Europa

An Introduction

Scorched Earth is the thoroughly revised edition of *Unent-schieden,* the second game of the *Europa* series, and is the companion game to *Fire in the East,* the revised edition of *Drang Nach Osten. Fire in the East/Scorched Earth* is a detailed, operational-level game of the German invasion of the USSR, from the start of the war in June 1941 to the end of December 1944.

Scorched Earth is a game in the continuing *Europa* series of comprehensive division-level games of World War II in Europe and North Africa. Other games and modules in the series are: *Fire in the East* (*Europa* I), *Marita-Merkur* (*Europa* III), *Narvik* (*Europa* IV), *Their Finest Hour* (*Europa* V), *Western Desert* (*Europa* VI), *Case White* (*Europa* VII), *The Fall of France* (*Europa* VIII), *The Near East* (*Europa* IX), *Spain and Portugal* (*Europa* X), *Torch* (*Europa* XI).

Overall, *Europa* is intended to re-create World War II in Europe and North Africa at the division level, using consistent unit strengths and interlocking maps, while each individual *Europa* game deals in greater detail with a specific campaign or battle. If necessary for detailed historical accuracy or playability, individual games are presented at levels lower than divisional, at differing scales, or with specialized non-standard rules. In this way, each game presents the greatest possible utility to those interested in only the situation covered by the specific game, while also providing continuing *Europa* material to the followers of the series.

Scorched Earth continues this tradition. The rules are a careful selection of *Europa* rules and specialized rules allowing detailed examination of the events of the campaign. The maps and counters are at standard *Europa* scales.

Scorched Earth
Europa II
Copyright © 1987, Game Designers' Workshop
All rights reserved. Printed in the U.S.A. Made in the U.S.A.

Game Credits

Scorched Earth contains many of the concepts and game mechanics which were presented originally in *Unentschieden,* which was designed in 1974 by Paul R. Banner and Frank Chadwick.

Design: John M. Astell

Special Assistance: Shelby L. Stanton

Research, Axis Order of Battle: Shelby Stanton, Franklyn G. Prieskop, John Astell

Research, Soviet Order of Battle: Charles S. Sharp, John Astell

Other Research and Research Assistance: Frank Chadwick, Marc Miller, Paul R. Banner, Louis Rotundo, Paul Dunigan, Karl Gaarsoe, Dave Hughes

Art Direction and Graphics: Barbie Pratt

Art Department Assistants: Lauretta Oblinger, Dana Reischauer, Tim Brown, Loren Wiseman, Lester Smith

Playtest, Advice, and Assistance: Frank Adami, Kirk Adamson, Jeff Aderly, Rich Allen, Chris Ammons, Eric Ammons, Harold Andrews, Bert Anz, Peter Atkinson, Bill Barber, Robert Betts, Rob Beyma, Andrew Black, Steve Blankenship, Seth Bolen, Julie Bonds, Peter Bonham, Robert Boyle, Jeff Brown, Kevin Brown, Tim Brown, Steve Bullock, Greg Cafarelli, Bob Caldwell, Mark E. Carter, Rob Cheek, Dylan Conner, Larry Conner, Jim Crust, Craig Daniels, Wayne Dare, John DeGregorio, Vince DeSimone, Richard Detar, Paul A. Disbrow, Sam Dobbins, Mike Dolan, Russ Dumke, Paul Dunigan, Steve Emmons, Brian Fagan, Michael Faletti, Darlene File, Gordon Foltz, Kenneth Fonarow, Terry Fong, Darrien Fox, Edward Rankin Gainsborg, Jr., Laura Tilley Gainsborg, Jose Garcia, James Gayler, Rick Gayler, John J. Gee, Tracey Gibb, John Giefer, Joe Giese, Chriss Goeke, Rob Goldsmith, John Gordon IV, Mike Graffy, Les Gray, Mike Graziano, Winston Hamilton, Greg Hanna, Lee Hanna, Harold Hansen, Wayne Harrel, Jerad Harper, Jim Hartley, Terrence Hatcher, Victor Hauser, Brad Hay, Norris Hazelton, Fred Helfferich, Charles Hill, Mark Hill, Jay Hoffman, Brad Houston, Don Howard, Dave Hughes, Todd Hutchins, Mark Isolda, Edward Jablonski, Hank Jacobson, Brian James, Tom Johnson, Ray Kanarr, Dan Kaszeta, Roger Keating, Ben Knight, Brian L. Knipple, Ken Koch, John Kostisin, Paul Kramer, Burt Labelle, Roland Labelle, Robert Lachowski, Roger Land, Doug Langsather, John Lawton, Mike Le Drew, Dan Lee, David Lilly, Robert Littlejohn, Art Lupinacci, John Madison, James A. Mattatall, Rush McAllister, Rich Mikulich, Jeff Millefoglie, Greg Miller, Steve Miller, Ross Nickle, Brian Niffen, Andy Nunez, Tom O'Neil, Sean Pane, Ron Pappin, Jack Parks, Rich Paris, John Paul, David Peters, Paul Pigulski, Eric Pinnell, Mark Popofsky, John Porter, Randi Porter, Tony Quatrine, Rob Ramey, Justin Reynolds, Charlie Riegel, Denis Robideau, Eric Rollins, Robert F. Rosenthal, Louis Rotundo, Eric Rubinfeld, E. Richard Russel, John Rutter, Dave Samuel, Gary Schaap, Dave Schooley, Robert Scogin, Johnny Scott, Dave Smith, Keith Smith, Marlan Smith, David Smuts, Nick Somlo, Les Spain, Gary Stagliano, Mike Stankovich, Tobin Stevens, Bill Stone, Richard Strickland, A. M. J. Svajlenka III, Andrew Taubman, Max Thanner, Alex Tihanyi, Ian Trout, Douglas Trumble, Larry Weis, David Wells, Gary Wells, Richard Wells, Paul Weston, Dave Wheeler, Gregory Whiley, Guy R. Wilde, Bill Wilson, Steve Winslett, Loren Wiseman, Ron Woodward, Bruce Wright, Mark Wright, Russ Wynne, Joe Youst, Mark Zimmerman

Learning Scorched Earth

Scorched Earth is a large and detailed game, but it isn't very difficult to learn. If you aren't familiar with *Fire in the East* and are learning *Scorched Earth* for the first time, concentrate on the core rules at first: rules 1 through 4 cover many basic features of the game, rules 5 through 14 cover the important aspects of the ground system, and rules 16 through 25 cover the air system. If you are playing as part of a team that has at least one experienced player in it, this is all you really need to know in order to start playing. Have the experienced player advise you on the other rules when you need them, and have him keep track of peripheral activities such as reinforcements, replacements, the naval system, and so on.

If you are familiar with *Fire in the East* (*FITE*) then you already know many of the rules of *Scorched Earth* (*SE*) as the majority of the rules are the same. However, expanding the coverage of the game from less than a year of operations (*FITE*) to three and a half years of campaigning (*SE*) meant that many rules had to be supplemented or scaled up. In addition, a number of rules are revised from those in *FITE*, incorporating the results of extensive playing of *FITE* since its publication in 1984. This means that the best way to learn the rules is to review them thoroughly, to familiarize yourself with the new material. The following is a guide to the differences between the *FITE* rules and *SE* rules. The differences are noted as follows: *Addition:* a new rule; *Change:* a scaled up *FITE* rule; *Supplement:* an *FITE* rule with new information added; *Revision:* a revised *FITE* rule; *Clarification:* a clarified *FITE* rule.

2. Game Components. Change.

3. Basic Game Concepts. 1) 3A1. Divisional Units. Change. 2) 3C4. Accumulation. Addition. 3) 3E. Heavy Equipment. Revision. Heavy equipment exclusion for cadres is dropped. 4) 3F. Ownership. Revision. "Ownership" is used in place of "control" throughout the rules, to avoid confusion between control of territory and zones of control. 5) 3H. Geography. Supplement. 6) 3I. Isolation. Change. Isolation is checked twice per player turn.

5. Zones of Control. Supplement. Reduced ZOCs are introduced. ZOCs in weather zone G are defined.

6. Movement. 1) General Rule. Revision and Supplement. The MP cost of rough terrain for mountain units is revised on the terrain effects chart. The new types of terrain (sand and solonchak) are covered on the terrain effects chart. 2) 6A. ZOCs and Movement. Supplement. Reduced ZOCs are added. 3) 6B. Administrative Movement. Revision. Admin. movement ability is increased and is based on unmodified movement allowances.

7. Transportation Lines. 1) 7A3. Regauging. Revision. A rail hex may not be used for rail movement in the turn it is regauged. 2) 7A4. Rail Capacity. Revision. The resource point cost to increase rail capacity is standardized. Only 30 REs per turn of Soviet reinforcements from the eastern military districts rail for free. 3) 7D. Railroad Construction. Revision and Supplement.

8. Stacking. 1) A. Stacking Limits. Supplement. The stacking rules cover divisional units and artillery divisions. 2) 8A3. Arctic Stacking. Revision. This is slightly modified to make it similar to the other stacking rules and to correct minor problems. 3) 8C. Corps/Army Markers. Change. Use of *Europa* marker displays is explained.

9. Combat. 1) Combat Results Table. Supplement. The table is expanded to include 1:4, 8:1, and 9:1 odds columns. 2) 9B8. General Combat Restrictions. Supplement. Maximum and minimum odds are defined. 3) 9I. Retreat Before Combat. Addition. This concept is introduced. 4) 9J. Required Losses. Addition. This is a general rule on taking losses when units use certain special combat abilities.

10. Armor/Antitank Effects. 1) 10B. AEC/ATEC Values. Revision. Mechanized units are now full ATEC. 2) 10C. AEC/ATEC Proportions. Revision. The minimum proportion to achieve an effect is now 1/7, not 1/5. 3) 10H. AEC/ATEC Required Losses. Change. Required losses for use of AEC and ATEC is defined. 4) 10I. Infantry Antitank Weapons. Addition. This concept is introduced. 5) 10J. Unit Type Notes. Addition. This notes unusual AEC/ATEC capabilities.

11. Support. Supplement. Effects of divisional units are defined.

12. Supply. 1) 12B1 and 2. Tracing Supply. Supplement. Effects of sand hexes when tracing overland and truck supply lines are covered. Supply status of cities affects reinforcements and replacements appearing there. 2) 12D. Supply Effects. Supplement. Reduced ZOCs are added. 3) 12E. Special Sources of Supply. Revision and Supplement. Air and naval supply now work similarly. Cities may not draw on special supplies, only units.

13. Overruns. Revision. Defensive support bombing is ignored for overruns.

14. Special Unit Types. 1) 14A1. Construction. Change. Permanent airfields may be built in woods and wooded rough hexes. 2) 14A4. Railroad Engineers. Revision. Regauging costs are reduced. 3) 14B3. Soviet Artillery Divisions. Addition. Use of these units is defined. 4) 14C. Special Armor Units. Change. This expands the coverage of flammpanzers to all special armor units. 5) 14H. Commandos. Change. The Brandenburger rule is expanded to cover all commandos. 6) 14I. Trucks. Supplement.

16. Air Rules Introduction. 16D. Air Unit Markers. Addition. This covers the use of these markers.

17. Airbases. 7B. Air Unit Escape. Change. This rule is simplified.

19. Patrol Attacks. Supplement. This covers the expansion of patrol zones for Soviet Guards fighters.

20 Air Missions. 1) 20E2. Air Drops. Revision. Air drops may be made in major city hexes. 2) 20F1e. Oilfield Bombing. Addition. 3) 20F2c and d. Ground and Defensive Support Bombing. Clarification. The total bombing strength that may be added is based on the printed bombing strength. 4) 20F2d. Defensive Support Bombing. Revision. This is not counted for overruns. 5) 20F2e. Harassment Bombing. Change. Harassment limit per hex is added.

21. Air Combat. 1) Air Combat Results Table. Revision. This table has been slightly modified. 2) 21A. Air Combat Preparation. Supplement. Abandoning air operations is introduced. 3) 21B. Air Combat Resolution. Revision. Each air unit may make only one attack per air combat resolution. This corrects anomalies that occur when several air units fire on one air unit.

22. Antiaircraft. 1) 22A. AA Capabilities. Supplement: light and heavy AA distinctions are defined. 2) 22A1. Intrinsic AA. Supplement. 3) 22A3. Position AA Units. Change. The capabilities of position AA units are restricted. 4) 22A4. Naval AA. Supplement. 5) 22B Resoultion. Revision. AA fire in ports is revised.

23. Air Unit Repair. Supplement.

24. Special Air Rules. 1) 24E. Dive Bombers. Supplement. 2) 24H to J. Various Aircraft. Addition.

25. Airborne Operations. 1) 25A. Disruption. Revision. Disruption modifier for major city hex is added. Disruption effects are expanded. Disruption modifier for Soviet air drops is revised. 2) 25C. Ground Operations. Revision. NE result modification is revised to prevent rules abuse. 3) 25D. Planning. Clarification. Air drops of supply do not need to be planned in advance. 4) 25F. Soviet Drop Restrictions (*FITE*). Change. This rule is not used in *SE*.

27. Air Replacement System. 1) 27A. Culling. Revision. 2) 27B. Air Replacement. Revision. The procedure is changed to correct abuses. 3) 27E. Activation. Revision. Placement of activated air units is simplified. 4) 27F3. Luftwaffe Transfers. Change. The German withdrawals rule (*FITE*) is expanded. 5) 27F4. Soviet Air Guards. Change. This rule is expanded. 6) 27F5. Axis Nationalities (*FITE*). Change. This rule is deleted, as 27B now covers this.

28. Naval Rules. 1) 28A. Naval Rules Concepts. Supplement. 2) 28B. Ships. Change and Revision. The ship rules are revised and expanded. 3) 28C. Naval Transport. Change and Revision. The naval transport rules are revised and expanded. 4) 28D. Naval Transport of Supply. Change and Revision. These rules are modified to make them consistent with air transport of supply. 5) 28E. River Flotillas. Revision. These rules are revised to correct problems. 6) 28F. Naval Repairs. Supplement. 7) 28G. Naval Reinforcements. Addition

29. Weather. Change and Supplement. Each weather zone has its own section on the weather chart.

30. The Arctic. Revision. Movement in the Arctic is revised, correcting problems when movement allowances were halved.

31. Special Rules. 1) 31A1. Causeways. Revision. Combat is now allowed across causeways. 2) 31A2. Kerch Straits. Supplement. Blocking the straits is covered. 3) 31A5. Fortifications. Supplement. 4) 31B. Neutrals. Supplement. 5) 31C. Soviet Mobility Limits. Supplement. 6) 31D. Soviet Factories. Change and Revision. Factories produce both armor and artillery replacements. Transfer of factories is revised. 7) 31E. Soviet Capital. Change and Revision. 8) 31F1. Surprise Ground Attack. Clarification. Border rivers have no effect on overruns. 9) 31F2. Surprise Air Attack. Revision. The procedure is revised to take bombing strengths into account. 10) 31G. Soviet Unpreparedness. Revision. This rule is expanded for unprepared major cities, reduced ZOCs, and unprepared fortified areas. 11) 31H. Soviet Garrisons. Addition. 12) 31I. Oil. Addition. 13) 31J. German Intrinsic Defenses. Addition.

32. Axis Allies. Change and Revision. 1) Surrender and defections rules are added. 2) The Finnish participation rules have been clarified.

33. Occupation. Addition. This rule replaces the *FITE* rule.

34. Reinforcements and Replacements. Change/Supplement. These rules are expanded to cover the additional topics here.

35. Lend-Lease. Supplement.

36. Preparing for Play. Change.

37. Victory. Change.

38. Advanced Rules. 1) 38C. Railroads. Supplement. 2) 38D. Winterization (*Fire in the East*). Change. This rule is incorporated into optional rule 39D. 3) 38D. Admin. Movement. Addition. 4) 38E. Soviet Artillery Replacements (*Fire in the East*). Change. This rule is deleted, as artillery replacements are now handled through Soviet factories. 5) 38E. Air-Naval Interaction. Addition. 6) 38F. Special Unit Types. Addition. 7) 38G. Luftwaffe Schools. Addition. 8) 38H. Eastern Troop Withdrawal. Addition.

39. Optional Rules. 1) 39A. Bridges. Change. 2) 39B. Resource Points. Supplement. 3) 39D through L. Various Optional Rules. Addition.

40. Partisans. Addition.

41. Scenarios. Addition.

Table of Contents

Rule 1 — Introduction

Scorched Earth is a historical game covering the German invasion of the Union of Soviet Socialist Republics on 22 June 1941, starting a campaign that brought the Germans to the gates of Moskva and ultimately to the destruction of the Wehrmacht and the utter collapse of the Third Reich. *Scorched Earth* is the companion game to *Fire in the East,* and *Fire in the East* is required in order to play *Scorched Earth.* Together, the two games cover the fighting on the Russian Front from June 1941 to the end of December 1944.

Scorched Earth is basically a two-player game, but its size lends itself admirably to multi-player team play. One side controls the forces of Germany and its allies while the other controls the forces of the Soviet Union. The maps cover the western regions of the USSR from the Arctic to the Volga River valley and Caucasus Mountains. Ground units represent corps, divisions, brigades, regiments, battalions, and batteries. Air units represent groups of 40 to 60 aircraft. Naval units represent major warships plus supporting vessels and flotillas of smaller vessels. The rules use the basic *Europa* system as a framework, with specialized rules covering the historical situation in detail.

The German player must attempt to ''...crush Soviet Russia in a lightning campaign'' (*Fuhrer* directive number 22, *Fall Barbarossa*), by destroying the Red Army as a fighting force and by occupying key regions of the USSR. The Soviet player must attempt to halt the invasion and, ultimately, to destroy the invaders.

Rule 2 — Game Components

Scorched Earth contains the following components:

A. Rules. This rules set, which is used in place of the rules in *Fire in the East.*

B. Maps. Three maps (*Europa* maps 7A, 8A, and 9A), covering the Volga River valley and the Soviet Caucasus, at a scale of 16 miles per hex. These maps add on to the maps in *Fire in the East.* The hexes on the maps are numbered, and specific hexes are identified by map number and hex number. For example, 9A:1506 refers to hex 1506, map 9A.

C. Counters. Sixteen counter sheets (*Europa* sheets 6A, 7A, 8A, 9A, 10A, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56) for a total of 3840 counters. These counters are used in addition to the counters in *Fire in the East.*

D. Charts. A set of charts consisting of:

1) Two combat results/terrain effects charts.

2) One unit identification chart.

3) One turn record chart.

4) Two game charts (one Soviet, one Axis)/1942 scenario front line maps.

5) One *Europa* marker display. The marker display is a generic display for corps/army and air markers and should be photocopied for multiple use in the game. *Note:* The display should be photocopied and the original saved, since it will be written on when used. Also, when playing in teams, providing each player with his own display helps to organize play.

6) One master sequence of play/special dates chart.

7) One *Europa* map legend. This map legend shows all terrain types in *Europa*, and some types of terrain shown on the chart are not present in *Fire in the East/Scorched Earth.*

8) One *Fire in the East/Scorched Earth* map guide. This guide shows the layout of the maps. It also covers the geography of the region, showing countries, regions, military districts, weather zones, and seas.

In addition to these charts, the two air charts and the city display from *Fire in the East* are used. The two corps/army marker displays from *Fire in the East* may be used if players wish. No other charts from *Fire in the East* are used, as the *Scorched Earth* charts replace them. In particular, the combat result tables/terrain effects charts in *Scorched Earth* contain additions and revisions to those in *Fire in the East,* and problems will occur if the ones in *Fire in the East* are used.

E. Orders of Battle. Two orders of battle (one Soviet , one Axis). These replace those in *Fire in the East.*

Rule 3 — Basic Game Concepts

Basic concepts and definitions used throughout the rules are presented below.

A. Units. When the term *units* is used by itself, it refers to ground units only and does not include naval units or air units. The term *forces* refers to ground, naval, and air units collectively.

Units are differentiated by size and type, as shown on the unit identification chart. Some overall definitions apply.

1. **Divisional Unit.** Any unit with the division or corps size symbol, except for headquarters. *Note:* Only corps which are organized and operate the same as divisions are shown as combat units in the game.

2. **Non-Divisional Unit.** Any unit smaller than a divisional unit: brigades, regiments, battalions, batteries, cadres, and headquarters.

3. **Artillery.** All unit types listed on the unit identification chart as artillery. Note that for game purposes antiaircraft and antitank units are not artillery.

4. **Combat/Motorized.** All unit types listed on the unit identification chart as combat/motorized. In addition, any unit type which has the motorized symbol used in conjunction with its unit type symbol is combat/motorized. *Note:* ''Combat/motorized'' is abbreviated ''c/m'' in the rules. ''Non-c/m'' refers to units that are not combat/motorized: all non-motorized units and all artillery units that are not combat/motorized.

B. Sides.

1. **Axis.** The term *Axis* refers to all forces controlled by the German player. Within this category, two further distinctions are made. The term *German* refers to all German forces: Army, Air Force (Luftwaffe), Navy (Kriegsmarine), SS, SS-Police, Brandenburger, Army foreign contingent, and Eastern Troop forces; it does not refer to any other Axis forces. The term *Axis-Allied* refers to all non-German Axis forces: Finnish, Hungarian, Italian, Rumanian, and Slovakian forces and all partisan forces fighting the Soviets.

2. **Soviet.** The term *Soviet* refers to all forces controlled by the Soviet player: regular, winter-capable, Militia, Guards, Air Force, Navy, NKVD, and foreign contingent forces and all partisan forces fighting the Axis. *Note:* Certain Axis-Allied forces may defect to the Soviets during the course of the game. In this case, they are no longer Axis forces but are Soviet forces.

C. Game Mechanics.

1. **Fractions.** Unless stated otherwise, always retain fractions when halving. For example, half of 7 is 3 1/2.

2. **Cumulative Effects.** Unless stated otherwise, all effects to units' strengths and all modifications to die rolls are cumulative. For example, a unit halved in strength twice is quartered in strength.

3. **Die Rolls.** All rolls made using two dice are specifically identified as such in the rules. All other rolls are made using only one die.

4. **Accumulation.** Each player receives various abilities which he may use on a turn by turn basis. These abilities may not be accumulated from turn to turn unless the rules specifically allow them to be accumulated. For example, the Soviet player may build two rail hexes per turn (per Rule 7D). However, this ability may not be accumulated. If the Soviet player does not build any rail hexes in a turn, he may not build four in the following turn.

D. Regimental Equivalents. A regimental equivalent (RE) is a measure of the size of a unit. REs are also used for any marker or other game feature which needs its size specified. RE sizes are as follows:

1/2 RE: each battalion, battery, or point of position AA.

1 RE: each brigade, regiment, cadre, divisional headquarters, fortified area, or resource point.

3 REs: each divisional unit, or truck counter.

15 REs: the Soviet capital.

30 REs: each factory.

Cavalry and c/m units count double their RE size for transport purposes: rail movement (Rule 7A) and naval transport (Rule 28C).

For example, a cavalry division (3 REs) that moves by rail or sea counts as 6 REs for transport purposes.

· **E. Heavy Equipment.** The unit identification chart lists the unit types that have heavy equipment. In addition, all units that have supporting arms (Rule 11) have heavy equipment.

F. Ownership. A player owns a hex if: 1) his units occupy the hex, 2) his units exert an uncontested zone of control into the hex, or 3) his units were the last to occupy or exert an uncontested zone of control into the hex. (Zones of control are defined in Rule 5. A player has an uncontested zone of control in a hex if the hex is neither occupied by nor in the zone of control of an enemy unit.) *Exception:* ZOCs alone do not gain ownership of enemy-owned cities or airbases. To gain ownership of a hex containing an enemy-owned city or airbase, a friendly unit must occupy the hex.

By itself, a battalion or battery sized unit cannot gain permanent ownership of an enemy hex. When entering an enemy-owned hex, such a unit owns the hex only as long as it occupies the hex; upon leaving the hex, ownership reverts to the other player. It takes at least 1 RE of units (including, for example, two battalions operating together) or an uncontested zone of control to gain permanent ownership of a hex.

G. Major City. A major city is any partial hex city, full hex city, or multi-hex city. A major city hex is any hex of a major city.

H. Geography. The map guide shows the major geographical features which appear on the game maps. Refer to this guide when reading this rule.

The game map shows national borders at the start of World War II (1 September 1939) and the changes that have occurred from that date. The German-Soviet demarcation line is the dividing line between the Axis and the USSR. All territory east of the line is Soviet. Territory west of the line is either Axis or neutral, except that Hango (in Finland) is Soviet owned at the start of the game.

The military districts (MDs) of the Soviet Union are shown on the map. The districts are labeled within the 1939 Soviet borders. The territory acquired by the USSR from 1939 to 1941 is also in the military districts, as shown by the extension of the districts boundaries in these regions. (Thus, Chisinau is in the Odessa MD; Cernauti and Lwow are in the Kiev MD; Bialystok is in the Western MD; and all ex-Finnish territory is in the Arkhangelsk MD.) The Baltic MD consists of Lithuania, Latvia, and Estonia.

For game purposes, specific definitions are assigned to the following geographical names:

USSR (or Soviet Union): all territory within the 1941 Soviet borders. (This includes all territory owned by the Soviets at the start of the game except for Hango.) For example, Riga and Lwow are Soviet cities even though these cities are outside the 1939 Soviet borders.

1939 USSR (or 1939 Soviet Union): all territory within the 1939 Soviet borders only.

Baltic States: Estonia, Latvia, and Lithuania.

Greater Germany: East Prussia and all territory in Poland west of the German-Soviet demarcation line.

Polish Territory: All territory within the 1939 Polish borders. For game purposes, this territory is subdivided into the following:

    Central Poland: All Polish territory in Greater Germany.

    Western Belorussia: All Polish territory in the Western MD.

    Western Ukraine: All Polish territory in the Kiev MD.

The Arctic: all hexes on or north of the A weather line.

The Ukraine: All territory of the Kiev, Odessa, and Kharkov MDs.

The Crimea: The peninsula of land in the Odessa MD on and south of hex 3B:3001.

Bessarabia: All territory between the 1939 Rumanian border and the German-Soviet demarcation line.

Other features such as sea zones (Rule 28) and weather zones (Rule 29) are shown on the map guide.

I. Isolation. A unit or hex is isolated if an overland supply line of any length cannot be traced from the item to regular source of supply of the owning player. (Supply lines and sources are covered in Rule 12.) Isolation status of all units and hexes is determined twice per player turn: at the start of each initial phase and combat phase. An item that is isolated at the start of one of these phases remains isolated until isolation status is checked again.

Rule 4 — Sequence of Play

The game is played in a series of game turns. Each game turn consists of a German player turn followed by a Soviet player turn.

A. Sequence. Each player turn consists of the following phases.

    1. Initial Phase. The phasing player receives reinforcements and replacements and may attempt to repair inoperative air units. Both players determine the supply and isolation status of their units and hexes.

    2. Movement Phase. The phasing player moves his ground and naval units.

    3. Air Phase. Players deploy air units, resolve air combat, and execute air missions.

    4. Combat Phase. Both players determine the isolation status of their units and hexes. The phasing player resolves attacks made by his units.

    5. Exploitation Phase. The phasing player moves his c/m units.

The master sequence of play chart shows the sequence of play in detail.

B. Phasing. During the German player turn, the German player is the phasing player and the Soviet player is the non-phasing player. During the Soviet player turn, these roles are reversed.

C. Restrictions. Unless noted otherwise, activities may not be conducted outside this sequence. The activities mentioned above are explained in detail in the rules which follow.

Rule 5 — Zones of Control

The zone of control (ZOC) of a unit represents the control a unit exerts over surrounding terrain. The effects of ZOCs are referred to throughout the rules.

A unit's ZOC is exerted through the six hexsides of the hex the unit occupies into the six surrounding, adjacent hexes. A unit prohibited from entering a specific terrain type or crossing a specific type of hexside does not exert a ZOC into that hex or through that hexside. For example, no unit exerts a ZOC through an all-sea hexside.

Every divisional unit has a ZOC. Brigades, regiments, and cadres have ZOCs only in hexes in weather zones A and G; they do not have ZOCs in hexes outside these zones. Battalions and batteries never have ZOCs.

Under certain conditions, units with ZOCs may have reduced ZOCs. Reduced ZOCs are the same as standard ZOCs, except for their effects on the movement of enemy units (Rule 6A).

Rule 6 — Movement

All phasing units may move during the movement phase. All phasing c/m units may move during the exploitation phase.

Movement is calculated in terms of movement points (MPs). A unit's movement rating gives the number of MPs the unit may normally spend in a movement or exploitation phase. A unit may move up to the limit of its movement rating, as restricted by terrain, ZOCs, and supply.

Units are moved voluntarily, with each unit spending MPs as it moves from hex to hex. A unit spends a varying amount of MPs for each hex it enters; this MP cost depends upon the type of terrain in the hex being entered and, in some cases, on the type of terrain of the hexside being crossed. The movement effects column on the terrain effects chart states the MP costs for the various terrain types. The MP cost to cross a hexside is in addition to the cost to enter a hex; it is indicated by a plus sign (+) in front of the cost. The notation *prohibited* means that type of terrain may not be entered or crossed by a unit. As a class, such terrain is called *prohibited terrain*. The notation *1/2M + 1* means that the cost of the terrain is one half the unit's printed movement allowance plus one movement point. For example, this would be 6 MPs for a unit with a movement rating of 10.

In general, a unit may not enter a hex occupied by an enemy unit. Special exceptions to this rule are covered in the appropriate rules.

A unit may always move a single hex (except into or across prohibited terrain) in phase in which it may move. To do so, the unit spends all of its MPs and enters an adjacent hex, even if the cost to enter the hex exceeds the number of MPs the unit has available that phase. It may move through enemy ZOCs when using it one hex movement ability. It unit may not spend MPs for any other purpose (such as breaking a rail line) when using this ability.

A unit with a movement rating of 0 may not move from the hex it occupies for any reason. If forced to retreat due to a combat result, it is eliminated instead.

Overruns (Rule 13) may occur during movement. Special forms of movement, such as rail movement and naval transport, are covered in separate rules.

Weather affects movement, as given on the terrain effects chart and in Rule 29.

A. ZOCs. When a unit exits a hex that is in an enemy ZOC, it must spend a number of MPs to leave the hex, in addition to the terrain costs of movement. The ZOC costs are given on the ZOC movement costs table. The reduced ZOC costs are used only if all enemy ZOCs affecting the unit's movement are reduced ZOCs. *Examples:* A unit pays the reduced ZOC cost if it leaves a reduced enemy ZOC and enters a hex either not in any enemy ZOC or in another reduced enemy ZOC. It pays the standard ZOC if it moves directly from a reduced enemy ZOC to a standard enemy ZOC or vice versa.

B. Administrative Movement. During the movement phase (only), a unit may use administrative (admin.) movement. A unit using admin. movement may move by road (see Rule 7B) and in clear terrain. For example, a unit may not use admin. movement in a woods hex unless moving along a road in that hex. A unit may not use admin. movement to cross a non-clear terrain hexside (such as a river hexside) unless moving along a road that crosses that hexside.

A unit pays half the usual cost of terrain when using admin. movement. For example, a unit using admin. movement to move on a road during clear weather pays 1/2 MP per hex. To use admin. movement, a unit must be in supply, may move only in hexes owned by its side at the start of the player turn, and may not start or move adjacent to an enemy unit during its movement. When using admin. movement, a unit may not spend MPs for any other purpose except for movement.

In weather zones A and G, a unit may use admin. movement only when moving by road.

Rule 7 — Transportation Lines

There are two types of transportation lines: railroads and roads. A unit moves along a transportation line by tracing a path through hexes containing connected transportation lines. It may use the transportation line movement rate only when moving in hexes directly connected to one another by the line.

A. Railroads. Rail movement may only be used in the movement phase. There are two types of rail movement: operational and strategic. Operational rail movement allows a unit to move by rail and engage in regular operations in the same turn. Strategic rail movement allows a unit to move a long distance by rail, sacrificing its ability to engage in other operations in the same turn. In either case, a player may only use railroads in hexes he owns at the start of his player turn.

1. Operational Rail Movement. A unit moving by rail moves at an accelerated rate, ignoring standard terrain costs. To use operational rail movement, a unit must first entrain. Entraining costs 1 MP. It then moves several hexes for each MP spent, as given on the rail movement rate table. There is no MP cost to detrain; after finishing its rail movement, the unit may move overland or otherwise spend its remaining MPs. Units are always considered detrained at the end of the movement phase.

When using operational rail movement, a unit may not enter or leave a hex in an enemy ZOC. However, an enemy ZOC is negated for operational rail movement purposes (only) if a friendly unit occupies the hex in the ZOC throughout the movement phase. This unit must start in the hex and may not leave the hex during the movement phase.

2. Strategic Rail Movement. A unit may move up to 200 hexes by rail when using strategic rail movement, ignoring standard terrain costs. However, the unit must start and end its movement on a rail line and may not start, end, or move adjacent to an enemy unit at any time during its movement. The unit may not otherwise move in the movement phase, may not attack during the combat phase, and may not move during the exploitation phase.

3. Gauge. There are two different rail gauges in use on the maps: standard and broad. All rail lines in the 1939 Soviet Union and in Finland are broad gauge. All other rail lines are standard gauge.

Axis units, except when using the Finnish rail net, may not use broad gauge rail lines for rail movement. Axis units on the Finnish rail net may. The Finnish rail net consists of all rail lines in Finland plus all Axis-owned rail lines in the USSR inside the Finnish and Arctic theaters of war (see Rule 32B).

Soviet units may always use rail movement on broad gauge lines. A Soviet unit may use rail movement on standard gauge lines if a rail route can be traced along Soviet-owned standard gauge rail lines (including broken ones) to any city in the standard gauge portion of the Soviet Union (i.e., the Baltic States, eastern Poland, and eastern Rumania). This city must have been continuously Soviet owned from the start of the game. (It may not have been Axis owned at any time, even if the Soviet player subsequently regains ownership.) Note that if all cities in this region become Axis owned at any time, the Soviet player entirely loses his ability to use rail movement on standard gauge lines.

A unit may use both broad and standard gauge rail lines as part of its rail movement, as long as the preceding rules are followed. A unit must pay a trans-shipment cost when it crosses from one gauge to the other: 1 MP for operational rail movement, or 20 hexes of its 200 for strategic rail movement.

Railroad engineer units may convert gauge from one size to the other (Rule 14A4). A rail hex may not be used for rail movement on the turn it is regauged. Use the rail gauge markers to show which lines are regauged. *Example:* The German player has regauged the line from hex 1B:3008 through Polotsk to hex 1B:2804, but the lateral line through Polotsk is not regauged. Show this by putting a standard gauge marker in 1B:2804 and broad gauge markers in 1B:2806 and 1B:3005.

4. Capacity. Players may move only a limited number of units by rail (operational or strategic) in a turn. The Soviet player has one capacity, used for all Soviet rail movement. The German player has two separate capacities: one for his standard gauge rail net and one for the Finnish rail net.

Capacities are stated in REs: the capacity is the maximum number of REs of items (units, factories, resource points, etc.) that may use rail movement that phase. Cavalry and c/m units count double their RE size for rail movement. Rail-only units (see Rule 14F) do count against a player's rail capacity. Up to 30 REs per turn of Soviet reinforcements and replacements which enter play from the eastern military districts in a turn do not count against the Soviet rail capacity that turn. All other Soviet forces do count, including all REs over 30 that enter play from the eastern military districts in a turn.

The Soviet player has a capacity of 90 REs per turn and may increase this capacity by up to 60 REs. The German player has a capacity of 30 REs per turn for his regular rail net and may increase this capacity by up to 30 REs. The German player has a capacity of 10 REs per turn for the Finnish rail net and may increase this capacity by up to 10 REs. A player must spend 1 resource point for every 10 (or fraction thereof) RE increase over the normal rail capacity of a rail net. The resource point is spent in the player's initial phase and must be in any unisolated rail hex on the net. (Resource points are covered in Rule 12F.)

Rail capacity increases through resource point expenditure are temporary, lasting only for the turn in which the resource points are spent.

The Soviet rail capacity is permanently reduced each time the German player captures (gains ownership of) a Soviet major city hex for the first time. It is reduced by 1 RE for each partial city hex captured and by 2 REs for each full city hex captured. For example, the Soviet rail capacity would be reduced by 8 if the Axis captured the entire city of Moskva (one full and six partial city hexes). The Soviet player does not regain rail capacity when he recaptures Soviet cities.

Note: Keep track of rail capacities and any gains or losses on paper.

B. Roads. A unit moving along a road pays the MP cost for clear terrain for each hex it enters; the actual terrain costs for hexes entered and hexsides crossed are ignored. Movement along a road is subject to the same limitations as regular movement. For example, a unit moving along a road must spend additional MPs to leave a hex in an enemy ZOC.

A unit may use a road anywhere, unlike the use of railroads. Roads may be used in both the movement and exploitation phases.

Railroads are also roads. That is, each rail line is considered to be a road as well. Even when a unit is prohibited from using a railroad in a hex, it may still use the rail line there as a road.

C. Breaks. A unit may break a rail line by spending 2 MPs in the rail line hex. Bombing (Rule 20F2f) and partisan attacks (Rule 33C) may also break rail lines. A unit may not use rail movement to enter or leave a hex in which the rail line is broken. Rail line breaks may be repaired (Rule 14A), and a rail line may be used in the turn it is repaired. *Note:* Roads may not be broken.

Use a hit marker to mark a broken rail line in a hex. Use line cut markers to mark a broken stretch of rail line. For example, if the rail line in each hex from (and including) Smolensk (2A:3532) to (and including) Vyazma (2A:3425) is broken, then place a line cut marker, pointing east, at Smolensk and another one, pointing west, at Vyazma.

D. Railroad Construction. At the start of the game, three rail lines exist only as roads and not as rail lines: between 6A:4407 and 6A:3818, between 6A:2430 and 6A:2426, and between 8A:3325 and 8A:4629. (The listed hexes are rail lines; only the lines between the listed hexes are not built. Use railhead markers to show where the rail lines end.)

Each player has a limited rail construction ability, which he may use in his initial phase. The Axis player may build one rail hex on the I turn of each month. The Soviet player may build up to two rail hexes on each turn. A player may build a rail hex on any of the above lines if at the start of his initial phase the hex is owned by the building player and adjacent to a friendly-owned railhead marker. The Soviet player may build railroads starting with the Jul I 41 turn.

Rule 8 — Stacking

A. Stacking Limit. Only a limited number of units may stack in a hex.

1. Regular. Up to six units of any unit types (including artillery), no more than three of which may be divisional units, may stack in a hex. In addition to this, two non-divisional artillery units or one artillery division may stack in the hex.

2. Mountain. Up to four units, no more than two of which may be divisional units, may stack in a mountain hex. In addition, one non-divisional artillery unit may stack in the hex.

3. Arctic. Up to two units, no more than one of which may be a divisional unit, may stack in a hex in the Arctic. In addition, one non-divisional artillery unit may stack in the hex. The Arctic stacking limit, not the mountain stacking limit, is used for mountain hexes in the Arctic.

B. Effects. No unit may end a movement, air, combat, or exploita-tion phase in violation of the stacking limit. A player may not move his units in such a way so that, at the end of the phase, the stacking limit is violated. If, as a result of combat, a unit is forced to retreat in violation of stacking, it must continue to retreat until the stacking

limit is no longer violated. If it cannot do so, it is eliminated instead.

The stacking limit of a hex is also the limit on the number of units that may attack that hex from an adjacent hex. *Example:* A hex in the Arctic is attacked by units in hexes south of the Arctic. Since the hex being attacked is in the Arctic, only units up to the Arctic stacking limit may attack the hex from each of the hexes south of the Arctic, even though more units may be stacked in these hexes.

The stacking limit may be violated in the initial phase, when reinforcements and replacements enter play (see Rule 34). These units may be placed in violation of the stacking limit during the initial phase, but only if the stacking limit will not be violated at the end of the following movement phase.

C. Corps/Army Markers. Corps/army markers and the *Europa* marker display chart (see Rule 2D5) are provided to help with stacking in congested portions of the map. To use a corps/army marker, simply remove a stack of units from the map, place a corps/army marker in its place, place the stack in a box on the marker display, and write the identification and unit type of the corps/army marker in the appropriate place in the box. Corps/army markers are used only for convenience for stacking; they do not increase the stacking limit of a hex or otherwise affect the play of the game. All units in a box on the display are treated for all purposes as being in the hex occupied by the marker.

Rule 9 — Combat

During the combat phase, the phasing player's units may attack adjacent enemy units. However, no unit may attack into or across terrain prohibited to that unit. Attacking is voluntary; units are not required to attack.

A. Procedure.

1) Modify the attack (combat) strengths of all units attacking into an adjacent enemy-occupied hex due to terrain (including weather effects), supply, and support as appropriate. Total the attack (combat) strengths involved, and add any ground support bombing and/or naval gunfire support to the total.

2) Modify the defense (combat) strengths of all units in the attacked hex due to supply and support, as appropriate. Total the defense (combat) strengths involved, and add any defensive support bombing and/or naval gunfire support to the total.

3) Compare the total attack strength to the total defense strength in the form *attacker:defender* to obtain a combat ratio. Round this ratio down in favor of the defender to correspond to a simple odds ratio on the combat results table. For example, an attack strength of 34 attacking a defense strength of 9 is 34:9, which rounds down to 3:1.

4) Roll one die, and modify the number rolled by any terrain effects and by any special effects (such as armor/antitank effects). Cross-index the adjusted die roll with the odds column to obtain a combat result. The combat result affects the units involved in the combat; implement it immediately.

B. General Restrictions.

1) No unit may attack or be attacked more than once per combat phase.

2) All units defending in a hex must be attacked collectively, with their defense strengths combined. Units in a hex may not be attacked individually.

3) Each attack must be directed against the units occupying a single hex. Two or more enemy-occupied hexes may not be attacked as a single attack.

4) Units stacked in the same hex may attack into different hexes, but each hex attacked must be resolved as a separate combat.

5) A single unit may not split its attack strength so as to attack more than one hex.

6) The attacker determines the order in which the attacks are resolved.

7) The stacking limit of the attacked hex limits the number of units in each adjacent hex that may attack the hex (see Rule 8B).

8) Any attack at odds higher than 9:1 is resolved at 9:1 odds.

Any attack at odds less than 1:4 is an automatic AE (attacker eliminated) result.

C. Combat Results. In the following results, A means that the combat result affects the attacking units and D means that the combat result affects the defending units.

AE: Attacker Eliminated/DE: Defender Eliminated. All affected units are eliminated. Any unit with a cadre strength is reduced to its cadre strength; all other units are removed from play. Units reduced to cadres must retreat.

AH: Attacker Half Eliminated/DH: Defender Half Eliminated. The owning player must eliminate units so that at least half of the total strength of the affected units is eliminated. All surviving affected units must retreat.

AR: Attacker Retreats/DR: Defender Retreats. All affected units must retreat.

NE: No Effect. The attack is inconclusive; neither side takes losses or retreats.

HX: Half Exchange. The side with the lower combat strength (or the defender if both sides are equal in strength) is eliminated. Units reduced to cadres because of this must retreat. The other player must then eliminate units so that his total strength loss at least equals one half the total strength loss of his opponent. For example, if the weaker side loses 10 strength points, then the stronger side must eliminate at least 5 strength points.

EX: Exchange. The side with the lower combat strength (or the defender if both sides are equal in strength) is eliminated. Units reduced to cadres because of this must retreat. The other player must then eliminate units so that his total strength loss at least equals that of his opponent.

D. Losses. All combat losses are calculated using the printed strengths of the involved units. Terrain, supply, and support may modify strengths for combat resolution, but these factors are not considered when assessing losses. When determining losses, always use the attacker's printed attack strengths and the defender's printed defense strengths.

Air units and ships may aid units in combat (Rules 20F2c, 20F2d, and 28B2). However, the bombing strengths of air units and the gunnery strengths of ships are not included when determining losses. Air units and ships are never eliminated due to ground combat resolution.

E. Cadres. Various divisional units are able to take losses in combat and remain in play at reduced strengths. These units have cadres printed on the back of the counters. (*Note:* German cadres are called *divisionsgruppen* (DG) on the counters.) When the unit is eliminated in combat, it is reduced to its cadre instead of being removed from play. When calculating the total strength loss in a combat, the strength of a divisional unit reduced to a cadre is counted fully. For example, an 8 strength point division reduced to a 3 strength point cadre is counted as a strength loss of 8, not 5.

F. Movement After Combat.

1. Retreats. When a unit is required to retreat, the owning player must move it one hex away from the hex it occupied during combat. A unit must be retreated in accordance with the following priorities: 1) to a hex not in any enemy ZOC and not in violation of stacking; 2) to a hex not in any enemy ZOC but in violation of stacking; 3) to a hex in an enemy ZOC (regardless of stacking). When a unit violates the stacking limit, it must continue to retreat, in accordance with the above priorities, until the stacking limit is no longer violated. If it cannot do this, it is eliminated. A unit which retreats to a hex in an enemy ZOC is reduced to a cadre; if it does not have a cadre (or already is a cadre) it is eliminated. A unit with no retreat route except into or across prohibited terrain or into enemy-occupied hexes is totally eliminated, even if it has a cadre.

Defending units which retreat into a friendly-occupied hex that is subsequently attacked in the same combat phase contribute nothing to the defense of the hex. These units are affected by all combat results achieved against the hex, but their combat strengths are not counted at all for any exchange purposes.

German c/m units (only) may ignore enemy ZOCs when retreating if they retreat to a friendly-occupied hex. If they retreat to a hex unoccupied by friendly units, they are affected by enemy ZOCs as normal. *Note:* Only German c/m units have this special retreat ability. All other units, including units stacked with German c/m units, do not have this ability.

2. Advances. Advance after combat is voluntary. If an attacked hex is cleared of defending units, the attacking units may occupy the hex, up to the stacking limit. The advance must be performed immediately upon resolution of the attack, before any other attack is resolved. Defending units may not advance after combat.

G. Zero Strength Units. A unit with an attack strength of 0 may not attack by itself. It may voluntarily be included in an attack made by other units, whereupon it is affected by the results of the attack (including advance after combat).

A unit with a defense strength of 0 that is not stacked with non 0 defense strength units is automatically eliminated when attacked by any unit.

A unit with a combat strength of 0 is subject to all limitations of this rule.

H. Terrain Effects. The terrain of the defender's hex and the terrain of the hexside across which the attack is made may affect combat resolution. The combat effects column on the terrain effects chart summarizes these effects. The references to AEC refer to armor capabilities, as explained in Rule 10. Terrain is rated by its effect on units attacking into such a hex or across such a hexside. Die roll modifications (e.g., −1) apply to the die roll used to resolve the attack.

I. Retreat Before Combat. Certain units (as specified in later rules) have the ability to retreat before combat. When an attack is resolved against a hex contains any defending units which may retreat before combat, the attacking player must indicate all forces that are attacking the hex. The defending player may then retreat before combat any of his units with this ability, at his option. Only units with the retreat before combat ability may do so; other units in the hex must remain. The regular rules of retreat (Section F1 above) are followed for retreat before combat.

Once allocated to an attack, the attacking forces may not be reallocated to a different attack or withheld from attacking, even if all defending units in the attacked hex retreat before combat. If any defending units remain in the attacked hex, the attack is resolved. If all defending units in the hex retreat before combat, the attacking units may advance into the hex, the same as for advance after combat (Section F2 above).

J. Required Losses. Certain units having special combat abilities are required to take losses under some circumstances if their special abilities are used. (The special abilities and whether required losses are incurred are covered in later rules.) If such units use their special abilities in a combat which results in losses to their side, at least half of all losses must be taken from these units. *Example:* In an attack, the attacker used full AECA to modify the attack and obtained an exchange against the defender. The defender lost 20 strength points in the exchange; the attacker must lose the same amount. Since required losses are incurred when 1/2 or more AECA is used (Rule 10H), half of the losses (10 strength points) must be taken from units capable of 1/2 or more AECA which participated in the attack.

Rule 10 — Armor/Antitank Effects.

Various units have armor and antitank capabilities. The specific capabilities of each unit type are shown on the unit identification chart.

A. Categories.

1. AECA: Armor Effects Capability in the Attack. AECA expresses the ability of an attacking unit to use armor effects.

2. AECD: Armor Effects Capability in the Defense. AECD expresses the ability of a defending unit to use armor effects.

3. ATEC: Antitank Effects Capability. ATEC expresses the ability of a defending unit to use antitank effects when the attacker has AECA.

B. Values. Armor and antitank effects are calculated on a propor–tional basis, using regimental equivalents. To calculate the propor–tion, a player must know the value of each of his involved REs. There are four possible values a unit may have.

1. **Full.** Each RE of the unit is counted as fully capable. For example, a Soviet tank corps (3REs) is counted as 3 REs of AECA.

2. **Half.** Each RE of the unit is counted as one half capable. For example, a German assault gun brigade (1 RE) is counted as 1/2 RE of AECD; its remaining 1/2 RE is counted as having no AECD.

3. **Neutral.** The REs of the unit are not counted when deter- mining the proportion. For example, the 3 REs of a Soviet motor- ized division are not counted when determining ATEC.

4. **None.** All REs of the unit are counted in the proportion as having no capability.

C. Proportions. To calculate the proportion in a category, total the number of REs that have a capability. Divide this number by the number of non-neutral REs involved. The resulting number is expressed as a fraction. For example, if two German infantry divi- sions (6 REs) and one panzer division (3 REs) are attacking, then three out of a total of nine REs have AECA, for a fraction of 1/3 (3/9).

Once the proportion is calculated, it is used to determine the die roll modification to combat. If the proportion is less than one seventh (1/7), then there is no die roll modification in that category.

1. **AECA.** When the AECA proportion is at least one seventh but less than one half (1/2), the die roll modification is +1.

When the AECA proportion is at least one half but less than one (1/1), the die roll modification is +2.

When the AECA proportion is one, the die roll modification is +3.

2. **AECD.** When the AECD proportion is at least one seventh but less than one half, the die roll modification is −1.

When the AECD proportion is one half or greater, the die roll modification is −2.

The defender may not use AECD in a combat if the attacking units have (or are capable of) one half or more AECA. In this situa- tion, the defender may use ATEC but not AECD.

3. **ATEC.** ATEC is used only when the attacking units have one half or more AECA. When determining if ATEC may be used, it is necessary only to determine if the attacking units are capable of one half or more AECA, even if the attacking units do not (or can- not) use this capability.

When the ATEC proportion is at least one seventh but less than one half, the die roll modification is −1.

When the ATEC proportion is at least one half but less than one, the die roll modification is −2.

When the ATEC proportion is one, the die roll modification is −4.

Example 1: A panzer division, two infantry divisions, and three artillery regiments are attacking. The artillery units are AECA neutral and thus are not counted. This leaves nine REs for the proportion, three of which are AECA. The proportion is 1/3, which is over 1/7 but less than 1/2. Thus, 1 is added to the die roll.

Example 2: One Soviet light tank cadre (1 RE) and one infantry cadre (1 RE) are defending. The light tank unit is 1/2 AECD, giving a total of 1/2 RE of AECD in this case. There are two REs for the proportion, one half of which is AECD. The proportion is 1/4; 1 is subtracted from the die roll.

D. Cumulative Effects. When both AECA and AECD or both AECA and ATEC are used in a combat, the modifications to the die roll are cumulative. For example, if the attacker is full AECA (+3) and the defender is full ATEC (−4), the net modification is −1.

E. Half Capability. Any unit listed as half capable in a category may be considered to be neutral in that category, at the owning player's option.

F. Neutral Restriction. In any combat, for any category, the own- ing player may not have more than twice the number of REs of neutral units as there are of capable units. Neutral REs in excess of this figure are counted as having no capability (rather than neutral) in the category.

Example: One panzer division, two motorized divisions, and three artillery regiments are attacking. Of the total of twelve REs, three are AECA and the remaining nine are neutral. However, only six (twice three) of these may be used as neutral; the remaining three are considered to have no capability. Thus, there are six REs for the proportion, of which three are AECA. The proportion is 1/2.

Note: For the purposes of this rule, all REs of half-capable units are counted. For example, 2 REs of neutral units may be used without penalty to armor effects in conjunction with a 1 RE unit having 1/2 AECA.

G. Terrain. The terrain effects chart lists several terrain types as *no AEC.* This means that AECA may not be used by a unit attack- ing into such a hex or across such a hexside. It means AECD may not be used by a unit defending in such a hex. ATEC is unaffected and may be used in such a hex if the attackers are capable of one half or more AECA, even though AECA may not be used due to the terrain.

Example: A Soviet tank brigade is attacking a German heavy anti- aircraft battalion in a dot city. Due to the dot city, the attacking unit may not use AECA. Since the tank brigade is capable of one half AECA or more, ATEC may be used by the defender. Thus, the die roll would be modified by −4, due to the full ATEC capability of the defending unit.

H. Required Losses. If the attacker used 1/2 or more AECA in an attack, at least half of all losses to the attacker as a result of the attack must be taken from units capable of at least 1/2 AECA. If the defender used 1/2 or more AECD or ATEC defending against an attack, at least half of all losses to the defender as a result of the attack must be taken from units capable of at least 1/2 AECD or ATEC, respectively.

I. Infantry Antitank Weapons. Due to availability of infantry anti- tank weapons, all German units listed on the unit identification chart as having no ATEC ability are ATEC neutral on and after the Jul I 44 turn.

J. Unit Type Notes. Soviet mechanized corps and their cadres have different AEC/ATEC values than other mechanized units, in- cluding other Soviet mechanized units. The ATEC value for assault gun units changes on the Jul I 42 turn. The ATEC value for Axis antitank units changes on the Apr I 42 turn. All of these are shown on the unit identification chart.

Rule 11 — Support

All units possess an intrinsic combat ability as given by their printed combat strengths. However, certain units are unable to use their strengths fully due to a lack of supporting arms. Such units are termed unsupported.

Most units have supporting arms. These units are:
1) All divisional units.
2) All artillery units.
3) All divisional headquarters.
4) All cadres.
5) All non-divisional units with a dot (the supported indicator) in the upper left corners of their counters.

All other units are unsupported. An unsupported unit has its com- bat strength halved as long as it remains unsupported.

When defending, a headquarters, artillery, or divisional unit pro- vides support for all units stacked with it. When attacking, the unit providing the support must also participate in the same attack as the units it is supporting, as well as being stacked in the same hex.

Note that cadres and non-divisional units marked with support indicators do not provide support to any unit stacked with them.

Rule 12 — Supply

The effectiveness of units is affected by supply conditions. Units operate to their full extent if they are in supply; they operate less effectively if they are out of supply.

A. Supply Lines. The supply conditions of units are determined by the tracing of supply lines. A supply line may not be traced into a hex occupied by an enemy unit, into a hex in an enemy ZOC unless

the hex is occupied by a friendly unit, into a prohibited terrain hex, or across a prohibited terrain hexside.

B. Tracing Supply. The supply status of all units and cities is checked during the initial phase of each player turn. Units out of supply at this time are out of supply throughout the entire player turn. If a city is out of supply, then any reinforcements or replacements (Rule 34) appearing in that city automatically have the same supply condition as the city.

A unit is in supply if a supply line can be traced from the unit to a supply source. The supply line may have up to four elements: overland, truck, road, and railroad. A supply line may have fewer than four elements. The elements must be traced in the following order: overland, road, and railroad. A truck element may be traced before and/or after the road element.

The lengths of the overland, truck, and road elements vary depending upon weather and location (i.e., the Arctic as opposed to everywhere else). The supply line summary lists the maximum lengths, in hexes, of these lines.

1. Overland. The overland element of a supply line may be traced to a truck, a road, a railroad, a port, or a supply source. Each mountain, forest, unfrozen swamp, wooded rough, and sand hex counts as 2 hexes when tracing the overland supply line. When an overland line is traced across an unfrozen major river hexside, this hexside itself counts as 1 hex against the length of the supply line. These penalties do not apply if the overland line is traced along a road. *Example:* On map 3B, in clear weather, a German unit in hex 1001 is tracing an overland supply line due west. The line can only be traced to hex 1006, as the swamp in hex 1004 counts as two hexes of the supply line and the major river hexside at 1004/1005 counts as one hex of the supply line. If there was a road from hex 1006 to hex 1001, then the unit's overland supply line could be two hexes longer.

An overland supply line may be traced through both friendly- and enemy-owned hexes.

2. Truck. The truck element of a supply line may be traced from a truck to another truck, a road, a railroad, a port, or a supply source. The line may be traced to a road only if the unit's road element has not yet been traced. The maximum length of a truck supply line in hexes is given on the supply line summary. Note that a chain of trucks may be used to trace supply. (Trucks are described in Rule 14I.)

Each mountain, forest, unfrozen swamp, wooded rough, and sand hex counts as 2 hexes when tracing a truck supply line. When a truck supply line is traced across a major river hexside, this hexside itself counts as 1 hex against the length of the supply line. These penalties do not apply if the truck supply line is traced along a road.

A truck supply line may be traced through both friendly- and enemy-owned hexes.

3. Road. The road element of a supply line may be traced to a truck, a railroad, a port, or a supply source. The maximum length of this line in hexes is given on the supply line summary. A road supply line may only be traced in friendly-owned territory.

4. Railroad. The railroad element of a supply line may be traced an unlimited length to a port or supply source, but it may only be traced in friendly-owned territory. Rail breaks do not block the tracing of the rail element. A player may trace the rail element only along rail lines of the same gauge that he may use for rail movement (see Rule 7A3).

C. Regular Supply Sources. Each side has its own supply sources, as listed below. A supply source may be used only by its own side and only if that side owns it.

1. Axis. Any rail hex on the west edge of the map in Greater Germany, Hungary, Rumania, or Bulgaria is a supply source for Axis units. Any Arctic port in Norway and Finland (including Arctic ports on the Baltic Sea) is a supply source for Axis units.

2. Soviet. Any rail hex on the east edge of the map is a supply source for Soviet units. In addition, any three connected Soviet major cities (i.e., major cities in the USSR, 1941 borders) are a sup-

ply source for Soviet units. Soviet cities are connected if a rail line of any length can be traced among the cities; this line is traced in the same manner as the rail element of a supply line. Once a Soviet city has been owned by the Axis, it may no longer be used in this manner, even if the Soviet player regains ownership of the city.

3. Finnish. In addition to the above supply sources, Helsinki or any dot city in Finland is a supply source for Finnish units.

4. Rumanian. In addition to the above supply sources, Bucuresti is a supply source for Rumanian units.

D. Supply Effects. A unit out of supply has its abilities restricted, depending upon the number of consecutive turns the unit is out of supply. A turn out of supply consists of two player turns. For example, if a Soviet unit is first judged to be out of supply in the initial phase of the Aug II 41 Soviet player turn, then the unit's first turn out of supply consists of the Aug II 41 Soviet player turn and the Sep I 41 German player turn. Use supply status markers to mark units out of supply. Use red markers for units that start out of supply in the Soviet initial phase and black ones for units that start out of supply in the German initial phase. (*Note:* Cluttering the map with supply status markers can impede ease of play. Where possible, use a single supply status marker for an entire stack or pocket (of several hexes) of units that are at the same supply condition.)

On the first turn out of supply, a unit has its attack strength halved; a c/m unit has its movement rating halved as well. A unit's defense and AA strengths, armor/antitank capabilities, and (for a non-c/m unit) movement rating are unaffected.

On the second and subsequent turns out of supply, the attack, defense, AA strengths, and movement rating of the unit all are halved. A unit with a ZOC has a reduced ZOC. A unit is no longer capable of armor/antitank effects; it is treated as having no capability for AECA, AECD, and ATEC calculations.

During each initial phase starting with the fourth turn out of supply, the unit is checked for elimination if it is both out of supply and isolated (see Rule 3I) at that time. (It need not have been isolated in the preceding turns.) One die is rolled for the unit. On a roll of 4 or greater, the unit is eliminated. If the unit has a cadre, it is reduced to its cadre strength. The die roll is modified as follows:

−2 if the unit is in a major city or fortress. In order to qualify for this modification, the major city or fortress must have started the game owned by the player and must not have been owned by the other player at any time during the game.

+1 during frost weather. This modification is not used if the unit is in a major city or fortress.

+2 during snow weather. This modification is not used if the unit is in a major city or fortress.

E. Special Supply Sources. Units (but not cities) may draw supply from certain special sources, as listed below. A unit drawing supply from such a source is treated as being in supply for the entire player turn. However, use of these sources does not negate or defer the number of turns a unit has been out of supply. *Example:* A unit has been out of supply for three turns, and would now be starting its fourth turn out of supply. However, the unit draws supply from a truck (see below). The unit is treated as being in supply for the current player turn but is still considered to have started its fourth turn out of supply for regular supply purposes. If isolated, it would not be checked elimination, as it is considered to be in supply.

Note: Certain rules specify that units must be in regular supply for various purposes. This means that the rule applies only if the unit draws supply from a supply source listed in Section C of this rule and does not apply if the unit draws supply from a special source of supply.

1. Trucks. Instead of being used to extend supply lines (per Section B2 above), a truck itself may be used as a source of supply. All units that can't trace a supply line to an undepleted truck may draw supply from the truck. The maximum length of this line in hexes is given on the supply line summary, and the restrictions governing a regular overland supply line also apply to this line. A truck used as a supply source is flipped to its depleted side. A

truck may not be used both as a source of supply and to extend supply lines in the same initial phase. An undepleted truck may be used as a source of supply even if it is out of supply or isolated.

A depleted truck may be used to extend supply lines as normal, but it may not be used as a source of supply. A depleted truck becomes undepleted during an initial phase if it is in a rail hex from which a rail element supply line (only) can be traced to a regular supply source.

2. Air and Naval. Air units can transport supply to airbases and can air drop supply in hexes, as described in the air transport rules (Rule 20E). Naval units can transport supply to ports and beaches, as described in the naval transport rules (Rule 28D).

When supply is transported by air or sea to a hex, place in the hex a numbered status marker corresponding to the number of REs of supply delivered there. These markers remain in the hexes until the end of the next friendly initial phase and are removed at that time. During the initial phases these counters are on the map, units may draw supply from such a hex by tracing an overland supply line to the hex. (*Note:* The supply line used here is an overland supply line, not a special supply line as for using a truck.) The number of REs of supply in the hex is the total number of REs of units that may draw supply from the hex. For example, if 3 REs of supply were transported to an airbase, then units totaling at most 3 REs may draw supply from that airbase in a following initial phase. Unused REs of supply may not be accumulated for later use.

F. Resource Points. Resource points are used in the construction of forts and airfields, to increase a player's rail capacity, and for air and ground operations in the Arctic. A resource point counter is used as a marker for resource points. Resource points do not count against stacking, do not have combat strengths, and do not have ZOCs. The owning player may freely build up or break down his resource point counters at any time, as long as the total number of resource points in each hex does not change. For example, a player may break a 5-point resource point counter down to five 1-point counters. Friendly-owned resource points in a hex captured by the enemy are automatically destroyed.

A resource point counter may move by rail by itself, moving the same as a rail-only unit. A resource point counter may not move overland by itself. Instead, it must be carried by a ground unit or a truck. A ground unit may carry up to twice its RE size in resource points (e.g., a division may carry 6 resource points). A unit carrying resource points up to its RE size has 1 MP deducted from its movement rating. A unit carrying resource points greater than its RE size has 2 MPs deducted from its movement rating. When a movement rating is to be halved, these MPs are deducted first. A truck may carry resource points only if it was not used for any supply purpose in the initial phase of that player turn. A truck may carry up to 30 resource points and does not have its movement rating affected due to this.

When retreating, units and trucks may carry resource points up to their maximum limits. As before, a truck may carry resource points only if it was not used for any supply function in the initial phase of the current player turn.

Rule 13 — Overruns

Overruns occur during the movement and exploitation phases. The phasing player may perform an overrun by moving units into a single hex adjacent to the enemy units to be overrun; these units may not exceed the stacking limit of the hex. All overrunning units must be able to enter the hex being overrun. The overrunning units must have a total attack strength sufficient to achieve 10:1 odds or more against the enemy units; the odds are computed in the same way that combat odds are, taking all terrain, supply, and support modifications into account except for defensive air support. Defensive air support (Rule 20F2d) is ignored for overrun purposes.

Units being overrun immediately lose their ZOCs. Each overrunning unit must spend MPs sufficient to enter the hex being overrun, paying all terrain, ZOC, and overrun MP costs. (Note that ZOC costs are not paid due to units in the hex being overrun, but are

paid due to enemy units in adjacent hexes.) Overrun MP costs must be paid by each unit participating in an overrun, as given on the overrun MP costs table. The units in the hex being overrun are completely eliminated and removed from play (even if they have cadres), and the overrunning units may advance into the hex. This advance is optional, but each overrunning unit must spend the required MPs even if it does not advance. After executing an overrun, the units may continue moving if they have sufficient MPs remaining.

A unit with insufficient MPs to pay the full MP costs for an overrun may not participate in the overrun, even if it has not moved at all in the phase.

Overrunning units may use the road movement rate when executing an overrun if all other considerations for road movement are met.

A unit with a defense strength of 0 may be overrun at 12:1 odds by any unit with an attack strength greater than zero.

A unit that may retreat before combat (see Rule 9I) may use this ability when enemy units overrun the hex it occupies. When the overrun is announced, these units may retreat before combat, at the owning player's option. The overrun odds are then recalculated, and the overrun resolved. If all units in a hex being overrun retreat before combat, then the overrunning units do not pay the overrun MP cost for the overrun attempt.

Rule 14 — Special Unit Types

A. Engineers.

1. Construction. Construction engineers and other construction units have a variety of construction abilities, as described below.

A construction unit may build a fort in any hex, except one already containing a fort, fortress, or fortified area. The unit begins building a fort during its initial phase and must be in supply. (Place a fort counter on the unit to show the construction.) It takes one game turn to build a fort in clear or rough terrain and two game turns to build a fort in any other terrain. For example, if a fort in a woods hex is begun during the Soviet initial phase of the Jul I 41 turn, then it will be completed in the Soviet initial phase of the Aug I 41 turn. (When completed, place it at the bottom of the stack in the hex.) If the construction unit leaves the hex at any time before the fort is built, the fort counter is removed from the map.

A construction unit may build a permanent airfield in any clear, rough, woods, or wooded rough hex (including such hexes containing other features such as reference cities or forts), except one already containing a permanent airfield. A permanent airfield is built in the same manner as a fort, taking one turn to build in a clear or rough hex and two turns to build in a woods or wooded rough hex.

One resource point must be spent in order to build a fort or permanent airfield. The construction unit building the item must be able to trace an overland supply line to the resource point being used for construction. The resource point is spent when the unit begins construction. If construction is not completed, for any reason, the resource point is not recovered.

A construction unit may build a temporary airfield in any clear or rough hex except one already containing any airfield. The unit must be in supply, and the airfield costs 4 MPs to build. Unlike a permanent airfield, a temporary airfield remains on the map only if there is a construction unit in its hex at all times. (The unit need not be the one that built the airfield.) If there is no construction unit in the hex, the airfield is removed from play. Note that a permanent airfield may be built in a hex containing a temporary airfield. In this case, the temporary airfield is removed from the map when the permanent one is completed.

A construction unit may demolish the capacity of a port. For every 3 MPs the unit spends in the port's hex, one hit of damage is applied to the port.

A construction unit may repair damaged ports, airbases, and rail lines. In all cases, the general procedure is the same: the unit must spend a number of MPs in the hex of the item to be repaired. It costs a construction unit 2 MPs to remove one hit from an airbase, 4 MPs to remove one hit from a port, and 4 MPs to remove a hit from a damaged rail line.

a. **Weather.** Poor weather (mud, frost, and snow) affects construction abilities. All MP construction costs are doubled. For example, 4 MPs are required to repair a hit on an airbase in poor weather. All construction costs based on turns are doubled. For example, 2 turns are required to build a permanent airfield in clear terrain during poor weather. Temporary airfields may not be built or repaired during mud weather.

b. **Quick Construction.** A player may use two construction units in conjunction in order to speed construction. The construction units must be stacked together at the time when their construction abilities are to be used together. In this case, each construction unit pays half the construction cost. For example, when two construction units are used to repair a rail line, each spends 2 MPs (half of 4) during good weather or 4 MPs (half of 8) in poor weather. When two construction units are used to build an item requiring one turn to build, then each unit spends one half its movement allowance for the construction. For example, if two Soviet 0-5 construction regiments are used to build a fort in a rough hex during clear weather, then each unit spends 2 1/2 MPs for the construction. *Note:* Construction of forts and permanent airfields must always be begun in the initial phase, even if quick construction is used.

Construction costs cannot be further decreased, even if the player uses three or more construction units in conjunction, two construction units plus workers (see below), or any other combination of construction abilities.

c. **Soviet Workers.** If a Soviet construction unit can trace a line no more than 4 hexes in length to a Soviet-owned major city in the USSR, then the unit may use the quick construction rule (above) without a second construction unit being present. This 4-hex line is traced the same as an overland supply line.

Only a limited number of construction units may use this ability per major city: up to 3 construction units per multi-hex city, up to 2 construction units per full hex city, and only 1 construction unit per partial hex city. For example, only two construction units may use Kiev's worker ability.

d. **Motorized Limit.** A c/m construction unit may not use its construction abilities in the exploitation phase.

2. Combat Engineers. Combat engineers are construction units. Combat engineers also have the following abilities.

A combat engineer is considered to be supported when attacking into or defending in a major city, fortress, or fort. It does not provide support to other units in such cases.

When at least 1/5 of the REs attacking a major city, fortress, or fort are combat engineers, the combat resolution die roll is modified by + 1. The REs of attacking artillery units are not counted in this calculation. If this special ability is used, then required losses (see Rule 9J) are incurred for the combat engineers.

3. Assault Engineers. Assault engineers are not construction units. They have the combat abilities of combat engineers. In addition, an assault engineer attacking into or defending in a major city or fortress has its combat strength doubled and has its RE size doubled for the purposes of calculating the engineer proportion. For example, a 1-10 assault engineer battalion attacking a fortress would have an attack strength of 2 and would be counted as 1 RE for the engineer proportion.

4. Railroad Engineers. A railroad engineer may repair a rail line in the same manner as a construction engineer. In addition, a railroad engineer may regauge a rail line, changing the gauge from broad to standard (or vice versa). If a rail line is broken, it must be repaired before it can be converted. A railroad engineer must be in supply to regauge a rail hex. It costs a railroad engineer 1 MP (2 MPs in poor weather) to regauge a rail hex. Quick construction may be used to regauge a rail hex. For quick construction, only one railroad engineer unit need be present; the other unit may be a construction unit. Also, Soviet railroad engineers may use Soviet workers for quick construction.

A railroad engineer has no other construction abilities.

B. **Artillery.** Artillery units do not defend with their full strength unless the number of non-artillery REs in a hex at least equals the number of artillery REs. All Axis artillery units in excess of this number defend with a total strength of 1. All Soviet artillery units in excess of this number defend with a total strength of 0.

Example: The German player has three 2-3-8 artillery regiments and one 2-6 infantry regiment defending in a hex. Since there is only 1 RE of non-artillery units in the hex, only one artillery regiment may defend using its full defense strength. The other two artillery units defend with a total strength of 1. Thus, the defense strength of the hex is 6.

Artillery units do not attack with their full strength unless the number of non-artillery REs participating in the attack at least equals the number of artillery REs. All artillery units (Axis and Soviet) in excess of this number attack with a total strength of 1.

1. Siege Artillery. Siege artillery has its attack strength doubled when attacking a fortress or major city.

2. Railroad Artillery. A railroad artillery unit has a range of two hexes. When firing at two-hex range, it is not subject to any combat results, may not advance after combat, and may not be included in exchange calculations. Railroad artillery may not attack by itself when firing at two-hex range; it may attack only if units adjacent to the defending hex are attacking the hex as well. When firing at one hex range (i.e., adjacent to the defending hex), railroad artillery is subject to combat results. Railroad artillery is also considered to be siege artillery.

3. Soviet Artillery Divisions. A Soviet artillery division which moves in its movement phase has its attack strength halved for any overruns that phase and for combat in the following combat phase.

C. **Specialized Armor Units.** Flamethrower tank units, engineer tank units, and sturmpanzer units are specialized armor units. When attacking a major city, fortress, or fort, a specialized armor unit is treated in all respects the same as a combat engineer unit attacking such a hex. Note that while these three unit types have the same special combat ability, they do have differing AEC/ATEC capabilities.

D. **Headquarters.** A headquarters unit has only a movement rating; its combat strength is 0. A headquarters unit is 1 RE in size, has heavy equipment, and does not have a ZOC. A headquarters is c/m if its unit type symbol is a c/m one. A headquarters is automatically AEC and ATEC neutral, regardless of the AEC and ATEC capabilities of its unit type symbol.

E. **Mountain** and **Ski Units.** Any unit with the mountain symbol as part of its unit type symbol is a mountain unit. Mountain units have movement and combat advantages in certain types of terrain, as summarized on the terrain effects chart. These abilities are in addition to any other abilities of the unit. For example, a mountain cavalry unit moves as a mountain unit in mountain hexes and as a cavalry unit in forest hexes.

Any unit with the ski symbol as part of its unit type symbol is a ski unit. Ski units have certain movement advantages in snow, as summarized on the terrain effects chart. In addition, all ski units are also considered to be mountain units.

F. **Rail-Only Units.** A unit with a printed movement rating of ''R'' may not move except by rail movement. In combat, it may attack any adjacent hex (per the standard rules); however, it may not advance after combat. A rail-only unit required to retreat may retreat only to a hex it could enter using rail movement. If there is no such hex available, the unit is eliminated instead. Note that if a rail-only unit is in a hex when the rail line there is broken, the unit may not leave the hex until after the line is repaired. If required to retreat from such a hex due to combat, the rail-only unit is eliminated instead.

G. **NKVD Political Troops.** In combat (attacking or defending), all Soviet units which started the combat phase stacked in a hex with an NKVD political troops unit ignore retreats. For example, if Soviet units stacked with an NKVD political troops unit are attacked and receive a DH result, the survivors do not retreat from the hex. A combat result of AR becomes NE for Soviet units attacking from a hex containing an NKVD political troops unit.

In addition to the preceding, a combat result of DR becomes EX

for Soviet units defending in a hex containing an NKVD political troops unit.

Note: This rule applies only to those units with the NKVD political troops unit type symbol. Other NKVD units do not have this special ability.

H. Commandos. A commando unit is any unit with the commando unit type symbol, either by itself or in conjunction with another unit type symbol. For example, a unit with the parachute commando unit type symbol is a commando unit. Commando units may attempt commando operations, as described below. The success table is consulted to determine the outcome of these operations. Roll one die, modifying it by all appropriate modifiers for commando operations, and consult the table for a result.

1. ZOCs. A commando unit may attempt to leave or move through enemy ZOCs without paying ZOC movement costs. Each time the unit leaves a hex in an enemy ZOC (whether or not it enters another hex in an enemy ZOC) without paying the ZOC costs, consult the success table. If the attempt does not succeed, the unit must pay normal ZOC costs to leave the hex; if it does not have sufficient MPs to meet this cost then it must end its movement in the hex it currently occupies.

A commando unit may attempt to retreat through enemy ZOCs to a friendly-occupied hex. Consult the success table. If the attempt succeeds, the unit is not eliminated due to retreating through enemy ZOCs.

A commando unit may attempt to help other units in its hex retreat through enemy ZOCs. The commando unit must successfully retreat to a friendly-occupied hex, and each unit to be helped must retreat to the same hex. Consult the success table for each unit retreating in this manner. If the attempt succeeds, the unit retreats to the hex, ignoring enemy ZOCs. If the attempt fails, the unit is subject to regular ZOC effects. *Example:* Soviet units attack a German-occupied hex from five adjacent hexes. The sixth hex is occupied by German units but is in Soviet ZOCs. In the attacked hex are a Brandenburger parachute commando unit and two 7-6 infantry divisions. The result of the attack is a DR. The Brandenburger unit attempts to retreat to the adjacent friendly-occupied hex and succeeds. Thus, the other retreating units may attempt to retreat through the Soviet ZOCs without loss. One division succeeds and thus retreats at its 7-6 strength. The other division fails and thus is reduced to cadre strength due to retreating through enemy ZOCs.

2. Surprise Attack. Any commando unit with an attack strength greater than 0 may attempt to make a surprise attack. The commando unit may attack alone or in conjunction with other units. The owning player declares the surprise attack immediately before rolling the die to resolve the attack, after calculating the odds of the attack. Consult the success table. If the commando operation succeeds, modify the combat resolution die roll for the attack by +1. If the operation fails, the commando unit may be eliminated (as explained on the success table). If the commando unit is eliminated, then the attack odds must be recalculated, excluding the commando unit's strength from the attack.

3. Retreat Before Combat. A commando unit may retreat before combat.

I. Trucks. A truck counter has a movement rating but no combat strength; it is treated as a 0-strength c/m unit. It does not count against stacking and does not have a ZOC. For transport purposes, it is 3 REs in size and has heavy equipment. A truck may move in the exploitation phase.

A truck may be used to extend supply lines, as a source of supply, and to carry resource points, as described in the supply rules. *Note:* Trucks are different from the transport counters used in some other *Europa* games; they may not be used to combat/motorize or otherwise carry ground units.

Rule 15 — Unit Breakdowns

A. Procedure. A divisional unit may break down into its component units at the start of a friendly movement phase. There is no MP cost to break down. The unit is removed from the map and its breakdown components are placed in its hex. The stacking limit may be violated when a unit breaks down, as long as the limit will not be violated at the end of the phase.

A divisional unit may be assembled at the end of any friendly movement phase. The component units of the divisional unit must be stacked in the same hex; they are removed from the map and the unit is placed in the hex.

C/m divisional units may break down and assemble during the exploitation phase the same as in the movement phase.

B. Unit Breakdown Charts. Breakdown possibilities are shown on the breakdown charts. The charts detail, by nationality, unit type, and unit ratings, all allowed breakdowns. Divisional units not listed on this chart may not break down. A player may not break down more units than there are breakdown counters provided in the counter mix.

A divisional unit may break down either into supported components or into a headquarters and unsupported components. For example, a German 7-6 infantry division may break down into three supported 2-6 infantry regiments or into an infantry division headquarters and three unsupported 2-6 infantry regiments. *Exception:* Battalion-sized break down components are never supported.

Each chart has a number of labeled boxes. When a unit is broken down, the unit counter should be placed in the appropriate box on the chart to show this fact. When a unit is assembled, its components should be placed in its box.

C. Breakdown Combinations.

1. General. Most divisional units do not have specific breakdown counters. Instead, the lettered breakdown counters of the appropriate nationality and unit type are used. Each specifically lettered set of breakdown counters may be used to break down one divisional unit at a time, and the unit broken down is placed in the corresponding lettered box on the chart.

2. Specific. Certain divisional units have specific breakdown counters; these units are identified on the unit breakdown charts. Such a unit may break down using only its specific breakdown counters, and these breakdown counters may not be used to break down any other unit.

D. German Antiaircraft Units. A German 2-10 motorized heavy antiaircraft (AA) regiment may break down (in the same manner as a divisional unit) into two 1-10 motorized heavy AA battalions, and two such battalions may be assembled into a regiment. These breakdowns and assemblies may use any appropriate units available in the counter mix, and the breakdowns and assemblies are not kept track of on the unit breakdown chart.

Rule 16 — Air Rules Introduction

A. Air Units. Air units are shown on the unit identification chart. The air unit codes table defines the three basic categories of air units: fighters, bombers, and transports. Within the fighter category, two further terms are used: interceptor and escort. An interceptor is a fighter flying the interception mission. An escort is a fighter flying the escort mission.

B. Concepts.

1. Operative. Under normal conditions, air units are operative and may function to the full extent the rules allow. Due to a variety of causes, air units may become inoperative. An inoperative air unit cannot function normally (such as fly missions or make patrol attacks) and must remain at its airbase until repaired. Place an inoperative air unit face down on its airbase to show its condition.

2. Target Hex. The target hex of an air unit is the hex in which it is to perform its mission. For example, the target hex of a bomber flying the ground support mission is the hex occupied by the enemy units to be bombed.

C. Air Phase Sequence. Activity within the air phase occurs in the following sequence.

1) Phasing Player Air Movement Step.
2) Non-Phasing Player Interceptor Movement Step.
3) Air Combat Resolution Step.

4) Mission Resolution Step.

5) Non-Phasing Player Interceptor Return Step.

6) Phasing Player Air Unit Return Step.

D. Air Unit Markers. Air unit markers are similar to corps/army markers (Rule 8C). Use air unit markers to ease counter congestion when a large number of air units fly to the same target hex. Place an air unit marker in the hex, place the air units there in a box on the *Europa* marker display, and write the identification of the marker on the box. For all game purposes, the air units are treated as being in the hex occupied by the marker.

Rule 17 — Airbases

Air units take off from and land at airbases. When not flying a mission, an air unit must be at a friendly-owned airbase; it may not use an enemy-owned airbase for any purpose.

A. Capacity. The capacity of an airbase is the number of air units that may initiate missions from that airbase each air phase. There is no limit to the number of air units that may land or be present at an airbase, except that an air unit may not land at an airbase if its capacity is currently 0. The capacities of airbases are shown on the airbase table.

B. Air Unit Escape. If an enemy ground unit gains ownership of an airbase hex, all operative air units there may try to escape. Airbase capacity is not considered (even if the capacity is 0) when air units attempt to escape. Roll a die for each air unit trying to escape:

On a roll of 1, 2, or 3, the air unit escapes. The air unit must immediately fly to an airbase within range of three times its printed movement rating; it becomes inoperative upon arrival. If there is no airbase within range, the air unit is eliminated.

On a roll of 4, 5, or 6, the air unit does not escape and is eliminated.

C. Airbase Capture. All enemy airbases except temporary airfields may be captured and used. An enemy airbase is captured when a friendly ground unit gains ownership of the hex. A captured airbase immediately becomes a friendly airbase and may be used from the instant of its capture.

A temporary airfield is immediately destroyed when an enemy unit gains ownership of its hex.

D. Airbase Damage. A unit may damage the capacity of an airbase by spending MPs to do so in the airbase's hex. One hit of damage to the airbase's capacity is done for every 2 MPs spent by the unit. Use hit markers to show this damage. The capacity of an airbase may be reduced due to bombing (Rule 20F2b) and partisan attacks (Rule 33C).

Each hit on an airbase reduces its capacity by one. Damaged airbases may be repaired (Rule 14A). No airbase may be damaged beyond its capacity. Anytime during the player turn, the phasing player may abandon any airfield (permanent or temporary) at zero capacity, removing it from the map.

Rule 18 — Movement of Air Units

Each air unit has a movement rating which states the basic number of MPs the air unit has available. Its movement rating may be modified depending upon the mission the air unit is flying. The modified movement rating is the maximum number of MPs the air unit may use to fly from its base to its target hex during the air phase; it is the maximum number of MPs it may use when returning to base during the air return step. As an air unit moves, it spends 1 MP for each hex it enters; terrain has no effect on the movement of air units. Each air unit moves individually.

An air unit, depending upon its air unit type and the mission it is flying, may fly during an air movement step or an interceptor movement step. Only the air units of the player named in the movement step may fly during the step.

During the air return steps, air units return to base. An air unit must return to a friendly airbase and is eliminated if it cannot do so.

Rule 19 — Patrol Attacks

Each operative fighter air unit at an airbase (i.e., not flying a mission) has a patrol zone. The patrol zone of an Axis fighter covers every hex within one half the movement rating (rounded down) of the exerting fighter. For example, an Me 109E fighter (movement rating of 7) has a patrol zone extending out to three hexes. The patrol zone of a Soviet fighter covers every hex within two hexes of the exerting fighter. On and after the Oct I 42 turn, the patrol zone of a Soviet Guards fighter covers every hex with one half the movement rating (rounded down) of the exerting fighter.

Fighters may make patrol attacks during the enemy player's air movement step. When an enemy air unit enters a hex in the patrol zone of a fighter, the enemy air unit is subject to a patrol attack. The air attack strength of the fighter is compared to the air defense strength of the enemy air unit. This comparison is used to determine the attack's chance of success:

If the fighter's strength is equal to or less than the enemy air unit's strength, a die roll of 6 will turn back the enemy air unit.

If the fighter's strength is greater than the enemy air unit's strength but less than twice as great, a die roll of 5 or 6 will turn back the enemy air unit.

If the fighter's strength is at least twice as great as the enemy air unit's strength, a die roll of 4, 5, or 6 will turn back the enemy air unit.

The turn back result due to patrol attacks is the same as the turn back result due to air combat (Rule 21B).

Patrol attacks may be made only during the enemy player's air movement step; they may not be made during the interceptor movement or air return steps. Patrol attacks are not missions, are not air combat, and do not count against airbase capacity. A fighter making a patrol attack is not subject to any adverse effects.

The capacity of the airbase is the maximum number of patrol attacks that fighters at the airbase may make. For example, only two patrol attacks may be made from a temporary airfield, even if three (or more) fighters are based there.

A fighter may make only one patrol attack per air phase. It is not required to make any patrol attack at all, and it need not make a patrol attack against the first air unit that enters its patrol zone.

An air unit may be subjected to only one patrol attack per hex entered; it may be subjected to a patrol attack in each hex it enters in enemy patrol zones.

Rule 20 — Air Missions

Air units may fly any of several missions, depending upon their air unit types. The missions are described in detail below. Each mission lists which air unit types may fly the mission, when the mission may be flown, and what the effects of the mission are. Unless otherwise stated below, an air unit may fly only one mission per air phase.

A. Interception. Fighters may fly interception during the interceptor movement step. An interceptor (a fighter flying this mission) may fly to any hex within range of one half its movement rating (round fractions down); the hex must contain enemy air units flying missions. The purpose of interception is to engage enemy air units in air combat.

B. Scramble. A fighter may scramble during the interceptor movement step if the fighter's airbase is the target hex of enemy air units. A scrambling fighter may fly to an airbase within range of its printed movement rating, landing at the airbase during the air return step. A fighter may not scramble to an airbase that is the target hex of any enemy air units.

C. Escort. Fighters may fly escort missions during the air movement step. An escort (a fighter flying this mission) flies to a hex within range of its printed movement rating; the hex must be a target hex of other friendly air units. The purpose of escort is to protect the other friendly air units in the hex during air combat.

D. Transfer. All air unit types may fly transfer missions during the air movement step. There are two different types of transfer missions.

1. Regular Transfer. An air unit may fly to any airbase within range of three times its printed movement rating. If the airbase is

not within interception range of any enemy fighter, the air unit may continue to transfer to another airbase within range of three times its printed movement rating. The air unit may continue to transfer in this manner any number of times. An air unit flying a regular transfer mission may not initiate a different mission in the same air movement step. Note that only the capacity of the airbase in which this mission is initiated is used.

2. Staging. An air unit may stage to an airbase within range of its printed movement rating and then initiate a non-transfer mission in the same air movement step. Note that the capacities of two airbases are used for each staging air unit: that of the airbase where the staging mission was initiated and that of the airbase where the second mission was initiated.

E. Transport. Transport air units may fly transport missions, carrying ground units, resource points, and supplies as their cargo during the air movement step. A transport may not carry any ground unit which has heavy equipment; all other ground units may be carried. The ground unit or resource point to be carried must start the air movement step at the airbase of the transport. Supplies can be carried from an airbase if a supply line could be traced from the airbase to a regular source of supply at the start of the player's initial phase. (Note that the special sources of supply cannot be used for this purpose.)

All air combat and antiaircraft fire which affect a transport also affect its cargo. If a transport is eliminated, its cargo also is eliminated. If a transport is aborted or turned back, its cargo returns to base with the transport. When two or more transports combine to carry a unit, then a result to any one of the transports also affects the cargo. Always use the most severe result to the transports as the effect upon the cargo. For example, if one transport is turned back and the other eliminated, then the cargo is eliminated.

There are two types of transport missions.

1. Regular Transport. Each transport may carry up to 1 RE of ground units/resource points or 2 REs of supply. A transport may fly to any airbase within range of twice its movement rating, landing there with its cargo during the air return step. Alternatively, a transport may fly to an airbase within range of its printed movement rating, land cargo there during the mission resolution step, and then return to any airbase within range of its printed movement rating during the air return step. It may not carry cargo during the air return step. Note that only the capacity of the airbase where this transport mission is initiated is used; the capacity of the airbase where the transport lands the cargo is not used.

2. Air Drop. Airborne units may be air dropped by transports. The target hex of an air drop may be any hex except for the following terrain types: prohibited terrain, mountain, swamp, or forest. The target hex may be in enemy ZOCs or occupied by enemy units. The effects of air drops are covered in Rule 25.

Supplies may be air dropped in any hex. Resource points may not be air dropped at all.

A transport may carry 1/2 RE of airborne units or 1 RE of supply. Thus, two transports are required to carry a 1 RE airborne unit on an air drop. A transport may fly to any target hex within range of its printed movement rating, dropping the airborne unit in the hex during the mission resolution step.

F. Bombing. Any air unit with a bombing strength greater than 0 may fly bombing missions. Air units fly bombing missions during the air movement step.

Most bombing missions are resolved during the mission resolution step, after air combat and antiaircraft fire in the hex has been resolved. Air units bombing a target may bomb it individually, or some (up to all) may combine their bombing strengths to make a single bombing attack. Exceptions to this general case are given in the specific bombing missions.

Several bombing missions require the use of the bombing table to resolve bombing attacks. For each bombing attack, use the bombing strength column that most closely matches (without exceeding) the bombing strength of the bombing attack. (If the bombing strength is less than 2, the bombing attack automatically misses.)

For example, a bombing attack with a strength of 8 points would use the 5 column. Roll the die and modify the number rolled with the appropriate modifiers on the bombing table. Cross-index the bombing strength column with the modified die roll to obtain a result. There are two possible results: M (miss) and H (hit). A miss has no effect on the target. A hit affects the target, as described in each bombing mission.

Weather (Rule 29) may affect bombing strengths. The bombing strengths (tactical and strategic) of an air unit are halved in mud and snow weather.

1. Strategic Bombing. The following missions may be flown by air units with strategic bombing strengths greater than 0.

a. Ports. Consult the bombing table for each bombing attack made upon an enemy-owned port. Each hit decreases the capacity of the port by 1 RE. Mark each hit achieved on the port with a hit marker.

b. Factories. Consult the bombing table for each bombing attack made upon a Soviet factory. Three hits on a factory in an air phase eliminates the factory's production in the next Soviet player turn. Additional hits do not accumulate.

c. Soviet Replacement Cities. Consult the bombing table for each bombing attack on a Soviet replacement city. For every 3 hits achieved on a city in an air phase, reduces the city's replacement rate by 1 replacement point in the next Soviet player turn. Hits beyond the city's replacement capacity for the next player turn have no effect.

d. Rail Marshalling Yards. Each dot city and major city hex is a rail marshalling yard. Consult the bombing table for each bombing attack made against an enemy rail marshalling yard. Each hit on the target reduces the rail capacity of the owning player by 2 in his next player turn. (This decrease is for his next player turn only; it is not permanent.) Only hits against functioning yards have effect; a yard is functioning if a rail-element supply line can be traced from the yard to a supply source at the start of the air phase. Only a limited number of hits are allowed per yard in an air phase: 1 per dot city and 2 per major city hex. Hits in excess of the yard's limit have no effect.

Note: Rail marshalling yards have no other effects in the game.

e. Oilfields. Baku (9A:1506) and Ploesti (3B:2826) are major oilfields and may be bombed. Consult the bombing table for each bombing attack made against an enemy-owned producing oilfield. For every 2 hits achieved on an oilfield in an air phase, 1 resource point from the oilfield's production for the following player turn is eliminated. Hits in excess of an oilfield's production have no effect. (Oilfields are covered in Rule 31I.)

2. Tactical Bombing. The following missions may be flown by air units with tactical bombing strengths greater then 0.

a. Air Units. Enemy air units at airbases (i.e., not flying missions) may be bombed. A fighter has its tactical bombing strength increased by 1 when flying this mission. For example, a fighter with a tactical bombing strength of 0 would have a strength of 1 when flying this mission. At each airbase, the phasing player must specify the target of his bombing air units before resolving any bombing attacks there. Consult the bombing table for each bombing attack. A hit on an operative air unit renders it inoperative. A hit on an inoperative air unit eliminates it.

b. Airbases. Air units may bomb enemy-owned airbases. Consult the bombing table for each bombing attack. Each hit achieved upon the airbase decreases the capacity of the airbase by 1. When the capacity of an airbase is reduced to 0, all further hits against the airbase are ignored.

c. Ground Support. Air units may aid attacks made by friendly ground units. The air units fly to the hex occupied by enemy ground units to be attacked. The air units remain in the target hex until the end of the combat phase, returning to base at that time. During the combat phase, add the air units' tactical bombing strengths to the total attack strength attacking the hex. Terrain does not affect tactical bombing strengths. The total printed tactical bombing

strength contributed to an attack may not exceed the total printed strength of the attacking ground units; bombing strength points in excess of this are ignored.

d. Defensive Support. Air units may aid friendly defending units. During the owning player's air movement step, the air units fly to the hex of the potentially defending friendly ground units. (This hex may be unoccupied or enemy occupied, in anticipation that friendly units will occupy the hex at a later point.) The air units remain in the hex until the start of the next friendly initial phase, returning to base at that time.

During enemy combat phase (only), add the air units' tactical bombing strengths to the total defense strength of the hex. (Note that defensive support bombing has no effect during overruns, which do not occur in the enemy combat phase.) Terrain does not affect tactical bombing strengths. The total printed tactical bombing strength contributed by the air units may not exceed the total printed strength of the defending ground units; bombing strength points in excess of this are ignored.

Prior to the resolution of the attack, the attacking player may fire antiaircraft against the defensive support air units in the hex (per Rule 22B).

e. Harassment. Air units fly harassment missions to their target hexes during the its owning player's air phase. They remain in these hexes until the start of the next friendly initial phase, returning to base at that time. For every two tactical bombing strength points delivered in a hex, one harassment hit is achieved. Harassment affects the movement of enemy units. A harassment hit has the following effects: 1) every enemy ground unit leaving the hex (including units using operational rail movement) must spend an additional MP to do so; 2) a unit leaving the hex by strategic rail movement loses 20 hexes of its rail movement ability; 3) an ''R'' movement unit loses 5 hexes of its rail movement ability when leaving the hex by operational rail movement. A unit may take a maximum of two harassment hits per hex in a movement or exploitation phase. Harassment hits in excess of two in a hex are ignored.

f. Rail Lines. Consult the bombing table for each bombing attack upon an enemy-owned rail line. A hit breaks the line in the target hex.

g. Ports. A tactical bombing attack may be made upon an enemy-owned port in the same manner as a strategic bombing attack on a port is made.

h. Naval Units. Consult the bombing table for each bombing attack made upon a naval unit (ship or river flotilla). The phasing player must specify the targets of his bombing air units before resolving any bombing attacks when two or more naval units are present in the target hex. Each hit on a naval unit damages it, and it will sink after taking sufficient damage. The naval rules (Rule 28) cover ships and river flotillas in detail.

Rule 21 — Air Combat

Air combat occurs when interceptors fly to hexes containing phasing air units flying missions; air combat is resolved during the air combat resolution step. All air combat in a hex is resolved before any air combat in another hex is resolved. There are two stages to air combat: preparation and resolution.

In the following rules, mission force refers to all air units in the target hex flying missions other than those flying escort (the escorts) or interception (the interceptors).

A. Preparation. At the start of the preparation for air combat in a hex, the player with the mission force may decide to abandon air operations in the hex. If a player abandons air operations in a hex, all of his air units flying missions in the hex immediately return to base; they may not land at an airbase in the hex in which they abandoned air operations. These air units may not fly a new mission that phase. Air combat, antiaircraft fire, and mission resolution do not occur in the hex. Enemy interceptors in the hex remain in the hex until the interceptor return step, returning to base at that time. (Note that the interceptors do not engage in air combat in the hex and may not be switched to air combat in any other hex.)

If air operations in a hex are not abandoned, air combat preparation continues. The player with the mission force separates his air units into two groupings: the escort screen and the mission force. All escorts are placed in the screen. Fighters flying bombing missions may jettison their bombs at this point and be placed in the escort screen (see Rule 24A).

The player with the interceptors separates his air units into two groupings: those that will attack the screen and those that will try to bypass the screen to attack the mission force. The player may divide his interceptors between these two groups as he wishes.

B. Resolution. In air combat, opposing air units fire upon one another. An air unit may, at most, fire only once during air combat in an air phase, regardless of the number of enemy air units that fire on it.

1. Sequence. Air combat is resolved in a series of steps; each step must be completed before the next is begun.

a) Interceptors allocated to attack the escort screen engage the screen in air combat. All other air units in the hex are ignored during this step. An interceptor is allocated against each escort of the screen. If one side has more air units than the other, the owning player may allocate these extra air units against enemy air units as he wishes. *Example:* Four interceptors attack a screen of two escorts. One interceptor must be allocated against each escort. The remaining two interceptors may be allocated either one against each escort (for a total of two interceptors against each escort) or both against one of the escorts (for a total of three interceptors against one escort and one interceptor against the other escort).

Unengaged (i.e., extra) escorts need not be allocated against the interceptors attacking the screen. Instead, they may attack the interceptors attempting to bypass the screen (step c).

b) Air combat between the allocated air units is resolved. Each separate allocation is resolved as a simultaneous exchange of fire between the opposing air units; combat results are implemented at the end of the exchange.

When one air unit is allocated against one air unit, each air unit fires once upon the the other air unit. Combat results are implemented after both air units have fired.

When several air units are allocated against one air unit, the single air unit fires upon any one opposing air unit, firing player's choice. The several air units each fire upon the single air unit separately. Combat results are implemented after all air units have fired. If the single air unit receives two or more abort results during the exchange, it is eliminated. *Example:* Two interceptors are allocated against an escort. The escort attacks one of the interceptors, achieving an eliminated result on it. Each interceptor fires on the escort separately, and each manages to achieve an abort result on it. At the end of the exchange of fire, the results are implemented. One interceptor is eliminated. The escort also is eliminated, having taken two abort results in the exchange.

All air units involved in air combat during this step have finished their air combat and are ignored for the rest of the air combat resolution in the hex.

c) Air combat between the unengaged escorts and the interceptors attempting to bypass the screen is now resolved. The escorts may be allocated against these interceptors as the owning player wishes. Following the allocation, air combat is resolved as in step b, except that none of the attacked interceptors may fire. Interceptors which survive this step may attack the mission force. *Example:* Three interceptors attempt to bypass the screen, and there are two unengaged escorts. The player with the escorts decides to attack two of the interceptors, each with one escort. (He could have allocated both escorts against a single interceptor.) Each escort attacks, one turning back an interceptor and the other achieving no effect. The interceptors may not attack the escorts. One interceptor is turned back and two get through to attack the mission force.

d) Interceptors successfully bypassing the escort screen may attack the mission force. The interceptors may be allocated against air units in the mission force as the owning player wishes. Air units of the mission force not attacked by interceptors are ignored; they

neither attack nor are attacked. Air combat between the allocated air units is resolved as in step b. All air combat in the hex is resolved upon completion of this step.

2. Combat Results. Air combat results are: no effect (—), turn back (R), abort (A), and elimination (K). An air unit that is turned back no longer participates in air combat and may not execute its mission (such as bombing); it returns to base during the appropriate air return step and remains operative. An aborted air unit is affected in the same manner as a turned back air unit, except that it becomes inoperative upon its return to base. An eliminated air unit is immediately removed from play.

3. Differentials. When an air unit fires on an opposing air unit, calculate the attack differential by subtracting the air defense strength of the air unit being fired upon from the air attack strength of the firing air unit. For example, in an exchange between a MiG-3 (5F5) and a Ju 87B (2D3), the MiG-3 would have an attack differential of +2 and the Ju 87B would have an attack differential of −3.

The attack differential determines the column used on the air combat results table. For each attack, roll two dice and modify the roll as indicated on the table. Cross-index the modified roll with the correct column on the table to obtain the air combat result.

Air Combat Example: Two LaGG-3 fighters (5F4) intercept a Rumanian force of one SM.79 bomber (1B3) escorted by two PZL.24 fighters (4F4). Step a: One LaGG-3 is allocated against one PZL.24, with the remaining interceptor trying to bypass the screen. The extra escort is not allocated against the interceptor attacking the screen so that it may attack the interceptor trying to bypass the screen. Step b: The LaGG-3 attacks with a differential of +1; a 5 is rolled, aborting the PZL.24. The PZL.24 attacks at 0; a 9 is rolled, for a no effect. Step c: The unengaged escort attacks the bypassing interceptor. The differential is 0; a 7 is rolled, for a no effect. The interceptor may not attack the escort. Step d: The bypassing interceptor engages the bomber. The LaGG-3 attacks at +2; a 4 is rolled and is modified to a 3 (due to a fighter attacking a type B air unit), eliminating the SM.79. The SM.79 attacks at −3; a 7 is rolled and is modified to an 8 (due to a type B air unit attacking a fighter), for a no effect.

Rule 22 — Antiaircraft

Various units and counters have antiaircraft (AA) strengths and are able to make AA attacks against enemy air units. AA strengths are divided into two types: heavy and light. This distinction is used for both AA and ATEC purposes.

A. Capabilities.

1. Intrinsic. Each of the following units has an intrinsic light AA strength of 1: all units with printed attack (combat) strengths of 9 or greater; all Axis c/m divisions and headquarters; all SS divisions; all Luftwaffe divisions; and all SS c/m brigades. *Note:* A cadre does not have an intrinsic AA strength unless it has an attack (combat) strength of 9 or greater.

Each Axis-owned airbase, except for permanent and temporary airfields, in Greater Germany and Rumania has an intrinsic AA strength of 3.

2. Combat AA Units. A combat AA unit is any unit with the AA symbol, a unit size, and a combat strength. A combat AA unit has its AA strength printed in the upper left corner of its counter.

3. Position AA Units. A position AA unit has neither a combat strength nor a unit size; its AA strength is printed in the upper left corner of the counter. Position AA units function somewhat differently than do regular combat units. They have combat strengths of 0. When required to retreat, they may not retreat and are eliminated instead. There may be any number of these counters in a hex, as the stacking limit does not affect them. For the purposes of transport and the like, each position AA strength point counts as 1/2 RE. Heavy position AA units have heavy equipment but do not have any ATEC capability. Light position AA units do not have heavy equipment. A position AA unit may not break rail lines or damage airbases.

During the player turn, the phasing player may freely break

down and build up his position AA units as long as the AA type and total AA strength in the hex do not change. For example, a 3-point heavy position AA counter may break down into three 1-point heavy position AA counters.

A position AA counter that moves the movement phase or is transported in the air phase of its player turn may not fire AA during that player turn.

4. Naval AA. Ships have AA strengths as printed on the counters. Each river flotilla has an AA strength of 1. All naval AA is light AA.

B. Resolution. AA fire is resolved during the mission resolution step (except as noted below), before air units perform their missions. AA strengths may fire upon air units flying air transport and bombing missions in the hex. AA strengths may not fire against air units flying all other missions. For example, AA may not fire against fighters flying escort in a hex.

In general, all AA strength in a hex (including that of river flotillas) except that of ships may fire upon enemy air units flying the appropriate missions in the hex. The exceptions are:

a) Only heavy AA may fire upon type HB air units.

b) Ships may fire AA and other units may fire AA with the ships only as follows: 1) Against air units bombing ships in port, the ship being bombed, any one ship not being bombed, and all non-ship AA in the hex may fire AA. 2) Against air units bombing ships at sea, only the ship being bombed plus any one ship at sea in the hex not being bombed may fire AA.

Each AA strength counter may fire once upon each enemy air unit it is allowed to attack. For example, if four air units were bombing a hex containing a 3 strength point position AA counter, the AA counter may fire upon each of the air units, making a 3 strength point attack upon each.

Total all AA fired at a single air unit. This total determines the AA strength column used on the antiaircraft fire table: use the column that most closely matches (without exceeding) the AA strength of the AA fire. (If the firing AA strength is less than 1, the AA fire automatically has no effect.) For example, 9 points of AA firing would use the 7 column. Roll two dice and modify the dice roll with the modifiers given on the antiaircraft fire table. Cross-index the modified dice roll with the AA strength column to obtain a result. Results are identical to those of air combat (Rule 21B).

AA is not fired during the mission resolution step against air units flying defensive support missions. Instead, AA fire is resolved against these air units in a hex during the combat phase immediately before combat in the hex is resolved. When firing AA against these air units, total the AA strengths of the units attacking the hex and divide this total by the number of hexes containing the attackers. Note that the units must be attacking the hex in order to use their AA strengths in this manner. *Example:* Soviet air units are flying defensive support over Smolensk. The German player is attacking Smolensk with units in three adjacent hexes; his attacking units have 3 AA points in one hex, 1 in the second hex, and 2 in the third. The German player's total of 6 AA points is divided by 3 (since the attackers occupy 3 hexes); thus, a 2-strength-point AA attack is made on each of the defensive support air units.

Rule 23 — Air Unit Repair

During the initial phase of a player turn, the phasing player may attempt to repair his inoperative air units. Roll one die for each inoperative air unit and modify the roll with the appropriate modifiers on the air unit repair table. If the modified die roll is equal to or less than the repair roll number on the air unit repair table, the air unit is repaired and immediately becomes operative.

All modifications to the repair roll are cumulative. However, a die roll of "1" always repairs an air unit, regardless of the die roll modifications.

Rule 24 — Special Air Rules

A. Fighters on Bombing Missions. Any type F air unit flying a bombing mission has its air attack and defense strengths each

reduced by 2 (but never below 1) for the duration of the mission. For example, an Me 109E fighter (7F5) flying a bombing mission would have an air attack strength of 5 and an air defense strength of 3.

A fighter flying a bombing mission may jettison its bomb load during air combat preparation, at the option of the owning player. If this is done, the fighter reverts to its printed air attack and defense strengths, but it may not complete the bombing mission. The fighter is treated as if it were flying an escort mission.

B. Extended Range. Air units may fly extended-range bombing missions by carrying reduced bomb loads. The air unit may fly to a target hex within range of twice its printed movement rating, but its bombing strengths are reduced to one-third of their printed values. A fighter may not fly an extended-range bombing mission.

Transports may fly regular extended-range transport missions by carrying half the standard cargo. A transport flying extended range may: 1) fly to any airbase within range of three times its printed movement rating, landing there during the air return step, or 2) fly to any airbase within range of twice its printed movement rating, landing cargo there during the mission resolution step and returning to base during the air return step. A transport may not fly an air drop mission at extended range.

Fighters may fly extended-range escort missions. A fighter flying at extended range has its air attack and defense strengths each reduced by 2 (but never below 1). The fighter may fly to a target hex within range of twice its printed movement rating.

During the air return step, any air unit flying at extended range may return to an airbase within range of twice its printed movement rating.

C. Fighter Pilot Superiority. When a German, Finnish, or Italian fighter fires on a Soviet non-Guards air unit in air combat, the die roll is modified by − 1. This modification is used in addition to all other air combat modifications. For example, a German fighter firing on a Soviet type B air unit would have its die roll modified by − 2.

This modification is not used by Axis fighters other than German, Italian, or Finnish, or against Soviet Guards air units.

D. Gliders. Glider transport (type GT) air units cannot fly by themselves but must be towed. One transport (type T) air unit may tow one glider air unit; the transport may carry a normal load of cargo when doing so. A glider must be stacked with the air unit towing it, and the two air units are treated as one for all purposes. The air defense strength of a glider is subtracted from the air defense strength of its towing air unit. For example, a Ju 52 (1T2) towing a DFS 230 (0GT1) has an air defense strength of 1. Any combat result (from patrol attacks, air combat, or antiaircraft fire) affects both the towing air unit and the glider equally. An aborted glider may be repaired per the standard air unit repair rules.

A glider may carry cargo at the same rate as a transport. A glider never counts against the capacity of an airbase.

A glider air unit is expended (removed from play) immediately following its use in an air drop mission. When a glider is used in a regular transport mission, one die is rolled each time the glider lands at an airbase. On a roll of 5 or 6, the glider is expended. Note that a glider may be expended only for transport; it may transfer without risk of expenditure.

E. Dive Bombers. When the bombing table is used to resolving bombing attacks made by type D air units, modify the die roll by + 1 before consulting the table. If any other air unit type combines its bombing strength with a dive bomber to make a bombing attack, this die roll modification may not be used.

On and after the Jan I 43 turn, modify the AA fire resolution dice roll by − 1 when firing on a type D air unit.

F. Night Air Operations. In general, air operations are assumed to occur during the daytime. However, air operations during the night are possible. For the purposes of this rule, a night air unit is an air unit with an ''N'' prefix before its air unit type letter (such as NB or NF); all other air units are day air units. The presence of the N prefix does not change the usual abilities of an air unit. For example, a type NB air unit is treated the same as a type B air unit

in air combat and for AA fire. Night air units are not required to operate at night. Both day and night air units may fly night air operations, although day air units are disadvantaged when operating at night.

Air units operating at night do not interact with air units operating during the day. For example, a bombing mission made at night may not be intercepted by fighters flying during the daytime.

Strategic bombing missions, transfer missions, and regular transport missions may be flown at night. Night fighters (only) may fly interception missions at night. All other air missions may not be flown at night. (Note that tactical bombing missions may not be flown at night.)

Night fighters (only) may make patrol attacks against air units flying at night.

A day air unit flying a bombing mission at night has its bombing strength halved.

Day air units flying at night may crash land when returning to base. A die is rolled for each day air unit flying any night air mission when it returns to base. An Axis air unit or a Soviet Guards air unit crash lands on a roll of 6; a Soviet non-Guards air unit crash lands on a roll of 5 or 6. An air unit that crash lands immediately becomes inoperative.

G. Harassment Bombers. A type H air unit has its tactical bombing strength doubled when flying the harassment bombing mission.

H. Jet Aircraft. A jet air unit is an air unit with a ''J'' prefix before its air unit type letter (such as JF); all other air units are non-jet air units. When resolving air combat involving jet air units, use the jet air unit dice roll modifiers on the air combat results table. The presence of the J prefix does not change the usual abilities of an air unit. For example, a type JF air unit is a fighter air unit.

I. Type HB Note. Type HB (heavy bomber) air units are a different type from type B air units. Air combat and AA fire modifiers that apply to one type do not automatically apply to the other. Use the modifiers exactly as given on these tables.

J. Code T Air Units. Code T air units are equipped with special antitank weaponry. When flying the defensive support mission in a hex, a code T air unit is counted as 3 REs of full ATEC. These REs are counted for the ATEC part of the proportion, but not for the total RE part. *Example:* In late 1943, a Ju 87G (a code T air unit) is flying defensive support in a hex containing two infantry divisions. There are 6 REs in the hex (3 for each of the divisions, none for the air unit) and 3 REs of full ATEC in the hex (3 for the air unit, none for the divisions). Thus, the ATEC proportion for the hex is 1/2 (3/6).

Rule 25 — Airborne Operations

The air drop mission (Rule 20E2) details how airborne units are transported to and dropped on a target hex. Parachute, air landing, and parachute commando units are airborne units. *Note:* Parachute-infantry, parachute panzer, and parachute panzergrenadier units are not airborne units; the term parachute in this context is an honorary designation only.

A. Disruption. An airborne unit may become disrupted when making an air drop. One die is rolled for each unit during the mission resolution step; the following conditions modify the die roll:

− 1 for dropping onto enemy units and/or into enemy ZOCs.

− 1 for dropping into a non-clear terrain hex.

− 1 for dropping into a major city hex. (This is in addition to the non-clear terrain modifier.)

− 1 for every five hexes (or fraction thereof) a Soviet air unit flies its cargo to the target hex.

− 2 for a drop during poor weather (mud, frost, snow).

+ 1 if a unit uses a glider as part or all of its transport.

If the disruption die roll is 1 or less, the unit is disrupted and has its combat strength halved. If the disruption die roll is − 1 or less, the unit may not attack at all during the player turn of its drop and is immediately eliminated if in an enemy-occupied hex. If the disruption roll is − 3 or less, the airborne unit is immediately eliminated.

A disrupted airborne unit does not gain ownership of the hex it

occupies. For example, a supply line may be traced through a friendly-owned hex occupied by a disrupted enemy airborne unit.

An airborne unit remains disrupted until the start of its next friendly initial phase. For example, an airborne unit disrupted during the German air phase would remain disrupted throughout the rest of the German player turn and throughout the entire following Soviet player turn.

The disruption die roll is also used for each RE of supply dropped in a hex. If the die roll is 1 or less, the RE of supply has been hopelessly scattered or mis-dropped and is removed from play.

B. ZOCs. An airborne unit does not exert a ZOC during the player turn in which it performs an air drop. (Note that this rule only applies to drops in weather zones A and G, since divisional-sized units cannot be dropped.)

C. Ground Operations. Airborne units which jump in hexes other than enemy-occupied hexes may attack adjacent enemy units per the standard combat rules. They may attack in conjunction with other friendly units.

Airborne units which jump in enemy-occupied hexes must attack the enemy units in the hex during the combat phase. Adjacent friendly units may join in the attack.

When differing sides occupy the same hex, combat is resolved as normal except that no effect results are modified. If an NE is rolled, the airborne units which dropped in the enemy-occupied hex treat the result as an AR (and must retreat). All other units treat the result as an NE.

Retreating units are subject to the effects of all ZOCs they enter, including the ZOCs of enemy units in the hex from which the retreat is conducted. *Example:* A parachute regiment drops in a hex occupied by an enemy division. During the combat phase, the parachute regiment must attack, and the combat result requires it to retreat. Since any hex it can enter is in the ZOC of the division in the drop hex, the parachute regiment is eliminated.

D. Planning and Preparation. Air dropping supply does not have to be planned in advance. Airborne operations involving airborne units must be planned in advance: the target hex of an air drop mission and the unit to be dropped there must be planned one turn in advance.

During the player's initial phase in the game turn prior to an operation, the player writes down the identity of the unit involved in the operation and the target hex of the operation. A unit may have only one operation planned for it at a time. Once planned, an operation may be canceled at the player's option in his next initial phase, and a new operation for the unit may be planned at that time. A player may also cancel an operation during the phase in which it is to occur.

During the initial phase, an operation may not be planned for a unit that is in an enemy ZOC at that time. Once an operation is planned for a unit, it must be canceled if the unit enters an enemy ZOC, attacks, or is attacked at any time between the planning and the execution of the operation. If for any reason the unit is not able to participate in the operation during the phase in which it is to take place, the operation must be canceled. An operation may be planned for a unit on the turn it arrives as a reinforcement.

E. Air Landing Units. An air landing unit may make an air drop only if all of its transport are gliders. For example, an air landing regiment would require the use of two glider transport air units to make an air drop.

Rule 26 — Air Replacement System Introduction

The air replacement system governs air unit reinforcements, replacement of eliminated air units, and the number of air units a player may have active at any one time.

A. The Air Chart. A player's air chart is used to record the current situation of his air units for the purposes of the air replacement system. The air chart is divided into several sections, as follows.

1. Available Box. This box is used to hold air units available to enter play.

2. Eliminated Air Units Boxes. The eliminated over friendly territory (EFT) box is used to hold air units eliminated over friendly territory. The eliminated over enemy territory (EET) box is used to hold air units eliminated over enemy territory.

3. Remnants Box. This box is used to hold air units destroyed on the ground and air units discarded through the replacement procedure. This box does not hold air units that are permanently eliminated. Such air units are no longer part of the air replacement system and are not kept on the air chart.

4. Group Allowance Chart. This section is used to record a player's group allowance (GA) and the number of his active air units. Place markers in the numbered boxes to show the correct amounts. For example, if the Luftwaffe group allowance is 83, then place the Luftwaffe GA 00 marker in the 80 box and the Luftwaffe GA 0 marker in the 3 box.

Adjust the markers when the quantities they record change. For example, if the number of active Soviet groups drops by one, then record this on the chart.

B. Group Allowance. A player's GA is the maximum number of air units he may have active. An air unit is active if it is in play on the map, even if it is inoperative. A player may not have more air units active than permitted by his GA; air units unable to enter play due to this are kept on the available box.

C. Friendly Territory. A hex is in a player's friendly territory if it is owned by the player or if it is within two hexes of a hex owned by the player (for ownership, see Rule 3F). Note that some hexes will be considered to be friendly territory to both players. If a hex is not in friendly territory, it is automatically in enemy territory. Note that the concept of friendly territory is different from ownership of territory; each is used for different game purposes.

D. Losses. Eliminated air units are placed on boxes on the air chart. The specific box used depends upon the manner and location of elimination of the air unit.

1. Eliminated over Friendly Territory. An air unit eliminated due to air combat or antiaircraft fire while flying over friendly territory is placed in the EFT box.

2. Eliminated over Enemy Territory. An air unit eliminated due to air combat or antiaircraft fire while flying over enemy territory is placed in the EET box.

3. Destroyed on the Ground. An air unit eliminated while it is based at an airbase is placed in the remnants box. Air units may be destroyed on the ground due to enemy bombing or by occupation of their airbases by enemy ground units.

E. Axis Nationalities. Each national force of the Axis is distinct for all air replacement system procedures, such as GA/active air unit calculations, culling, etc. The Axis national forces are: German (the Luftwaffe), Rumanian, Finnish, Italian, Hungarian, and Slovakian.

F. Air Replacement Cycle. Various air activities for a player occur within the framework of the air replacement cycle. A player's air replacement cycle consists of four consecutive game turns beginning with his I player turn of each odd-numbered month (Jan I, Mar I, May I, Jul I, Sep I, Nov I). Various activities occur on the turn at the start of a player's air replacement cycle. For example, new air units and GA additions are received at this time.

Rule 27 — Air Replacement System

The air replacement procedure is used by a player during the initial phase of each of his player turns. The various activities of the procedure occur in the order as given in Sections A through E. The German player follows the sequence separately for each of his national forces.

A. Culling. The player checks the number of air units in the remnants box and then in the available box. If the number of air units in the remnants box is greater than 10, then 10% (rounding down) of them must be permanently eliminated. If the number of air units in the available box is greater than 10, then 10% (rounding down) of them must be placed in the remnants box. When culling air units, choose at random the air units culled from those present in the box. *Example:* During a Soviet initial phase, the Soviet player has 12 air

units in his remnants box. Since there are more than 10 air units in the box, one (10% of 12, rounded down) air unit is culled. The Soviet player chooses at random one air unit in this box and permanently eliminates it.

B. Replacements. Eliminated air units in the EFT, EET, and remnants boxes may be replaced. When a player has sufficient air units in these boxes to use the following replacement procedures, the procedures must be used. The specific replacement procedure used depends upon the box occupied by the air units. In general, air units in a box are grouped together for replacement purposes, with the number of air units being grouped together depending upon the box: 4 air units per group for the EFT box, 3 air units per group for the EET box, and 5 air units per group for the remnants box.

For the EFT and EET boxes, air units are grouped together by model and type (e.g., a group of three Ju 87D type D air units in EET box) to the extent possible. Remaining air units are then grouped together by type (e.g., four type F air units in the EFT box) to the extent possible. Finally, remaining air units are grouped together by basic category (fighter, bomber, transport) to the extent possible. In general, air units unable to be grouped together after this step do not undergo the air replacement procedure. However, on the turn at the start of a player's air replacement cycle, any remaining air units are grouped together at random without regard for model, type, or category. When grouping air units, the player may choose which specific air units are grouped together, to the extent allowed by the above rules.

For the remnants box, air units are grouped together without regard for model, type, or category.

1. EFT Box. For every grouping in this box, place two air units chosen at random in the available box and place the other two air units in the remnants box. Each time this is done, reduce the player's GA by 1. *Example:* The Soviet player has a GA of 92 and has five type F (four of which are I-16 fighters), three type B (all are different models), and one type A air units in the EFT box. The four I-16 fighters are grouped together: two are placed in the available box, two are placed in the remnants box, and the Soviet GA is reduced by 1. The four bomber category air units are grouped together: two chosen at random are placed in the available box, two are placed in the remnants box, and the Soviet GA is reduced by 1. The Soviet GA now is 90. Note that the type B and type A air units were grouped together, as neither type had sufficient air units in the EFT box to undergo replacement separately. The fifth fighter was unable to be grouped and remains in the box.

2. EET Box. For every grouping in this box, place one air unit chosen at random in the available box, place one air unit chosen at random in the remnants box, and permanently eliminate the third air unit. Each time this is done, reduce the player's GA by 1. *Example:* At the start of a cycle, the Luftwaffe GA is 79 and there are four Luftwaffe air units in the EET box: two type B and two type F. Since this is the start of the cycle, three of these air units are grouped together. One is placed in the available box, one is placed in the remnants box, one is permanently eliminated, and the Luftwaffe GA is reduced by 1 to 78.

3. Remnants Box. For every grouping in this box, place one air unit chosen at random in the available box and permanently eliminate the other four. The player's GA is not affected by this.

C. Reinforcements. All air units received as reinforcements are placed in the available box. GA increases are added to the appropriate GA total.

D. Deactivation. The player may remove active air units from the map. Air units so removed are placed in the remnants box. Air units at isolated airbases may not be deactivated. Each air unit deactivated reduces the number of active air units, and this must be recorded on the chart.

E. Activation. The player may activate air units. The player's active air unit total is subtracted from his GA total to determine the number of air units that may be activated. For example, if the Soviet player has a GA of 103 and has 101 active air units, then he may activate 2 air units.

Any air unit in the available box may be selected for activation. An activated air unit is placed at any unisolated friendly-owned airbase.

F. Special Rules.

1. Night Air Units. Air units with the N prefix are not treated as separate types from air units without the N prefix. For example, a type NB air unit is treated the same as a type B air unit for replacement purposes.

2. Gliders. Glider air units are never included in the active air his GA total, plus any number of gliders. Gliders present in the available box are not counted when culling occurs. Activating a glider does not change the number of active air units in play. Whenever a glider is eliminated, it is permanently eliminated; it is not placed in any boxes on the air chart.

3. Luftwaffe Transfers. The transfers line on the Luftwaffe section of the Axis air order of battle chart shows major Luftwaffe GA transfers to and from the German eastern front. Transfers into the theater are treated the same as GA increases. Transfers out of theater are implemented immediately after air units are activated. The German player reduces the Luftwaffe GA and active markers by the indicated amount and withdraws from play the indicated number of active Luftwaffe non-glider air units. The air units to be withdrawn must be operative, if possible. Once withdrawn, these air units are not placed on the air chart and do not return to play. The foreign GA line on the Luftwaffe section of the Axis air order of battle has a transfer out of theater, which is handled the same as above.

4. Soviet Guards. During the course of the game, Soviet regular air units are converted to Guards status. These conversions are specified on the Soviet air order of battle. When an air unit may be converted to Guards status, the Soviet player may substitute any Guards air unit not in play for any active Soviet regular air unit of the same model. For example, if the Soviet player converts a regular Yak-1 fighter to Guards, he removes the regular Yak-1 from its airbase and places the Guards Yak-1 in its place. If an inoperative air unit is converted to Guards, then the Guards air unit is inoperative.

Converting a regular air unit to Guards does not affect the Soviet GA or active air units totals. The air unit removed by the conversion is not placed on the air chart; it is simply removed from play.

A Guards air unit on the air chart is not treated separately from Soviet regular air units on the chart. For example, if there are two regular and one Guards fighters in the EET, then the three fighters undergo the replacement procedure.

The Soviet player may deactivate Guards air units, the same as other air units may be deactivated. For each Guards air unit deactivated, the Soviet player may activate one air unit in the available box as a Guards air unit. For example, the Soviet player deactivates a Guards LaGG-3 and activates a an La-5FN in the available box as a Guards air unit. Note that this allows the Soviet player to upgrade his active Guards air units as improved models become available.

Note: Guards air unit counters that have not been brought into play through conversion or activation (as described above) are kept aside and are not placed anywhere on the air chart. Regular air units which are removed from play due to conversion to or activation as Guards air units are not placed on the air chart. These procedures insure that the air replacement system rules work properly for the Soviet GA and active air unit totals.

Rule 28 — Naval Rules

A. Concepts.

1. Sea Zones. There are four sea zones on the map: the Arctic Ocean, the Baltic Sea, the Black Sea, and the Caspian Sea. Each sea zone is separate. For example, a Soviet ship based in the Black Sea cannot operate in the Baltic. Due to the fact that Germany has direct access (off-map) to the Baltic and the Arctic, the German player is allowed naval movement between the Baltic and the

Arctic, as explained below.

2. Naval Units. There are two types of naval units: ships and river flotillas. There are two types of ships: warships and transports.

3. Ports. A city or fortress in a coastal hex is a port. A port has a capacity of 8 REs: a total of 8 REs of cargo may embark/disembark at a port in a player turn. A port may be damaged due to bombing (Rule 20F) or demolition (Rule 14A). Each hit of damage on the port reduces its capacity by 1 RE. A port may take a maximum of 10 REs of damage.

A city or fortress in a non-coastal hex is a river port if it is in a hex on a lake or adjacent to a river hexside. A river port is treated the same as a coastal port in all respects except that only river flotillas may embark/disembark cargo at river ports.

Each player has off-maps ports. The German player may use off-map German ports in the Baltic Sea and Arctic Ocean sea zones. A German ship may use these ports by exiting/entering the west edge of the map in the Baltic Sea or Arctic Ocean zones. The Soviet player may use off-map Caspian ports. A Soviet ship may use these ports by exiting/entering the east edge of the map in Caspian Sea zone. Off-map ports have unlimited capacities and are always in regular supply.

A player may use a port during a turn only if he owns it at the start of his initial phase.

Astrakhan (8A:3325) is a port on the Caspian Sea zone, even though it is located up the Volga River. The Soviet player may use Astrakhan as a port if he owns the city and all land hexes along the major river from Astrakhan to the Caspian Sea (hexes 8A:3325, 3326, 3425, 3426, 3526, 3527, 3626).

4. Beaches. A coastal hex of any terrain type except mountain is a beach hex. A beach hex has an unlimited capacity of REs that may embark/disembark there in a player turn. Some coastal hexes contain both a port and beach, each of which may be used.

5. Cargo. Naval units may transport ground units, resource points, and supplies. Units and resource points are carried based on the RE size; the RE size of cavalry and c/m units is doubled for naval transport purposes. Every 5 REs of supplies counts as 1 RE of cargo.

B. Ships. There are two types of ships: warships and transports. The Soviet player has both types of ships, while the German player only has transports. Warships are rated for use in the *Europa* naval system; however, not all the ratings are used in play. The unit identification chart displays the ratings that are used.

A ship may be in port or at sea. A ship may be at sea in a port hex.

Ships may be sunk. Each bombing hit on a ship does one hit of damage to the ship. Ships may take differing amounts of damage, depending upon their ship types: 4 hits for a type BB, 3 hits for a type CA, 2 hits for a type CL, 2 hits for a transport, and 1 hit for a type DD. When hits on a ship equal or exceed the damage it may take, the ship is sunk and is removed from play. Use hit markers to denote damage to ships.

The presence of a ship in a coastal hex does not prohibit enemy ground units from entering the hex, and ships may freely enter coastal hexes occupied by enemy units. (A coastal hex is any hex containing both land and sea.)

1. Movement. A player moves his ships in his movement phase. A ship may move an unlimited distance in its sea zone, moving in all-sea or coastal hexes. A ship must move along an all-sea route and may not cross land or move on rivers. For example, a ship in hex 3B:3105 could not move from the hex to hex 3305 via hex 3205, due to the land barrier in hex 3205.

A ship may move in only one sea zone during movement. Off-map German ports are considered to be in both the Baltic Sea and Arctic Ocean sea zones. Thus, a ship in either sea zone may move to the off-map German ports and a ship at these ports may move in either sea zone. Note that it cannot move in both zones in the same turn, however. Only German ships may use the off-map German ports. Place ships and their cargo which end their movement in the off-map German ports on the Germany box on the Axis game chart.

A German transport may not end its movement at sea. It must end its movement in port and may not undertake any action that would prevent it from doing so. It may not enter a hex occupied by a Soviet warship at sea. If a German transport is in port and a Soviet warship is at sea in the same hex, the transport may not leave port.

A ship with parentheses enclosing its ship type is not fully operational. It may not move and must remain in port at all times. (Its gunnery strength may be used in combat.)

2. Gunfire. Soviet warships may support Soviet ground units in combat through the use of their gunnery strengths. A warship may have one or more of three gunnery strengths: primary, intermediate, and secondary. These strengths are rated for use in the *Europa* naval system and are halved when used in ground combat. Primary gunnery strength may support an attack or defense within 2 hexes of the firing warship. Intermediate and secondary gunnery strengths may support an attack or defense within 1 hex of the firing warship.

For a warship's gunfire to support an attack or defense, its gunnery strength must be within range of the attacked hex. Each warship supporting a combat is treated the same as a 1 RE field artillery unit (see Rules 11 and 14B). There is one exception to this: warships' gunnery strengths are not counted when determining losses due to exchanges.

Warships may not fire independently; they may fire only in support of attacking or defending ground units. Warships are never affected by any ground combat results. A warship may fire each of its gunnery strengths once per combat phase. However, a warship may aid only one attack or defense per combat phase.

At the start of each German combat phase, the Soviet player must state which hex each of his warships will support in defense. Warships allocated to a specific hex may not fire in support of another hex that phase, even if their assigned hex is not attacked. There is no similar requirement for Soviet warships firing during the Soviet combat phase; the Soviet player announces which warships are supporting an attack only when he announces the attack.

A warship may use its gunnery strengths each combat phase, even if it moved and transported cargo (excluding supplies) during the movement phase. A warship may not use its gunnery strengths if it was used to transport supplies (per Section D).

3. Replenishment. Once each player turn, each phasing ship must put in to port for replenishing. The ship does not have to start or end its movement in the port; it need only move to the port at some time during its movement. Soviet ships replenish at any Soviet-owned ports in the USSR. German ships replenish at any Axis-owned ports in Greater Germany (including the off-map German ports), Rumania, or Bulgaria. A ship may replenish at an appropriate port even if the port is isolated. A ship unable to replenish is unsupplied. An unsupplied ship has its gunnery strengths halved but is otherwise unaffected. If an unsupplied ship is unable to replenish in its next player turn, it must be scuttled at the end of that player turn.

4. Scuttling. When an enemy unit gains ownership of a port hex, ships in port there must try to escape to sea. One die is rolled for each ship in the port. On a roll of 1 through 4, the ship escapes to sea (and is considered to be at sea in the port's hex); on a roll of 5 or 6, the ship fails to escape from the port and is scuttled to prevent its capture by the enemy. A ship with a parenthetical ship type may not move and is automatically scuttled when an enemy unit gains ownership of its port.

A scuttled ship is immediately sunk and removed from play.

5. Baltic Restrictions. Due to German mines and submarines in the Baltic, Soviet naval units operating in the Baltic sea outside a safe zone risk damage. Initially, the Soviet safe zone consists of all hexes within two hexes of Kronshtadt. At the start of a Soviet initial phase on or after Jan I 43, the safe zone expands if the appropriate conditions are met. Once the safe zone expands, it covers its expanded area for the rest of the game, even if the conditions for its expansion are not met in later turns. The safe zone expands

to cover:

all hexes in the Baltic Sea on map 1B on or east of the 1B:0012 hex column if all ports in this area are not Axis owned.

all hexes in the Baltic Sea on or north of the 1B:1900 hex-row if all ports in this area are not Axis owned.

Each Soviet naval unit in the Baltic that operates outside the safe zone must be checked. The naval unit is checked immediately when it re-enters the safe zone or at the end of its movement if it remains outside the safe zone. If it is outside the safe zone but remains in port throughout the movement phase, it is not checked. To check for damage, one die is rolled and 4 is subtracted from it. (The roll may be further modified, as explained below.) A roll modified below 0 is treated as 0. The naval unit takes a number of hits of damage equal to the modified roll. For example, if 6 is rolled, then the ship takes 2 hits. The die roll is modified by +1 for every 10 hexes (or portion thereof) that the naval unit moves in the Baltic Sea outside the safe zone. For example, if the naval unit moved a total of 11 hexes outside the safe zone, then the die roll is modified by +2. If the naval unit is sunk outside the safe zone, any cargo it carried outside the safe zone is eliminated. *Note:* This rule affects all Soviet naval units, including river flotillas, operating in the Baltic sea zone outside the safe zone.

The safe zone ceases to exist (permanently) if the German player gains ownership of all ports in the safe zone. As long as the safe zone is in existence, German transports may not enter any hex in the safe zone.

C. Naval Transport.

1. Regular Transport. A player may use naval transport during his friendly movement phase, between friendly-owned ports and/or beaches in the same sea zone. Each ship may carry up to 2 REs of cargo. Two or more ships may combine their capacities to carry large cargoes (such as divisions), as long as all these ships move together while transporting the unit. A ship may move prior to transporting a unit but must end its turn in the hex in which the cargo disembarks. Cargo may not remain at sea; it must be landed by the end of the movement phase. If a ship is sunk, then any cargo it is carrying is eliminated.

A unit is under no special restriction in phases following after being moved by sea by regular transport. For example, a unit may attack during the combat phase following its transport and does not have its attack strength reduced due to the transport.

a. Ports. When cargo is both embarked and disembarked at a port, the following rules are used. A unit must spend MPs in order to be transported: 2 MPs for a non-c/m unit and 4 MPs for a c/m unit. The unit may move both before and after its transport. A resource point may be carried by a ground unit or moved by rail both before and after its transport.

b. Beaches. When cargo is embarked and/or disembarked at a beach, the following rules are used. C/m units and artillery units may not embark/disembark at beaches; only non-c/m units and resource points may. A unit spends all its available MPs in order to be transported and may not spend MPs for any other purpose. A resource point may not be carried by a unit or moved by rail either before or after its transport.

2. Amphibious Landings. Soviet units may make amphibious landings by disembarking in enemy-owned beach hexes. The rules for regular naval transport to beaches are used, with the following exceptions:

a) A unit making an amphibious landing is counted at double its RE size for transport purposes.

b) Any unit except a marine unit making an amphibious landing has its attack strength halved in the following combat phase. A marine unit does not have its attack strength halved due to making an amphibious landing. *Note:* A marine unit is any unit with the marine unit type symbol. Do not confuse marine capability with a unit's service. For example, ground forces of the Soviet Navy include both marine and non-marine units.

c) A supplied unit making an amphibious landing is automatically in supply in the following player turn.

d) A unit making an amphibious landing during poor weather (mud, frost, snow) may be affected by the weather. Roll one die for each unit making an amphibious landing during poor weather. The unit is affected by the weather on a roll of 3 or less and has its attack strength halved in the combat phase following its landing.

A unit may make an amphibious landing in an enemy-occupied hex. In this case, combat is conducted the same as for an airborne landing in an enemy-occupied hex (see Rule 25C).

Due to coastal defenses not represented in the game, Soviet units may not make amphibious landings in or adjacent to coastal port hexes outside the Soviet Union and may not make any amphibious landings at all in coastal hexes in Bulgaria.

An amphibious operation must be planned in advance, similar to an airborne operation. Use Rule 25D for planning amphibious operations.

D. Naval Transport of Supply. Ships may transport supplies. Every 5 REs of supply count as 1 RE of cargo against a ship's capacity and a port's capacity. A ship may embark supplies at a port if a supply line could be traced from the port to a regular source of supply during the player's initial phase. A ship may embark supplies at a beach if a rail element (only) supply line could be traced from the beach hex to a regular source of supply during the player's initial phase. (Note that special sources of supply cannot be used.) Other than the preceding, transport of supply is the same as other naval transport.

E. River Flotillas. The Soviet player has river flotillas, which are naval units with characteristics of both ships and ground units. In general, a river flotilla is treated as a ground combat unit for most game purposes, with the following abilities.

A river flotilla is sunk (and removed from play) if it takes 2 hits due to bombing. Each bombing hit on a river flotilla does one hit of damage to the flotilla unless it is at sea. A bombing hit does two hits of damage to a river flotilla at sea.

A river flotilla never needs supply or replenishment.

A river flotilla moves in the Soviet movement phase. It has a movement allowance of 30 hexes and spends 1 MP per hex entered. It operates on lakes, rivers, and coastal waters. It may enter lake hexes (both partial-lake and full-lake) and coastal waters (coastal hexes and all-sea hexes adjacent to coastal hexes) and may move along rivers. When moving along a river, it is moved through the hexes adjacent to the river hexsides. For example, a river flotilla on the Dnepr River in hex 3B:0807 may move along the river as follows: 0806, 0906, 1005, 1004, 1104, 1203, using 6 hexes of its movement allowance to do so. A river flotilla may not enter an enemy-occupied hex. A river flotilla leaving or moving through enemy ZOCs must pay ZOC movement costs. A river flotilla participating in an overrun must pay overrun movement costs. A river flotilla may never end its movement in an all-lake or all-sea hex.

For all combat and overrun purposes (both offensive and defensive), a river flotilla is treated as a 1 RE Soviet field artillery unit with a combat strength of 2. This includes counting its combat strength when calculating losses in an exchange. If required to retreat or allowed to advance due to combat, a river flotilla may only enter hexes in which it may move. *Examples:* 1) Soviet 4-6 rifle division and a river flotilla in hex 4A:2204 attack an Axis unit in 4A:2205, at a total attack strength of 6 (4 for the division and 2 for the flotilla). If the attack succeeds, the division but not the flotilla could advance after combat. If the attack resulted in an AR and the Soviet force was surrounded by enemy ZOCs, both the division and the flotilla would be eliminated. 2) A Soviet river flotilla is alone in hex 4A:2204. During the German movement phase, any German unit with an attack strength greater than 0 may overrun the flotilla at 12:1 odds, since the flotilla is treated the same as a Soviet artillery unit (per Rule 14B).

A river flotilla may transport cargo. It has a cargo capacity of 4 REs and transports cargo the same as a ship (Sections C and D above), with the following additions:

a) A river flotilla may embark/disembark cargo at river ports.

b) A river flotilla may treat any land hex in which it may move

as a beach hex for transport purposes. Note that a river flotilla transporting cargo to an enemy-owned hex is making an amphibious landing, which must be planned in advance.

During the movement and combat phases, a river flotilla may allow Soviet units to treat an all-lake or all-sea hexside as a major river hexside for movement and combat purposes. The flotilla must start the Soviet movement phase adjacent to the hexside and may not move at all that phase. If these conditions are met, Soviet ground units treat the hexside as a major river hexside for movement and combat purposes during that Soviet player turn and during the following German player turn. *Example:* A flotilla is in hex 1B:1506 and does not move. Soviet units may treat the 1B:1506/1507 lake hexside as a major river hexside for movement and combat purposes.

F. Repairs. Each player receives repair points during the course of the game. During the initial phase, the phasing player may spend his repair points to repair naval units or to replace eliminated river flotillas, transports, or the destroyer flotilla. Repair points may be accumulated for use in later turns.

One repair point repairs one hit of damage from a ship. To be repaired, the ship must be in port during the initial phase; it may not move or fire in the player turn it is repaired. Two repairs points may be used to replace a sunk transport or destroyer flotilla. Upon replacement, it is placed at any friendly-owned port in the sea zone in which it was sunk. It is fully operational upon replacement. No other ship may be replaced.

One repair point may be used to repair two hits of damage to river flotillas in play. To be repaired, the river flotillas must be in hexes containing any Soviet-owned ports (they do not have to be in the same port); they may not use any of their abilities in the player turn they are repaired. One repair point may be used to replace an eliminated river flotilla. The replaced flotilla is placed in any Soviet-owned port in the USSR.

G. Reinforcements. Naval unit reinforcements appear as specified on the orders of battles. If the location where a naval unit reinforcement appears is enemy owned, the reinforcement is not received and is treated as being sunk for game purposes.

Rule 29 — Weather

A. Definitions.

1. Weather Zones. The weather lines divide the map area into five weather zones, as illustrated on the map guide: zones A, B, C, D, and G. A zone consists of all hexes in the zone (as shown on the map guide) plus all hexes of its labeled weather line. Note that zone C is split into three separate areas: the broad band running from Greater Germany in the west through Saratov in the east and two smaller areas on map 9A.

2. Weather Conditions. There are four possible weather conditions. From best weather to worst, they are: clear, mud, frost, and snow. Mud, frost, and snow weather is collectively called poor weather. Frost and snow weather is collectively called cold weather.

3. Weather Chart. The weather chart, located on the turn record chart, consists of the weather table and the weather conditions display.

The weather table is divided into sections, one for each weather zone, which are used to determine the weather conditions for their zones each turn. For each zone, the weather die roll (see Section B below) is cross-indexed with the current turn to obtain a result. Results are clear (C), mud (M), frost (F), snow (S), and no change (N). A result of no change means the weather result for the zone is the same as that of the zone on the previous turn. For example, if for zone B the weather on Sep II was clear and the weather result for Oct I is no change, then the weather for zone B on Oct I is clear.

The weather conditions display is used to show the weather condition in each zone. For each zone, place a marker in the box corresponding to the zone's weather.

B. Procedure. At the start of each game turn, the Soviet player rolls one die to determine weather conditions in each zone. Note that the die is rolled only once, not once per zone. *Example:* On

the Nov I 41 turn, the Soviet player rolls a "6" for weather conditions. For each zone, this die roll is cross-indexes with the Nov I column to obtain the zone's weather condition: snow in zone A, frost in zones B and C, mud in zone D, and clear in zone G.

C. Effects. Weather changes the movement and combat effects of terrain, as shown on the terrain effects chart. In addition, AEC may not be used anywhere in zones with mud or snow weather.

Weather affects supply considerations, as described in the supply rules (Rule 12).

Poor weather (mud, frost, and snow) affects the construction abilities of engineers and the regauging abilities of railroad engineers (Rule 14A), airborne operations (Rule 25A), and amphibious landings (Rule 28C2).

Weather affects air units. In mud and snow weather (but not frost), the maximum capacity of temporary airfields is reduced to 1, and all bombing strengths of air units are halved. In mud, frost, or snow weather from Jun II 41 through Jun II 42, all Axis air unit repair rolls are modified by +1.

1. Interzone Effects. The weather condition of a hex being entered or attacked by a unit is always that of the hex's weather zone, even if the unit is moving or attacking from a hex in a zone that has different weather.

A hexside falling between two zones is treated as having the worse weather of the two zones.

When tracing supply lines through zones with differing weather, the specific supply line element being traced is affected by the worse weather of the zones.

D. Special Weather Rules.

1. First Winter. Everywhere in zones A and B and only in the USSR in zone C, units are subject to the following effects during snow turns in their zones from Oct II 41 through Apr II 42.

a. Axis Attacks. All attacks by Axis units, except for attacks made solely by Finnish units, have the combat resolution die roll modified by −1.

b. Winterization. An attack (by either side) into any hexes except one containing a city (of any size) or fortress may have its combat resolution die roll modified due to the winterization of the involved units. Cross-index the winterization level of the attacker with the level of the defender on the winterization table to obtain the die roll modification.

Winterization is calculated on a regimental equivalent basis, by dividing the total number of REs participating in combat into the number of winterized REs. There are three levels of winterization: less than 1/5 winterized, at least 1/5 but less than 1/2 winterized, and 1/2 or more winterized.

All mountain and ski units are winterized. All ground units of the following forces are winterized:

Soviet: winter-capable (those units in the Soviet winter-capable colors), NKVD, Guards, Navy.

Axis: Finnish, Luftwaffe, SS, SS-Police.

During the first winter, for combat in hexes subject to the first winter effects, a player must take required losses (Rule 9J) with his winterized units if his units are 1/2 or more winterized. This applies both to the attacker and defender.

2. Freezing. In zones A, B, C, and G, all rivers and lakes are frozen on the second consecutive cold weather turn. Once frozen, they remain frozen until the first non-cold weather turn.

The movement and combat effects of frozen rivers are given on the terrain effects chart.

Ground units may operate to limited extent on a frozen lake. No unit may enter an all-lake hex, even if frozen. Units may move, attack, and trace supply lines across frozen lake hexsides that are between land hexsides. For example, units may trace a supply line across hexside 2A:0929/0928 when Lake Ladoga is frozen.

A river flotilla may not operate on a frozen river or lake. It may not enter a frozen lake hex or river hexside. If it is present on a lake or river which freezes, it may not move at all.

A swamp hex in any weather zone is frozen on all snow weather turns. A frozen swamp hex counts as only 1 hex, not 2, when

tracing overland and truck supply lines (see Rule 12B).

3. Sea Ice. Various coastal hexes are frozen on the second consecutive cold weather turn. Once frozen, these hexes remain frozen until the first non-cold weather turn. Coastal hexes which may freeze are: all coastal hexes in the Baltic Sea on or north of hexrow 2200, except for Hango, and all coastal hexes on map 6A east of hex column 0015 and/or south of hexrow 1700.

Naval units may not enter a frozen coastal hex. Ships in port in a frozen coastal hex may not leave port (and must be scuttled if the enemy player gains ownership of the port).

Rule 30 — The Arctic

Units in the Arctic (weather zone A) have their operations restricted, due to the limited communications and harsh climate of this region. Stacking and ZOCs in the Arctic have already been covered in previous rules. The following rules also apply to units in the Arctic.

All units pay double MP costs for terrain when moving in the Arctic, except when moving on roads or railroads. (Simply double the MP cost of terrain given on the terrain effects chart.) For example, the MP cost of a rough hex in the Arctic is 4 MPs for an infantry unit and 2 MPs for a mountain unit.

C/m units may not move during the exploitation phase when in the Arctic. Cavalry units may not operate in the Arctic.

Supply lines in the Arctic are usually shorter than those elsewhere, as shown on the supply line summary.

Attacking in the Arctic requires the expenditure of resource points. One resource point must be spent for each attack, regardless of the number of units participating in the attack. An overland supply line (only) must be traced from all attacking units to the resource point immediately prior to the resolution of the attack. Units unable to trace the line to a resource point may not attack. *Note:* Expenditure of resource points in this manner does not change the supply status of units. For example, units out of supply may attack if a resource point is spent for their attack. However, these units would have their attack strengths halved for being out of supply.

Units which make amphibious landings or air drops in hexes in the Arctic may attack in the combat phase only if resource points are spent for their attacks. Such a unit may attack if it can trace to a resource point as described above. Alternatively, the owning player may expend a resource point at the unit's port or airbase (where it began the amphibious or airborne operation) in order to allow the unit to attack in the following combat phase.

Air units based in the Arctic require the expenditure of resource points in order to fly missions, except for transfer and interception missions. Air units based in the Arctic may transfer without the expenditure of any supplies. One resource point must be spent for every five (or fraction thereof) air units flying missions from airbases in the Arctic. A resource point expended for this purpose must be in the Arctic and may not be isolated; expenditure of such a resource point allows up to 5 air units anywhere in the Arctic to fly missions. *Note:* Resource points must be spent for air units based in the Arctic even if the target hexes of their missions are outside the Arctic, but resource points are not spent for air units based outside the Arctic, even if the target hexes of their missions are inside the Arctic.

Rule 31 — Special Rules

A. Terrain.

1. Causeways. Transportation lines which cross prohibited terrain hexsides are causeways. Ground units treat such a hexside as a major river hexside for all movement and combat purposes.

2. Kerch Straits. Hexes 4A:3525 and 4A:3526 are the Kerch Straits. Ground units may move and overrun across the 4A:3525/3526 hexside as if it were a major river hexside, but they may not attack across this hexside. This hexside is treated as a major river hexside when tracing supply lines.

Naval units may not move through the Kerch Straits if the enemy player owns both straits hexes. (*Note:* Naval units may move to these hexes even when both are enemy owned and may disembark units making amphibious landings there, but they may never move through the straits between the Sea of Azov and the rest of the Black Sea while both straits hexes are enemy controlled.)

3. Baltic Islands. The Baltic Islands are the four islands just off the coast of Estonia. All sea hexsides between the islands and between the islands and the coast of Estonia are treated as major river hexsides for all movement, overrun, combat, and supply purposes.

4. Kronshtadt. Kronshtadt (2A:0832), although an island, is not treated separate from the coastal portion of its hex. For example, an Axis unit entering hex 2A:0832 from an adjacent land hex gains ownership of the entire hex.

The Soviet player may treat the all-sea hexside between Kronshtadt and the northwest hex of Leningrad as a major river for all game purposes as long as he owns both hexes.

5. Fortifications.

a. Fortresses. When a fortress hex is captured by enemy units, the fortress in the hex is destroyed. The fortress is thereafter treated as a reference city for all purposes, even if the original owner regains ownership of the hex. A destroyed fortress may not be rebuilt in the context of the game.

b. Forts. When a hex containing a fort is captured by enemy units, the fort is destroyed and is immediately removed from play.

c. Fortified Areas. A fortified area is a combat unit having both unit and fort counter attributes. A fortified area unit is 1 RE in size, has a movement rating of 0, and does not count against the stacking limit. It has a defense strength, as printed on the counter. It has an attack strength of 0 and may not attack. The unit is supported, although it may not support other units in its hex. When defending, the unit has the same effect on combat as a fort does, in addition to its defense strength. It may not be replaced once eliminated. A fort may not be built in a hex containing a fortified area.

During each German initial phase from the Jul I 44 turn on, the German player may place one German fortified area in East Prussia. Any Axis-owned hex in East Prussia may be chosen, as long as it is in regular supply and does not already contain any fortification. *Note:* The German player does not use construction units or resource points to receive these fortified areas.

B. Neutrals. In general, neither side's forces may enter or pass through any hex of a country while it is neutral. Turkey and Sweden are neutral throughout the game. Finland and Hungary are neutral at the start of the game but later join the Axis (see Rule 32). Iran starts the game neutral but later becomes Soviet-owned territory.

Although Sweden is neutral, one German unit is allowed to pass through Swedish territory: the German Jun II 41 reinforcement that enters in Sweden. This unit enters play on any rail line on the west edge of the map in Sweden and must use strategic rail movement to move to Finland that turn. It may not remain in Sweden. It uses no rail capacity to move through Sweden but uses Finnish rail capacity in Finland. No other German forces may move through Sweden.

At the start of the Soviet player turn on the Aug I 41 turn, Iran is no longer neutral but immediately becomes Soviet-owned territory. Forces of both sides may enter Iran from this time on.

C. Soviet Mobility Limits. Soviet c/m divisions and cadres of Soviet c/m divisions, except for Guards c/m divisions and cadres, have mobility limitations. Such a unit may not move in the exploitation phase if: 1) it starts that phase in the ZOC of an Axis unit, or 2) if it attacked during the preceding combat phase.

All other Soviet c/m units, including Soviet c/m corps and cadres of corps, are not subject to this limitation.

D. Factories. The Soviet player has a number of factories, which are the source of Soviet armor and artillery replacements (Rule 34B). A factory counter is not a unit, does not have a combat strength, and does not prevent enemy units from entering its hex. If an enemy unit gains ownership of a factory's hex, any accumulated replacements at the factory are immediately destroyed. The factory itself is destroyed and removed from play if its hex is Axis owned at the start of a German initial phase.

Starting with the Jul I 41 turn, the Soviet player may begin the

process of transferring on-map factories to the Urals (off-map). Transferring a factory is a two-step process: preparing the factory for transfer and then transferring the factory.

1) A factory may be prepared for transfer at the start of any Soviet initial phase on or after the Jul I 41 turn. Place a marker on the factory to show that it is prepared for transfer (use a broad-gauge rail marker for this). The factory does not produce any replacements on the turn it is being prepared for transfer and at any time thereafter until it is put back into production.

2) Any factory that starts a Soviet initial phase prepared for transfer may be transferred to the Urals if a rail element supply line can be traced from the factory to a rail hex on the east edge of the map. Transferring a factory counts against the Soviet rail capacity; each factory is 30 REs in size for this purpose. The transferring factory is removed from the map and placed on the turn record chart 7 turns from the current turn. In the Soviet initial phase on the seventh turn, the factory is placed in the Urals box on the Soviet game chart and is back in production on this turn.

Example: The Soviet player prepares a factory for transfer on his Jul I 41 turn. In his initial phase on the Jul II 41 turn, he transfers the factory to the Urals, placing it on the Nov I 41 turn on the turn record chart. In the Soviet initial phase of the Nov I 41 turn, the factory is in the Urals and is back in production.

During the Soviet initial phase, the Soviet player may cancel the transfer of any factory that has been prepared for transfer but not yet removed from the map. Such a factory returns to production in the next Soviet initial phase.

Factories in production generate armor and artillery replacement points in the Soviet initial phases, starting on the Aug I 41 turn. Each factory produces 1 armor replacement point (RP) on every turn and 1 artillery RP on the I turn of each month. During the course of the game, the Soviet player may upgrade his factories, as specified on the Soviet order of battle charts. Any unisolated factory in production may be upgraded. An upgraded factory produces 2 armor RPs on every turn and 2 artillery RPs on the I turn of every month. Use of armor and artillery RPs is covered in Rule 34B.

E. The Soviet Government. The seat of government of the USSR starts the game at Moskva. (A capital counter is provided to mark its location. For brevity, the seat of government of the USSR is called the capital.)

Starting with the Aug I 41 turn, the Soviet player may begin the process of transferring the capital to a different location. Transferring the capital is a two-step process: preparing the capital for transfer and then transferring the capital.

1) The capital may be prepared for moving at the start of any Soviet initial phase on or after the Aug I 41 turn. Place a marker on the capital to show that it is prepared for transfer (use a broad-gauge rail marker for this).

2) The capital may be transferred to a new location if it starts a Soviet initial phase prepared for transfer. It may be transferred to any major city hex in the USSR or to the Urals (off-map) if a rail element supply line can be traced from the capital to the major city hex or to a rail hex on the east edge of the map (when transferring to the Urals). If it can be transferred, it is immediately placed in its new location. For the purposes of transfer, the capital is 15 REs in size and counts against the Soviet rail capacity on the turn it is moved.

The Soviet player incurs a penalty if the capital is transferred or is captured by the Axis. When the penalty is incurred, the number of regular infantry replacement points (Rule 34B) the Soviet player receives is halved. For example, when the penalty is incurred, the Soviet player receives 1 (not 2) infantry RPs for Gorkiy, 3 (not 6) infantry RPs for the eastern MDs, etc. The penalty is incurred as follows:

on the turn the capital is prepared for transfer.

if the capital is transferred to the Urals, on the turn it is transferred.

for four consecutive turns following the loss of the capital due to Axis capture.

The Soviet capital is captured by the Axis when an Axis unit gains ownership of the capital's hex. The capital counter is removed from play at this time. In the fourth Soviet initial phase following loss of the capital, the Soviet player places the capital counter in any Soviet-owned major city in the USSR or in the Urals. The new capital is treated the same as the original, including the same penalties for moving it or losing it.

F. Surprise Attack. On the first game turn (Jun II 41), the German player receives a special surprise attack turn prior to his regular player turn. The surprise attack turn consists of a movement phase, special air phase, and combat phase. Only German units starting the game in Greater Germany may move and attack in these phases. Only German air units based in Greater Germany or Rumania may participate in the special air phase. Following the surprise turn, the regular German player turn for Jun II 41 begins with the German initial phase. All standard rules are in effect, except that all units of both sides are automatically in supply throughout the German player turn.

1. Ground Units. All standard movement and combat rules are in effect for the movement and combat phases of the surprise turn, except for the following: a) rail movement may not be used; b) naval transport may not be used; c) river hexsides along the German-Soviet border (only) have no effect on combat and overruns; d) Soviet units do not exert ZOCs in hexes outside the Soviet borders; e) Soviet border guard units are considered to be supported.

2. Air Units. When preparing for play (Rule 36), the German player may assign air units to make a surprise attack against the Soviet Air Force. Any available German air unit able to fly the air unit bombing mission may be chosen. These air units and all Soviet air units are not placed on the maps; they are placed aside until the surprise attack is resolved.

All other German air units are placed at airbases. They may fly regular air missions (such as ground support) during the special air phase as normal.

Since no Soviet air units are deployed on the map, the Soviet player cannot make patrol attacks or fly interception. All Soviet AA fires during the surprise attack turn are halved.

The surprise attack against the Soviet air force is resolved as follows:

a) 10% (rounding down) of the German air units participating in this attack are aborted. These air units are chosen at random from the air units allocated to the attack and are removed from the attack.

b) Total the tactical bombing strengths of the remaining German air units assigned to the attack. Halve this total, rounding fractions down. The resulting number is the number of Soviet air units that are eliminated due to the attack. Choose the eliminated Soviet air units at random from the initial Soviet air units, before the Soviet player activates any air units. Place the eliminated air units on the Soviet air chart as follows: place 20% (rounding down) chosen at random in the eliminated over friendly territory box; place the remainder in the remnants box.

c) The Soviet player calculates his disrupted group allowance (see below) and then activates his initial air units.

d) During the air return step, players deploy the air units involved in this procedure. The Soviet player deploys his activated air units at any Soviet-owned airbases in the USSR. The German player deploys his air units which participated in the surprise attack at any airbases in Greater Germany and Rumania; aborted air units are deployed inoperative.

The Soviet player calculates his disrupted group allowance by totaling the number of Soviet air units eliminated in the surprise attack and dividing this number by 2 (rounding fractions down). The disrupted GA is deducted from the Soviet GA and is recorded separately on the air chart. The Soviet non-disrupted GA total is the limit on how many active air units the Soviet player may have in play. The disrupted GA is recovered at a rate of 5 GA during the Soviet initial phase of each turn starting with Jul I 41; the recovered GA is added into the Soviet GA on the air chart.

Example: The German player allocates 71 air units to make the surprise attack against the Soviet air force. The German player has 7 (10% of 71) air units aborted. The remaining 64 air units have a total tactical bombing strength of 140. Thus, 70 Soviet air units are eliminated: 14 (20% of 70) are placed in the EFT box, and the remaining 56 are placed in the remnants box. The Soviet player has 35 (half of 70) GA disrupted. Thus, the initial Soviet GA is reduced by 35, and the disrupted GA return to play at a rate of 5 per turn starting on Jul I 41.

G. Soviet Unpreparedness. The Soviets were not fully prepared for war, and the following rules reflect this condition.

On the Jun II 41 turn, the following rules are in effect: The Soviet rail capacity is 45 REs, and the Soviet player may not spend resource points to increase this capacity. The Soviet player may not start construction of any forts or permanent airfields and may not use his worker ability for construction. The Soviet player may not plan any airborne operations or amphibious landings. Soviet major city hexes are treated as dot city hexes for all combat and overrun purposes.

On the Jun II 41, Jul I 41, and Jul II 41 turns, the following rules are in effect: In all weather zones except zones A and G, Soviet units with ZOCs have reduced ZOCs. Soviet fortified areas do not have the effects of fort counters. (Note that a Soviet fortified area still has its defense strength. It simply is not treated as a fort: the combat die roll is not modified by −1 and AEC is not negated.)

H. Soviet Garrisons. The Soviet player must garrison various areas or pay a penalty for failing to do so. A garrison consists of a required number of REs of Soviet ground units. Any ground units except position AA may be used for a garrison. Garrisons are checked at the start of each Soviet initial phase. For each RE missing from a garrison, the Soviet player loses one infantry replacement point. These infantry RPs are deducted from RPs arriving that turn or from accumulated RPs, to the extent possible. RPs lost in excess of this are deducted when Soviet infantry RPs are received in later turns.

A garrison is released if at the start of a Soviet initial phase a path of 7 hexes or less can be traced from any unit of the garrison to an enemy unit. This path may not be traced into or through prohibited terrain or neutral territory. Once released, a garrison need not be maintained, even if enemy units subsequently move more than 7 hexes away.

1. Border Areas. The Soviet player must garrison Soviet border regions facing neutral countries. All units of the garrison must be within 3 hexes of the border with the neutral country and every transportation line crossing this border must be occupied by or in the ZOC of a Soviet unit. At the start of the game, Turkey, Iran, Finland, and Hungary are neutral countries sharing borders with the Soviet Union. The garrison requirements for these borders areas are:

> Finland: 50 REs.
> Hungary: 10 REs.
> Iran: 10 REs.
> Turkey: 35 REs, of which at least 9 REs must be of mountain units.

2. Occupation of Iran. On the Aug I 41 turn, Iran is no longer neutral and becomes Soviet-owned territory (Rule 31B). The Soviet player is no longer required to garrison the border area with Iran. However, starting with the following turn, he must maintain a garrison force of 10 REs anywhere in Iran.

I. Oil. Baku (9A:1506) and Ploesti (3B:2826) are major oilfields. Baku produces 2 resource points per turn and Ploesti produces 1 resource point per turn. A player receives the resource points produced by oilfields he owns during his initial phase. Resource points produced by an oilfield are placed in the hex of the oilfield.

Whenever a player gains ownership of an enemy-owned oilfield, the oilfield ceases production for a number of turns. Roll two dice; the number rolled is the number of turns the oilfield is out of production. While out of production, the oilfield produces no resource points. *Example:* The German player captures Baku during the Jul I 42 turn. He rolls a 6 for the number of turns the oilfield will be out of production; thus, the German player will receive resource

points for Baku starting with the Oct II 42 turn. Note that if the Soviet player recaptures Baku, even before it begins producing for the German player, he repeats this procedure.

J. German Intrinsic Defenses. The German player has intrinsic defense strength points in various cities in Norway and East Prussia, as follows:

> 8 points: each major city hex in East Prussia, Trondheim (5B:2532), Narvik (5B:0911)
> 4 points: each dot city in East Prussia, each port in Norway other than Trondheim and Narvik
> 2 points: each reference city in East Prussia.

An intrinsic defense strength of a city is treated as a supported German combat unit with 0 attack strength and 0 movement rating. It does not have a ZOC and does not count against stacking. Its RE size is equal to half its defense strength (e.g. an 8-point intrinsic defense strength equals 4 REs). It has no AEC capabilities. It has no ATEC capabilities until the Jul I 44 turn, whereupon it is ATEC neutral per Rule 10I. In addition, on and after the Sep I 44 turn, one of its REs is full ATEC.

If the intrinsic defense strength of a city is ever eliminated, it may not be replaced.

K. Exiting the Map. Soviet units may exit the west edge of the map, anywhere in or south of Greater Germany. Axis units may exit the south edge of the map in Iran. Any unisolated, supplied unit may exit the west edge of the map when moving by spending MPs. The MP cost to exit the map is equal to the MP cost of the hex on the map edge from which the unit is exiting. Total the printed attack strengths of a player's units which exit the map. For the Soviet player, keep two separate totals: one for units which exit the map in Greater Germany, and one for units which exit the map south of Greater Germany.

Rule 32 — Axis Allies

Various Axis-Allied forces may only operate in certain areas of the map, as defined below. An Axis-Allied ground unit may not voluntarily move outside its operational area and is eliminated if forced to retreat outside its operational area. An Axis-Allied air unit may not fly over any hex outside its operational area.

Certain Axis-Allied nations may surrender to the Soviets, as defined below. Check for Axis-Allied surrender at the start of each game turn when the conditions for surrender have been met. When an Axis-Allied nation surrenders, all its forces in play are eliminated and any accumulated replacements are lost. The nation does not receive any reinforcements or replacements for the rest of the game.

Certain Axis-Allied nations may defect to the Soviets, as defined below. Check for Axis-Allied defection at the start of each game turn when the conditions for defection have been met. When an Axis-Allied nation defects to the Soviets, the following rules are in effect:

a) Roll one die for each ground unit of the defecting nation; modify the roll by +2 if the unit is c/m or cavalry. If the roll is 6 or greater, the unit is immediately eliminated (and does not generate any special replacements). All remaining forces of that nation are controlled by the Soviet player for the rest of the game. The nation and its forces are no longer part of the Axis.

b) The nation no longer receives any reinforcements listed for it on the Axis order of battle. Any accumulated replacement points for the nation are lost, and it does not receive any replacement points for six game turns following its defection. Thereafter, it receives RPs at its usual rate.

c) When the nation defects, if forces of the defecting nation and Axis forces occupy the same hex, these forces must be disengaged. In hexes inside the defecting country, Axis ground units must retreat and air units must attempt to escape. In hexes outside the defecting country, the defecting nation's ground units must retreat and air units must attempt to escape. Retreats are resolved the same as retreats due to combat, except that ZOCs of the defecting nation's units and Axis units are ignored.

d) All hexes in the defecting nation that are not occupied by

or in the uncontested ZOCs of Axis units automatically become Soviet owned when the nation defects.

A. Eastern European Nations. Hungarian, Rumanian, and Slovakian forces may operate only in weather zones C, D, and G.

Due to the intense national rivalries between Hungary and its Eastern European neighbors (Rumania and Slovakia), the following rules are in effect, as long as Hungary and Rumania/Slovakia are on the same side. Hungarian and Rumanian/Slovakian units may not stack together or participate in an attack together. Hungarian and Rumanian/Slovakian air units may not base at the same airbase and may not fly to the same target hex. Hungarian forces may not operate in Rumania or Slovakia. Rumanian and Slovakian forces may not operate in Hungary.

1. Hungary. Hungary is neutral on the Jun II 41 and joins the Axis, entering the war against the USSR, on the Jul I 41 turn. While neutral, the rules on neutrals are observed (Rule 31B), except that the German player may move Hungarian forces inside Hungary (only) during his regular player turn on Jun II 41. These forces may not move outside Hungary or attack.

Once Hungary enters the war, a maximum of 2 Hungarian air units may base and/or fly air missions in the USSR. All other Hungarian air units must base in Hungary and may not fly air missions outside Hungary.

The gray-bordered region containing the the the city of Cluj (1630) was annexed from Rumania by Hungary in 1940. It is part of Hungary for all game purposes.

A number of Hungarian units start the game in reserve status. Units in reserve may operate only in Hungary (that is, only move in Hungary and only attack hexes in Hungary). On various turns, some of these units are released from reserve, as indicated on the Axis order of battle. A unit in reserve may operate normally when the Axis order of battle releases it from reserve. All units in reserve are released from reserve if there are 10 or more REs of Soviet units anywhere in Hungary at the start of a German initial phase.

All Hungarian units that are replaced from the replacement pool are automatically placed in reserve upon their entry into play.

Hungarian units may desert if the Soviet player exits units totalling at least 200 attack strength points off the west edge of the map south of Greater Germany. At the start of the first game turn following the exiting of the required total, check all Hungarian units in play. Roll one die for each unit; the unit deserts on a roll of 6. Treat a unit which deserts as eliminated.

2. Rumania. A maximum of 3 Rumanian air units may base and/or fly air missions in the USSR. All other Rumanian air units must base in Rumania and may not fly air missions outside Rumania.

A number of Rumanian units start the game in reserve status. Units in reserve may operate only in Rumania. Initially, they may operate only in Rumania on or west of the line from 3B:2424 to 3B:3519. When Bessarabia becomes part of Rumania (see below), they may operate anywhere in Rumania, including Bessarabia. A unit in reserve may operate normally when the Axis order of battle releases it from reserve. All units in reserve are released from reserve if there are 10 or more REs of Soviet units anywhere in Rumania at the start of a German initial phase.

All Rumanian units that are replaced from the replacement pool are automatically placed in reserve upon their entry into play.

The Soviet Union annexed Bessarabia from Rumania in 1940. For all game purposes, once all hexes in Bessarabia are Axis owned, Bessarabia is part of Rumania, even if the Soviet player regains ownership of some or all hexes there.

Up through the Dec II 42 turn; Rumania may surrender. If Bucuresti (3B:3126) and all dot cities in Rumania are Soviet owned at the start of a game turn and a supply line can be traced from each of these cities to a Soviet regular source of supply, Rumania surrenders.

On or after the Jan I 43 turn, Rumania may surrender or defect. If either Bucuresti or any three dot cities in Rumania are Soviet owned at the start of a game turn and a supply line can be traced from each of these cities to a Soviet regular source of supply,

Rumania sues for peace. The Soviet player either accepts a surrender or demands that Rumania defect. If surrender is accepted, Rumania surrenders immediately. If defection is demanded, the Soviet player rolls one die. On a roll of 3 or greater, Rumania defects. On a roll of 1 or 2, Rumania remains in the war on the side of the Axis and will neither surrender nor defect to the Soviets for the rest of the game.

3. Slovakia. Slovakian units may desert if the Soviet player exits units totalling at least 200 attack strength points off the west edge of the map south of Greater Germany. At the start of the first game turn following the exiting of the required total, check all Slovakian units in play. Roll one die for each unit; the unit deserts on a roll of 6. Treat a unit which deserts as eliminated.

4. Bulgaria. Bulgaria may defect. If any hex in Bulgaria is Soviet owned at the start of a game turn and a supply line can be traced from the city to a Soviet regular source of supply, Bulgaria defects. *Note:* Bulgarian forces are not shown in the game. However, a Bulgarian defection may change the ownership of Bulgarian territory.

B. Finland. Finland is neutral on the Jun II 41 turn and joins the Axis, entering the war against the USSR, on the Jul I 41 turn. While neutral, the rules on neutrals are observed (Rule 31B), except for the following: The German player may move Finnish forces inside Finland (only) during his regular player turn on Jun II 41; these forces may not move outside Finland or attack. German forces may enter and move inside Finland before Jul I 41, but these forces may not enter or attack into the Soviet Union from Finland while Finland is neutral.

Once Finland enters the war, Finnish forces may operate in weather zones A and B. However, due to Finland's limited war aims, Finnish forces have operational restrictions within this zone, as defined below.

The Soviet Union, after its costly victory in the Winter War of 1939/40, annexed portions of Finland (the regions between the 1939 and 1941 Finnish borders) and occupied Hango. For all game purposes, once Axis units gain ownership of these hexes, they are considered to be part of Finland, even if the Soviet player regains ownership.

1. War Aims. Finland had only limited war aims, and, unlike most other Axis Allies, was successful in resisting German pressure to play an ever-larger role in the war against the Soviet Union. The following rules cover Finland's situation. For these rules, Finland and its neighboring area are divided into two theaters of war:

The Finnish theater consists of all Finnish territory south of the A weather line and all territory south of the A weather line adja-cent to Finnish territory, up to these limits: the 1939 Soviet-Finnish border facing Leningrad (2A:0732 to 2A:0630), the Svir River (2A:0725 to 2A:0619), Lake Onega, and the White Sea Canal (6A:4619 to 6A:3818).

The Arctic theater consists of all territory in the Arctic.

The Arctic theater is a German-controlled theater of war, not a Finnish one. Accordingly, German operations in the Arctic, including Finnish territory in the Arctic, have no special limits placed on them once Finland enters the war. In general, Finnish forces may operate in the Arctic. However, no more than 10 REs of Finnish units may operate in the Arctic outside the 1939 Finnish borders.

Finnish forces may operate normally anywhere in the Finnish theater. Except in the Arctic theater, Finnish forces are under the following restrictions outside the Finnish theater: Finnish units may not attack any hex outside the Finnish theater. Finnish units may enter these hexes if the Soviet player leaves them unoccupied and may overrun these hexes if able to do so. Finnish air units may not fly any air missions in Soviet-owned hexes outside the Finnish and Arctic theaters.

All German forces operating in or tracing a supply line through any part of the Finnish theater are bound by the Finnish operational limits (above).

Only a limited number of German forces are allowed to operate in the Finnish theater. A maximum of 5 REs may operate in this region. For this limit, c/m units are counted at double their RE size,

and air units are counted as being 1 RE in size. Position AA counters and resource points are not counted against this limit. German forces in excess of this limit may not enter this region.

The RE limit for German forces in the Finnish theater is raised as follows:

by 5 REs in the German initial phase on the Apr I turn of each year.

by 20 REs in each German initial phase if at that time there are any unisolated Soviet units within **7** hexes of Helsinki, only Soviet units in Finland are considered. Soviet units at Hango are not considered for this calculation if Hango has been continuously Soviet-owned since the start of the game.

2. Leningrad. If at the start of any German initial phase Leningrad is completely Axis owned, the Finnish limited war aims are modified for the rest of the game. In the Finnish theater, German forces (but not Finnish forces) are no longer bound by the Finnish operational limits, and any number of REs of German forces may operate in this theater. In the Arctic theater, any number of REs of Finnish units may operate in the Arctic outside Finland.

3. Surrender. Finland may surrender. If Helsinki and all dot cities in Finland are Soviet owned at the start of a game turn and a supply line can be traced from each of these cities to a Soviet regular source of supply, Finland surrenders.

4. Armistice. At the start of any game turn on or after the Jan I 43 turn, Finland will accept an armistice with the Soviet Union if the following conditions are met: 1) All cities in the Leningrad MD are Soviet owned. 2) At least four of the following cities are Soviet owned and a supply line can be traced from each city to a Soviet regular source of supply: any major or dot city within the 1939 Finnish borders, any city in Estonia, any port in Latvia or Greater Germany.

If Finland agrees to an armistice, the Soviet player then either accepts or rejects it. If the Soviet player rejects the armistice, Finland remains in the war on the side of the Axis until surrender.

If the Soviet player accepts the armistice, then the German player may either accept or reject it. If the German player rejects the armistice, Finland defects to the Soviets.

If both players accept the armistice, the following conditions are in effect:

a) Finnish forces become non-belligerent. For simplicity, remove all Finnish forces from play. Finnish reinforcements and replacements are no longer received, and any accumulated Finnish replacements are lost.

b) During the German player turn on the turn the armistice is accepted, German forces must leave southern Finland. Southern Finland consists of all hexes within the 1941 Finnish borders south of the A weather line plus all hexes within three hexes of a Baltic Sea coastal hex within Finland. During this turn, German forces may use Finnish ports, airfields, and rail capacity. Any German forces in southern Finland at the end of this player turn are interned and are treated as eliminated. For the rest of the game, German forces may not enter any hex of southern Finland and may not use the Finnish rail capacity.

c) Soviet forces must leave southern Finland. The Soviet player must move his forces out of southern Finland as quickly as possible, but this may take as many turns as necessary. Once all belligerent forces have left southern Finland, this territory is treated as neutral (per Rule 31 B) for the rest of the game. Note that only southern Finland is treated as neutral; the rest of Finland remains a theater of war for both sides.

C. Italy. Italian forces may operate only in weather zones C, D, and G.

D. German Aid. The German player may give German armor replacement points (RPsl to Axis-Allied nations for their use. During a German movement phase, the German player may transfer any accumulated German armor RPs to any Axis-Allied nations. For transport purposes, an armor RP is 1 RE in size and must be shipped by rail or sea to the receiving Axis-Allied nation. Shipments to Italy or any Eastern European nation are by rail and occur automatically. Shipments to Finland may be made by sea or rail. For shipment by

sea, armor RPs must be shipped by a German transport from Greater Germany to Helsinki. For shipment by rail, the armor RPs must be shipped as if they were German units using strategic rail movement
from any rail hex on the west edge of Greater Germany to Helsinki.

Rule 33 — Occupation

Partisans are covered in an optional rule (Rule 40) in *Scorched Earth*. This rule covers the major effects of the occupation of the USSR and the partisan war in a simple, easy to use format.

A. Occupation Territory. Only territory within the 1939 Soviet borders is affected by the following rules. Territory between the 1939 and 1941 Soviet borders is not affected by these rules. The German player is not required to garrison it, and the Soviet player may not make partisan attacks there.

B. Axis Garrisons. Axis-owned dot and major cities in the 1939 Soviet Union must be garrisoned by Axis units. The garrison of a dot city must be 1 RE in size; the garrison of a major city must be 3 REs in size. The garrisoning unit may not be position antiaircraft. The German player must garrison a captured city starting with the game turn following the turn of its capture. For example, if Smolensk is captured in the Jul II 41 turn, then the city must be garrisoned in the Aug I 41 turn. However, a city does not have to be garrisoned if there are supplied Soviet units within 5 hexes of the city or if a supply line cannot be traced from the city to an Axis regular source of supply.

Garrisons are checked at the start of the initial phase of each Soviet player turn. If an Axis-owned Soviet city is lacking its garrison (either entirely or in part), then the Soviet player may make extra partisan attacks in the military district of the city lacking its garrison: 1 partisan attack for a dot city and 2 partisan attacks for a major city. Also, Axis units may not trace supply lines through the hex (or hexes) of a city lacking its required garrison.

C. Partisan Attacks. The Soviet player may make partisan attacks against Axis-owned rail lines and airbases in hexes within the 1939 Soviet borders. Partisan attacks are resolved during the Soviet Initial phase. Partisan attacks are based on the Soviet military districts. The Soviet player may make partisan attacks in each MD at the following basic rates:

Up through Aug II **41**: 0 attacks per MD.

Sept I 41 through Mar II **42**: 1 attack per non-Ukrainian MD; 0 attacks per Ukrainian MD.

Apr I **42** through Mar II **43**: 2 attack per non-Ukrainian MD; 1 attacks per Ukrainian MD.

Apr I **43** through Mar II **44**: 3 attack per non-Ukrainian MD; 1 attacks per Ukrainian MD.

Apr I **44** and after: 4 attack per non-Ukrainian MD; **2** attacks per Ukrainian MD.

In addition to the basic rate, the Soviet player may make extra partisan attacks in an MD if the German player has failed to gar-rison cities there (see Section B above).

For each partisan attack the Soviet player is allowed to make in an MD, he may make either a rail attack, attacking one Axis-owned rail line hex, or one airbase attack, attacking one Axis-owned air-base hex in the MD. The Soviet player may make only one rail attack and one airbase attack per Axis-owned hex. (Note that the Soviet player may make up to two partisan attacks per Axis-owned hex: one rail attack and one airbase attack.)

Use the success table to resolve each partisan attack. Roll one die and consult the table for a result. Do not modify the die roll by the partisan operation modifiers on this table; these modifiers are only for use with the optional partisan rule. If a partisan rail attack succeeds, the rail line in the hex is broken. If a partisan airbase attack succeeds, the capacity of the airbase takes one hit of damage.

The Soviet player may not make a partisan attack in a hex occupied by an Axis unit with a defense strength greater than 0 or in a hex adjacent to any Axis police, security, SS or SS-Police Unit.

Rule 34 -- Reinforcements and Replacements

During the course of the game, each player receives

reinforcements and replacements, may convert or upgrade units, and is required to withdraw units.

If a unit enters play (as a reinforcement or replacement) at a city that is out of supply, the unit's supply status is the same as that of the city. For example, if Leningrad has been out of supply for three turns and a replacement unit appears there, the unit is considered to be in its third turn out of supply. *Note:* Units appearing in a city that is isolated and has been out of supply for at least four turns are not checked for elimination (per Rule 12D) on the turn they arrive.

A player receives reinforcements and replacements during his initial phase. These units may be placed on the map in violation of the stacking limit during the initial phase, but only if the stacking limit will not be violated at the end of the player's movement phase.

The orders of battle charts cover the reinforcements and replacements in the game. On the orders of battle, unit identifications are given for historical interest and in general may be ignored. (*Note:* In particular, unit identifications should be ignored for withdrawals and conversions, or else the play of the game will be slowed for no practical effect.) However, the national indicator on the unit identifications of Soviet foreign contingents is used for replacement purposes and should not be ignored.

A. Reinforcements. Players receive reinforcements during the course of the game, as given on their orders of battle. A player's reinforcements are placed on the map during his initial phase. Reinforcements may be placed only in friendly-owned hexes; these hexes may be in enemy ZOCs.

In general, reinforcements that are unable to enter play as specified below have their appearance delayed until they are able to enter play. Exceptions to this are covered below.

1. Axis. Axis reinforcements arrive in various ways, corresponding to their listing on the Axis order of battle.

German reinforcements enter according to to their listings on the order of battle, as follows:

German: These are standard German reinforcements and are placed in any hexes on the west edge of the map in Greater Germany, Hungary, Rumania, Bulgaria, or Greece. Alternatively, they may be placed in the off-map German ports, for entry via naval transport.

Arctic: These reinforcements are placed in any ports in Norway.

Sweden: This reinforcement is placed in any rail hex on the west edge of the map in Sweden; its movement is governed by Rule 31B.

Finland: These reinforcements are placed in any cities in Finland from which a supply line can be traced to a regular source of supply. These units may not be placed in cities in the Finnish theater if doing this would exceed the RE limit for German forces in this region.

East: These reinforcements are placed in any cities in Greater Germany or the USSR from which a supply line can be traced to a regular source of supply.

Return: These reinforcements appear the same as standard German reinforcements. *Note:* "Return" indicates that a unit withdrawn from play in an earlier turn is returning to play. It is used only when the same unit counter as withdrawn from play returns to play. A number of units withdrawn at cadre strength return at full strength.

Replace: The German player receives the indicated units from his replacement pool. These units are replaced for free and cost the German player no replacement points. These reinforcements appear the same as standard German reinforcements.

Finnish reinforcements are placed in any cities in Finland south of the A weather line.

Hungarian reinforcements are placed in any hexes on the west edge of the map in Hungary.

Italian reinforcements are placed in any hexes on the west edge of the map in Greater Germany, Hungary, Rumania, Bulgaria, or Greece.

Rumanian reinforcements are placed in any cities in Rumania.

Slovakian reinforcements are placed in any hexes on the west edge of the map in Greater Germany.

Certain Hungarian and Rumanian reinforcements listed as being added to the reserves enter play in reserve status (see Rule 32A). The order of battle releases various Hungarian and Rumanian units from reserve status in two ways: a) specific units released from reserve status; b) a number of REs released from reserve status. When releasing REs, the German player releases from reserve status units with an RE total equal to or less than the number specified. Any units in reserve status except c/m units may be chosen.

2. Soviet. Soviet reinforcements are placed in cities in military districts, at specific locations on the map, or on the east edge of the map when arriving from the (off-map) eastern military districts.

Reinforcements arriving at an on-map MD are placed in cities in the MD, as follows:

    a) One unit is placed at each unisolated major city.

    b) One unit then is placed at each unisolated dot city.

    c) One unit is placed at each isolated major and dot city.

    d) Step a through c are repeated until all units arriving at the MD are placed. If all dot and major cities of the MD are enemy owned, then reinforcements scheduled to arrive there are eliminated and may enter play only through replacement.

Certain reinforcements appear at a specific location, as indicated on the order of battle. If these units are unable to enter play due to enemy ownership of the location, they are eliminated.

Reinforcements arriving from the (off-map) eastern MDs are placed in hexes on the east edge of the map, within two hexes of any hex containing a rail line exiting the east edge of the map. Up to 30 REs of these units that are placed on rail hexes may use rail movement on their turn of arrival without using any REs of the Soviet player's rail capacity.

Reinforcements listed as arriving at any MDs may arrive in any MDs capable of receiving reinforcements.

Soviet reinforcements listed on the Soviet other forces chart appear in any unisolated Soviet-owned major cities in the USSR and/or enter from the eastern MDs. No more than one unit of the same exact unit type (e.g., combat engineer, antitank, etc.) may appear in a city in a turn. No more than three units of the same exact type may enter from the eastern MDs.

3. Conditional Reinforcements. Each player may receive conditional reinforcements. A player receives a conditional reinforcement when he meets the conditions for its appearance for the first time. These reinforcements and their conditions for arrival are listed on the players' orders of battle.

B. Replacements. Players receive replacement points (RPs), which are used to replace eliminated units and to rebuild cadres to full strength. RPs are received and used during the player's initial phase. Unused RPs may be accumulated for use in later turns.

Each replacement point replaces one attack strength point of a unit. A unit with 0 attack strength has its replacement cost based on its defense strength. A unit with 0 combat strength is replaced at a cost of one replacement point. Position AA is replaced at a cost of 1 RP for two AA strength points. A divisional headquarters is replaced at a cost of 1 RP. A truck is replaced at a cost of 4 RPs.

Replacement points may be used to replace an eliminated unit at its cadre strength. The RP cost is equal to the strength of the cadre. RPs may be used to replace a unit at its full strength; the cost is equal to the full strength of the unit.

RPs may be used to rebuild a unit at cadre strength to its full strength. The cost for this is equal to its full strength minus its cadre strength. For example, a 7-6 division at its 3-6 cadre strength requires 4 RPs. To be rebuilt, a cadre must be in a city or fortress, be able to trace a supply line to a friendly-owned source of replacements, and may not be in an enemy ZOC. The sources of replacements are:

Finnish: Helsinki.

Rumanian: Bucuresti.

Other Axis: Axis regular supply sources.

Soviet: Soviet replacement cities for infantry replacements and Soviet factories in production for armor and artillery replacements.

The German player receives two types of RPs: infantry and armor. The Soviet player receives three types of RPs: infantry, armor, and artillery. *Note:* The labels infantry, armor, and artillery are terms of convenience, as each type of RP actually represents more than just its name. For example, Soviet armor RPs represent armor, other vehicle, and certain specialized personnel replacements, while German armor RPs mostly represent armor and truck replacements.

1. Axis. The German player receives Axis RPs on the first turn of each month, as listed on the Axis replacements chart. Axis infantry RPs are based on nationality, and infantry RPs of one nationality may not be used for other nationalities. For example, German infantry RPs may not be used to replace Hungarian units. For replacement purposes, Eastern Troop forces and German Army foreign contingents are each considered to be their own nationalities, separate from all other German forces. German armor RPs may be used by other nationalities, through German aid (Rule 32D).

Replaced units appear the same as reinforcements of the same nationality. Replaced German units may appear either as German standard or east reinforcements. Note that replaced Hungarian and Rumanian units enter play in reserve status (Rule 32A).

Armor RPs are used for the following units: all reconnaissance, flammpanzer, assault gun, sturmpanzer, and engineer tank units; all non-divisional armored (panzer) units except German panzer brigades with attack strengths of 7 or greater; and all trucks.

A mixture of armor and infantry RPs are used for the following units: all armored (panzer) divisions; all German panzer brigades with attack strengths of 7 or greater; all mechanized (panzergrenadier) units; and all motorized infantry units. These units and the amounts of armor and infantry RPs they require are listed on the Axis special RP costs chart.

Infantry RPs are used to replace all other units (such as infantry, motorized antitank, field artillery, etc.).

The German player may replace only a limited number of units of certain unit types, per nationality. The limits are:

1) Only one combat or assault engineer RE may be replaced per month.

2) Only one artillery RE may be replaced per month.

3) Only one airborne RE may be replaced per three-month (six-turn) period.

4) Only one commando unit may be replaced per month. (A parachute commando unit counts as a commando unit, not as an airborne unit.)

2. Soviet. The Soviet player receives RPs starting with the Aug I 41 turn. Soviet RPs are generated at cities in the military districts and at factories. Soviet armor and artillery RPs may be used for all Soviet forces. Soviet infantry RPs are used for all Soviet forces except for Soviet Army foreign contingents and former Axis-Allied nations that defected to the Soviets. Soviet foreign contingents receive their own infantry RPs, as listed on the Soviet replacements chart. These RPs are based on the actual nationality of the contingent; the nationality of a foreign contingent unit is printed as part of its unit identification. Axis-Allied nations that defect to the Soviets receive their own RPs, as listed on the Axis replacements chart.

Armor RPs are used for all c/m units except for c/m rocket artillery. Artillery RPs are used for all antiaircraft, antitank, and artillery units (including c/m rocket artillery). Infantry RPs are used for all other units.

The Soviet player receives armor and artillery RPs from factories in production, at rates as given in Rule 31D. These RPs are handled as follows:

a) RPs produced by unisolated factories are placed in general RP pools, armor RPs in one pool and artillery RPs in another pool. Units replaced by RPs from a pool are placed at any unisolated, producing factory.

b) RPs produced by an isolated factory do not go into the general RP pools; they accumulate only at the factory itself. Units replaced by these RPs are placed at that factory, and other RPs may not be used to help replace the unit. If such a factory is no longer isolated in a Soviet initial phase, all of its accumulated RPs go into the general pools. If the German player gains ownership of an isolated factory, then all its accumulated RPs are lost.

c) Producing factories are the sources of replacements for cadres that are rebuilt using armor or artillery RPs. A cadre may be rebuilt with RPs from a general RP pool if it can trace a supply line to an unisolated factory or to a rail hex on the east edge of the map. It may be rebuilt with RPs accumulated at an isolated factory if it can trace to that factory.

The Soviet player receives infantry RPs from Soviet-owned replacement cities in his military districts, as listed on the Soviet replacements chart. (Note that he initially receives infantry RPs on every turn from Aug I 41, but he receives them at less frequent intervals later in game, as listed on the chart.) These RPs are handled as follows:

a) Each MD maintains a separate pool of RPs. Each unisolated replacement city in the MD contributes its RPs to the pool. Units replaced from these pools are placed in cities in the MD in the same manner as reinforcements for the MD, except that units replaced from the general MD pool may not be placed at isolated cities. If the German player gains ownership of all dot and major cities in an MD, all accumulated RPs for that MD are lost.

b) RPs from an isolated replacement city do not go into the MD's pool; they accumulate only at the city itself. Units replaced from these RPs are placed at that city, and other RPs may not be used to help replace the unit. If the German player gains ownership of an isolated replacement city, all RPs accumulated at that city are lost.

c) Replacement cities are the sources of replacements for cadres that are rebuilt using infantry RPs. A cadre may be rebuilt with RPs from a an MD's pool if it is in the MD and can trace a supply line to any unisolated dot or major city in the MD. It may be rebuilt with RPs accumulated at an isolated city if it is in the city's MD and can trace to that city.

d) If the Soviet player regains ownership of a replacement city previously controlled by the German player, the city begins to produce RPs again no sooner than the sixth turn following its recapture.

Infantry RPs for foreign contingents are held in general national pools and are not associated with any MDs. Foreign contingent cadres may be rebuilt if they can trace a supply line to any unisolated dot or major city in the Soviet Union.

Units replaced by RPs from the eastern MDs or from factories in the Urals enter play the same as reinforcements from the eastern MDs.

The Soviet player may replace only a limited number of units of certain unit types:

1) Only six REs of cavalry units may be replaced/rebuilt per turn.

2) Only one NKVD political troops RE may be replaced per month.

3) Only one airborne RE may be replaced per three-month (six-turn) period.

4) Only one combat or assault engineer RE may be replaced per month.

5) Only three REs of mountain units may be replaced/rebuilt per month.

6) From the start of the game to the end of the first winter, only three REs of winterized units may be replaced/rebuilt per month. *Note:* This includes all Soviet winterized units, not just those Soviet units in the winter-capable colors.

3. Special Replacements. When unisolated units are eliminated due to combat or overrun, the owning player receives infantry RPs. (Note that eliminated c/m and artillery units yield infantry RPs. Artillery and armor RPs are never received as special replacements.) All nationalities receive special replacements, and they may receive these replacements any time from the start of the game.

When an unisolated unit is eliminated, the owning player places

the unit to one side. When an unisolated unit is reduced to cadre, the owning player notes the actual attack strength point loss (i.e., full attack strength minus cadre attack strength). In his initial phase, the phasing player determines his total losses by calculating the total attack strength loss of his units eliminated since his last initial phase (and he may then place these units in his replacement pool) and adding this to the total attack strength loss of his units reduced to cadres since his last initial phase. (Note that these calculations always use units' attack strengths.) The losses for each nationality that receives its own infantry replacements are calculated separately. For example, Germany Army, Luftwaffe, and SS losses are counted in general as German losses, while Rumanian and Eastern Troop losses are each counted separately.

The player determines the number of infantry RPs received as special replacements, based on his losses. To calculate these RPs, divide the German and Finnish loss totals by 4, and divide all other loss totals by 5. (For convenience, round fractions down. Optionally, retain fractions.) The resulting number is the number of infantry RPs that nationality receives due to special replacements. These RPs are added their national RP pools. Soviet RPs are added to the accumulated RP pools of any of his on-map MDs. However, no MD may receive more than 10 of these RPs. RPs received due to special replacements may be used in the initial phase in which they are calculated or may be accumulated.

Example: In a Soviet initial phase, the Soviet player finds that he has lost 155 attack strength points of unisolated units. Thus, he receives 31 infantry RPs as special replacements and may add these RPs to the RP pools of any of his on-map MDs. However, he may add no more than 10 of these RPs to the RP pool of any on-map MD.

C. Withdrawals. The orders of battle require certain units be withdrawn from play at various times. Any unit of the indicated nationality, size, type, and strength may be withdrawn. An isolated unit may not be withdrawn. A withdrawn unit is out of play (simply remove it from the map) and may not return to play unless call for in the orders of battle.

If no unit in play can be withdrawn, then an eliminated unit is removed from the replacement pool, and the player forfeits RPs equal to the unit's replacement cost. If the player does not have sufficient RPs (of the correct types) to meet this cost, then the remainder needed is deducted when RPs are received in later turns.

When the Axis order of battle requires a cadre to withdraw, the German player may instead withdraw a full strength division that has the indicated cadre. If he does this, he receives RPs equal to the cost of rebuilding the cadre to its full strength. These RPs may not be used on the turn they are generated but may be used thereafter. *Example:* On May I 42, the German player withdraws a 12-10 panzer division in place of a 5-8 panzer cadre that is required to withdraw. He receives 4 armor and 3 infantry RPs for this, and he may use these RPs on or after May II 42.

D. Conversions, Upgrades, and Reorganizations. The orders of battle specify when units may be converted, upgraded, or reorganized from one strength and/or type to another.

1. Conversion. The player may convert a unit in any of his initial phases on or after the turn the conversion is specified on the order of battle. To be converted, the unit must meet the same requirements as for a cadre to be rebuilt. (See Section B above: it must be in a city or fortress, be able to trace a supply line to a source of replacements, and may not be in an enemy ZOC.) The original unit is removed from play and the new unit is put in its place. Units removed from play through conversion may not be replaced.

2. Upgrade. An upgrade is the same as a conversion, except that the owning player must spend RPs when the unit is upgraded. These costs are given on the orders of battle in the upgrades listings.

3. Reorganize. The German player may reorganize various German divisions and cadres, as listed on the Axis order of battle. A reorganization is the same as a conversion, except that there may be an RP cost or gain, depending upon the unit involved. The RP costs or gains for reorganizing units are given on the German

reorganization chart. RPs gained through reorganization may not be used on the turn they are generated but may be used thereafter.

Once the German player is allowed to reorganize divisions and cadres in play, he may also reorganize these units in his replacement pool. This is treated the same as a replacement pool substitution.

Note: The phrase "replacement pool substitution" in this rule does refer to the substitution procedure given in Rule 34E1.

E. Fragile Divisions. Various Soviet and Finnish divisions may not be replaced either at original strength or at all once eliminated.

1. Substitutions. Certain Soviet divisions may not be replaced at their original strengths once eliminated. Instead, when these divisions are eliminated, they have other divisions substituted for them in the replacement pool. These substitutions are listed on the Soviet order of battle. All the following Soviet divisions excluding Guards, NKVD, and foreign contingent divisions are fragile and have substitutions:

Divisions with 3-6 rifle division substitutions: 5-6, 6-6, and 7-6 rifle divisions; any strength motorized divisions; any strength mechanized divisions; and, from the start of the game through the Jun II 44 turn, any strength mountain rifle divisions.

Divisions with 3-8 cavalry division substitutions: 4-3-8 and 5-4-8 cavalry divisions; 3-2-8 mountain cavalry divisions.

In addition, these Soviet divisions may not be rebuilt to their original full strength when at cadre strength. Instead, the player may rebuild such a cadre to its substitution strength. *Example:* A Soviet regular 5-6 rifle division has been reduced to its 1-6 cadre strength. The Soviet player may not rebuild this cadre to its 5-6 strength. Instead, he may rebuild it to its divisional substitution strength, by spending 2 infantry RPs, removing the 1-6 cadre from play, and putting its 3-6 rifle division substitution in its place.

Finnish 6-6 rifle divisions may not be replaced at their original strengths once eliminated. Instead, when these divisions are eliminated, they have 5-6 rifle divisions substituted for them in the replacement pool.

2. No Substitutions. Soviet tank divisions and the Soviet NKVD c/m division may not be replaced once eliminated. In addition, cadres of these divisions may not be rebuilt to full strength.

3. Notes. 1) Note that cadres of fragile Finnish divisions may be rebuilt. 2) Note that this rule applies only to divisions, but not to divisional units in general. Soviet corps are not affected by this rule.

F. Special Considerations.

1. Disbanding. Players may disband some of their units, receiving RPs for doing so. A player's order of battle specifies which units he may disband and when he may disband them. A player disbands units in his initial phase, receiving the RP cost of the unit. A unit may be disbanded if it can trace a supply line to a source of replacements and is not in an enemy ZOC. When disbanded, its RPs are added to its national pool. (Soviet RPs are added to the Soviet RP pools similar to the way RPs are used from the pools when rebuilding cadres.) These RPs may not be used on the turn they are generated but may be used thereafter.

2. Soviet Militia. Eliminated Soviet militia units may not be replaced.

When Soviet militia units are disbanded, the Soviet player receives infantry RPs equal to the unit's attack strength plus one. For example, disbanding a 2-4 militia division gives the Soviet player 3 infantry RPs.

3. NKVD. Eliminated NKVD border and rifle units may not be replaced. (*Note:* Other NKVD units may be replaced.)

When NKVD units are disbanded, the Soviet player receives infantry RPs equal to the unit's attack strength plus one. For example, disbanding a 0-1-5 NKVD border regiment gives the Soviet player 1 infantry RP.

4. Soviet 3-6 Rifle Divisions. Various Soviet 3-6 rifle divisions have 4-6 rifle divisions printed on the backs of their counters. Neither division has a cadre.

Starting with the Aug I 41 turn, the Soviet player may convert up to four 3-6 rifle divisions per turn to their 4-6 strengths.

When an eliminated rifle division that has both a 3-6 and a 4-6

side is replaced, the unit must be replaced at its 3-6 strength.

5. Soviet Guards. The Soviet order of battle specifies when units are converted to Guards status. The regular conversion rules are followed, with the exception that most units removed from play due to conversion to Guards status are placed in the replacement pool and may subsequently be replaced. (In such a case, a new for-mation has been raised with the old formation's identification.) The following units are not placed in the replacement pool (and may not be replaced) when converted to Guards status: all c/m corps, all artillery divisions.

Any Soviet regular, winter-capable, or naval ground unit of the correct size and type may be converted to Guards status. The con-version may require or yield RPs, similar to reorganization (see Sec-tion D above). To determine this, add one to the attack strength of the unit being converted and subtract the attack strength of the Guards unit from this. If the result is negative then that is number of RPs needed to make the conversion. If the number is positive, that is the number of RPs gained by the conversion. RPs are spent the same as for rebuilding a cadre and gained the same as for dis-banding. For example, if a 3-6 rifle division is converted to a 5-6 Guards rifle division in Moskva, 1 infantry RP from the Moskva MD must be spent for this conversion.

6. Disarming. The German player must disarm certain Axis-Allied forces, as specified on the Axis order of battle. When an Axis-Allied force is disarmed, all of its ground units are withdrawn from play. Calculate special replacements for these units and divide this number by 2 (rounding down). The result is the number of German infantry RPs the German player receives for disarming these units. Remove all units of the disarmed force from the Axis replacement pool. Remove all air units of the disarmed force from play and from the Axis air chart and reduce its group allowance and active air unit totals to 0.

7. Assemblies. The Soviet order of battle charts list a number of Soviet artillery divisions as being available for assembly. These divisions may be assembled any time on or after the turn specified. These divisions are assembled from Soviet non-divisional artillery units in play, as specified on the unit assembly possibilities chart. An artillery division may be assembled in the Soviet initial phase, in the same manner as a broken down unit is assembled (see Rule 15). Once assembled, the artillery division may not be broken down, nor may the units from which it is assembled be returned to play through replacement or by any other means.

8. Note. In addition to the above, some unique reinforcement events occur at various times. These are specified on the orders of battle; follow the instructions given there when these events occur. When the orders of battle require a unit to be removed from or substituted in the replacement pool and no appropriate unit is in the pool, the activity is delayed until an appropriate unit enters the pool -- if none ever enter the pool it is never removed or withdrawn.

Rule 35 — Lend-Lease

During the course of the game, the Soviet player receives lend-lease reinforcements from the United States and United Kingdom. Lend-lease reinforcements are delivered to the USSR via three routes: northern, southern, and eastern routes, as listed on the Allied lend-lease charts.

Lend-lease reinforcements arriving via the northern route arrive at any unfrozen Soviet-owned ports on the Arctic Ocean. If there is no port available, the lend-lease reinforcements for that turn do not arrive at all. If a port is available, then each arriving lend-lease reinforcement (such as an air unit, individual resource point, or indi-vidual armor RP) must be checked for the effects of German anti-shipping forces. Roll two dice for each item; on a roll of 3 or less, the item was sunk in transit and does not arrive.

Lend-lease reinforcements arriving via the northern route are placed as follows: a) resource points are always placed at the port; b) if the port is not isolated, then armor RPs are placed in the general armor RP pool and air units are placed in the available box; c) if the port is isolated, then the armor RPs and air units are stockpiled at the port. In following Soviet initial phases, these items go to their proper destinations if the port is no longer isolated. If the German player ever gains ownership of the port hex, then all stockpiled

armor RPs and air units at the port are eliminated.

Lend-lease reinforcements arriving via the southern route appear unless this route is cut. The German player may cut the route by exiting units off the south edge of the map in Iran. Once the German player has exited units totalling at least 100 attack strength points off this map edge, the southern lend-lease route is cut. While the route is cut, all lend-lease arriving via the southern route is lost and does not arrive in the game. Once cut, the route is re-opened if the Axis off-map forces are destroyed. These forces are destroyed if all hexes on the south edge of the map in Iran are isolated for four consecutive German initial phases. Destroyed Axis forces are placed in the Axis replacement pool; they do not generate any special replacements.

Lend-lease reinforcements arriving via the southern route arrive as follows: a) units and resource points are placed on the south edge of the map in Iran or at the off-map Caspian ports; b) air units are placed in the available box; c) armor RPs are placed in the general armor RP pool.

Lend-lease reinforcements arriving via the eastern route always appear; this route may not be cut. These reinforcements arrive as follows: a) units and resource points appear the same as rein-forcements from the eastern MDs; b) air units are placed in the available box; c) armor RPs are placed in the general armor RP pool; d) rail capacity increases are added to the Soviet rail capacity total; e) factory upgrades occur per Rule 31D.

The Soviet player occasionally receives Royal Air Force group allowances from the United Kingdom for use with certain lend-lease aircraft, as indicated on the Allied lend-lease aircraft chart. These GA may be used only for the indicated air units. While in play, the GA's air unit is treated as a Guards air unit. (Use the Guards air unit counter for this.) When the GA is withdrawn, the air unit is turned over to the Soviet air force: either keep it in play if a Soviet GA is available (note that a Guards conversion must be used to keep it as a Guards air unit), or place it in the available box if none is available.

The Soviet player may not reduce the RAF group allowance through the air replacement procedures, even if its air unit is eliminated while the RAF group allowance is in play.

The lend-lease charts notes any unique lend-lease events; follow the instructions on the chart for these events.

Rule 36 — Preparing for Play

Lay out the maps to form a complete game map, as shown on the map guide. There is a one-hex overlap between adjacent maps. For example, when assembling the maps, the 5100 hex row of map 5B overlaps the 0100 hex row of map 1B (or vice-versa).

Sort the counters by nationality, type, size, and strength. Unit designations are given for historical interest and may be ignored for deployment and play of the game.

The orders of battle specify the initial deployment for both sides. (Abbreviations used on the orders of battles are explained in each order of battle.) In general, ground units are deployed in their historical army areas. These units may be deployed in any hexes of their army areas. Soviet units are deployed in Soviet territory, and Axis units are deployed in Axis territory. The stacking limit may not be violated when units are deployed. Except in weather zones A and G, units may not be deployed broken down. Each army deploying along the Axis-Soviet demarcation line has a a range of hexes for deployment. No unit of the army may be deployed in any hex north or south of this range. For example, units of the German 16th Army (deployment range 1B:2723 to 1B:2923) may not deploy in hexes north of the 1B:2700 row or south of the 1B:2900 row. *Note:* The orders of battle often require units to be deployed within a certain number of hexes of border hexsides. Count these hexes starting from the border hexside.

The Soviet player deploys the forces of his border military districts first. Along the Soviet borders with Greater Germany, Hungary, and Rumania, every hex in the Soviet Union adjacent to a border hex-side must be occupied by, or in the ZOC of, a Soviet unit. Along

the Soviet border with Finland, Turkey, and Iran, every border hex containing a transportation line entering the Soviet Union must be occupied by, or in the ZOC of, a Soviet Unit. Units listed in the non-divisional section of each MD are deployed stacked with any other units in the MD or in any cities or fortresses in the MD.

The German player then deploys all of his forces except air units, as specified on the Axis initial order of battle. Any airborne operations or amphibious landings for the German surprise turn and regular player turn of Jun II 41 are planned at this time.

The Soviet player then deploys all of his remaining forces, except air units. He does not activate his air units at this time. His available air units are placed aside for the resolution of the surprise attack turn (Rule 31F), and the Soviet player activates and deploys his air units after this attack.

The German player activates Axis air units. Air units not activated are placed on the available box of the German air chart. The German player then chooses which of his Luftwaffe air units (only) will make the surprise attack against the Soviet Air Force; these are placed to one side for the resolution of the attack in the surprise attack turn. The remaining air units are deployed on the map. Axis-Allied air units are placed at airbases in their home countries. Up to three Luftwaffe air units may be placed at airbases in Norway. The remaining Luftwaffe air units are placed at airbases in Greater Germany or Rumania, and the air units making the surprise attack will be deployed in Greater Germany and Rumania following the attack.

After all forces are deployed, the game begins with the German surprise attack turn of the Jun II 41 turn. The weather is clear in all weather zones on this turn.

At the start of the game, the German player owns Norway, Greater Germany, Rumania, Bulgaria, and Greece. The Soviet player owns the USSR and Hango. Finland, Hungary, Sweden, Turkey, and Iran are neutral. (Note that Finland and Hungary will enter the war, per Rule 32.)

Rule 37 — Victory

A. Game Length. The game starts with the Jun II 41 turn and ends with the Dec II 44 turn.

B. Victory Determination. At the end of the Dec II 44 turn, victory is determined. Victory is based on victory points, which are calculated at the end of the game. The German player gains victory points for cities he owns at the end of the game:

2 points for each full city hex.

1 point for each partial city hex - ignore Danzig (1B:2433).

1 point for each of the following cities: Tallinn (1B:0711), Kaunas (1B:2818), Smolensk (2A:3532), Ploesti (3B:2826), Sevastopol (3B:3704), Krasnodar (4A:3818), Narvik (5B:0911), Murmansk (6A:1617), Groznyy (8A:4932).

The German player gains half the victory point value of a city's hex if it is Soviet owned but isolated.

Total the victory points gained by the German player at the end of the game, and round down any fraction remaining after totalling. This determines the level of victory (see below). Adjust the level of victory as follows:

Shift the level of victory by one level in favor of the Soviet player if he has exited sufficient units off the west edge of the map: He must exit units totalling at least 400 attack strength points off the map edge in Greater Germany and at least 200 attack strength points off the map edge south of Greater Germany.

Shift the level of victory by one level in favor of a player with military superiority. A player has military superiority if the total attack strength of his units in play is at least three times that of his opponent. Count all units in play for this calculation, including those which have exited the map, and count all accumulated replacement points as one attack strength point each.

C. Levels of Victory. At the end of the game, calculate the level of victory and adjust it, as described above. This determines the winner of the game and his overall level of victory:

Victory Point Total	Level of Victory
60 or more	German Decisive Victory
40-59	German Substantial Victory
15-39	German Marginal Victory
9-14	Soviet Marginal Victory
3-8	Soviet Substantial Victory
2 or less	Soviet Decisive Victory

D. Automatic Victory. If a player owns all non-neutral major cities on the map at the start of his player turn, the game ends at that point. The player has won an automatic decisive victory.

Rule 38 — Advanced Rules

The following rules cover certain game mechanics in greater detail than presented in the previous rules. For players gaining experience with the game system, these rules can be disregarded. These rules should be used by experienced players.

A. Retreats and Overruns. During the combat phase, a unit or stack required to retreat due to a combat result (Rule 9F1) may retreat into an enemy-occupied hex if able to overrun (Rule 13) the hex. The overrun odds are calculated as normal, but movement point costs are ignored. The effects of enemy ZOCs on retreats are implemented before the overrun odds are calculated. *Example:* A stack of two Soviet 10-5-8 tank divisions is attacked and a DR is achieved. The stack is surrounded, but one of the adjacent hexes is occupied by a 1-10 supported battalion, and no German ZOC is exerted into that hex. Accordingly, the Soviet tank divisions retreat into this hex, overrunning the battalion. If a German ZOC was exerted into this hex, the tank divisions would be reduced to their 4-2-8 cadre strengths first and thus be too weak to overrun the battalion.

B. Antiaircraft Fire. Units may fire AA during the movement and exploitation phases against air units flying harassment. To fire AA, the unit (or units) must enter the hex containing the air units flying harassment, ending their movement for the phase in the hex. The units may then fire AA against the air units flying harassment in the hex. If any air units are driven off, the harassment cost in the hex is recalculated and used for all subsequent movement. Only one AA attack may be made per hex containing air units flying harassment per movement or exploitation phase. Only c/m units may fire AA during the exploitation phase.

C. Railroads.

1. Broad Gauge Rail Lines. The rule defining the location of broad and standard gauge rail lines is a simplification for playability purposes. Actually, the following are broad gauge rail lines, not standard gauge:

The rail line from Velikie Luki to Riga, including its portion in Estonia, 1B:2407-2309-2212-1816. All other rail lines in the Baltic States are standard gauge, including those that cross this broad gauge line. For example, all other rail lines running into or through Riga are standard gauge.

The rail line from Proskurov to Przemysl, including its portion in former Polish territory, 3B:0621-0224-0226-0129. All other rail lines in the former Polish territory are standard gauge.

2. Upgrading. Many roads shown on the map are actually low-capacity railroads, and these may be upgraded to full railroad status. Any road hex may be upgraded to railroad status, except for any road hex in the Arctic and any road in a mountain hex.

A construction unit may upgrade a road to a railroad. A road is upgraded to a railroad (in any terrain) in the same manner as a fort is built in clear terrain (Rule 14A). Note that upgrading a road hex costs a resource point. Use railroad upgrade markers to mark the courses of roads upgraded to railroads. *Note:* A hex containing both a road and a railroad must be upgraded in order for the road in the hex to become a railroad.

D. Admin. Movement. A unit may combine admin. movement (Rule 6B) with regular naval transport (Rule 28C1) and operational rail movement (Rule 7A1). *Example:* A Rumanian 4-6 infantry division in Bucuresti entrains (1 MP), moves by operational rail movement directly to Constanta (2 MPs), embarks (2 MPs) on a transport,

is shipped to Nikolaev where it disembarks, and uses admin. movement to move to Kherson (1 MP).

E. Air-Naval Interaction. When flying the naval unit bombing mission (Rule 20F2h), an air unit may fly to a search hex instead of flying to a target hex and resolving its mission during the air phase. This allows the air unit to remain in the hex into the enemy player turn and gives the air unit a chance to bomb enemy naval units at that time. When flying to a search hex, the air unit has its movement allowance reduced by 4 MPs. A search hex may be any full or partial sea hex; it need not contain any enemy naval units. An air unit flying this mission has a search zone, which is composed of all full or partial sea hexes within four hexes of its search hex.

An air unit flies to a search hex during its air phase, and any patrol attacks, interception, and air combat involving the air unit occurs during this phase. AA is not fired at the air units during this phase. The air unit does not bomb during this phase. Instead, it remains in its search hex into the enemy player's movement phase. During this phase, it may bomb an enemy naval unit that is/moves at sea in its search zone. For the purposes of this rule, a naval unit is at sea if it is in a full or partial sea hex and is not in port. AA is fired at the air unit immediately before it bombs. If one or more naval units are moving together within the search zones of several air units, all these air units may bomb the naval units at the same time. (Note that this is mostly for the purposes of Rule 22B, as a ship being bombed can receive AA support from one not being bombed.) If the air unit survives AA fire, it bombs its target. All of a player's air units flying this mission return to base at the end of the enemy player's movement phase.

If a naval unit is hit due to this bombing, it must immediately return to port and end its movement for the turn there. If it is carrying cargo, the cargo is disembarked at this port. However, the naval unit may not return to a port that is in the search zone of the air unit that successfully bombed the naval unit, unless no other port is available. *Note:* When returning to port, the naval unit could be bombed by other air units, if it enters their search zones.

When using this rule, a player must indicate all sea movement of his naval units in a sea zone before any naval bombing in the zone is resolved. (Thus, the non-phasing player will see all sea movement in a zone before he has to resolve any bombing.) A player may arrange the sea movement of his naval units so that several naval units are moving together, either for all or for only part of the movement.

F. Special Unit Types.

1. NKVD Political Troops Modification. The special abilities of an NKVD political troops unit (Rule 14G) is not used in the defense of a hex if the combat result against the hex is DE. *Example:* An NKVD political troops regiment and a Soviet division that has a cadre side are defending against a German attack in a hex. The combat result is DE, which eliminates the regiment and reduces the division to cadre. Since the result is DE, the no retreat ability cannot be used, and the cadre must retreat.

2. Soviet Parachute-Infantry. Unlike other parachute-infantry units, Soviet parachute-infantry units actually have limited airborne capabilities. Treat these units as airborne units, but add the following modifier to the disruption die roll:

   −4 for a drop by a Soviet parachute-infantry unit.

G. Luftwaffe Schools. The German player may call up the Luftwaffe training schools, in order to receive additional GA and air unit reinforcements. The GA and air units of the Luftwaffe schools are listed on the Axis air order of battle chart. During a German initial phase, the German player may call up the Luftwaffe schools. He receives the schools' GA as GA additions and may take any (up to all) of the schools' air units as air unit reinforcements. If the Luftwaffe schools' GA is in play at any time during a German air replacement cycle, then the regular Luftwaffe GA increase at the start of the next cycle is lost.

Once called up, the German player may stand down the Luftwaffe schools during any subsequent German initial phase. He reduces the Luftwaffe GA total by the schools' GA total. He deactivates

and/or removes from the available box non-glider air units equal in number to the number of air units he called up from the schools. (Note that the same air units called up are not required to be stood down.) When the schools are stood down, the effects of calling up the schools on the overall German war effort are assessed. For every two turns (or fraction thereof) that the schools' GA has been in play, the German player must transfer one GA and one air unit out of theater (per Rule 27F3). *Note:* Keep track of the number of turns the schools' GA is in play for the purposes of this calculation.

The German player may call up the schools any time from Jul I 41 through Aug II 44. On Sep I 44, the schools must be stood down if they are in play at this time and may not be called up for the rest of the game.

H. Eastern Troop Withdrawal. Starting on the Jul I 43 turn, calculate the German player's victory point total in each German initial phase. If the total is less than 25 victory points in a German initial phase, Eastern Troop withdrawal is triggered. The German player must withdraw from play and remove from the replacement pool all Eastern Troop units except for the Baltic Eastern Troop units and any two other Eastern Troop units. (Baltic Eastern Troops are Eastern Troop units with "Est", "Lett", or "Lit" in their unit identifications.) All accumulated Eastern Troop RPs are lost, and only cities in the Baltic States generate Eastern Troop RPs from this time on. No Eastern Troop reinforcements except Baltic ones are received from this time on. These restrictions are not lifted even if the German player later achieves a 25+ victory point total.

Rule 39 — Optional Rules

The following optional rules may be used upon agreement by both players. Players should decide which optional rules will be used before choosing sides.

A. Bridges. A transportation line crossing a river/major river hexside is a bridge. A player owns a bridge if he owns both both hexes adjacent to the bridge hexside or if he was the last to do so. At the start of the game, bridges on the Axis-Soviet demarcation line are not owned by either player. Bridges may be demolished.

Air units may demolish a bridge by bombing. (This is a tactical bombing mission.) The bombing air unit flies to either hex adjacent to an unowned or enemy-owned bridge hexside and may be intercepted by enemy interceptors able to fly to that hex. After air combat, AA is fired. AA fire may come from either (but not both) of the two hexes adjacent to the bridge hexside, firing player's choice. Surviving air units then bomb the bridge, using the bombing table. Three bombing hits demolishes the bridge.

A ground unit may demolish a bridge by spending 4 MPs in either hex adjacent to the bridge to do so. The bridge must be friendly owned or unowned.

A demolished bridge may not be used for any movement purposes, such as road movement, rail movement, admin. movement, etc. For example, a unit using a road to cross a river and enter a woods hex normally pays 1 MP to do so; it must spend 3 MPs to do so if the bridge is destroyed (1 MP for the river and 2 MPs for the woods hex). Supply lines may be traced across a demolished bridge without penalty.

A construction unit may repair a demolished bridge or a bridge that has taken bombing hits. A bridge may be repaired only if the player owns both hexes adjacent to the bridge. Repairing a bridge across a non-major river costs the construction unit 4 MPs. Repairing a bridge across a major river costs the construction unit 8 MPs, and the unit must trace an overland supply path to a resource point, which must be expended. Repairing a bridge that has bombing hits but is not demolished is the same as repairing a demolished bridge except that a resource point is never required.

Any commando unit (except the Kriegsmarine commando unit) may attempt to seize a bridge when it enters a hex adjacent to a bridge hexside. If there are no enemy ground units in the other hex adjacent to the bridge hexside, the attempt is automatically successful. If there are enemy units adjacent, then one die is rolled and the success table is consulted. A phasing commando unit may make

one attempt to seize a bridge per player turn and must end its movement in a hex adjacent to the bridge to do so. It may attempt to seize a bridge during the movement phase when it moves adjacent to the bridge. It may attempt to seize a bridge in the air phase if it is air dropped adjacent to the bridge. A seized bridge immediately becomes owned by the phasing player. In addition, in the phasing player's combat phase of the player turn the bridge was seized, any one friendly unit may attack across this hexside without being affected by the terrain effects of the river hexside. Only one unit (of any size) may benefit from this; other units attacking across the hexside are affected by the river, as normal.

B. Resource Points.

1. Capture. A player may voluntarily destroy his resource points at any time in his player turn only. During a player turn, whenever a unit gains ownership of a hex containing enemy resource points, half (round down) of the resource points in the hex are captured, and the remainder are immediately destroyed. A captured resource point is treated in all respects the same as the player's own resource points. *Example:* During the German combat phase, Axis units attack a hex occupied by a Soviet rifle brigade and five resource points. The result of the combat is a DR, and the rifle brigade retreats from the hex, carrying two resource points with it (Rule 12F). Axis units advance after combat into the hex, gaining ownership of the hex. One resource point there is captured (half of the 3 points there, rounded down), and the remaining 2 points are immediately destroyed.

2. Recovery. A player may recover resource points by dismantling forts and permanent airfields. A construction unit may dismantle an unisolated fort or permanent airfield. It takes the unit one turn (two turns in poor weather) to dismantle a fort or permanent airfield. (Dismantling is similar to construction, starting and finishing in initial phases. See Rule 14A1.) For every three forts/permanent airfields dismantled, the player receives one resource point. The resource point is received as a reinforcement in the turn following the dismantling of the third fort/permanent airfield, and is placed at any friendly-owned unisolated major city.

C. Finnish War Effort.
The standard rules show Finland's historical participation in the war. This rule covers the separate nature of the Finnish foreign policy and Finland's independent relationship with Germany.

At the start of the game before any units are deployed, the German player draws at random a card from a deck of playing cards to determine Finland's war effort. The card is not revealed to the Soviet player until the end of the game. (The German player should seal the card in an envelope, which the Soviet play may open after the game is played to conclusion.)

The card determines Finland's war effort. The limits of Rule 32B1 are modified as follows:

Ace of Spades. Finland is totally committed to the Axis cause and is in the war from the start of the game. (Axis forces in Finland may not operate against the USSR during the surprise attack turn but may do so in the regular German player turn of Jun II 41.) All units of Army Norway may be deployed anywhere in Finland. All Finnish limited war aims restrictions (Rule 32B1) are ignored. Finnish forces may operate anywhere in Finland, Norway, Estonia, and the Leningrad and Arkhangelsk MDs.

Any Other Ace, King. Finland is strongly allied with Germany. The provisions of Rule 32B1 are followed, with the following exceptions: The Finnish theater is extended to include all of the Arkhangelsk MD south of the Arctic and all of the Leningrad MD except for hexes in or adjacent to the city of Leningrad in the Leningrad MD. A maximum of 20 REs of German forces may operate in the Finnish theater. There are no RE restrictions on Finnish unit operating in the Arctic outside Finland.

Queen, Jack. Finland pursues an independent war policy. The provisions of Rule 32B1 are followed except that 10 REs of German forces may operate in the Finnish theater and 20 REs of Finnish units may operate in the Arctic outside Finland.

10, 9, 8, 7, 6. Finland pursues an independent war policy. The provisions of Rule 32B1 are followed, without modification.

5, 4. Finland pursues an independent war policy. The provisions of Rule 32B1 are followed, with the following exceptions: The units of Army Norway may not deploy inside Finland and may not enter Finland on Jun II 41. Only 3 REs of German forces may operate in the Finnish theater, and only 5 REs of Finnish units may operate in the Arctic outside Finland. The German reinforcement entering in Sweden on Jun II 41 instead enters as an Arctic reinforcement on Jul I 41.

3. Finland pursues an independent war policy. The provisions of Rule 32B1 are followed, with the following exceptions: Finland enters the war on the Jul II 41 turn, not the Jul I 41 turn. The units of Army Norway may not deploy inside Finland and may not enter Finland until Finland enters the war. No REs of German units may operate in the Finnish theater, and no REs of Finnish units may operate in the Arctic outside Finland. The German reinforcement entering in Sweden on Jun II 41 instead enters as an Arctic reinforcement on Jul I 41.

2. Finland is neutral. German forces may not enter Finland at any time. The units of Army Norway may be deployed in Norway (as a deception measure so that the Soviet player will not be certain that Finland is neutral). Alternatively, Army Norway units may not be deployed initially, entering play instead as standard German reinforcements on Jul I 41. German Arctic reinforcements may enter as normal or may enter as standard German reinforcements. German Finland reinforcements may enter as German standard or Arctic reinforcements. The German reinforcement entering in Sweden on Jun II 41 instead enters on Jul I 41 as either an Arctic or standard reinforcement.

D. Special Unit Abilities.

1. Guards Cavalry. During any Soviet initial phase on or after the Apr I 43 turn, the Soviet player may decide to give his Guards cavalry units a limited exploitation ability (for the rest of the game). To do so, he must spend armor RPs for all of his Guards cavalry units in play: two armor RPs for each Guards cavalry division and one armor RP for each Guards cavalry cadre. To spend the armor RPs, each of these units must be able to trace a supply line to a Soviet armor RP source. Once the armor RPs are spent, each Guards cavalry unit has a limited exploitation ability. It may move in the Soviet exploitation phase, but it has its movement allowance halved in this phase. On and after the turn this ability is achieved, the replacement costs for Guards cavalry are as follows:

3 infantry RPs and 2 armor RPs to replace an eliminated Guards cavalry division to full strength.

1 armor RP to replace an eliminated Guards cavalry division to cadre strength.

3 infantry RPs and 1 armor RP to rebuild a Guards cavalry cadre to full strength.

2. The 22nd Air Landing Division. The German 22nd Air Landing Division was employed entirely in a ground role in the campaign. Thus, breakdown components for this division are not provided (which effectively means that the unit is limited to a ground role). The decision on how to employ this division may be left to the German player rather than imposed. Accordingly, allow this division (the 8-6 air landing division) to break down into an air landing headquarters and three 2-5 unsupported air landing regiments. These breakdown components may be found in other *Europa* games.

3. Winterization. The German Grossdeutschland and Lehr units are winterized. These are the German Army motorized regiment with the GD unit identification and all German Army units with Lehr as part (or all) of its unit identification. The German foreign contingent infantry division, the 250th (Spanish) Infantry Division, is winterized.

4. Axis Nationals in Soviet Service. Soviet foreign contingent units raised from German, Austrian, and Rumanian nationals may attempt to make surprise attacks against certain Axis units. A Soviet-raised German or Austrian unit (any Soviet foreign contingent unit with ''Ger'' or ''Aus'' as part of its unit identification) may attempt a surprise attack against a hex containing any German units. A Soviet-raised Rumanian unit (a Soviet foreign contingent unit with

"Rum" as part of its unit identification) may attempt a surprise attack against any hex containing any Rumanian units. This surprise attack is attempted and resolved the same in all cases as a surprise attack by a commando unit. See Rule 14H2. *Note:* Only one surprise attack may be attempted per hex per combat phase, even if the Soviet player has both German and Rumanian foreign contingent units attacking a hex occupied by German and Rumanian units together.

5. German Railroad Engineers. A German railroad engineer unit may break a rail line in a hex by spending 1 MP (2 MPs in poor weather). Quick construction cannot be used with this ability.

6. Punitive Units. A punitive unit is a construction unit, per Rule 14A. Punitive units may be replaced for free, at no RP cost, as follows: During each German initial phase, the German player may replace one eliminated punitive unit for free. This unit appears the same as any other replaced German unit. During each Soviet initial phase, the Soviet player may replace one eliminated punitive unit for free. This unit appears in any MD or isolated replacement city capable of receiving replaced units.

7. High Mountain Units. A high mountain unit may cross high mountain hexsides during clear weather. It costs the unit 5 MPs to cross such a hexside. It may not cross a high mountain hexside during poor weather.

8. Kriegsmarine Commando. The German Kriegsmarine marine commando battalion does not have regular commando abilities per Rule 14H. Instead, it has the following abilities. During the German movement phase, it may make amphibious landings (per the standard naval rules, including planning) in coastal hexes in the Baltic sea zone, except for hexes containing a Soviet naval unit at sea or in the Soviet safe zone. (*Note:* It has its own intrinsic naval transport ability in the Baltic sea in any German movement phase including the Surprise turn. It may make a landing in a Soviet-owned port.) It may attempt to make a surprise attack (per Rule 14H) by landing in a hex occupied by Soviet units, when attacking in conjunction with other Axis units. (Note that it may not attack by itself, as it has a combat strength of 0.)

9. 80cm Artillery. The German 672nd Railroad Artillery Battery contains the gigantic 80cm railroad artillery gun. This unit operates as a railroad artillery unit, with the following additional rules. The unit has two modes: a firing mode and a mobile mode. The front and back of the unit counter are printed to correspond to these modes. During the German initial phase (only), the German player may change the unit's mode. The unit must be in mobile mode in order to move and must be in firing mode to use its attack strength. (Its defense strength is based on its accompanying troops and thus is used regardless of mode.) During the German combat phase, the unit may attack if it is in firing mode and if it can trace an overland supply line to a resource point. This resource point is expended when the unit fires and may not be used for any other purpose.

10. Heavy Antiaircraft. A heavy AA unit does not have its attack strength halved when attacking a fortress.

11. Soviet Ski Brigades. When a Soviet ski brigade is disbanded, the Soviet player receives infantry RPs equal to the combat strength of the brigade plus 1. For example, a 1-8 ski brigade yields 2 infantry RPs when disbanded.

E. Special Terrain Effects.

1. The Sivash. The Sivash is a shallow, swampy body of water off the northeast coast of the Crimea; it is impassable to naval units. Accordingly, naval units may not enter any hex in the line from 4A:2929 through 4A:3230.

2. The Sea of Azov. The Sea of Azov is the protected body of water in the Black Sea north of the Kerch Straits. A river flotilla may enter any all-sea hex in the Sea of Azov.

F. Special Weather Effects.

1. Freezing. The rule on freezing (Rule 29D2) is a simplification for playability purposes. The following rule covers this subject in more detail.

Rivers and lakes are frozen on the second consecutive cold weather turn in weather zones A, B, C, and G, per Rule 29D2. However, in the first cold weather turn in these zones, rivers and lakes in the zone are freezing. River flotillas treat a freezing river or lake as being frozen; a freezing river or lake is treated as being unfrozen for all other game purposes.

When tracing supply lines, frozen partial lake hexes may be treated as road hexes. *Example:* During a snow weather turn in zone B, a Soviet unit in 2A:0833 traces an overland supply line to the frozen partial lake hex in 2A:0930 (2A:0833-0832-0831-0830-0930) and a road supply line from this hex to 2A:1026 (2A:0930-0929-0928-0927-1026) per the ice road rule. Hex 2A:1026 contains a rail line, which may be used to trace a rail supply line to a Soviet regular source of supply.

A swamp is frozen on the second consecutive cold weather turn in a zone, similar to rivers or lakes. The terrain effects of a frozen swamp hex during frost weather is the same as that of a swamp hex during snow weather, including the no AEC provision of snow weather.

2. Spring Thaw. All rivers in a zone are flooding on each turn that the zone's weather changes from cold to non-cold. The MP costs to cross flooding river hexsides are: River: +2 MP; Major River: +4 MP.

G. Special Air Unit Abilities.

1. Bombers as Transports. The following type B and HB air units may be used as transport air units, at the owning player's option:

Axis: He 111F, He 111P, He 111H, He 177A, Ju 86E, Ju 86G, Ju 86K

Soviet: Li-2T, TB-3, Pe-8

When used as a transport, such an air unit can carry cargo, at the same capacity as a type T air unit. When used as a transport, the air unit has its air attack and defense strengths each reduced by 2 (but never below 1).

2. Hans-Ulrich Rudel. "Occasionally, a single man will exert a profound influence on the outcome of an engagement. When this happens once or twice, it may be attributed to the many imponderables of a battle and written off to chance. However, when such action by a single individual becomes a virtually daily occurrence, some consideration should be made." (From *Unentschieden*, *Europa II*, 1974.)

Such a man is Hans-Ulrich Rudel, who became so adept at flying his Ju 87G aircraft that he destroyed 519 Soviet tanks over the course of the war. The German player receives a Rudel counter on May I 43. The following rules apply to this counter:

In the German air phase of the I turn of each month, place the Rudel counter at any German airbase containing a Luftwaffe Ju 87 air unit. This air unit must be a Ju 87G if any are available. At the end of this air phase, remove the Rudel counter from play; it becomes available again on the next I turn.

During the air phase the counter is available, it may fly to any hex within range that contains a Soviet tank brigade. During the mission resolution step, it may attack one tank brigade in the hex. Roll one die and consult the success table. If a success result is achieved, the tank brigade is eliminated.

The Rudel counter is not affected by air combat or AA fire. (Rudel was shot down on a number of occasions, but he always made his way back to his airbase.)

H. Off-Map Rail Connections. Rail lines running off the west edge of the map in or south of Greater Germany are connected. Axis units may move by rail off the map on one of these rail lines and re-enter the map on any connected rail line. It costs the unit 50 hexes of rail movement to do this. Rail lines running off the east edge of the map are connected. Soviet units may move by rail off the map on one of these rail lines and re-enter the map on any connected rail line. It costs the unit 100 hexes of rail movement to do this. *Example:* A Soviet unit at Kirov (7A:1905) moves by strategic rail movement: it moves to the east edge of the map at 7A:2000 (5 hexes), off-map to 8A:1119 (100 hexes), and then to Saratov (13 hexes), moving a total of 118 hexes by rail.

I. Local Drafting. When the Soviet player liberates (regains ownership of) Axis-owned cities in the Soviet Union, he may conduct an immediate draft of manpower. The liberated city must have been

Axis-owned for at least the last two game turns prior to its liberation. The Soviet player may conduct only one immediate draft per city hex per game, regardless of the number of times he may liberate it. When the draft is conducted, the Soviet player receives the following infantry RPs: 1 per dot city, 3 per major city hex. The Soviet player conducts the draft upon liberation of the city, and the RPs are added to infantry RP pool of the city's military district.

J. German Replacement Army. In the autumn of 1942, the German High Command decided to use the German training and replacement establishment (the *Ersatzheer*—Replacement Army) for occupation duties in addition to their regular duties.

On and after the Oct I 42, the German player must use his replacement units in order to use his regular infantry RPs; he may no longer simply spend the RPs when they are received. German infantry RPs received from special replacements, disbanding, and withdrawing are exempt from this rule and may be spent per Rule 34B. German replacement units are marked with a special indicator, as shown on the unit identification chart. All German reserve, ersatz, and training divisions are replacement units. Using a replacement unit is a two-step process:

1) In a German initial phase, a replacement unit may take up to 10 German infantry RPs. To receive these RPs, the unit must be able to trace a supply line to a regular source of supply. These RPs may not be spent in the turn the unit receives them. (Use status markers to show the amount of infantry RPs a replacement unit has.)

2) During a German initial phase, the German player may spend the infantry RPs that start the phase with a replacement unit. These RPs are spent as normal, except that the replacement activity occurs in the replacement unit's hex. That is, a unit replaced with the RPs of replacement unit is placed in the replacement unit's hex, and a cadre must be stacked with the replacement unit in order to use its RPs for rebuilding. Note that a replacement unit is not required to be in a city for its RPs to be used.

These rules apply only for German infantry RPs. Other Axis infantry RPs (including Eastern Troop RPs) are used per Rule 34B. Also, German armor RPs are used per Rule 34B. However, when a German unit requiring both infantry and armor RPs is to be replaced or rebuilt, this rule is followed for the infantry RPs, and Rule 34B is modified for the armor RPs: The unit is replaced or rebuilt at a replacement unit that has infantry RPs available and can trace a supply line to a regular source of supply for the armor RPs. *Example:* A German reserve division is in hex 3B:2007 and can trace a supply line to a regular source of supply. In the German initial phase of Aug I 43, the German player places 5 infantry RPs in the unit. During his player turn, the German player moves the 5-8 panzer cadre of a 12-10 panzer division into the reserve division's hex. In the German initial phase of Aug II 43, the German player rebuilds this cadre to full strength, spending 3 infantry RPs of the reserve division and 4 armor RPs.

K. Luftwaffe Manpower. Due to interservice rivalry, Luftwaffe manpower transferred to ground combat formations was used inefficiently. Assuming the German High Command had made better use of this manpower, use the following rule.

When a Luftwaffe infantry division is received, as either a reinforcement or conversion, the corresponding German Army 4-6-6 infantry division is taken instead. See the German Nov I 43 reorganization listing on the Axis order of battle for the corresponding German Army 4-6-6 divisions.

L. Isolation and Ownership. The standard rules for determining isolation and ownership of territory (Rules 3I and 3F) are simple to use and adequately cover most situations that arise. The following rules cover these aspects in greater detail and require extra effort and time to use. These rules are needed if Optional Rule 40 is used.

The following rules require the tracing of a line of communications (LOC). An LOC may be up to 14 hexes in length (regardless of weather) and is traced the same as an overland supply line.

1. Isolation.

a. Tracing. When isolation is checked, a unit or hex is isolated if an LOC cannot be traced from it to a hex that is in regular supply.

b. Soviet Special Replacements. An isolated Soviet unit generates special replacements when it is eliminated if an LOC can be traced from the unit to a Soviet replacement city. The unit's RPs are added to the city's RP pool.

2. Ownership of Territory. In addition to the cases in Rule 3F, a player may gain ownership of territory in the following manner. At the start of each player turn, check the ownership of all isolated hexes except for major city hexes and hexes occupied by non-partisan units. When checked, a friendly-owned hex becomes enemy owned if an LOC cannot be traced from the hex to a friendly non-partisan unit but can be traced to an enemy non-partisan unit.

Rule 40 — Partisans (Optional)

This optional rule may be used in place of the occupation rule (Rule 33). If this rule is used, the optional isolation and ownership rule (Rule 39L) must also be used. If the optional bridge rule (Rule 39A) is not used, ignore the mention of bridges below.

A. Definitions.

1. Partisan Unit. A partisan unit is any unit of the following unit types: partisan infantry, partisan cavalry, partisan parachute. The counters for partisan units have two sides: a hidden side and a revealed side, as shown on the unit identification chart. The hidden side shows the general characteristics of a partisan unit, while the revealed side shows its specific characteristics. The hidden side of partisan units is used to hide the actual strengths and compositions of a player's partisan forces from the opposing player.

The Soviet player has two partisan forces: Soviet partisans and pro-Soviet Polish partisans. These forces are printed in the same colors and are distinguished by unit identifications: Pro-Soviet Polish partisans have "Pol" printed on their counters.

2. Anti-Partisan Units. All security and police are anti-partisan units. All SS-Police, SS, and NKVD units of any unit types are anti-partisan units.

3. Anti-Partisan Zone of Control (APZOC). An APZOC is exerted into hexes the same as a regular ZOC. All 1 RE or larger anti-partisan units have APZOCs. (*Note:* Only anti-partisan units have APZOCs.) An APZOC has effects as described below; it does not have the effects of a regular ZOC.

B. Partisan Effects.

1. Partisan Units. Partisan units operate differently than do regular combat units, and the following rules define these differences. If a standard rule is not mentioned below, then partisan units are affected by it the same as other units. *Note:* The standard rules sections to which the following paragraphs refer are given in parentheses at the end of the paragraphs.

A partisan unit does not own the hex it occupies. Ownership of the hex is determined as if the unit was not there. (3F)

A partisan division does not have a ZOC. (5)

A partisan unit, regardless of its unit type, may move the same as a light infantry, mountain, or cavalry unit, as the owning player wishes. A partisan unit is not affected by ZOCs when moving. Instead, it is affected by enemy APZOCs. Movement costs for APZOCs are the same as for regular ZOCs. (6)

A partisan unit may move through (but not end its movement in) hexes occupied by enemy units, except hexes occupied by anti-partisan units.

Any unit may move through (but not end its movement in) hexes occupied by enemy partisan units. The presence of an enemy partisan unit in a hex does not affect the admin. or strategic rail movement of units.

A partisan unit may not attack any hex containing enemy units with defense strengths greater than 0. It has a limited attack ability against a hex containing enemy units with 0 defense strengths. This attack is resolved in the combat phase similar to other attacks; the combat result for this attack is automatically DR. (9)

A partisan unit may retreat into or through enemy ZOCs. It may retreat through an enemy-occupied hex to reach a hex not occupied by enemy units if such is the only retreat route available. A partisan unit may not retreat into or through an APZOC or through a hex

containing an anti-partisan unit and is eliminated if required to do so. (9F)

Any unit may retreat through a hex containing enemy partisan units if they are otherwise unable to retreat except through enemy ZOCs. A unit may not end its retreat in such a hex but may retreat through any number of such hexes until it reaches a hex where it may stop retreating. (9F)

A partisan unit may retreat before combat. (9I)

A partisan division is supported. However, it may provide support only for other partisan units. (11)

A partisan unit is not affected by isolation in any way. A partisan unit is always in supply. (3I, 12)

A partisan unit may not overrun or be overrun. (13)

A partisan unit may not operate in the Arctic. It may not enter the Arctic through movement or appear in the Arctic through recruitment. (30)

A partisan unit never yields special replacements when eliminated. (34B3)

A partisan unit may not break rail lines, damage airbases, or destroy bridges per the standard rules. (7C, 17D, 39A)

Partisan units may engage in sabotage. In a hex, a partisan unit may make a sabotage attempt if it spends 6 MPs to do so. All partisan units attempting the same type of sabotage (see below) in a hex are combined into a single attempt. For each sabotage attempt, consult the success table, applying all partisan operations modifiers. If the attempt is successful, the result is applied immediately. The types of sabotage and the effects of successful sabotage attempts on them are as follows:

Type of Sabotage	Effect of Successful Attempt
Break a rail line	Rail line in the hex is broken
Damage an airbase	Airbase capacity is reduced by 1
Damage a port	Port capacity is reduced by 1
Destroy a bridge	Bridge is destroyed
Destroy an air unit	One air unit at a base in the hex is eliminated, partisan player's choice

A partisan unit must be in the hex of its target in order to make a sabotage attempt against it. For attempts against bridges, the bridge is considered to be in the partisan unit's hex only if the partisan unit is in a hex adjacent to the bridge hexside and no enemy unit is in a hex adjacent to the bridge hexside.

2. Hidden Units and Dummies. A partisan unit operates with its hidden side face up, so that the opposing player doesn't know the specifics of the unit. The revealed side of a partisan unit is shown to the opposing player only as follows: when the unit attacks an enemy 0 defense strength unit, when it attempts an act of sabotage, when it is attacked and does not retreat before combat, or when it is removed from play (for whatever reason). Once shown, the partisan unit's revealed side remains face up until the end of the current phase, at which time its hidden side is placed face up again.

In addition to actual partisan units, dummy partisan units are available. A dummy partisan unit operates the same as other partisan units, except that it may neither attack nor make any sabotage attempt. A dummy partisan unit is removed from play when its revealed side is shown to the opposing player. The owning player may voluntarily remove from play any of his dummy partisans units at any time.

C. Recruitment. Partisan units enter play through recruitment of partisan infantry brigades. For each partisan force, all of its partisan infantry brigades that are not in play are kept in a general recruitment pool. When a partisan infantry brigade is eliminated, it is placed in the pool and may subsequently re-enter play. If there are no units in the pool when reinforcements are called for, the reinforcements for that turn are forfeited.

Partisan recruitment for a player occurs in his initial phase. Recruitment allows a player to take partisan infantry brigades from his recruitment pool and bring them into play. Also, for each partisan infantry brigade recruited the player receives a dummy partisan unit printed in the same colors as the brigade, if any are available. In

general, when a partisan unit (including a dummy, which may be placed separately) is received, it is placed inside its recruitment area in a hex that is: a) enemy owned, b) not occupied by an enemy unit, c) not in an enemy APZOC, and d) not adjacent to a friendly non-partisan unit. If no such hex is available, the reinforcement is forfeited.

A partisan unit (including a dummy) may not move or make a sabotage attempt in the player turn it is recruited.

Territory in the Arctic is ignored for all partisan recruitment purposes.

1. General Recruitment.

a. Soviet. On the II turn of each month starting with Aug II 41, the Soviet player recruits partisan infantry brigades in his military districts. He recruits partisans in each MD that contains any Axis non-partisan units or Axis-owned cities, except for the Baltic MD. (The Soviet player never receives any partisans due to general recruitment in the Baltic MD.) The basic recruitment rate is 2 partisan units per MD and is modified as follows:

subtract 1 from the rate in 1941

add 1 to the rate in 1943 and 1944

halve the rate if any part of the MD has poor weather

halve the rate for the Ukrainian MDs (Kiev, Odessa, Kharkov MDs)

halve the rate if there are no Soviet non-partisan units in the MD

Note: Do all additions and subtractions to the rate before doing any halving. Round fractions down after all halving is done.

For each MD, the Soviet player receives partisan infantry brigades equal in number to the modified rate of the MD. These are placed in the MD. *Exception:* Soviet partisans entering play through general recruitment may not be placed in Bessarabia or in territory between the 1939 and 1941 Finnish borders.

b. Pro-Soviet Polish. On the II turn of each month starting with Jun II 42, the Soviet player recruits one pro-Soviet Polish partisan infantry brigade if there are any Soviet non-partisan units in central Poland. The recruited unit is placed in central Poland.

c. Anti-Soviet. On the II turn of each month starting with Jun II 42, the German player receives one anti-Soviet partisan infantry brigade. This unit is placed in the Soviet Union.

d. Finnish. On the II turn of each month from the start of the game, the German player receives one Finnish partisan infantry brigade if Finland is Axis Allied and if there are any Soviet units inside the 1941 Finnish borders.

2. Special Replacements. Soviet partisans (only) may be recruited through special replacements. When eliminated units do not yield special replacements due to isolation, their losses are used for partisan recruitment. The player receives partisan infantry brigades equal to half (rounding down) the number of special replacement infantry RPs he would have received for these units.

Soviet partisans are formed in this manner when isolated Soviet units inside the Soviet Union are eliminated. These units are placed anywhere in the Soviet Union (including the Baltic MD, Bessarabia, and territory between the 1939 and 1941 Finnish borders) in MDs that have Soviet non-partisan units present. If possible, no more than half (rounding down) of the partisan infantry brigades received in this manner may be placed in any single MD.

Example: Over the course of a turn, the Soviet player has had 50 attack strength points worth of isolated units eliminated inside the Soviet Union. During his initial phase, he calculates the special replacements this generates (10) and halves it (5). The Soviet player receives five partisan infantry brigades, and, if possible, may place no more than two in any one MD.

D. Operational Partisan Commands. On the II turn of each month starting with Jun II 42, the Soviet player receives one operational partisan command unit. An operational partisan command unit is a partisan parachute headquarters unit. The unit is placed in any hex in the Soviet Union containing a Soviet partisan unit (including a dummy partisans unit.) An operational partisan command unit influences the operations of other Soviet partisan units, per the

partisan operations modifiers on the success table. Unlike other partisan units, operational partisan command units ignore APZOCs when retreating.

E. Partisan Divisions. On and after Jun II 42, partisan divisions may be assembled from partisan brigades, if any division counters are available. Once assembled, partisan divisions may be broken down in partisan brigades, if sufficient brigades are available. The phasing player may assemble or break down his partisan divisions in his initial phase (only). (The general rules for assembling and breaking down units apply; see Rule 15.) A partisan infantry division may be assembled from/broken down into three partisan infantry brigades. A partisan cavalry division may be assembled from/broken down into two partisan infantry brigades. Partisan brigades are placed in the recruitment pool (and may subsequently be recruited) when used to assemble a division; they are taken from the pool when used to break down a division.

F. Dismissal. During each initial phase (friendly or enemy), a player must dismiss his partisan units that are in friendly owned hexes or are adjacent to friendly non-partisan units. When dismissing a partisan unit, the player must either disband the unit or withdraw it from play. A dismissed partisan infantry brigade is returned to its recruitment pool. A dismissed operational partisan command unit is available to re-enter per Section D above. A dismissed partisan division may be assembled from other partisan infantry brigades in following turns.

A partisan unit is disbanded per the disbanding rule (Rule 34F1). In general, a disbanded partisan unit yields infantry RPs equal to its printed combat strength. However, a disbanded operational partisan command unit yields one infantry RP.

A partisan unit has an associated force. When the unit is disbanded, it yields infantry RPs for its force. The associated forces of partisans are:

Soviet partisans: Soviet national forces (all Soviet forces except foreign contingent and defected Axis-Allied nations).

Pro-Soviet Polish partisans: Soviet Polish foreign contingent forces.

Anti-Soviet partisans: German Eastern Troop forces.

Finnish partisans: Finnish forces.

A partisan unit is withdrawn from play per the withdrawal rule (Rule 34C), except that it may be withdrawn even if isolated.

If Finland becomes non-belligerent, surrenders, or defects to the Soviets, all Finnish partisans are immediately withdrawn from play.

G. Operational Limits. Partisans may operate only in certain areas and may not leave these areas voluntarily. If forced to leave their operational areas, partisan units are eliminated instead. The operational areas are:

Anti-Soviet Partisans: the Soviet Union (1941 borders)

Finnish Partisans: Finland

Pro-Soviet Polish Partisans: central Poland

Soviet Partisans: the Soviet Union (1941 borders), central Poland, Rumania, Hungary, Bulgaria

Due to the antipathy of the local population, Soviet partisans in the Baltic MD, in Bessarabia, or outside the Soviet Union may not retreat before combat. (Note that this applies to Soviet partisans in central Poland but not to Pro-Soviet Polish partisans.)

Due to low-level Soviet security forces not represented in the game, partisan units controlled by the German player may not enter or be recruited in Soviet-owned cities and fortresses in the USSR.

H. Nationalist Partisans (Optional). Nationalist partisans are Lithuanian, Latvian, Estonian, and Ukrainian partisans. Separate recruitment pools are maintained for each of these nationalities. The unit identifications on these units show their nationalities: ''Lith'' (Lithuanian), ''Lat'' (Latvian), ''Est'' (Estonian), ''Ukr'' (Ukrainian).

The recruitment areas for the nationalist partisans are as follows: Lithuanian: Lithuania, Latvian: Latvia, Estonian: Estonia, Ukrainian: the western Ukraine. On the II turn of each month from the start of the game, the German player receives one partisan infantry brigade for a nationality if its recruitment area contains any Soviet non-partisan units or any Soviet-owned cities. The partisan unit is placed in its recruitment area.

When required to be dismissed, a nationalist partisan unit must be withdrawn from play. It may not be disbanded.

Except for the Ukrainians, nationalist partisans may only operate in their recruitment areas. Ukrainian partisans may operate anywhere in the Ukraine. recruitment is limited to the western Ukraine, however.)

Rule 41 — Scenarios

In addition to the grand campaign game, running from Jun II 41 through Dec II 44, shorter scenarios may be played.

A. 1941 Campaign. The 1941 campaign game covers the initial German invasion of the USSR and the first Soviet winter counteroffensive.

1. Game Length. The game starts with the Jun II 41 turn and ends upon the conclusion of the Mar II 42 turn.

2. Preparing for Play. The game is set up the same as for the grand campaign game. See Rule 36.

3. Victory. At the end of the game, victory is calculated per Rule 37B, with the following additions: The German player receives 1 victory point if the Soviet player moves the capital. He receives 2 victory points if he captures the capital.

The following levels of victory are used:

Victory Point Total	Level of Victory
41 or more	German Decisive Victory
31-40	German Substantial Victory
21-30	German Marginal Victory
16-20	Soviet Marginal Victory
11-15	Soviet Substantial Victory
10 or less	Soviet Decisive Victory

B. 1942 Campaign. The 1942 campaign game covers the spring fighting, the German 1942 summer offensive, and the second Soviet winter counteroffensive.

1. Game Length. The game starts with the Apr I 42 turn and ends upon the conclusion of the Mar II 43 turn.

2. Preparing for Play. The 1942 scenario orders of battle and the 1942 scenario deployment maps are used to set up the game. The deployment maps show the front lines of each side. Except for the indicated pockets, all territory on and west of the Axis front line is Axis owned and all territory on and east of the Soviet front line is Soviet owned. Territory in a pocket is owned by the player with forces in the pocket.

a. Deployment. The orders of battle for the 1942 campaign game list the starting forces and deployment instructions. Follow the instructions on the orders of battle for deploying these forces. The players set up in the following sequence:

1) The German player deploys all his front line forces except for 15 units from each front line deployment area.

2) The Soviet player deploys all his front line forces except for 5 units from each front line deployment area.

3) The German player deploys his remaining front line forces.

4) The Soviet player deploys his remaining front line forces.

5) The German player deploys his rear area forces.

6) The Soviet player deploys his rear area forces.

7) The German player deploys his other forces.

8) The Soviet player deploys his other forces.

General conditions for each deployment area are given on the orders of battle:

The Soviet player has a number of cadres specified. He chooses at random that number of units from all divisions that have cadre strengths listed for the deployment area; these units start the game at cadre strength. For example, six units are chosen at random from the divisions with cadre strengths in the Northwestern Sector to meet the requirement for that deployment area.

The Soviet player has a number of 3-6 rifle division conversions specified. He chooses that number of units from the 3-6 rifle divisions listed for the deployment area; these units start the

game already converted to their 4-6 strengths. For example, nine 3-6 rifle divisions in the Northwestern Sector start the game already converted to their 4-6 strengths.

Each player has a loss level specified. He eliminates units totalling the specified number of attack strength points from his units listed for the deployment area, placing them in the replacement pool. For example, the Soviet player must eliminate units totalling 50 attack strength points from the Northwestern Sector. *Note:* Do not count the strength loss of Soviet divisions starting the game at cadre strengths (per above) as part of the specified loss level.

Each player has a number of forts and airfields specified. These are placed the same as the player's units, except that they may not be placed in hexes where they could not have been built.

When a player deploys his front line forces, the following restrictions must be met:

On map 6A, each transportation line in his front line hexes must be occupied, by or in the ZOC of, a unit.

South of map 6A, each of his front line hexes must be occupied by, or in the ZOC of, a unit.

Each player activates and deploys air units when he deploys his other forces. A player activates air units from his available air units and selects at random a number of them to start the game inoperative. The German player randomly chooses 10 Axis air units to be inoperative; the Soviet player randomly chooses 25 Soviet air units to be inoperative. When activating air units, the Soviet player may choose any six to be Guards. He chooses these units after activating his air units but before selecting his inoperative air units. A player then deploys all his active air units any friendly-owned airbases. The German player may start the game with the Luftwaffe schools called up. If so, then they are considered to have been called up during the current air cycle.

b. Prior and Initial Conditions. The weather on the Mar II 42 turn was snow in zones A and B, mud in zones C and D, and clear in zone G. For simplicity, on Mar II 42 all unisolated forces were in regular supply, and all isolated forces had been at least four turns out of regular supply. Note that the Leningrad pocket was not isolated on Mar II 42, as lake hexside 2A:0929/0928 was frozen.

Before the start of the game, each player may deploy sup-ply points due to special sources of supply. Each player may place a number of supply points equal to the capacity of his operative air transports; it may be placed at airbases within range of the transports. This supply is considered to have been delivered in the player's air phase on Mar II 42. The Soviet player may place up to 60 points of supply at ports in the Black Sea; this is considered to have been delivered by the Soviet Black Sea ships during the Soviet movement phase on Mar II 42.

c. Reinforcements and Replacements. Reinforcements and replacements are received as listed on the grand campaign game's orders of battle and charts. *Note:* Both the German and Soviet players must withdraw units on the first turn of the game. Initial deployment can be speeded a bit if both sides agree to remove these withdrawals from their initial forces, instead of having to deploy them and then withdraw them on the first turn.

d. First Player (Optional). The deployment sequence for the 1942 scenario is structured to give a fairly reasonable starting posi-tion that doesn't take too much time to set up. Even so, initial deployment by both sides is governed by the knowledge that the German player turn comes first. Players who wish to avoid this may use the following rule.

Just before beginning play, after both sides have deployed their forces, roll two dice. On a roll of 8 or less, the first game turn consists of a German player turn followed by a Soviet player turn, as usual. On a roll of 9 or greater, the first game turn consists of a shortened German player turn followed by a regular Soviet player turn. The shortened German player turn consists of an initial phase, a special movement phase, and a special air phase. The initial phase is a standard initial phase. In the special movement phase, only Axis units which entered play as reinforcements or replacements may move. In the special air phase, air units may fly only air transport of supply and escort missions.

3. Victory. At the end of the game, victory is calculated per Rule 37B, with the following additions: The German player receives 1 victory point if the Soviet player moves the capital. He receives 2 victory points if he captures the capital.

The following levels of victory are used:

Victory Point Total	Level of Victory
46 or more	German Decisive Victory
36-45	German Substantial Victory
26-35	German Marginal Victory
21-25	Soviet Marginal Victory
16-20	Soviet Substantial Victory
15 or less	Soviet Decisive Victory

C. 1942 Grand Campaign. The 1942 grand campaign game covers the war on the Russian front from the spring of 1942 to the end of 1944.

1. Game Length. The game starts with the Apr I 42 turn and ends upon the conclusion of the Dec II 44 turn.

2. Preparing for Play. The game is set up the same as for the 1942 campaign game. See Section B2 above.

3. Victory. Victory is determined as for the grand campaign game. See Rule 37.

DESIGNER'S NOTES

Scorched Earth is the culmination of years of research and many months of design and testing. Together with *Fire in the East*, it forms a game with a scope and playability that has few rivals.

I had the help of many people in this project, and I'm very grateful for their assistance. I particularly wish to thank Shelby Stanton, whose excellent research and advice contributed very much to many aspects of the game. Shelby and Frank Prieskop researched the Axis order of battle, and Charles Sharp researched the Soviet OB. Despite the difficulty of the topic (the entire eastern front is an immense subject, often with poor records), the result is a superb order of battle. Paul Dunigan assisted greatly with his own research, particularly with the air OBs and with the troublesome Rumanian OB. Karl Gaarsoe and Louis Rotundo helped with many details of the Soviet OB. Very many people helped with the playtesting. To everyone who helped, I extend my sincere thanks.

The Rules

The major topic of the game is operational ground combat, which was the decisive factor on the eastern front. I have written the rules with this in mind, keeping other subjects from overpowering this topic while incorporating their influence on it. This governed the design of the following systems:

Air: The air rules don't contain a master strategic bombing system. Strategic bombing wasn't an important element of the campaign. The Soviets mounted virtually no effort in this area, and the Germans' effort was very limited and ineffectual. Actually, the rules present enough on strategic bombing that you can try it if you wish. You'll quickly discover that your air forces aren't up to it, as was the case historically. Both sides had tactical air forces, and the vast majority of missions flown were ground and defensive support. These are also the best missions to fly in the game.

Naval: The naval system factors out a lot of detail that is unimportant for eastern front naval operations. Each ship counter in the game is actually a collection of ships. Warship counters represent a major warship plus an assortment of escort and transport vessels. Transport counters represent a group of transports and their escorts. All Axis warships in the theater are factored into the transport counters as escorts, and the rules preclude any ship-to-ship combat. This is the way it should it be, as there were no naval engagements of any consequence in this theater at any time during the war. If anything, the blockade ability given to Soviet warships in the game overstates the Soviet Navy's actual capabilities.

Strategic: Production and manpower is entirely factored into the reinforcement and replacement systems. Oil is greatly abstracted. This decision is debatable, but I think it is the right one. Loss of Ploesti would be potentially crippling to the Axis, but they could probably keep the eastern front going at the expense of the other theaters. (Sure, this means they'd probably lose to the Western Allies earlier, but that's outside the scope of the game.) Loss of Baku would be serious to the Soviets, but the Allies probably could increase lend-lease oil shipments to blunt its major effects. The appropriate place to cover all this is at overall *Europa* level and not in any individual game, however large.

Political: An entire game could have been devised around the situation of the Eastern European nations and Finland, and at times my draft rules approached this stage. At one point, I tried for a general system to handle the Axis Allies abandoning the Germans. It had various levels of neutrality, surrender, and defection; it allowed the Germans to try to set up pro-Axis puppet governments; and it was hopelessly complex and unworkable. This subject is difficult to handle in the context of a two-player game, and probably needs separate players (with separate goals) for Finland, Rumania, and Hungary. Also, it's all rather peripheral to the important aspects of the game, making it another grand *Europa* level item.

The game emphasizes operational ground combat, and it does this very well. The game challenges and rewards players' strategic and tactical skills. Skills such as launching an offensive, organiz-ing a defense, reducing a position, sustaining operations over the course of a season, and so on are called forth, and the players who best master these will win.

The game also has a detailed set of rules. I have tried to avoid making them too detailed, as excessive detail lessens playability and even the game's simulation value. As the burden of what the players need to remember increases, the game takes longer to play and is less enjoyable. Beyond a certain point, the players become overloaded with details and make too many mistakes when playing, which ruins the simulation. I have worked hard to avoid this situation. The rules are quite detailed, but they don't go into endless detail on every subject.

One of the ways I cut down on excess detail was to avoid adding many special cases or restrictions to the basic rules. To this end, I have removed a number of these from the *FITE* rules. At the same time, I incorporated a number of minor revisions to these rules. Some of these are:

1) I've changed the names of a few terms in *SE* from those in *FITE*. The word *control* caused problems, as it was too easy to get confused between *control of territory* and *zones of control*. Using *ownership* cleaned this up. There was too much confusion with the use of *winterized* for the Soviets, as it referred to both a class of units and a separate force. Using *winter-capable* for the white on gold-brown Soviet units fixes this. Finally, *NKVD* being used as both a force and a unit type resulted in players being unsure which units got the special no-retreat effects. The unit type is now called *NKVD political troops*, which should help.

2) The heavy equipment exclusion for cadres was removed. This not only prevents abuses through the air transport of cadres, it also removes a special case from the rules.

3) The movement cost of rough terrain for mountain units was reduced to 1 MP. This makes rough terrain cost less than mountains, which is correct. It also makes the new Arctic movement system work.

4) The admin. and Arctic movement systems in *FITE* were a bit clumsy. Modifying unit's movement ratings tended to be too bothersome to calculate and caused problems with other rules, such as operational rail movement and harassment bombing. In *SE*, the ratings are not modified, but the costs of terrain are. I find this really works well. It also speeds up admin. movement a bit, which previously was a bit low.

5) The Arctic stacking limit was modified as it was too restrictive. Now, a non-divisional unit can stack with a divisional unit, which gives non-divisional units their proper value here. The change also makes the Arctic rule similar in form to the rest of the stacking rules, removing another special exception that needed to be remembered.

6) The ground combat results table received more odds columns. This fixes minor problems that occurred when combat was resolved at the limits of the old table.

7) A per-hex harassment bombing limit has been added. I had planned to add this in *Second Front*, as the overwhelming strength of the Allied tactical air forces would require this. I decided to introduce it here instead, as the air activity at times becomes heavy enough to justify it.

8) Airborne operations have been refined. a) Drops into major city hexes are now allowed. b) Certain clever players used to drop airborne units in enemy-occupied hexes that were under attack simply to avoid NE results. The NE result for airborne operations has been changed to prevent this abuse. c) The Soviets had major problems dropping paratroopers accurately throughout the way. The disruption modifier based on how far the transports flew to their destinations covers this situation.

9) Amphibious landings need to be planned in advance, similar to airborne operations and for similar reasons.

The armor/antitank effects system was changed to allow minimum effects at a proportion of 1/7, instead of 1/5. This allows a fully capable battalion to achieve minimum effects when stacked with a division, solving a long-standing problem in the *Europa*

system.

The railroad rules were revised and expanded: 1) I was finally able to determine that the Kemijarvi-Salla rail line had not been completed before the start of the war. I've added this situation to the game, but I find it has very little practical effect on Arctic operations. 2) Most of the roads shown on the map (other than those in the Arctic or in mountains) are actually low-capacity railroads, too low in capacity to qualify as *Europa*-scale rail lines. However, they are capable of being upgraded to higher capacities. While this capability can be ignored in *FITE*, it becomes important in *SE*. 3) The railroad regauging cost was reduced. This has been a difficult topic to work on, as it involves more than just the physical difference in the gauges. The rail nets were incompatible in many aspects, such as with different spacing of ties (which limited the maximum weight of trains) and water towers. However, I overestimated these problems in *FITE* and made the regauging cost too high. With the new rate and quick construction ability, each railroad engineer can now regauge four hexes per turn in clear weather.

Speaking of weather, those rules were scaled up. Each zone now has its own section on the weather table. The old system in which one zone's weather would determine another zone's weather in the following turn is gone. This simplifies the rule and also removes the two-week-in-advance weather prediction ability, an ability neither side actually had.

I didn't include a provision for harsh and mild winters. However, the system can handle this easily, if you want to add it: At the start of each Dec I turn, roll one die (before rolling weather for the turn) to determine the severity of winter. On a roll of 1, the winter is mild; modify the weather die roll by -1 for the Dec I through Feb II turns. On a roll of 6, the winter is harsh; modify the weather die roll by $+1$ for the Dec I through Feb II turns.

The air system has undergone some revision. The air combat results table is slightly bloodier, as air losses previously were too light. Air units now receive no more than one shot in an air combat, which corrects problems that used to arise when several air units attacked one opponent. More importantly, players may now abandon missions before air combat is resolved. This makes it easier to fly missions to several different hexes in the face of enemy fighters, as the "gang interception" tactic (where all the interceptors gang up on a single hex, ignoring the rest) can be negated.

The original river flotilla rule appeared in *Case White*. It was very simple, and it worked well for that game. I inherited the rule when I first worked on *Marita-Merkur*, and I've been slowly going mad trying to make it work in some semblance of its original form ever since. Well, I give up. Allowing river flotillas to prevent or halve combat makes them super units, regardless of how much the other rules are rigged to pull their fangs. I've scrapped all that and have introduced a much more rational system for these units.

Reduced zones of control are added to the game. This has a major impact on the play of the game, as Soviet units now have reduced ZOCs during the initial period of the German invasion.

The fragile division rule covers the fragile nature of the Soviet Army in 1941. The prewar Soviet Army was organized along the lines of Western armies, with large divisions controlled by corps headquarters. However, most Soviet officers were incapable of handling these formations effectively. Under the impact of the German invasion, the Soviet organization broke down, and the Soviets had to forge a new organization that was more suited to their resources. Corps headquarters were abolished, with divisions being controlled directly by army headquarters. Divisions became smaller (those in the field through combat losses) more easily controlled. Specialized divisional organizations, such as tank and motorized divisions, were abandoned. The fragile division rule handles this.

The optional rule on isolation and ownership is one of those that I'd like to tell players to use common sense rather than following the rule strictly. If you're in a group that can do this, then have fun. If not, then you're stuck counting a lot of hexes. Remember, it's optional. Don't use it if you find it troublesome.

The optional partisan rules proved very difficult to design. They went through many major revisions, and I'm still not fully satisfied with them. Early systems allowed partisan units to be in enemy-occupied hexes, but this proved to be a playability nightmare. Going over to the present system of separate stacking raised the problem of lines of partisans screening the main line from attack. The best solution to this was the dismissal rule, as heavy-handed as it is.

Another problem with the partisans was in portraying the nationalist partisans. Ideally, there should be a system to handle their growing anti-German sentiments, as they realize that the Germans have no intentions of recognizing their national aspirations. However, rules for this in the context of a two-player game become hopelessly complex and subject to abuse. The present system covers their main (anti-Soviet) effects. I excluded one group of nationalist partisans entirely: the Polish Home Army. Extremely anti-German, they were also very suspicious of the Soviets (and with good reason). Having either side control them in the game would be completely wrong.

By the way, the use of brigade and division symbols for partisan units was done to show relative size. (It does conform somewhat to actual partisan organization.) However, these are not equivalent to regular combat unit brigades and divisions. Partisans operated in small groups. Consider a partisan unit to be a number of partisan groups operating in the same area, and not a cohesive formation. This may help you in using the partisan rules.

The 1942 scenario usually produces a very exciting and close game. I was skeptical about designing it at first, as I believe the proper place to start the game is 22 June 1941, not later. Why live with someone else's mistakes when you can make your own?

The 1942 scenario deployment instructions work adequately and get the game going. However, they don't result in a completely *natural* setup. Probably nothing short of a tedious hex-by-hex deployment of every unit would suffice, if that. If you want a more interactive deployment sequence or some defensive support air units from the start, feel free to add this. I flushed out the EET, EFT, and remnant boxes as a simple way to handle this situation. Doing anything else would pretend to much more information than is available here.

There are a number of items not in the game:

1) There are no Bulgarian forces. It was so unlikely that Bulgaria would have entered into combat against the Soviet Union that this topic can safely be ignored.

2) There are no sudden death victory conditions or national morale rules. (Both require a side to hold or gain a certain number of objectives at various time intervals.) I've experimented with these considerably but have yet to come up with anything workable. Sudden death conditions aren't really appropriate to the game, as they end it artificially, when in reality the war would continue. National morale would be better, in which the losing side's units would become more and more ineffective unless the situation turned around. However, all rules I've tried here have been hopelessly complicated. Besides, I'm not sure of the need for this. In many ways, "player morale" is an adequate substitute for national morale. If you play well enough to demoralize your opponent, he'll give up.

3) There are no airbase supply rules. Perhaps there should be, but it's a pretty unimportant subject. One reason for this is that air transport of supply (at night if necessary) appears sufficient to keep most cut off bases going.

4) There are no rules on rebuilding fortresses. Yes, I've heard the arguments that it should be possible, given the length of time involved in the game. Well, that's true, but it doesn't overcome the fact that neither side rebuilt any. Still, if you're determined to have this, here's a quick rule on it: It takes six months of construction to rebuild a fortress, at a cost of one resource point per month. (Embellish this to suit your taste.)

Orders of Battle

The orders of battle are meant to serve as general guides to the forces committed to the eastern front. Because of this, the OBs

become complicated in places. Particularly, the OBs occasionally present certain units as reinforcements while requiring other units of the same strength and type to be withdrawn. For example, on the Nov I 41 turn, the German player receives a 7-6 infantry division (the 223rd) as a reinforcement and is required to withdraw a 7-6 infantry division (the 113th) from play. It makes no significant difference to the play of the game if you deduct the reinforcement to satisfy the withdrawal requirement.

Axis Order of Battle: The Axis order of battle charts the immense effort made by Germany and its allies to carve an empire out of the Soviet Union—an effort dwarfed only by the Soviet effort to halt and destroy the invaders. The OBs show the evolution of the German Armed Forces: the panzer troops grow in strength, the infantry declines in effectiveness, the Waffen-SS continually becomes more important, and antitank weaponry is constantly expanded.

The German Army panzer division upgrades in the game are tied to major refitting of these units. I have tried to avoid needless shuffling of counters here: each division is upgraded once, from its starting strength to its final strength. For some divisions, this process could have been extended out to two or even three upgradings, but this is excessive.

The German player receives a number of units replaced for free during the campaign. These replacements represent units rebuilt either in theaters outside the eastern front or by special means outside the regular replacement system:

Five infantry divisions were reformed from "shadow divisions." I originally had the shadow divisions in the game as separate units. However, I factored them into the free replacements, since they were never employed operationally and were used solely to rebuild shot-up divisions. The 121st Infantry Division is rebuilt from Mielau Shadow Division; 15th from Wahn; 68th from Demba; 57th from Debica; and 357th from Breslau. Actually, these replacements are not completely free. The German player is required to withdraw the 141st and 151st Reserve Divisions from play, and these are used to form the Demba and Mielau Shadow Divisions, respectively.

Five SS divisions were rebuilt from SS schools: the Fegelein, Wiking, Tokenkopf, 14th, and 15th SS Divisions.

Six infantry divisions destroyed at Stalingrad were raised new outside the eastern front and later sent there: the 44th, 76th, 371st, 376th, 384th, and 389th Infantry Divisions.

The replacement pool removals track units that were destroyed on the eastern front and then rebuilt and used out of theater. Infantry divisions are handled abstractly here, while other units are handled by exact ID. This isn't a pointless exercise: a) A number of these units eventually return to play, and thus are free replacements in effect. b) This builds in the requirements of the other German theaters. Even if the German player is doing so well in the game that he could replace all his losses, he would still have to field a smaller force due to the need of the other fronts.

Various divisions are withdrawn at cadre strength and later return to play at full strength. As above, they are in effect free replacements, being rebuilt out of theater.

Many units which are withdrawn from play later return to play, and the OB doesn't list all of these under the *return* category. A unit is listed here only when the same counter that was withdrawn returns to play. If a withdrawn unit was reorganized out of theater and returns at a different strength, it is listed as a reinforcement, not a return.

The Eastern Troops were Soviet subjects fighting in the German Army against the Soviet Union. For the most part, they were organized and employed at battalion level and were poorly treated by the Germans, due to Nazi racial policies. I have factored the Eastern Troops into brigades, with seven to nine battalions per brigade. The *700* series brigades were actual Eastern Troop headquarters called *Kommanduere der Osttruppen*. (Numbers 705-708 and 714-716 are hypothetical, filling gaps in the actual sequence, with 714 later being raised as an Eastern Troop Grenadier Regiment in Denmark. 753 technically was an Eastern Troop Regimental Headquarters.) The nationality letters tagged with these numbers were

not historically associated with these headquarters. Instead, they are a rough guide to relative national/ethnic composition of the Eastern Troops. The Cossacks were the most highly regarded of the Eastern Troops, due to their military ability. Cossack cavalry is shown at regimental level, while *plastun* (Cossack infantry) is represented as an ad hoc brigade. In addition to the Eastern Troops, Estonians, Latvians, and Ukrainians served in the Waffen-SS (the SS infantry divisions in the game are the end result of this), and many rather murderous Soviet citizens served in the SS-Police. By the way, the SS Drushina unit was formed from Soviet subjects. It was used for security duties and was constantly mistreated until it deserted as a unit and became the Soviet 1st Anti-Fascist Partisan Brigades. Unfortunately, I see no way of incorporating it into the game while preventing the German player from sending it out on a suicide mission. The SS-Police Ukrainian Training Division is a replacement unit per Rule 39J. If you want another special case to remember when using this rule, only SS-Police units may use infantry RPs at this training division.

The German-Arab Legion (the DAL security unit) is connected to the Eastern Troops through a hypothetical conversion in the conditional reinforcements. This legion was raised from Arabs, mostly Palestinians. Its official designation was *Sonderverband 287*. (This is the designation used in *Torch* for its component that went to Tunisia.) The DAL was sent east in the expectation that the unit's Muslims could help form an effective unit from Soviet Muslim citizens. In actuality, the Germans were halted in 1942 before they reached the major Muslim areas of the USSR.

The 7-15-2 Warschau (Warsaw) Fortress Division was a huge unit. Not counting units already represented in the game, it had around 40,000 men in various brigades, regiments, and battalions. I'm not sure that showing the division as an integral unit is correct, but then I'm not sure how to show it otherwise. If you want more special rules, this unit cannot be replaced nor its cadre rebuilt. Possibly, it should be 1/2 ATEC.

The two high mountain battalions were composed of crack mountaineers. Men from one of these units climbed Mount Elbrus in the Caucasus Mountains as a propaganda stunt in 1942. Again with a special rule, these units cannot be replaced once eliminated.

I've added the German punitive battalions to the game. The most colorful one of the lot is the Kriegsmarine Polarkuste Punitive Battalion in the Arctic. Commanded by naval officers, it contains Army and Luftwaffe offenders—even deserters from the *Afrika Korps*! It was nicknamed the "Tundra Destruction" Battalion, as it used demolitions to explode frozen ground in order to make fortifications.

The 672nd Railroad Artillery Battery consists of the immense 80cm siege gun. Actually, two 80cm guns served on the eastern front. *Gustav* was used at Sevastopol, and *Dora* was sent to Leningrad. Since only one gun at a time was sent east, the 672nd is used for both. The resource point cost for its use represents the limited ammunition available for this weapon together with the costs of its maintenance.

The 27th Panzer Division was a ghost unit with assets drawn from other formations already in the game. The Germans would have raised the 27th if they could have, so I have added the 27th to the replacement pool. If the German player has the replacement points available, he can form the 27th himself.

The 4th SS Panzer Division (appearing Oct I 44) is technically a panzergrenadier division. However, the division had a battalion of Tiger II tanks attached to it and thus qualifies as a full panzer division.

Soviet Order of Battle: Compiling the Soviet order of battle is much like assembling a complicated jigsaw puzzle: you're constantly looking for pieces that fit together. There simply isn't any comprehensive, reliable source. The best comprehensive sources available are still the wartime German intelligence records. Although these are often surprisingly good, they are inaccurate in places and have many holes. The Soviets have published many thousands of books and articles on their "Great Patriotic War," but a comprehensive OB work has yet to be seen. Instead, the OB must be compiled through the very tedious method of pulling isolated OB items out of the many

publications and assembling them into a larger picture. The German intelligence records are used to provide clues when no other information is available. An accurate OB can be (and has been) assembled this way, but better information for it is bound to crop up from time to time.

The Soviet OB in *Scorched Earth* incorporates a number of revisions from that in *Fire in the East*:

1) The 8th Rifle Division has been deleted from the Western MD. This unit was based on German intelligence, which appears to be wrong here. The 86th Rifle Division seems correct and is added in the 8th's place.

2) The 13th Army has been split out of the Western MD's reserves, and the 20th Army has been split out of the Moskva MD. In both cases, the information needed to do this was lacking when *FITE* was done.

3) The assignment of rifle divisions to strategic reserve armies and interior military districts has been revised. Pinning down exactly which rifle division is with exactly which interior command is problematic, as few are given exact locations on 22 June 1941 in the histories.

4) The 103rd, 106th, and 107th Motorized Divisions are deleted from the Soviet initial forces. These *100* series divisions are very difficult to pin down. The best guess is that these three units are actually part of the *100* series tank divisions the Soviets raised in July, as some of these tank divisions are called motorized rifle divisions due to their low tank strengths. However, the Soviet sources are somewhat contradictory (at least one can be construed to imply that the 106th Rifle and 106th Motorized Divisions both exist at the start of the war, but then again maybe not), and the Germans are even more confused.

5) The appearance times of Soviet reinforcements have been refined.

6) Various divisions that arrived from the eastern MDs in *FITE* actually remained in the eastern MDs throughout the war: the 12th, 22nd, 35th, 39th, 57th, 94th, and 105th Rifle Divisions, the 47th Mountain Rifle Division, the 59th Cavalry Division, and the 111th Tank Division.

7) The 82nd Division was shown as a rifle division in *FITE*, but it's definitely a motorized rifle division.

8) A number of rifle divisions and tank brigades which appeared as reinforcements are now placed in the replacement pool. These units were formed from disbanded militia and tank divisions.

A Soviet militia formation is shown in the game as a unit if it either entered combat against the Axis or eventually became a regular army formation. Hence, the Ivanovo militia divisions are included, as they eventually became regular rifle divisions. The Kiev militia was never organized as a division, and I have split it into two brigades. I have added a hypothetical Minsk militia brigade to the game, as Belorussian militia would have been fielded had Belorussia not been occupied so quickly.

The 16th Don Cossack Militia Cavalry Division has been deleted from the game. It and the 10th Kuban Cossack Militia Cavalry Division appear to be ghost units, with perhaps some connection to the regular 10th and 16th Cavalry Divisions which had been disbanded before the war.

I have made the second wave of the Moscow militia conditional reinforcements. Their formation in Moscow during the crisis of the German drive on Moscow wasn't coincidental, and I want the OB to reflect this.

The NKVD was a shadowy, semi-military organization that is very difficult to track. I have made the appearance of the NKVD rifle troops conditional. Their appearance in combat at crisis points clearly shows that they are emergency troops and are not regular reinforcements. For example, had the Germans failed to break through to Stalingrad in the summer of 1942, the 11th NKVD Division at Stalingrad would probably never have entered combat. I have represented the known NKVD brigades as security troops, which is my guess as to their function.

The Soviet tank and mechanized corps shown as units in the game are, to all practical purposes, divisions. A tank corps consists of three tank brigades and one motorized rifle brigade. A mechanized corps is an improved tank corps, not a stripped-down version (the way a German panzergrenadier division was essentially a stripped-down version of a panzer division). It consists of three mechanized brigades and on tank brigade, with as many tanks as, and a better organization than, a tank corps. This is why it receives full AEC in the game.

The OB doesn't track which Soviet units became Guards units. This is because Guards conversions were situational, based on the performance of units. The OB doesn't show non-divisional Guards units except for maneuver units. While there were Guards artillery brigades, engineer brigades, and so on, the Guards designation seems to be purely honorary. It seemed best not to clutter up the counter mix with this.

The antiaircraft brigades in the game are technically divisions. Showing them as brigades has them work correctly in game terms.

The Soviets fielded many independent regiments and battalions, such as breakthrough tank regiments, self-propelled gun regiments, rocket artillery battalions, and so on. At *Europa* scale, these all fall somewhere between *1* and *0* in combat strength, which is not convenient. Also, showing them directly would add many more counters to the game—and I think there are already enough counters! Accordingly, I have factored these units into other units where possible, particularly into the tank and mechanized corps and the cavalry divisions.

I have had a lot of fun designing this game. Despite the vast amount of work involved in preparing it for publication, I still find the game and its topic fascinating. I hope you will enjoy it, and may all your battles be on paper!

—John M. Astell