

# DRIVE ON MOSCOW

## OPERATION TYPHOON, 1941

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# DRIVE ON MOSCOW: OPERATION TYPHOON, 1941

**NOTE:** These rules use the following color system: **Red** for critical points such as errata and exceptions, **Blue** for examples of play. Check for E-rules updates to this game @ [www.decisiongames.com](http://www.decisiongames.com).

## 1.0 INTRODUCTION

*Drive on Moscow* (*DoM* for short) is a two-player, low-to-intermediate complexity, strategic-level simulation of the final German attempt to capture the capital city of the Soviet Union late in 1941. The German player is generally on the offensive, attempting to win the game by isolating or capturing the city of Moscow, or by seizing all the other key cities on map. The Soviet player is primarily on the defensive, but the situation sometimes also requires that he prosecute counterattacks.

Game play encompasses the period that began with the Germans launching their offensive on 1 October 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 objective. Play may end sooner than the historic termination time if either player concedes defeat prior to the official end of a game.

### 1.1 Game Scale

Each hexagon on the map represents 7.5 miles (12 kilometers) from side to opposite side. The units of maneuver for both sides are primarily divisions, along with some brigades and one super-elite regiment. 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 game turn represents a week.

## 2.0 GAME COMPONENTS

The components to a complete game of *DoM* include these rules, the map sheet and 352 die-cut counters, which are also referred to as "units" and "unit counters." Players must provide themselves a standard six-sided die to resolve combat and other probabilistic game events.

### 2.1 Game Map

The game maps illustrate the militarily significant terrain found around the city of Moscow late in 1941 when viewed at these time and space scales. A hexagonal ("hex") grid is printed over the maps to regulate the placement and movement of units across it, much like in Chess and Checkers. A unit can 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 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 during the real campaign.

**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 should be taken down before it can be completed.

### 2.2 Seating

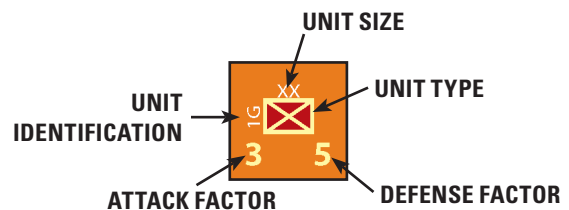
The German player should sit along the joined maps' west edge, with the Soviet player opposite on the east. See 3.0 for more detail on assembling the two map sheets into a single playing surface.

## 2.3 Counters

There are 352 unit-counters in the game, most of which represent combat formations. Others are provided as informational markers and memory aids. After reading through the 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.

### 2.4 Sample Combat Unit

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



### 2.5 Nationality

A unit's nationality and its "mobility category" (2.8), is shown by its color scheme.

#### German Side

Mechanized Units: Black background  
Non-Mechanized Units: Gray background

#### Soviet Side

Guards Mechanized Units: Dark brown background  
Guards Non-Mechanized Units: Orange background  
Regular Mechanized Units: Red background  
Regular Non-Mechanized Units: Light brown background

### 2.6 Historical Identification

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

**G:** Guards  
**GD:** Gross Deutschland  
**KG:** Kampfgruppe  
**L:** Lehr  
**M:** Moscow

### 2.7 Unit Sizes





Historical organizational sizes are shown by the following symbols:

**Division:** XX  
**Brigade:** X  
**Regiment:** III  
**Kampfgruppe:** KG (battlegroup of a burned out German mechanized-class division).

### 2.8 Unit Types

All ground units in the game belong to two basic mobility categories: mechanized ("mech") or non-mechanized ("non-mech"). Mechanized units are those whose primary means of moving across the battlefield is by wheeled or tracked vehicles or horses. Non-mechanized units are those

whose primary means of locomotion is provided by human legs. That distinction is important for movement and combat considerations. In the list of unit types below, if the explanation for a symbol contains a slash (/), the term in front of the slash is used to describe German units of that type and the term to the right of the slash is used to describe Soviet units of that type.

Mechanized Unit Types	
	Panzer Grenadier/Motorized Rifle
	Panzer/Tank
	Cavalry
	Infantry/Rifle

### 2.9 Combat Factors

Attack and defense factors, together called “combat factors,” are the measures of each unit’s ability to conduct offensive and defensive combat operations. Their specific uses are explained in sections 10.0 and 11.0.

### 2.10 Movement Factors (MF)

MF are the measure of a unit’s ability to travel across the hex grid printed over the map. Units pay one MF to enter a hex, while crossing a river hexside costs an extra MF. Note that in this game, unlike in many others, units’ movement factors are not printed on the counters. They’re presented that way because movement factors vary greatly from turn to turn depending on the ground condition.

All movement factors, based on mobility category (2.8) are given on the Turn Record Track (printed on the map sheet) in a two-number format following the abbreviation “MF.” The first number is the movement factor that game turn for both sides’ mechanized-class units; the second number is the movement factor that game turn for both sides’ non-mechanized units.

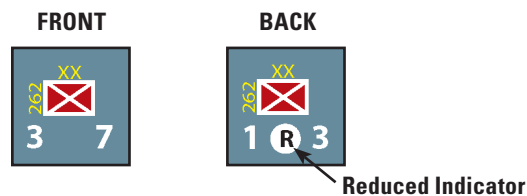
**Example:** On Game Turn 1 all mechanized-class units of both sides have movement factors of “10,” while all non-mechanized units of both sides have movement factors of “6.”

**Note:** On the Soviet side, Guards and non-Guards units of the same mobility class have the same MF.

### 2.11 Step Strength

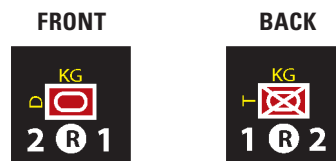
All ground units in the game have one or two “strength steps,” or simply “steps.” That’s an arbitrary term used to express the ability of a unit to absorb a certain amount of combat losses before ceasing to be an effective formation (a measure of its “robustness” in current US Army jargon). Those units 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. All two-step units that start play set up on the map do so at their full step strength. All two-step units that enter the map as reinforcements after play has begun do so at their full strength.

If a two-step unit suffers a one-step loss, it is flipped over so its reduced side (the one with the lower combat factors and reduced indicator) shows. If a one-step unit, or a two-stepper that’s already been reduced, suffers a step loss, it is removed from the map (eliminated) and placed into the dead pile (10.0).



### 2.12 German KG Units

There are 10 German KG units in the counter-mix. They are printed on both sides, in panzer division KG format on one side (factors of 2-1), and panzer grenadier division format on their other side (factors of 1-2). Those counters in effect work to allow the German player to create a third strength step for some of his units (11.30).



### 2.13 Soviet Untried Units

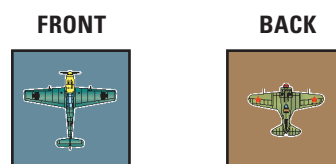
All Soviet non-guard units in the game lack numbers on their reverse sides. Soviet units with only their background color and unit-type icon on their reverse sides are set-up (or entered as reinforcements) with that numberless side showing upward. Thus, neither player will at first know exactly what is on the front. The hidden side of a unit shows only their mobility class and type. Such units are said to be “untried,” and are not flipped over to reveal their exact combat strengths until the first time they enter battle as either the attacker or defender. Once revealed, untried units are permanently converted to “veteran” status, and are never again flipped back to their untried side.



### 2.14 Other Counters

The uses of the following counters are explained at appropriate points throughout the rest of the rules.

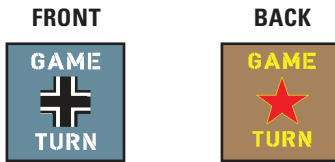
Ground Combat Support Aircraft Markers (11.19)



**Note:** Only one aircraft marker is back printed with a Soviet aircraft

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Game Turn Indicator (5.0)



## 3.0 SET UP & HEX CONTROL

Players should first join the two maps together to form one playing surface. Overlay the north edge of the south map atop the south edge of the north map. Use masking tape or removable tape to lightly join the two map sheets for play. That done, the players should decide which side each will control. Each player should take his own side's units and sort them onto and around the map according to the instructions below.

### 3.1 Reinforcement & Starting Units

Units that enter play after the game has begun, rather than starting play already set up on the map, are called "reinforcements." Soviet reinforcement units are described in the boxes of the Turn Record Track using the following abbreviations.

**CD:** Cavalry Division  
**GCD:** Guard Cavalry Division  
**GRD:** Guard Rifle Division  
**GTB:** Guard Tank Brigade  
**MRB:** Motorized Rifle Brigade  
**MRD:** Motorized Rifle Division  
**RB:** Rifle Brigade  
**RD:** Rifle Division  
**TB:** Tank Brigade

**Example:** During Game Turn 1, the Soviet player will receive seven rifle divisions, two rifle brigades, two cavalry divisions and a tank brigade as reinforcements, all of them non-Guards and entering play in their untried state.

**Note:** If you examine all five Soviet motorized rifle divisions in the counter-mix, you'll find one of them, when flipped to its veteran side, is a tank division. Since there was only one of them in action here historically, to preserve the overall working of the untried unit system, we simply mixed in that one tank division with the motorized rifle divisions.

At the start of play, all non-guard Soviet reinforcement units should be sorted by type into neat piles off to the side of the Turn Record Track, with their untried sides showing. Neither player should know their combat strengths during this process. For details on the set up and entry of Guards units, see 3.2, 3.3 & 3.4. For details on reinforcement entry, see 9.1 & 9.4.

### 3.2 Soviet Reserve Front Set Up

When his reinforcements have been sorted as described, the Soviet player selects the following units:

MRD x 1  
RD x 4  
RB x 4  
Guards Rifle Divisions (GRD) x 6

**Note:** All non-guard units are picked randomly and set up with their untried side up, neither player should know their actual strength.

These units are set up in any hexes east of the Forward Zone/Reserve Front boundary line printed on the map. No Reserve Front unit may be stacked with any other unit; they must be set up one per hex.

**Note:** All Soviet Guards units of all types have two strength steps, and they are set up with their full, two-step, combat strengths upward and known to both players.

### 3.3 Soviet Forward Zone Set Up

After his Reserve Front units have been deployed, the Soviet player should take the following numbers of non-guard units, all untried and selected randomly by type, and set them up in the area between the initial front-line boundary and the Reserve Front boundary lines:

CD x9  
MRB x8  
MRD x4  
RB x17  
RD x78  
TB x9.

Soviet Forward Zone units may be set up within normal stacking limits (6.0), but every hex of the front line must have at least one rifle division set up in it. Beyond that stricture, the Soviet player is free to set up his Forward Zone units anywhere inside that area of the map.

**Designer's Note:** Both Soviet front boundaries permanently lose all significance as soon as set up is completed and play begins (exception: 4.4).

### 3.4 Remaining Soviet Guards Units

As the final step of his set up, the Soviet player should place the eight undeployed guard units into an opaque large-mouth container, such as a coffee mug.

GCD x2  
GRD x2  
GTB x4

For details on how they come out of that container see 9.4.

### 3.5 Once In, Once Out

The Soviet counter-mix has been structured so each unit of that side makes only one entry or exit from play. That is, no unit of the Soviet side will enter or exit play more than once per game. Whenever a Soviet unit is eliminated, one or the other player should put it back into whatever they're using as storage containers for the game's components.

### 3.6 German-Side Set Up

Once the Soviet player has completed his set up, the German player should start and complete the set-up of his side's units. Set aside, within easy reach, all the KG and ground combat support aircraft counters. All other German units begin set up anywhere west of the initial front line printed on the map; they may be set up adjacent to Soviet units. Normal stacking restrictions must be observed.

### 3.7 Hex Control

In this game, the idea of “hex control” (which side owns which hex at any given instant) is important for victory reckoning purposes (4.0). At the start of play, the German player controls all hexes west of the initial front line, while the Soviet player controls all hexes east of that line. 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. Don’t confuse the idea of “hex control,” presented above, with the idea of “zones of control” (7.0).

## 4.0 HOW TO WIN

The German player is generally on the offensive, trying to win the game by driving as fast as possible into the Soviet controlled portion of the map, there to capture Moscow and/or other key cities. If by early December he has managed to go significantly farther than occurred historically, he will be judged the winner of the game. The Soviet player generally wins by preventing his opponent from doing so; though an ‘offensive solution’ is also available to the Red Army commander. No drawn games are possible.

### 4.1 German Sudden Death Victory Via Moscow Entry

Play stops, and the German player is declared to have won the game, the instant either hex of Moscow comes under his side’s control. That doesn’t necessarily mean the Soviet Union would thereby be fully defeated in the war. Victory in the game is awarded to the German player under this circumstance simply because, he succeeded in entering the city, he has thereby so out-performed both his opponent and his historic counterparts that he deserves to win in the competitive-comparative sense.

### 4.2 German Sudden Death Victory Via Isolating Moscow

Play stops, and the German player is declared to have won the game, the instant a supply line can no longer be traced from both hexes of Moscow to any one or more of the Soviet supply source hexes on the north or east map edges. Both hexes may use the same or different tracing to complete a supply line (8.0). This tracing has nothing to do with the fact the Moscow hexes themselves are supply sources for Soviet units inside them (8.2). Make the victory-check trace as if the Moscow hexes were themselves units needing supply from a board edge.

**Important:** Both Moscow hexes must be cut off at the same time for this victory condition to apply.

*Note: This accomplishment wouldn’t necessarily mean the Soviet Union would thereby be fully defeated in the war. Victory in the game is awarded to the German player under this circumstance simply because, by isolating the city, he has thereby so out-performed both his opponent and his historic counterparts that he deserves to win in the competitive sense.*

### 4.3 German Victory by Other Means

The German player is declared to have won the game if, at the end of Game Turn 9 (Dec I), he controls all five non-Moscow city hexes on the map: Kalinin, Kursk, Orel, Smolensk and Tula. The supply states of those hexes are not relevant. This rule works to prevent the Soviet player from unrealistically ‘hedge-hogging’ all his units into the northeast corner of the map.

### 4.4 Soviet Sudden Death Victory

Play stops, and the Soviet player is declared the winner, the instant any town or city lying to the west of the initial front line comes under his side’s control. The supply state of the controlled hex is not relevant. This type of victory is awarded to the Soviet player because it means he’s penetrated far enough into the German rear area to significantly disrupt his opponent’s logistics and communications. The Soviet player is also awarded a sudden death victory if, for any reason, the German player fails to meet his withdrawal requirements (9.3).

### 4.5 Regular Soviet Victory

The Soviet player is declared to have won if, at the end of Game Turn 9 (Dec I), the German player hasn’t fulfilled any of that side’s victory conditions.

## 5.0 THE TURN SEQUENCE

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

### 5.1 Turn Sequence Outline

The turn sequence is given below in outline. The German player turn is the first player turn during each game turn.

#### I: German Player Turn

- A:** German Replacement & Withdrawal Phase.
- B:** German Movement or Combat Phase, or;
- C:** German Combat or Movement Phase

#### II: Soviet Player Turn

- A:** Soviet Reinforcement Phase
- B:** Soviet Movement or Combat Phase, or;
- C:** Soviet Combat or Movement Phase
- D:** Soviet Guards Conversion Phase
- E:** Soviet Terminal Supply Phase

### 5.2 Move or Fight; Fight or Move

At the start of every one of your player turns, you must declare in what order you will carry out your movement and combat phases that turn. That is, you may choose to have your units move (and, if you’re the German player, mobile assault) first and then make prepared assaults, or you may choose to fight first and move (and mobile assault) second. The decision is always up to each player. No matter what phase order you choose, all your units can participate to the limit of their normal capabilities in both phases. Moving, and possibly mobile assaulting, or making a prepared assault in the combat phase, doesn’t preclude a unit performing both operations each turn; only the order of execution is variable.

- Each player makes only 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.
- You may not choose one phase order for some of your units and the other phase order for others.
- Whenever the German player chooses the fight/move sequence, all his prepared assaults that turn gain a one column rightward (1R) odds shift in addition to any other applicable odds shifts (see the second paragraph of rule 12.3).

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## 5.3 Game Turn 1 Special Rules

No matter which phase sequence he chooses, during Game Turn 1 all the German player's MA and PA gain a one-column rightward odds shift. That reflects the tactical momentum achieved by the Germans when they first began their offensive, and is applied in addition to all other applicable combat odds shifters (10.0 & 11.0). If he chooses the fight/move sequence, his PA does not gain a two-column rightward shift that turn; that bonus remains just one column.

**Important:** Guderian Effect; During Game Turn 1's German Movement Phase, all mechanized-class units of that side that set up on the south map, and that spend the entire game turn moving and/or attacking only on the south map, have their movement factor for that turn increased to 14.

## 5.4 Tracking Game Turns

At the start of play put the Game Turn Marker into the Game Turn 1 box on the Turn Record Track. To keep track of 'game time,' move it forward one box on the track after each game turn.

## 6.0 STACKING

"Stacking" is the word used to describe the piling of more than one friendly unit into a single hex at the same time. The general rule is each side may stack up to five units per hex. Step and combat strengths have no bearing on defining a "unit" for stacking purposes. Each unit in the game is considered one unit for stacking purposes.

### 6.1 Stacking & Movement

Stacking rules are in effect throughout the game turn. Players should therefore pay 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 that phase.

- There are no limits on the number of units that may enter and attack through a given hex over the course of a phase, player turn or game turn, if stacking limits are always met on a hex-by-hex and instant-by-instant basis.
- If a 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 phase, 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) back into limits. The idea here is stacking violations should be noted and stopped before they're allowed to go on, during each phase as the game progresses. If, however, some stacking 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.

### 6.2 Free Stacking Units

Ground combat support aircraft units (2.14) have no stacking value of their own. They may be added to any stack in accordance with the rules given for their use (11.19).

## 7.0 GERMAN ZONES OF CONTROL

Every German ground unit in the game exerts a "zone of control" (ZOC) into the six hexes surrounding its location hex. There is no qualitative difference between a hex containing ZOC exerted there by one unit or by several.

**Important:** Soviet units do not exert ZOC.

### 7.1 Limits

ZOC do not extend across reservoir hex sides. They do extend into and out of all other hexes and across all other hex sides. They are exerted equally by units in both supply states and all step strengths.

### 7.2 ZOC Effect on Movement

All moving Soviet ground units must stop their movement for that movement phase in the first hex they enter containing a German zone of control (GZOC).

- Soviet units beginning their side's Movement Phase already in a hex containing a GZOC may move out of that hex provided the first hex they enter contains no GZOC. Soviet units may then enter another GZOC after moving into that first GZOC-free hex, but they would then be forced to halt their movement for that phase.
- Soviet units are never allowed to move from one GZOC directly into another GZOC.
- The above strictures are applied only to Soviet units during Soviet Movement Phases and during both sides' Combat Phases (11.26).
- The fact that a German unit or stack is projecting a ZOC as it moves next to, and possibly past, a Soviet unit or stack in no way stops or slows German movement. German ZOC only inhibit Soviet activities.

### 7.3 GZOC & Supply

In general, Soviet supply lines may not be traced, into or through, hexes containing GZOC. German ground units exert ZOC normally no matter their supply state.

**Exception:** 8.4

### 7.4 No Negating GZOC

In general, the presence of a Soviet ground unit in a hex containing a GZOC does not negate that GZOC for any purpose.

**Exception:** GZOC do not block Soviet advances-after-combat (11.31).

### 7.5 GZOC & Hex Control

The mere projection of one or more GZOC into a hex is not, by itself, enough to cause the control status of that hex to switch to the German side (3.7). A German ground unit must enter a Soviet controlled hex for such a control status switch to take place there.

## 8.0 SUPPLY

Units of both sides need supply to operate at their full potential. There are no counters representing the actual materiel consumed; instead, the process of supply consumption is represented by "supply line tracing" to "supply source" hexes.

### 8.1 Supply States

There are two supply states for the units of both sides, and each ground unit always exists in one of them. Each unit is always either “supplied” (also referred to as being “in supply”), or “unsupplied” (also referred to as being “out of supply” or OOS).

### 8.2 In Supply

A unit is in supply if it can trace a supply path of contiguous hexes of any length, unblocked by enemy ground units or GZOC, from its location to an appropriate supply source hex.

- The German supply source hexes are all those hexes along the west map edge.
- Soviet supply sources are the six hexes marked with a supply symbol along the assembled maps’ north and east edges.
- Soviet units stacked in city hexes are considered supplied while they remain in those hexes, provided only that city hex was never yet been under German control.

**Important:** This rule does not allow Soviet units outside cities to trace supply to them as if they were map-edge supply source hexes. Only Soviet units located in city hexes may use this kind of supply.

- Units in supply have their full movement and combat capabilities available for use.
- On the German side, only supplied mechanized-class units may make mobile assaults (10.14).

### 8.3 Tracing Supply Lines

A supply line consists of an uninterrupted chain of hexes traced from the unit or stack in question back to a valid supply source. Supply lines may enter and cross all kinds of terrain, water barriers and hexes except for the following:

- Only Soviet supply lines may be traced across reservoir hexsides.
- Units may NOT trace supply lines into or through enemy controlled city hexes, even if those city hexes are empty of actual enemy units.
- Neither side’s supply lines may enter hexes occupied by enemy units.
- Soviet supply lines may be traced from, but not through or into, GZOC hexes.

**Important:** The presence of one or more Soviet units in a hex otherwise containing a GZOC negates that GZOC for purposes of tracing Soviet supply lines into, out of, and through such hexes.

### 8.4 Gaining & Losing Supply Source Hexes

Map-edge supply source hexes lose their supply providing capacity while enemy controlled. That capacity is regained, 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 hex throughout the game.

**Exception:** A Soviet city hex, once it becomes German controlled, may never again provide supply to Soviet units that may later reenter it.

### 8.5 German OOS Effects

German units are never reduced in step-strength or eliminated for being OOS; however, their attack and movement factors are reduced to zero. OOS German units continue to have their normal defense factors available to them.

Check the supply status of each German unit or stack at the start of its movement and again at the start of each individual battle (both mobile assault and prepared assault) in which it is involved on offense.

- German units found to be OOS at the start of their move have their movement factors reduced to zero.
- German units found to be OOS at the start of any attack in which they would otherwise be participating have their attack factor reduced to zero.

**Note:** The wording of those last two sentences allows for the possibility of German units OOS at the start of a movement or combat phase to have a supply line opened to them by the action of other German units, and thereby allowing the resupplied German units to participate normally in the activities of that same phase.

- German mechanized-class units may not make mobile assaults unless they are in supply in the “launch hex” of that mobile assault. The “launch hex” of a mobile assault is the last hex occupied by those attackers prior to their entry into the defenders’ hex (10.17).

### 8.6 Soviet OOS Effects

Soviet units found to be OOS during any game turn’s Soviet Terminal Supply Check Phase (5.1), are eliminated and removed to the dead pile at that time (no matter if one-step or two-step units). During all other portions of the game turn, Soviet OOS units operate with all their movement and combat capabilities fully intact and available for normal use no matter what their supply state.

### 8.7 Deliberate OOS

It’s permitted for both players to deliberately move their units into hexes wherein they will or may become OOS.

### 8.8 Appropriate Supply Sources

The supply source hexes in the game work only 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.

## 9.0 REINFORCEMENTS, REPLACEMENTS, WITHDRAWALS & CONVERSIONS

Reinforcements are new units that enter the game after play has begun. Reinforcement units always enter play in supply and with their full movement and combat capabilities immediately available for normal use. Normal stacking restrictions must be observed when entering reinforcements. Soviet reinforcements are placed on the map during step A (5.1).

### 9.1 Soviet Reinforcements

The Soviet player may not delay the arrival of any of his reinforcements. Any reinforcements not entered for any reason during the turns indicated on the Turn Record Track are permanently eliminated from play. The Soviet player may enter his non-guard reinforcements, decided by him on a unit by unit, turn by turn, and hex by hex basis as follows:

- Via any of his side’s map edge supply source hexes that are under his control at that time.
- They may also be placed in any town or city hexes that are at that moment under his side’s control, have no German units in any hexes immediately adjacent to them, and have never yet, even just temporarily,

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been under German control. To be used as a Soviet reinforcement entry hex during any given game turn, a town or city hex must have been in supply to a map edge supply source hex at the very start of that Soviet player turn.

All Soviet non-guard reinforcements enter play in their untried state and are drawn randomly by that player from among the pool of all units of their type, with the exact number of each type to be entered shown in the boxes of the Turn Record Track. No type-substitutions may ever be made.

## 9.2 Replacements

The only German replacements in the game are entered with that side's November offensive (12.0). There are no Soviet replacements.

## 9.3 German Withdrawals

The German player is required to withdraw units from the map during the game. The German player may not decline to make any withdrawal; to do so would forfeit the game to the Soviet player (4.4). To be eligible for withdrawal, a selected unit need only be in supply. Simply pick up units to be withdrawn and set them permanently aside; they will not come back into play during the game. The German player must withdraw the following units:

**Game Turns 5, 6 and 7:** Each turn, withdraw one 4-8/2-4 infantry division (total of three).

**Game Turn 7:** German cavalry division.

Withdrawn divisions may be in their reduced or full-step strength when withdrawn. If a 4-8/2-4 infantry division is not available for withdrawal at a time one is to be made, a 3-7/1-3 division, full strength or reduced, may be substituted for it. If the cavalry division isn't available to be withdrawn when called for, any other mechanized-class division, reduced or full strength, may be substituted for it. (KG may not be substituted.)

## 9.4 Soviet Guards Conversions

On Game Turns 1 through 8, during step II.D of each of those Soviet player turns, a new Soviet Guards unit may enter play via "conversion." Guards units are all two-steppers, and enter play via the conversion of non-guard units already in play on the map. When the appropriate phase arrives, the Soviet player may enter a guard unit into play on the map by first removing a non-guard unit of the matching type, and then substituting in place the new guard arrival. The new guard units have their normal movement and combat capabilities available for regular use starting that game turn.

- Non-guard units selected for conversion may be either in their untried or veteran states. The Soviet player may view the veteran side of the selected untried unit; however, he may not change his mind about that conversion once he's viewed the unit's combat factors. The German player does not have any right to view the veteran sides of such converted untried units.
- The removed non-guard unit must be in supply via a map edge Soviet supply source hex at the time of the conversion.
- It must be of the exact same type as the guard unit into which it's being converted. (It need not share the same historic I.D. number.)
- Non-guard units removed to carry out guard conversions are not eligible for reentry into play on later turns.
- Guard units may never receive step-replenishment, nor may they be reclaimed from the dead pile in any way once there.

- Guard conversions may never be delayed. If they cannot be carried out during the game turns indicated, judged on a unit by unit and turn by basis, the unentered guard unit is eliminated.
- To determine which guard unit is to enter play each turn, the Soviet player should, without looking, reach into the container holding the general pool of guard units (3.4). He should select one randomly, and then immediately use the conversion process described above to bring it into play. All guard units enter play at their full two-step strength.

**Designer's Note:** *The Soviet player will more fully come to understand the criticality of guard units to his army's overall performance once he's read rule 11.29.*

## 10.0 MOVEMENT & MOBILE ASSAULTS

Every ground unit in the game has a "movement factor" awarded to it every game turn, based on its mobility class (2.8) and listed on the Turn Record Track. 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 one MP per hex to do so. The movement of each player's ground units takes place only during his own player turn's Movement Phase; no enemy movement takes place during your own player turn.

**Exception:** 11.26 (Retreat After Combat).

### 10.1 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 change the position of an already moved unit or stack only if his opponent agrees to allow it.

### 10.2 No Minimum Movement Ability

No unit is guaranteed the ability to move during a friendly Movement phase. To enter a hex (or cross a river hexside), a unit must have sufficient MP remaining to it to pay for the costs involved in that move. OOS German units may not be moved at all while in that state (8.5).

### 10.3 Enemy Units

Your side's ground units may normally never enter hexes containing enemy ground units,

**Exception:** See 10.14 for an important exception.

### 10.4 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.

### 10.5 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 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 previous stack without your opponent's permission.

### **10.6 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 moving with the faster ones.

### **10.7 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.

### **10.8 Natural Terrain & Hydrography.**

There are five types of natural terrain and hydrographic features on the map: clear, forest, marsh, river hexsides and reservoir hexsides. The effects those various features have on the movement of ground units are described below and are also summarized on the Terrain Effects Chart (TEC) for quick reference during play.

**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. For a hex to be considered clear, it must be entirely devoid of all other natural terrains. All city hexes and town hexes are considered to have a base of clear terrain.

**Forest Hexes:** Represent areas of tree cover or broken terrain. Each forest hex costs units one MP to enter. If a hex contains any amount of forest terrain, that entire hex is considered fully forested for all movement and combat purposes.

**Marsh hexes:** May not be entered by mechanized units other than cavalry. Non-mechanized units and cavalry units pay one MP per marsh hex entered. Both sides' cavalry units are considered mechanized-class units for all purposes except for this one characteristic. If a hex contains any amount of marsh terrain, that entire hex is considered fully marsh for all movement and combat purposes.

### **10.9 River Hexsides**

Rivers run between hexes, along hexsides, rather than existing in-hex. Every river hexside may be crossed by all units of both sides by paying one extra MP for the crossing. "Extra" means in addition to the movement cost for the hex being moved into.

### **10.10 Reservoir Hexsides**

No movement or combat is allowed across reservoir hexsides for either side, but see 8.3 for a Soviet logistical exception.

### **10.11 Manmade Terrain & Movement**

Manmade terrain exists in three types: cities, towns and Soviet fortifications. The movement cost for entering hexes is determined by the natural terrain in them and any hydrographic features along their hex sides. Each hex is identified by only one type of natural terrain; manmade terrain, however, may exist in hexes along with natural terrain.

### **10.12 Cumulative Costs**

The total movement cost for entering any hex is always the sum of the terrain and any river-crossing costs involved. For example, a unit entering a clear hex by crossing a river hexside into it would pay a total of two MP to do so. That is, one MP to enter the new hex and an "extra" MP to cross the river hexside.

### **10.13 Off Map Movement**

Units, once in play on the map, may never voluntarily move, advance- or retreat off the map.

**Exception:** German withdrawals (9.3).

**Design Note:** *If this is your first time reading these rules, it's probably best for you to skip over for now rules 10.14 through 10.23, and resume reading at the start of section 11.0. Return to this place after you've finished reading section 11.0.*

### **10.14 German Mobile Assaults**

All German mechanized-class units, including cavalry, may conduct a special form of attack during their side's Movement Phases called "mobile assault" (MA). All types of German mechanized-class units may potentially participate in MA, but for panzer grenadier or cavalry units to be able to do so at least one panzer division or panzer KG must be involved in the same MA. Panzer grenadiers or cavalry alone, or in combination with each other but without at least one panzer unit also participating, may not make MA. Within normal stacking limits, one panzer unit enables any number of panzer grenadier or cavalry units to participate in the same MA with it.

### **10.15 MA Procedure**

To conduct an MA, an eligible German mechanized unit or stack enters the Soviet occupied hex chosen to be attacked, paying two additional MP to do so. A given German mechanized unit or stack may not conduct more than one MA per German Movement Phase, but any given Soviet occupied hex may potentially be mobile assaulted any number of times during the same German Movement Phase, if each new MA is conducted by new units with sufficient MF to pay for each new effort. The German player must observe stacking limits at all times in MA launch hexes. An MA "launch hex" is the last hex occupied by the assaulting German force just prior to entering the defender's hex. The stacking limits for the two sides' involved units within the assaulted hex itself are mutually exclusive.

### **10.16 MA General Limits**

MA may be launched into any kind of hexes other than marsh terrain. Clear terrain hexes that contain cities or towns or fortifications may be the targets of MA. MA may never be launched across reservoir hexsides. MA may be launched across river hexsides, but they suffer a one column leftward shift for it (in addition to any in-hex odds shifter).

### **10.17 MA & Supply**

The supply state of otherwise eligible German units in an MA is determined at the instant of battle and at the location of battle. That is, no German mechanized-class unit or stack may take part in an MA if it is OOS in the launch hex for that MA at the instant the MA is begun.

### **10.18 MA Stack Eligibility**

To be able to MA together during a given Movement phase, German mechanized-class units must have begun that phase already stacked together.

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## 10.19 Unfavorable Combat Result

If an MA achieves any result that fails to entirely clear the attacked hex of Soviet units, the involved German force suffers whatever losses are dictated by that result (if any), and the survivors are placed back in their launch hex, where they must remain for the rest of the phase. Such stalled units could still potentially attack (PA) in the following German Combat Phase, provided the sequence chosen for that turn had been move/fight.

## 10.20 Favorable Combat Result

If an MA completely clears the target hex of Soviet units, the assaulting German units may continue their movement from that hex with the MF remaining to them. They may not, however, launch another MA that same phase, though they might yet PA if the sequence chosen that turn was move/fight. Note there is never any automatic advance-after-combat in victorious MA as there is with victorious PA (11.31). All post-MA movement is governed by the MF left to the moving units.

## 10.21 MA & Phase Sequence

The ability of German mechanized-class 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 Combat Phase prepared assault and then, during the following Movement Phase, also launch an MA. The same is true when the move/fight sequence is chosen; units that launched an MA during the Movement Phase might also participate in a prepared assault during the Combat Phase later that same German player turn.

## 10.22 Retreating-After-Combat & Subsequent 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 hex comes under subsequent MA attack that same German Movement Phase, the Soviet units that retreated into the new hex do 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.

- When conducting a mobile assault, the GZOC of the mobile-assaulting force doesn't work to prevent the retreat of the Soviet unit/stack being mobile assaulted. That is, mobile-assaulting does NOT turn the "DR" combat result into a "Death Ray" result. Mobile-assaulted Soviet units can retreat out from under the GZOC of the force assaulting them. Of course, though, any GZOC from German forces positioned in hexes nearby the mobile-assaulted hex remain in force and do work to block retreats.
- When determining the direction of a Soviet retreat from an MA, precedence must be given to the hex directly opposite the hexside through which the mobile-assaulting German force entered the defended hex. If that hex is blocked for any reason, the Soviet player must then give precedence to retreating via either of the hexsides adjacent to that blocked hexside (his choice), and so on around the perimeter of the defended hex until the hexside from which the Germans launched their MA is reached. Soviet units retreating from an MA may never retreat into the hex from which that MA was launched against them

## 10.23 Summary

Within the limits and exceptions given above, MA are generally resolved the same way as PA (11.0).

**Note:** 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.

## 11.0 COMBAT PHASE PREPARED ASSAULTS

Prepared Assault (PA) combat takes place between adjacent opposing units during the Combat Phase in every player-turn. Attacking is always voluntary for both players; the mere fact of enemy units' adjacency doesn't necessitate your units launching PA or MA against them. Within the strictures of sections 10.0 and 11.0, both players are free to attack or not, as each chooses, during each of their own player turns' Combat Phases throughout the game. 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.

### 11.1 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 combined defending unit.

### 11.2 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 the surrounding hexes, but no more than one hex may ever be the object of any one PA, which is also true for MA (10.14).

### 11.3 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 is attacked by others. No attacking unit may attack more than once per Combat Phase, and no defending unit may be attacked more than once per Combat Phase.

### Exception: 10.22

### 11.4 Attack Sequencing

There is no artificial limit on the number of PA each player may resolve during his Combat Phases, which is also true for MA during the German player's Movement Phases. The attacker need not declare all his attacks beforehand, and he may resolve them in any order he wishes if the resolution of one is completed before that of the next is begun.

### 11.5 Stacks in Prepared Assaults

It's not necessary for all the units you have stacked in a hex to participate in the same PA. Some of the units in a stack might attack into one hex while others attacked into another or simply didn't attack at all. Note, though, each attack made into a different defended hex would have to be resolved as a separate battle. No defending unit may ever refuse combat.

### 11.6 Fog of 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 may the German player examine his opponent's reinforcement units piled off to the side of the Turn Record Track.

### **11.7 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.

**Example:** If 26 attack factors attack 7 defense factors, the situation yields an odds ratio of 3:1 ("three to one"). That is,  $26 \div 7 = 3.71$ , which rounds down to 3. To turn that "3" into a ratio, you 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 (CRT).

### **11.8 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.

**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 ( $11 \div 5 = 2.2$ ), 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").

### **11.9 Odds Limits**

The column headings on the CRT range from 1:3 to 5:1. Final odds greater than 5:1 are resolved without a die roll; their results are always "DE." Final odds less than 1:3 are also resolved without a die roll; their results are always "AL1." When determining combat odds, always apply all applicable odds shifters to obtain a final odds ratio prior to referring to the CRT.

### **11.10 Combat Modifiers**

The odds obtained in the calculations described above may be modified ("shifted") by the terrain in the defender's hex and any river around its sides, as well as other factors described below. All applicable combat modifiers are cumulative in their effect. That is, in every battle all applicable modifiers are determined and their effects considered before the "final odds" are determined and the die is rolled to get a combat result.

### **11.11 Clear Terrain**

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

### **11.12 Forest**

Soviet units defending in forest hexes against German MA receive a one column leftward odds shift (1L). There are no combat odds shifts due to the presence of forest terrain for either side's units when defending there against Combat Phase prepared assaults.

### **11.13 Marsh**

Mechanized-class units other than cavalry may never move or attack into marsh hexes in any way. The German cavalry division may not MA into any marsh hex because it would, of necessity, lack the panzer unit needed to lead such an effort. When cavalry and/or non-mechanized units PA against defenders in marsh hexes, neither side gains or suffers any column shift because of that terrain.

### **11.14 River Hexsides**

If all attacking units in an MA or PA are coming across a river hexside, the defending side in that combat benefits from a one column leftward odds shift.

### **11.15 Reservoir Hexsides**

Units of both sides may not conduct a MA or PA across reservoir hex sides.

### **11.16 Towns**

Towns themselves never generate any kind of combat odds shifter or modifier in this game, but fortifications in town hexes do make themselves felt as usual for all combat purposes (11.18).

### **11.17 Cities**

Soviet units defending against an MA or PA in a city hex never suffer the concentric attack bonus (11.20), no matter what the positions of the attackers around the defended city hex.

- All units of both sides defending in city hexes gain a two-column leftward (2L) odds shift.
- Whenever Soviet units attack into city hexes, both AS and DR combat results must be converted to AL1.
- In German PA into cities, DR combat results must be converted into either AS or "Bloodbath" results. The German player is generally free to choose which result to convert to (11.28).
- German panzer units must use their defense factors as their attack factor when attacking into cities, both MA and PA.
- Neither player may retreat-after-combat (11.26) 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 player trace his supply lines into or through such hexes.

### **11.18 Soviet Fortifications**

All fortifications on the map belong to the Soviet side; there are no German fortifications.

- All fortifications are always considered to be intact and operative.
- If a fortification hex is taken control of by the German side only to be retaken later by the Soviet side, the fortifications in that hex again generate their combat bonus for any Soviet units defending in them.
- When Soviet units defend in a fortification hex, the combat effect of those fortifications is to shift the odds one column leftward, in addition to any other applicable odds shifters, in both MA and PA.
- There are never any fortification odds shift for German units that may be defending in such hexes.
- When German panzer units attack into a Soviet fortification hex, they must use their defense factor as their attack factor.

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## 11.19 Ground Combat Support Aircraft

At various times both players are awarded ground support aircraft counters. On the Turn Record Track, two numbers are listed after the word "Air." The number to the left of the slash is the number of German combat aircraft units available that turn; the number to the right is the number of Soviet combat aircraft units available that turn.

**Note:** Both players never have aircraft available during the same game turns; it's always just one or the other.

- Aircraft may not be in any way accumulated or saved from game turn to game turn. The single Soviet aircraft unit is back printed on one of the two German aircraft units.
- The player with aircraft available may commit them to support any one or two battles, either offensively or defensively, MA or PA, anywhere on the map. Aircraft counters have no stacking or combat value of their own, nor may they be given up satisfying combat result requirements. They are, in effect, indestructible in game terms.
- The effect of an aircraft counter is to generate a one column shift in favor of the owning side.
- Each aircraft counter awarded to a player may be used once per game turn, up until the time of its removal at the start of the subsequent game turn.
- More than one aircraft counter may be committed to the same MA or PA.
- The player with aircraft must announce the commitment of the counter(s) prior to the revealing of the exact compositions of any involved stacks and/or untried Soviet units, and before any odds calculations have begun for the battle being resolved.
- German aircraft don't exert GZOC. Their inclusion in a battle in no way negates or inhibits the GZOC of the involved German ground units.

## 11.20 Concentric Prepared Assault

If a unit or stack is defending against a PA originating from two directly opposite hexes, or by units attacking from three hexes with one hex between each hex and the next, or by units attacking from more than three hexes, that PA gains a one column rightward (1R) odds shift. That bonus is available to both Soviet and German units making PA, but it's never available to German units making MA. Similarly, it's never available to units attacking into a city hex.

## 11.21 Final Combat Resolution

After all applicable odds shifters have been applied, and the final odds column determined, the attacker rolls a die and consults the CRT to get a "combat result." For example, a roll of "5" at odds of 1:1 yields a combat result of "AS" on the CRT. Apply all applicable modifiers before going to the CRT to find each battle's final odds column.

**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 5:1, the highest odds column shown on the CRT, and then shift 2L; you apply all modifiers first, then go to the CRT to find your column.

## 11.22 Combat Results in General

In each battle, the defender must always completely apply his combat result before the attacker applies his. There is never any carry over of a combat result from one battle to another or from one phase or turn to another.

## 11.23 AS: Attack Stalled

Both sides remain in place and neither side suffers any losses. When this result is achieved in a MA, the Soviet defenders remain in place and the German attackers are put back into their launch hex, from where they may not move again in that same phase.

## 11.24 AL1: Attacker Lose One Step

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 loss. When this result is achieved in an MA, the German force suffers its one step loss; the Soviet defenders remain in place, and the surviving German attackers (if any) are put back into their launch hex, from where they may not move again that same phase. The attacker is always completely free to absorb his step loss from among any of his involved units.

## 11.25 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. Neither player may retreat his units into hexes containing enemy controlled cities, even if that city is empty of actual enemy units at the time of the retreat. If there is more than one eligible hex available to receive a retreating stack or unit, 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.

## 11.26 Retreat-After-Combat Movement

Retreat-after-combat doesn't use movement points, and it has nothing to do with the costs involved with Movement Phase movement. Retreating units, however, must still observe normal movement prohibitions.

**Example:** No unit may ever retreat across a reservoir hexside.

Stacking limits must also be observed during retreats. 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 (11.29). 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. Retreating is always an all-or-nothing proposition; either the whole defending force retreats or the whole defending force stays and instead suffers a DE result, based on the strictures given above. Soviet units may not retreat into hexes containing GZOC (7.0).

## 11.27 Retreating-After-Combat into Subsequent PA

If defending units in one PA retreat-after-combat into a hex containing other friendly units, and that hex comes under attack that same Combat Phase, the units that retreated into the new hex in no way contribute to their new location's defense against the attack being waged there. If the original defenders in the new hex receive any combat result other than AS or AL1, the newly retreated-in units are automatically and fully eliminated, and their elimination doesn't serve to satisfy any of the current PA's defender result. (That's different than the process described for mobile assaults in 10.22.)

### 11.28 DR Conversions

Whenever the German player attacks into a city, MA or PA, and gets a DR result, he must convert it to an "AS" or "Bloodbath" result.

- In a bloodbath (a result not otherwise on the CRT), all involved Soviet defenders suffer a DE result (11.29), then the German player must eliminate from among his involved units the number of steps equal to the number of steps just lost by the Soviet player. (That's steps, not combat factors.)
- If choosing a bloodbath would leave the German player without at least one surviving step among his involved force, he must choose AS; otherwise, he's free to choose either conversion result.
- Whenever the Soviet player attacks into a city and gets a DR result, it's automatically converted into an AL1.
- When German units are defending in a hex other than a city, and they receive a combat result of DR from a Soviet attack, the German player may choose to execute that DR retreat result normally or he may decide to convert it into a "Defender Lose 1" result (a result not otherwise on the CRT). To do that he eliminates any one step from among any one of his involved units, thereby allowing all to hold their place. He may not choose to convert a DR to a Defender Lose 1, however, if in doing so he would thereby be eliminating his entire involved force.

### 11.29 DE: Defender Eliminated

When this result is achieved in a PA or MA, the defender must first eliminate all his involved one-step units. Immediately after that he must reduce all his involved two-step units (if any) to one-step strength. The attacker suffers no losses. In a PA, the attacker may make an advance-after-combat into the defender hex if the DE result has left it empty of enemy units.

### 11.30 German Panzer & Panzer Grenadier KG

Whenever a panzer or panzer grenadier division (not brigade or regiment) that's been reduced to one-step strength is then eliminated for any reason, immediately replace that unit-counter in the same hex with a KG counter of its same type: 2-1s for panzer divisions and 1-2s for panzer grenadier divisions.

The two types of KG are reverse-printed on each other; that doesn't make them two-step units. Each KG is a one-step unit that enters play with a permanent configuration and type. When/if the KG counters run out, the process stops; entered and eliminated KG may not be entered into play a second time. (There are only some many stalwarts per army group.) Beyond that, once entered into play, each KG immediately begins operating normally as a unit of its type and mobility class.

### 11.31 PA Advance-After-Combat

At the end of every PA (not MA), whenever the defender's hex is left vacant of defending units, either due to elimination 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. GZOC don't serve to block the ability of victorious Soviet attackers to advance-after-combat.

Advancing-after-combat is an option; it's never mandatory (exception 12.1). 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 (exception; 12.1). There is never any defender advance-after-combat; victorious defenders simply hold their place.

## 12.0 GERMAN NOVEMBER OFFENSIVE

The German player may openly declare a "November Offensive" at the very start of Game Turn 4, 5, 6 or 7 (Oct IV, Nov I, Nov II, or Nov III). He is not required to declare any such offensive, and he may never declare more than one per game. There is an unavoidable one game turn delay between the declaration and execution of a November offensive.

### 12.1 Game Turn of Declaration

During the German player turn that immediately follows the German declaration of a November offensive, the following is in effect:

- No German attacks, MA or PA, may take place.
- All German mechanized-class units have their MF reduced by two.
- All German non-mechanized units have their MF reduced by one.

**Example:** If the German decided to make his November offensive declaration at the start of Game Turn 5 (Nov I), his supplied mechanized-class units would have MF of one that turn, while his supplied non-mechanized units would have MF of two. That's a "2" and a "1," respectively, subtracted from the MF that would otherwise be awarded for the two classes of units on the Turn Record Track that turn.

During the Soviet player turn of the game turn of the German offensive's declaration, Stalin reacts to the lull (and the obvious new offensive it portends) by ordering the Soviet player to launch spoiling attacks.

- To determine the exact magnitude of the required Soviet attacks, the Soviet player must roll a die at the start of his player turn that game turn and multiply that result by three. That will yield a number between three and 18, which represents the minimum number of units he must launch into PA that turn against German units.
- Beyond the requirement to attack with a certain number of units, the Soviet player is free to resolve his Stalin-mandated spoiling attacks normally.

**Exception:** When it is possible to do so, the Soviet player must advance-after-combat as many of his victorious units as possible into vacated German-defended hexes.

**Note:** Every Soviet unit, no matter its organizational size or step strength, counts as "one unit" for purposes of satisfying Stalin's order.

If, by some unusual set of circumstances, the Soviet player is unable to attack with the minimum number of units mandated by Stalin, no matter how he moves his units or sequences his phases, then whatever turns out to be the maximum number he can engage is considered sufficient to satisfy the great leader (even if that number is zero). In relation to choosing his phase sequence, if one sequence allows him to meet Stalin's minimum-attack-size demand and the other doesn't, the Soviet player must choose the sequence that best allows him to comply with those orders.

### 12.2 Game Turn of Execution

The German November offensive is launched and executed during that side's player turn in the game turn following its declaration.

# DRIVE ON MOSCOW: OPERATION TYPHOON, 1941

**Example:** If the German player declared his offensive at the start of Game Turn 6, it would be run during Game Turn 7.

During the game turn of execution:

- All German mechanized-class MF are increased by two.
- All German non-mechanized MF are increased by one.

**Example:** In the example cited above, during a November Offensive executed during Game Turn 7 (Nov III), German supplied mechanized-class units would have MF of eight, and German supplied non-mechanized units would have MF five.

- All German PA launched that turn receive a one-column rightward shift. Those shifts are in addition to all other normal odds shifters.

**Exception:** If the German chooses the fight/move sequence, his PA the turn of the November offensive only gains a one column rightward shift, not a cumulative two.

- The German player's normal ground combat support aircraft allocation is also increased by one beyond what's shown on the Turn Record Track for that turn.
- The German player also receives three steps of mechanized-class replacements and three steps of non-mechanized class replacements. Each of the three mechanized replacement steps may be used to replenish a reduced panzer or panzer grenadier division to its full two-step strength. Each of the three non-mechanized replacement steps may be used to replenish a reduced infantry division back to its full two-step strength. Divisions of both categories must be in supply to receive a replacement. No KG may be replenished back into divisional form, nor may the L Brigade or GD Regiment receive replacements. The replacement steps may not be accumulated for use in later turns, nor may any step be used to replenish a unit from outside its own mobility class. Units that receive replacements may operate normally that turn and thereafter.

## 12.3 No November Offensive

If the German player hasn't declared a November Offensive by the start of Game Turn 7 (Nov III), he thereby permanently forfeits the ability to do so. In that case, play continues uninterrupted except for the following effects:

- For the remainder of the game, due to increasing German logistical and replacement shortfalls, all German MA and PA suffer a one-column leftward shift.
- All Soviet attacks gain a one-column rightward shift bonus. (All those shifts are in addition to the continued application of all other normally applicable shifters.)

## 13.0 DEVELOPERS' NOTES

by Ty Bomba

This game was originally designed over half a decade ago by my good friend and comrade-in-arms, Joseph Miranda, using his well-liked *Balkans '41* system, which was published way back in the 20th. Since then, however, the component structure of *S&T* has evolved considerably. What 'fit' then, in terms of word-counts and page-counts, isn't a 'fit' now. That was why the decision was taken to redesign DoM to use the similarly well-liked system from Drive on Stalingrad.

Concerning the air-system of *DoM*: this is an area of disagreement between JM and myself. That is, my belief is, the air system of *Balkans '41* is historically inaccurate in that it allows players too many clear-cut and well-developed options for that stage of the war. It presents a system that allows players, particularly the German, to regularly gain operationally significant results with tactical airpower. My belief is, that kind of thing — operationally significant results as an outcome of the application of tactical airpower — was only achieved three times during WWII: Poland in 1939, Southeast Asia in 1942-45, and northwest Europe in 1944-45. Further, those operational successes were, I think, due to unique circumstances that prevailed in each of those cases.

In 1939 the Germans got such powerful results because the Poles, for political reasons, didn't begin their armed forces' mobilization until war was already upon them. Since that mobilization was inescapably tied to a handful of important and easily identifiable rail-junction cities, the Germans, by returning again and again to hit those places, could achieve the operational disruption of much of the mobilizing Polish army. They were in fact able to delay all of, and completely overturn parts of, that process.

In Southeast Asia, the overall topographic situation across that vast region at the start of the Pacific War could be summarized as an immense, under-developed, agricultural and semi-wilderness tied together by a few major, easily recognizable, transport arteries and large ports. That meant, despite the vast size of the overall theater of operations, tactical air forces of both sides could achieve operationally significant results by concentrating their efforts against its few transport arteries and nodal points.

In northwest Europe in 1944-45, the Allies got such good results, first, because they simply had such immense aerial resources to bring to bear against the Germans. Second, aerial technologies and doctrines had by then been improved to the point nighttime and bad-weather operations were no longer entirely ruled out.

In terms of what was lacking for tactical airpower early in the war in Europe — to dependably expand tactical airpower into operational airpower — what was needed was: nighttime and all-weather attack capability, air transport and supply doctrine, and corresponding amounts of equipment designed specifically for those kinds of operations.

The primary source that's most affected my understanding this aspect of World War II's air war is the transcribed, book-length debriefing of *Luftwaffe* Gen. A.D. "Fritz" Morzik, head of that air force's transport arm during the war. His memoir of that aspect of the struggle runs to 417 pages, and was published by the USAF in 1968 through Arno Press, under the title: *German Air Force Airlift Operations*. (Interestingly, in World War I, Morzik flew as a combat pilot in the "Pasha" squadron Germany sent to the Middle East theater.)

Morzik points out in his book that, contrary to popular wisdom, German air-transport and air-supply doctrine didn't simply arrive, full-blown, on 1 September 1939. At the start of the war the only troops the Germans believed would need that kind of thing were the relatively small numbers of paratroops, and perhaps the single army division of light "air landing" troops. No one was imagining large numbers of regular German ground force troops would need to be supplied by air as they fought to survive behind the enemy front in large pockets. A further important upshot of that failure of imagination was the fact the only air-droppable supply canisters on hand were, again, small and light affairs intended only for use with paratroopers. German Paratroop doctrine, in turn, called for them to be quickly linked up with advancing ground forces—and hence their rapid reintegration into the regular supply net.

Thus, when "air supply" was used during the portion of the war fought prior to the pocket-formation battles, which started taking place for the first time early in 1942, it was used to speed the forward movement of some critical type of commodity (for instance, gasoline being moved in "Gerry Cans") along existing overland supply routes. It was not conducted as a logistical operation independent of the on-the-ground German supply system.

The need for large air-droppable supply canisters became apparent, at places like Kholm and Demyansk, only in 1942. The tube-like containers used by the paratrooper "sticks" were then found to be inadequate. Not only were they too small to hold the kinds and quantities of supplies needed by trapped German conventional units, they were also too light to hold together against the stresses inherent in being air-dropped when crammed full of those other types of commodities. Thus, Morzik had to pretty much start from scratch, overseeing the speedy design and initial production of a whole new set of supply canisters. (The fact he was able to do that in a matter of weeks, rather than months or even years, is remarkable.)

In pockets, large enough to contain airfields there was also a problem in that the Germans trapped on the ground there, no matter how bad the tactical situation might become around the airfields, would inevitably report via radio that it was OK

for the transports to come in and land. From those men's perspectives, of course, they were managing to survive in the terrible conditions of a pocket; so, they certainly weren't going to let some flyboys get by with abandoning a supply mission because of a 'little enemy gunfire' over an airfield.

Morzik solved that problem by quickly instituting Luftwaffe logistics command liaison teams, who were air dropped (or landed on the airfield) into such pockets as soon as they were formed. Those teams were independent of the chain of command of the pocketed troops, reporting directly to Morzik; and they had the yes/no say-so on whether conditions allowed for landing Luftwaffe transports.

Morzik's changes and reforms worked so well that during 1944-45 it wasn't unusual for pocketed German troops to get better supply via the Luftwaffe than their comrades outside the pockets got through regular German Army logistical channels.

In the realm of operational combat results, as I mentioned above, the great weakness of most World War II tactical air forces was their almost universal and complete lack nighttime and bad-weather attack capability. The common north European weather feature of daytime low-cloud cover could often overturn one side's tactical air dominance above a fighting front. And it never took long for ground commanders on the losing side of the tactical airpower contest to realize it was time to put their units, in so far as operational maneuver was concerned, on the 'night shift.'



# DRIVE ON MOSCOW: OPERATION TYPHOON, 1941

For all those reasons, then, I've come to view the original air system from *Balkans '41* as what amounts to an 'alternative history' view of that component of the early-war fighting in Europe. I think it could be easily adapted to the widening powers and uses for tactical airpower for campaigns that began in 1942 and after, but it allows for a way-too-sophisticated use of airpower in campaigns prior to that time.

The traditional Soviet winter counteroffensive scenarios are also missing from *DoM*. The simple reason for that is, the map scale is wrong for that to be an interesting option. That is, at this map scale, the farthest penetration into the Germans' position, after three-and-a-half months of Soviet hammering (14 game turns), was nine hexes. In contrast, the Germans go about three times that distance in nine game turns.

My experience with that kind of thing was set in place decades ago when first playing the original AH *Battle of the Bulge* game. That is, both players would sit down to it while swearing they were both ready to fight it out to the bitter end. Of course, come 23 or 24 December, and it became clear the Germans weren't going to jump the Meuse, etc., that player would sigh and say something like: "Say, I believe we can see where this is going. Why don't we put it away and get something else out to play that we can both enjoy?"

We used to call that kind of thing the "Bulge Syndrome." I sought to avoid it here. The idea in *DoM* is to make it be as accessible as possible in terms of a big game. That means one scenario—which works to focus everyone's play, most quickly generate AARs and strategy articles, etc., while also controlling playing time and overall rules length.

## PLAYERS' NOTES

The key to the game for the German player is to plot a strategy—and, just as important, make your initial operational deployments—in such a way that your forces' ever-deteriorating mobility can still get the job done. Above all, that means deploying your forces so you can drive on Moscow and all the other cities on the map at the same time. More than one playtest game was lost when, during the final turns, the German commander realized he was only one city away (usually Kursk) from a victory based on rule 4.4. The thing is, it doesn't matter how under-defended a Soviet city is if you can't get anything there to attack it in time. If you just kind of 'mob up' your combat power in the center of the front, figuring you'll send out expeditionary forces toward the flanks as circumstances evolve—which seemed to be the dominant approach among first-time German commanders—against competent Soviet play you will lose every time.

When it comes time to make the "November Offensive" decision, study the map. Essentially, if you decide for that offensive, you'll be giving up one turn of normal operations to get a doubled-up turn of operations. Whether that trade-off is worthwhile will depend entirely on the distance you still must go to reach your objectives.

The key to winning for the Soviet player is found in that side's Guards formations. Don't attempt to use them to create massed, counterattacking "Guards Army"—this isn't yet that phase of the war. Spread out the Guards into the key locales, while also establishing a main reserve of them in Moscow.

## TERRAIN KEY



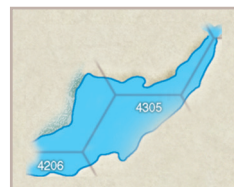
CLEAR



FOREST



MARSH



RESERVOIR HEXSIDES



RIVER HEXSIDES



TOWNS



CITIES



STARTING FRONTLINE BOUNDARY HEXSIDES



SOVIET SUPPLY SOURCES



SOVIET FORTIFICATIONS



*German mountain hunters during a march near the German-Soviet border, 22 June 1941.*



## MOSCOW, 1941: GUDERIAN VS. HITLER

*By Joseph Miranda*

**T**he most controversial decision of the Barbarossa campaign was Hitler's diversion of the two panzer groups of *Army Group Center* to support *Army Groups North* and *South* in August 1941. Both during and after the war, Hitler's critics claimed, had the Germans continued their advance on Moscow in the late summer, the Soviet capital would have fallen. What led to Hitler's decision? And what would have happened had the Germans advanced on Moscow in the summer of 1941?

One of the main advocates of the Moscow-first strategy was Gen. Heinz Guderian, commander of *2<sup>nd</sup> Panzer Group* and one of the chief proponents of mobile armored warfare. He saw Moscow as the Soviet center of gravity. Moscow, indeed, was the Soviet capital and it contained the central offices of the state apparatus and was also the psychological center of communism itself. Taking Moscow, Guderian stated, would cause communism to collapse as a unifying force, thereby encouraging the nationalities subjugated by the Soviet Union to revolt. Also in the Moscow area were numerous armament factories, and taking them would undermine Soviet military capabilities. Finally, the Soviets were sure to make a stand in front of Moscow, thereby allowing the Germans to engage and destroy the remaining Red armies.

One reason Guderian and the other generals pushed for an offensive against Moscow is they did not realize the extent to which the Soviets had mobilized. The Germans thought they were winning in the summer of 1941. The bulk of the Red Army divisions on the frontier had been destroyed and key economic areas had come under the Reich's control. The panzer generals assumed Moscow could be captured quickly by mechanized divisions alone.

There were, however, some ominous forebodings. Despite the destruction of large numbers of Soviet divisions, new Red Army units always seemed to take their place. Prior to the start of *Barbarossa*, the Germans had anticipated having to engage some 200 Soviet divisions. By August they had come in contact with 360. As early as 23 July, Franz Halder, German army chief of staff, issued a communiqué implying Soviet economic and manpower resources had to be eliminated prior to victory being attained, otherwise the enemy could always replace his losses. That clearly signaled a change in the German perception of the campaign; the initially anticipated quick victory was already starting to recede.

The Germans had assembled for *Barbarossa* some 3,700 tanks and assault guns and 3,400 aircraft. The respective Soviet totals were 28,800 and 8,100. To be sure, numbers were not

# The German Invasion of Russia

Operations from 22 June to 25 August 1941



*Guderian at a forward command post for one of his panzer regiments near Kiev, 1941.*



everything. The Germans were better trained and led, and they had a superior mobile warfare doctrine. The Soviets also had severe problems in maintenance and supply, rendering much of their equipment inoperable.

Even though the Germans destroyed or captured most of the Soviet tanks deployed against them at the opening of the campaign, the Russians could still mobilize more. It became a matter of having to defeat the Red Army again and again. The Germans could not go on doing so forever. Hitler admitted after the start of *Barbarossa*, had he known how much equipment the Soviets had, he never would have invaded.

Given the Soviet numerical superiority, some kind of decision had to be reached in 1941. While the capture of Moscow may not have materially destroyed the Soviet Union, it might have provided the psychological blow needed to turn the tide. If nothing else, it would have been one more proof of German might, and Hitler needed such prestige victories to maintain the politico-psychological balance in his favor.

In light of all that, then, why did Hitler at first oppose making Moscow the primary German objective? The answer is complex and has to do with a variety of military and political factors, some of them entwined in Nazi ideology.

Hitler, as were other Europeans, was familiar with the debacle of Napoleon in Russia in 1812. Moscow even then had been the great magnet that drew the French to their end. Napoleon took Moscow in 1812, but that still proved insufficient to produce a victory for the French. Instead, the campaign destroyed



the French Army. Once having marched deep into the Russian expanses, an invading army had no guarantee of getting out.

Hitler had wanted to destroy the Soviet Army in western Russia, west of the Dneper-Dvina Rivers. Previous invasions of Russia—those of Charles XII of Sweden in the early 18<sup>th</sup> century, as well as that of Napoleon in 1812—had failed when the Russians simply withdrew in front of the invaders. Hitler wanted to avoid having to confront intact Soviet armies farther east. An assault on Moscow in 1941 meant taking the direct



approach, one the Soviets would surely anticipate. By putting the emphasis of his attack in the north and south, Hitler took the line of least resistance. His decision was further tied to important economic and political factors.

In late July, Hitler declared Kiev a primary target for the German armed forces. He argued the destruction of the Soviet armies around Kiev, not the occupation of Moscow, would be the critical factor. Kiev was an important city for a number of reasons. It was the rail center for Soviet industry and communications in the southwest of the country.

Guderian and others countered the main Soviet armies were to be found near Moscow. What all the debate really indicated was the general confusion in objectives among the Germans just at the time the campaign was reaching its crisis.

There were, in fact, good reasons for the Germans to take Kiev before proceeding to Moscow. Kiev had become the anchor of a salient containing several Soviet armies. If the panzers were to advance on Moscow without first reducing the Kiev salient, the Soviets could launch a counterattack from there against *Army Group Center's* flank.

Hitler was fond of saying his generals knew nothing of economics, and on one level he was right. Germany in 1918 had been defeated by a lack of food and resources as much as anything else. By conquering the Ukraine, the Third Reich would secure a source of grain, industrial ores and factory complexes. Their capture would also deny those resources to the Soviets. Stalin had ordered vital industrial machinery be evacuated to

the Urals, where Soviet industry could be reestablished out of range of the German advance. By delaying the attack on the Ukraine, the Germans would be giving the Soviets more time to evacuate still more factories and technical personnel.

Hitler also wanted to go after Leningrad because he saw it, rather than Moscow, as being the true center of Bolshevism. Leningrad had seen the start of the Russian Revolution. It was a more “modern” city in that, since the days of Peter the Great, St. Petersburg (the city’s original name) had been Russia’s window to the west. There were other strategic benefits to be had by going north. The capture of Leningrad would bring with it the capture of the Soviet Navy’s bases on the Baltic, and would thus give Germany complete naval domination of that sea. The capture of Leningrad would allow the Germans to link up with the Finns on a direct overland route, creating a united front, both militarily and politically, with that country. It would also clean up the front. In the end, the Germans tied down an entire army group for three years simply to cover Leningrad. Had they taken the city, those troops could have been sent elsewhere.

There was also the mundane matter of logistics. By the end of August, German tank strength averaged about 50 percent in the panzer divisions. By the end of September (that is, just prior to the start of the Moscow offensive), the Germans had managed to rebuild their tank strength to 70 percent. That increased strength was due to the German maintenance system putting disabled tanks back into the line. Therefore, the later start date for the Moscow campaign actually had the Germans at a higher

strength than they would have been in late August and early September. Also by early September, the Germans managed to push their rail net east of Smolensk, giving them a better logistical base from which to launch their assault on Moscow.

There was still another, and more fundamental, reason for Hitler's hesitation before Moscow, one that went to the depth of the National Socialist movement itself and, indeed, one that had permeated European politics since the revolutions of 1848: fear of Marxism.

In the aftermath of the collapse of the Soviet Union in 1991, it is easy to forget the extent to which communist ideology dominated much of the global worldview in the 20<sup>th</sup> century. Communism, among other things, proclaimed itself as being the scientific revolution, the wave of the future, the movement of the people. It proved capable of mobilizing entire nations for revolutions and war. Even Hitler had paid Marxism grudging tribute by naming his political party the National Socialist German Workers Party, knowing the only way to outdo the communists was to co-opt their slogans. The use of the color red so prominently on the Nazi flag was an attempt to steal the communists' iconography. It would be at Moscow that Hitler would have to prove National Socialism could meet and defeat international socialism.

## OPERATION TYPHOON

With all that in mind, Hitler ordered Operation *Typhoon*, the final assault on Moscow, on 16 September 1941. But only 3<sup>rd</sup> *Panzer Group* was in position to attack at that time. The actual offensive therefore didn't kick off until 30 September. In the first week, the panzers again made great advances, but on 6 October the ground turned to mud as the autumn rains began. There was also a light snowfall, an ominous portent of what was to come. Of course, the weather affected the Soviets just as much as the Germans, but as an army they were better adapted to it. Soviet tank treads were wider in order to be able to move more effectively over soft ground, and their horse drawn, large-wheeled, *panje* supply wagons had been adapted by centuries of experience with deep mud conditions.

Ironically, the fact the majority of the German army was not mechanized proved to be an asset here, at least for the several weeks of autumn mud. With the mechanized forces paralyzed by the sodden terrain, the infantry could catch up, even when marching cross-country.

As the Germans advanced, the Soviet military was continuing to grow. Some of the new units were hastily thrown together; others were built around veteran cadres. Between 22 June and 1 December 1941, the Red Army mobilized 194 divisions, along with 94 separate brigades, in addition to its starting forces. The Soviets would also bring in another 97 divisions from other parts of the USSR to their western front. The Soviets were, therefore, always able to put in new units to replace those that had been destroyed. Still, there were deficiencies in quality. Soviet divisions averaged 50 percent of the manpower



Gen. Georgy Zhukov speaking on 1 September 1941.

of comparable German units, and their training was below German standards.

Another important development had to do with the redesignation of certain Red Army units as "Guards." They were units that had proven their mettle in combat and thereafter received better personnel and equipment as a reward. The term "Guards" had its origin in the elite units of the Czarist Empire, and indicated the degree to which the communists were willing to use the terminology of Russian nationalism in order to maintain the support of the army.

On a higher organizational level, the Soviets also formed new units, the shock armies. They were essentially infantry formations reinforced with tanks, artillery and assault engineers. That evolution indicated the Red Army could adapt to the changing military situation, something that would prove decisive as the war dragged on. It would be the shock armies spearheading the Soviet counteroffensive that would throw the Germans back from Moscow in the winter of 1941-42.

Nor was the defense of the Soviet Union limited only to the military. The civilian populace was mobilized and performed heroically, building several defensive lines on the approaches to Moscow.

## MOSCOW 1941

In the end, Hitler ordered an advance on Moscow, and the Germans fought their way to the outskirts of the city before being stopped. The extent of the German advance in 1941 can be

# The German Drive on Moscow

## Operations from 26 August to 5 December 1941



--- Russo-German treaty boundary  
- - - Axis thrusts    - - - Soviet counter-thrusts  
   German forces  
   Romanian forces  
   Russian forces  
   Encircled Russian armies

0                      100 miles



*Soviet gun crew in action during the Siege of Odessa, July 1941.*

taken as evidence that, had the offensive against Moscow been ordered a month or so earlier—when ground conditions were better and Soviet resistance less well organized—it would have succeeded, and thereby perhaps have won the war in the east for the Germans. But that conclusion doesn't hold up to careful analysis.

In the first place, it's not clear the Germans would have captured Moscow in a late-summer offensive in 1941. To be sure, the Soviets were materially weaker in front of their capital in September than they would be in October, November and December. At least one of the reasons for that, however, was they were diverting forces to the northern and southern sectors of the front. A concerted drive on Moscow would have drawn in Soviet reinforcements from the Ukraine. That's what the German generals wanted: a battle of annihilation in the vicinity of the capital. Still, the Germans got their battles of annihilation anyway, in the Kiev and Vyazma encirclements, which netted some 665,000 and 650,000 prisoners, respectively. Yet those battles failed to end the resistance of the Red Army. As long as the Soviets could mobilize more reservists and train more personnel, resistance would continue.

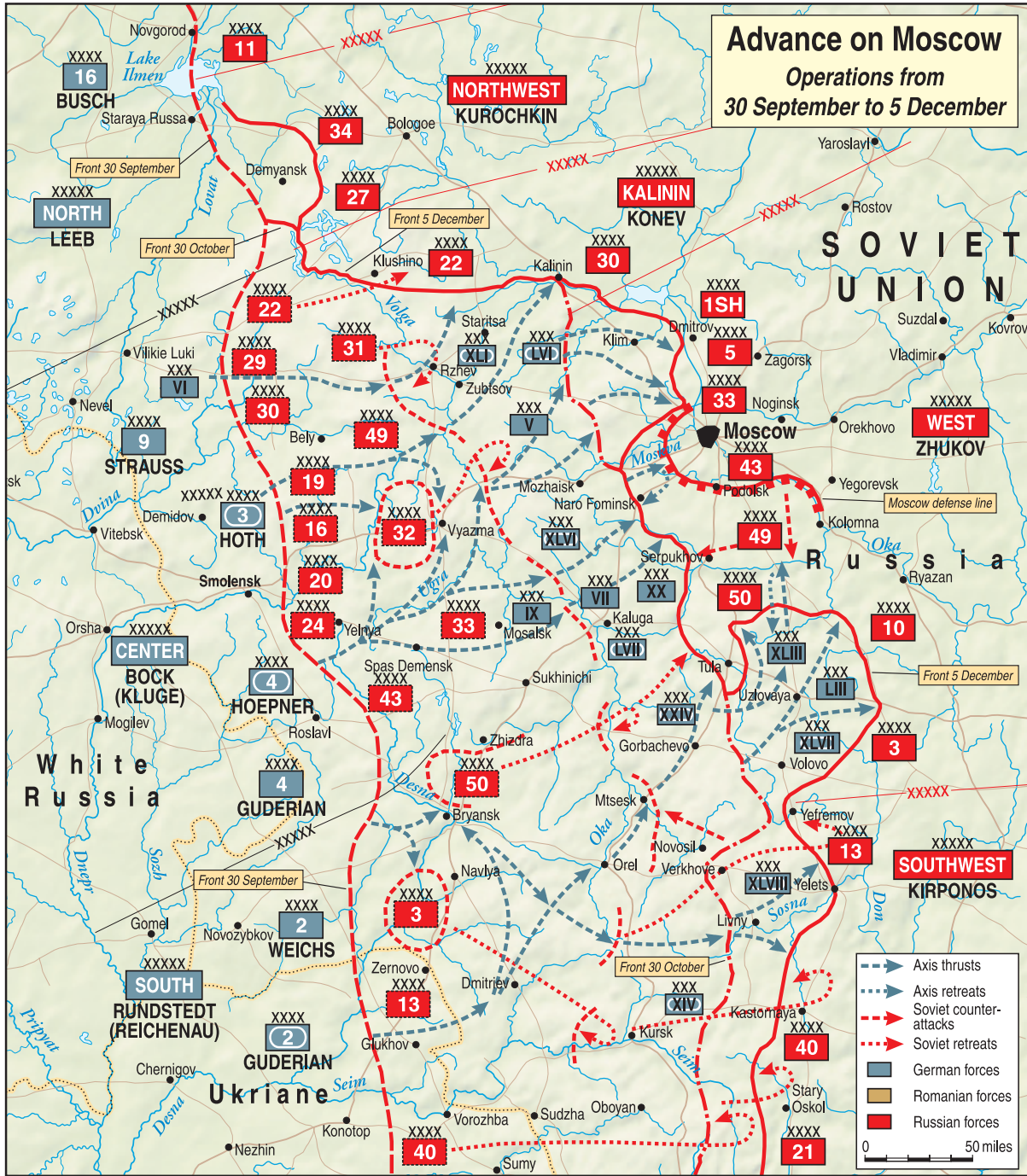
The problem was in the nature of the German Army. The panzers had been outrunning the non-motorized infantry. As a result, the pockets the panzers created couldn't be properly closed. Thousands of Soviet soldiers escaped the traps. Completing the Kiev encirclement made sound operational sense, as each operation needed to be completed before proceeding to the next. At the same time, though, strategic objectives such as Moscow were left untouched when they were open to capture by a swift mechanized advance.

Another advantage of an earlier attack on Moscow was the Germans could have assaulted the city prior to the Soviets finishing the multiple lines of fortifications on the city's approaches. By moving quickly, the Germans might also have been able to seize the communication infrastructure (railroads, bridges, etc.) before the Soviets could destroy them. Russia, however, wasn't western Europe; it lacked the road and rail net that had facilitated the German blitz in the west in 1940. The Germans had to secure as much of the Russian infrastructure as possible.

A fundamental question also remains in how the Germans would have taken Moscow itself. A summer offensive would have meant the German panzer groups would have been the only units available for the assault, as the infantry armies had not yet marched east sufficiently to be in position. An early Moscow offensive would have meant committing the panzers in a frontal assault into the city. Those tanks would have been especially hard pressed in that kind of fighting. The Germans would also have had to seal a Moscow pocket only with mechanized units, further overextending them.

The Stalingrad battle a year later showed what might have happened. There the German 6<sup>th</sup> Army fought at the end of its logistical rope. The result was a battle of attrition against the Soviets. While the Germans ended up taking 90 percent of Stalingrad, the losses they suffered doing so drained the their units' manpower. Once pinned down in a fight for the city, 6<sup>th</sup> Army became trapped when the Soviets launched their own encirclement operation in the winter of 1942-43.

Another possibility was the Germans might have continued their offensive in southern Russia instead of switching to Moscow. Maintaining the Ukraine as the primary objective would have avoided the waste of time, and wear and tear, involved



in switching armies across the front. Conceivably the Germans could have secured Rostov and the entire Don Basin in late 1941. Similarly, had the Germans kept up the pressure in *Army Group North's* sector, they might have captured Leningrad before year's end. Again, the diversion of panzers from the flanks to *Army Group Center* undermined concentration on all other objectives.

Given that altered strategy, the Germans would not have taken the losses they did in their attack toward Moscow, as well as the huge losses due to frostbite and equipment breakdown during the winter fighting. Following the Moscow offensive,

the German army would always be understrength, and that was largely due to the losses taken late in 1941 that were never made good.

In light of all that, it can be argued Hitler's initial decision *not* to go to Moscow was correct. His mistake was in allowing his generals to convince him the war could be won by one last offensive against the Soviet capital. The Germans had planned on a four month campaign ending no later than October, before the heavy autumn rains began. The Soviet Union was to have been defeated within the span of a single campaigning season. Only some of the more astute German generals believed



a second year of campaigning might be needed to properly finish the job. Again, though, the German economy wasn't prepared for a protracted war. If nothing else, the Germans weren't manufacturing enough armored vehicles to replace their losses.

The Germans simply pushed too far in 1941. Once the Kiev pocket had been destroyed and the Germans had cleared the approaches to Leningrad, a feasible alternative would have been to stop to prepare for the next year of campaigning. Had the Germans stopped major offensive operations in late September, they would have been in a position to consolidate a solid line instead of the convoluted front they ended up with following the Soviet counteroffensive. The front the Germans held in the first week of October 1941, just before the autumn mud season began, was fairly straight. Given German manpower limitations, the straighter the front, the fewer troops needed to hold it. The Germans would also be in a good position to launch their 1942 offensive. Leningrad, Moscow and the Don basin were all within range of their October line.

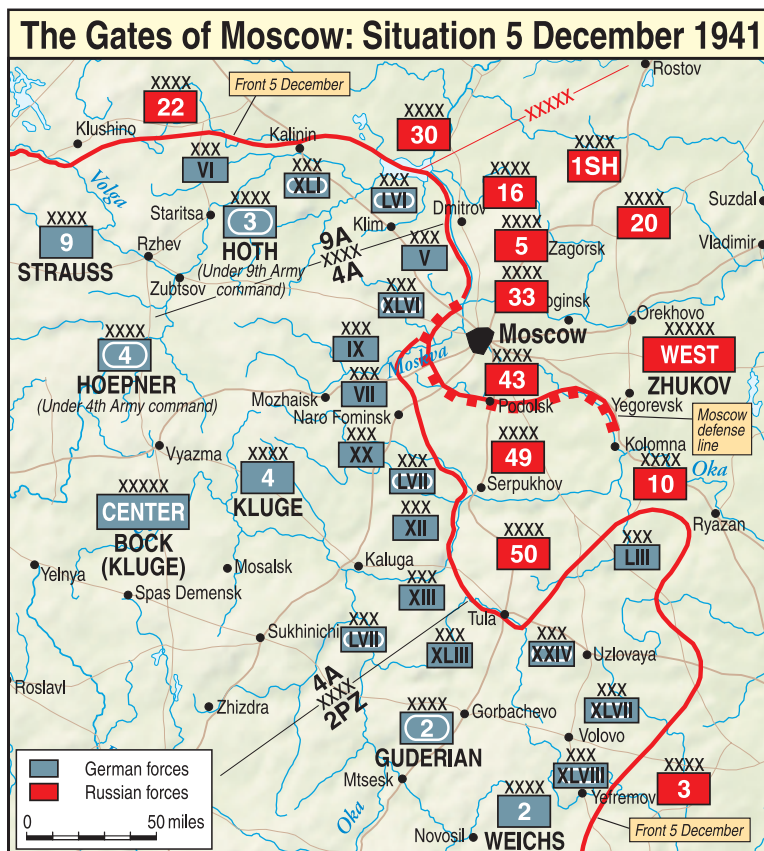
## MOSCOW SALIENT

Assuming Hitler had ordered an attack against Moscow in late August and, further, that the Germans then took Moscow. Then what? Historically, as the Germans came near Moscow in November 1941, a panic broke out. People started to flee the city, and many officials were suddenly nowhere to be found. Rumors started to fly: Molotov was dead; the Red Army had launched a coup; Stalin was missing. The capture of Moscow might well have led to the demoralization of the Soviet peoples and thereby accelerated the overall disintegration of the Soviet Union itself. No doubt Moscow's loss to the Germans would have been a signal for ethnic groups to fight for their independence against Soviet domination and for dissident elements to rebel against the communists.

Militarily, the German capture of Moscow would have split the eastern front wide open, dividing the Soviet rail system. The Soviets would then have been the ones who found it difficult to switch forces across the front. The city's capture, though, wouldn't have ended



*"Hedgehogs" block a Moscow thoroughfare.*



# The Soviet Winter Offensive

Operations from 6 December 1941 to 7 May 1942



**Legend**

- Russo-German treaty boundary
- Axis thrusts
- Soviet thrusts
- Soviet forces
- Romanian forces
- Russian forces
- Soviet Paratroopers

0 100 miles

reinforcements arriving from farther east. Five major rail lines ran east-west: Vologa-Kirov, Gorki-Kirov, Kazan-Moscow, Ryazan-Kuybyshev and Ryazan-Saratov. The Soviets could have employed them to continue to support the front, albeit at a much lower level of efficiency.

Consider that the Yugoslavs continued to resist the Germans despite the surrender of their country. Repressive Nazi occupation policies forced people into resistance. Given there would still be the vast unconquered hinterlands beyond the Urals and into Siberia, total subjugation of the Soviet Union would have been impossible. The original German goal was to maintain an occupation force of some 50 divisions. More likely, at least twice that many troops would have been needed to hold the country. The Axis had some 34 divisions in the Balkans in mid-1944, yet that force didn't prevent Tito's partisans from roaming across much of the countryside.

Stalin had plans to continue the fight even if Moscow fell. He intended mobilizing more reserves and arms in the Urals and Siberia, then marching westward. The loss of western Russia would have made that difficult, but Stalin would likely not have given up the fight. The alternative would have been a pow-

er struggle in which he—and probably the entire communist party—could have ended up dead.

A Nazi seizure of Moscow without the historic victory at Kiev and the advance to Leningrad would have placed the German armies in a peculiar position. The Germans would have been holding a salient deep in Russian territory with both flanks exposed. It's approximately 375 miles (600 kilometers) from Kiev to Moscow, and that entire distance would have had to have been guarded.

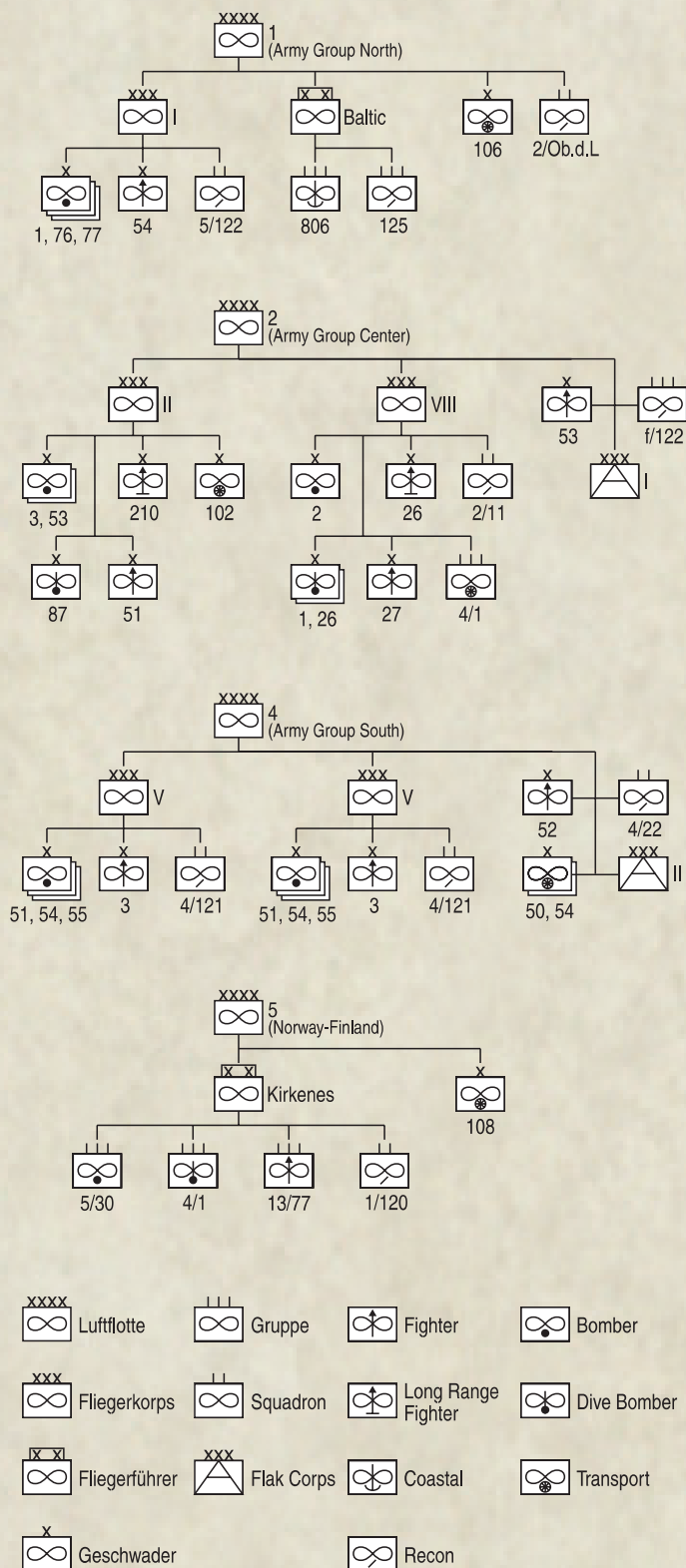
The German plan for taking Moscow in the historic campaign called for the panzer armies to encircle the city from the north and south. The infantry armies would then march up to secure the flanks and relieve the panzer and motorized divisions on the line, while at the same time mopping up pockets of Soviet units scattered along the front. That would have stretched the German logistical system to the breaking point. Given the distances to be marched, approximately 190 miles (300 kilometers) from Smolensk to Moscow, the bulk of the non-motorized German infantry divisions would have had a hard time simply reaching the front in time. The German panzer and motorized divisions would have had to perform the final assault. That

**Cont. On Pg. 30 >>**

*Red Army antiaircraft machinegun crew awaits the Luftwaffe.*



## Luftwaffe on the Eastern Front: June 1941



## THE WAR IN THE AIR

The *Luftwaffe* was vital to the conduct of the *blitzkrieg*. The Germans used it as an instrument of operational warfare, attacking enemy headquarters, logistics and troop concentrations. It also provided reconnaissance and close air support for ground forces. One reason the panzers could operate independently ahead of the infantry divisions was that *Luftwaffe* aircraft could cover their flanks.

The *Luftwaffe* went into *Barbarossa* with a total frontline strength about the same as it had a year or so before when it undertook the invasion of the West (about 4,800 aircraft in all of Europe and North Africa). The losses from the Battle of Britain were just barely made good, yet now the *Luftwaffe* was going fight on a much broader front against a vastly larger Soviet Air Force. The *Luftwaffe* committed 2,770 combat aircraft to *Barbarossa* against a Red Air Force that had some 6,000 available to face the Germans in the west. While much of the Soviet air strength was destroyed in the initial *Luftwaffe* attacks on airfields, and the Red Air Force suffered greatly from obsolete aircraft, poor training and a lack of command control, the numbers eventually did catch up with the Germans.

Having aircraft on the books is not the same as aircraft ready for flight. Throughout the campaign the *Luftwaffe* suffered from a decreasing operational aircraft rate. The numbers of aircraft that had been damaged, or which were in need of repair, continually rose. In addition to aircraft destroyed or damaged in combat, there were numerous non-combatant losses owing to weather, poor landings, enemy ground action and general wear and tear on machines. Losses could not be replaced immediately.

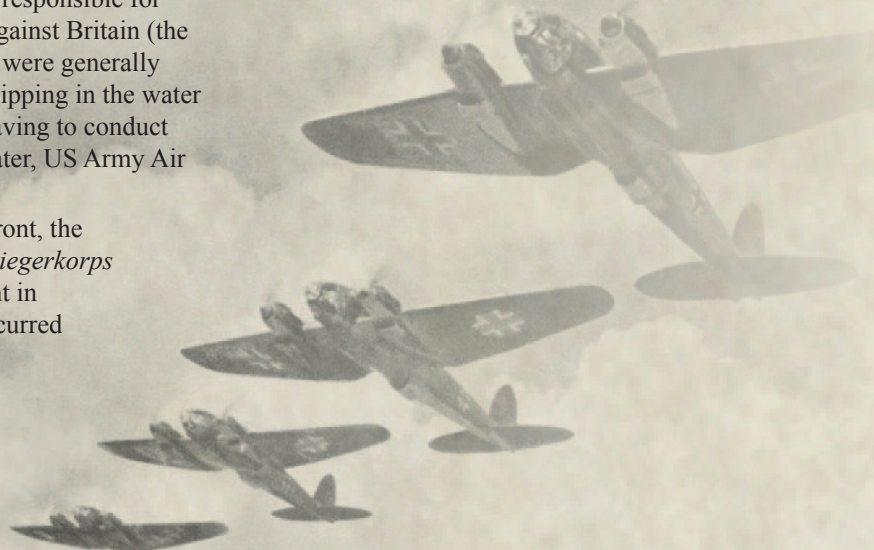
As was the case with the ground forces, there was no longer any possibility of maintaining a theater reserve. Air units had to be switched from crisis to crisis, concentrating to gain temporary air superiority over critical sectors of the front. Among other things, this made it impossible to conduct any kind of strategic bombing campaign against Soviet industry since the bombers were needed simply to bail out the ground troops. The *Luftwaffe* also began the pernicious practice of pulling pilots from training units in order to fill cockpits at the front. While that was supposed to be a temporary emergency measure, it soon became standard.

Up until *Barbarossa*, the *Luftwaffe* had attempted to maintain a reserve of spare aircraft and replacement parts, but they were quickly burned up in the attrition on the eastern front. What that meant was, by the end of the Moscow campaign in early 1942, the *Luftwaffe* was fighting a desperate struggle simply to maintain its own front line strength.

Despite the appearance of a single front war in 1941, Germany was actually engaged in two other theaters: against Britain and in the Mediterranean. Since these theaters involved little or no land forces, they frequently are given short shrift by historians, but both required that the *Wehrmacht* apply extensive air force assets. The *Luftwaffe* was responsible for continuing the bombing pressure against Britain (the so-called “Blitz” bombings, which were generally ineffective), for attacking Allied shipping in the water around Britain, and increasingly having to conduct fighter defense against RAF and, later, US Army Air Force strategic bombers.

To bail out the Mediterranean front, the *Wehrmacht* transferred an entire *Fliegerkorps* (flying corps) from the eastern front in December 1941. This diversion occurred at the climax of the *Barbarossa* campaign, when the *Wehrmacht* needed to concentrate its full strength against Moscow. Within this context, Hitler’s decision to

minimize the land unit reinforcements to Rommel was probably correct: the panzers needed to be focused on the eastern front, not diverted into yet another endless campaign. Hitler had to win it at Moscow, or not at all.



Luftwaffe Strength	Aircraft 11 May 1940	Aircraft 21 June 1941	Losses due to enemy action 1941	Losses due to other causes 1941	Aircraft deployed on Eastern Front 22 June 1941
Single engine fighters	1,356	1,440	622	705	830
Twin engine fighters	354	188	246	217	90
Night fighters	0	263	(1)	(1)	(1)
Medium bombers	1711	1511	1154	644	775
Dive bombers	414	424	225	141	310
Ground attack	50	0 (2)	-	-	0
Coastal	240	223	43	42	55
Tactical recon	335	440	165	98	710 (3)
Strategic recon	332	393	195	95	(3)

**Notes:** (1) Losses included under single and twin engine fighters.  
 (2) Biplane fighters, retired.  
 (3) Combined tactical + strategic recon.

◀◀ Cont. From Pg. 27

would have generated heavy losses among those divisions, possibly finishing them as effective units for the remainder of the campaign.

Once Moscow was seized, it would have had to have been held. The German mechanized divisions would have had to use their motorized infantry regiments in a defensive screen stretching from Kalinin in the north to Tula in the south. The mechanized units would have had to have defended in place, taking losses in attritional warfare. A mobile defense of the Moscow position would have been difficult, inasmuch as the surrender of any large amount of terrain might well have meant loss of the city to a Soviet counterattack.

All in all, it could be expected that losses due to combat and maintenance needs would have caused serious, if not terminal, attrition among the German panzer and motorized infantry units. At the same time, extending the front another 190 miles eastward would have made it that much more difficult to move up supplies and replacements to those fighting units. Any German position at Moscow would have been tenuous. The rail lines leading to it were fragile, and the *Wehrmacht* was not prepared for winter warfare. The Germans could have become bogged down in positional warfare some 60 miles (100 kilometers) farther east of the line they ended up with in December 1941.

What would have happened had the German divisions holding Moscow and its environs been cut off by a Soviet counteroffensive? Would there have been another “Stalingrad,” this one a year earlier in the winter of 1941-42. Hitler, no doubt, would have insisted Moscow be held at all costs, and that might have become a trap that would have sucked in all of *Army Group Center*. The panzer groups would have ended up defending Moscow, resulting in a lack of mobile units to relieve the pocket itself or to counter Soviet breakthroughs. Multitudes of German divisions might well have been lost in a Moscow pocket.

There is also the question of the Soviets being able to conduct an operational encirclement in the winter of 1941-42. At that still early period of the war, the Soviets were able to effectively operate mechanized forces only at the brigade level. It would be another year before they could get up to the division level (Soviet tank and mechanized “corps” were actually division-sized formations), and to develop the command and logistical support for deep penetrations. For that reason, then, the Germans might have been able to prevent the loss of Moscow to a Soviet counteroffensive.

Some of the panzer generals even wanted to continue the offensive after the Germans had captured Moscow. Using Moscow as their new base, they would then conduct two grand strategic encirclements, one of Leningrad to the north and the other of the Ukraine to the south.

*Collective farmers from the Moscow suburbs handing over tanks manufactured on their money to Soviet servicemen*



The execution of that plan would have been difficult. In the first place, the panzer divisions would have had to have been refitted prior to continuing operations. One of the advantages of the Kiev and Leningrad diversions in the historic campaign was the 2<sup>nd</sup> and 3<sup>rd</sup> *Panzer Groups* (which were, respectively, involved in them) were moving laterally along the front. Accordingly, when they returned to their *Army Group Center* positions, they were no farther east than they had been before making the move. The supply system therefore had time to catch up. A direct advance on Moscow would have meant the supply system would have been stretched to the breaking point. Further, since the rains began in earnest in the first week of October, the German forces at Moscow would have had to overcome muddy ground conditions in order to conduct further operations. Moscow would therefore probably have been the last German offensive in 1941, no matter the time of its launch or its outcome.

All that comes back to the position of any German armies at Moscow itself. The exposed flanks of the salient would have been vulnerable to counterattack by the Soviets. On the Leningrad front, the Soviet ability to launch a counteroffensive from there would have been screened by *Army Group North*, as well as by the surrounding swamps and the Valdai Hills. The situation along the southern flank was more serious. The Soviets had large concentrations of troops at Kiev. Indeed, one of the reasons Hitler ordered the Kiev encirclement was to eliminate that threat. By advancing toward Moscow, the Germans were, in effect, creating the perfect opportunity for the Soviets to attack them in their deep flank. The Germans would have had to detach one or two infantry armies to hold the line Minsk-Bryansk which would, in turn, have detracted from the strength they could have committed to the Moscow battle.

The Soviets could have used the several hundred thousand or so troops that historically became casualties in the Kiev pocket for launching thrusts against the lengthening German flank. They would also have maintained control of the industrial complexes and factories of the south and used them to turn out even more armaments. Holding the Ukraine would have facilitated the Soviet logistical system, since supplies and replacements would not have had to have been hauled in from the Urals; they could have been brought up along much shorter distances.

Rundstedt's *Army Group South* could have kept up the pressure on the Soviets in the Kiev region, but he'd already found his single panzer group was insufficient to conduct the grand encirclements necessary to win. At best, the Soviets in the Kiev region would have been pushed back toward the Donets River, from where they would still have been available for further operations. Consider what would have happened to a German position at Moscow had several more Soviet armies been shifted north. The lack of German strategic reserves would have meant Soviet counterthrusts could have been met only by pulling divisions from other parts of the line. That, in turn, might have meant the collapse of the entire German position inside the Soviet Union.

## THE TURNING POINT

The Germans, then, simply underestimated what was required to win the war in the east. Once the Soviet Union survived the initial onslaught of 1941, the Second World War was no longer a matter of sharp, short, and victorious campaigns. Instead, it turned into an attritional match. The opportunity for decisive German campaigns on the operational level still existed, but such operations would be unable by themselves to win the war for the Reich.

The Germans were not up to the task of conquering the Soviet Union in a single campaign. Hitler continually switched forces around the front, trying to find and fight the decisive battle that would give him victory; it never came. The Soviets stopped the Germans because their strategy was in accordance with their own capabilities, and that's what made the difference in the end.

