1998. ISBN: 0-7006-0879-6.

Klein, Oberstleutnant Hans. The OKH Project: The Planning Branch of the Chief of Transportation. La Fox, IL: The War Room, Inc., no date. Reprint of post-war US Army POW interrogation, c. 1945.

Morzik, Gen. Maj. D. Fritz. German Air Force Airlift Operations. USAF Historical Studies, No. 167. New York: Arno Press, 1961.

2.0 GAME COMPONENTS

2.1 The components to a complete game of *LWE* include these rules, the map and 700 die-cut counters, which are also referred to as "units" and "unit counters." A standard six-sided die to resolve combat and other probabilistic game events is included.

2.2 The Game Map shows the militarily significant terrain found in the European portion of the Soviet Union in 1941 when viewed at these time and space scales. A hexagonal ("hex") grid is printed over the map to regulate the placement and movement of units across it, much like in Chess and Checkers. A unit is considered to be in only one hex at any one time.

Each hex contains natural and/or manmade terrain and/or water features that can affect the movement of units and combat between units. The various terrains and water features on the map have had their exact real-world configurations altered slightly in order to make them coincide with the hex-grid, but the

relationships among the terrains and water bodies from hex to hex are accurate to the degree necessary to present players with the same space/time dilemmas faced by their historic counterparts in the real campaign.

Also note every hex on the map has a unique four-digit identification number printed within it. They're provided to help find exact locations more quickly and to allow for the recording of unit positions if a match has to be taken down before it can be completed. For example, the city of Rostov is in hex 4344; the large town of Grodno is in hex 1715.

2.3 Seating

The German player should sit along the map's west edge, with the Soviet player opposite him on the east.

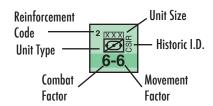
2.4 Counters

There are 700 unit-counters in the game, most of which represent combat formations. Others are provided as informational markers and memory aids. After reading through these rules at least once, carefully punch out the counters. Trimming off the "dog ears" from their corners with a fingernail clipper will facilitate easier handling and stacking during play and enhances their appearance.

Unit Counters: There are two infantry divisions missing from the starting, main front, German order of battle. They are the 168th and the 297th. Both are 3-5s on their fronts and 2-4s on their reverse sides. Players may remedy this in one of three ways. First, they may simply make up their own new counters from scratch. Second, they may pick two German infantry units of the same strength, and which don't otherwise appear until late in the game, and substitute them into play in place of the two missing units. Make note of the substitutions, then, late in the game, when the substituted units are still to appear, pick them from the dead pile or substitute two other units taken from that source. Third, you can go to the Decision Games website <www.decisiongames. com> and find this game's eRules file posted there. Next to it is another file that contains the artwork for the two missing units. Download that file and print off a copy; then use that artwork, by pasting it onto two other counters, such as two of the control markers included in the counter-mix, to create the needed divisions.

2.5 Sample Combat Unit

Each combat unit-counter displays several pieces of information: nationality (and therefore the "side" each unit is on), specific historic identification, unit type and size, combat and step strengths, movement allowance, and reinforcement or other special status.



2.6 Nationality

A unit's nationality, and sometimes it's "mobility category" (see 2.9 below), is shown by its color scheme.

German Side

German mechanized units: white on black/gray

German non-mechanized units: black on gray-green/light-green

Hungarian unit: black on yellow/gold

Italian unit: black on leaf-green/lightgreen

Romanian units: black on blue/sky-blue Soviet Side

Starting units: black on tan/orange **Fortified zones**: black on orange with hexagon symbol

Reinforcement units: white on tan/orange

2.7 Historical Identification

All units are given their specific identification by numbers or abbreviations of their historic designations or names, printed to the right of their unit-type boxes. Those abbreviations are as follows:

ArKo-German acronym for "Artillery Command"

BC-Batskelevich Cavalry Group

Cv- Cavalry

Cm—Communist

Crm-Crimean

CSIR-Italian acronym for their expeditionary force in Russia.

DC-Dovator's Cavalry Group

DBC-DonBass Cavalry Group

G-Guards (elite Soviet units-see Design Note below)

g-militia ("guards" honorific-see Design Note below)

HF-Hungarian Fast Corps

I-Italian

ICA-Independent Coastal Army

J-Jaeger (German light infantry)

K-Kiev

KC-Kuliev Cavalry Group

Krs-Krasnodar

L-Leningrad

M-Militia

MC -Mishulin's Cavalry Group

Mo-Moscow

Mtn-Mountain

N-NKVD (Communist Party security forces)

Nvl-Naval

Od-Odessa

R-Romanian/Romania

SB-Spanish "Blue" Division

SS-Schutzstaffel (elite Nazi Party units)

SSL-SS Leibstandarte (Life Guards)

SSP-SS Police

SSR-SS Reich (Empire)

SSV-SS Viking

Stl-Stalino

T-Totenkopf (Death's Head)

Vro-Voronezh

Design Note. Several Soviet militia divisions were termed "Guards" units. Though designated that way on their unit-counters in this game, understand those militia units in no way share the characteristics of the proper "Guards" units described in rule 8.13. Militia guards units are in no way to be treated as 'real' Guards. To make that difference more readily distinguishable, militia guards carry a lower-case "g" rather than the upper-case "G" of the regular army Guards units.

2.8 Unit Sizes

Units' historic organizational sizes are shown by the following symbols: **XXXX**—army; **XXX**—corps; **XX**—division. A bracket atop a size symbol means that unit was *ad hoc*, and therefore was not necessarily listed in its army's records as being of that size, but was a formation approximating that size.

2.9 Unit Types

All ground units in the game belong to two basic movement categories: mechanized ("Mech") or non-mechanized ("Non-Mech"). Mechanized units are those whose primary means of moving across the battlefield is by wheeled and/or tracked vehicles. Non-mechanized units are those whose primary means of locomotion is provided by legs, human and animal. This distinction is important for movement and combat considerations. In the list of unit types below, if the explanation for a symbol contains a phrase with a slash (/) in it, the term in front of the slash is used to describe German-side units of that type, while the term to the right of the slash is used to describe Soviet units of that type.

For all purposes, a unit is considered to be a "mobile unit" if its printed movement factor is greater than zero, and that's true no matter which of the two movement categories described above it belongs. A unit with a printed movement factor of zero ("0") is said to be a "static" unit. The only static units in the game are Soviet fortified zones (see 11.24) and the Oranienbaum naval infantry unit (see 9.3).

Design Note. Air landing infantry have no special air transport or air mobility capabilities in this game. Treat them like regular infantry.

2.10 Combat Factors

Combat factors are the measures of a unit's ability to conduct offensive and defensive combat operations. Their uses are explained in sections 9.0 and 11.0. If a unit has two numbers printed across its

Mechanized Unit Types Panzer/Tank Motorized Infantry/Motorized Rifle **Combined Arms** Panzer Grenadier/Mechanized **Motorized Security Forces** Non-Mechanized Unit Types Infantry/Rifle Air Landing Infantry L Light Infantry Militia Infantry Mountain Infantry/Mountain Rifle Naval Infantry Paratroops/Airborne Static Infantry Cavalry Siege Artillery

bottom edge, the first number is its combined combat factor, while the second is its movement factor (see 2.11 below). On those units, that same combat factor number is used for both offensive and defensive combat. If a unit has three numbers printed across its bottom edge, the first number is its attack factor; the second is its defense factor, and the third is its movement factor.

2.11 Movement Factor

This number is a measure of a unit's ability to move across the hex grid printed on the map. Units pay varied movement costs to enter different hexes depending on the terrain in each hex, any water along the hex sides around each hex, and the moving unit's type.

2.12 Step Strength

All ground units in the game have one or two "strength steps," or simply "steps." That's an arbitrary term used to express the ability of a unit to absorb a certain amount of combat losses before ceasing to be an effective formation (a measure of its "robustness" in current US Army jargon). Those units with combat factors on only one side of their counter are "one-step" units; those with combat factors on both sides of their counter are "two-step" units.

If a two-step unit suffers a step loss, it's flipped over so its "reduced" side (the one with the lower combat factors) shows. If a one-step unit, or a two-stepper that's already been reduced, suffers a step loss, it's removed from the map ("eliminated") and placed into the "dead pile." When units of these sizes are "eliminated" in play it doesn't mean every individual within them has been killed. It means enough casualties and equipment losses have been suffered to render them useless for further operations. For more details, see section 11.0.

All two-step units that start play set up on the map do so at their full twostep strength. All two-step units that enter the map as reinforcements after play has begun also do so at their full two-step strength.

2.13 Other Counters

The uses of the following counters (shown at right) are explained at appropriate points throughout the rest of the rules.

VP x10

German Victory Point Markers (see section 4.0)



Game Turn indicator (see section 5.0)



German VIII Flieger-Korps Ground Support marker (see 11.25)



Weather Indicators (see section 10.0)



German Non-Mechanized Replacements Markers (see 8.6)



German Mechanized Refit Markers (see 8.11)



Paulus Pause Markers (see 7.5)



German Supply Concentration Marker (see 7.6)





Hex Control Markers (see 3.6)

3.0 SET UP & HEX CONTROL

3.1 Players should first decide which side each will control. After that they should take their own side's units and sort them onto and around the map according to the instructions below.

3.2 Set Up

After all the units of both sides are deployed as described below, place both sides' reinforcement units in the appropriate boxes on the Turn Record & Reinforcement Track (TRRT, 12.10). Place the German victory point markers at zero (0) points on the German Victory Point Track (12.1).

3.3 Reinforcement & Starting Units

Units of the German side that enter play after the game has begun, rather than starting play already set up on the map, are called "reinforcements." Reinforcements of the German side can be distinguished from that side's starting units by the fact they (the reinforcements) have only a one-digit or two-digit number printed in their upper-left corners, which

correspond to their earliest possible game turns of entry into play. A few German units contain only asterisks (*) in their upper-left corners. They are special reinforcements; see 8.3 for details on their entry into play. Simply put them off to the side of the map, within easy reach, when first setting up.

If a unit of the German side has an "R" in its upper-left corner, that means it must start the game set up in Romania. German units with nothing in their upper-left corners start the game set up in Greater Germany or temporarily held off the map in "OKH Reserve" area (see 3.5 below for details).

3.4 Soviet Set Up

Soviet units that start play on the map are distinguished from that side's reinforcement units by the fact the latter are printed in a white-on-red color scheme, while the former are printed black-on-red. Entry and set up data for all Soviet one-step units are printed on their reverse sides; see 8.5 for details. Of all the Soviet units in the game, only the ICA and Guards units have two steps. For details on those units see 8.9 and 8.13.

All one-step Soviet reinforcements, the ICA and the two-step Guards reinforcements, should be sorted into the appropriate boxes on the Turn Record & Reinforcement Track at the start of play. The two-step ICA and Guards units have a game turn number printed in their upper-left corners; all other Soviet reinforcement units have their turn of entry data printed on their reverse sides. For instance, if a Soviet unit has a "2" printed in its upper-left corner or reverse side, that means it starts the game in the "Game Turn 2–Jul I" box of the Turn Record & Reinforcement Track.

All starting Soviet units are one-step units, and all set up data for each one of them is therefore found on their reverse sides. If a Soviet starting unit has a four-digit number printed on its reverse, that means it starts play set up in the hex corresponding to that coordinate. If more than one four-digit number is printed on the reverse side of a starting Soviet unit, that player may choose in which of those hexes each such unit will start.

Most starting Soviet units belong to one or another of the armies that have

deployment areas shown on the map. For example, Soviet 6th Army's deployment area encompasses the following seven hexes: 1025, 1125, 1225, 1226, 1326, 1427 and 1428. Thus Soviet units marked simply "6A" (short for "6th Army") on their reverse sides may be set up by that player in any hexes within that area. Normal stacking limitations apply, but the Soviet player is under no special strictures in setting up such units other than the one described above in this paragraph. Note that no two Soviet armies have overlapping deployment areas, and the hexes actually containing deployment-area boundary lines belong to their respective armies-and therefore may have units set up in them.

The large group of Soviet rifle divisions with "R.P." (for "Replacement Pool") printed on their reverse sides should be sorted together into one pile and then temporarily set aside. See 8.10 for details.

Soviet fortified zone (FZ) units should be the first units set up by the Soviet player. That may be accomplished in two ways, players choosing whichever method is easier and faster for them. That is, all the FZ have their set up hex number printed on their reverse sides, and may therefore be set up according to those data. At the same time, the staring locations of all FZ are also shown on the map itself; so the Soviet player may choose to set up the FZ by simply placing any one such unit in each marked hex.

3.5 German Set Up

Once both players have sorted their reinforcement units onto the Turn Record & Reinforcement Track (TRRT), and the Soviet player has completed his set up of all his starting units, the German player should complete the set up of his side's starting units. All Romanian starting units must begin play set up within that country along with all German units with an "R" in their upper-left corners. All other starting German units begin set up anywhere inside Greater Germany. They may be set up directly adjacent to Soviet units located just across the border in the USSR. Normal stacking limits must be observed.

Because of the relatively large number of units starting there, Greater Germany may be too crowded to facilitate their easy moving and handling. If the German player judges that to be the case, he should simply set aside whatever number of Greater Germany starting units he desires within easy reach off to the side of the map. (Only Greater Germany starting units may be set aside, not Romanian or "R" German starting units.) Such units are said to be in the "OKH Reserve." (OKH is the German-language acronym for their army high command.) OKH Reserve units may be entered into play by the German player-all, some or one at a time-during any of his Movement Phases of Game Turns 1 and 2, by simply moving them onto the edge of the map within Greater Germany, paying all regular terrain costs from the first hex entered. No units may be moved back into the reserve once they've come out of it. All OKH Reserve units must be moved onto the map by the end of the German Movement Phase of Game Turn 2; any units still off the map at that time are eliminated.

3.6 Hex Control

In this game the idea of "hex control"-which side "owns" which hexes at any given instant-is important for victory point hexes (see section 4.0), cities (see 11.22), and intact fortified line hexes (see 11.23). At the start of play the German player controls all hexes generally to the west of the border, while the Soviet player controls all hexes generally to the east of the border. The control status of a hex switches from one side to the other whenever a ground unit from the other side enters it. Control switching is immediate and may occur and reoccur in the same hexes any number of times during play.

A number of Hex Control Markers are included in the counter mix (see 2.13). Use them to keep track of the control status of important hexes in areas of the board where the positioning of both sides' combat-units doesn't work to do that clearly.

4.0 HOW TO WIN

4.1 The German player is generally on the offensive, striving to win the game by driving east as fast as possible into the Soviet controlled portion of the map, there to seize victory point (VP) hexes. If he manages to do that at a tempo significantly faster than occurred historically, or by early December has managed to go

significantly farther than occurred historically, he will be judged the winner of the game. The Soviet player wins simply by preventing his opponent from winning. Only the German player gains or loses VP; the Soviet player doesn't keep track of any VP total of his own. No drawn games are possible.

4.2 VP Hexes

Each Soviet small town hex is worth one VP; each Soviet large town hex is worth two VP, and each Soviet city hex is worth four VP. For example, then, each time the German player gains control of a Soviet small town hex, his VP total is increased by one. Control of the same VP hex can be traded back and forth between the two sides any number of times during play. Each time a VP hex's control status switches, increase or decrease the German VP total by the appropriate number of points. Note the supply status of VP hexes is irrelevant when considering their VP status.

Also note the German player must deduct one VP from his total for each hex inside Greater Germany (but not Romania) that's controlled by the Soviet player. Those VP may, of course, be regained by the German player when/if he retakes control of those hexes, reckoned on a hex by hex basis. Also see paragraph two in rule 4.3 below.

At the start of Game Turn 4 and each game turn after that, both players should scan the map to find any Soviet FZ still in play on it. Exception: when making these checks, always ignore the FZ in hex 2141 (Odessa). At each of those times, then, the German player is debited one victory point for each such counter still on the map (other than the one that still might possibly be found in Odessa). Those debits are the penalty the German must pay for not forcing the pace of advance or allowing such centers of resistance to go on existing behind his lines.

4.3 Starting VP

At the start of the game the German player has zero (0) VP. Place the VP counters provided in the counter mix on the Victory Point Track (12.1) to record that fact and then to maintain a constant record of German VP. Record any changes to the German VP total as soon as they occur throughout every phase, player-

turn, and game-turn.

Note the German player doesn't score any VP for controlling the large town of Memel (1507) or the city of Konigsberg (1209) at the start of play. Those locales only come into VP consideration if the Soviet player takes control of one or both of them. If that occurs, deduct the appropriate amount of VP from the German total, and add them back again if the German players recaptures one or both places. Note the German isn't debited a double amount for Memel and Konigsberg. That is, if he loses control of those hexes, he must deduct two or four VP, respectively, from his total. He doesn't, however, have to also deduct another single point for having lost control of those hexes as described above in 4.2. In effect, for VP purposes, it's as if each hex inside Greater Germany has a small town in it. If the German VP total is driven to a level less than zero, flip the VP counters over so their negative sides show upward, then revert to positive VP record keeping when/if the number moves back into positive territory.

4.4 German Sudden Death Victory Via Moscow

If the German player gains control of Moscow (4618) prior to the first occurrence of any kind of non-dry weather (see section 10.0), he immediately rolls a die and consults the Moscow Dry Weather Capture Table (see 12.9).

Note that all three potential modifiers to that die roll are cumulative. Also note the German player may not delay consulting the Moscow capture table. No more than one die roll on it may be made per game, and it must be made at the time Moscow is first captured by the Germans. Finally, note the supply status of the various city hexes involved here is not relevant to any of this. If the result is the "USSR Collapses," play stops and the German player is declared to have won a major victory (see 4.6, paragraph three).

If the modified die roll result is "USSR Fights On," no Soviet collapse occurs. In that case the German player should simply add the normal four points for gaining control of a Soviet city to his VP total. Play then continues until the next scheduled victory check, at which time the procedures given below in 4.5 are followed.

If the German player gains control of Moscow after the occurrence of the first non-dry weather (see section 10.0), don't consult table 12.9; there is no longer any chance for an automatic Soviet collapse. In such situations the German player should simply add the normal four city seizure VP to his total. Play continues until the next scheduled victory check, at which time the procedures given below in 4.5 are followed.

4.5 Checks for VP Victory

Certain game turns on the Turn Record & Reinforcement Track (12.10) contain the note: "Make Victory Check." At the appropriate time in all such game turns (see section 5.0), check the current German VP total against the amount shown on the German Victory Table (12.3) as being necessary for that player to achieve a win at that time. For example, if the German player's VP total were found to be 52 or more during the Victory Check Phase of Game Turn 5 (Jul IV), play would stop and he would be declared the winner. If his VP total were found to be 51 or less at that time, play would continue until the Victory Check Phase of Game Turn 9 (Aug IV), when another comparison would be made.

If the German player fails to achieve a sudden death victory via Moscow, while also failing each of the victory checks called for on the TRRT, the Soviet player is declared to have won the game at the end of Game Turn 22 (Dec I). Of course, either player may concede defeat at any time during play if he becomes convinced he no longer stands any chance of winning.

4.6 Levels of Victory

For purposes of comparing their martial achievements, players may refer to the following gradation of victory levels for both sides. If the final German VP tally is between 119 and 124, inclusive, the German player has done somewhat better in this campaign than his historic counterpart, thereby winning a "minor" victory. That means the Soviet Union survives and goes on to take part in the general Allied counter-offensive into the heart of the Reich. World War II in Europe will most likely still end with Germany's complete defeat, but sometime in midsummer 1945 rather than in mid-spring.

If the final German VP tally is between 125 and 129, inclusive, the German player has done well enough to win a mid-level, or "substantive," victory. The Soviet Union survives as an active Allied participant in the war, but the German player has set back the clock in terms of when to expect the final Nazi defeat. Assuming the rest of the war generally follows the historic course of events on its other fronts, Nazi Germany will likely survive into the late summer of 1945, at which time the Allies will likely bring the war to a conclusion by atom-bombing one or more cities within the Reich.

If the final German VP total is 130 or higher, the German player has won the highest kind of victory, a "major victory." That means he's done well enough that the Soviet Union will in all likelihood cease to exist as an independent political entity, at least west of the Urals, sometime during 1942. The historic progression of events has been distorted to the point Nazi Germany may survive World War II. If the German player wins the game on points at the time of any of the victory checks made prior to Game Turn 18, he is also considered to have won this kind of victory, no matter what his actual point total.

If the final German VP tally is between 118 and 98, inclusive, the Soviet player has won a "minor" victory that, more or less, broadly parallels the outcome of the historic campaign. That means the overall timeline of the war remains generally unchanged, and the Soviet Union will go on to eventually collapse from its own internal contradictions in the early 1990s.

If the final German VP tally is between 97 and 87, inclusive, the Soviet player has won a mid-level, or "substantive" victory. That means, by outdoing his historic counterpart in terms of the success of his defense of the western USSR, the complete defeat of Nazi Germany will be brought on three or four months sooner than occurred historically. It's likely the portion of Germany that eventually becomes the "German Democratic Republic" will be larger than it was historically. That may in turn provide more temptation for Stalin or one of his successors to strike for the Rhine or beyond in later years, thereby starting World War III and bringing on global devastation, perhaps

even all-out nuclear war, depending on the exact start date of the new conflict.

If the final German VP tally is 86 or less, the Soviet player has won the highest kind of victory, a "major" victory. The pace of Red Army entry into central Europe, and possibly also western Europe, has been accelerated enough to vastly alter World War II's strategic outcome in favor of the men in the Kremlin. A new and highly destructive global war with the Western Allies is likely to begin immediately after World War II is completed.

5.0 THE TURN SEQUENCE

5.1 Each game turn of LWE is divided into two player turns of sequenced steps called "phases." Every action taken by a player must be carried out in the appropriate phase as described below. Once a player has finished a particular phase, he may not go back to perform some forgotten action or redo a poorly executed one unless his opponent graciously permits it.

5.2 The Turn Sequence is given below in outline. Note the German Player Turn is the first player turn during each game turn.

I. Weather Determination Phase

II. German Player Turn

- A. German Mechanized Refit Start Phase
- B. German New Unit Entry Phase
- C. German Move & MA Phase or Prepared Assault Phase
- D. German Prepared Assault Phase or Move & MA Phase
- E. German Mechanized Refit Completion Phase

III. Soviet Player Turn

- A. Soviet Prepared Assault Phase
- B. Soviet New Unit Entry Phase
- C. Soviet Movement Phase
- D. Soviet Supply Check Phase (but see 5.6)

IV. Victory Check Phase

Design Note. Only the German player is able to launch mobile assaults (MA)—a form of combat conducted during his movement phase; see 9.22ff.

5.3 Move or Fight; Fight or Move

At the start of every one of his own player turns, the German player must de-

clare in what order he will carry out his movement phase and his prepared assault (PA) phase that turn. That is, he may choose to have his units move and mobile assault (MA) first, and make prepared assaults second, or PA first and move/MA second. That decision is always up to the German player.

The Soviet phase sequence is always prepared assault followed by movement. No matter what phase order the German player chooses, all his units are allowed to participate to the limit of their normal capabilities in both phases. Moving and (possibly) mobile assaulting, or making a prepared assault, doesn't preclude an otherwise eligible unit performing both tasks each turn; only the order of execution is variable.

The German player only makes one phase order declaration per player turn, at the start of each of his own player turns, which is then applied to all his units throughout that player turn. He may not choose one phase order for some of his units and the other phase order for others

Whenever the German player chooses the prepared assault followed by movement and mobile assault phase sequence, all his prepared assaults that turn gain a one column rightward (1R) odds shift in addition to any other applicable odds shifters.

Design Note. The Victory Check and Weather Determination Phases are not carried out every game turn. See sections 4.0 and 10.0, respectively, for details on them.

5.4 Turn 1 & Other Early Game Special Rules

During Game Turn 1, units of the German side in Romania may move only within Romania, and they may not PA or MA in any locations. Starting with Game Turn 2, units of the German side in Romania may move and attack normally on both sides of the border. Soviet units are similarly prohibited from moving or attacking into Romania in any way during Game Turn 1.

More, during all of Game Turns 1, 2 and 3 the German player may ignore all river hex sides for all movement and offensive combat purposes. That is, during those three turns he may move and attack (MA and PA) across river hex sides as if they didn't exist. Note, though, Soviet

units don't get that movement benefit, and they must also take into account river hex sides' halving combat effect (see 11.17) into account when attacking across them.

During the first game turn, German (not the Soviets or Axis satellites) movement factors are enhanced. That is, during Game Turn 1, the movement factor of all German mechanized units, both full strength and reduced is 14, while that of all German infantry units, both full strength and reduced, is 7. From the start of Game Turn 2, German movement factors are based on what's printed on their counters. Also, during Game Turns 1 through 3, inclusive, the German player may ignore the nearest-use restrictions placed on Rollbahn supply (see 7.3).

5.5 Soviet Units & Borders. In general, Soviet units are always free, within normal movement and combat rules, to move and attack on both sides of the border, into both Greater Germany and Romania, during all game turns (but see paragraph one in rule 5.4 above).

5.6 Peoples' Commissariat of Defense Directive No. 3 (DD3)

The general rule concerning combat in both players' prepared assault phases (see section 11.0) is that attacking is voluntary. That is, adjacency to enemy units doesn't usually bring with it the necessity to attack those units. At the start of play, however, and extending to at least to the start of Game Turn 8 (Aug III), "Peoples" Commissariat of Defense Directive No. 3" (DD3) is in effect on the Soviet side. The original of that document was issued under the signatures of Stalin and Timoshenko on the day of the invasion, and called for the immediate launching of a general and sustained Red Army counteroffensive against the Germans all along the front. That means launching prepared assaults isn't voluntary for the Soviet player, at least not at first.

Starting with Game Turn 1, every Soviet unit, other than Fortified Zones and units stacked with them, as well as all units in fortified lines or cities, which begin the Soviet Prepared Assault Phase next to one or more enemy occupied hexes, must participate in a prepared assault against one of those hexes (Soviet player's choice) during that phase. (Further exemption: Soviet units are never required to attack across river hexsides.)

This requirement remains in place from the start of play until DD3 is rescinded. At the same time, while DD3 is in effect, Soviet units everywhere on the map are, in effect, in supply. For more details on all this see 7.12, 8.1, 8.5, 8.7,8.9,8.10 and 8.13.

6.0 STACKING

6.1 "Stacking" is the word used to describe the piling of more than one unit of the same side into a single hex at the same time. The general rule is each side may stack up to six divisions per hex. Note that step strength has no bearing on defining a "division" for stacking purposes. Each division-sized unit (XX-see 2.8), as well as each Soviet fortified zone unit, is considered one division for stacking purposes. Corps (XXX) and army (XXXX) sized units are each equal to three divisions for stacking purposes. Those stacking values remain constant for all units no matter if their size-symbol is bracketed or not bracketed and no matter their step strength.

6.2 Stacking & Movement

Stacking rules are generally in effect at all times throughout the game turn (exception, see 8.1 paragraph three). Players should therefore pay particular attention to the order they move their units in crowded areas of the map; otherwise, moves made carelessly early in a phase may block your ability to move units later in a phase. There are no limits on the number of units that may enter and pass through a given hex over the course of a phase, player turn or game turn, as long as the stacking limits are met on a hexby-hex, instant-by-instant basis.

If any hex containing stacked units of either side is found to be "over stacked" (exceed the stacking limits given above) at the start or end of any movement or prepared assault phase, or at the end of any retreat or advance after combat, the opposing player is immediately allowed to remove to the dead pile his choice of the minimum number of involved enemy units necessary to bring the violating stack(s) into limits.

The idea in the paragraph above is that stacking violations should be noted and stopped before they're allowed to actually come into effect, during each phase as the game progresses. If, however, some violation is not seen until a phase ends, or

is discovered when a phase is just beginning, the transgressing player then suffers the penalty of unit elimination rather than just chastisement.

6.3 German & Axis-Satellite Stacking Restrictions

German and Axis-satellite units may generally not stack with any units other than those of their own specific nationality. That is, in general, Hungarian units may only stack with other Hungarian units; Italian units may only stack with other Italian units; Romanian units may only stack with other Romanian units, and German units may only stack with other German units. Thus, with just two exceptions, there may never be units of more than one nationality of the German side in any hex at any one time.

The first exception is units of the German side that are out of supply (see section 7.0) may stack together up to the general stacking limit without regard to nationality. That's not six divisions per nationality per hex, but six divisions, total, per hex.

The second exception is Axis satellite mechanized-class units may always stack with German units without regard to nationality; however, that still doesn't allow Axis satellite mechanized-class units to stack with each other or to launch MA. For instance, the Italian *CSIR* unit could stack with a force of German mechanized units, but it couldn't stack with the Hungarian *Fast Corps* even if there were also German mechanized units in the same hex. And, again, the overall six division limit must be observed.

If a multi-national stack of out of supply German-side units suddenly comes back into supply, that player is given until the end of his current turn's movement phase to sort out his stack by nationality, or until the end of his next movement phase if the supply status change occurs at a time other than during one of his movement phases. Also see 11.37 for restrictions on multi-national German-side prepared assaults.

6.4 Soviet Fortified Zone (FZ) Units

Whenever an FZ unit is located in a stack, that FZ unit should always be kept as the top unit in that stack. Also note there will never be more than one FZ unit per stack.

6.5 Free Stacking Units

None of the units and counters pictured in rule 2.13 have any stacking value of their own. They may be added to any stack in accordance with the particular rules given for their uses.

7.0 SUPPLY

7.1 Units of both sides need supply to operate at their full, printed-on-the-counter, movement and combat potentials. There are no counters representing the actual materiel consumed; instead, that process is represented by "supply line tracing" to "supply source hexes."

7.2 German Supply States

There are three supply states for units of the German side, and each ground unit of that side always exists in one of them:

1) regular supply; 2) attenuated supply; and 3) out of supply, which is also referred to as being "OOS" and "unsupplied."

7.3 German Regular Supply

A unit of the German side is in regular supply if it can trace a supply path of contiguous hexes no longer than 12 hexes, unblocked by enemy units and/or intact fortified line hexes and/or enemy controlled city hexes, from its location to an appropriate supply source hex. German supply source hexes are all the western map edge hexes inside Greater Germany and Romania. Units of the German side with regular supply have their full, printed movement and combat factors available for use. Only German mechanized units with regular supply may make mobile assaults.

German and Axis satellite units farther away than 12 hexes from their board edge supply source hexes may extend the length of their supply line by utilizing the Rollbahnen printed on the map (see 9.19). That is, units in such locations may trace a supply path of up to 12 contiguous and unblocked hexes to a Rollbahn hex, and then from there trace along the path of that highway, over any number of such hexes, back to a map edge supply source hex. Once a supply line is traced onto a Rollbahn, it may not leave that Rollbahn again for any reason.

After the completion of Game Turn 3, for the rest of the game, German and Axis units using Rollbahnen to extend their supply lines must trace their sup-

ply lines to the nearest (in hexes) friendly controlled Rollbahn hex, even if that Rollbahnen isn't functioning because of Soviet controlled hexes elsewhere along it. If more than one Rollbahn hex is an equal distance away, the Axis player may choose the one to trace to. Note this rule means exactly what it says. If the nearest friendly Rollbahn hex is four hexes away, but isn't operative as a supply line, and there's another Rollbahn five or six hexes away that would be operative, those units are still out of supply.

7.4 German Attenuated Supply (GAS)

Units of the German side that have a regular supply line but are located in hexes east of the GAS Line are said to be suffering "attenuated supply." Such units have their full, printed movement and combat factors available, and they also defend normally, but they must consult the German (& Axis Satellite) Attenuated Supply Table (GAST) [12.7] as a final step before resolving both MA and PA in which they are involved. The effect of the GAST is to either worsen such forces' attack odds or leave them unchanged. Note that several cumulative die roll modifiers are listed beneath the chart. In attacks in which some attackers are east of the GAS Line and others are west of it, make an attenuated supply die roll.

The die roll modifier of "+1" for "September, October, November" shown on the table isn't cumulative across those three months. That is, no matter which of those three months it happens to be when the German player is consulting that table, the die roll modifier due to that time factor is always only "+1," until December when it becomes "+2."

During all four August turns (Game Turns 6,7,8 and 9) all German-side attacks, both MA and PA, anywhere on the board must use the GAST to resolve combat. There is a minus-one die roll modifier on the GAST for attacks in which all involved attacking units are west of the GAS Line printed on the map. After Turn 9, the GAS Table is used only for attacks east of the GAS Line. The German player may use rules 7.5 and 7.6 in regard to escaping this new 7.4 August GAST requirement.

Design Note: Historically both the German logistics system and their army's equipment were showing the strain of their advance by early August 1941. Beyond the wear and tear on equipment, increasing fatigue, and lengthening supply lines, the unexpected ferocity of Soviet resistance, particularly the constant Soviet counterattacks carried out under DD3, however tactically disastrous for the Soviets, introduced an element of doubt among German commanders that gradually worked like sand thrown into their command machinery. That made August, arguably, the month the Germans lost the campaign. The following is meant to simulate both the physical and psychological effects that helped unhinge the German drive.

7.5 Von Paulus Pause

The German player can escape having to use table 12.7 by declaring a "pause" at the end of Game Turns 2, 3, 4 or 5. Once declared, a pause lasts for three game turns. For example, a pause declared at the end of Game Turn 2 would last through all of Game Turns 3, 4 and 5. During a pause, units of the German side continue to function normally except they can't attack in any way, MA or PA. Soviet operations are completely unaffected. After a pause, German operations resume with the added benefit that player may ignore the GAS Line for the rest of the game. The German player is not required to declare a pause, and may even abort one before it's completed (in which case no benefit is gained). Three "Paulus Pause" markers are provided in the counter mix for use on the Turn Record and Reinforcement Track.

Exception: During a von Paulus pause, units of the German side may attack a Soviet occupied hex if it contains a "fortified zone" unit. If other Soviet units are also in such hexes, they may also be attacked in that way.

Design Note. Gen. von Paulus (of later Stalingrad fame) determined, in a staff study completed shortly before the invasion began, if the Germans halted their offensive operations for 20 days sometime in July, in order to allow for the staging forward of their main supply centers, they'd then be able to resume campaigning with a vastly improved logistical situation.

7.6 German Supply Concentration

Another way the German player can escape table 12.7 and the effects of attenuated supply is to declare a "supply concentration." That means all available supply is being concentrated to support 18 units for offensive operations (presumably located east of the GAS Line). The German player may declare a supply concentration at the beginning of any of his player turns, and that declaration

may be rescinded at the start of any subsequent German player turn. Once supply concentration has been declared and then rescinded, however, it may not be declared again for the rest of the game.

When declared, the German player should immediately place all 18 Supply Concentration Markers atop the units he wants to receive the supply. The selected units are not automatically in supply; they must still trace a regular supply line in the normal way, but they are freed from all GAS Line considerations. The German player is not required to select all mechanized-class units to receive this kind of supply (though it's generally most efficient if he does so); but he is required to continue using the same units to receive the supply concentration if he decides to maintain it for more than one turn. That is, a supply concentration marker may only be redeployed to a new unit if the unit atop which it was originally placed is eliminated. Make such redeployments at the start of the next German player turn.

The effect on all unselected units of the German side is they may not attack in any way, nor may they move more than one hex per Movement Phase. Their defensive combat strength is normal.

7.7 When to Check German-Side Supply

Check the supply status of each unit/ stack of the German side at the start of its movement and again at the start of each individual prepared assault in which such units are involved on the offense.

Units of the German side found to be OOS at the start of their movement have their movement factor reduced to zero for that phase. Likewise, German mechanized units that don't have supply (attenuated is OK) at the start of their movement may not launch any mobile assaults that phase. Units of the German side found to be OOS at the start of any prepared assault in which they'd otherwise be participating on offense have their attack strength reduced to zero and may not attack.

Note the wording in the two paragraphs above allows for the possibility of opening supply lines to OOS German units during the course of a friendly Movement or Prepared Assault Phase, thereby freeing those re-supplied units to operate normally in rest of that phase.

Units of the German side that are OOS

always have their full, printed defense strength available. Units of the Germanside are never reduced in step-strength or eliminated simply for being OOS; those units may exist indefinitely in the OOS or any other supply state.

7.8 Soviet Supply States

From the start of play until the time the Soviet player rescinds DD3 (see 9.12) all Soviet units already on the map are in supply. During that period of play the Soviet player need only concern himself with supply line tracing when it comes to entering new units onto the map. (See below, 7.11, 8.1, 8.5, 8.7, 8.9, 8.10 and 8.13.) Once DD3 is rescinded, there are three supply states for Soviet units, and each ground unit of that side always exists in one of them: 1) regular supply; 2) coastal supply; and 3) out of supply.

7.9 Soviet Regular Supply After DD3

With DD3 rescinded, a Soviet unit is in regular supply if it can trace a supply path of contiguous hexes of potentially any length (but see 7.11 to 7.13), unblocked by enemy ground units or enemy controlled city hexes, from its location to an appropriate supply source hex. Soviet supply source hexes are all the hexes located along the eastern map edge (see 1.4), as well as those hexes on the southern map edge between 3752 and 4853, inclusive. Soviet units with regular supply have their full, printed movement and combat factors available for use.

7.10 Soviet Coastal Supply After DD3

Soviet units in coastal hexes of the Black Sea or Sea of Azov that contain a small or large town or a city automatically have supply while in those hexes. They are thereby considered to be in supply for all purposes. Note that for coastal supply no supply line tracing is actually involved as is done for regular supply; a unit's presence in an appropriate coastal supply hex is sufficient to grant it this kind of supply.

7.11 Soviet Oranienbaum Coastal Supply After DD3

The Oranienbaum hex (3701) enjoys a special kind of Soviet supply when controlled by that side. That is, as long as Leningrad is Soviet controlled and supplied, all Soviet units in Oranienbaum are also considered to have supply.

7.12 Soviet Effects of Being OOS

From the start of play until such time as to DD3 is rescinded (see 7.12 and below), the Soviet player only need concern himself with supply line tracing when entering new units into play (see 8.1, 8.5, 8.7, 8.9. 8.10 and 8.13). That is, during that period of play Soviet units on the map are, in effect, always in supply, and that player need only check to see if the entry hexes of his reinforcements have supply lines in order to qualify those hexes to receive newly arriving units. During that same period of play, however, all Soviet units that begin their side's combat phase in hexes adjacent to one or more enemy units must attack one of those enemy occupied hexes. During the period of play in which DD3 is in effect, then, the Soviet player simply skips his Supply Check Phase (III.D. in the sequence outline; see 5.2).

At the start of Game Turn 8, or at the start of any game turn after that, the Soviet player may choose to declare DD3 is no longer in effect. He's never required to make that declaration, but once the declaration is made it may not be undone for the remainder of the game. Such a declaration may only be made at the very start of a new game turn, not at the start of the Soviet Player Turn within a game turn. Once DD3 is rescinded, the Soviet Supply Check Phase is added to the turn sequence, as shown in 5.2, every game turn.

With DD3 rescinded, the Soviet mandatory attack requirement is done away with for the duration of play. Along with that change, however, Soviet units found to be OOS during any Soviet Supply Check Phase are immediately and fully eliminated and removed to the dead pile at that time, no matter if one-step or twostep units. During all other portions of the game turn, Soviet OOS units still operate with all their movement and combat capabilities fully intact and available for normal use no matter their seeming supply state. Soviet supply lines must still be traced for purposes of new unit entry (see 8.1, 8.5, 8.7, 8.9, 8.10 and 8.13).

If the Soviet player hasn't rescinded DD3 by the time the first non-dry weather is rolled (see section 10.0), DD3 is automatically rescinded at that time.

7.13 Tracing Supply Lines

An regular supply line consists of an uninterrupted chain of contiguous hexes traced from the unit or stack in question back to a valid supply source. Such paths may enter and cross all kinds of playable terrain. In addition, Soviet units may trace their supply lines across all-lake hexes in all kinds of weather. German-side units may only trace their supply lines across such hexes during S weather (see section 10.0).

Supply lines may not enter hexes occupied by enemy ground units, nor may they cross all-sea hexes except as described below in 7.14. Units of the German side may not trace their supply lines into or through intact Soviet fortified line hexes (see 11.23), or into or through Soviet-controlled city hexes, even if those city and intact fortified line hexes are empty of actual Soviet units. Similarly, Soviet units may not trace their supply lines into or through enemy controlled city hexes, even if those hexes are empty of actual enemy units.

In the case of German-side units making use of a Rollbahn in their supply line trace, the restrictions given above apply equally to both the Rollbahn and non-Rollbahn portions of that trace.

7.14 The Sivash & Kerch Straits

The Sivash consists of the two allsea hex sides shared by hexes 2844/2845 and 2944/2945. The Kerch Straits consist of the two allsea hex sides shared by 3448/3449 and 3348/3449. Those are the only allsea hex sides on the map across which supply lines may be traced, and that holds true for all units of both sides. For more details on these hex sides see 9.9, 9.16, 10.7 and 11.19.

7.15 Gaining & Losing Supply Source Hexes

For both sides, a supply source hex loses its supply providing capacity while it's enemy controlled. That capacity is regained, though, the instant the supply source hex is brought back under friendly control. That loss/gain process may potentially go on any number of times for each such hex throughout the game.

7.16 Deliberate OOS

It's not permitted for the German player to move any of his side's units into, or enter them into play via, hexes wherein they are OOS. The Soviet player may always move his units into hexes in which they will be OOS; however, he may not enter units into play into hexes that are OOS.

7.17 Appropriate Supply Sources

The supply source hexes in the game only work for the units of the proper side as described in the rules above. If, for example, the Germans captured a Soviet supply source hex, it wouldn't become a supply source for them.

8.0 REINFORCEMENTS, REPLACEMENTS, REFITS, WITHDRAWALS & CONVER-SIONS

8.1 Reinforcements are new units that enter the game after play has begun. German-side reinforcements are identified by having a game turn number printed in their upper-left corners. That number corresponds to the earliest possible game turn during which that reinforcement may enter play.

The relatively few two-step Soviet reinforcement units (the Guards and the ICA) are identified in the same way as German-side reinforcements; however, the large majority of Soviet reinforcement units are one-steppers, and they have their game turn and entry data printed on their reverse sides. Those one-step reinforcements should be sorted onto (or near) the TRRT with their reverse sides showing up (see 3.3.).

Reinforcement units of both sides always enter play, during their own side's New Unit Entry Phases, in supply with their full movement and combat capabilities immediately available. Normal stacking restrictions may be temporarily ignored by the Soviet player when entering his side's reinforcement units in their various mandated hexes; however, those strictures must be met by the end of the immediately following Soviet movement phase, and they may only be violated in the first place to the minimum extent necessary to allow newly arriving units to enter in their mandated hexes.

8.2 German-Side Reinforcements

The German player may not delay his side's reinforcement arrivals. Any reinforcement units(s) not entered during its indicated turn of arrival is/are permanently forfeit.

German reinforcements, including the Spanish Blue Division, may enter the map via any board edge hexes in Greater Germany and/or Romania, decided by that player on a unit by unit and turn by turn basis. Alternatively, the German player may choose to enter his German reinforcements via any cities, large town or small town hexes located in any Rollbahn hexes the map, and that are friendly controlled and in regular supply at the moment of entry. Units that enter via Rollbahn towns, large towns or cities, may not move or attack that turn. It's suggested players rotate such units 90 degrees as a reminder. All Axis satellite reinforcement units must enter play only via map edge hexes in Romania. They may not enter play via hexes under Soviet control. In all cases, the hex of entry doesn't count against the movement factor of the entering units.

8.3 Asterisked German-Side Reinforcements

Several German units, and one Hungarian unit, are marked with asterisks in their upper-left corners. Those units actually start the game just off the map between hexes 1025 and 1030. The German player may enter one, some, or all of them, during the Movement Phase of any of his player turns that begin with no Soviet units in any of those six hexes. Those are the only hexes, and that is the only procedure, by which these asterisked German-side reinforcements may enter play. Further, these units must be entered during the first turn that it's possible, within normal stacking rules and the entry procedures described here, to bring them onto the map.

8.4 The German ArKo

The *ad hoc* German artillery command unit carries a double-asterisk (**) on its counter to signify its unique status as a special German reinforcement. The German player may bring it into play during any of his New Unit Entry Phases via any Soviet large or small town or city hex that's in regular supply. The ArKo counts as a division for stacking purposes. Once brought into play, the ArKo remains on board until it's eliminated in combat. For the combat effects of the ArKo see 11.26.

8.5 Soviet Reinforcements

The Soviet player may not delay, nor change the entry hexes for, his reinforcement units. Any reinforcement units not entered for any reason during the turns and in the places indicated on their counters or in the rules below are permanently eliminated from play. Further, to be used as a Soviet reinforcement entry point during any given game turn, a hex must have been under that player's control and in regular supply at the very start of his player turn.

All the one-step Soviet reinforcements in the game have their entry data printed on their reverse sides beneath their game turn of entry. If a single hex coordinate number is printed there, that unit may only enter via that specific hex. If more than one hex coordinate number is printed there, the Soviet player may choose from among them to enter each such unit. Note, however, Soviet units may only enter play via hexes in regular supply at the start of his player turn. (Leningrad is considered to be in regular supply even if the only line traceable to it is over Lake Ladoga.) Soviet reinforcement units that have the word "Any" printed beneath their game turn entry numbers may enter play via any friendly controlled small or large town or city hexes that meet the supply requirement described above.

The ICA may only enter via Odessa (2141) or Sevastopol (2548) during Game Turn 2 no matter what supply conditions otherwise prevail there. Guards units enter via "conversions" of non-Guards units; see below, 8.13.

8.6 German Non-Mechanized Replacements

At the start of the game the German player has 14 replacement steps he may use to replenish his reduced non-mechanized units still on the map. Each replacement step works to flip a reduced German non-mechanized division back to its full, two-step configuration. Any given division may receive any number of replacement replenishments throughout the game, provided only it's not OOS at the time. Note, though, no German non-mechanized division may be returned to play in any way once it's in the dead pile.

All replacement replenishments for a turn take place during the German New Unit Entry Phase. Within the strictures above, German non-mechanized divisions receiving replacement replenishment may move and fight normally, no matter what phase sequence is being used, that same turn. Once a replacement step has been committed to a unit, it may no longer be recalled or given, traded or loaned, to any other unit. Two counters are provided to keep track of the number of non-mechanized replacement steps remaining to that player on the track of that same name (12.2).

Within the strictures given above, there's no limit on the number of non-mechanized steps the German player may expend during any one of his turns. Once the allotment of 14 steps is gone, however, no more are available for the duration of the game.

8.7 Soviet Replacements

Thirteen cities and large towns have a star printed next to their name on the map, meaning they're "replacement centers." They are, in alphabetical order: Dnepro-Petrovsk (3339), Kharkhov (3835), Kiev (2529), Leningrad (3802), Minsk (2418), Moscow (4618), Odessa (2143), Orel (4026), Riga (2306), Rostov (4344), Smolensk (3418), Stalino (3941) and Voronezh (4632).

Starting with the Soviet player turn of Game Turn 2 (Jul I), that player may reclaim from his side's dead pile two rifle divisions (non-mechanized) or mountain rifle divisions or regular cavalry corps for every replacement center still under his control and in regular supply at that instant. The two units per replacement center may be taken in any mix of available and eligible units. Cavalry groups, Guards cavalry corps, paratroops, as well as any other types not listed above, are never eligible for replacement. Also note the Soviet replacement rate multiples are periodically increased.

Soviet replacements, though generated on a replacement-center by replacement-center basis, need not be entered onto the map that way. That is, Soviet replacement units may be entered onto the map via any in-supply large towns and/or cities on the map, decided on a turn by turn and unit by unit basis by that player. As with reinforcement entry, stacking restrictions may be ignored when entering replacements, as long as they're met by

the end of that player turn's Soviet Movement Phase. Soviet replacements may be entered via the same and/or different hexes than Soviet reinforcements during the same phase, as long as both those types of units' entry strictures are otherwise being met. Also see 8.9.

Soviet replacement steps may not be accumulated from turn to turn. Units reentering play as replacements should be placed, along with Soviet reinforcements, during the course of that player's New Unit Entry Phases. As with all newly entering units of both sides, Soviet replacements (re)enter play supplied and with all their normal movement and combat capabilities immediately available.

Note that the prohibition to use the replacement points only to reclaim eliminated cavalry corps or rifle divisions or mountain rifle divisions means just that. Replacement steps may not be used, for instance, to reclaim NKVD or militia divisions, nor any kind of Guards or other units. If there are not enough eligible units in the dead pile, the excess replacement steps are simply lost. And, again, normal stacking prohibitions may be ignored, when necessary, when placing replacements and/or any other new units entering play for the Soviet side. Stacking rules must be observed again, however, at the end of each Soviet Movement Phase; otherwise the German player is allowed to eliminated the excess units.

If a replacement center lost to enemy control is later retaken by the Soviet player, it begins generating replacement steps for the Red Army, at the then going rate, at the start of the New Unit Entry Phase of the Soviet Player Turn when it's again both friendly controlled and in regular supply. That loss/regain process may go on any number of times per replacement center per game. Similarly, within the strictures above, eligible Soviet units may go through the replacement process any number of times per game, no matter the circumstances of each of their eliminations.

8.8 Soviet Replacement Rate Increases

Starting with the Soviet Player Turn of Game Turn 4 (Jul III), the replacement rate per friendly controlled and supplied replacement center goes up to three steps per turn.

Starting with the Soviet player turn of Game Turn 6 (Aug I), that rate goes up to four steps per turn.

Starting with the Soviet player turn of Game Turn 10 (Sep I), that rate goes up to five steps per turn.

Starting with the Soviet player turn of Game Turn 14 (Oct I), that rate goes up to six steps per turn.

On the Soviet player turn of Game Turn 18 (Nov I), that rate goes up to seven steps per turn. And finally, on Game Turn 22, it goes up to eight steps per turn.

8.9 Replenishing the ICA

The Independent Coastal Army (ICA) is the only two-step Soviet unit in play prior to the arrival of the first Guards units (see below, 8.13). If the ICA is once fully eliminated, it may not be reclaimed from there during the course of the game. If, however, the ICA is found to be merely reduced at the start of a Soviet New Unit Entry Phase, that player may choose to replenish it to its full, two-step strength by expending five replacement steps. Those steps may come from any one or more functioning Soviet replacement centers in any combination that player desires. The Soviet player needn't worry about tracing any kind of communications line between the donating replacement centers and the ICA; he simply notes to the German player the donation is taking place and deducts five steps, overall, from the rest of his replacement activities that turn. The ICA may potentially be replenished any number of times per game; the only stricture is it must be located in a Black Sea or Sea of Azov coastal small town, large town or city hex at the time of each replenishment. The ICA my fight and/or move normally during turns of replenishment. See 9.17 for more on the ICA.

8.10 Soviet Replacement Pool (RP) Rifle Divisions

Note there are many Soviet rifle divisions with "RP" (abbreviation for "replacement pool") printed on their reverse sides. Those divisions formed parts of the rifle corps that make up a good part of the initial Red Army order of battle. Whenever a Soviet rifle corps is eliminated, that player should take the number of RP rifle divisions corresponding to the lost corps' combat factor and place them in the pile of eliminated rifle divisions eligible for

replacement. Such pooled RP units are then eligible for replacement as described above for other eligible Soviet units in 8.7.

Note that four of the RP units are mountain rifle divisions rather than just rifle divisions. To keep RP units' selections random, have the Soviet player place all of them in a large, open-mouthed opaque container, such as a coffee mug, and then draw the appropriate number blindly each time a rifle corps is eliminated. There is one exception to the above: when the 65th Rifle Corps, a unit with factors of 1-3, no RP divisions go into the replacement pool for it; it is simply eliminated and out of the game. (It was only a headquarters.)

8.11 German Mechanized-Class Refits

Reduced German panzer, panzer grenadier and motorized infantry divisions are eligible to attempt to replenish their step strength using the following "refit" process. All refit attempts are permanently stopped the first time any M or S weather is rolled (see section 10.0).

To be eligible to attempt a refit, an otherwise eligible unit must begin the German Mechanized Refit Start Phase in regular supply (not attenuated) in a hex that's not adjacent to any Soviet unit. The German player should, during that phase, place a "Refit" marker atop every eligible unit for which he wants to attempt that activity that turn. A unit with a refit marker atop it may not move or fight in any way during that German Player Turn.

During his Mechanized Refit Completion Phase, the German player rolls a die for each unit he earlier placed beneath a refit marker. When the result is a one through four, the division rolled for is considered to have successfully completed the refit process. In such cases immediately remove the refit marker and flip the unit so its full-strength side again shows upward. When the die roll result is a five or six, that division has failed to complete the refit process. In such cases again remove the refit marker, but leave failed units with their reduced strength sides still showing upward.

Within the strictures given above, any panzer, panzer grenadier or motorized infantry divisions may go through (or attempt to go through) the refit process any number of times per game, taking two or more consecutive (or non-consecutive) player turns to do so if the owning player so desires.

Design Note. The German non-mechanized replacement process is quicker and more sure than that for his mechanized units because the latter involves divisional motor pool troops reclaiming and repairing damaged and worn out tanks and other vehicles, while the request for the release of new vehicles, motors and other parts is sent up the command chain. Hitler was concerned about saving enough such materiel to be able to form new mechanized-class units in 1942, and was therefore stingy about releasing it for replenishment use during Barbarossa. The nonmechanized replenishment process mostly requires just the integration of whole replacement battalions into divisions that are only moving along at a walking pace to begin with.

8.12 German-Side Withdrawals

Only the German player is required to withdraw units from the map during the course of a game. The withdrawal schedule and unit types to be withdrawn are set out on the German & Axis Withdrawal Table (12.5). In general, within the unit types listed on that table, the German player is free to select the exact units to be withdrawn, and such units may be at reduced strength at the time of their departure. To be eligible for withdrawal a selected unit need only be regular supply (attenuated is OK). Simply pick up such units and set them permanently aside; they will not come back into play during the course of that game.

Note that in one instance, the with-drawal of the Hungarian *Fast Corps* on Game Turn 20, a withdrawal is called for by specific unit rather than simply by type. In that case no withdrawal substitute unit may be selected. If the German player doesn't withdraw the specific unit called for, for any reason, he must pay the penalty for doing so (see below).

The German player may decline to make any called for withdrawal, decided on a unit by unit basis, except for that of the *VIII FliegerKorps* on Game Turn 22. To do so, he simply states he's declining a particular withdrawal, and then debits himself one VP per unit not withdrawn. Similarly, if he can't make a withdrawal because no unit of the called for type is available (or, in the case of the HF Corps, if that specific unit is unavailable) due to their having been eliminated or being found in an unacceptable supply state, etc., no substitutions are made; just debit the appropriate amount of VP.

Withdrawals are never delayed; they are only carried out on time or declined, for whatever reason, as they're called for on table 12.5. On turns withdrawals are called for, the German player should make them the first activity of his New Units Entry Phase.

Design Note. Before reading farther here, you may want to reread the Design Note at the end of rule 2.7

8.13 Soviet Guards Conversions

On Game Turns 12 (Sep III) and 20 (Nov III) several Soviet Guards units enter play. Those Guards units are all two-steppers, and enter play via "conversion" of non-Guards units then already in play on the map. When the appropriate game turns arrive, the Soviet player enters those Guards units into play on the map, during his New Units Entry Phase, by removing from it a corresponding number of non-Guards units and simply substituting in those units' places the new arrivals. The arriving Guards units instantly have their normal movement and combat capabilities available for use.

The only stricture is the removed units must be in regular supply at the time of the conversion, and each must also be of the exact same type, but not necessarily the same historic I.D. number, as the Guards unit into which they're being converted. Soviet non-Guards units removed to carry out Guards conversions are eligible for reentry into play on later turns via the normal Soviet replacement process. Guards units themselves may never receive German-style step replenishment, nor may they be reclaimed from the dead pile in any way once there.

Guards conversions may never be delayed. If they can't be carried out during the game turns indicated, decided on a unit by unit basis, the unentered Guards units are permanently eliminated. During the two turns Guards units are entered into play, those conversions should be the first activity of the Soviet player during his New Units Entry Phase.

Design Note. The Soviet player will more fully come to understand the criticality of Guards units to his army's overall performance once he's read rules 11.34 and 11.35.

8.14 Stavka Directive No. 1. At the very start of Game Turn 6 (Aug I), the Soviet player should sort through all his units deployed on the map, removing all rifle

corps still there. He should substitute rifle divisions for them in place, taken from his RP units (see 8.10) and put into the former hexes of the rifle corps at the rate of one division per rifle corps' combat factor.

Design Note. "Stavka Directive No. 1" was the title of the reorganization order that did away with rifle corps until early in 1943.

9.0 MOVEMENT & MOBILE ASSAULTS

9.1 Every ground combat unit in the game has a "movement factor" printed in its bottom-right corner. That factor is the number of "movement points" (also called "movement factors" and "MF" and "MP") available to the unit to use to move across the hex grid during its side's movement phase in each player turn. Units move from hex to adjacent hex-no "skipping" of hexes is allowed-paying varied costs to do so depending on the type of unit moving, the weather, and the terrain in and along the hexes being entered. The movement of each player's ground units generally takes place only during his own player turn's movement phase; no enemy movement takes place during your own player turn (exception: see 11.31ff, retreat-after-combat).

9.2 Limits

MP may not be accumulated from turn to turn or phase to phase, nor may they be loaned or given from one unit to another. A player may potentially move all, some, or none of his units in each of his movement phases throughout the game. Units that move are not required to expend all their MP before stopping. The movement of each unit or stack must be completed before that of another is begun. A player may only change the position of an already moved unit or stack if his opponent agrees to allow it.

9.3 Minimum Movement Ability

Each ground combat unit with a printed movement factor of one (1) or more is generally guaranteed the ability to move at least one hex during a friendly movement phase by expending all its MF to do so. That guarantee doesn't allow units to enter hexes or cross hex sides that are otherwise impassable to them, nor does it guarantee German mechanized units the ability to launch mobile assaults. Soviet fortified zone units, as well as the naval

infantry unit that appears in Oranienbaum on Game Turn 4, have printed movement factors of zero (0). Those units never move from their hexes of placement/entry once they are on the map.

9.4 Enemy Units

Friendly units may normally not enter hexes containing enemy units, but see 9.22ff a crucial exception.

9.5 Stack Movement

To move together as a stack, units must begin their side's movement phase already stacked together in the same hex. Units are not, however, required to move together simply because they started a movement phase in the same hex; such units might be moved together, individually, or in smaller sub-stacks.

9.6 Splitting Stacks

When moving a stack you may halt it temporarily to allow a unit or sub-stack to split off and move away on a separate course. The units left behind in the original (or "parent") stack may then resume their own movement, even splitting off other units if desired. Once you begin moving an entirely different parent stack, or an individual unit that began in a different hex than the currently moving parent stack, you may no longer resume the movement of the earlier stack without your opponent's permission.

9.7 Different MF in Stacks

If units with different movement factors are traveling together in a stack, the stack must use the movement factor of the slowest unit within it. Of course, as the slower units exhaust their MF, you may drop them off and continue with the faster ones.

9.8 Terrain & Movement

All terrain features on the map are classified into two broad categories: natural and manmade. Both of those categories are further divided into different types (see below). There is never more than one type of natural terrain in any one hex, but one or more types of manmade terrain may exist in one hex along with the natural stuff.

9.9 Natural Terrain & Hydrography

There are nine types of natural terrain and hydrographic features on the map: clear, forest, hills, marsh, river hex sides, all-lake hex sides, all-sea hex sides, Sivash hex sides and Kerch Strait hex sides. The effects those various features have on the movement of ground units are described below and are also summarized on the Terrain Effects Chart (12.4) for quick reference during play. Also note the terrain effects below are described with dry ("D") weather prevailing; for the effects on play of other weathers see section 10.0.

9.10 Clear terrain is the "base" terrain of the game; it's devoid of any natural features that would enhance defense or slow movement at this level of operations. Each clear hex costs all ground units one MP to enter. All city hexes are considered to have a base of clear terrain, but that's not necessarily true for small or large towns.

9.11 Forest hexes represent areas where the primary ground cover is trees. Each forest hex costs mechanized units two MP to enter, while non-mechanized units pay one MP.

9.12 Hills are areas dominated by broken or hilly terrain. All mechanized units pay three MP per hex entered; mountain infantry and cavalry one MP, while all other non-mechanized units pay two MP.

9.13 Marsh hexes cost mechanized units four MP per hex entered. Cavalry units pay one MP per marsh hex entered; other non-mechanized units pay 2 MP per marsh hex entered.

9.14 River Hex Sides run between hexes, along hex sides, rather than existing inhex. Every river hex side may be crossed by non-mechanized units of both sides by paying one extra MP for the crossing, and by mechanized units of both sides by paying two extra MP for the crossing. "Extra" means in addition to whatever movement cost is involved for the hex being moved into.

9.15 All-Lake Hex Sides & All-Sea Hex Sides

In general, no movement or combat is allowed across all-lake or all-sea hex sides for either side, but see below for important exceptions.

9.16 Sivash & Kerch Straits Hex Sides are defined in rule 7.14. All ground units of both sides are eligible to cross those hex sides, but to do so they must start their side's movement phase already located in

a hex with a Sivash or Kerch Strait hex side. The crossing then uses up all their available MF for that player turn (also see 10.7 and 11.19).

9.17 Soviet Sea Movement & The ICA

The Soviet player may move up to five non-mechanized rifle divisions, or the ICA, from friendly controlled port to friendly controlled port on the Black Sea or Sea of Azov coast, during each of his movement phases. To move by sea, an otherwise eligible Soviet unit must start the friendly movement phase already located in a coastal port. A unit that begins a Soviet Movement Phase already in a port may move from there to any other port, but may move no farther that same turn. It's permitted for a Soviet unit that fought during the same player turn's combat phase to use sea movement as long as it begins its side's movement phase in a port.

Sea movement may not be used by the Soviet player to withdraw units from the map, nor does this rule give that player an amphibious invasion capability against German controlled ports. A "port" is any and every large town, small town or city hex anywhere on the Black Sea or Sea of Azov coast. All three types of locales share the same overall sea movement capacity each turn.

Note the ICA equals five full divisions for sea movement purposes no matter if at full or reduced step strength. Sea movement is the only way the ICA moves in this game. Rather than a regular numeric movement factor, it has an anchor icon printed in its unit-counter's lower-right corner as a reminder of this unique status.

Note that if Soviet sea movement is to go between the Sea of Azov and the Black Sea, in either direction, all hexes of the Kerch Straits (see 7.14) must be Soviet controlled at the time of the move.

Design Note. There is no German-side sea movement of any kind in any sea, nor is there any Soviet sea movement in the Baltic or Gulf of Finland.

9.18 Manmade Terrain & Movement

Manmade terrain exists in five types: cities, large towns, small towns, fortified lines and Rollbahnen. Except for the Rollbahnen (see 9.19 below), manmade terrains have no effects by themselves

on movement. Other than when using the Rollbahnen, the movement cost for entering hexes is determined by the natural terrain in them and any hydrographic features along their sides.

9.19 Rollbahn is a German word meaning "runway" (as at airports; plural is Rollbahnen). During WW2 the term was used by their army's traffic coordinators to denote a major road selected as a central traffic artery. The Rollbahnen used by the Germans during this phase of the war are shown on the map. The following rules govern their use by the German-side units in the game. Rollbahnen have no effects on Soviet movement or combat.

Units of the German side moving directly from one Rollbahn hex to another such hex, via hex sides traversed by the Rollbahn as drawn on the map, may do so at the cost of one MP per hex, no matter the natural terrain in the involved hexes. Further, units moving in that way are also able to use the Rollbahn to make river crossings at no-extra-cost (but not to launch an MA if it's after Game Turn 3). All of the Rollbahnen permanently cease to exist for movement enhancement purposes when the first non-D weather is rolled. That's not true for supply purposes; see 7.3.

Every non-mechanized unit of the German side that begins its movement phase already on a Rollbahn hex, and spends all its movement moving along the Rollbahn as described above, and is in regular and/or attenuated supply for the whole move, may add one more Rollbahn hex to its move. Non-mechanized units that use this Rollbahn bonus may PA during the same player turn, no matter what phase sequence is being used.

Every mechanized unit of the German side that begins its movement phase already on a Rollbahn hex, and spends all its movement moving along the Rollbahn as described above, and is in regular overland and/or attenuated supply for the whole move, may add two more Rollbahn hexes to its move. Mechanized units that use this Rollbahn bonus may PA during the same player turn, no matter what phase sequence is being used, but they may not MA.

If a German mechanized unit is moving along a Rollbahn using the one-MPper-hex advantage, but not taking the extra one or two hexes, it may still only MA into hexes that could normally receive such an attack, and at the normal six MP launch cost.

Design Note. Soviet units would, of course, also have been found traveling along the "runway" roads; however, during this chaotic period of the war, many factors prevented the Red Army from making anywhere near as good a use of their own nation's road net as did the Germans. Hence the Rollbahnen may only be used operatively by the invaders.

9.20 Cumulative Costs

The total movement cost for entering any hex is always the sum of all the applicable terrain and water costs involved. For example, a mechanized unit crossing a river hex side into a hill hex would pay a total of five MP to do so. That is, three MP to enter the hill hex and two "extra" MP to cross the river hex side.

9.21 Off Map Movement

No unit once in play on the map may be voluntarily lifted, moved, advancedafter-combat or retreated-after-combat off it except as given in 8.12 and 8.13.

Design Note. If this is your first time reading these rules, it's probably best for you to skip over rule sections 9.22 to 9.30, inclusive, and resume reading at the start of section 10.0. Return to this point after you've finished reading sections 10.0 and 11.0.

9.22 German Mobile Assaults

All German mechanized units may conduct a special form of attack during that side's movement phases called "mobile assault" or "MA." All three types of German mechanized-class units may potentially participate in MA, but for motorized infantry to be able to do so at least one panzer or panzer grenadier division must be involved in the same MA. Motorized infantry alone, or in combination with each other but without at least one panzer or panzer grenadier division also participating, may not make MA. Within normal stacking limits, one panzer or panzer grenadier division enables any number of motorized infantry divisions to participate in the same MA with it.

9.23 MA Procedure

To conduct an MA, an eligible moving German mechanized unit or stack enters the enemy occupied hex chosen to be attacked, paying six MP to do so. No German mechanized unit or stack may conduct more than one MA per German Movement Phase, but any given defended

hex may potentially be mobile assaulted any number of times during any one German Movement Phase, as long as each new MA is conducted by fresh units and the German player observes stacking limits at all times in the launch hex(es). The stacking limits for the two sides' involved units within a mobile assaulted hex are mutually exclusive. An MA "launch hex" is the last hex occupied by the assaulting German force immediately prior to entering the defender's hex.

9.24 MA Limit

In general, no MA may ever be launched into any kind of hexes other than clear terrain. Clear terrain hexes that contain small or large towns may still be the targets of MA, but cities, Soviet fortified zone units and intact Soviet fortified line hexes also prevent MA being launched into their hexes. In general, MA may not be launched across any kind of all-water hex side, but remember the German player may completely ignore river hex sides for all movement and offensive combat purposes during Game Turns 1, 2 and 3.

MA may not be launched into any hexes in a weather zone where M or S is currently the weather. Soviet and Axis satellite units may never launch MA; nor is the concentric assault odds shift bonus (see 11.26) ever available for MA.

The guaranteed ability of units to move at least one hex per friendly movement phase by expending all their MP to do so (see 9.3) doesn't work to guarantee German mechanized units the ability to launch MA. A mobile assaulting unit or stack must have sufficient MP available to pay for the MA or it may not be made. Note also that terrain doesn't limit the hexes from which MA may be launched; the terrain requirement only has to do with the terrain in the defender's hex.

9.25 MA & Supply

The supply state of German mechanized units involved in an MA is determined at the start of the mobile-assaulting force's movement that phase. That is, no German mechanized unit or stack may conduct an MA if it can be seen to be without supply (attenuated is OK) in the hex in which it's located as it begins its move.

9.26 MA Stack Eligibility

To be able to MA together as one combined forced during a given movement phase, German mechanized units must have begun that phase already stacked together, and they must move together along the entire course of their move up to and including the hex into which they launch their MA. Further, each hex entered along that path by the moving MA force must remain within the stacking limits given in these rules at the time of those entries.

9.27 Unfavorable MA Combat Result

If a German MA achieves any result that fails to entirely clear the defended hex of all enemy units, the involved German force suffers whatever losses are dictated by that result (if any) and the survivors are placed back in their MA launch hex, where they must remain for the rest of that phase. Such units could potentially attack in the following German Prepared Assault Phase, provided the sequence chosen for that turn was move-fight.

9.28 Favorable MA Combat Result

If a German MA completely clears the defended hex of Soviet units, the assaulting German units may continue their movement from that hex with the MP remaining to them. They may not, however, launch another MA that same phase; though they might yet PA if the phase sequence chosen that turn was move-fight. Note there is never any automatic advance-after-combat in victorious MA as there is in victorious PA (see 11.36); all post-MA movement is governed by the MP left to the moving units.

9.29 MA & Phase Sequence

The ability of German mechanized units to MA is not effected by the phase sequence chosen by that player. With the fight-move sequence, otherwise eligible units might participate in a prepared assault and then, during the following movement phase, also launch a mobile assault. The same is true when the move-fight sequence is chosen: units that launch a mobile assault during the movement phase might also participate in combat during the prepared assault phase later that same German player turn.

9.30 Retreating Into MA

If defending Soviet units in one MA retreat-after-combat into a hex that's either empty or already contains other Soviet units, and that new location comes under subsequent MA attack that same phase, the Soviet units that retreated into the hex contribute to their new location's defense against the MA being waged there, just as if they had been in the new hex from the start of that movement phase. That process may go on any number of times each movement phase for any given Soviet unit(s) in any number of hexes (also see 11.31, 11.32 and 11.33).

Design Note. Within the limits and exceptions given above, mobile assaults are generally resolved the same way as prepared assaults (see section 11.0). Note that, unlike many other games using MA-type rules, here there are no inherent combat penalties or odds shifts involved simply because an attack is an MA.

9.31 Axis Satellite Map Restrictions

All Italian, Romanian and Hungarian units must always end their moves in hexes south of the north/south sector line (see 7.15). They may move through hexes north of that line during their moves, as long as they end the movement phase in hexes south of it. Similarly, Italian, Hungarian and Romanian units may never attack into any hexes north of the sector dividing line.

10.0 WEATHER & GROUND CONDITIONS

10.1 At this scale of simulation, weather makes itself felt in play by affecting ground conditions. At the start of the game the weather is considered normal or "dry." That is, the ground is generally dry and the normal movement and combat rules, which have all been written with that kind of weather in mind, pertain. At the start of each game turn beginning with Game Turn 12, the Soviet player rolls a die to determine the weather/ground condition(s) that will pertain throughout the next game turn.

10.2 Weather Zones

Note there are two weather zones, northern and southern, delineated on the map. The Northern Weather Zone (NWZ) is much larger than the Southern (SWZ), which only exists across some of the Crimean peninsula. Both zones may share the same weather during a given turn, or each may have its own, depend-

ing on the die roll result when consulting the Weather Table (see 12.6). The SWZ's weather is always the NWZ's weather die roll minus two (-2). Don't make two die rolls.

10.3 D Weather

"D" means dry weather. It's considered the normal weather for the game and the bulk of the rules have been written with that in mind.

10.4 R Weather

"R" means enough rain falls during the week to slow, but not totally disrupt, German-side movement. All Germanside non-mechanized units lose one MP from their printed MF, and all Germanside mechanized units lose two MP from theirs. There are no effects on Soviet units or play.

10.5 M Weather

"M" means the rain has become heavy enough to generate quagmire conditions. All dry weather in-hex terrain costs are doubled for both sides, and hex side river crossing costs increase by one MP for each class of unit, to +2 MP for non-mechanized units and +3 MP for mechanized units of both sides. No MA may be conducted.

10.6 F Weather

"F" means temperatures have fallen below freezing and remain there, causing frost conditions, but there is still little or no snow. The effect of F weather is generally the same as for D weather, except all units of both sides may completely ignore rivers for all movement and combat purposes, and marsh hexes are treated as if they were clear terrain. German MA are allowed into marsh hexes during F weather. Note the Sivash and Kerch Straits aren't affected by F weather.

10.7 S Weather

"S" means temperatures continue below freezing and deep snow also clogs the ground. All units of both sides ignore all river, lake, Sivash and Kerch Strait hex sides for all movement and combat purposes. Note, though, no MA are allowed during S weather. Also note the Sivash hex sides are considered to lie entirely in the SWZ. Also treat marsh hexes as clear terrain, but all D weather in-hex terrain costs are now doubled; so marsh is now two MP per hex for all units, as is clear terrain. All units of both sides may move and attack across all-lake hex sides with no extra costs or penalties involved.

10.8 Deep Winter

The first time S is rolled for the NWZ it becomes the permanent weather there for the rest of the game. Keep rolling and subtracting two, though, to determine the SWZ's weather until that process also yields S weather there for the first time. At that time S weather also becomes the permanent weather in the SWZ for the rest of the game. Note that except for this "deep winter" effect, the weather may potentially change back and forth among F, M, R and D in both weather zones any number of times.

10.9 German Mechanized-Class Refits

German refits cease permanently all across the board the first time M or S weather is rolled.

10.10 Rollbahn

All Rollbahnen (see 9.19) permanently cease to exist for all movement enhancement purposes all across the map the first time M or S weather occurs. That's not true for their logistical functions.

11.0 PREPARED ASSAULT

11.1 Prepared Assault (PA) combat takes place between adjacent opposing units during the Prepared Assault Phase in every player-turn. Attacking is always voluntary for the German player; the mere fact of Soviet units' adjacency doesn't necessitate his units launch PA against them. The German player is always free to PA or not, as he chooses, during each of his own player turns' combat phases throughout the game.

Launching PA is at not voluntary for the Soviet player at the start of the game. Starting with Game Turn 1, in general, every Soviet unit that begins its side's Prepared Assault Phase next to one or more enemy occupied hexes must participate in a PA on one of those hexes (Soviet player's choice) during that phase. The exceptions are that Soviet fortified zone units and the Oranienbaum naval infantry unit are never required to attack. Further, any Soviet unit stacked with a fortified zone unit in a large town hex, or that are stacked with the Oranienbaum naval infantry unit in that hex, are likewise excused from having to attack (though they may still do so at the Soviet player's discretion).

The mandatory attack requirement remains in place from the start of each game until the start of a game turn wherein DD3 is rescinded (see 7.12). As soon as that happens, attacking becomes completely voluntary for the Soviet player all across the map for the rest of the game, just as it is for the German player from the start of play. (Other important changes also occur; see 7.12, 8.1, 8.5, 8.7, 8.9, 8.10 and 8.13.)

The player whose player turn it is, is considered the "attacker," and the other player is considered the "defender," no matter the overall situation across the map.

11.2 Multiple Defenders in One Hex

If there are two or more enemy units in a hex being attacked by your units (MA or PA), you may only attack that stack as if it were one large, combined defending unit.

11.3 Multi-Hex Attacks

An enemy occupied hex may be prepared assaulted in one battle by as many of your units as you can bring to bear from one, some or all of the surrounding hexes, but no more than one hex may ever be the object of any one PA or MA. For example, a unit in 2123 may not attack, either PA or MA, into both 2122 and 2223 during the same phase. See 11.6 below for more details.

11.4 Indivisibility of Units

No single attacking unit may have its attack factor divided and applied to more than one battle. Likewise, no defending unit may have part of its defense factor attacked by one or a few attackers while another part of that factor is attacked by other enemy units. No attacking unit may attack more than once per prepared assault phase. It is possible for a given defending unit to be attacked more than once per prepared assault phase, just as the same can be potentially be done with MA during the movement phase.

11.5 Attack Sequencing

There is no artificial limit on the number of PA each player may resolve during his prepared assault phases, which is also true for MA during German Movement Phases. The attacker need not declare all his attacks before hand, and he may

resolve them in any order he wishes as long as the resolution of one is completed before that of the next is begun.

11.6 Stacks in Prepared Assaults

It's not necessary for all the units stacked in a given hex to participate in the same PA. Some of the units in a stack might attack into one defended hex while others attacked into some other hex or simply didn't attack at all. No defending unit may ever refuse combat.

11.7 Fog o' War

Neither player may ever look beneath the top unit of enemy stacks until the time comes in the combat resolution process for odds computation. Once such an examination has been made the attacker may no longer call off that attack. Neither player may examine the other's stacked reinforcement units on the Turn Record & Reinforcement Track. The German VP and non-mechanized replacement step totals are always known to both players.

11.8 Combat Procedure

Normally the attacking player should strive to have several times more attack factors involved in a battle than the defender has defense factors. Such battles are called "high odds" attacks. To resolve such fights, the attacking player begins by calculating his "odds." Do that by adding together the attack factors of all the attacking units involved in the battle; then add up the defense factors of the enemy units defending in the battle. Divide the defender-total into the attacker-total and round down any remainder. For example, if 26 attack factors attack 7 defense factors, the situation yields an odds ratio of 3:1 ("three to one"). That is, $27 \div 7 = 3.71$, which rounds down to 3. To turn that "3" into a ratio, you must set a "1" next to it on the right. Thus "3" becomes "3:1," which corresponds to a column-heading on the Combat Results Table (12.8).

11.9 Poor Odds Attacks

Battles in which the attacking force has fewer combat factors than the defender are called "poor odds attacks." Procedures in such situations are modified from what's described above in that here you divide the defender's total by the attacker's, round up all remainders, and set the "1" on the left side of that result. For example, if a force with 5 attack factors

is attacking a force with 11 defense factors, it's a poor odds attack. In that case, divide 11 by 5 (11÷5=2.2), and round up (2.2 becomes 3); then set a "1" on the left of that "3," yielding odds of 1:3 ("one to three").

11.10 Odds Limits

Note the column headings on the CRT range from 1:3 to 6:1. Final odds greater than 6:1 are resolved without a die roll; their results are always "DE." Odds less than 1:3 are also resolved without a die roll; their results are always "AL1." See 11.28 below for more on this aspect of CRT use.

11.11 Combat Modifiers

The odds obtained in the calculations described above may be shifted by the terrain in the defender's hex and around its perimeter, as well as other factors described below. All applicable combat shifters are cumulative in their effect. That is, in every battle all applicable shifters are determined and their effects taken into account before the "final odds" are determined and the die is rolled to get a combat result.

11.12 Minimum Combat Factors

No lone unit or stack in the game with a printed combat factor greater than zero ever has that combat factor reduced to less than one for any reason(s). Whenever stacked or multi-unit or multi-hex situations arise in which combat factor reductions are to be made, total all the units' factors subject to a common reduction, then make just one grand reduction, rounding down any remainder.

11.13 Clear Terrain

Units defending in clear terrain hexes devoid of other terrain features derive no benefit to their defense because of that terrain.

11.14 Forest

Units defending in forest hexes receive a one column leftward odds shift (1L) for doing so. MA may never be launched against defenders in forest hexes.

11.15 Hills

Units defending in hill hexes receive a two-column leftward (2L) odds shift. MA may never be launched against defenders in hill hexes.

11.16 Marsh

Both sides' mechanized units are halved when attacking into marsh hexes. MA may never be launched against defenders in marsh hexes. Remember, though, weather may effect the status of marsh terrain in that respect; see 10.6 and 10.7. When units PA against defenders in marsh terrain in D, M or R weather, they gain a one column rightward (1R) odds shift for doing so, due to lack of cover for the defenders.

11.17 River Hex Sides

Every unit attacking across a river hex side has its attack factor halved during D, M and R weathers. No MA may be launched across river hex sides except in F weather and during Game Turns 1, 2 and 3. Completely ignore for all purposes during S weather.

11.18 Lakes & All-Sea Hex Sides

It's impossible for units of either side to attack across these hex sides in any way, except lake hexsides may be attacked across as if they were clear terrain during S weather.

11.19 The Sivash & Kerch Straits

No MA may ever be launched across Sivash or Kerch Straits hex sides. Non-mechanized units attacking across those hex sides always treat the situation as if they were attacking across river hex sides in D weather (they're halved on attack). Mechanized units always have attack factors of one (1) when attacking across such hex sides.

11.20 Small Towns

Small towns themselves never generate any kind of combat odds shifter or modifier in this game, but other terrain in town hexes does continue to make itself felt as usual for all combat purposes.

11.21 Large Towns

Units defending in a hex containing a large town receive a one column leftward odds shift (1L) for doing so.

11.22 Cities

Units defending against a PA in a city hex never suffer the concentric attack bonus (see 11.26), no matter what the positions of the attackers around their hex. In addition, units defending in city hexes gain a two-column leftward (2L) odds shift for doing so. Further, both AS and

DR combat results are converted to AL1 when achieved against defenders in cities. Also note that Soviet mechanized and cavalry units, no matter their organizational sizes, defend in cities with defense factors of just "1" each. (Such units may attack out of cities normally.) Finally, MA may never be launched into cities, and German panzer divisions are halved when participating in PA into city hexes.

Neither player may retreat-after-combat (see below, 11.31) any of his units into or through a hex containing an enemy controlled city, even if that hex is empty of actual enemy units at the time, nor may either trace his supply lines into or through enemy controlled city hexes.

11.23 Soviet Fortified Lines

All fortified lines on the map belong to the Soviet side; there are no Germanside fortifications. All fortified line hexes are either "intact" or "destroyed," considered on a hex by hex basis. At the start of play all fortifications are intact. Note that one of the fortified "lines" actually only amounts to one hex, the one in 2845.

When Soviet units are in an intact fortified line hex, the combat effect of those fortifications is to shift the odds one column left in favor of Soviet defenders, in addition to any and all other applicable odds shifters, while also working to prohibit the launch of any MA into that hex. Likewise, no concentric assault bonus may be taken against Soviet units defending in intact fortified line hexes.

A fortified line hex is permanently destroyed the first time any unit of the German-side enters that hex, either during regular movement or advance-after-combat (see 11.36). In prepared assaults, the German must win the battle in order for that fortified line hex to be destroyed. That is, he must completely clear the hex of defending units. Fortified line hexes never generate any combat effect for units of the German-side that happen to be defending in such hexes.

The German player may not retreatafter-combat any of his units into or through a hex containing intact Soviet fortified lines, nor may he trace his supply lines into or through such hexes, even if the hex is otherwise empty of Soviet units at the time. Victorious German-side units may not advance-after-combat through intact, but otherwise empty, Soviet fortifications unless such a hex was the target hex of the PA in question.

In situations in which the overall pattern of the front line doesn't make clear which fortification hexes are destroyed, mark those hexes with a German control marker (see 2.13).

11.24 Soviet Fortified Zone (FZ) Units

When Soviet mobile units are in a hex along with a fortified zone unit, the combat effect of those fortifications is to shift the odds one column left in favor of Soviet defenders, in addition to any and all other applicable odds shifters, while also working to prohibit the launch of any MA into that hex. Likewise, no concentric assault bonus may be taken against Soviet units defending in a hex that contains an FZ unit. At the same time, a fortified zone unit also contributes its own defense and step strength, both of which are "1," to the defense of its hex, no matter if other Soviet units are or are not present. Even when attacking a hex empty of mobile Soviet defending units, the German player must still take into account all applicable column shifters, including the one generated by the fortified zone itself.

If an FZ unit is deployed in a hex containing a large town, there is an additional benefit to Soviet defenders there. That is, in such situations, any DR result obtained against those defenders is converted into an "AL1" result. Even more, Soviet mobile units stacked in large towns with a fortified zone unit are exempt from the DD3 mandatory attack requirement.

Note there may never be more than one FZ per hex, nor may an FZ that's once been eliminated ever make a reappearance onto the map. When DD3 is rescinded (see 5.6), all FZ units not in large town hexes are permanently removed from the map.

11.25 VIII FliegerKorps

Most of the effects generated by the overall German air superiority that side enjoyed during this campaign have been built into the rules, but the German player has one ground support aircraft counter available for use during either side's combat phases from the start of Game Turn 2 through the end of Game Turn 21. That counter represents the superlative performance contributed by VIII FliegerKorps.

The German player may commit his aircraft counter to support any one battle, either offensive or defensive, MA or PA, anywhere on the map. The counter has no stacking or combat value of its own, nor may it be given up to satisfy combat result requirement; it is indestructible in game terms. The effect of the aircraft counter is to generate a one-column odds shift in favor of the German side. The plane counter may be used once per game turn, up until the time of its withdrawal at the start of Game Turn 22 (see 8.12), as described above. The German player must announce the commitment of the counter prior to either side revealing the exact compositions of any involved stacks and before any odds calculations have begun for the battle being resolved.

11.26 The German ArKo unit (see 8.4) may only attack (PA only) when in regular supply and stacked with one or more units of the German side. To determine the ArKo's exact contribution to such an offensive battle, the German player should roll three dice each time it enters combat in that way. The result is the ArKo's combat factor for that one battle; however, the ArKo may never contribute more combat factors to a battle than there are non-ArKo German-side combat factors in that same battle. On the defense, if caught alone in a hex or stacked with other units, the ArKo is considered to have a combat factor of one. The ArKo may never advance-after-combat.

11.27 Concentric Prepared Assault

If a Soviet unit or stack is defending against a German PA launched into its hex from two exactly opposite hexes, or by units from three hexes with one hex between each and the next, or by units from more than three hexes, that German PA gains a two column rightward (2R) odds shift. That bonus is also available to attacking Axis-satellite and Soviet units, but when they gain it they only achieve a one-column rightward (1R) odds shift. If a mixed German/Axis satellite force gains concentric positioning for a PA, the bonus is likewise only 1R. This bonus is

never available to units attacking into any city hex, a hex containing an intact Soviet fortified line hex, or a hex containing a Soviet FZ unit. In the accompanying diagram, the defending unit in the center is being concentrically assaulted.

11.28 Final Combat Resolution

After all applicable modifiers have been applied and the final CRT odds column determined, the attacker rolls a die and consults the proper table (12.8 or 12.9) to get a "combat result." For example, a roll of "5" at odds of 6:1 yields a combat result of "DE" on the CRT. Apply all applicable modifiers before going to the CRT to find each battle's final odds column. For example, if you're attacking at 20:1 (twenty to one) and there are modifiers operating that give a 2L shift, you're then actually attacking at 18:1. That means you'd resolve that battle without a die roll, obtaining an automatic "DE" result in accordance with the note printed beneath the CRT. You don't convert the original 20:1 to a 7:1, the highest odds column on the CRT, and then shift 2L; you apply all modifiers first, then go to the CRT to find your column.

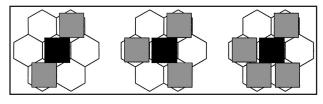
11.29 In each battle, the defender must always completely absorb his combat result before the attacker absorbs his. There is never any carry over of a combat result from one battle into any other battle.

11.30 AS-Attack Stalled

When this result is achieved in a PA, nothing happens: both sides remain in place and neither side suffers any losses. When this result is achieved in an MA, the Soviet defenders remain in place and the German attackers are placed back into their launch hex, from where they may not move that same phase.

11.31 AL1-Attacker Lose One Step

When this result is achieved in a PA or MA, the attacking player must remove any one strength step (total) from among his involved units. Both sides otherwise remain in place and the defender suffers no losses. When this result is achieved in an MA, the Soviet defenders remain in



place and the German attackers are placed back into their launch hex, from where they may not move that same phase.

In a PA, the attacker is always completely free to absorb his step loss from among any of his involved units. When a German MA gets this result, however, the step loss must come from an involved panzer or panzer grenadier division.

11.32 DR-Defender Retreat-After-Combat

In PA or MA, the defeated defending unit or stack must be retreated into an adjacent hex empty of enemy units and that also isn't adjacent to any of the attacking force that just caused the retreat to take place. Empty but intact Soviet fortified line hexes may not be retreated into by German or Axis satellite units. Neither player may retreat his units into hexes containing enemy controlled cities, even if those cities are empty of actual enemy units at the time of the retreat. If there is more than one eligible hex available to receive a retreat, the owning player must retreat his units in the direction that takes them closer to their nearest source of supply. If more than one route fulfills that requirement, it's his choice.

Note that Soviet fortified zone units, as well as the Oranienbaum naval infantry unit, may never retreat after combat. If a DR result is scored against hexes containing those units (no matter if other Soviet defenders are or are not present), the static units are eliminated in place and the other Soviet units must then conduct a retreat.

In general, neither side's units may retreat-after-combat out to sea from a coastal hex. There is one important exception in the case of the Soviet ICA. When that unit is defending in a large town or small town coastal hex and suffers a DR result, the Soviet player simply moves it from there to any other Soviet controlled port on the same sea coast. If there are no other eligible Soviet-controlled ports at that time, or if there are but the ICA's entry there would violate stacking limits, the ICA must stay in place a take a DE result instead (see 11.36).

11.33 Retreat-After-Combat doesn't use MP, and it has nothing to do with the costs involved with movement phase movement. Retreating units, however,

must still observe normal movement prohibitions. For example, units retreating after combat, other than the ICA as described above in 11.31, may not retreat across all-sea hex sides. Stacking limits must be observed in retreat movement. If the only retreat path open would result in over-stacking in that hex, the defending units must all stand their ground and instead take a DE result (see 11.34). A retreating stack may only be broken up to allow its component units to retreat individually or in sub-stacks into different hexes if stacking restrictions require it.

For mobile units, retreating is always an all-or-nothing proposition; either the whole defending force retreats or the whole defending force stays and instead takes a DE result, based on the strictures given above in this rule and 11.32.

11.33B Retreating Into a PA

If defending units in one PA retreatafter-combat into a hex containing other friendly units, and that hex comes under attack that same prepared assault phase, the units that retreated into the new hex contribute normally to their new location's defense against the battle being fought there. (Also see 9.30).

11.34 DE-Defender Eliminated

When this result is achieved in a PA or MA, the defender must first eliminate (remove to the dead pile) all his involved one-step units. Then he must reduce all his involved two-step units (if any) to one-step strength. The attacker suffers no loss and, if that battle is being waged as a prepared assault, he may make an advance-after-combat into the defended hex if the DE result has left it empty of enemy units. In an MA, if a DE result has left the defended hex vacant of enemy units, the victorious attacker may continue moving with his surviving attacking units to the limit of their MF. DE results always work to eliminate the fortification in a fortified line hex.

11.35 BB-Blood Bath

When this result is achieved in a PA or MA, the defender must first eliminate (remove to the dead pile) all his involved one-step units. Immediately after that he must reduce all his involved two-step units (if any) to one-step strength. That done, the attacker must remove the number of steps from among his involved at-

tackers equal to the number of steps just lost by the defender. In a PA, if a BB result has left the defender hex vacant of enemy units, the victorious attacker may advance-after-combat with his surviving attacking units. In an MA, if a BB result has left the defender hex vacant of enemy units, the victorious attacker may continue moving with his surviving attacking units to the limit of their MF. BB results always work to eliminate the fortification in a fortified line hex.

11.36 PA Advance-After-Combat

At the end of every PA (not MA), whenever the defender's hex is left vacant of defenders, either by step loss or retreat, the victorious attacking units may advance-after-combat into that hex. Stacking limitations must be observed. Such advances aren't part of normal movement, and they don't cost any MP, but advancing units must still observe normal terrain prohibitions. Advancing-after-combat is an option; it is never mandatory. The decision to advance must be made immediately after the battle is resolved and before that of another is begun. It's not necessary for advancing attackers to stack-full the newly won hex; the victorious player may send just one or a few units. There is never any defender advance-after-combat; victorious defenders simply hold their place.

11.37 German-Side Multi-National PA

It's permitted for German units to PA together in any one battle with any one nationality of Axis satellite units, but no more than one nationality of Axis satellite units may ever be involved in any one German-side PA. If a mixed German/Axis force makes a PA with concentric assault (see 11.26), the bonus is only 1R.

11.38 German DR Conversion

Any time a defensive force in a PA that consists entirely of German units receives a DR combat result, that player may decide to convert it to a "DL1," a result not otherwise on the CRT. To make the conversion, the German player simply announces it at the time a DR is obtained against him in a Soviet attack. Instead of retreating the involved German force, one step (total) is removed from it (German player's choice), and the surviving units remain in place. The involved Soviet attackers also remain in place and suffer no

loss. This conversion is not available if one or more Axis-satellite units are part of the defending force; nor is it available if the involved German defending force contains only one step.

11.39 Soviet Cavalry Raids

All through the game, other than during Game Turn 1, Soviet cavalry (Guards and non-Guards) units may "raid" during both sides' prepared assault phases. After the normal odds computation process has been gone through, as a final step before the roll of the die, the Soviet player may declare a raid. If he declares one, the raiding Soviet cavalry unit is immediately removed to the dead pile (don't recalculate the battle odds), and the odds are then shifted one column in the Soviet side's favor. The battle is then resolved at those final odds. The early elimination of the raiding Soviet cavalry unit in no way goes toward satisfying any loss requirements that might be mandated by the combat result when the battle is resolved.

If there is more than one Soviet cavalry unit present in a given PA, no more than one may raid during it; the others simply participate in combat normally. For a Guards cavalry corps to raid, it must start that battle at two-step strength. Raids are never required simply because of the presence of Soviet cavalry; it's a Soviet player option. Non-Guards cavalry corps (not groups or Guards) eliminated for raiding are still eligible for replacement

11.40 Axis Satellite Attack Restrictions

Italian, Romanian and Hungarian units may never attack into hexes north of the north/south sector line (see 7.15).

12.0 CHARTS & TABLES

See the separate player aid cards.

The Red Army at Moscow

Armor

The Red Army had been a pioneer in mobile warfare in the 1930s. It was one of the first militaries to organize not only armored divisions, and it also created mechanized corps in 1935. On paper the armored formations look good, with many tanks as well as a lot of motorized infantry, artillery and anti-aircraft support. The Soviets also created motorized rifle divisions that, again, looked like reasonable combinedarms formations. Soviet industry had the capacity to provide large numbers of armored vehicles, and by 1938 there were some 15,000 tanks in the Red Army's inventory, more than any other country in the world. Several factors, though, would undermine the Red Army's mechanized forces by the time the Germans invaded in 1941.

During the Spanish Civil War, Moscow provided military assistance to the Republicans, including large numbers of tanks. The fighting there seemed to indicate large tank formations quickly bogged down in combat. That was actually due to a lack of training in mobile warfare, but the lesson seemed to be that large independent armored formations were unfeasible. As a result, the Soviet People's Commissariat for Defense decided to reorganize its armored forces. The mechanized corps and divisions were broken down into smaller units: tank and mechanized brigades that could support infantry armies, and tank battalions that were assigned directly to infantry divisions. In effect, a decade of armored evolution was thrown out, and the Red Army reverted to World War I tank doctrine.

Along with the mechanized corps went mobile doctrine. Post World War I Soviet military thinkers had emphasized the use of independent mechanized and cavalry units as maneuver units capable of making deep thrusts into the enemy rear area and there fighting the decisive battle. With the breakup of the mechanized corps, training for such large-scale operations no longer was conducted.

Still, Stalin remained willing to learn. The German blitzkrieg in Poland in 1939 and against the West in 1940 suddenly showed the efficacy



German halftracks maneuver through the Russian mud.

of independent armored operations. The Defense Commissariat quickly ordered the tank divisions and mechanized corps be re-established. The dilemma was, of course, the Red Army's mobile forces would have only a few months to undo years of neglect before the Germans invaded on 22 June 1941.

Building an armored force is not simply a matter of having machines in the inventory or men on the muster rolls. A cadre of experienced commanders and trained troops are also needed. But those commanders weren't there. The officers who should've been trained to lead large armored formations had been dispersed throughout the armed forces. And it wasn't only combat leaders who were conspicuous by their absence. Good staff officers were also scarce. They were men who could draw up plans to coordinate the movement of hundreds of vehicles in complex operations, and who could project logistical requirements for a modern army. At the troop level, many tank crew had only a few hours of experience as drivers or on the gunnery range. Trained mechanics and truck drivers were also scarce.

Stalin's purges made things even worse. In a prolonged spate of paranoia, the Soviet dictator wiped out much of the Red Army's higher leadership. Generals and colonels who might have been able to provide innovative operational and tactical methods ended up in Siberia or executed.

AXIS DIVISIONS ON THE EASTERN FRONT

	June 1941	July	Aug.	Sept.	Oct.	Nov.	Dec.	January 1942	Feb.	March	
German											
Panzer	17	19	19	19	19	19	19	19	19	21	
Motorized	14	15	15	15	15	15	15	15	15	15	
Infantry	90	102	102	103	104	103	106	115	123	127	
Cavalry	1	1	1	1	1	1	1	1	-	-	
Total German	122	137	137	138	139	138	141	150	158	164	
Axis Allies											
Finland	16	/	/	16	/	/	/	16	/	/	
Romania	9	/	/	11	/	/	/	4	/	/	
Hungary	0	/	/	1	/	/	/	3	/	/	
Italy	0	/	/	3	/	/	/	3	/	/	
Slovakia	1	/	/	2	/	/	/	2	/	/	
Spain	0	/	/	1	/	/	/	1	/	/	
Total Axis Allies	26	/	/	34	/	/	/	29	/	/	

Notes: This chart includes the divisions actively engaged in Army Groups North, Center and South. The Germans also had five more divisions in Finland and northern Norway. In some cases, brigades are considered in totals as one half division. "/" = Numbers of Axis allied divisions are known only for the dates indicated.

Rebuilding the mechanized corps meant that formerly independent tank battalions and brigades had to be combined into units one or two echelons higher than that in which they usually operated. Tank battalions were pulled out of infantry divisions, leaving the divisional commanders without one of their strongest units. They were then combined with tank battalions from other divisions, as well as formerly independent tank brigades, into new tank and motorized divisions. Often that was done without regard to logistical considerations. Light tank battalions might find themselves in the same regiment as heavier T-34s. That strained the already creaking supply system and made coordination difficult, again owing to the lack of qualified command and staff. More, many of the tanks were obsolete. The light T-26, for example, couldn't stand up against German Panzer IIIs and IVs.

Nonetheless, units were formed in the months just prior to the opening of Operation Barbarossa. In June 1941 the Red Army had 60 tank divisions and 36 motorized rifle divisions, with most of those units organized into 29 mechanized corps. There were also some independent heavy tank brigades and light tank battalions. While that mass constituted the largest armored armada in the world (the *Wehrmacht* had only some 20 panzer divisions at this time), it was not an effective combat force. Most of the divisions were at 50 percent strength in tanks. Even with 15,000 tanks the Red Army fell short in trying to equip so many large mechanized units. As the chart shows, they had excess light tanks and insufficient medium and heavy models.

There were also critical shortages in trucks, which meant the infantry and artillery couldn't keep up with the tanks. After the invasion began, Soviet tank attacks often degenerated into "charges" that German gunners could easily shoot to pieces. The Germans, for their part, emphasized combined-arms training and battlegroup tactics, giving them the tactical advantage.

Soviet units found large numbers of their tanks were always out of service owing to maintenance and repair problems. Vehicles frequently had to be abandoned in the middle of a fight because they would run out of fuel. Again, while the Red Army's mechanized forces looked good on paper, in the field they were able to bring to bear only a fraction of their potential combat power.

The short term solution was to again abandon the mechanized divisions and corps as unworkable. In the summer of 1941 they were reorganized back into brigades to be used mainly to support the other arms; however, those new tank brigades contained the seeds of future greatness. Those brigades were combined arms formations, including tank, motorized (or tank carried) infantry, and guns. Tank companies had five to 10 tanks, giving the brigade an armored strength about equal to a Western tank battalion, though the infantry and other arms increased its combat power. The infantry was there mainly to protect the tanks from enemy anti-tank forces, and proved effective in that regard, though they suffered from a lack of armored personnel carriers. The tank brigades later became the basis for the mighty tank and mechanized corps of 1943-45.

Infantry

The Soviet infantry (or "rifle") division was originally intended as a combined arms formation. As noted, it was supposed to have a tank battalion assigned to it for support. The final Red Army reorganization prior to the opening of *Barbarossa* removed the tank battalions so they could be used to reform the tank and mechanized corps.

While the Red Army rifle divisions also looked good on paper, again there were shortfalls in reality. Stalin's purges removed much of the capable leadership, with majors sometimes left to command divisions. While the division had what appeared to be a plethora of support units on paper, often they were not present. For example, engineer battalions might only be the size of a company in a Western army.

In response to the German invasion the Red Army reorganized its rifle divisions. They were made smaller so as to be easier to control, especially given the large numbers of conscripts who had to be assimilated. That change also reflected the ongoing personnel situation in which even pre-war rifle divisions were often 50 percent under-strength. Indeed, the Defense Commissariat convinced Stalin in April 1941 to recall 500,000 reservists just to bring the divisions in the western USSR up to near full-strength.

Once the war began, Red Army practice was to build new divisions around a cadre rather than sending replacements to rebuild units that had been depleted in combat. That contrasted with the German practice

Red Army Rifle Divisions	Sept 1939	April 1941	July 1941	December 1941	March 1942	German	Infantry Division 1941
Personnel	1,8841	14,483	10,859	11,626	12,725	Personnel	17,200
Infantry	8,000	6,800	6,300	6,600	6,600	Infantry	8000
Submachineguns	0	1204	171	582	655	Submachineguns	700
Rifles & Carbines	Not available	10,429	8,341	8,565	9,375	Rifles & Carbines	15,500
Light machineguns	578	392	162	251	352	Light machineguns	527
Medium machineguns	162	166	108	108	114	Medium machineguns	116
Quad antiaircraft machineguns	15	15	18	0	0	Quad antiaircraft machineguns	0
Heavy machineguns	18	18	9	12	9	Heavy machineguns	0
50mm mortars	81	84	54	72	76	50mm mortars	84
82mm mortars	36	54	18	72	76	81mm mortars	58
120mm mortars	12	12	6	18	18	120mm mortars	0
Antitank rifles	60	0	0	89	279	Antitank rifles	90
45mm antitank guns	54	54	18	18	30	50mm antitank guns	75
76mm antitank guns	0	0	0	12	0	75mm antitank guns	(1)
37mm antiaircraft guns	8	8	6	6	6	20mm antiaircraft guns	11
76m m antiaircraft guns	4	4	4	0	0	88mm antiaircraft guns	0
76mm field guns	38	34	28	28	32	75mm infantry guns	20 + 6 150mm
122mm howitzers	28	32	8	8	12	105mm howitzers	36
152mm howitzers	12	12	0	0	0	150mm howitzers	12
Multiple rocket launchers	0	0	0	8	0		
Tanks + armored cars	38	0	0	0	0	Tanks + armored cars	3
Motor Vehicles	817	657	208	248	169	Motor Vehicles	1394 (2)

Notes: (1) 75mm or captured 76mm antitank guns replacing 50mm starting in late 1941. (2) Includes 452 motorcycles.

of pulling units out of the line for replacements and rest, then sending them back in whole cloth. The advantage of the German system was it maintained unit élan and allowed veterans to give the advantage of their experience to recruits.

Again, while the Red Army rifle division looked similar to its *Wehrmacht* equivalent in general structure, there were shortfalls. Divisional artillery was only a fraction of that in the German division. That meant the Germans had the advantage in firepower. Soviet medium and heavy artillery was concentrated in non-divisional units because, given the lack of training, it was easier to control in centralized units. That meant the guns weren't up front to support the troops, at least not in 1941. Anti-tank, flak, engineer, signal and support units, while frequently termed "battalions," were more often the equivalent of a Western company or battery. The Soviet division also didn't have the extensive divisional services that the German unit could access. The result was the Soviet rifle division tended to be just a mass of infantry supported by some heavy weapons.

The Red Army also deployed the effective 120mm mortar down to regimental level, a weapon the *Wehrmacht* would later adopt. The divisional artillery headquarters was also responsible for controlling those mortars, as well as the multiple rocket launchers that were sometimes available. The Soviets also made good use of submachineguns and semi-automatic rifles to increase infantry firepower, and were ac-

tually ahead of the Germans in that regard. A major Soviet weakness was the lack of radios. That made it difficult for commanders to control operations, especially in mobile conditions. Soviet artillery was good, considered to be something of an elite arm; however, the general lack of radios, and just as important, the lack of a good fire control system, made most Red Army guns effective only for direct fire. It was here the Germans had a marked advantage with their superior tactical communications and forward observer system. German units could call in artillery fire to radically increase their firepower.

-Joseph Miranda

Credits

Design & Development: Ty Bomba **Post Publication Development**: Ted Raicer

Playtesters: Ty Bomba, Christopher Cummins, Paul Koenig, Christopher Perello, Jim Duncan & Thad "Macunaima" Blanchette

Map & Counters: Nicolas Eskubi

Production: Callie Cummins

© 2007 Decision Games, Bakersfield CA. Made and printed in the USA. (v2.0) Decision Games• PO Box 21598• Bakersfield CA 93390

• 661-587-9633 • www.decisiongames.com