

Operational Combat Series:

Series Rules, v4.1a

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v4.1a Note: This rulebook incorporates latest errata and clarifications to the v4.1 rulebook, but there are no real changes to those rules.

Introduction

OCS games simulate campaign-level combat from 1900 to the mid-1950s. The series goal is to allow a sophisticated study of historical events while maintaining mechanical simplicity.

Version 4.1 Rules

A number of changes have been made from Version 4 of these rules. Sections that were substantially revised for clarity are marked √ for easy identification; sections with actual changed rules are marked √√. On page 47 is a change-list summarizing the important changes. Enjoy!

Some terminology was altered when moving from Version 3 to 4. Strategic Move Mode is now called Strat Mode (shorter), Combined Arms Effects are now called Anti-Tank Effects (more descriptive). Naval units and air units are now referred to as ships and aircraft. Trainbusting replaces Railroad Interdiction and includes all other Interdiction effects as well.

Game Components

I The Game Map

The map depicts the area in which the battle or campaign was fought. Laminate the map or cover it with 1/8" Plexiglas to help protect your gaming investment.

A. The Hex Numbering System. All hexes are identified by a unique four-digit number in the form "column.row". If the game has more than one map, a letter identifies each, and the hex numbers for hexes on a given map are prefixed with the map's letter. For example, B10.10 identifies hex 10.10 on Map B. The digits before the decimal point identify the hex row, reading along the horizontal dimension from left to right. The digits after the decimal identify the exact hex along that particular hexrow, reading along the vertical dimension from bottom

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to top. Not every hex is numbered. Each fifth hex (xx.05, xx.10, xx.15) is numbered to create grid lines. For example, to find hex 29.17, follow the grid line for xx.15 until you find the 29.xx hexrow, then count up two hexes to 29.17.

B. Map Edge Hexes. Only hexes with at least half of the hex showing are playable.

C. Off Map Movement. Unless specifically allowed in a given game, units can neither exit the map to re-enter later nor conduct any off-map movement. Destroy units forced off the map.

D. Turn Record. A turn record track is printed on the map or play aids. Each box represents one game turn. (See 2.1)

E. Weather Record. Mark the weather status using this track.

F. Holding Boxes. Two types of holding boxes are possible: those which are also map hexes and those which are not. Use map hex holding boxes to relieve congestion. The units in them are within the hex associated with the box. These units must follow the usual combat rules. **Non-hex** holding boxes can hold unlimited numbers of units. Combat cannot occur in non-hex holding boxes. Non-hex holding boxes can link to each other to show off-map areas. Units of both sides can never occupy a given off-map holding box.

II The Counters

Carefully cut or punch the counters from the sheets and keep them organized by type or identification for ease of use. For a description of the various types of units and markers in the game, see 3.0.

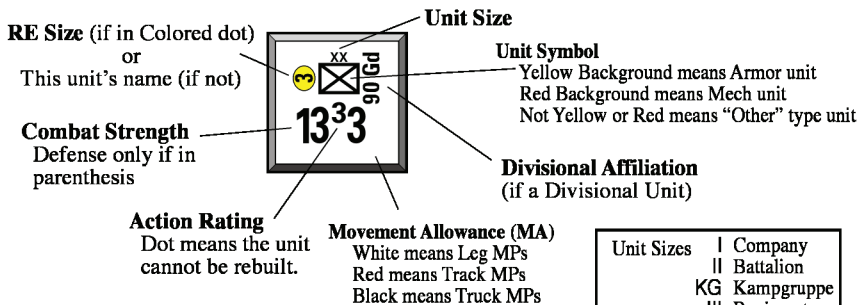
III The Rules

Every OCS game contains a Series rulebook and a Game rulebook. The Series rulebook contains the rules generally applicable to all series games. The Game rulebook gives the details needed for a specific game, including special rules, scenarios, and set-up information.

A. Organization. Rules are numbered by section and case. Each major rules grouping is a section; a paragraph within a section is a case. The number 4.2 would, for example, refer to section 4, case 2. A specific case may contain a number of statements. Statements within a case are lettered, as in 4.2a, 4.2b, etc.

B. Repetition. Once stated, a rule is repeated in another section only if needed for clarification in *that* section.

A Basic Combat Unit

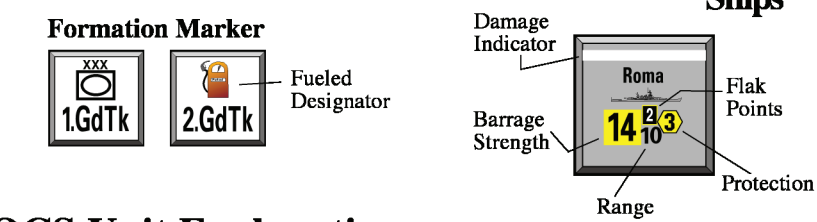
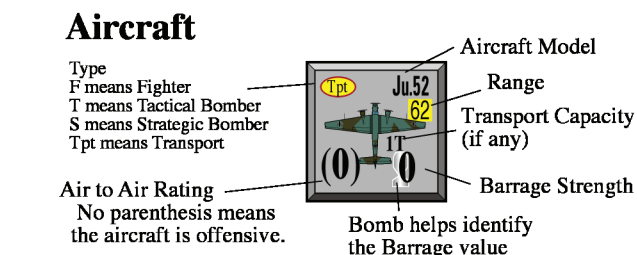
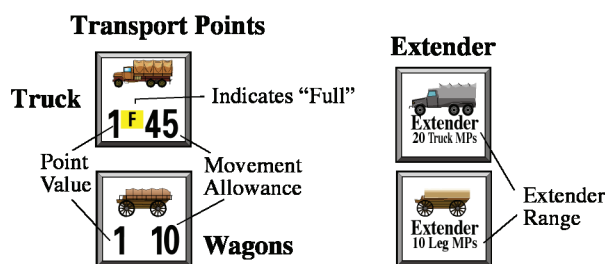
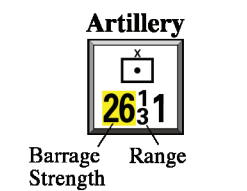


Unit Sizes	I Company
	II Battalion
	KG Kampgruppe
	III Regiment
	X Brigade
	XX Division
	XXX Corps
	XXXX Army

Basic Unit Symbol Types

Infantry	Cavalry Artillery	Equipment Repl
Tank or Panzer	Militia	Personnel Repl
Assault Gun	Rocket Artillery	Machine Gun
Armored Infantry	Motorcycle	Assault Engineer
Armored Recon	Bicycle	Police
Cavalry or Unarmored Recon	Mountain	Security
Towed Artillery	Penal	Pioneers
SP Artillery	Rail Repair	Parachute
Marine or Naval	Commando	Engineer
Glider Infantry	Anti-Tank	Territorial
Semi-Formed	Coastal Artillery	Ski Troops
Mortar	Anti-Aircraft	Arm. Car

Basic Symbols may be mixed together and combine with motorization symbols to generate more complex symbols, such as:
 Motorized, Mountain Infantry



















OCS Unit Explanations

IV Set Up Notes

The Game rulebook contains set-up information for the scenarios presented. Except as amended by special notes in

OCS Standard Markers

	Turn
	Reserve Mode
	Disorganized Mode
	Strategic Move Mode
	Exploitation Mode Min AR Needed
	Step Loss Number of steps lost
	Supply Points (Full Points) Number
	Supply Points (Tokens) Number (2T=Two Tokens)
	Low Internal Stocks
	Exhausted Internal Stocks
	Hedgehog Level
	Railhead
	Air Base Level <small>Offset location if desired.</small>
	Fuel Marker
	Out of Supply
	Train Busting

the Game rulebook, the following are always true:

- A) “w/i X” means to set up a given unit or stack anywhere at or within X hexes of the location given. A stack can “spread out” into multiple hexes within the given radius (and this includes possibly deploying breakdown regiments).
- B) Ground units set up in any desired mode. (**Exception:** ground units **adjacent** to enemy Attack-Capable units cannot set up in Reserve or Strat Mode.)
- C) Supply Points (SPs) setting up in the same hex with Transport Points can deploy loaded or unloaded. Transport Points not stacked with SPs are always unloaded unless scenario rules specify otherwise.
- D) Organic Trucks start loaded only if the scenario explicitly states that they do (but they can take advantage of C above to become loaded if they set up stacked with SPs).
- E) Units may never start the game over-stacked.
- F) Aircraft always begin Active.
- G) Units generally start at full strength.
- H) When the notation “(inclusive)” follows set-up boundaries, units can set up anywhere within the given zone **to include** the boundary lines.
- I) Units can never set up in hexes that they could not move into during their regular movement.
- J) Units, Formation markers, and HQs always start play “un-fueled.”
- K) √ Use index cards, etc., to create off-map areas for each side’s dead pile and to organize reinforcements.

1.0 Scale

OCS games can include combat units from company through division in size. The ground scale is normally 5 miles per hex, but can drop as low as 2.5 miles per hex (based on theater, operational density, and so on). A game turn will usually represent a half-week of time (given 5 miles per hex scale), but can drop as low as 1/4 week (given 2.5 miles per hex ground scale).

2.0 Sequence of Play

2.1 The Game Turn



A “Game Turn” is a sequence of events, the order of which is the “sequence of play.” Each Game Turn consists of two Player Turns, one for each player. For reference, we call a player taking action during his own turn the “phasing” player; the “non-phasing player” takes action during his opponent’s turn. A Player Turn consists of the set sequence of steps listed below. Each step can involve one player or the other (phasing or non-phasing). At the end of the second Player Turn, advance the turn marker one space and begin the process again. The sequence of play must be strictly followed in the order given.

2.2 Outline Sequence of Play

• Pre-Turn Phase

- ◇ Weather Determination
- ◇ First Player Determination

• 1st Player, Player Turn

- ◇ Aircraft Refit Phase
- ◇ Reinforcement Phase
- ◇ Movement Phase
 - Breakout Segment
 - Movement Segment
 - Air/Naval Barrage Segment
(No Artillery Barrages)

- ◇ Supply Phase
- ◇ Reaction Phase
(Non-Phasing Player)

- Movement Segment
- Barrage Segment

- ◇ Combat Phase
Artillery Barrage Segment
(No Air or Naval Barrages)

- Combat Segment
- ◇ Exploitation Phase
Movement Segment
Barrage Segment
Combat Segment

- ◇ Clean Up Phase

• 2nd Player, Player Turn

- ◇ Repeat the above for other player.

• Turn End

2.3 Narrative Sequence of Play

• Pre-Turn Phase

◇ Weather Determination Segment

One player, it is irrelevant which, rolls to determine the weather. The weather affects the entire Game Turn.

◇ First Player Determination Segment

Each player rolls two dice. The player with the higher roll elects to be first or second in the Game Turn. Re-roll any ties.

• 1st Player, Player Turn

◇ Aircraft Refit Phase

The phasing player refits Inactive aircraft. Pay 1T per base at which the player desires to refit. At these bases, the player can refit up to two aircraft per base Level. An Air Base **cannot** refit aircraft if in an un-negated enemy Zone of Control (ZOC).

◇ Reinforcement Phase

The phasing player places any new units in their entry points according to the Arrival Schedules. He rolls on his Supply Table to determine the number of new Supply Points available and places them on the map. He rolls on his Variable Reinforcement Table and places any resulting reinforcements on the map. He places newly arrived aircraft on any friendly Air Base (they arrive Active). The phasing player conducts Unit Rebuilds and/or Unit Consolidations as desired.

◇ Movement Phase

The phasing player may “Breakout” any combat units not in trace supply. He then moves his ships and ground units, individually or in stacks, making any voluntary changes to a combat unit’s mode as each starts to move. Restrictions are imposed by mode, supply, and enemy units. As they move, combat units can conduct overruns, a special form of attack during movement. They can also destroy or damage supply dumps and facilities, as well as build or improve Air Bases and Hedgehogs. The player can move units and supplies by rail or sea transport. The phasing player’s Active aircraft can execute missions throughout the phase: Fighter Sweeps, Hip Shoots, and Transport Missions during the movement portion and Barrage missions during the barrage portion (when ships also execute their Barrage missions).

◇ Supply Phase

The phasing player must replenish any combat units with low (or exhausted) internal stocks, if possible. The phasing player then determines which of his combat units are in trace supply. Those out of trace must either expend on-map supply or be marked Out of Supply and checked for Attrition.

◇ Reaction Phase

The non-phasing player can move his ships and any released Reserves. He can destroy his supply dumps, but no construction-type activities are allowed. Released combat units can move (1/2 their Movement Allowance or MA) and overrun. The non-phasing player’s Active aircraft can execute missions throughout the phase: Fighter Sweeps, Hip Shoots, and Transport Missions during the movement portion and Barrage missions during the barrage portion (when ships and artillery also execute their Barrage missions). This phase does not have a Combat Segment.

◇ Combat Phase

The phasing player first resolves artillery barrages. Then his combat units attack according to the mode, supply, and combat rules. Combat results can cause units to advance, retreat, or enter Disorganized (DG) or Exploitation Mode.

◇ Exploitation Phase

The phasing player can move and fight with released Reserves (full MA), and with units in Exploitation Mode (half MA). He can destroy his supply dumps, but no construction-type activities are allowed. The phasing player’s Active aircraft can execute missions throughout the phase: Fighter Sweeps, Hip Shoots, and Transport Missions during the movement portion and Barrage missions during the barrage portion (when ships and artillery will also execute their Barrage missions). At the end of this phase is a Combat Segment during which eligible combat units can attack.

◇ Clean Up Phase

The phasing player removes all DG and Exploitation markers from his units and removes (or flips) all his Fueled markers. Remove all Trainbusting markers generated by the **non-Phasing Player**.

• 2nd Player, Player Turn

Repeat the above steps for the second player with the roles reversed.

• Turn End

Move the Turn Record marker one space forward along its track. Begin the above sequence again for the next Game Turn.

2.4 Simulcast Turns

Some games contain periods where the major activity is logistical buildup on both sides. These periods can run much faster if both players declare the turn to be a “simulcast” turn and follow these rules:

- 1) Both players execute the turn sequence at the same time.
- 2) No combat or barrages are allowed.
- 3) Neither player executes anything which could be construed as an offensive, raid, or other such activities on land, water, or air.
- 4) The goal of the simulcast turn is to speed up the down periods—don’t screw up that goal by attempting anything to gain some sort of advantage. If you have some operations in mind, don’t agree to the simulcast turn in the first place. However, don’t waste time playing a regular turn for minor reasons.

3.0 Units and Markers

Terms used to describe classes of units have **precise meanings** that are important to understanding these rules. For instance, “ground units” describes a broader range of units than “combat units” (combat units are a subset of ground units). “Attack-Capable units” are a further subdivision of ground units. Use of the word “units” by itself (not modified as in “tank units” or “Strat Mode units”) refers collectively to all units—ground, naval, and air—when a narrower context is not obvious.

3.1 Ground Units

Ground units include two large sub-categories: combat units (3.2) and non-combat units (3.3). Each has some or all of the following printed on the counter: unit designation; size and type symbols; combat, barrage, Action Rating, and movement values; and supply-throw or barrage ranges.

3.1a Color indicates a ground unit’s **Movement Point (MP) class**. If the Movement Allowance (MA) is in an outline font, use the color inside the outline.

Movement Point class can be different from one side of the counter to the other.

- **Tracked MP** ground units have a Red MA.
- **Leg MP** ground units have a White MA.
- **Truck MP** ground units have a Black MA.

3.1b The type symbol can have one “wheel” (semi-motorized) or two “wheels” (fully-motorized). This notation (by itself) is for historical interest only.

3.1c Multi-Unit Formations are those formations containing one or more ground units with the same higher designation (e.g., “1st Division” or “6th Tank Corps”). Colored stripes mark these formations in newer *OCS* games. See also 13.7.

3.1d Some ground units have a yellow dot behind their Action Rating. These **cannot** be rebuilt.

3.2 Combat Units

Combat units are any ground units with a combat strength. Each side of the counter shows the unit in a different mode (see 5.0). Note that HQs and artillery units are combat units, even though their combat strengths are not printed on the counter (see 13.1c and 13.4b).

3.2a Combat units are further divided into three categories affecting ground combat (see 9.4). “Armor” units have a **yellow background** printed within their unit symbol. “Mech” units have a **red background**. Any color other than red or yellow denotes “Other-type” units.

Design Note: A unit with an armor unit symbol can have a red background. Such a unit contains a tank force with an infantry component. Other such combinations are possible. The combination of color and symbol depict the functional as well as the nominal organization of a unit.

3.2b A combat unit with a combat value in parenthesis is **not** Attack-Capable (see 4.4). It can only defend.

3.2c The Action Rating represents the ground unit’s leadership, training, cohesion, and equipment maintenance. Printed values range from 0 to 5, with higher numbers being better. (Some modes reduce these ratings, so a -1 AR is possible).

3.2d Division-sized combat units have a Regimental Equivalent (RE) number printed on the counter. This RE number

is used for a number of purposes (such as stacking and transportation) and is in a colored dot for easy identification.

3.2e Specialized combat units covered by the series rules are listed below (individual games may add other types):

- HQ units (13.1)
- Rail Repair Units (13.3g)
- Artillery units (13.4)
- Replacement units (13.5)
- Engineer units (13.8)
- Break-Down regiments (20.0)

√ **3.2f Independent Units.** Sometimes a special rule applies to independent units. Treat as “independent” any unit that is not a division-sized unit (3.2d) or part of a multi-unit formation (3.1c).

3.3 Non-Combat Units

Non-combat units come in five types: Ports, Air Bases, Hedgehogs, Transport Points, and Supply Points. They are ground units, but not combat units. They have no combat strength and cannot be used to absorb step losses. Organic Trucks show the same specific Transport Points value on both front and back of the counter; other non-combat units show a different number of generic “points” or a different “level.”

A) Supply Points (SP) show supplies in a specific location. A single SP **roughly** equates to 1,500 tons of consumable supply (adequate mixing of fuel, ammo, and stores is assumed). One SP can be divided into four smaller units called Tokens (T); each Token is 1/4 SP. SPs and Ts can be broken down and recombined as needed. SPs have no inherent movement ability. They can be moved via the side’s rail capacity and by units with a supply lift capability: Transport Points, certain ship types, and certain aircraft types. The term for SPs in a hex, whether loaded on a Transport Point or on the ground, is **dump**. SPs are “generic” and can be captured (and recaptured) when control of a hex changes.

B) Transport Points have a point value that shows both their size and how many SPs they can carry. (Thus a 1-point Wagon’s full load is 1 SP.) Transport Points can represent just about any kind of transportation pressed into service (from trucks to elephants). Transport Points with a

unit ID on their counter are “Organic Trucks” that **belong** to a specific formation. See 13.2g for details pertaining to these units.

C) Ports, Air Bases, and Hedgehogs of various sizes can begin the game in place, or be constructed during play. These units cannot move. Ports can be damaged, which reduces their capacity until repaired. Air Bases can be reduced to a smaller size. Hedgehogs can be reduced in Level by friendly (not enemy) action. They are captured (and recaptured) when control of the hex changes (9.14). References to “Air Bases” in these rules generally include aircraft carriers and Air Strips as well; references to “Ports” include printed ports and converted LSTs.

Important: Ports and Hedgehogs are often printed on the map, and a non-combat unit of that type is considered to be in those hexes even though there is no counter.

3.4 Ships

Ship units can represent individual ships or groups of ships. Most ships are marked with Barrage Strength, Range, Flak, and Protection Values. The front of most naval counters represents the full-strength ship, while the back is the same ship but at reduced strength due to damage. Landing Craft (18.4) are different: they are presented as generic “points” of capacity capable of delivering cargo (combat units, Transport Points, and SPs) to beaches and ports.

Design Note: Individual ships (such as battleships or carriers) are named and will be “slow” on their damaged side. Naval units without a “slow” side represent multiple ships: generally two Cruisers or four Destroyers, and beneath them each “point” of Landing Craft represents many small craft.

3.5 Aircraft

Air units—called ‘aircraft’ or by their type (Fighter, Bomber, Strat Bomber, or Transport) in these rules—represent 20 to 45 aircraft each. These are marked with an Aircraft Silhouette, Aircraft Type, Air Combat Rating, Barrage Strength, and Range. Some aircraft also have a Transport Capacity. The front of the counter represents the full-strength unit; the back is the same aircraft but at reduced strength.

3.6 Game Markers

3.6a Supply Markers. These show various supply states such as Out of Supply, Low/Exhausted internal stocks, and Fueled status.

3.6b Mode Markers. These markers designate Reserve, Exploitation, Strat, and Disorganized Mode.

3.6c Weather Markers. These markers show the status of weather, flight, and ground conditions.

3.6d Turn and Phase Markers. These keep track of the game turn and phase.

3.6e Step Loss Markers. These markers show the losses to units containing more than one step.

3.6f Formation Markers. Use these to represent a group of counters kept off-map. This reduces on-map counter density and can add to fog of war (13.7).

4.0 General Concepts

4.1 Rounding Rule

Players will often be required to round numbers to whole numbers. If the fractional part is less than .5, round down. If the fractional part is .5 or more, round up.

4.2 Fractions

Do not round until all calculations are finished. **Never** round Movement Allowances. Round the final odds determined; do not round combat strengths before determining odds.

***Design Note:** Players should note the important effect of this rounding rule on odds calculation. In this series, 15 attacking 6 rounds to 3:1.*

Example: Suppose three combat units attack a single one. Their modified combat strengths are 2.5, 3.25, and 4 (for a total strength of 9.75) against the defender's strength of 2. Combat odds would be figured as 4.875 to 1, which is rounded to 5:1.

4.3 Cumulative Effects

In all cases where a unit is subject to multiple modifiers, those effects are cumulative. For instance, quarter the strength of a combat unit halved for terrain and halved for supply.

4.4 Attack-Capable Units

Combat units with **printed** combat strengths are Attack-Capable, **unless** the strength is parenthesized or the unit is in Strat Mode or Reserve Mode. A printed combat strength of zero still makes a unit Attack-Capable (see 9.14a).

4.4a Attacking units in combat and overrun must be Attack-Capable.

4.4b Attack-Capable units have a Zone of Control (ZOC) if they are in Combat Mode and are not under an Out of Supply marker. Units in any mode other than Combat Mode **do not** have a ZOC. (**Exception:** Exploitation Mode units that had a ZOC before receiving the Exploitation marker retain that ZOC even after entering Exploitation Mode.)

4.4c Ground movement into a hex with an enemy non-combat unit (Hedgehog, dump, Transport Point, port, or Air Base) requires an Attack-Capable unit. This may result in capture or destruction, per 9.14. (Note that Attack-Capable units are no longer required for movement into "empty" enemy villages or cities.)

4.5 Zone of Control

Combat Mode Attack-Capable units have a Zone of Control (ZOC) unless currently marked Out of Supply. (**Exception:** Exploit Mode, 4.4b.) A unit's ZOC limits certain enemy actions in the six hexes adjacent to the unit. This is true regardless of the terrain in those hexes or on the hexsides between them.

4.5a The following actions **cannot** be taken in an enemy ZOC. Those actions marked <Negation>, however, are allowed if the ZOC has been negated (4.5b); negation is not possible for the others.

- A) **Truck Movement.** <Negation> Units using Truck MPs (mobility types are explained in 3.1a) that enter an enemy ZOC hex must either end movement in the hex or conduct an overrun from the hex. One overrun might lead to another, allowing the unit to continue "moving" even through more than one ZOC. Units using Truck MP that start the phase in an enemy ZOC can exit that hex and move normally. Note that Leg and Track MP movement is unaffected by ZOCs.

- B) **Supply Lines.** <Negation> An enemy ZOC blocks all types of supply paths that are traced using Movement Points (draw, throw, Extenders, etc.) if the mobility type being used is Truck. Note that some HQs and Extenders use Leg MP or Track MP, and these are unaffected by ZOCs.
- C) **Rail Transportation-Literal, Using Rail Cap.**
- D) **Rail Transportation-Trace Supply.** <Negation>
- E) **Rail Conversion operations.**
- F) **Port Operations-Trace Supply.** <Negation>
- G) $\sqrt{\text{Port Operations-Literal, Using Sea Cap.}}$
- H) **Aircraft Refit.** <Negation>
- I) **Reserve Mode.** Units cannot change into Reserve Mode when in an enemy ZOC. Once in Reserve Mode, they can enter/exit ZOC normally.
- J) **Strat Mode.** Units cannot change into Strat Mode in an enemy ZOC, nor can they move into a ZOC.
- K) **Repl Rebuilds.**

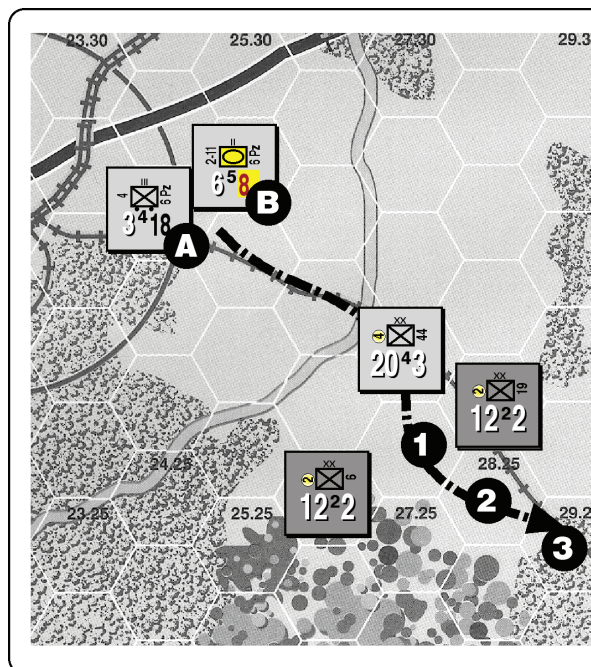
***Specific Game Note:** When playing DAK (either edition), friendly units **do not** negate EZOCs for Port Operations (F).*

4.5b Negating ZOC. Per 4.5a, some ZOC effects can be negated. A negated ZOC has no effect. An enemy ZOC is negated in a given hex if the hex contains a friendly combat unit at that moment and, further, if that combat unit will end the current phase in the hex. The friendly combat unit doing the negation need not have a ZOC itself. Note that when a unit **starts** the phase in an enemy ZOC, negation is not needed to exit that hex.

Example: Aircraft refit can **still** be done **even if** a combat mode enemy unit is adjacent to the base, provided a friendly combat unit (of any mode) is in the hex.

4.5c ZOCs and Retreats. See 9.12e.

***Design Note:** The lack of ZOC effects on most movement can cause anomalous looking events if a player is not careful about unit placement. Once a player understands the true implications of this feature, these strange occurrences will disappear because he will understand that the game system will not cover for him when he misuses his units.*



Example: Movement in and through Zones of Control.

In this example, the German units at (A & B) are moving. The panzer battalion is using tracked MPs, the infantry regiment is using Truck MPs. Each unit can move along the path shown with the dashed line.

All ZOC effects are negated in the hex containing the 44th Infantry Division. Either of the moving units can pass through the 44th's hex without additional movement point costs—the 44th either began the phase in that hex and is not going to move in this phase, or has already ceased its move for the turn there, and this allows it to negate the ZOC.

When the motorize infantry hits Hex 1, it must stop. Because it is using Truck MPs, it must stop when it enters an un-negated ZOC hex.

The panzer battalion, however, is not slowed or otherwise affected by the enemy units adjacent to Hex 1 and can continue to move to Hex 2 and then 3 because it is using Tracked MPs without any worry about the EZOCs it is moving through.

4.6 Regimental Equivalents

To simplify ground unit size determination, this game uses Regimental Equivalents (REs). **Only** ground combat units have RE sizes as only they need them.

- Division-sized units have their RE size shown on the counter.
- Battalions are 1/2 RE.
- Repl units and company-sized units are 1/4 RE.
- All other sizes count as 1 RE. (There may be game-specific exceptions.)

The RE size of Division-sized units is reduced by one for each step loss (9.11). All other combat units are 1 step, regardless of RE size, for loss purposes. (Some OCS games have exceptions to this rule.)

***Design Note:** The RE concept has its roots in the Europa game system. Europa is a trademark of Paul Richard Banner and all related titles and materials are copyrights of Historical Military Services.*

4.7 Transportation Equivalents

Combat units, SPs, and Transport Points can sometimes be transported by train (13.3), air (14.9), landing craft (18.4) or abstract shipping (19.0f). Transport Points can **only** transport SPs.

4.7a REs and SPs are interchangeable transportation equivalents. One point of rail capacity can move either 1 SP or 1 RE (or other combination, such as 2T of supply and 1/2 RE of units).

4.7b If a unit's Move Mode MA is between 1 to 6 Leg MP, inclusive, its transportation equivalent is halved. For all other units, the transportation cost is the same as the RE size.

4.7c Transport Points can carry a number of SPs equal to their point value. Transport Points can be transported by landing craft, rail, or shipping (but not by air). Count only the size of the Transport Points when figuring the transportation equivalents—loaded with SPs or not, 1 Transport Point always takes 1 point of transportation capacity to move.

4.8 Stacking

Stacking is having more than one unit in a hex. **No more than 10 REs can ever stack in a hex.** Any number of SPs or Transport Points can stack together in a hex, but never more than one port, Air Base, and Hedgehog per hex. Air and naval stacking limits are described in 14.2a and 18.1b. There is no movement cost for stacking or unstacking. For units on the same side, nationality and unit type usually have no effect on stacking. In rare cases, friendly and enemy units are allowed to stack with one another, and those special cases are given in 4.8c. Off-Map Holding Boxes can hold an unlimited number of REs.

4.8a Stacking is enforced at the *end* of all segments and all phases (the Reinforcement Phase is an exception; see 13.6). Overstacking is having more than 10 REs in a hex. The owning player must reduce any overstacked hex found at the end of a segment, by eliminating the

units of his choice. Units can temporarily overstack while moving without penalty.

Exception: units wishing to conduct an overrun cannot overstack at the time of the combat (counting both the overrunning units and any other friendly units that might be in that hex).

4.8b Order of Stacking. The player can arrange his stacks in any order that makes sense to him, but needs to ensure that:

- A) Mode (and Out of Supply) markers should **always** be placed on **top** of all such units in the hex. Except where another such marker comes between them, a single marker implies that all ground units lower in the stack are in that mode (or Out of Supply). Some units can never be in a certain Mode or status, and those units simply ignore a marker above them in the stack. For example, SPs and Inactive aircraft under a DG marker are not in Disorganized mode.
- B) Put a Low, Exhausted, or Step Loss marker **beneath** each and every affected unit.
- C) If a *Combat Mode Attack-Capable* unit is in a hex, it should be the top combat unit in the stack (to make ZOCs obvious).
- D) An HQ can be the top combat unit in the hex when no enemy ground units are adjacent (to help the owning player see his logistical net). In this case, the owning player must make any ZOC known to the enemy **before** the enemy attempts to move adjacent to that hex.

- E) $\sqrt{\vee}$ Any Active Air Units are on top of the ground units in the hex. But the enemy player may always see the top ground unit on request. If an Active fighter is in the stack, it should be the top air unit (to make Patrol Zones obvious).
- F) If a Hedgehog is in the hex, it should be atop the top ground combat unit. Again, the enemy player is always allowed to also see the top ground combat unit.

4.8c Enemy Stacks. Friendly units can move into hexes with enemy units in the following cases **only**. (There is no extra MP cost.) Many of these situations trigger specialized combats, but in some cases the units can coexist in the same stack. If any unlisted type of enemy unit is in the hex, friendly units cannot enter the hex during movement or retreat.

- A) Ground units that are **Attack-Capable** can move into hexes with enemy non-combat units. See 9.14. Units which are not Attack-Capable cannot enter these hexes.
- B) If Attack-Capable ground units enter an enemy ship's hex or vice versa, the ship is destroyed.
- C) Ships can move into hexes with enemy non-combat units and aircraft. (They coexist.)
- D) Aircraft can move into hexes containing all kinds of enemy units to conduct their missions.
- E) Rail transport and supply paths can pass **through** enemy non-combat units, but cannot stop **in** their hex. Neither can enter a hex containing an enemy combat unit.

4.9 Fog of War

4.9a A player can **never** look through an enemy stack. However, the enemy player may always see any **Hedgehog, top Combat Mode Attack-Capable unit** (or top combat unit if there is no Combat Mode Attack-Capable unit), **AND top Active Air Units** in any hex. While the player will know if the top unit is Strat Mode, DG, or Out of Supply, he is not entitled to know about internal stocks status or steps lost.

4.9b During combat (regular or overrun), players must reveal their Action Rating, AT capability (9.4e), and the total combat strength. Neither side is required to show actual units (other than per 4.9a).

4.9c During a barrage, the barraging player should reveal the barrage strength, and be informed of the applicable table shifts and the Flak Roll Modifier (if an air barrage).

4.9d During Air Combat, both players should reveal all aircraft present and which are involved in each round.

4.9e Players normally make die rolls in the open, after announcing their purpose (such as "this is my variable supply roll"). If players agree, they can make certain rolls in secret to increase the fog of war.

5.0 Modes

5.1 Units Affected by Mode

Combat units and Transport Points have the modes described in this section. Not all ground units can use all six modes. Aircraft, SPs, ports, Air Bases, and Hedgehogs do not use any modes.

Ships make limited use of Disorganized Mode (18.1d).

5.2 General Mode Restrictions

A unit affected by mode can only be in one mode at any given time.

Ground units without a mode marker are in either Combat or Move Mode, depending on the side of the counter showing. Markers are placed on top of a unit or stack to show the four other modes: Reserve, Strat, Disorganized (DG), and Exploitation. When a mode marker is removed, a unit returns to either Combat or Move Mode (depending on the existing "orientation" of the counter).

Units move and fight according to the values on the side of the counter that is showing (that is, the Move Mode or Combat Mode values). Some modes modify these values. A unit with a mode marker uses the base values of Combat or Move Mode (it is said to be "oriented toward" the mode whose side is showing), but is only considered to be in the mode indicated by the marker. This means, for example, that a unit in DG Mode could never move by rail (which requires Move Mode) regardless of which side of its counter is face-up.

Units of differing modes can stack, and one unit's mode has no effect on the mode of other units in the stack.

***Design Note:** The implications of the different modes with respect to the turn sequence and each other will become apparent only after repeated play. Suffice it to say they are many and subtle. Good players will orchestrate the differences between these modes to their advantage.*

5.3 Voluntary vs. Involuntary

Voluntary Modes are Combat, Move, Strat, and Reserve. **Involuntary Modes** are DG and Exploitation.

5.4 Mode Change

Units in Combat, Move, Reserve, and Strat Mode can change to a different voluntary mode in the Movement Phase. This is done as each individual unit or stack starts to move. For example, a unit in Combat Mode could be changed to Reserve Mode (with either the Move or Combat side up).

Mode change does not cost MPs.

Modes are generally changed **during** the Movement Phase before each unit or stack moves. There is no requirement to do all your mode changes before moving units. Play moves much more smoothly if players do their mode changes as they go, provided the units in question have not yet moved themselves.

Units in Reserve Mode can **also** perform a *limited* voluntary mode change during Reaction and Exploitation Phases (see 5.7b). These are the only voluntary mode changes allowed outside of the Movement Phase.

Involuntary modes are not chosen, they just "happen" as a result of combat, retreat, and barrage. The involuntary mode **replaces** the existing mode. The only time involuntary mode markers can be removed is during the player's Clean Up Phase. Although a Disorganized unit cannot change mode during the Movement Phase, it can change its orientation between the Combat and Move sides of the counter.

$\sqrt{\vee}$ **5.4a Marker Limits.** Game-specific rules place strict limits on the number of Reserve markers available to each side. To conserve these valuable markers, a player can show the entire portion of a stack that is in Reserve Mode with one marker (4.8b) and the marker itself need not be placed until after units have finished their 25% movement. There are no restrictions imposed on any of the other modes by marker limits, but players should still conserve markers to keep stacks

Example: Units and their Modes
 A unit can be in only one mode at a time... here is an infantry division in each of the possible modes.

manageable. (They should not attempt to deceive their opponent by marking individual units with mode markers!)

5.5 Combat Mode



Combat Mode units expect enemy contact. Combat Mode is the side of the counter with the greater combat strength and lesser movement allowance.

5.5a Combat Mode units **cannot** use rail, air, or shipping transport. (**Exception:** Rail Repair Units, 13.3g.)

5.5b Units must be in Combat Mode to convert railroad gauge (13.3f) or perform engineering functions (13.8a).

5.5c Repl units and Transport Points **cannot** enter Combat Mode.

5.5d Units must be in Combat or Move Mode to land via Amphibious Landing (ALT) (see 18.5c).

5.5e A unit must be in Combat Mode to exert a ZOC per 4.5. (**Exception:** Exploit Mode, 5.9c.)

5.6 Move Mode



Move Mode units sacrifice some combat capability to enhance speed. Move Mode is the side of the counter with the lesser combat strength and greater Movement Allowance.

5.6a Move Mode is required for use of rail, air, and shipping transport. (**Exception:** Rail Repair Units, 13.3g.)

5.6b Repl units and Transport Points have no Combat Mode side to their counters, so they are always in Move Mode unless marked with a Mode marker (such as Reserve).

5.6c Units must be in Combat or Move Mode to land via the Amphibious Landing Table (ALT, see 18.5c).

5.7 Reserve Mode



Reserve Mode units are ready to react quickly to events. Mark this mode with a Reserve marker.

The number of Reserve Mode markers is limited, per 5.4a.

Reserve Mode units **cannot** attack, overrun, or barrage until released. Units attacked while in Reserve Mode **defend at x1/2 combat strength.**

5.7a Entering Reserve. When entering Reserve Mode, a unit can be flipped to have either side of its counter facing up. Reserve Mode units cannot change the chosen orientation (toward Combat or Move Mode) until the next friendly Movement Phase. Reserve Mode units can **move x1/4** their MA during the regular Movement Phase.

***Play Note:** The 25% movement allowed for Reserves during the Movement Phase can be useful in shifting units in bad terrain (per 6.1c they can 'always move one hex') such as in Mountains or Jungle, and in normal situations players can squeeze an additional 25% movement out of key units.*

5.7b Reserve Release. The player can release any of his Reserve Mode units or stacks in his Reaction Phase or Exploitation Phase. The player is allowed to release a Reserve Mode stack, and then have it move and overrun before deciding to release other Reserves. When releasing a unit, remove the Reserve marker: the unit is now in Combat or Move Mode, depending on the orientation chosen per 5.7a.

A) Exploitation Phase. Released Reserves can use their full movement, barrage, and combat capabilities. They can attack or barrage with other released Reserves or Exploitation Mode units in the subsequent Combat Segment, and can overrun.

B) Reaction Phase. Released Reserves can only move using 1/2 their MA, but can use their **full** combat ability in overrun. (No regular ground combat is allowed during the Reaction Phase.) Released Reserve Artillery can barrage in the Reaction Phase's Barrage Segment.

5.7c Enemy ZOC. A unit cannot switch into Reserve Mode when in an enemy ZOC.

Units already in Reserve Mode can enter/exit ZOC normally.

5.7d Enemy Contact. Remove the Reserve marker from a stack that receives any defender result (even an **ignored** DoI) when attacked in overrun or regular combat. The unit is now in Combat or Move Mode, depending on the orientation chosen (5.7a).

5.7e Reserve Mode units **cannot** use rail, air, and shipping transport.

5.7f Transport Points units **cannot** enter Reserve Mode. (**Exception:** Organic Trucks can do so.)

5.7g No unit in Reserve Mode can be in a Hedgehog hex at the end of any Movement Segment.

5.8 Strat Mode



Strat Mode units do not expect enemy contact. Mark this mode with a Strat Mode marker. Entire stacks can be marked in this way. **A Strat Mode unit must be oriented so its Move Mode side is showing under the marker.**

The sole advantage of Strat Mode is that units move at double their MA. The mode does **not** confine them to road movement—they may freely leave the road net. There are several disadvantages: Strat Mode units **cannot** attack, overrun, or barrage. Units attacked while in Strat Mode have their Combat Strength and Action Rating reduced to ZERO.

5.8a Enemy ZOC. Units cannot enter Strat Mode when in an enemy ZOC. Units in Strat Mode cannot move or retreat into an enemy ZOC. If forced to do so (in a retreat), they are eliminated. (If an enemy unit moves next to them, nothing special occurs.)

5.8b Supply. Strat Mode units can never “eat off the map” and must end their movement in hexes where trace supply is currently possible. An HQ in Strat Mode cannot throw supplies.

5.8c Transport Points cannot enter Strat Mode.

5.8d Strat Mode units **cannot** use rail, air, and shipping transport.

5.9 Exploitation Mode



This involuntary mode is a combat result that rewards successful attacking units. Mark this mode with an Exploit

marker on top of the stack (the current Move or Combat orientation of combat units is not changed). Exploitation Mode units (and Released Reserves) can move and fight again during the Exploitation Phase (see 11.0).

Exploitation Mode units move using only 1/2 their MA. Their Combat and Barrage Ratings are normal.

Remove Exploit markers from **phasing** units during the Clean Up Phase. The unit is now in Combat or Move Mode, depending on its existing orientation.

5.9a Restrictions on entering Exploitation Mode are found in 9.13b.

5.9b Exploit markers have numbers to remind players of the minimum Action Rating (2, 3, or 4) needed for a unit in the stack to take advantage of the involuntary mode change. The old marker sheets lack these numbers and players need to rely on memory when using them.

5.9c Units retain any ZOC they had before gaining the Exploit marker.

5.10 Disorganized Mode



This involuntary mode, called “DG” for short, is a result of combat, retreat, or barrage. Mark this mode with a DG marker on top of the stack (with current Move or Combat orientation of combat units unchanged). Any other mode markers are removed.

Remove DG markers from the phasing player’s units during the Clean Up Phase. The unit is now in Combat or Move Mode, depending on its existing orientation.

5.10a Entering DG Mode. Combat units enter DG Mode when any of the following happens:

- They suffer a DG result from barrage or combat.
- They retreat two or more hexes (apply the DG marker the instant the unit retreats into its second hex).
- They retreat into an enemy ZOC. When units that are already in DG Mode retreat into an enemy ZOC, inflict one step loss on the retreating stack (not each unit). The owning player decides which unit takes the loss.
- At the moment a DG is inflicted, all combat units in the hex—even those not otherwise involved in a retreat (9.12e)—change to DG Mode. A

combat unit already in DG Mode suffers no further effect, except as noted in “C” above.

5.10b Effects of DG Mode. DG Mode units suffer the following effects:

- Their movement, combat, and barrage values are halved.
- Their Action Ratings are reduced by one. (**Exception:** the original (unmodified) Action Rating is used on the Attrition Table.)
- They are unable to overrun or earn Exploitation Mode.

5.10c Transport Points are exempt from DG results and are never placed in that mode for any reason. Note that Organic Trucks in Reserve in a hex that receives a DG result lose their Reserve marker.

5.10d DG Mode units **cannot** use rail, air, and shipping transport.

✓ **5.10e Engineering and Rebuilding.** Engineer-Capable units (13.8a) and Rail Repair units (13.3g) are still able to perform their special functions when DG, assuming they are oriented toward Combat Mode. This also applies to the specialized road-building and bridging units found in some games, and to HQs rebuilding units with replacements (13.5a).

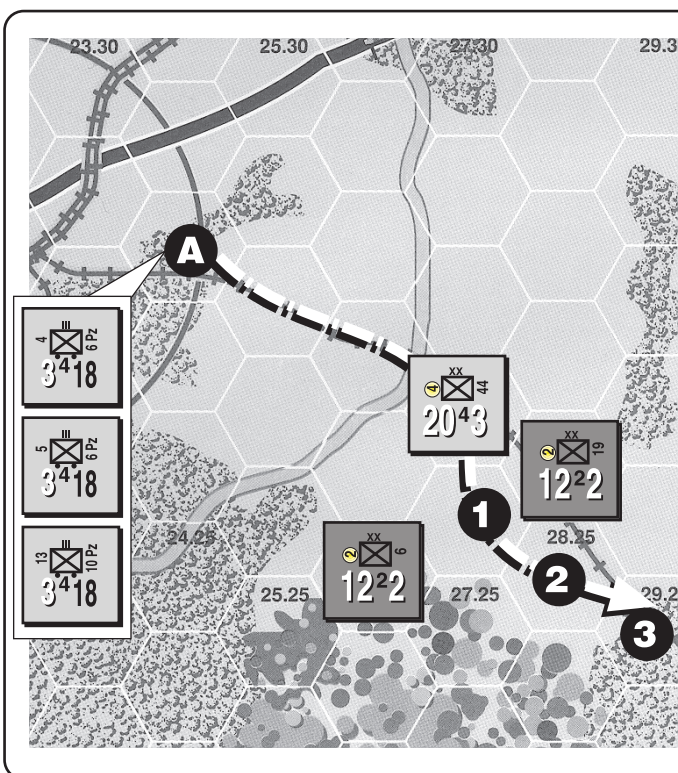
***Play Note:** The DG Mode engineering exception does **not** apply when non-engineer units are building Hedgehogs.*

6.0 Ground Movement

A player can move as many or as few of his ground units as he likes during the Movement Segment of his Movement Phase. Similarly, a player can move his units during the Movement Segments of his Reaction and Exploitation Phases, subject to mode restrictions. Each unit can move as many or as few hexes as desired, subject to MA, mode, supply, fuel requirements, and terrain.

6.1 How to Move Ground Units

Move units individually or in stacks. Movement must follow a contiguous path of hexes through the hex grid. Units can move in any direction or series of directions. Finish moving one unit (or stack) before moving another. Regular combat does not occur during movement, but Attack-Capable units can conduct overruns (a combined form of movement and combat) while moving.



Example: Laying a Carpet.

Mildly different from the normal movement through ZOCs case shown in the other example, here we have a bunch of truck-borne infantry wiggling through a tiny slot in the enemy line.

When the group at A hits hex 1, it must drop off one of the infantry regiments to ‘carpet’ the EZOC in that hex.

The remaining two units move to hex 2 and another must be dropped off to ‘carpet’ that hex as well.

The remaining infantry regiment can continue to hex 3 and points beyond, but will have to stop when it enters a later EZOC as there will be no further units to drop off.

6.1a Movement Points (MPs). Each unit expends MPs for each hex entered and hexside crossed according to the Terrain Effects on Movement Chart. Keep a running Movement Point total as each unit/stack moves.

6.1b Movement Allowance (MA). A unit’s MA is the maximum number of MPs it can use in a single phase. Different modes can give a unit different MAs—use the one associated with the unit’s current mode. Certain units (ports, Air Bases, Hedgehogs) have no MA and cannot move or retreat.

6.1c If eligible to move in a phase, a unit without enough MPs can still move a **minimum of one** hex. Units can **never** use this rule to overrun, violate restrictions imposed by their mode, or to move into or through prohibited terrain. Only units with a current MA greater than zero can take advantage of this rule.

6.1d A unit can move from hex A to hex B only if it could **also** move from hex B to hex A. For example, a unit prohibited from entering mountains could not move from a mountain hex to a clear hex through a non-road hexside. Note the possible impact on overruns, which cannot make use roads (8.1c).

6.1e The MAs of units in a stack are independent of each other, and the expenditure of one unit does not affect other units. A player cannot transfer MPs,

even if unused, from unit to unit or save them for later use.

6.1f Units can begin moving as a stack and then split up by dropping units off as the stack moves. Once dropped off, the unit **cannot** move further, even if some of its MA remains unused.

*Design Note: The “secret” here would be to **not** start moving as a stack if you want the separate units to split off and move elsewhere!*

6.1g Players **cannot** move units a portion of their MA, move some others, then return to finish the movement of the earlier (unfinished) units. Once a unit begins to move, it must continue until it is finished.

6.1h The MA of a unit in certain modes can be halved or quartered (see 5.7, 5.8, and 5.10). Never round MAs.

6.2 Terrain Effects

According to the Terrain Effects on Movement Chart, each hex and hexside feature costs a specific number of Movement Points. The moving unit must pay the **total required** cost before entry. (**Exception:** minimum moves, 6.1c.) A hex or hexside’s Movement Point cost varies depending on the mobility type of the unit: Tracked MP, Leg MP, or Truck MP (see 3.1).

In all cases below, the word “road” encompasses all road-like features (roads of different caliber, tracks, and railroads):

6.2a Roads can be used only if the moving unit is following a continuous road path. A unit then pays the road movement cost and ignores other features in the hexes or hexsides crossed. There is no requirement for roads to intersect **within** a hex in order to leave via any of them—roads and railroads are considered to be linked in a common hex even if it is not literally shown as such on the map.

6.2b Add the cost of any hexside feature crossed to that of the hex entered. (**Exception:** units moving along roads **ignore** hexside features.) **Bridges (road or railroad) and Pontoons** fully negate river hexside costs. (**Exception:** engineering functions, 13.8b.)

6.2c Ground units cannot enter or cross prohibited hexes or hexsides (unless using a bridge or roads). Destroy units forced to do so. See also 6.1d.

6.2d Multiple Terrain Types. Some hexes have more than one area terrain symbol. Use the type which is most costly for movement, with the exception being units following roads, tracks, and railroads. The amount of symbol in the hex does not matter for this rule.

✓ **Multiple Terrain on a hexside:** Unlike hex terrain, when crossing a hexside a

moving unit uses the *hexside* terrain of its choice. For instance, if the hexside is part lake and part clear, the hexside cost can be that of clear.

6.3 Restrictions on Movement

6.3a Only the designated player can move his ground units during a given phase. For instance, only the non-phasing player's units can move during the Reaction Phase.

6.3b Enemy Contact. Unless negated, an enemy ZOC stops ground movement using Truck MA units (see 4.5). Ground units can *sometimes* move into hexes containing enemy units (see 4.8c).

7.0 Reaction Phase

The Reaction Phase is a chance for the non-phasing player to disrupt enemy plans with movement, overruns, and barrages. There is no regular Combat Segment in this phase.

7.0a The only ground units that can be used in this phase are those the non-phasing player chooses to release from Reserve Mode. (**Exception:** Ground units can use Air Transport in this phase per 14.9d.) The non-phasing player can release as many or as few of his Reserves as he wants. See 5.7b for complete details. Artillery released from Reserve can conduct barrages in the Reaction Phase's Barrage Segment.

7.0b Handle barrages and overruns in the Reaction Phase normally.

7.0c The non-phasing player's ships and Active aircraft are all eligible to be used in this phase.

8.0 Overrun

Overrun is a form of combat that occurs during the various Movement Segments. Do not use these overrun procedures against a hex that doesn't contain enemy combat units—refer to 9.14 when moving into hexes with only enemy naval, air, and/or non-combat units.

Procedure:

Move the attacking stack adjacent to the target hex and declare the overrun. Overrun from the adjacent hex; the attackers do not actually enter the defender's hex until and unless the defender vacates it.

√ Resolve overruns like any other combat (follow the sequence in 9.2). Note the increased chance for Surprise (9.8) in overruns. If the attacker does not retreat and has sufficient MPs remaining after an overrun (regardless of whether the defender retreats or is destroyed), he can continue to move and can make further overruns against the same or other targets. If the defender retreats or is destroyed, the attacking units **must** enter the hex (at no additional movement cost) if allowed to advance after combat (9.12g).

Example: A unit that twice attacks a hex that would cost 2 MPs to enter and is successful the second time would find itself in the defender's hex with 6 MPs expended.

8.1 Overrun Restrictions

Only Attack-Capable units which started the phase stacked together can overrun. They must be in Combat, Move or Exploitation Mode. Units can overrun as many times as their MA allows. A given defender can be attacked any number of times during a single Movement Segment. Resolve each overrun separately.

8.1a Overrunning units spend 3 MPs for each overrun. If the combat result allows the attacker to occupy the defender's hex, there is no additional MP cost to do so. Units with fewer than 3 MPs remaining cannot overrun.

8.1b Overruns are only allowed if the MP cost to enter the hex (the combined hex, hexside, and Trainbusting costs) would be 3 MPs *or less*. A terrain that lists a cost of "All" cannot be overrun.

√ **8.1c** Units cannot use features such as roads or bridges to bring the hex's MP cost down, to negate prohibited terrain, or to meet the restriction of 6.1d.

8.1d Each overrun is made against a single adjacent enemy hex. A single hex can be overrun several times in a single phase. The same moving stack can make several overruns (against the same or different hexes).

8.1e No unit, regardless of the combat result, is **ever** marked with an Exploitation marker as an overrun result.

8.1f Should attacking units choose to take one or more of their options as retreats from an overrun, their movement for the phase ends. Attackers that do not retreat can continue movement.

8.1g Only units conducting the overrun can move in an overrunning stack.

8.1h Other friendly units can be in the hex from which an overrun is made. These units affect stacking in that hex, but are not involved in the overrun. The overrun's combat result has no effect on these units whatsoever—regardless of what it is.

9.0 Ground Combat

Ground combat occurs during the Combat Segments of the Combat and Exploitation Phases. Overruns are resolved using the ground combat procedure, with some differences, outlined in section 8.0. To engage in combat, the attacking units must be adjacent to the defending units. Attacking is never mandatory, but units **must** defend if attacked.

Artillery, ships, and aircraft do not attack ground units using ground combat. They "attack" using barrage combat as discussed in 10.0. Combat units that are not Attack-Capable never attack, but can defend. A hex that does not contain at least one **combat unit** cannot be attacked via the Combat Table. Such hexes are dealt with via Specialized Combats (9.14).

Procedure:

The attacker indicates the attacking hex(es) and the defending hex. Before determining any odds or modifiers, both the attacking and defending players must put their involved combat units into combat supply by either expending SP according to the Supply Table or expending internal stocks. The attacker does this first and if he cannot do so, the attack is cancelled and the defender does not need to expend any supply. If the defender cannot (or chooses not to do so), the attack continues, but the defender fights at half combat strength. Each player selects a unit whose Action Rating will lead the combat. Subtract the defender's Action Rating from the attacker's Action Rating and use the difference as a Dice Roll Modifier (DRM) **to both Surprise determination and the combat roll**. Roll two dice for Surprise to see if there are any "Surprise Shifts" to the Combat Table odds column. Determine the base Combat Table odds by comparing the combat strengths for each side (making all adjustments due to things like mode, terrain, and supply) as a ratio of Attacker:Defender (rounding as needed according to the standard rounding rule). On the appropriate terrain category row, locate the correct odds column on the Combat Table. If either player has Surprise, adjust the table column accordingly. Roll

two dice, add the final Action Rating DRM, and subtract the value of any Hedgehog DRM the defender might have. Cross-index the modified roll with the odds column to find the combat result. Apply that result, starting with the unit of each side whose Action Rating was used to determine Surprise.

9.1 Restrictions on Combat

9.1a Only the phasing player's units can attack in a Combat Segment, and only the moving player's units can overrun in a Movement Segment.

9.1b Attacking is voluntary. No unit is ever forced to attack.

9.1c No unit can divide its strength to attack more than one hex, nor can multiple defending hexes be attacked in one combined combat. No hex can be attacked more than once in a single Combat Segment, although a hex may be overrun more than once in a given Movement Segment (see 8.0). Except for stacking, there is no limit on the number of units that can engage in an attack from a single hex. During the Combat Segment, a hex can be attacked from as many adjacent hexes as the attacking player wants. Only the currently moving stack can overrun and so overrun attacks must come from one adjacent hex. A given unit may attack only once in a Combat Segment. Units may overrun more than once in a Movement Segment (8.1c).

9.1d Attack all combat units in a hex as a single defending strength. The defender can never withhold units in a hex from combat.

9.1e Units can be restricted in their ability to attack by mode (Strat Mode units and unreleased Reserves cannot attack), supply status (requisite SPs or Internal Stocks not available), terrain (see 9.1f), and unit type (parenthesized combat strengths can only defend). Fuel status does not prevent a unit from attacking or defending, nor does it influence the unit's combat strength.

√ **9.1f** A unit **cannot** attack a hex that the movement rules prohibit it from entering. If a terrain feature can be entered in movement, but only by using a road, combat is allowed—but the applicable modifiers may be extreme.

9.1g Resolve attacks that begin on, or are shifted past, odds further than those available on the table on the last available column. Also, attacks with odds which begin off the table have their column shifts measured from the last available column.

***Example:** A player makes a 1:12 attack (shame on him). The starting column for this attack is the furthest left or 1:5. Surprise is obtained and a column shift of 6 is given. The player shifts six columns from the 1:5 column to 3:1.*

***Design Note:** For best results while learning this system, use the summary on this page for each combat and follow the steps rigorously in order. Even after the sequence is well known, it is usually best to keep a copy out to follow as a check list to keep things straight. The order of the steps is important.*

9.2 Sequence Summary

- 1) The attacker identifies the defending and attacking hexes.
- 2) Both players expend required SPs (see Supply Tables). If the defender can spend no supply, or chooses not to do so, he defends at half strength.
- 3) The attacker announces his Action Rating value, then the defender announces his.
- 4) The defender announces terrain choices (9.3b) and players determine the initial odds.
- 5) Using each side's Action Rating unit, determine the Dice Roll Modifier (9.6).
- 6) Roll two dice to determine Surprise. Modify the odds column as per 9.8.
- 7) Roll two dice and modify by the DRM in 9.6 to determine the result.
- 8) Execute the results—attacker first, then the defender, starting with the unit of each side whose Action Rating was used to determine Surprise (9.11c).
- 9) If the defender's hex becomes vacant and the attacker has not retreated as part of an option result, the attacker can advance into the defender's hex.

9.3 Terrain and Combat Table

The Combat Table divides terrain into four categories (Open, Close, Very Close, and Extremely Close). These define the row used when determining the odds column. The Terrain Effects on Combat Chart defines the category of each terrain. In every case, the **defender's hex** determines the combat terrain category (9.4c).

√ **9.3a** This case has been moved to 9.1f.

9.3b Multiple Terrain Types. Some hexes have more than one background terrain symbol (woods, mountains, hills, etc.). The **defender** chooses what terrain to use (9.4b, 9.4c). The amount of symbol in the hex does not matter.

9.3c The exact effects of terrain are listed on the Terrain Effects Chart found in each game's specific rules.

9.4 Terrain and Unit Strength

Combat units are divided into three categories—Armor, Mech, and Other—per 3.2a. The combat strength of each combat unit category is sometimes modified by terrain. See the Terrain Effects on Combat Chart. For instance, attacking Armor is usually x2 in Open terrain.

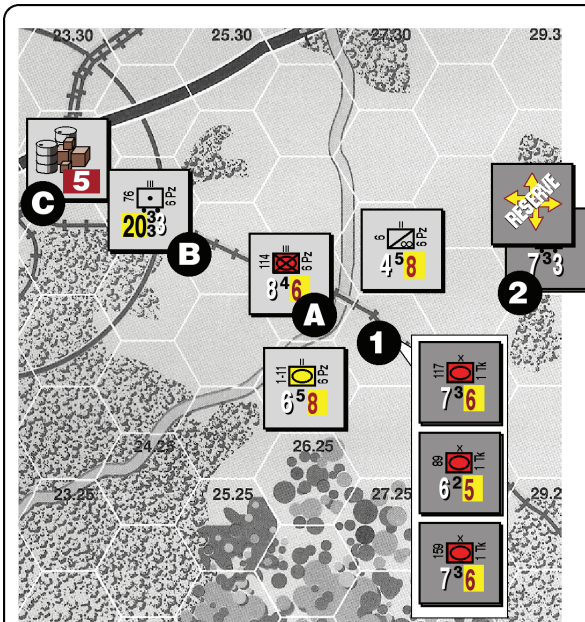
9.4a Apply Terrain Effects to each unit independently.

9.4b The defending player chooses the terrain for each **attacking** stack: either that in the defender's **hex** (Mountain, Swamp, Open, etc.), or the **hexside** (Rivers, etc.) the attack crosses. This selection is made **separately** for each attacking stack. Only the hex **or** the hexside can be chosen; these modifiers are **not** cumulative.

√ **Important Note:** A game's Terrain Effects on Combat Chart will *usually* mark with an asterisk situations where combat is possible only when hexes are connected by a road. But 9.1f still applies even if the asterisk is "missing" (due to the complex combinations of Movement and Combat types).

9.4c The defending player also chooses the terrain for the **defending** stack. This is made without regard to the selection(s) made in 9.4b. Only hex terrain (not hexside) can be chosen, and the selection also determines the terrain category line used on the Combat Table.

***Example:** A city hex is attacked from three adjacent hexes. Each of the three attacking hexes are across minor river hexsides. Two of the attacking hexes are open terrain, the last is a swamp. The defending player believes his city hex will hurt some of the attacking hexes more than the minor river (thinking there is armor there), so he selects the city hex as the terrain for two of the attacking hexes. The remaining attacking hex is all infantry, so the defender selects the river instead. That done, the defending player selects his city for his defense (Very Close in this case). The swamp in the other attacking hex does not matter.*



Example: Comprehensive Combat

This example covers many combat possibilities and interactions. At the end of the German Movement Phase, the forces are arranged as shown. In his Supply Phase, the German player checks the supply trace of his units and determines that all can be supplied. In the Soviet player's Reaction Phase, the unit at 2 releases from reserve. It has only 1.5 MPs to use, so it cannot make any sort of overrun attack to relieve the expected attack on Hex 1. It cannot even scurry over and stack in Hex 1 to add some to the defense. The

Soviet player decides not to move the unit and ends his Reaction Phase. As the first part of his Combat Phase (the Barrage Segment), the German player announces a barrage attack using the artillery regiment at B. It is to shell Hex 1. On the Barrage Table, the initial column is 17-24 because of the barrage strength of the artillery (20). He pays 3T (the cost noted on the Barrage Table) to fire from the dump at C (leaving 4 SPs + 1T). Resolve the barrage on the 17-24 column. The German player rolls two dice and gets a 4, giving no effect.

In the following Combat Segment, the German player announces the attack on Hex 1. He informs the Soviet player that the mech infantry regiment will attack across the river (x1/2) and the motorcycle and panzer battalions will attack on the same side of the river as Hex 1. With no HQ in the area to throw supply, he realizes that the two units he threw across the river cannot draw from the dump at C to obtain combat supply (counting back across the river in this case costs too much). Deciding that to not attack with these units would mess up the attack as a whole, the German player decides to attack with these units using their internal stocks. He places a 'Low Internals' under each and pays another 1T from the dump to allow the mech infantry to attack.

The Soviet player expends 2T for the mech. The German player announces the use of the motorcycle battalion (a 5) as his action rating unit. The Soviet player announces the use of a 3-rated tank brigade as his. This gives an action rating differential of +2. The combined attacking strength is 17 (4 for the motorcycle, 4 for the mech infantry attacking across the river, and 9 for the panzer battalion attacking in the open terrain). The defenders total 20 points. This gives a raw odds of 1:1.18 or 1:1. The German player identifies the 1:1 column of the open terrain line on the Combat Table.

With the +2 DRM identified earlier, the German player rolls for surprise. He rolls a 9, modified to an 11 which gives attacker surprise. He then rolls one die and gets a 2, giving a two column shift to the right, so that the combat will be resolved using the 3:1 column instead of the 1:1 one.

The German player rolls two dice and adds the action rating modifier—the roll is 5 which is modified to a 7. This gives a result of Ao1, Do1. The German player chooses to kill the motorcycle unit (his action rating unit) to satisfy the "o1" result. The defender's option must then be satisfied and the Soviet player decides to retreat one hex to satisfy it. He can do this without ill-effect. The remaining German units can, if the player desires, move forward to occupy the defender's empty hex. That ends this combat.

9.4d If a Terrain Effect is in brackets ([x2], etc.), then that modifier only applies to attacking units. On defense, all such bracketed modifiers are read as x1.

9.4e **Anti-Tank (AT) Effects.** In some situations, a x2 Terrain Effect for attacking Armor or Mech is reduced to x1.5. This occurs when the defender's hex has the same or a higher level of AT Effects.

- Heavy AT Effects are given to Hedgehogs, all Yellow-coded units, Red-coded units with a Tank Symbol (such as a Soviet Tank Brigade), and units with an Anti-Tank or Anti-Aircraft symbol.
- Light AT Effects are given to Red-coded units which do not have a Tank Symbol (such as Panzergrenadiers).
- No AT Effects are given to all other unit types.

Consider reductions to the attack multiplier on an individual unit basis.

Example: An attack has some Panzers (Heavy AT) and some Panzergrenadiers (Light AT). Normally, these units would all be x2 when attacking an open terrain hex. If the defending hex has some units that would provide Light AT Effects (but none that provide Heavy AT), the attacking Panzers would still be x2 but the attacking Panzergrenadiers would be x1.5. If the

defending hex had Heavy AT Effects, the attackers would all be x1.5.

Design Note: These Anti-Tank Effects show the reduction in the offensive power of mechanized units when confronted by defenses prepared for their threat. As a side benefit, they bring out the "hard-yet-soft" character of most Red-Mech units. Note the Red-Mech units with a tank symbol (and only that exact symbol) are a special case because they have inherent infantry strength as well as tanks.

9.5 Supply and Combat

Both combat supply and trace supply are needed to fight at full effectiveness. Trace supply status affects unit strengths independently of combat supply concerns, and any reductions are cumulative.

9.5a A unit marked Out of Supply (no trace supply during the previous Supply Phase) attacks or defends at half strength if combat supply is available. If Out of Supply and with no combat supply or internal stocks expended, units cannot attack and defend at 1/4 (in addition to any other applicable modifications).

9.5b Combat Supply (see the Supply Tables in the Charts & Tables) is paid at

the instant of combat using either SPs or internal stocks (12.10).

- A) Units without combat supply **cannot** attack.
- B) Units without combat supply defend at half strength. Defending units can choose to defend at half strength to avoid using combat supply (internal or otherwise) if the player desires.
- C) Internal stocks can **only** be used when regular supply is physically unavailable. (**Exception:** SPs loaded on Organic Trucks are **exempt** from this requirement.)

Design Note: This rule keeps players from relying on internal stocks (instead of using SPs) in situations where they can tell the unit involved is going to die. That would allow far too much micro-management—in effect getting the combat for "free." Allowing units to defend without supply is a safety valve for tight situations where the defending player might otherwise be the target of "supply soak-off" attacks.

Example: In a regular attack, a player attacks with 3 REs (in three different 1 RE units) against a defending 1/2 RE. To be considered in combat supply, the attacker must expend 3T, the defender must be able to expend 1T. In this case,

the attacker cannot expend the 3T, but has 1T. He must reduce the attack to one unit, use some internal stocks, or not attack at all. He cuts down the attacking force to one unit. The defender, however, is also unable to obtain combat supply and has no internal stocks remaining. His combat strength is halved in the resulting battle.

9.6 Action Rating Modifier

Action Ratings affect combat as Dice Roll Modifiers (DRMs). Each player selects the unit he wishes to use to determine his side's Action Rating. Choose only one unit per side. The chosen unit **must actively participate** in the combat. Calculate the DRM as follows: Attacker's rating minus Defender's rating = DRM. This number can be positive or negative. The attacker must announce his Action Rating choice first. The DRM is used to determine Surprise (9.8) and during Combat Resolution (9.9).

Players are free to select the unit of their choice as their Action Rating unit.

Important: Each side's **first step lost**, if any, in a combat result **must** be taken from their Action Rating unit. This does not apply to losses taken in barrages or retreats. In those cases, the owning player can take the loss from **any** of the involved units. See 9.11c for more detail.

√ **9.6a Mode Considerations.** Mode can reduce Action Ratings. Subtract one from the Action Rating of DG units. Strat Mode reduces a unit's Action Rating to ZERO.

9.7 Odds Determination

To determine the raw combat odds, use the total modified attacking strength and the total modified defending strength. Divide **both** by the **smaller** of them and apply the rounding rule (see 4.2) to each result. Express the resulting numbers as a ratio of Attacker:Defender.

9.7a The Combat Table has a row devoted to each terrain category. Find the odds determined above on the correct row, using the terrain in the defender's hex. Use the highest column that is **less than or equal** to the determined rounded odds.

9.7b Odds are limited to those printed on the table. Resolve attacks that fall outside the odds listed on the table on the last available column and begin any shifts from there (see also 9.1f).

9.8 Surprise

After players have identified their Action Rating units and have determined the combat odds, check for Surprise. Roll two dice and add the DRM determined in 9.6. Subtract one from that roll if the defender is in any Level of Hedgehog. Check the modified roll against the Surprise Table to determine which player (if any) gets Surprise. **If Surprise occurs**, roll one die and shift the final odds column on the Combat Table that number of columns. These shifts are to the **right** for attacker Surprise and **left** for defender Surprise. If no Surprise occurs, make no shift.

The **type of attack** (overrun or regular) determines the Surprise Roll needed for each side.

Play Hint: Roll three dice at once—the two “Surprise” dice and an off-colored “shift” die—to speed Surprise checks and play.

Design Note: Surprise mechanics and effects have been the subject of some debate over the years. Some go into a state of shock at the thought that their odds might shift six full columns (infrequent, but it can and does happen). It is instructive to look at the “massive” changes involved in the above examples. In the first, a rather middling three-column shift in the attack's favor generated the following difference in effect: The attacker's 3's get exploit, whereas a 4 AR would have been required before, and the defender gets one additional hard loss and a DG he might have had anyway. In the second example, this time with the **maximum** six column shift against the attack, the difference is one step loss for the attacker (but the option disappears) and the defender option is lost.

Example: A 5-rated unit attacks a 0-rated unit in overrun. This gives a +5 (!) to the Surprise dice roll. The player rolls an 8, modified to 13 giving attacker Surprise. He then rolls one die and gets a three, which shifts the combat odds three columns to the right. **Note that the +5 Action Rating DRM is also applied to the Combat Table Dice Roll.**

Let's assume the above attack was 4:1 in the open. The column shift moves the odds to the 9:1 column. The player rolls his dice giving a 7 (modified by +5 giving a 12), and the combat result is Ae3, DL2o2DG. Without the column shift, the same battle would have resulted in an Ae4, DL1o2.

For the sake of argument, reverse the above (the 0 attacking the 5 in an overrun). This

is not recommended! The Surprise roll is 10 modified by -5 for the Action Ratings involved, giving a 5. That gives defender Surprise in an overrun. A six is rolled for the number of column shifts. Shift left six columns from the 4:1 in the open column to the 1:4 column. A combat roll of 7, modified to a 2 by the Action Rating differential gives a combat result of AL2. Without Surprise, the result would have been AL1o1, Do1.

9.9 Combat Resolution

After determining odds, Surprise, and any column shifts, roll two dice. Add the Action Rating DRM (9.6) and subtract the full value of any Hedgehog in the defender's hex. If the modified roll is less than 1, make it 1. If it is greater than 15, make it 15. Cross index the **modified** dice roll with the final odds column to find the result. Execute the result according to the 9.10 through 9.13 below.

Note that the Hedgehog modification is different for the Surprise Action Rating DRM and the one used for the combat roll itself. Surprise uses -1 regardless of Hedgehog Level while Combat uses the full value of the Hedgehog.

9.10 Retreat/Step Loss Option

Players are sometimes given a choice in the exact combat result. The combat result might give a “loss number” and an “option number.” The “option number” is given on the Combat Table as “o” followed by a number—that number being the side's option result. The loss number represents the **required** step loss. Destroy those steps. Ensure the first step lost comes from the side's Action Rating unit. The option number represents the retreat/step loss option available. An option may be met by any combination of retreat hexes and step losses provided the correct total is executed. A unit **cannot** retreat more than this number. If there is a retreat, all involved units **must** retreat the same number of hexes. *The attacker always goes first—he must decide how he will exercise his option before the defender decides.*

9.10a The defender can choose to **ignore** his options if the attacker retreats or cannot take all options. The defender can always choose to apply his full option if he wants to retreat. The attacker must always fulfill all his option results, even if the defender is destroyed.

Examples: (Some results have been “invented” and do not exist on the table. They are here only to show rule application.)

- A) Ao1, DL1o2...attacker retreats, defender’s result becomes DL1.
- B) AL1o1, Do1...attacker dies by the L1, defender ignores result entirely.
- C) Ao1e4, DL1o2...attacker kills one step (and maybe gets his exploit result), defender must lose 1 and execute both option results.
- D) AL1, Do1...attacker dies (or otherwise takes his required step loss), defender must execute his option.
- E) Ao1, DL1o1...lone defending step is destroyed. Attacker must execute his option.

9.10b When results contain both option and exploitation numbers, the attacker must take his entire option as a loss to earn Exploitation Mode. If the attacker chooses to retreat, ignore the exploitation result entirely.

9.11 Step Losses



Brigade and smaller units usually have one step. Destroy these units when they lose a step. Divisions have one step per RE. Mark their step losses with step loss markers under the unit. When the marker equals the total steps available to the unit, destroy the unit. No unit can absorb more step losses than it has available.

9.11a The owning player determines which unit or units absorb step losses, within the restrictions of 9.11c.

9.11b Results given as “L” followed by a number **must** be taken as step losses.

9.11c Step Loss Distribution. Units giving their side’s Action Rating must lose the **first** step loss of their side in a combat. (This does not apply to losses in a retreat or barrage.) In case of multiple losses, all units must take one step loss before any unit takes two. Ignore step losses beyond the side’s ability to absorb them. This rule does not apply to barrages. In these, the player owning the struck units has full control.

Example: A stack takes 4 step losses, but only possesses 3 steps. The stack is eliminated and the remaining loss is ignored. In another example, a hex containing a three-step division and a single-step unit suffers two step losses. The

division provided the AR for the attack. The division suffers the first step loss; then the one-step unit, being the only other unit in the hex, is destroyed by the second loss.

9.11d Effects of Step Loss. Combat units missing one or more steps halve their combat strength when attacking. If they lose half or more of their original (printed) steps, their combat strength is also halved on defense. (See also option 21.2.) Destroyed units are placed in the dead pile for possible future rebuilding.

Example: An infantry division with three steps (14 combat strength) loses one step. Place a “one” step loss marker under the division, its attack strength is now x1/2, while its defense strength is normal. Later, the division loses another step. Flip the one step loss marker to its “two” side. The division’s combat strength is now halved to 7 in both attack **and** defense. A further step loss will destroy it.

9.11e A division’s current RE size is that division’s printed RE size minus the steps it has lost.

9.12 Retreats & Advances

Any option result not taken as step losses (unless exempt due to 9.10a) must be taken as a retreat. All units involved in a combat must retreat the remaining result’s number of hexes. Eliminate units unable to retreat because of enemy-occupied hexes, prohibited hexes, or which must overstack at the retreat’s end.

9.12a The “DG” result on the Combat Table forces all defending units to immediately enter DG Mode. Do this before beginning any retreat (important due to 9.12e). Units that retreat 2 or more hexes **must** enter DG Mode the instant they enter the second hex of their retreat. Note that the step loss in 9.12e **only** applies if the stack or unit was DG **before** it entered the hex.

9.12b Units with a zero MA change to Move Mode before retreating. Units unable to move on their own in any Mode are destroyed if forced to retreat.

9.12c Direction. Players retreat their own units. Retreating units can retreat as a stack or split up. A retreat should be generally away from enemy units involved in the combat, but to avoid losses, retreating units are allowed to bend the definition of what is “locally to the rear.” A retreat must always end the full distance from the hex where it began (no zigzags or yo-yo movements are allowed), but does not have to be in a straight line.

9.12d Tagalongs. Ground units that did not participate in a combat can sometimes join a retreat: Organic Trucks and combat units **can** tag along. Transport Points (except for Organic Trucks), ships, aircraft, ports, Hedgehogs, and dumps **can not** tag along, and must remain in the hex.

9.12e Enemy ZOCs. A combat unit that retreats into an enemy ZOC becomes DG, as must any friendly combat units that ‘just happen’ to be in the hex. In addition, if any part of the retreating stack was DG *before* entering the enemy ZOC, lose one step from the stack (owning player’s choice from among the *retreating* DG units). This ZOC effect cannot be “negated” by friendly combat units and is never affected by terrain.

9.12f Enemy Units. Retreats cannot be through enemy combat units. Handle non-combat units, aircraft and ships as you would during regular movement.

9.12g Advance After Combat. If all the defenders are destroyed or forced to retreat, attacking units can enter the defender’s hex. This is an “advance after combat.”

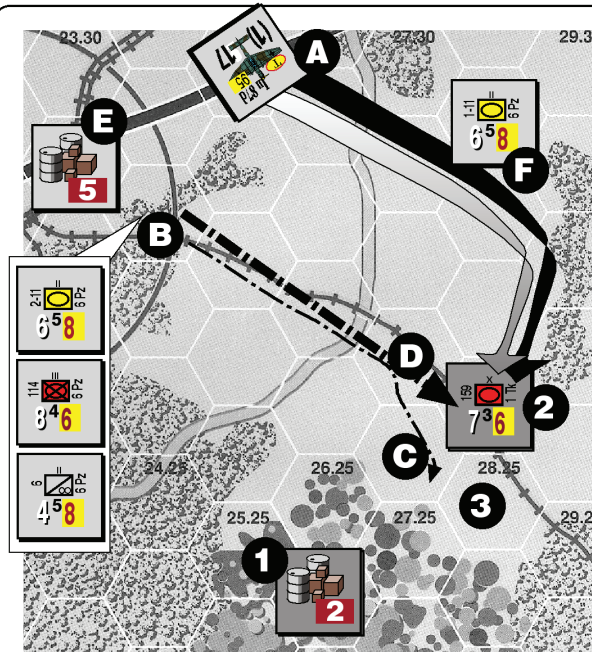
- A) Only those units contributing to the attacker’s combat strength (including those with a combat strength of 0) can advance.
- B) If the attackers take their option as a retreat, no advance is possible.
- C) The owning player chooses which attacking units (if any) advance. Note that a successful overrun **requires** advance after combat.
- D) Advance after combat could result in the capture or destruction of enemy ships, aircraft, and non-combat units. See 9.14.

Design Note: The “retreat next to the enemy” rule needs some explaining, especially the part about friendly units having no effect on it. A retreat being an unplanned movement, even if the unit retreats into a hex “protected” by a friendly unit, results in great confusion. This is why both the retreating unit and the units it retreats through become DG.

9.13 Exploit Results



Some attacker results include a notation of “e” and a number. Mark attacking units with an Action Rating of that number or higher with an Exploitation marker. Those units enter Exploitation Mode. Such units **must** have *contributed* to the combat



Example: An Overrun Attack with a Hipshoot.

In this case, the German player wants to overrun the Soviet Tank Brigade at 2 with the stack at B after preparing the target with a hip shoot airstrike.

First, he wants to provide the spotter for the airstrike (to avoid column shifts). Taking a quick look at the situation, he decides to use the motorcycle battalion already with the stack at B. He could have chosen any of the other friendly units available here for this task. Glancing at the enemy situation, the German player determines that if the motorcycle battalion goes to hex C, then he will cut the ability of the target to draw on the SPs at 1 (the only SPs available) as hex 3 will be blocked. This will not affect the defense (the target brigade can still use internals)—but the German player (still thinking ahead) has his eyes on capturing that dump for his own purposes and doesn't want the Soviet player using any of it before he

gets there. He could have run the motorcycle battalion into the dump right now to grab it, but decided not to since the MP costs of the terrain (the dump is in heavy forest) would preclude the battalion making it back to C to perform its original function as a spotter. Since the motorcycle battalion is using tracked MPs, it can slip through hex D to C without any problems, but does need to have fuel expended. The German player pays 1T for this.

The motorcycle battalion in place, the German player rolls in an airstrike by a single Stuka (A). He plops the Stuka down on hex 2 and announces the hip shoot. The Soviet player has no flak modifier and rolls two dice for Flak getting no result. The German player now resolves his barrage attack. On the Barrage Table, he begins at the 17-24 column. Of the possible shifts, only one applies—there is 1 RE in the target hex, so a shift one column to the left is in order. The final column is 12-16. The German player rolls two dice getting an 8 which DGs the target. The target is marked with a DG marker and the Stuka returns to a base and becomes inactive.

Having done his preparations, the German player can now launch his overrun. He pays 2T from the dump at E (leaving 4 SPs + 1T, 1T having already been spent on the motorcycle Bn's fuel) to fuel the movement of the two attacking units. He chose to do this instead of paying 1 SP for the whole division because he feels it will be cheaper for him and does not think these units will be moving later in the turn (the 1T per unit payment only lasts for the current phase). The unit at F cannot join in the overrun because it did not begin the phase stacked with the others. The two overrunning units expend 3 MPs to get to hex D and announce the overrun. The overrun costs an additional 3 MPs (which both units can pay).

Both sides pay for their combat supply for this attack—the overrunning units pay 2T from the dump at E (leaving 3 SPs + 3T); the defending unit uses its first internal because he cannot reach any real SPs (but does not mark it yet, as the Soviet player feels his unit will die in the combat).

The action rating unit for the Germans is announced as the panzer battalion (a 5 rated unit). The Russian player has only one unit to choose from which in this case is a 2 because of the DG, so a +3 differential affects the combat. The German player rolls two dice for surprise and adds the differential. The raw roll is a 6 which when modified hits the minimum required to get attacker surprise. Another die is rolled giving a two column shift for the Combat Table.

In this attack, both German units would be doubled because of Special Modifiers (armor and mech are x2 in the open), but are only x1.5 because of the Tank Brigade's AT Effects, for a modified combat strength is 21.

The defender has no Special Modifier effect to worry about in this case, but is x1/2 because the unit is DG for a modified combat strength of 3.5. The raw odds are exactly 6:1, but there is no such column on the Open terrain line, so he must use the next lower column (5:1). He then shifts up 2 columns (for surprise) to the 9:1 column and determines the action rating dice roll modifier (+3, the same as the differential used before in surprise). He rolls two dice (getting a 4) and adds the 3 modifier. The combat's result is on the 7 die roll position of the 9:1 column, or Ao1 e4, DL1o2.

Even though the defender is destroyed by the L1 result, the attacker option result stands. The German player must choose to lose a step or retreat. Retreat would end the movement of these units, if a unit is to be killed, it will have to be his lead unit (the panzer battalion)—the German player kills the unit so his other units can advance after combat. The exploit result of 4 is ignored as this attack is an overrun and not occurring in the player's regular Combat Phase. Remove the defending unit from the map and move the overrunning force into the target hex. The mech infantry regiment must stop there (it has used all its MA). Either way, that ends this overrun combat.

that generated the result. This means units which are not Attack-Capable can never be marked for Exploitation.

9.13a Exploitation Mode units can move and fight in the coming Exploitation Phase.

9.13b Ignore Exploit results when:

- A) Attacking units in DG Mode. (Other attackers in the same attack treat exploit results normally.)
- B) Overrun attack.
- C) Exploitation Phase combat.
- D) Two attacking stacks are not mutually adjacent. Thus in order to keep an exploit result, **at most** two stacks can be attacking and they **must** occupy adjacent hexes.

9.14 Specialized Combats

9.14a Units with a Zero Combat Strength. When attacking or defending, some special rules apply to units with a 'zero' combat strength. Attacks against zero strength begin on the right-most column on the Combat Table (before adjusting for Surprise shifts.). Attacks with zero

strength must be supplied normally, and begin on the left-most column. If both sides manage to have a zero strength, call it 1:1 and shake your head.



9.14b Dumps. Dumps do not take part in regular combat (or overruns). When stacked with combat units that attack or defend, SPs add no strength and cannot be used to absorb step losses. Dumps never retreat.

Whenever enemy Attack-Capable units move or advance/retreat into a dump hex, the dump is captured. Roll on "Dump" column of the Capture Table to determine how many SPs are retained by the capturing player. The remainder is destroyed.



9.14c Transport Points. Transport Points do not take part in combat. When stacked with combat units that attack

or defend, Transport Points add no strength and cannot be used to absorb step losses. Transport Points never retreat. (**Exception:** Organic Trucks 9.12d.)

Whenever enemy Attack-Capable units move or advance/retreat into a hex with

Transport Points, some of the Transport Points may be captured (and the remainder displaced some number of hexes). Roll on the appropriate column of the Capture Table and follow the instructions beneath the table. Capture Table results affect Transport Points and their cargoes equally. Enemy units, ZOCs, and prohibited terrain have no effect on Capture Table displacements—just pick up the Transport Points and place them in their new location. Transport Points can move right after their capture if captured in the Movement Phase. If a hex contains both regular Transport Points and Organic Trucks, the owning player decides which are captured and which are displaced.

√ Transport Point capture usually rounds to full point increments (only round to token-size trucks if the game's counter mix includes them). SP capture (even when loaded on a truck) always rounds to tokens.

Important Note: Transport Points deployed as Extenders **never** suffer losses from the Capture Table, nor are they figured into the total number of Transport Points in a hex when calculating the percent loss. Instead they "collapse." Collapse can come

automatically (when the enemy enters their hex) or voluntarily (as the Extender's regular movement).

Place the Extender in any desired hex within its special draw range currently in trace supply. It suffers no loss in doing this. Ignore enemy units when executing a collapse. Flip the Extender to its **regular** Transport Point side in the new hex. If no hex exists in range where trace supply is available (shame on you!), then just flip the Extender in place and it does not collapse...it takes losses like any other Transport Point.

This procedure is also available, at the player's option, to Extenders that lose trace supply, see 12.7d.

Example: *In a hex there are four Trucks and 12 SPs (four of the SPs are loaded on the trucks). A German Motorcycle Battalion roars into the hex at no additional MP cost. (The Soviet player neglected to garrison this hex, shame, shame.) The German player then consults the Capture Table. First, he rolls for the trucks and supplies thereon using the table's second column. He rolls a 1: that gives no Trucks or SPs to the German war effort. The four Trucks and their SPs displace up to ten hexes under the Soviet player's control. Determined to make up for his previous failure, he rolls for the remaining eight SPs and gets a 5. That gives a 50% result. 50% of the SPs are captured, the remainder is destroyed. This gives the German player four SPs to use, and the remaining four SPs are destroyed. The Motorcycle Bn can continue movement with its remaining MPs.*

9.14d HQ and Artillery Units. See 13.1c and 13.4b.



9.14e Hedgehogs. An enemy Hedgehog is captured merely by having an **Attack-Capable** unit move or advance/retreat into its hex. Units must be Attack-Capable to enter a hex with an enemy Hedgehog.

9.14f Air Bases. Air Bases do not take part in combat. When stacked with units that attack or defend, Air Bases add no strength and cannot be used to absorb step losses. Air Bases never retreat.

Players can capture and use enemy Air Bases, but never aircraft. An Air Base is captured when an enemy Attack-Capable unit moves or advances/retreats into the hex. Captured Air Bases can be used immediately.

Regardless of weather conditions (*i.e.* even if flight is not allowed), execute the

following when an Air Base is captured: Roll for all enemy aircraft using the Air Base Capture Table. Apply the results as shown ("reduction" or "no result"). Then the remaining aircraft displace to any friendly Air Base within **2x range** and become Inactive regardless of their status before the roll. They **cannot** remain in the hex; they **must** displace and become Inactive. If no friendly Air Base exists in 2x range, the aircraft are destroyed.

9.14g Naval Interactions. When Attack-Capable ground units move or advance/retreat into a hex containing enemy ships (including DUKW operating as LC), the ships are destroyed.

9.14h Ports. When Attack-Capable ground units move or advance/retreat into a hex containing an enemy port, they capture the port. The port can immediately be used for both shipping and as a possible source of trace supply.

10.0 Barrage

Artillery, ships, and aircraft conduct barrages against enemy units and facilities to damage or destroy them. There are two barrage tables; use the one appropriate for the target. Although more than one unit can attack in the same barrage, only units of the same general type—artillery, naval, or air—can combine in a single barrage. See 18.3 regarding Naval Barrage Fires.

The appropriate units can conduct barrages in the Barrage Segments of their Movement, Reaction, Combat, and Exploitation Phases. If a side is capable of aircraft Hip Shoot barrages (see 14.7d), these special barrages are conducted during the various Movement Segments. Any number of artillery or ships, or up to four aircraft, can participate in a single barrage.

The following general procedure is used in all types of barrages (air, artillery, and naval) and when using either of the barrage tables. Total the barrage strengths firing, determine the correct column on the table, expend supply using the amounts listed on that column (for artillery firing only), and adjust the column per the table's notes. Roll two dice and apply the result.

√ It always takes at least 1 point to "get on the table" (before shifts are applied). No 0-point barrages are allowed!

10.0a Barrage Table. Use the Barrage Table to conduct barrages against enemy combat units. The primary goal of the Barrage Table is to DG enemy units.

The targeted player can freely select the units in the stack to absorb any required step losses.

Note that a single division (even a multi-unit formation) never counts as more than 3 RE for density purposes. (Use the actual amount, if less than 3 RE.)

Play Hint: Roll three dice at once—the two "barrage" dice and an off-colored "rounding" die (for possible "1/2" results or Flak-related DRMs) to speed barrage resolution and play.

10.0b Spotter Restrictions. A Barrage Table attack that has no correct spotter is penalized by a **3-column** shift. Spotting does not apply to the Barrage vs. Facility Table used in 10.0c.

√√ **Exception:** Hip Shoots (on either table) cannot be made without a correct spotter.

A "correct spotter" is any friendly combat unit adjacent to the target hex that is not loaded on a landing craft.

10.0c Barrages vs. Facility Table. Use this table for barrages against facility-type targets. The player must pre-designate his specific target in the hex: Air Base or port. One additional facility-type barrage by aircraft is Trainbusting. No modifiers or terrain effects apply to these barrages. Roll a single die to determine the result.

- A) Air Base Targets.** If a parenthesized result occurs in a barrage on an Air Base, the attacking player checks **all** enemy aircraft in the hex for losses using that value. Make a separate roll for each. If the roll is greater than or equal to the value, the aircraft takes a step loss. The numbered results (1 and 2) reduce the Air Base by that number of levels, down to a minimum of Level 1. Airstrips are not reduced.
- B) Port Targets.** Numbered results (1 and 2) generate damage; other results have no effect. Ports accumulate damage, up to a maximum of four hits, which steadily decrease the port's capacity (19.0b).
- C) Trainbusting.** On "*" results, place a Trainbusting marker in the hex. This makes enemy rail transport through that hex and the adjacent ones more costly and adds to the cost of enemy ground movement in that hex and the adjacent ones, per 14.8. Remove these markers during the next **enemy** Clean Up Phase. Additional results have no added effect.

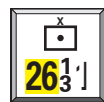
10.0d Barrage vs. Dump/Transport Point Table. This process was eliminated in v4.

10.0e Barrage Limits & Phasing. Several restrictions are placed on the conduct of barrages by certain units and in certain phases:

- A) Regardless of the number of target-types in the target hex, only **one** barrage per phase per target hex is allowed. (**Exception:** Hip Shoots do not count against this limit.) A declared mission that is completely destroyed/aborted by Flak or Interception *does* count against this limit.
- B) A unit can only perform one barrage per phase and cannot split its strength between several barrages or fire at less than its printed strength.
- C) Only air and naval barrages can be performed during the Movement Phase, mainly during the Movement Phase's Barrage Segment (the exception being Hip Shoot barrages, which occur during the Movement Segment itself).
- D) Only artillery barrages can be performed during the Combat Phase.
- E) Air, naval, and artillery barrages can be performed during the Reaction and Exploitation Phases.
- F) A single barrage can use only a single type of unit: air, naval, or artillery.

10.0f Barraging Mixed Target Hexes. Hexes will often contain targets that are affected in different ways by different barrage tables. In any barrage, the attacking player must announce a general target (such as "combat units" or "port") and apply the Barrage Points to that target only. An example would be a hex with combat units, an Air Base, and a port in it. The player can use the Barrage Table to attack the combat units **or** the Barrage vs. Facility Table to attack either the port or the Air Base (but not both at once).

10.1 Artillery Barrages



10.1a Artillery ranges are given in hexes and are unaffected by terrain or weather. An artillery unit with a range of 3 would be able to barrage targets from 1 to 3 hexes away.

10.1b Supply Cost. Expend combat supply to conduct an **artillery** barrage at the moment of the barrage. The supply cost is noted near the top of the appropriate table;

use the initial column (before shifts). If the amount required to fire the barrage is not available, do not execute the barrage. There is no penalty; units selected for a cancelled barrage are not considered to have fired.

- A) All supply needed to fire a multi-unit barrage must come from either the same HQ or same direct draw point (if no HQ is used).
- B) Artillery units marked Out of Supply still barrage at full strength (assuming combat supply is available).
- C) **Barrages can never be made using internal stocks.**

***Example:** Two artillery battalions, within range, barrage a hex. The total barrage strength is 16. The firing player identifies the column on the Barrage Table (12-16). That table requires 3T to fire. The player pays 3T to execute the shot. Checking for modifiers, he finds the target hex containing 8 REs and a Level 1 Hedgehog, in close terrain. An appropriate spotter is adjacent to the target hex. The total column shift applied to the initial column is two to the right (4 right for the REs, one left for the Hedgehog, and one left for the terrain). This gives a final table column of 25-40. The player rolls two dice and obtains an 8. The result is [1/2]. In this case, as neither of the conditions for a bracketed result apply (there is a unit adjacent and the target is not in a Level 3 or greater Hedgehog), the result is treated as a regular "1/2." The firing player rolls one die and gets a 3. The target hex does not lose any steps, but is Disorganized.*

10.2 Air Barrages

Barrages by aircraft are covered in 14.7. They are very similar to artillery barrages, but never have a combat supply cost and also involve Interception and Flak.

10.2a Air Barrage and Phasing. Aircraft are placed on their target and resolve their barrage in the various Barrage Segments. (**Exception:** Hip Shoots occur during Movement Segments.) The aircraft **must** return to a base and become Inactive immediately afterward (14.1c). Aircraft conducting a barrage are subject to Interception and Flak (see 14.4 and 14.5), which are resolved before conducting the barrage. Hip Shoots are a special kind of air barrage governed by various special rules (see 14.7d).

10.2b Air Barrages and Range Effects. Aircraft barrages are affected by range.

If all aircraft conducting a barrage are at or within 10 hexes of their base, they get an additional shift to the right on the regular Barrage Table. **Never** apply this to Strat Bombers.

10.2c There is never a combat supply cost for an air barrage.

10.3 Naval Barrages

Barrages by ships are covered in 18.3. They are very similar to artillery barrages, but never have a combat supply cost.

11.0 Exploitation Phase

During this phase, units can exploit a breakthrough or finish off a battered defensive position.

11.0a The only ground units able to move or fight are Exploitation Mode units and units released from Reserve Mode during the phase. (**Exception:** Ground units can use Air Transport in this phase per 14.9d.) The phase consists of a Movement Segment (which allows overruns), a Barrage Segment, and a Combat Segment.

11.0b The phasing player can release any Reserves during this phase, as per 5.7b. He is not required to do so and can wait to see how things are proceeding in the phase before releasing additional Reserves. To keep things straight, players should mark such released Reserves with an Exploitation marker. **Remember:** Units actually in Exploitation Mode can move **only** half their MA; released Reserves can move their full MA in this phase.

11.0c Handle Exploitation Phase combat (barrage, overrun, or regular) normally.

11.0d The phasing player's ships and Active aircraft are all eligible to be used in this phase.

***Play Note:** Having Reserves that can be released in the Exploitation Phase is often the critical factor determining the success or failure of an operation.*

12.0 Supply

There are two supply types: on-map supply and abstract trace supply. On-map supply, represented by SP (and Token) counters, is primarily used to pay artillery barrage, combat supply, and fuel costs. Trace supply

is used to determine whether combat units are “in supply” during their Supply Phase. SPs can be used to provide trace supply when combat units do not have a valid supply line, but trace supply can never be substituted when SPs are needed.

On-map supply is normally stockpiled in dumps set up behind the front lines. Units sometimes are close enough to draw supply directly from the dump, but more commonly supply is “thrown” to them by an HQ unit nearer to the dump.

Trace supply is handled a bit more abstractly. Combat units must trace a path to a supply source, usually a port or a map edge hex. As with on-map supply, HQs are typically used to put the front lines in trace supply. Rail connections and Transport Point “Extenders” are often used to cover long distances back to a supply source.

IMPORTANT: Only combat units require supply. Non-combat units, ships and aircraft never consume SPs or need trace supply (their supply needs are not explicitly modeled). (**Exception:** Air Bases require supply to refit aircraft.)



Note: The graphic displayed on the SPs differs from that on Tokens so that they are easy to tell apart, and the graphic on the Token counter does not imply that Tokens are only used for ammunition. SPs and Tokens are identical except for their denomination (Tokens being fractions of an SP).

12.1 Supply Points



12.1a Mechanical Handling.

Players can break down and add together SPs in the same hex by “making change” with SP counters of equal value. Players can further break down SPs to Tokens, which are the small change of the logistical currency. **One SP equals four Tokens or conversely, one Token equals 1/4 SP.** Combine Tokens into SPs whenever possible to reduce stack clutter. The abbreviation used for Token is T, so the shorthand for two Tokens is 2T.

Examples: A player must spend 1T to fuel a moving tank unit from a supply dump with a 2 SP counter. Flip the 2 SP counter to its 1 SP side and expend 1T of the other SP to pay for the fuel (which leaves 3T in “change” at the dump).

To pay for a 2T barrage out of a player’s 5 SP dump, the player must do the following. 2T is the same as 1/2 SP, so the player

knows his dump will expend 1/2 SP and have 4 1/2 SPs remaining. Take away the 5 SP counter and replace it with a 4 SP counter. This leaves the 1/2 SP, which is the same as 2T, so place a 2T counter in the hex.

12.1b Supply Dumps. Any location containing Supply Points, whether loaded on a Transport Point or not, is called a dump. SPs do not have to be unloaded to be used.

12.1c Generic Supply Dumps. The v4.0 markers provide a number of SP markers with a letter designation instead of a number. These can be used as Supply Dump markers for any number of SPs. Place the marker on the map and record the number of SPs in the dump on a scrap of paper. Aside from the paper record, these dumps are the same as any other SPs in the game. Remove the marker if the dump is ever emptied.

12.1d Ownership of Supply Points. Since the SP counters are common to both players, it is important that players keep track of who owns what. An SP belongs to (and can only be used by) the player who brought it onto the map unless it has been captured (see 9.14b).

12.2 Transportation of Supply

A player can transport SPs using Transport Points and his air, naval, and rail assets. The capabilities and limitations of each appear in rule sections governing each method (13.2, 13.3, 14.9, 14.10, 18.4, and 19.0).

12.2a Leapfrogging. No SP can be moved by more than one type of transport (shipping, rail, Transport Point, etc.) in a single phase, nor can an SP be loaded if it was **unloaded** previously in the same phase.

12.2b It is **not** a violation of the leapfrog rule if SPs are moved across the map and **then used** in the same phase.

12.3 On-Map Supply

Supply Points are used in various phases to fuel movement, supply combat, refit aircraft, resupply internal ammo stocks, pay for construction costs, and as a substitute for needed trace supply.

Note: Players use the **same** mechanics of direct draw and HQ-throw **any** time they need supply for **any** purpose (trace, fuel, combat, construction, ammo restocking, or aircraft refit).

12.3a Direct Draw. To draw supply, units must be within 5 MPs of a dump, or a hex that is **adjacent** to the dump (12.3c). Needed supply can be drawn from one or more dumps within range.

Always use Truck MPs when counting the path back to a dump. (**Exception:** for HQs, if the HQ’s throw range is in another mobility type, use that mobility type.) Count the MPs back to the dump just as when moving a unit. If a path of 5 MPs or less can be found, the dump can be used. Fuel is never required to draw supply.

12.3b Throwing Via HQ. An HQ able to draw SPs from a dump (per 12.3a) can then pass needed supply forward to the extent of its printed throw range. An HQ’s throw range, in MPs, appears on the counter. The mobility type of the throw range is indicated normally, by its color. To throw supply, count a movement path using this throw range from the HQ to the unit needing supply, or a hex **adjacent** to the unit (12.3c).

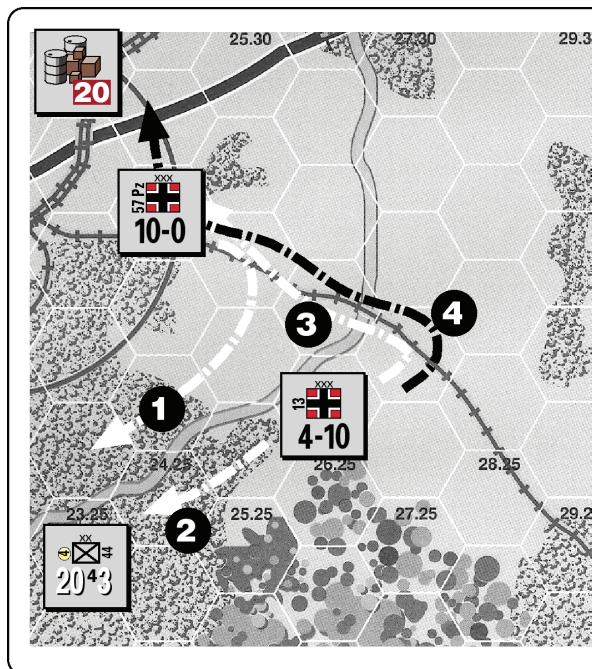
Fuel is never required to throw supply.

- A) HQs in Strat Mode cannot throw supply.
- B) HQs cannot throw supply except for immediate use. Moving dumps from one location to another requires use of Transport Points or some form of rail transport, air transport, or shipping capacity.
- C) HQs can throw to any number of friendly units (but specific game rules might impose certain restrictions).

HQs cannot “rethrow” SPs thrown to them by another HQ, but they can use them directly (e.g. for their own combat supply or fuel) just like any independent unit.

12.3c The “adjacent to” provision for supply handling is very important. Regardless of terrain (even if prohibited), it is assumed that the unit will be able to get its hands on supply that can reach an adjacent hex. The “adjacent is close enough” rule applies to **all** supply use involving direct draw or HQ throw. (**Exception:** Per 18.5e, units must be in a hex adjacent to draw SPs loaded on a Landing Craft, and HQs are **not** allowed to “throw” supplies drawn from a Landing Craft.)

12.3d Supply Path Movement. Supply paths (draw, throw, trace) are always counted as if a non-combat unit is being moved through the hexes of the supply path. These paths can be traced through enemy non-combat units, ships and aircraft, but



Example: Maximum Stretch of HQs

This example shows a number of features about the use of HQs for supply purposes.

The 57 Pz Corps HQ can act as its own detrainable hex for trace purposes and has enough range to throw to the hex adjacent to the infantry division (via route 1). While there isn't enough throw MPs to get into the same hex as the division, but as in all cases with HQs and unit supply ranges adjacent is good enough.

The 13 Corps HQ can also supply the division. It can count back to the 57 Pz Corps HQ (via route 3) and use that HQ as a detrainable hex for trace purposes (here it has enough MPs to get into the 57 Pz Corps HQ's hex, but adjacent is good enough would apply if needed). It has enough throw MPs to get adjacent to the division. For combat supply purposes, the 13 Corps HQ can draw on the SPs via route 4. Again, while it can only make it adjacent to the SPs (max draw range is 5 MPs), it need only do that to use the SPs.

never through a hex containing an enemy combat unit. All the special provisions of movement contained in 6.1 apply when counting out supply ranges. Fuel is never needed for supply paths.

An un-negated enemy ZOC blocks all types of supply paths that are traced using Movement Points (draw, throw, Extenders, etc.), if the mobility type being used is Truck. Note that some HQs and Extenders use Leg MP or Track MP, and these are unaffected by ZOCs.

√ Always use "normal" terrain costs (the summer/clear variety), and ignore temporary "bad" ground conditions such as mud and snow as well as the added cost of moving through or next to a Trainbusting marker. (Exception: You can use the movement costs temporarily reduced because of weather.)

12.3e Holding Boxes and Supply. Units in holding boxes that represent specific map hexes draw supply as if they were in that map hex (since the holding box only exists to give large stacks some elbow room). Units in holding boxes that represent **off-map** locations must draw supply from within the same holding box (which frequently have their own infinite dumps; see the game specific rules).

On-map units cannot draw supply from off-map holding boxes.

12.4 Combat Supply

Direct Draw (12.3a) and Throwing Via HQ (12.3b) are used to receive and distribute combat supply (9.5).

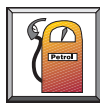
Attacker: 1T per attacking step. (Exception: DAK 2-step brigades cost 1T.)

Defender: 2T per combat. (Exception: if 1 RE or less, cost is 1T.)

Internal Stocks. (12.10) Attackers & defenders can use Internal Stocks only if on-map supply is unavailable. After using Internal Stocks in one combat, mark a unit Low; after its next combat using Internal Stocks the marker is flipped to Exhausted and the unit has no more internal stocks. Low and Exhausted units **must** pay SPs to remove these markers in a subsequent Supply Phase (12.10e).

Note: Units which do not have their full combat supply available cannot attack. Defenders always have the option to withhold combat supply and defend at half strength.

12.5 Fuel Supply



Direct Draw (12.3a) and Throwing Via HQ (12.3b) are used to receive and distribute fuel supply.

12.5a Combat units using Tracked MP or Truck MP **cannot expend MPs** unless their fuel costs are paid. Full fuel costs must be paid to move even one hex. (Exception: movement following ALT landings 18.5h.)

Fuel is never needed for other units or functions (Leg MP units, ships, planes, supply draw/throw, etc.).

12.5b Combat units needing fuel for movement can attack, defend, barrage,

advance after combat, and retreat without fuel payment. Overrun **requires** the attacker to pay for fuel even if the overrun stack begins movement adjacent to the defender.

12.5c According to the cases below, pay fuel costs in **any** phase in which the player incurs them at the instant they are incurred.

- A) Pay **1 SP to fuel an entire multi-unit formation**. This payment lasts until the next Friendly Clean Up Phase. Mark this by flipping the Formation marker (13.7) to its Fueled side. If all the Tracked/Truck MP combat units in the formation are not directly drawing from the same dump, or being thrown supply via a single HQ, apply C (below) to any units that cannot draw from the common supply source.
- B) Pay **1 SP per HQ** to fuel an HQ itself and all independent units within its throw range (see 12.5e). This payment lasts until the next Friendly Clean Up Phase. Mark this with a Fueled marker on top of the HQ.
- C) Pay **1T per unit** that has **Tracked** or **Truck** MPs, regardless of the combat unit's organizational size. This lasts for the **current** phase only. Do not mark this fuel.

12.5d The phasing player removes Fueled markers from his HQs and flips his Formation markers to their non-fueled sides during his Clean Up Phase. (This sequence means Fueled markers placed

when releasing Reserves in the Reaction Phase give the best mileage, insofar as they remain on map the longest.)

12.5e An HQ can throw fuel to independent units (defined in 3.2f) “for free” (avoiding the normal 1T per unit per phase cost) once the cost of 12.5c (B) has been paid. The throw range is counted when each independent unit begins to move.

√√ **A fueled HQ can only throw fuel from a single location each phase.** This affects a moving HQ, which must choose whether to throw fuel from its starting hex or its ending hex.

√ **12.5f** Placement of reinforcements doesn’t require fuel, but to move beyond the entry hex regular fuel costs (if any) must be paid—reinforcements **do not** get “free fuel” when arriving.

12.5g Internal stocks **cannot** be used for fuel costs.

Example: *In his Reaction Phase, a player wants to move a panzer division and five non-divisional Assault Gun Battalions. He has, however, only minimal SPs available. The player pays 1 SP to fuel an HQ to run the non-divisionals (since the 1 SP is cheaper than the 5T he would have to spend for them individually). The panzer division has been pretty well mauled in earlier battles and has one panzer battalion and an infantry regiment left. The player rapidly determines that he can afford to let the infantry walk (using their Leg MP in Combat Mode) and pays 1T for the panzer battalion. The total movement cost is 5T (1SP + 1T), where it might have cost as much as 9T had he not been thinking about it.*

Play passes into the above player’s own turn. In his regular Player Turn some of the above decisions will affect play—both in the regular Movement Phase and in the Exploitation Phase. The HQ which was fueled for the Assault Guns is still fueled (and will be until the player’s Clean Up Phase) so all non-divisional units in range of that HQ (including other HQs and that HQ itself) can move during the Player Turn without additional costs. The panzer division’s panzer battalion cannot move without further payment, because the 1T expended only lasted for the phase in which it was spent. The Leg infantry is unaffected, as it can still walk. To move the panzer battalion about will require further fuel expenditures.

12.6 Trace Supply

Combat units need to check for trace supply during their Supply Phase. If unable to obtain trace supply or “eat off the map” (12.6e), the combat units are marked Out of Supply and must roll for Attrition. In addition, units wanting to Breakout (12.8e) must be unable to “make their trace” during the Breakout Segment.

Direct Draw (12.3a) and Throwing Via HQ (12.3b) are used to receive and distribute trace supply.

12.6a A Supply Source is:

- 1) a map edge railroad hex that allows Reinforcement entry, plus any other supply source specifically mentioned in the game rules, or
- 2) a detrainable hex (defined as a railroad hex that contains a village, minor city, major city, port, or Engineer-Capable HQ (13.8a) from which a path of connected rail hexes (possibly including some Extenders per 12.7; possibly limited by enemy ZOC per 4.5a) can be traced to a supply source), or
- 3) a hex containing an Extender (see 12.7) that connects (possibly through more Extenders) to a detrainable hex or directly to a supply source.

12.6b A supply source in an un-negated enemy ZOC is no longer functional and cannot supply any units.

12.6c Eating off the Map. Combat units that cannot “make their trace” using Direct Draw (12.3a) or HQ Throw (12.3b) can “eat” SPs for their needed trace supply. For every 1T spent, up to 2 REs (within draw or throw range of the dump) can be fed. Round all fractions up; for example, 6 1/2 REs would cost 4T. This can **only** be done when no trace supply is available or for units suffering from the “split up effects” of 12.6f.

12.6d Combat units that can **neither** “make their trace” **nor** “eat off the map” are marked Out of Supply and roll for Attrition (see 12.8).

Play Note: *Units are never forced to “eat off the map,” even when SPs are available. At times, letting surrounded troops “starve” to save combat supply is a good gamble.*

12.6e Strat Mode units can never “eat off the map” and must end their movement in hexes where trace supply is currently possible. An HQ in Strat Mode cannot throw supplies.

12.6f Combat units in a multi-unit formation must all “make their trace” to the same HQ or the same direct-draw source. If this is not possible, then select part of the formation to trace “for free” while the rest must substitute SPs for trace supply or become Out of Supply (per 12.6b).

12.6g Ground units on a Landing Craft are always considered in trace supply.

√√ **12.6h** Units making a planned air drop (14.10b) do not require trace supply on the turn they are dropped.

12.7 Extenders



Extenders are used to help bridge gaps in trace supply. Five Transport Points of the same type (usually truck or wagon) in a hex can be converted into an appropriate “Extender” counter by expending half their MA (per 12.7d). Transport Points acting as an Extender cannot move (or be used for any other purpose).

Note that Organic Trucks can never be used to create an Extender.

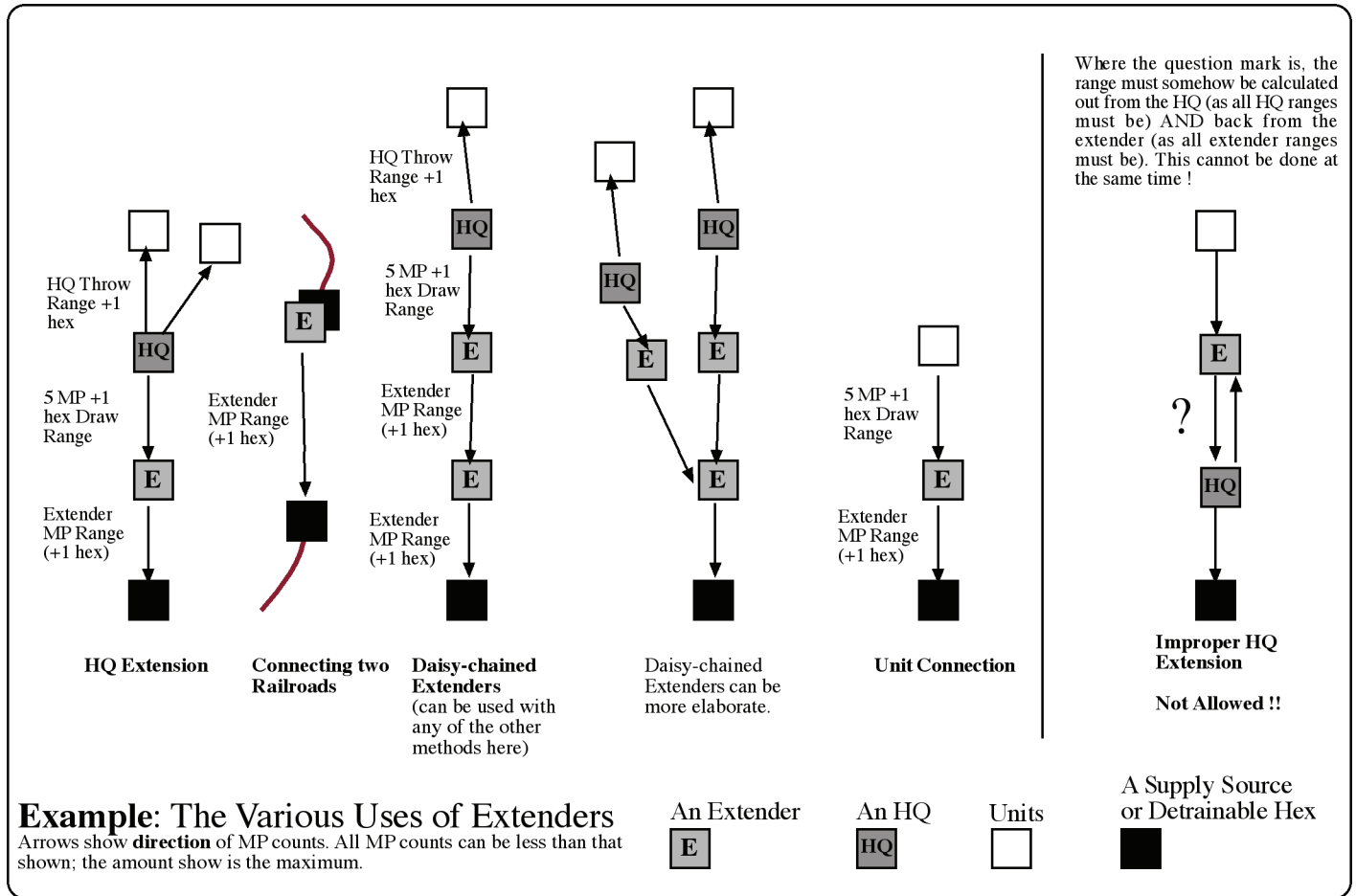
12.7a The only purpose of Extenders is to create new locations from which trace supply can be drawn. (They never move SPs or increase draw/throw ranges.) Extenders can act as a trace supply...

- A) ...**source** that leads to a detrainable hex (that connects to a supply source) or leads directly to a supply source.
- B) ...**connection** between two unconnected detrainable hexes, allowing hexes along the “forward” rail-line to be detrainable and serve as a supply source.
- C) ...**connection** between a detrainable hex and an unconnected supply source.

12.7b Extenders have a range that is the maximum distance (in MPs) that they can connect for supply-trace. The range must be counted back from the Extender’s hex to the connected hex. Extenders are always posted at the “forward” end of their connection. (So for a railroad connection, an Extender must be in the “forward” detrainable hex.)

12.7c Extenders can link to other Extenders in a “daisy chain” to make longer connections.

12.7d Switching into an Extender costs a Transport Point half of its MA. An Extender cannot move unless it flips back



into Transport Points, using half its MA to do so. A given Extender may be formed by only one **type** of Transport Point (e.g. truck or wagon, not both). Loaded Transport Points cannot convert into Extenders (they must first unload). An Extender cannot be created in a hex where it cannot connect for trace supply at that moment. Extenders that later have their trace cut can stay as Extenders or use Collapse (9.14c).

12.7e Transport Points forming an Extender can come from different hexes, combining in a common hex (none can move more than half of its MA).

12.7f After an Extender is switched back into Transport Points, the points can be moved separately to different hexes. They need not be moved as a stack.

12.7g Extenders can apply the “adjacent is good enough” rule, as in all other supply-related functions.

12.7h Extenders “collapse” when enemy combat units enter their hex, but never suffer losses due to this. See 9.14c.

Play Note: Garrison your Extenders, or else...

12.8 Attrition & Out of Supply



12.8a During the friendly Supply Phase, combat units unable to “make their trace” or “eat SPs” are marked Out of Supply and checked for Attrition. The marker remains until trace supply is regained in a future friendly Supply Phase. Each stack marked Out of Supply must check for Attrition every Supply Phase until back in supply.

√ **12.8b** Check a stack for Attrition by rolling two dice and consulting the Attrition Table. Use the column for the highest Action Rating among the units marked Out of Supply, and count only the steps in the hex that are Out of Supply. The table result is the number of steps the stack must lose. The owning player chooses how to inflict these losses on the Out of Supply units in the stack. There is no requirement to take the loss from the unit with the highest AR.

12.8c When checking Attrition, do not adjust a unit’s AR for being in DG Mode but do adjust for Strat Mode (however this should never come up, given 12.6e).

12.8d Out of Supply Effects. Units marked Out of Supply have no ZOC. If combat supply is available, such units can attack and defend at half strength. Without combat supply, Out of Supply units **cannot** attack but can defend at 1/4 strength. Given Barrage supply, Out of Supply units barrage normally. Units marked Out of Supply move normally.

√ **12.8e Breakout.** During their Breakout Segment, **combat units** (never non-combat units) currently out of trace supply that have a printed MA of 1 or more can attempt to Breakout **provided** they meet the following conditions:

- A) There must be a path of any length from the unit to some other friendly unit in trace supply. That path **must** be free of enemy combat units and of terrain that prohibits movement. Truck MP units (based on Move Mode values) must have a path that is also free of un-negated EZOCs.
- B) The unit attempting Breakout must be at or within 15 hexes of a friendly combat unit in trace supply (straight line distance in this case, not the path free of units/ZOCs.)

- C) $\sqrt{\vee}$ On the first turn a unit finds itself out of trace supply (not after it ‘eats off the map’ or uses Tree Bark, etc.), the restrictions in “A” and “B” are waived, the success chance (see below) is improved by a +1 DRM, and Transport Points are also eligible to Breakout (roll for each point separately).

Breakout is *always* voluntary. If a unit does not fulfill the pre-conditions above, it cannot attempt Breakout.

Roll for each unit attempting Breakout:

- If the roll is 1-4, it fails and the unit is placed in the dead pile (and can be rebuilt normally).
- If the roll is 5-6, it succeeds. The unit is removed from the map, but will return to play as a Reinforcement. Roll again for each unit that successfully breaks out: it returns that number of turns in the future. Returning units retain their step loss markers, but lose other status markers (low ammo, DG, etc).

Play Note: Use the Turn Record Track as a reminder for when units return.

12.9 Specialty Supply Levels

12.9a Non-combat units never require trace supply or fuel.

12.9b HQs need trace supply and require fuel and combat supply like any other combat unit.

12.9c Aircraft do not require supply. Air Bases need supply (obtained by direct draw or HQ-throw) to refit aircraft.

12.9d Ships do not require supply.

12.10 Internal Stocks

Internal stocks represent ammunition supplies that combat units can draw upon when needed SPs are unavailable. They can be used **only** for combat supply (see 9.5)—never for barrages, trace supply, fuel, etc. A unit’s combat strength is the same whether using internal stocks or on-map supply.

Mark each unit’s use of internal stocks individually by placing “Low” or “Exhausted” markers **under** the unit.

12.10a Internal stocks can **only** be used if the unit **cannot** direct draw or be thrown SPs from on-map stocks. (**Exception:** internal stocks **can** be used if the only available dump is SPs loaded on Organic Trucks.)

12.10b When a unit draws combat supply from its internal stocks, mark it with “Low” internal stocks. If the unit is already marked “Low” mark it “Exhausted” instead, which means that after this combat its internal stocks are empty.

12.10c A unit with low or exhausted internal stocks is still eligible to use regular combat supply. If regular combat supply is not available *and* the unit has exhausted its internal stocks then it cannot attack, and must defend without combat supply.

12.10d No unit can draw on another’s internal stocks, even when stacked together.

12.10e Recovery. Units marked “Low” or “Exhausted” recover internal stocks in the player’s Supply Phase if on-map supply is available (using either direct draw or thrown SPs). Recovery from “Low” costs 2T per unit or RE (whichever cost is more); recovery from “Exhausted” costs twice that amount.

- A) Units **must** recover internals if possible, and recovery must take priority over using on-map supply as a substitute for trace supply.
- B) All dumps from which a unit can draw or be thrown SPs are subject to the requirement to recover internals. (**Exception:** SPs loaded on Organic Trucks are exempt from the requirement to provide recovery for internals.)
- C) When there are some on-map SPs available, but not enough to fully recover internals, expend what is available. A single T would be wasted; 2T can be used to recover one “Low” unit or improve an “Exhausted” unit to “Low” internals.

12.10f Out of Supply status has no effect on internal stocks or vice versa.

12.10g Internal Stocks and on-map supply can be mixed to meet combat needs. (**Exception:** A single counter, even if containing multiple steps—such as a division, can use either internal stocks **or** on-map supply—such a unit cannot mix the two for itself.)

12.10h If a multi-step counter chooses to use Internal Stocks because there is not enough on-map supply available, the on-map supply must also be spent (it is wasted).

Example: 3 REs (three separate units) attempt to defend. The player has 1T of on-map supply available. The on-map 1T can be used to pay for one unit, and the rest must use Internal Stocks.

12.11 Destroying Dumps

All SPs in a hex, both those loaded on Transport Points and those on the ground, are called a supply dump. A dump (but not Transport Points) can be blown by its nominal garrison if a player fears it may soon be captured by the enemy. The nominal garrison never consumes supply and has no movement or combat ability.

12.11a Blowing Dumps. A player can blow any (or all) of his dumps during the Movement Segments of his Movement, Reaction, or Exploitation Phases. A player can blow a given dump only once per phase. The player can attempt to blow all or only some of the SPs in a dump. Roll one die on the Dump Blowing Table to determine the percentage destroyed. Round losses to the nearest Token.

Example: A player attempts to blow 3 of the 4 SPs in a dump. He obtains a 75% result. $3 \times .75 = 2.35$, so 2 SPs and 1T are destroyed.

12.11b Capturing Dumps. When an Attack-Capable unit enters a hex with enemy SPs and/or Transport Points, roll on the appropriate column(s) of the Capture Table. If enemy units occupy the dump hex, they must be evicted from the hex before an attempt to capture can be made. See 9.14b and 9.14c for complete details.

13.0 Specialized Units

13.1 HQ Units



HQs provide supply distribution and engineer support (13.8). HQs are 1 RE in size, regardless of what is shown on the unit designation.

$\sqrt{13.1a}$ **HQs and Modes.** The Combat Mode side of an HQ is the one with the greater throw range. **Per 5.10e, DG Mode does not affect an HQ’s special functions (13.1b).** An HQ’s defense strength (see 13.1c) is determined by mode. An HQ in Strat Mode cannot throw supply. HQs never enter Exploit Mode.

Design Note: Combat Mode HQs represent the HQ having taken up residence; Move Mode represents the HQ in a more mobile status. When in Move Mode, the extra trucks of the HQ are considered to be shuttling around mechanics and bakers instead of supplies.

√ **13.1b HQ Special Functions.**

- An HQ “throws” SPs and trace supply to units within its throw range (12.3b).
- An HQ rebuilds units per 13.5a.
- An Engineer-Capable HQ (13.8a) can perform Engineer Functions that include bridging, detainable creation, and construction.

13.1c HQs and Combat. HQs have some common ratings that aren’t printed on the counters. Their Action Rating is 0. In Combat Mode, they have a parenthesized (defensive-only) strength of 5, and in Move Mode this is reduced to 1.

HQs need supply like any other combat unit. They must change to Move Mode when forced to retreat.

13.1d Multi-Level and Multi-National HQs. A game can include HQs of several command levels and nationalities. HQs are normally able to throw supply to all friendly ground units without regard to historical chain of command, but there may be limitations in specific games. One exception is series-wide: Divisional HQs can provide supply only to their **own** division’s units or to independent units (defined in 3.2e) of the same nationality.

13.2 Transport Points

See 9.14c for Specialized Combats involving Transport Points.



13.2a Sequencing Transport & Supply. A Transport Point can move, pause to use some of its load, and then move further

in the same phase. While “pausing” the carried SPs can be used to pay for all kinds of fueling and construction/repair. There are two important restrictions: the Transport Point must finish moving before another unit is moved, and upcoming combat/barrage costs can never be pre-paid in this fashion. SPs being used “off” a Transport Point need not be unloaded before doing so.

13.2b Supply Effects on Transport Points. Transport Points never need fuel to move and are never Out of Supply.

13.2c Transport Capacity: Combining and Dividing. Transport Points can carry up to their size in SPs. Transport Points can freely divide and combine within counter-mix limits. Splitting or combining does not cost MPs, can only be done in the friendly Movement Phase, and requires all involved units to be in one hex. The combined/divided Transport Points can then continue

to move (but must normally conform to the limitation imposed by 6.1f, but see 12.7e and 12.7f for some liberties given Extenders). Transport Points of different types can never combine into a single counter. Organic Trucks cannot combine with or divide into regular Transport Points and vice versa. See 13.9 for the actual transfer of regular Transport Points into Organic Trucks.

13.2d Mode Restrictions. Transport Points are always in Move Mode (never Combat, Strat, Reserve, DG, or Exploit). (**Exception:** Organic Trucks can be placed in Reserve Mode, per 13.2g.)

13.2e Transport Points can be transported by ship or train (but not by air) and can be transported while **loaded** for the **same** shipping cost. (**Exception:** Mules, found in some OCS games, **can** be shipped via Air Transport.) The shipping cost is always equal to the size of the Transport Point.

13.2f Loading/Unloading.

Requirements: A Transport Point can **load** in any hex. Transport Points can only **unload** in hexes which contain one or more friendly...

- Combat Units,
- Port or Air Base, or
- An existing *unloaded* Supply Dump

Costs: It costs 10% of a Transport Point’s printed MA (adjusted for Weather effects, if applicable) to load/unload any number of SPs in a hex.

- Round the cost normally (so a truck with 45 MA must pay 5 MPs to load or unload SPs).
- A Transport Point **cannot** be loaded via direct-draw or by thrown SPs. It can (effectively) be unloaded by direct-draw as its load is used by other units.
- Place loaded SPs under the Transport Points carrying them. Place unloaded SPs above any Transport Points in the same stack.

13.2g Organic Trucks. To show the intrinsic transport capability of some multi-unit formations, one or more Transport Points are assigned directly to these formations. Organic Trucks follow the rules for other Transport Points, with these exceptions:

Organic Trucks...

- never** unload their SP on the map,
- only allow units of the same multi-unit formation to draw their SPs,

- can never be combined into Extenders,
- can be put into Reserve Mode (if their hex gets a DG result, the Reserve marker is removed),
- can tag along with other retreating combat units in their stack (but cannot retreat alone),
- become regular Transport Points for the enemy when captured, and
- can withhold combat supply (see 12.10a).

Players can use HQs to throw supply from Organic Trucks to **that** formation’s units.

13.2h "Full" Transport Point Notation. Some Transport Points show an “F” in a yellow box on one side and no such notation on the back. The “F” side denotes that the Transport Point is full, while the other side shows it is empty (use the empty side plus some partial load to show partially loaded Transport Points).

13.2i Transport Points that are captured (see 9.14c) in a Movement Phase can be moved immediately. If captured during any other phase, no movement is allowed until the capturing side’s next Movement Phase.

13.3 Railroads

Railroads are vital for the movement of reinforcements and supplies. The initial extent of each player’s rail lines is given in the scenario rules. Railhead markers are used to show the forward extent of rail hexes under a player’s control.

Each player may have a Rail Capacity (Rail Cap) in the game specific rules that represents the total number of SPs he can transport in a given turn.

Ground units, Transport Points, and SPs moving by Rail Transport are sometimes referred to as “cargo.”

13.3a Combat units, Transport Points, and SPs can be moved using Rail Cap (13.3b). This is the only rail cargo allowed: never air, ships, hedgehogs, etc.

The transportation equivalents of various cargo are found in 4.7. Each Rail Cap point can transport **one** SP or RE **any** distance by rail. Railroad movement cannot include hexes in an enemy ZOC (which **cannot** be negated) or any hex containing an enemy combat unit. See 13.3f for limits imposed by tracks of the wrong gauge. Ignore other terrain effects when moving by rail.

There are two railroad classes: multi-track, and single-track. If cargo moves for its

entire rail movement along **multi-track** rail hexes, that cargo costs **half** its normal Rail CAP cost. If the rail movement is along **any** combination of single-track and multi-track lines the Rail Cap expended equals the load in SPs. If rail movement enters a hex in an Trainbusting zone, the Rail Cap cost is doubled, see 14.8b.

Design Note: Rail movement is most effective as a strategic asset. Therefore it is much more efficient to move loads over long distances than in short hops. Most of the usage of rail capacity comes from marshaling rolling stock and loading/unloading. To go through all that monkey-drill for a short, relatively tactical, move is wasteful.

13.3b Rail Cap is available every turn at whatever levels specified by the scenario rules. It cannot be “saved” for use in another Movement Phase. **Rail Cap can only be used in the Movement Phase (never during Reaction or Exploitation).**

13.3c Rail movement always includes three steps: entrain, move, detrain. All three steps must be completed in the same phase.

- 1) To entrain, cargo must be in a detrainable railroad hex (see below) and not in an enemy ZOC. Combat units and Transport Points moving by rail must be in Move Mode, and can expend up to half their MA in the current phase *before* entraining. Reinforcements and new SPs can entrain “off-map” if their arrival hex is a railroad.
- 2) To move, the cargo follows a path of connected rail hexes, never moving into an enemy ZOC or hex containing an enemy combat unit of any sort. Rail hexes that are wrong gauge (13.3f) or uncontrolled (13.3h) cannot be used.
- 3) To detrain, cargo must be in a detrainable railroad hex which is not in an enemy ZOC. No further movement is allowed by a unit after it detrains.

√ A railroad hex is **detrainable** if it meets all of these requirements:

- It contains a village, minor city, major city, port, or Engineer-Capable HQ (13.8a).
- It is under the player’s control (13.3h).
- It has a rail path free of EZOC back to a supply source. Extender links can be part of this path for trace supply, but not for moving cargo. Note that EZOCs

cannot be negated for moving cargo by rail, but **can** be negated to trace a rail path to a supply source.



13.3d Railheads. Some games limit use of railroads by the gauge of the track. Mark the divide between gauges with Railhead markers, positioning them to show that railroad hexes up to and including the marker are a certain gauge. Railhead markers are moved by the conversion work of Rail Repair units per 13.3f. Movement of enemy ground units through rail hexes has no effect on the position of a Railhead marker.

Play Note: Railhead markers can also be useful in games where both sides use the same gauge, if only to help visualize railroad control (13.3h).

13.3e Damaging & Repairing Railroads. This ability has been eliminated.

13.3f Rail Conversion. Some games contain rail lines of more than one gauge, and a player can only use his rail capacity or supply line trace along rail lines of his own gauge. Eligible Rail Repair units are used to convert rail lines to the gauge appropriate to their side per 13.3g. Players keep track of the current extent of each rail gauge using Railhead markers.

- A) Railroads cannot be converted in an enemy ZOC (no negation).
- B) √√ To convert a rail hex, an eligible Rail Repair unit simply moves **into** it using its movement points. Rail conversion **does not** cost SPs or extra movement points.

13.3g Rail Repair Units. Rail Repair units are combat units that are used to convert railroad hexes. Several special rules govern their movement abilities:

- A) Rail Repair units can combine rail movement with conversion of railroad hexes in the same Movement Phase. (However, they **cannot** do so if the hexes they use for railroad movement were converted in the current phase. No leapfrogging!)
- B) Rail Repair units can move their full Movement Allowance **after** using railroad movement (less any movement done prior to entraining) and can use railroad movement in Combat Mode.
- C) Rail Repair units can entrain and detrain in any railroad hex (it does not have to be “detrainable” per 13.3c).

- D) √√ To convert gauge (13.3f), Rail Repair units must be in Combat Mode, or else be in DG Mode and oriented toward Combat Mode (per 5.10e). They can convert up to 4 hexes (or hexes equal their current MA, if less than 4) during the Movement Phase (not other phases).

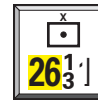
Play Note: Rail Repair units are not restricted to merely pushing forward the railhead marking where standard and wide gauges meet; they can, for example, use Strat Mode to move ahead of the normal re-gauging to start working on a forward section of track. “No leapfrogging” is narrowly restricted to not having a second repair unit use rail movement on newly converted track to get into position to extend the converted track.

13.3h Railroad Control. This rule **supersedes** all previous game-specific Railroad Control rules. A player can use any railroad that leads from a friendly supply source to a friendly combat unit without entering any hex containing an enemy combat unit. This friendly combat unit need not be on the railroad; it merely needs to be supplied by that railroad in the usual ways.

Rules 13.3c (detrainable hexes) and 13.3f (rail gauge) contain additional limits on railroad use.

Play Note: There is no longer a need to “move units through hexes” or to perform any other mechanical activity to “take control” of railroad hexes.

13.4 Artillery Units



Artillery units can participate in barrages against targets which are at a distance less than or equal to their range in hexes. Artillery Barrage Strengths are shown in a yellow box (on the lower left of the counter). Artillery units have their range printed below their Action Rating. The Combat Mode side of an artillery unit is the one with the greater barrage strength. Artillery units can move and fire in the same turn.

13.4a Artillery units in Reserve or Strat Mode **cannot** barrage. Otherwise, artillery units are able to barrage during any Barrage Segment (given additional requirements, such as eligibility to act in the current phase, range, and supply needs).

13.4b Artillery and Combat. All artillery units have a parenthesized (defensive-

only) strength of 1 (this number is **not** printed on the counters) in both Move or Combat Mode. Other modes affect this strength normally.

13.4c See 10.0 for details on barrages.

13.5 Replacement Units

Players roll on their Variable Reinforcement Tables (part of each game's game specific rules) in each of their Reinforcement Phases. Replacement units (Repls) acquired by this roll arrive as additions to the turn's regular Reinforcements. Repls can be used as soon as they arrive or be saved for later. They come in two types: Equipment (Eq) and Personnel (Pax). These are used to rebuild lost steps or units. Repl counters are not intentionally limited by the counter-mix, and as with SP both players share the same generic counters and must take care to remember who owns which.

Repls **cannot** enter Combat Mode, but can enter all other modes. They are 1/4 RE for stacking. Repls are Attack-Capable and can be used to satisfy combat or barrage losses. Eq cannot be transported by aircraft; Pax can. Repls are non-divisional units and must be supplied normally.

13.5a Using Repls to replace losses. A Repl must be in Move Mode to be used to replace losses or rebuild dead units. Rebuilding costs vary by unit types and sizes, and are summarized on the Rebuild Chart supplied with each game. Two general kinds of rebuild are possible:

- 1) $\sqrt{\sqrt{\quad}}$ To rebuild a unit in the dead pile, the required Repls must be in a single hex at or within 2 hexes of a friendly HQ. The HQ must be in Combat Mode, or else be in DG Mode and oriented toward Combat Mode (per 5.10e). This hex may not be in an enemy ZOC (4.5a). During the Reinforcement Phase, remove the Repls and place the rebuilt unit in that hex.
- 2) To rebuild an on-map unit that has taken step losses, follow the procedure in "1" above. In addition, the unit being rebuilt must be stacked with the Repls.

13.5b A reduced or eliminated multi-step unit can have any number of steps rebuilt in a turn, given the required Repls. Its supply status and mode have no effect on rebuilding. Rebuilding does not cost MPs; place a newly-rebuilt unit in any voluntary mode.

Only units in the dead pile (and on-map damaged units) can be rebuilt. Break-Down regiments **cannot** be rebuilt (return them to the pool of available Break-Down counters when destroyed).

***Design Note:** We have found the best way to use Repls is to set up a "training detachment" at some rear area base. Use a "not-so-good" HQ for this, and station all incoming Repls adjacent to it. This method simplifies the problem of having to hunt down Repls when you need them.*

13.5c No Rebuild Units. Units with a Yellow dot behind their Action Rating cannot be rebuilt and are removed from the game permanently when destroyed.

13.5d One Repl for Two Units. Some very small units (which are listed on the Rebuild Table) can be rebuilt in pairs for only one Repl. If only one such unit is available in the dead pile, one Repl must still be expended.

13.5e Truck Rebuilds. Players can rebuild trucks (Organic or regular) at a cost of 1x Eq per truck. Only trucks that have been destroyed by enemy action (or captured) can be rebuilt in this way, so the player can never have more trucks than the scenario provides him. Other types of Transport Units (such as wagons and mules) **cannot** be rebuilt in this way.

13.5f Air Replacements. Some games have tables that provide direct aircraft step replacement. In games with no such result available, players can use Eq Repls to replace air losses. **Each** Eq Repl can rebuild **two** aircraft steps. Expend the Repl at an HQ and follow the normal rules with one addition to 13.5a: a plane rebuilt from the dead pile shows up at **any** friendly Air Base and is Active.

Notes: Rebuilding can be done regardless of flight conditions. An Eq Repl cannot be "partially" used. (If the player has only one air step to rebuild, he would have to expend the entire Eq Repl.)

13.6 Reinforcements

Reinforcements are new units entering the game via either the Arrival Chart or the Variable Reinforcement Table. The player **cannot** delay the entry of his Reinforcements, and "forgotten" Reinforcements never arrive (unless your opponent is *very* nice). Reinforcements are placed in their entry hexes during the friendly Reinforcement Phase. Place reinforcing aircraft on any friendly Air Base. They arrive Active.

13.6a Ground units can be overstacked during the Reinforcement Phase. Only the number of REs allowed by port capacity can enter as Reinforcements at a port, but port-arrival is prevented by a ZOC. Newly-placed aircraft must conform to normal stacking rules (14.2a and 18.2a).

$\sqrt{\quad}$ **13.6b** Place Reinforcements in any legal mode. They can be placed in hexes in an enemy ZOC (but note port restriction in 13.5a), and can arrive by rail (ignoring the usual "entraining" requirements of 13.3c(1) during Movement Phase). If a map-edge arrival hex is blocked by enemy units, the reinforcements can be placed in the nearest unblocked map-edge hex.

13.6c Organic Trucks **arrive** loaded. Other Transport Points only arrive loaded if SPs are arriving at the same location that turn.

13.7 Formation Markers

The game provides each multi-unit formation with a Formation marker. To reduce counter density, these can be used to show the location of one or more of the formation's units. Remove the actual units from the map, keeping them anywhere convenient. **Unless using option 13.7b, players should take pains not to "hide" their formations from one another.**

At least one of the Formation's units must be in the marker (and off map) for the marker to be on the map at all. "Empties" cannot be used as dummy or ghost units.

A Formation marker can **only** represent units of its own formation. The marker moves and fights as if it were the units it represents (all of which are in its hex). Units can freely move into the marker (and be pulled off the map), or from the marker (and be put on the map) with no additional MP cost. There is no requirement to enter a Formation marker should an eligible unit stack with it.

Units represented by a Formation marker can be in different modes. Mode markers are normally placed off-map with the units, but if all units are in the same mode (such as Reserve) the marker should be placed on top of the Formation marker. If some units in a hex are in the same mode as some units in the Formation marker, a single marker can still usually be used for all. Just remember to think of the off-map units actually being stacked where the Formation marker is placed.

Formation markers have regular and fueled sides. Players must use the fueled side when the division's fuel cost is paid (see 12.5c (A)).

13.7a Trace/Fuel Supply Concerns. Combat units in a multi-unit formation must receive trace and fuel supply from the same HQ or the same direct-draw source. If this is not possible:

- For trace supply, part of the formation can trace “for free” while the rest must “eat off the map” or become Out of Supply (per 12.6b).
- For fuel supply, part of the formation can receive fuel per 12.5c (A), but the remainder will need to be fueled via the 1T per unit method.

√ **13.7b Fog of War Option.** If both players agree, Formation markers can heighten the fog of war. Players are allowed to “hide” a tank corps or panzer division by putting its Formation marker under other combat units in a stack. Any such trickery must conform to 4.8b and 4.9a—the Formation needs to be on top if it contains the stack’s only Combat Mode Attack-Capable units and one of its units needs to be revealed.

13.8 Engineer Functions

Engineer and HQ units are the **only** units that can perform engineer functions (bridging, detrainable creation, or construction). Related unit types—such as Rail Repair, Assault Engineers, Pioneers, and Para/Glider Engineers—cannot perform the tasks listed in this section.

√√ **13.8a Engineer-Capable.** To be considered Engineer-Capable, an HQ or Engineer unit must be in **Combat Mode**, or else be in **DG Mode** and oriented toward **Combat Mode** (per 5.10e).

13.8b Bridging. When **adjacent** to a Major River, Engineer-Capable units (13.8a) automatically reduce the MP cost of Major River hexsides to that of Minor River hexsides. Likewise, Engineer-Capable units downgrade Minor River hexsides to “no effect.” There is no SP cost. Only movement into or out of the Engineer-Capable unit’s hex benefits from the reduced movement costs. Apply these bridging effects to their Frozen-River counterparts as appropriate.

Attacking units **cannot** use this bridging function to cross a hexside to **overrun** across a river. Bridging has no effect on combat terrain modifiers, but can enable an attack where none would be possible without a bridge.

Bridging disappears the instant a mode change makes the unit no longer Engineer-Capable. **Exception:** An Engineer-Capable unit can use its own bridge to leave

the hex (after losing its Engineer-Capable status by changing mode or orientation).

√ **13.8c Detrainable Creation.** This is a special ability of HQ units only, not other engineers. When an Engineer-Capable (13.8a) HQ occupies a functioning railroad hex it automatically makes the hex detrainable (13.3c). There is no SP cost.

The special detrainable status disappears the instant a mode change makes the HQ no longer Engineer-Capable. **Exception:** An Engineer-Capable HQ can entrain itself before switching to Move Mode.

√ **13.8d Construction.** Engineer-Capable units (13.8a) must not move in the current phase if performing construction. The work can be done within 2 hexes (ZOC and terrain affect this path as if Leg MA is being used) of the engineer, and construction tasks include build/improve/reduce airfields (15.3), build/improve/reduce hedgehogs (16.0b), and repair/damage ports (19.0d).

Construction limits and notes:

- Each turn an Engineer-Capable unit can only perform construction in a single hex, and can only perform one type of construction.
- All of the build/improve/repair tasks all have an SP cost. The reduce/damage tasks are free of cost.
- Construction is immediate, so for instance a new airfield can be used in the same phase it is built.

***Design Note:** A large portion of engineer capability is tied to HQ units. In real life, these engineers typically spend most of their time doing their assigned tasks. In games, all too frequently, they end up as poor excuses for infantry units and their original task is forgotten. The idea here is to prevent such misuse by eliminating most non-combat engineer units from the counter-mix.*

13.9 Unit Consolidation

During his Reinforcement Phase, a player can combine crippled formations into more compact packages. Units may consolidate adjacent to enemy units and even when Out of Supply. Ground units being exchanged/combined must be **identical** on *both* sides of the counter, and no unit involved in a consolidation can have low/exhausted internal stocks or be DG.

There are four types of Consolidation:

- 1) To consolidate two multi-step units, the combining units must be in the

same hex (or off-map box). Remove one of the units and change the step losses on the remaining unit to reflect the steps added to it. No unit can be rebuilt beyond full strength in this manner—excess steps would be lost.

- 2) To consolidate multi-unit formations, the player can exchange any unit (including Organic Trucks) for the equivalent unit of a different multi-unit formation that is in the dead pile. Mode and so on remain the same. Supplies loaded on Transport Points remain loaded following unit consolidation (possibly allowing “control” of organic supply to pass from one division to another).
- 3) Independent units (including Transport Points) can be consolidated **into** a multi-unit formation (per #2 above), but a unit from a multi-unit formation **can never** be converted to an independent unit.
- 4) Two reduced aircraft of the same aircraft type, values, and status (Active or Inactive) can combine into a full strength aircraft if they are in the same hex (or off-map box). This can be done during any phase (not just the Reinforcement Phase).

14.0 Air Power

In very general terms, “Active” aircraft execute missions from their Air Bases to hexes within their range. A player’s Active aircraft can perform missions in friendly Movement, Exploitation, and Reaction Phases. Execute each mission and then return the aircraft to an Air Base to become Inactive before executing the next mission. During a future Refit Phase, these planes can become “Active” once more.

Missions that aircraft can perform include Interception (disruption of enemy missions), Fighter Sweeps (cleaning out enemy aircraft), Barrage (hitting enemy facilities or units), Transport (moving units or SPs to other Air Bases), Air Drop (doing the same to a non-Air Base hex), and Transfer (moving aircraft from one base to another).

14.1 Aircraft & Basic Handling

Aircraft represent groups of specific aircraft (such as Bf-109s) that are rated for Type, Range, Air Combat Rating, Barrage Strength, and Transport Capacity

as appropriate. While an aircraft unit is roughly 45 aircraft, it is assumed that the operational rate of these is something well under 100%.

The game uses five types of aircraft.

- 1) **Fighters (F).** Fighters can barrage and are the only aircraft capable of offensive Air Combat and Interception. They also exert a “Patrol Zone” that interferes with enemy air missions.
- 2) **Tactical Bombers (T).** Tactical Bombers are used for barrage.
- 3) **Strategic Bombers(S).** Strat Bombers are used for barrage, and suffer from several limitations, including the inability to Hip Shoot. See 14.1e.
- 4) **Transports (Tpt).** Transports are a means of transportation. Their transportation capacity can be used to move supplies and units from an Air Base to a new location.
- 5) **Combo Types.** Some aircraft have two types noted on the counter, for instance “T, Tpt.” These units can function as either listed type.

14.1a Active & Inactive Aircraft. Aircraft are capable of two modes—Active or Inactive. An aircraft’s mode is shown by its being above (Active) or below (Inactive) its Air Base marker. Basically, Active aircraft can conduct missions; Inactive ones cannot. Active aircraft in a friendly Air Base hex will remain Active indefinitely.

14.1b Aircraft Step Losses. Aircraft have two steps each. Use the reverse (reduced) side of the counter to show one step loss. Aircraft which take a second step loss are eliminated and placed in the dead pile.

14.1c Aborts & Return to Base. When an aircraft “aborts” from air combat or executes a mission (see 14.2f), it must return to a friendly base within its range and become Inactive. (**Exceptions:** Fighters remain Active after completing a successful Interception (14.5) and after making a Base Transfer (14.11) at normal range.) Aircraft that abort before/during an Air Combat over a friendly Air Base must return to that base. (**Exception:** see 14.5 for special handling of Interceptors.)

14.1d Refitting. Refitting is the maintenance needed to keep aircraft in action. It is the process that makes Inactive aircraft Active. The Aircraft Refit Phase is the only time aircraft need or consume supply. See 15.0.

14.1e Strategic Bombers. Strat Bombers suffer several limitations due to their high altitude operations.

- A) Barrages including Strat Bombers always suffer the unspotted penalty.
- B) Strat Bombers can **never** do Hip Shoots (14.7d) or barrage ships.
- C) Strat Bombers **never** receive the short-range barrage shift (14.7c).

14.1f Weather. Weather can inhibit air operations. When this happens, Active aircraft which are on a friendly Air Base remain Active. Even if weather prohibits flight, aircraft **can** still refit to become Active, but must remain on their base.

14.1g Phasing. Active planes are eligible to fly missions during friendly Movement, Exploitation, and Reaction Phases. They never need Reserve markers.

14.2 Aircraft Movement

Aircraft units have their own stacking requirements and “move” by being lifted directly from their Air Base to the mission target hex. They ignore all hexes in between (including all ground units, terrain, and even aircraft that might be in them). Aircraft movement occurs in various phases, depending on the mission.

14.2a Aircraft Stacking. Count each aircraft (whether reduced or full-strength) as one unit for stacking. No more than four **Active** aircraft can execute a mission together. On a friendly Air Base, a maximum of four friendly aircraft **plus** the Air Base Level can be Active at one time (so, a Level 3 Air Base can have a total of seven Active aircraft). There is no limit to the number of Inactive planes that can stack at a base.

14.2b When air combat is initiated, either player can voluntarily abort **all but one** Active aircraft in the hex to avoid undesired Air Combat, but at least one aircraft **must** remain Active and fight (14.3d).

14.2c Aircraft Movement. Aircraft will normally only move from their base to where they will conduct their mission. When an Air Base’s hex is occupied by enemy ground units, follow the sequence in 9.14f.

14.2d An aircraft’s range is the maximum distance it can travel (in hexes) when flying to a mission hex or returning from one. Active aircraft move by simply placing the unit in any hex within range, without regard to terrain or presence of enemy units. There is no need to trace a specific path of movement. Inactive aircraft *cannot* be moved. The distance moved must be the aircraft’s range or less.

14.2e Air Missions. An Active aircraft can perform one of the following missions; see later sections for details on how to do them. An air unit can **never** perform multiple or combined air missions (such as “Barrage of two hexes”) in the same phase. Unless otherwise noted, execute the mission in Step F of the Air Movement Sequence. “Mission aircraft” means the air unit(s) performing a mission.

√ Missions are never restricted to planes of a certain type. For instance, a Fighter is allowed to take part in an Air Transport mission (to protect it from Interception).

- **Interception (14.5).** A limited ability to ‘jump’ enemy aircraft before they perform their mission.
- **Fighter Sweep (14.6).** A Fighter Sweep is an operation designed to engage enemy aircraft in air-to-air combat. Fighter Sweeps are executed in the various Movement Segments.
- **Barrage (14.7).** A Barrage Mission is an air attack on enemy ground units or facilities. Barrage Missions are executed in the various Barrage Segments.
- **Hip Shoot (14.7d).** A Hip Shoot is a special type of barrage that is executed during the Movement Segments instead of Barrage Segments and allows the same hex to be hit more than once in a single phase. Only certain air forces can do Hip Shoots.
- **Trainbusting (14.8).** Trainbusting is a special form of barrage that allows aircraft to affect enemy ground and rail movement. Perform Trainbusting during the various Barrage Segments.
- **Air Transport (14.9) or Air Drop (14.10).** The delivery of units or SPs by air, either by landing at an Air Base or dropping by parachute/glider. Air Transport/Drop Missions are executed in the various Movement Segments.
- **Base Transfer (14.11).** The movement of your aircraft from one Air Base to another. Transfers are executed in the various Movement Segments.

Important Note: There are no limits placed on the number of non-barrage missions that can be flown to the same hex in a phase. For instance, a player wanting to Air Drop 1T of supply to a surrounded tank division could keep flying mission after mission until he successfully lands the needed supplies. A player could also Hip Shoot a hex several times in the phase. Other barrages are limited to one to a hex.

✓✓ **14.2f Air Mission Sequence.** Follow this complete sequence when executing a mission. Aircraft from more than one Air Base (up to a combined stacking limit of four aircraft) can execute a mission together, with aircraft from each base moving separately (there is no need to “link up” before reaching target hex):

- A) Declare a mission (Trainbusting, Barrage, etc.)
- B) Move aircraft from one or more bases to the mission hex.
- C) Resolve Air Combat (14.3) if both players have aircraft in the hex.
- D) Resolve any Interception (14.5) against the mission.
- E) Resolve any Flak (14.4) against the mission.
- F) Resolve the mission. Mission planes then return to any base within range (14.1c) and usually become Inactive. The mission is complete.

Play Note: Planes can no longer be added to a mission after Step C, so remember to perform Fighter Sweeps during the Movement Segment!

14.3 Air Combat

Any time one side moves Active aircraft into a hex containing Active enemy aircraft and at least one Active Fighter unit is present (on either side), Air Combat is immediately resolved. This happens only when a player attacks an enemy Air Base or during Interception. Air combat consists of a series of rounds. During each round, each player selects one unit to use. The result of the round may be the aborting (see 14.1c) and possibly a loss to one or both of the selected aircraft. These rounds of Air Combat continue until one side or the other is alone in the hex (or no aircraft with non-parenthesized Air Combat Ratings remain).

14.3a Parenthesized Air Combat Ratings.

Aircraft with parenthesized Air Combat Ratings *cannot* be the “attacker” in Air Combat. They can still enter a hex with enemy aircraft, however. If all the aircraft in a hex (both sides) have parenthesized Air Combat Ratings, the aircraft ignore one another (there is no Air Combat).

14.3b Modifiers to Air Combat Ratings.

There are none unless using option 21.4.

14.3c “Attacker” Identification. The “attacker” in an Air Combat is normally the player who is moving into the battle

(mission player or Interceptor). If all of the mission player’s Active aircraft remaining in an Air Combat have parenthesized Air Combat Ratings, then the other player is the attacker. If all the Active aircraft in the hex have parenthesized Air Combat Ratings, then the combat ends, the aircraft ignore each other, and the mission continues. Regardless, ignore all Inactive aircraft.

14.3d Voluntarily Aborting from Air Combat. Voluntarily Aborting from an Air Combat is sometimes useful:

- A) ✓✓ Either player can voluntarily abort **all but one** aircraft in the hex to avoid undesired Air Combat before it starts, but at least one aircraft **must** remain to fight (owning player’s choice).
- B) Neither player can voluntarily abort in the middle of an Air Combat. Once it starts, it continues until only one player has Active aircraft in the hex, or both sides run out of non-parenthesized aircraft
- C) Aircraft can voluntarily abort after completely finishing an Air Combat.

14.3e Air Combat Procedure.

- A) Both players lay out their aircraft in plain view. Voluntary aborts (14.3d) are made now.
- B) The attacker selects one of his **non-parenthesized** aircraft, then the defender selects **any** of his aircraft. These are the aircraft used in the current combat round.
- C) The attacker rolls two dice. Add the attacking aircraft’s Air Combat Rating, and subtract the defending aircraft’s Air Combat Rating from the roll. Compare the modified roll to the Air Combat Table and identify which aircraft must abort. Either one or both of the units will abort. Then, roll a third die—the “loss” die—to determine if the aborted unit(s) must take a step loss as well. This happens on a roll of 5 or 6.
- D) Repeat B and C (one round of combat) with the same or different aircraft until one side or the other remains alone in the hex (or until neither player has any Active Fighters left).

Play Hint: Roll three dice at once—the two “combat” dice and an off-colored “loss” die—to speed Air Combat resolution.

Example: One LaGG-3 (Air Combat Rating 2) and one IL-2 Air Combat

Rating (2)) move into a German Air Base hex occupied by one Active Bf 109f (Air Combat Rating 4) and two Stukas (Air Combat Rating (1)) along with several Inactive aircraft. All of the above are at full strength. The Soviets are the attackers.

Each player selects the aircraft of his choice for the first round of Air Combat. The Soviet player must select the LaGG-3; the German player picks the Bf 109f. The German player (as defender) could also have picked one of the Stukas (not a bright move, but allowed). The Soviet player (as attacker) could not have picked the IL-2 because of its parenthesized Air Combat Rating. The Soviet player rolls two dice (getting a 9) to which he adds his aircraft’s rating (2) and subtracts the German unit’s rating (4) for a modified roll of 7. The Air Combat Table gives “Both Abort.” The Soviet player rolls one die and no losses result, so both players send their aircraft back to base where they become Inactive.

This leaves the two Stukas facing the IL-2. None of these can attack, so the combat ends and the two forces ignore each other. The Soviets can then barrage the Air Base.

14.4 Flak

In Step E of the Air Movement Sequence (14.2e), players check to see if abstracted enemy air defenses (“Flak”) disrupt the mission aircraft. Flak normally involves only ground-to-air fires: most combat units have some anti-aircraft ability, and the game also assumes nominal Flak assets are deployed at all important potential targets. The intensity of ground Flak is increased if the mission is flown into an enemy Patrol Zone (14.4a).

14.4a Missions Subject to Flak. Barrage, Hip Shoot, and Trainbusting missions **are always** subject to Flak. Air Transport/Drop and Base Transfer missions are subject to Flak **only** if they are executed in a Patrol Zone. Other mission types (Fighter Sweep and Interception), as well as non-missions such as return to base after a mission and placement of air reinforcements, are never subject to Flak.

14.4b Supply considerations never affect Flak, nor is there any SP cost for Flak rolls.

14.4c Patrol Zone. A Patrol Zone (PZ) is a defensive area created by any Air Base with one or more Active Fighters, and extends 10 hexes in all directions. Enemy air missions that target a hex in a PZ are subject to Interception (14.5) and heavier Flak.

14.4d Non-Mission Aircraft. Sometimes non-mission aircraft will be stacked with mission aircraft when Flak is resolved. For instance, an Active aircraft might be at a friendly Air Base receiving a Transport mission. The non-mission aircraft are never affected by Flak, but are affected by an Interception (taking part in the Air Combat along with the mission aircraft).

14.4e Flak Resolution. Roll two dice. If the modified result is 11 or more, kill one mission aircraft step. Otherwise, the Flak has no effect and resolution is complete.

The dice roll is modified by the Flak Points affecting the mission, per the charts & tables.

√ **14.4f Flak Losses.** If a step loss is called for above, one of the mission aircraft takes a loss before conducting the mission. Otherwise, the Flak has no effect. Determine which air unit in a stack takes the loss by using the Mission Loss Table. Remove an eliminated aircraft; those with one step remaining finish the mission using their reduced values.

14.4g Cargo Losses. If there is a change in a Transport mission's cargo capacity because of Flak, recalculate the available load (keeping in mind range effects of 14.9e) and destroy a portion of the cargo (player's choice) that exceeds the new capacity. Round in favor of cargo survival (e.g. if 1T is being transported and the aircraft drops from 1T to 1/2T capability, the 1T survives and arrives successfully).

14.5 Interception

During Step D of the Air Movement Sequence (14.2f), a player sometimes has the option to Intercept an enemy mission. Only mission types subject to Flak (per 14.4a) are subject to Interception, and then only if the enemy mission hex is in a Patrol Zone. The player can intercept with **one** Active Fighter (never more than one) which has a Patrol Zone into the mission hex. The player is not required to engage in this way, it is his option.

√ **IMPORTANT:** game-specific weather and/or phase restriction rules **never** prevent Interception missions.

Interception is resolved as Air Combat. If non-mission aircraft are present, see 14.4d. Handling of the intercepting Fighter after the combat is a special case:

- If the interceptor aborted, it must become Inactive at the base from which it came (even if the mission hex contains a friendly base).
- If the interceptor won the Air Combat, it remains Active at the base from which it came.

√ 14.6 Fighter Sweep

A Fighter Sweep is a mission where a friendly Fighter moves to an enemy Air Base to engage Active enemy aircraft in Air Combat. Only one hex can be the target of a given Fighter Sweep mission, and any number of Fighter Sweeps can target the same hex during a Movement

Segment. Win or lose, the mission Fighter must abort to any base within range at the conclusion of Air Combat.

***Play Note:** There is no reason to have more than one Fighter per Sweep, since multiple Sweeps can be flown against the same hex.*

14.7 Barrage & Hip Shoots

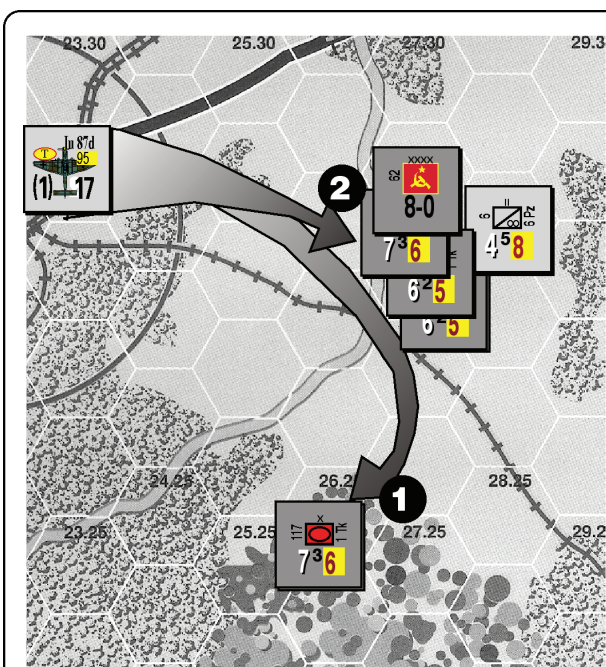
Aircraft use Barrage missions to attack enemy ships, ground units, and facilities. What follows are the specifics of Barrage missions; 10.0 covers the more general rules of Barrage and 18.3 describes anti-ship barrages. All the usual modifiers for Barrage (including spotters) apply to air barrages as well.

A given hex can only be barraged once in a phase (**Exception:** 18.3c), but Hip Shoots do not count against this limit.

14.7a Aircraft can never combine with artillery or ships in a single barrage. An Air Barrage never has any supply cost of its own.

14.7b Air Barrages and Phasing. Aircraft move to a mission hex during a Barrage Segment. Follow the sequencing shown in 14.2f. Aircraft are subject to Flak (see 14.4) before the barrage, and **must** return to a base and become Inactive immediately after resolving the barrage.

14.7c Short Range Barrage Modifier. Range effects apply when all aircraft conducting the barrage are at or within 10 hexes of the base from which they flew. These barrages



Example: A Set of Barrage Air Missions

In this example, the Stuka on the far left has two target hexes to choose from 1, or 2. In a real game, it could hit only one target, but for illustrative purposes here, we will work through each kind of attack.

There are no enemy fighters in the area, so no interception occurs as part of the flak procedure.

Target 1: Unspotted Unit in Terrain. The Stuka hits the lone tank brigade in the forest hex (close terrain) which has no German units adjacent to it. There are no Flak modifiers, so the Russian player rolls two dice looking for an 11 or more. He rolls an 8 and the shot fails and the Stuka drones on to its target. Start on the 17-24 column of the Barrage Table. Several of the column shift modifiers below the table apply. They are: left 1 for close terrain, left 3 for no unit adjacent, and left 1 for 1 RE or less in the hex. That is a total shift of 5 left such that the 2 column is used. The German player lucks out and rolls a 10 and DGs the target. The Stuka returns to base and becomes inactive.

Target 2: Spotted Units in the Open with an HQ involved. The Stuka hits a hex with three tank brigades and an Army HQ. The German motorcycle battalion is adjacent to the target. The Stuka hits this hex and the +1 flak roll (due to the HQ) and rolls an 11 causing the Stuka to flip to its reduced side. The barrage strength is now 9 and begin on the 8-11 column of the Barrage Table. The HQ adds to the RE size of the hex, so the hex has 4 REs in it giving a right one shift for density. The German player lucks out and rolls a 11 on the 12-16 column and gets a 1/2 result.

This is good, because had he gotten a [1/2] result, there would have been no loss possibility because in an air barrage, it automatically becomes nothing more than a DG.

With a real 1/2 result, he then rolls one die and gets a 4 which means the 1/2 'rounds up' into a step loss result. The Soviet must kill off one of the units (his choice of either of the tank brigades or the HQ) and DGs the stack. The Stuka returns to base and become inactive.

get an additional rightward shift on the Barrage Table. **Never** apply this shift to Strat Bombers. See rule 21.4 for optional Long-Range effects.

14.7d Hip Shoots. A Hip Shoot is a barrage conducted in a Movement Segment. These are resolved like a normal Barrage (14.7), with several exceptions and restrictions:

- A) Hip Shoots do not count against the limit of one barrage against a hex in a phase. This means a hex can be barraged by multiple Hip Shoots in a single phase, and the same hex can also be subjected to a “regular” barrage during the same phase.
- B) A Hip Shoot must be made by a **single** aircraft and the nationality **must** be listed as having Hip Shoot capability in the game-specific rules.
- C) √ Hip Shoots on either Barrage Table require a correct spotter (10.0c) that has either finished movement or hasn’t begun moving.
- D) Given the above, a Hip Shoot can be any **type** of barrage. (**Exception:** Trainbusting cannot be performed as a Hip Shoot.)

14.8 Trainbusting



Trainbusting missions are used to harass enemy rail traffic as well as columns of men, vehicles, and pack animals moving through an area.

Only one attempt per hex per phase is allowed. No more than one Trainbusting marker can be placed in any hex. These missions cannot be executed as Hip Shoots.

14.8a Execution. Set up the mission stack in the target hex. Resolve Flak (see 14.4) and then attack the hex using the Barrage vs Facility Table. If the result contains an asterisk, place a Trainbusting marker in the hex (otherwise there is no effect). Regardless of success, the aircraft return to base and become Inactive.

14.8b Trainbusting Zone. The Trainbusting Zone (TZ) is the hex containing the marker plus all adjacent hexes. (**Exception:** For Leg MA movement, the Trainbusting Zone is limited to the marker’s hex.)

14.8c Trainbusting Effects. The Trainbusting Zone affects enemy ground unit movement and rail costs.

- Enemy units must add 1 MP to the terrain cost of hexes in a TZ.
- Rail cargo passing through a TZ costs twice the normal Rail Cap.

- Ships and Sea Cap are unaffected.

Every Trainbusting marker affects a unit as it moves along (but in each hex the maximum extra cost is +1). The doubling of Rail Cap cost is applied only once, however, even if more than one marker is traced through.

Trainbusting does not affect enemy supply draw, throw, Air Transport, or Sea Transport in any way. There is no additional effect on single hex for overlapping Trainbusting markers. Trainbusting has no effect on retreats.

14.8d Phasing. Trainbusting barrages can be conducted in the barrage segment of any phase allowing a player’s aircraft to conduct missions. The markers are removed in the **enemy** player’s next Clean Up Phase and their effects are continuous until then.

***Design Note:** “Trainbusting” includes the old interdiction effects. To avoid a long hyphenated name like “Interdiction-Trainbusting” I’ve simplified it to just “Trainbusting” as it involves a different procedure than the old interdiction process and bigger words just won’t fit on the counter.*

14.9 Air Transport

Air Transport allows the player to use his Transports to move supplies and units around the map.

Air Transport can occur in any friendly Movement Segment.

14.9a Transports have a transport capacity printed on them. They can carry any load up to that capacity. (See 4.7 for Transportation Equivalents.) Transports can stack and combine their transport capacity to carry cargo. For instance, two aircraft with a “1/2T” capacity could carry a parachute battalion that has a transport equivalence of 1T.

14.9b Some Transports have a transport capacity of 1/2T. These units must usually use rule 14.9a, combining to move 1T amounts. Alternatively, they can move 1T by making a double capacity trip using 14.9e. **In no case** can the 1/2T amount be saved for later or rounded up to 1T. (**Exception:** cargo survival, 14.4h).

14.9c Cargo Types. SP can be transported by air, as can combat units that are in **Move Mode** with an MA of **10 or less Leg MPs**.

14.9d Combat units can move up to 1/2 their MA during the phase it is carried by

Air Transport. This can be done before or after the Air Transport mission (or both) provided no more than 1/2 MA is expended.

√ There are important mode and phasing considerations. SP cannot be moved before/after a mission due to “leapfrog” restrictions. Combat units can change to Move Mode prior to Air Transport in Movement Phase, but cannot “flip” orientation during Reaction or Exploitation. Combat units must be released reserves (or Exploit-marked) to move (and possibly attack) before/after a mission during Reaction or Exploitation—all other units being air transported in these phases essentially have an MA of zero (and cannot attack). Note that units moving before/after the mission in Reaction (and Exploit-marked units during Exploitation) have their MA halved twice, for a total of x1/4 MA.

14.9e Air Transport missions are flown to any friendly Air Base. A Transport mission can...

- A) ...be at up to double the unit’s range, provided the air unit becomes Inactive at the destination Air Base, or
- B) ...be at up to the unit’s range, in which case the air unit may return to any Air Base within range after concluding the mission, or
- C) ...be at up to half the unit’s range, in which case the air unit’s capacity is doubled and the air unit can return to any base within half its range after concluding the mission.

In any case, Flak is resolved only once at the destination hex.

14.9f A given Air Base can only unload 2T times the base Level per Movement Segment using Air Transport. However, **any** amount of cargo can be unloaded if the Transports in excess of this limit become Inactive in the destination hex.

14.10 Air Drop

An Air Drop is a form of Air Transport that does not require a friendly Air Base at the destination. Air Drops also differ in that sometimes they must be planned in advance and the cargo may be destroyed in the attempt. Air Drop can be done either by parachute or glider landings. The rules in Section 14.9 apply to Air Drops except where they differ with the rules below.

14.10a Unit Eligibility. Only SPs and those combat units with the small “Para” symbol can Air Drop. (**Exception:** Any combat

unit that can be air transported can land by glider, 14.10e.)

14.10b Prior Planning. Drops of **combat units** have special restrictions. They can only be made during the Movement Phase and require a Drop Plan—a written record of the hex where each combat unit will be dropped and the specific turn the mission will take place. You must make this plan either before the game begins or at least two turns in advance of the scheduled drop. Plan these drops in the Aircraft Refit Phase. No unit can ever be on more than one Drop Plan at a time.

√√ Note that units making a planned air drop do not require trace supply on the turn they are dropped.

Supply drops don't need prior planning nor do they have any phase restrictions.

√ **14.10c Cancellation and Delay.** All or part of a Drop Plan can be cancelled or delayed. (Some units could drop as scheduled, some be delayed, and some cancelled.) Make this decision during any Aircraft Refit Phase. If delayed, the exact same drop is now pushed back to the next turn. If cancelled, the plan ceases to exist (and even if the same plan is drawn up in the future, planning must start from scratch).

14.10d Air Drop Procedure. After resolving Flak, check for losses using the Air Transport Success Table. Roll two dice for each combat unit or 1T of supply separately, based on the type of terrain in the mission hex and drop method (glider or paradrop). Apply the table's modifiers. If the roll is successful, place the unit in the drop hex and it is finished moving for that phase. Otherwise, it is destroyed. Automatically destroy anything that attempts to land on an enemy combat unit. If landing in an enemy hex containing enemy non-combat units, apply relevant parts of rule 9.14.

14.10e Gliders. Gliders improve the transport capacity and success of Air Transport and Air Drops. Gliders do not count for stacking, and are always considered Active. Glider counters are generic "change" (they can combine and break down like SPs) that represent one or two Glider Points.

A) Expend one Eq Repl to build two Glider Points in the same manner as aircraft rebuilding. Gliders cannot be built in games where they are not provided. Gliders can be rebuilt, but not reused—place gliders in the dead pile after use in a mission.

B) Gliders can only move when being

towed as part of an Air Drop or Air Transport mission. If an Air Base is captured, any gliders in that hex are destroyed.

C) A full-strength Transport (of any capacity) can tow one Glider Point. The capacity of one Transport/Glider combination is 2T (all of which is considered loaded on the glider). A Transport eligible to double its capacity (per 14.9e) due to a half-range mission can tow two Glider Points. (This uses double the Glider Points—don't double the amount each glider carries.) Alternatively, it could carry one full load with a glider and one without (for a total load of 2T on the glider trip and its printed capacity for the Paradrop trip).

D) When used to land at an Air Base/strip, gliders do not count for off-loading limits. Do not roll on the Air Transport Success Table (success is automatic at a friendly Air Base). The glider is still removed from play, however.

E) Glider landings have a better chance for success than a regular Air Drop, as shown by the Air Transport Success Table.

F) Gliders, themselves, do not check for Flak, but their tow aircraft do. The capacity of the Transport/Glider combination is reduced to 1T if the towing aircraft takes a loss. Handle losses to cargo as per 14.4h.

√√ **14.10f Integral Gliders.** As opposed to the separate counter version in 14.10e, some games may contain Transports that contain a glider component as part of the Transport itself. Basically, these are special Transports with an improved transport capacity because they **always** are towing gliders (which make them **exempt** from base unloading limitations). Rule 14.9e modifies their capacity for half range, etc.

Specific Game Note: Case Blue's transports with Integral Gliders can only perform Air Transport and Base Transfer missions (never Air Drop missions).

14.11 Base Transfer

A base transfer is simply a way of moving an aircraft from one base to another without performing any other functions.

Aircraft can *double* their range when moving from base to base.

When a Fighter performs a Base Transfer **within** its normal range, it remains Active. Otherwise, it goes Inactive (as do all other plane types making Base Transfers).

Play Note: Players may find that aborting after a mission is often a more useful way to change base (since they can return to any base they want, not just where they came from, and they can do something "along the way.")

Example of a Complex Aircraft Mission.

During his Movement Phase's Barrage Segment, the Allied player launches a Barrage against an Axis stack with a Reserve marker showing. The strike consists of two Hurricane II Fighters and one Blenheim V bomber. The mission hex is inside the Patrol Zone. The mission has a +2 Flak Mod operating against it (+1 for a Patrol Zone (since a Fighter is present), +1 for three mission aircraft).

First, the Axis player resolves Flak against the mission. He chooses to avoid literally intercepting and forcing an actual Air Combat. The Axis player rolls two dice and gets a 10 which is modified to 12 resulting in a loss. The Allied player uses the Mission Loss Table to randomly select one of his aircraft to take the loss and it is the Blenheim. It is reduced and the mission continues.

The Allied player now totals the barrage strength of the three aircraft in the mission. The Fighters are worth a combined 6 Barrage Points. The now reduced bomber adds 3 more, for a total of 9 points. The initial Barrage Table column is 8-11. There is no barrage supply cost since this is an Air Barrage. No Allied combat unit is adjacent to the target (no spotter: three columns left) and it turns out there are 4 REs in the hex (one shift right). No further column shifts apply. The total Barrage Table shift is two left, to the 3-4 column. The Allied player rolls two dice and gets a 12, giving a 1/2 result. He then rolls a 5 with one die, so it "rounds up." The Axis player must remove one step of his choice and the mode of the stack is changed from Reserve to DG. The Allied aircraft now return to any friendly base within range.

15.0 Air Bases



Air Bases represent ground support establishments in addition to physical facilities (runways, hangars, fuel tanks).

Each Air Base has a Level that represents

its size and abilities. Air Base markers have a small triangle on them that allows players to displace them from their actual hex in congested areas. Use this feature as needed. **See 9.14f regarding Air Base capture.**

15.0a No more than one Air Base can ever exist in a single hex. Air Bases are non-combat units with no defense strength of their own.

15.0b The base's Level has the following effects:

- A) Each Air Base Level allows the refit of two aircraft per Aircraft Refit Phase.
- B) Air Bases give a Flak Roll Modifier equal to their Level.
- C) Only 2T times the Level of the Air Base per Movement Segment can be unloaded (unlimited if the Transports in excess of this amount become Inactive or it is an Air Drop or glider operation). There is no limit on loading.
- D) Stacking limit of Active aircraft in an Air Base hex is 4 + the Level.

15.0c When attacked on the Barrage vs. Facility Table, Air Bases may take hits which reduce the Air Base's Level. **However, no Air Base can ever be reduced below Level 1 in this manner (even in games where Air Strips are used).**

15.0d Air Bases and aircraft never require trace supply and are never subject to the Attrition Table.

15.1 Refitting Aircraft

- A) An Air Base can refit once per Aircraft Refit Phase.
- B) Refitting costs 1T to refit each base (regardless of base Level or number of aircraft involved). A base can refit up to **double** its base Level in aircraft. The player chooses which Inactive aircraft to refit. Every aircraft counts as one for refit, even when at reduced strength.
- C) An Air Base cannot refit aircraft if in an un-negated enemy ZOC.
- D) **In a change to some previous game specific rules:** Weather conditions never prohibit refit, and aircraft are always allowed to be Active on their base.

15.2 Air Strips

Some games allow players to build Air Strips. These are Air Bases that are *smaller* than regular Air Bases. If not specifically allowed, Air Strips cannot be used. The following are their special characteristics:

- A) An Air Strip can only refit one aircraft per Aircraft Refit Phase.
- B) Air strips have a 2T unloading capacity.
- C) The stacking limit of Active aircraft in an Air Strip hex is 4.
- D) An Air Strip can be built for 1T following the procedure in 15.3. An Air Strip can be upgraded to a Level 1 Air Base by paying the remaining SP cost for the Level 1 base (3T).
- E) Air strips can never be reduced by damage or voluntary reduction.
- F) Air strips do not give any Flak Roll Modifier.

15.3 Building Air Bases

In his Movement Phase (only) a player can build/improve Air Bases. A base cannot be improved above Level 3, and no Air Base can increase more than one Level in a given phase. **There can never be more than one Air Base in a hex.**

An Engineer-Capable unit can construct (13.8d) a Level-1 Air Base at a cost of 1 SP. The same procedure/cost can be used to improve any existing Air Base by one level.

15.4 Reduction of Air Bases

During the Movement Phase, at least 1 RE of combat units that are in Combat Mode and do not move from their starting hex can reduce an Air Base by one Level. Engineers can also perform this function, per 13.8d.

No base can be reduced more than one Level in a single phase, and no base can be reduced below Level 1. There is no SP cost for reduction.

15.5 Air Base Cards (Optional)

Printed on the back of the rules are a number of Air Base card forms. Photocopy these and use them as off-map displays for each Air Base. Only aircraft can ever be off-map on an Air Base Card.

16.0 Hedgehogs



Hedgehogs (aka "Hogs") represent fieldworks, mines, and other obstacles that help protect a hex from combat and barrage attacks. There are four Hedgehog levels. They cannot move or retreat from the hex in which they are built. They are non-combat units with no defense strength, and as such do not require combat supply or trace supply.

Hedgehogs can be captured and used by the enemy, per 9.14e.

Hedgehogs are off-limits to units in Reserve Mode, per 5.7g.

16.0a Hedgehogs come in four levels. No Hedgehog can exceed Level-4.

16.0b Construction. A player can build/improve Hedgehogs only during his Movement Phase. **A given hog can increase by only one Level in a phase and there can never be more than one hog in a hex.**

√ At least 1 RE of combat units that are in Combat Mode and do not move during the phase can build a Level-1 Hedgehog in their hex by spending 2 SP. Alternately, an Engineer-Capable unit can do the work, per 13.8d.

It thus takes four turns and 8 SP to build a Level-4 hedgehog from scratch.

16.0c Reduction. During the Movement Phase, at least 1 RE of combat units that are in Combat Mode and do not move from their starting hex can reduce a Hedgehog by one Level. An Engineer-Capable unit can also perform this function, per 13.8d.

No Hedgehog can be reduced more than one Level in a single phase. Remove a Hedgehog unit reduced below Level-1. There is no SP cost for reduction. Combat and barrage results never reduce or eliminate a Hedgehog.

16.0d Combat Effects. Hedgehogs affect **defensive** combat in their hex as a die roll modifier equal to their Level. Apply this DRM in addition to the Action Rating DRM. For example, a Level 3 Hedgehog would give the defender a -3 DRM. Furthermore, the defender's Hedgehog affects Surprise with a -1 DRM (regardless of the Hedgehog's Level). See 9.3, 9.4, and 9.8.

16.0e Hedgehogs affect Terrain Effects by providing Heavy AT (9.4e) to defending combat units in the hex.

17.0 Weather

Determine the weather during the Weather Determination Segment. One player rolls on the Weather Table to determine the weather and its effects for the turn.

17.0a Weather affects play according to the effects (if any) listed with the game specific Weather Table(s).

17.0b Weather generally affects each player equally, although in special circumstances it can affect one side or the other differently.

17.0c Weather conditions that **increase** normal movement costs are ignored when tracing supply-related paths (12.3d).

17.0d In a change to some older game's game specific rules, weather never prohibits refit or aircraft being Active at their base.

18.0 Naval Power

Skip this entire section if the game being played does not include ships!

Naval warfare is handled fairly simply, because the series is built around land-air combat. However, some detail in naval operations is needed to allow for campaigns with an important naval component (specifically amphibious landings and naval gunfire support).

18.1 General Naval Rules

18.1a Supply. Ships do not generally require supply expenditure.

18.1b Stacking. There is no limit to the number of ships that can stack in a hex. Ships cannot stack with enemy ships.

18.1c Movement. Most ships can only enter all-sea hexes and friendly ports. Landing Craft can additionally move in any coastal hexes and in either hex bordering an estuary (sea hexside), as can **any** ship intending to end movement in a friendly port. Ships can never cross an all-land hexside or move along rivers. Movement of ships does not change control of a hex (or port, airfield, dump, etc.).

18.1d Naval DG. Ships do not use modes, but use DG markers to show an increased vulnerability to damage (see 18.3d). DG markers are removed from ships during the player's Clean Up Phase. Ships in port hexes are **automatically** considered to be DG.

18.1e Phasing. Ships can move during friendly Movement, Exploitation, and Reaction Phases, and expend 1 MP per hex. Every ship can move in all three phases (no need for Reserve markers).

18.1f Speed. Most ships move 20 hexes per phase (regardless of game scale). **Slow** ships (designated with a **white stripe**) move 10 hexes per phase. Damaged single-ship counters convert to slow speed, but multi-ship counters (destroyers and cruisers) are reduced in strength while retaining normal speed. These changes are reflected on the damaged side of the counter.

***Design Note:** The speeds above are indeed "slow" given regular steaming rates. They exist here not as a measure of how fast the ships can go, but rather as a measure of flexibility. Ships dedicated to an operation cannot instantly shift focus as would be the case if they had a movement rate matching their potential steaming distance.*

18.2 Aircraft Carriers

18.2a Capacity. Carriers are limited in the number and type of aircraft they can carry. Only aircraft with the associated carrier's name on them can use that carrier. In some games, each carrier has a number on it that is the number of aircraft it can support. A carrier **cannot** exceed that number (counting both Inactive and Active aircraft).

18.2b Refit. Carriers automatically refit all their aircraft in the Aircraft Refit Phase with no SP cost.

18.2c Damaged Carriers. A damaged carrier **refits only 2 aircraft**, regardless of its normal rating.

18.2d Carrier-based Air. Aircraft on a carrier perform their missions and project a Patrol Zone from the carrier's current location. A carrier can move in the same segment air units based on it perform missions, either before or after the mission is performed. Aircraft on a carrier stay with the carrier when it moves. (Tagging along with the carrier is **not** considered to be a mission by the aircraft.) Other than having a special base, carrier-based air operates under the same rules as other aircraft.

18.2e Surface ship gunfire **cannot** be directed at a carrier **if** any non-carrier surface ships are in range. (The other surface combatants must be sunk before surface fires can be directed at the carrier.) This rule does not apply to coastal artillery gunfire (18.3g).

***Design Note:** This last rule is designed to show the effort by members of a carrier group to defend the carrier. Every destroyer, cruiser, and even battleship in the area will give of itself to protect the carrier. The surface attack will not be able to get to the carrier (regardless of the game map's positional abstraction) until the screen is eliminated.*

18.3 Naval Combat

Ships attack and are attacked using barrage.

18.3a Ship Barrages. A ship can barrage once per friendly Barrage Segment, choosing a ground or naval target within range. Ships can barrage in any of the Barrage Segments, with the following restrictions:

- A) A ship can fire Ship-to-Ship in every available Barrage Segment.
- B) A ship can fire Ship-to-Shore in any friendly Segment, but only in one Segment per game turn (counting both Player Turns). For example, a ship could fire in the Reaction Phase Barrage Segment in the enemy turn, but would not then be able to fire in any of the friendly Player Turn's Barrage Segments.

18.3b Ground Targets. Naval barrages against ground units have reduced effects as noted on the Barrage Table. Barrage vs. Facilities using ships have no special rules. Ships firing together do not need to stack together. See 18.3g for the procedure for firing at Coastal Artillery.

18.3c Naval Targets. Instead of attacking entire stacks of ships, barrages are made against individual ships.

√ There is no limit on the number of anti-ship barrage missions that can be directed against a single target hex in a Barrage Segment, but no ship can be the target of more than one barrage in a phase.

After announcing a barrage against a stack of ships, the firing player is allowed to see all the available ships (but not their cargoes, if any) before selecting individual targets. For example, a stack of two aircraft could combine against one ship or each attack a different ship. (The strength of a barraging unit cannot be split, however.) Resolve each barrage independently.

Use the regular Barrage Table when shelling ships (in any manner). Several special rules apply when attacking ships:

- A) The **only** possible shifts are those related to an attacking aircraft's distance from its base.

- B) Always **multiply** an aircraft's barrage strength x2.
- C) Always **divide** incoming barrage strength by the target ship's Protection Rating (if none is printed on the counter, treat it as '1').

Design Note: *It is important for players to realize the abstractions represented in ship vs. ship exchanges. Ship location at this level is not all that precise. Keep in mind the range changes that happen in the hours significantly "below" the resolution of the system. Additionally, many of the fire, counter-fire procedures that were tested were not included in the final draft of these rules. Here, gunfire exchanges will occur over a course of phases, which gives a skewed look at them with regards to time, but will generate appropriate losses and results. This is **not** a tactical naval system!*

18.3d Naval Damage. Ships are affected by hits and DG results generated by the Barrage Table. Damaged ships **cannot** be repaired.

- A) The first hit flips a ship to its damaged side; the second sinks it. (**Exception:** Landing Craft; see "C" below.) Also mark the ship DG when it takes a hit. Note a second DG requires special handling, per "B" below.
- B) DG results only affect the target ship, not the entire hex or any cargo. Ship values are not affected by DG results, but on a second DG result remove the marker and apply a hit result. Keep in mind that ships are already DG when in a port, so **every** DG from barrage is converted into a hit. Remove DG markers on ships during the friendly Clean Up Phase.
- C) Each hit against a "Landing Craft" or "DUKW" eliminates one point of the unit—just find a counter of the reduced point value to reflect the hit. When an "LST" takes a hit, **convert** the counter to a "Landing Craft" of the reduced point value. DG results apply in the same way as other ships.

Important: The player conducting a barrage selects its target if shooting against ships. If firing against Landing Craft, **randomly** determine the target. Eliminated cargo is also randomly determined. (Example: a 2-point DUKW carrying 1 SP and 1 regiment takes a loss. Reduce the DUKW to 1 point, and then roll to see if the SP or the regiment is lost.)

18.3e Torpedo Bombers. Aircraft with their barrage strength in parentheses are exclusively Torpedo Bombers. Such aircraft function normally except that their barrage strength can **only** be used against ships. Their strength can **never** be used against land targets.

18.3f Ship Flak Ratings. The Flak value of a ship (if any) is given on the counter. To determine the Flak rating applied to any air barrage in its hex, use the target ship's Flak Rating plus all other ships in that hex.

18.3g Coastal Artillery. Coastal artillery units can fire as "land-based ships" using the same rules as ship-to-ship fires (including the exemption from supply use). **They are the only ground units that can barrage ships.**

- A) Coastal artillery can barrage as regular artillery (with all the usual rules, mode restrictions, and supply costs) in phases they do not fire at enemy ships.
- B) Ships can engage coastal artillery as a naval target, independently of other ground units in the hex. (They could alternatively do a regular barrage against the hex, per 18.3b.) These are always considered to be "spotted" fires, with Barrage Table results treated as follows: any step loss eliminates the coastal artillery unit; DG results are ignored.

18.4 Landing Craft

Landing Craft, LSTs and DUKWs are ships referred to collectively in these rules as "Landing Craft." They are used to deliver units and SPs to the invasion beaches in some OCS games, using either the Amphibious Landing (ALT) or Beach Assault (BA) procedures. Landing Craft have no combat value.

18.4a Capacity. Landing Craft have a capacity number on the counter and function much like Transport Points. They do not count for stacking.

18.4b Movement. Landing Craft are slow ships that can move in all three available Movement Phases. Loaded ground units and supplies tag along until unloaded.

18.4c Loading. Landing Craft can load combat units, SPs, and Transport Points up to the limit of their capacity (see 4.7 for Transportation Equivalents). On-Map Loading can only be done in port hexes (printed or LST port). While loaded, SPs can only be used by units in the same or an adjacent hex.

18.4d Handling. Landing Craft are like Transport Points, in that they can be split up and combined in various combinations of generic "points." The same is true when taking losses, either from ALT results or from barrage: all one needs to do is replace the current strength of the Landing Craft with the reduced number of points. LSTs are an exception (see 18.3d).

√ All LC in a stack are treated as "one individual ship" for target and DG purposes.

18.4e DUKWs. In addition to being Landing Craft, DUKWs can operate as Transport Points (13.2; capture as Truck per 9.14c). When moving as Transport Points, DUKWs lose the ability to move in all three Movement Phases, but their MA is **tripled** to 24. The switch between Landing Craft and Transport Point (and vice versa) can occur at any time during the Movement Phase—just triple the remaining MA when it starts to move by land (or divide by 3 when it starts to move by water).

In addition to the special ability to move on both water and land, a DUKW has some limitations:

- A) Make an ALT roll (see 18.5f) each time the DUKW switches movement type from Landing Craft to Transport Point (**NOT** vice versa). This **can** be the same roll used to unload cargo.
- B) √ When functioning as Landing Craft, DUKWs can only carry items allowed on Air Transport Missions (restricted as per 14.9c). Treat as an LC when overrun (9.14g).
- C) √ When functioning as Transport Points, DUKWs can only carry SPs and loading/unloading is according to 13.2f. Treat as a truck when overrun (9.14c).

18.4f LSTs. In addition to being Landing Craft, an LST can be converted into a new port. At the end of any friendly phase an LST in a coastal or estuary hex can deploy as a port by flipping over to its port side. This 'conversion' requires an ALT roll (see 18.5f). An LST can unload any cargo in the same phase it deploys as a port: unload the cargo using the same ALT roll as the port deployment (but this landing occurs before the port exists).

Some special rules apply to LST ports:

- A) Unlike regular ports, they **cannot** be targeted by a barrage (the **hex** can be barraged, but the port ignores any result).
- B) They are destroyed if an enemy Attack-Capable unit enters its hex.

They can never be captured or destroyed by any other method.

- C) They cannot be moved or reconverted into an LST.
- D) They are a normal 1 SP port, which includes being a supply source.
- E) They begin to function the **instant** the LST deploys (provided it is not in an un-negated enemy ZOC).
- F) An LST cannot be converted into a port in a hex with any real port.

18.5 Amphibious Landings

Landing Craft can unload combat units being transported when they end movement in coastal hexes. The risk attached to such landings is reflected by the required roll on the Amphibious Landing Table (ALT).

18.5a There is no movement cost for unloading; just drop off the combat units when the Landing Craft enters the coastal hex. The Landing Craft must end its move at that point. These landings are limited to undefended coastal hexes. For hexes occupied by enemy combat units, see 18.6.

18.5b Any number of Landing Craft points can unload in a given hex in one phase.

18.5c Combat units must unload in either Combat or Move Mode.

18.5d Landings requiring an ALT roll can **only** be done during the player's **Movement Phase**. Note that landings in ports which do not require an ALT roll can also be done in Reaction and Exploitation Phases (see 18.5g).

18.5e Transport Points and SPs **cannot** be landed by ALT (but see 18.5g). SPs loaded on Landing Craft can **only** be used by units in the same or an adjacent hex (even if off-shore).

18.5f The ALT Roll. Make ALT rolls **after** all Landing Craft have moved for the phase. Roll two dice per hex containing units that landed during the phase. Add applicable modifiers and execute the result.

- A) When there are several terrain types in the hex, use the most difficult on the ALT.
- B) When losses are required by the ALT roll, randomly choose which Landing Craft are lost. Cargo losses should also be random.
- C) $\sqrt{\quad}$ Roll and implement ALT results separately for each full or fractional group of 3 REs landed in a hex.

Make as few rolls as possible, but otherwise a player can arrange units into groups as desired.

- D) $\sqrt{\quad}$ "After landing" movement (18.5h) is made after all of the turn's ALT rolls are complete.

18.5g Ports. Do not make ALT rolls for Landing Craft making use of a friendly port with an available capacity at least as large as the size of the cargo to be unloaded. (Any units being landed in excess of port capacity **do** require an ALT roll.) When no roll is required, loaded Transport Points, and SPs **can** unload in ports.

18.5h After Landing. Ground units can move 1/2 their MA during that same Movement Phase after an ALT landing. Units are assumed to be fueled **before** landing (for free) and this lasts until the first friendly Clean Up Phase after the landing. No "after landing" movement is allowed by units coming ashore without an ALT roll via 18.5g.

It is possible to do an ALT landing in a hex containing enemy non-combat units. After making the ALT roll, apply the Specialized Combat rules of 9.14.

18.6 Beach Assaults

Landing Craft can position units being transported for an assault on a coastal hex that contains enemy combat units. Resolve Beach Assaults (BA) as a ground combat done as a last resort (when landings via the ALT are not possible).

18.6a Resolve Beach Assaults during the friendly Combat Phase. Several special rules apply:

- A) The attacking units must be in Combat Mode, no more than 3 REs can assault a specific landing hex, and only one attacking stack can assault a given landing hex.
- B) Combat supply for a BA can be drawn only from Landing Craft carrying Supply Points in the same or an adjacent hex.
- C) All attacker option results **must** be taken as step losses.
- D) Unit making BAs can keep any Exploit result they might get; BAs are not considered overruns for any purpose (including Surprise).
- E) If the BA fails to dislodge the enemy from the defending hex, destroy all attacking units and their Landing Craft.

F) There is a nominal hexside terrain that makes all units x1/2 when attacking in a BA. The defender can instead choose the hex terrain for Terrain Effects, should he so desire.

G) BA combats **cannot** be made in conjunction with attacking units that have already landed; the player must select only one type of attack to do against the target hex in a given phase.

18.6b Just before the execution of a BA, the defending player must decide to resolve the attack on the ALT or as a BA. He should choose the table that offers the greatest damage to the attacker—for example, he can select the ALT if he thinks the odds for a BA are overwhelming and the ALT offers a better chance to cause the enemy some loss. The defending player's decision cannot be changed once made, and must be made before any dice are rolled, units exposed, or combat supply paid. Handle each landing hex independently. Spend no supply for BAs resolved on the ALT. Several special rules modify the normal ALT procedure:

- A) Regardless of the ALT result, the defenders are automatically destroyed.
- B) Landed units advance into the coastal hex and cannot move further that phase.
- C) If a pre-landing barrage destroys the defending units, a Beach Assault is automatically resolved on the ALT, but case B above still applies (no further movement).

19.0 Ports & Shipping

Ports are marked on the map with an anchor symbol and capacity. Ports are treated as non-combat units (no actual counter is used), so only Attack-Capable enemy units can enter these hexes.

19.0a Capacity. Port capacities are given in SPs. The capacity is the maximum number of SPs allowed to load and/or unload in a single phase. For example, a port with a 1T capacity could load **or** unload 1T in a phase, but not both. Units and supplies coming into the port without an ALT roll via 18.5g and 19.0f count against the capacity of a port.

Ports with a capacity above zero **can** choose to use their **full** capacity to load or unload a **single** ground combat unit counter whose Transport Equivalent size exceeds

the port's current capacity. This can be the only loading/unloading performed at the port during the phase.

√√ A port is "shut down" when in an un-negated enemy ZOC. (Per 4.5a, negation is possible for trace supply operations, but not for Sea Cap.) Ports which are shut down have their capacity treated as zero. The port instantly recovers its normal capacity when the enemy units move, are driven away, or the ZOC is negated.

Play Note: A port continues to function when enemy combat units or ZOC block the hexes that lie between it to the sea. Note that game-specific rules will sometimes override this.

19.0b Damage. Ports can accumulate "hits" from the Barrage vs. Facility Table. These hits affect the port's capacity (as noted beneath the Barrage vs. Facility Table; round to nearest Token of capacity). Whether by the Barrage vs. Facility Table or by Voluntary Reduction (see below) a port can never accumulate more than 4 hits. Some ports have a Damage Track specific to them; for these apply the Port Capacities listed there and not the generic hit effects.

19.0c Voluntary Reduction. During the Movement Phase, at least 1 RE of combat units that are in Combat Mode and do not move from their starting hex can inflict 1 hit on a port in that hex. Engineers can also perform this function, per 13.8d.

19.0d Repair. In his Movement Phase (only) a player can repair damaged ports. An Engineer-Capable unit can use construction (13.8d) to repair one hit at a cost of 1 SP. Only one hit per port can be repaired in a given phase.

19.0e Ports and Trace Supply. The Game-Specific rules of each game specify which ports, if any, are available as supply sources. A port that is normally available to the player as a supply source loses that ability if the port falls below a 1 SP capacity.

19.0f Shipping (aka Sea Cap). Combat units, Transport Points, and SPs can be moved using shipping to cover any distance between ports. Landing Craft or other ships are not needed for this abstract shipping.

- A) Shipped units must be in Move Mode.
- B) Shipping is allowed only during the Movement Phase.
- C) No other movement is allowed by shipped units and SPs during the same Movement Phase.

- D) The game-specific rules may give players a "shipping allowance" in SPs. The Transportation Equivalent of various cargoes is found in rule 4.7.
- E) Each shipping point can transport **one** SP from port to port, and the limitations of each port's capacity must be observed.
- F) √√ Enemy ZOC prevent port operations involving Sea Cap (4.5a).

20.0 Breakdowns



Breakdown Regiments are generic, single-step units detached from multi-step infantry divisions to allow these divisions (which cannot otherwise split up) to cover more terrain. These units are infantry regiments with either "Brkdn" or no unit identification at all. Available Breakdowns are not limited to the provided counter mix (if players don't mind making extras).

20.0a Infantry divisions with more than one step can generate Breakdowns when a division begins to move or advance/retreat after combat. Expend one or more steps by placing the appropriate Step Loss marker under the division. Each step used in this way generates one Breakdown in the division's hex. The last available step of a division can **never** become a Breakdown.

20.0b A division can only detach Breakdowns with an Action Rating equal to or less than its own, and may absorb a Breakdown with an Action Rating greater than or equal to its own.

√√ **20.0c** When being created or absorbed, Breakdowns must have the same "mode & marker" status (things like low ammo and DG Mode) as their parent division.

20.0d A reduced infantry division must reabsorb an eligible Breakdown it is stacked with at the end of any phase (given terms of 20.0b and 20.0c are met).

20.0e Breakdown creation and recovery costs no MPs. Created Breakdowns can move in the same Movement Segment in which they are created.

20.0f Breakdowns are 1 RE and have one step. They are treated as independent units.

√ **20.0g** Specialized infantry divisions, such as mountain and parachute, use the same Breakdown rules (and usually the same pool of Brkdn counters).

21.0 Optional Rules

Most of these rules are, in my opinion, a little too much work to be worth the effort. They are presented here so you can use them or not, depending on what you want out of your game. Enjoy!

21.1 Recon

This option is for those who want to incorporate some of the special attributes of recon units. For this option, a "recon unit" is any unit (regiment or smaller) with the recon, cavalry, commando, motorcycle, or armored car symbol.

During any phase in which a recon unit moves, it can spend 1/4 its printed MA and 1T to recon an adjacent hex. The other player must reveal the total number of steps and whether armor, mech, and/or anti-tank units are present (as they relate to 9.4e).

21.2 Proportional Strength

Use proportional strengths for multiple-step units that have losses, rather than 9.11d. The formula is (Strength x Current Steps / Printed Steps). Round these strengths immediately.

Example: An 11-strength division with two of three steps remaining would have a proportional strength of 7.

21.3 Independents

In any combat with attacking independent units that does not also include an attacking divisional unit, double the attacker's supply cost (to 2T per RE or unit). Furthermore, independents falling into this category (again, attack only) **cannot** use internal stocks.

Attacks that combine independent units with divisional units must use a divisional unit for the Action Rating for the attack. This does not apply to defense.

Fuel Expenses. Instead of paying for an HQ and all independent units in range, pay 1T per 1 RE of independent units and mark them with their own fuel marker. This version of fuel use replaces 12.5c method "B" and lasts until the next Clean Up Phase.

21.4 Long Range Air Effects

Apply the following to aircraft moving **more than 1/2** their printed range:

- A) Barrages suffer an additional shift of one column left. Apply this regardless of the number of aircraft in the barrage that are affected.
- B) Air Combat Rating is reduced by one.
- C) Fighters that do a Base Transfer must become Inactive (under 14.11, they would remain Active at full printed range).

21.5 Re-Basing Limits

Allow only a maximum (per turn) of one aircraft per base Level (of the receiving Air Base) to apply the “Fighters can remain Active” clause of 14.11 or to enter as Active reinforcements at a given base. Count an Air Strip as a Level-1 Air Base for this rule.

21.6 Convention Tempo

This rule makes for an ahistorically high rate of operations. It can be used in any scenario and any of the games to make a more intense gaming experience. In a multi-player convention setting it keeps everyone active, and it can also help new players (who have not optimized their play) adjust to the system’s demands.

21.6a Double all at-start, on-map supply points, excluding Organic Trucks that might be loaded.

21.6b Double the rail capacity, and all Transport Points at start.

21.6c Increase Reinforcement supply amounts and shipping capacities by 50%.

21.6d Roll twice on all Variable Reinforcement Tables in each Reinforcement Phase.

√√ 21.7 Revised Rebuilds

There are several changes to 13.5:

- Limited Hoarding. Pax and Eq often represent remnants of eliminated units being reorganized and returning to action. As such, at least 1/2 of Pax and 1/2 of Eq must be used on the turn they are received. (So no saving them for later unless at least two are received on a given turn.)
- Easier Rebuilding. Allow reinforcing Repls to arrive in the hex with any HQ that is in normal trace supply (cannot be “eating off map” or using something special like **GBII**’s Tree Bark Soup).

There is no longer a need to march or rail them forward.

- One-Repl Rebuilds. Every kind of step can now be replaced with either 1x Pax or 1x Eq, regardless of previous cost. (But “no rebuild” units still cannot return from the dead, nor can units that don’t have a rebuild cost.) For instance, it now costs just 1x Pax regardless of whether the old cost was 1x Pax or 2x Pax or 3x Pax. If the game’s Common Rebuild Table shows a mix of Eq and Pax being required, the new cost is now 1x Pax except in the case of units with a Track MA (on either side of the counter), in which case it costs 1x Eq.

21.8 Attacking Empties

Some players are puzzled as to why a unit could move 100% of its MA and attack an enemy unit to move at least one hex further, while another unit can’t attack the empty hex in front of it to do the same thing. This also helps guys disturbed by a player being penalized for having a “too successful” preparatory barrage (and not getting to attack at all).

21.8a Any unit otherwise able to attack in a given Combat Segment can do so, even if no enemy units are in the target hex.

21.8b In an exception to 9.14a, do not assign the empty hex a zero combat strength. Instead, the attacker pays his attack SPs normally for all units involved and the units paid for can advance into the target hex. No Combat Table roll is needed and no exploit result is possible.

√√ **21.8c** Air-dropped combat units can “attack empties” on the turn they land at no supply cost. (Thanks to Dick Horneffer for this suggestion to give the paras some post-landing movement.)

21.9 Reactive Artillery

By popular demand, this is a test rule from a v4.0 draft that did not make the final cut but is included here because some players found that they really liked its effects.

21.9a Allow artillery that is in Combat or Move Mode to fire in the player’s Reaction Phase even when not marked in Reserve.

21.9b This rule does not allow the artillery to move in Reaction, or do anything beyond the normal rules in Exploitation.

21.9c Artillery in Hedgehogs **can** take advantage of this rule.

21.9d Ric van Dyke cannot use this rule.

21.10 Anti-Raider Rules

These rules are for those concerned that some little suicide unit might cut off large stretches of your front-line from trace supply. (Many feel such rules are *not* needed as one of the points of the system is that the player is responsible for his own rear areas; players who pull units out of the rear and run them toward the front deserve what they get.) There are two options you can apply if you feel such a thing should not happen, or your opponent is the kind of slimy guy who thinks along these lines.

21.10a Godzilla. Deep in the enemy rear areas lurks a giant, hungry lizard. Units fear monsters, so they prefer not to go too far out on a limb, for fear of becoming lizard food. Defining what a “raider” is for this is difficult, so players will need to use common sense. Qualifying units tend to be small, out of trace supply, out of range of an HQ, and positioned so that they block enemy supply trace (and that is their primary purpose). If you find a unit or stack that seems to qualify, Godzilla eats them and they reappear in the dead pile.

*To Satisfy Jim Wise: No, in games with Japanese players (such as **Burma**), the player cannot avoid Godzilla by having his mouth continue to move after finishing speaking and committing unlikely feats of technological prowess. (Yes, proofreaders start looking for comic relief after hours and hours of rules reading. Good one, Jim!)*

21.10b Shift-Off. At the end of the Exploitation Phase, the non-phasing player can declare a “Raider Check.” He points at railroads that have just been blocked by enemy movements that will prevent his HQs from remaining in trace supply (note that trace between the HQ and units is not a concern here, only from the HQ back). The owning player must shift any Move or Strat Mode units on those railroads one or two hexes so they are no longer sitting on a railroad needed for trace. Combat Mode units need not retreat.

√√ 21.11 Enhanced Construction

This rule adds a bit more detail to the rules for hedgehog construction and port repair.

21.11a Big Hogs. An Engineer-Capable unit is now needed to improve a hedgehog—improving a hog beyond Level-1 goes well beyond what can be done by regular troops. The cost of the Big Hogs is also increased to Level + 1 (so a Level-2 costs 3 SP, a Level-3 costs 4 SP, and a

Level-4 costs 5 SP). Other units can still construct Level-1 hogs and their cost remains 2 SP.

21.11b Small Ports. Port Repair (19.0d) cost is reduced to the current port capacity if a port's current capacity is under 1 SP. Example: if the current (damaged) capacity is 2T, it costs 2T to repair a level.

√ 21.12 Enhanced Transport

This rule adds a bit more detail to the rules for Air Transport, Sea Cap, and Strat Mode.

21.12a XYZ Transport Missions. An Air Transport mission is normally flown from Base X to the "mission hex" at Base Y, and from there to Base Z (where plane goes inactive). Cargo is loaded at X, unloaded at Y, and the transports return empty to Z. The planes in a mission can come from different X's, and return to different Z's, but in general this is the procedure.

Under this enhancement, cargo can be loaded at **both** X and Y (to full capacity of aircraft at both stops), and cargo can be unloaded at **both** Y and Z. The range of an XYZ mission is figured as whichever leg is longer (either X to Y or Y to Z). Planes can still return to different Base Z locations, and come from different Base X's.

In this enhanced Air Transport mission, Base Y and Base Z can both be "mission hexes" for the purpose of flak and interception (so possibly two of each), assuming loading/unloading activity occurs.

21.12b Cloak of Night. Ports in an EZOC are no longer shutdown for Sea Cap. Under this option, a player can still ship to/from these ports up to their current capacity, but spends 4x the normal Sea Cap to do so. This represents night deliveries, etc.

21.12c Strat Column Spacing. A maximum of 3 RE of units in Strat Mode can end a segment in a given hex. There can still be a total of 10 RE in the stack; the new limit is just on Strat Mode units. Units found in excess of this limit are destroyed (owning player's choice). **Exception:** a single multi-step unit or multi-unit formation, even if it is larger than 3 RE, can always end a segment in Strat Mode in a hex.

21.11c Strat Direct Draw. All units in Strat Mode must end movement in a hex where they can receive trace supply via Direct Draw (not by "eating off the map" or "HQ-Throw").

***Design Note:** Strat Mode usage is normally intended for redeployment, not penetration. The reduction of strength to zero takes care of this in most situations, but the pair of Strat Mode options improve the model as a whole.*

***Game-Specific Note:** Don't use the "direct draw" option in **Baltic Gap**, which was designed for aggressive use of Strat Mode.*

Terms and Definitions

Abort The requirement of aircraft to go back to any friendly Air Base and become Inactive.

Action Rating How good a unit is at fighting. Training, experience, doctrine and leadership

Active Aircraft An aircraft which has been refitted and is capable of flying air missions.

Air Base Level The size of an Air Base's facilities.

Armor Unit A unit very heavy in AFVs with little or no organic infantry component. Such units are marked with yellow backgrounds on their unit symbols.

Attack-Capable Unit Any ground unit with a non-parenthesized combat strength of zero or more.

Barrage An attack at a range of one or more hexes made by artillery, ships, or aircraft.

Break-Down Regiment A portion of a division-sized unit detached to allow the division to cover more than one hex.

Bridging The use of Engineer-Capable units to lessen the MP cost of crossing river features.

Burrito as Big as Your Head A food item sold by a local establishment which is about a foot long and four inches wide. Many design decisions in this game were made over these three pound burritos. (That way we know what to blame...)

Close Terrain Terrain providing limited mobility to AFVs as well as some cover. Such terrain in the defender's hex would require the use of the Close Terrain line of the Combat Table.

Combat Mode A unit mode with a higher combat value and a lower movement allowance. In this mode, the unit is deployed for action.

Combat Supply The supply required to fight using the regular Combat Table and

required by artillery units to fire their Barrage strengths.

Combat Unit A ground unit with a combat strength of zero or more.

Combo Type Aircraft An aircraft which can fulfill two of the basic aircraft roles. Usually, this will be limited to aircraft which can function as either Tactical Bombers or Transports.

Consolidation The realignment of units from Multi-Unit Formations so that a single stronger formation is generated from two or more crippled ones.

Construction The creation of game facilities (Air Bases, Hedgehogs, etc.) which require the presence of Engineer-Capable units.

Dead Pile Each player should keep his eliminated units organized for possible rebuilding.

Detrain The act of ending rail movement.

Detrainable Hex A railroad hex containing either a village, minor city, major city, port, or Combat Mode HQ.

Die or Dice Roll Modifier (DRM) Any one of a number of additions or subtractions from the die (or dice) rolled on the game's tables.

Direct Draw The act of using SPs that are within the supply draw range of a unit (for whatever purpose) without using the assistance of an HQ.

Disorganized Mode (DG) A state of chaos generated by enemy activity which inhibits the smooth functioning of a unit.

Divisional Unit A unit which is either a division itself, or part of a multi-unit formation.

DUKW—D = year of manufacture i.e. the 4th year of the war; U = utility vehicle, K = all-wheel drive, W = wheel driven... basically amphibious trucks. Built by General Motors with the full designation DUKW-353

Dumps Any stack of SPs on the map, whether on the ground or loaded on a Transport Point, etc.

Engineer-Capable Unit An engineer or HQ unit in Combat Mode. (Assault engineers and Pioneers are **not** considered engineer capable.)

Entrain The act of loading something onto a railroad in order to use rail capacity.

Eq Repl A replacement unit consisting of heavy vehicles, aircraft, or weapons needed to rebuild heavy units.

Exhausted Internal Stocks Internal stocks which have had both of their two allotments used.

Exploitation Mode A combat result which allows units access to the Exploitation Phase.

Exploitation Result (e) A combat result which puts some attacking units into Exploitation Mode.

Extender A 5-point Transport Point dedicated to providing connections for trace supply purposes.

Extremely Close Terrain Heavily built-up urban areas which are easily defended by few units.

Fighters (F-Type) A fighter type aircraft.

Flak or Flak Rating The ability of ground units and ships to resist air attack.

Formation Marker A counter used to replace any number of units from the same higher formation (generally division, or Soviet Corps) so as to eliminate big stacks and create some limits on intelligence.

Fortifications Features permanently printed on the map which assist ground units in defense.

Fuel Supply which is used to move tracked or truck units about.

Fully-Motorized A unit with two wheels under its unit symbol—one with enough transport for all to ride.

Game Turn Game play corresponding to a half-week or quarter-week of real time consisting of two Player Turns.

Hedgehog A moderate degree of fieldworks in a hex to assist ground units in defense.

Hip Shoot An air Barrage that behaves much like an Overrun. Named for the technique of stopping a mortar unit while on the road to deploy and shoot with no warning.

HQ Unit A headquarters unit and its support systems. Each HQ also represents many smaller service units, and enough logistical capacity to support a local group of units.

Inactive Aircraft An aircraft which has expended its capabilities and has yet to refit. Such units cannot fly or Barrage at all.

Inactivation The process by which Active aircraft become Inactive after they are “used.”

Independent Units Combat units that are neither multi-step units nor part of a multi-unit formation.

Internal Stocks The amount of Combat Supply available to a unit in the stores it carries about by itself.

In Supply A unit which has either successfully traced or had on-map supply expended for it.

Involuntary Mode Modes which a player cannot select, but which are inflicted as a result of combat.

Landing Craft Small boats used for transporting units and SPs from larger ships to landing beaches or ports.

Leapfrogging The prohibited act of loading something, moving it, loading it onto another transport unit and moving it again.

Leg MPs Movement points generated by foot or hoof which are shown on the counter in white.

Low Internal Stocks Internal stocks which have had one of their two allotments used.

LST Landing Ship, Tank. A large high-capacity ship supporting amphibious operations.

MA Abbreviation for Movement Allowance.

Mech Unit A unit with both a heavy AFV component and a large organic infantry component. These units provide their own combined arms teams. Such units have a red unit symbol background.

Move Mode A unit mode with a lower combat value and a higher movement allowance. The unit has sacrificed some security for speed.

Multi-Track Railroad A fully configured modern railroad featuring two or more track sets, many sidings, and support facilities. Top of the line rail transport support.

Non-Combat Unit Any ground unit without a combat strength such as SPs, Air Bases, or Transport Points.

Non-Divisional Unit Any unit which is neither a division itself nor part of a multi-counter formation.

Non-Motorized A unit that requires shoe leather or horses to get around.

Non-Phasing Player The guy whose player turn it isn't.

Offensive Aircraft Aircraft with non-parenthesized Air Combat Ratings.

Open Terrain Terrain essentially free of obstruction.

Option Number or Option Result The portion of a combat result which the player has the option of taking as step losses or hexes of retreat.

Organic Truck A Transport Point actually assigned to a specific formation. These represent the internal transportation capabilities of some units. While generically referred to as ‘trucks’ other types of Transport Point might actually be used (as shown on the counter).

“Other type” Unit A unit which is neither mech nor armor.

Overrun An attack made by units during movement.

Patrol Zone The area at or within 10 hexes of an Active Fighter on its Air Base. This represents the normal operation of Fighters to contest the use of that air space.

Pax Repl A replacement unit made up of little more than warm bodies.

Phasing Player The guy whose player turn it is.

Player Turn One half of a Game Turn, in which one player goes through the sequence of play from Aircraft Refit through Clean Up.

Rail Capacity The total number of SPs of rail transport a player can use in a single player turn.

Railhead A boundary between usable and unusable railroad hexes.

Rail Repair Units (aka RR Units) Units which are capable of railroad conversion.

Refitting The act of converting Inactive aircraft into Active ones. Essentially, the aircraft are being over-hauled, rearmed, and refueled to participate in future air operations.

Regimental Equivalents (REs) A quick and dirty measure of unit size.

Replacement Units (Repls) Units which can be combined in different ways to rebuild dead or damaged units.

Replenishment The refilling of used internal stocks.

Reserve Mode A unit which is awaiting orders or otherwise in readiness for quick action.

Reserve Release When a player decides to remove a unit from Reserve Mode and deploy it into action.

Road This term is used when a rule is meant to apply to all road-like features in the game (roads of different caliber, tracks, and railroads).

Rounding Rule The standard method of dealing with fractions in any Gamers brand game.

Strat Bomber (S) A strategic bomber.

Semi-Motorized A unit with some trucks and other transport, but not enough to be fully motorized. These units have one wheel under their unit symbol.

Single-Track Railroads The standard railroad feature in the game.

Steps, Step Loss A portion of a unit's strength and size used to keep track of the attrition effects of combat.

Strat Mode A unit in full road movement posture. Most security precautions have been dumped to allow fast movement.

Supply Points (SPs) The measure of bulk supply. Divided by the "great quartermaster in the sky" into just the right proportions of everything that units need at different times—luckily for us, right?

Surprise The act of being caught tactically unprepared for the threat of the moment—the board game equivalent of bringing a knife to a gun fight.

Tactical Bombers (T-type) These aircraft fight at lower altitudes than do strategic bombers, often in close support of ground units.

Throw Range The distance HQs are able to push forward SPs or Trace Supply to units which need them.

√√ **Trainbusting Zone** The area affected by a successful Trainbusting mission.

Transports (Tpt) A Transport aircraft.

Trace Supply The basic handling of subsistence supply.

Transportation Equivalents The determination of the SP "weight" of units to allow a quick assessment of the capacity needed to transport them.

Track MPs Movement points generated by all-terrain vehicles (tracked or wheeled) which are shown on the counter in red.

Truck MPs Movement points generated by less maneuverable vehicles (usually trucks) which are shown on the counter in black.

Very Close Terrain Terrain which is extremely tight for vehicles and which provides much cover and concealment.

Via HQ Supply Supply which is expended using an HQ's throw range.

Voluntary Mode Modes which a player can select to use during the Movement Phase.

Zones of Control (ZOCs) The effect of units on enemy units which are adjacent to their location. While the game has no ZOCs for most purposes, some things (supply trace, truck MP movement, etc.) are influenced by the presence of enemy units.

v4.0 Designer's Notes

Where to begin?

OCS v4.0 grew originally out of necessity. Due to a number of reasons not important enough to go into, I had only the **v3.0** rules on hand (I never had the actual files for the **v3.1** rules). So, **OCS v4.0** started as an innocent effort to take the **v3.0** rules and incorporate the known errata (in other words, rebuild **v3.1** and leave out some of the things that were done there I did not agree with... I called the effort **v3.2**).

John Kisner volunteered to help with the project to which we added an effort to make sure that answers were provided, in the rules, to all the questions we could find over the years on various discussion forums, plus to preempt additional questions by addressing any passages that guys tended to find confusing. During this process, he began a painstaking look at every rule checking wording, identifying conflicts, standardizing terminology and in general making the rules tighter and cleaner. His efforts cannot be overstated, thank you John!

Somewhere in that process, I decided it was time to address all known system abuses (and things guys didn't consider abuses, but were play not in the spirit I intended). The idea was to deal with them once and for all... as a result, discussions, sometimes heated, raged for months on items small and large exploring alternatives simple and extreme for dealing with each. Many worked into the rules, while others where the fix was deemed worse than the disease ended up in the optionals.

Suggestions came from all over, **Elias Nordling** single-handedly suggested the revised method of doing air strikes, which was basically the way we had been playing for years and is now the "rules as written" way as well.

Subject to a six month or so discussion/argument was the Flak System. I have no idea how many different ways were tried to cook that particular egg. I do know I threw my hands up in frustration a number of times (apologies to those subject to my

wrath... especially poor John who took the brunt of it) as no system seemed to have all the desired items. Finally, **Andrew Fischer** said something to the effect of "Why don't you just do it this way?" and at the drop of a hat fixed the whole bloody mess. With only minor modifications, Andrew's method remains the one in the final rules. Thank you, Andrew.

As the project grew in scope, leaving no stone unturned as it were, the decision was made to rename it **v4.0** instead of **v3.2**. Volunteers from all over played the older **OCS** games using the ever changing **v4.0** rules to give informed opinions. Every effort was made to make sure we were fixing known issues in the old games, not creating new ones. Noteworthy among the volunteer testers were Stephen Poitinger and E.R. Bickford. Mr. Bickford is of special note in particular as he played the entire **DAKII** campaign using *every* variation of the **v4.0** rules. That way lies madness.

At one point along the way, locked in a hotel room for a week for other reasons, I went through the entire rulebook looking to kill words, sentences, and rules. The former just to shorten the reading length of the rules (many thousands of words were eliminated by rephrasing sentences). I eliminated jargon where I could. Most importantly, I eliminated numerous niggling little rules that had crept into the rulebook over the years while we tried to legislate numerous things that just weren't important enough to worry about. Besides, getting older I always forgot those rules when I played. I'll venture to say many others did, too.

So, What's Different?

First, check out the Official Change List [*Ed. note: the change-list from v3 to v4 is no longer part of these rules*] for more complete information, I'll only cover a few highlights here. I'll answer two questions right off the bat: 1) Whatever alternative you might be thinking of, we probably tried it along the way, and it was found wanting for reasons I probably can't remember off-hand and 2) Yes, there was a reason (possibly many) for every change. Remember this is the end of a six year intensive effort.

Making it so that only Combat Mode units give ZOC effects made for some more interesting tactical puzzles and put a higher premium on "pre-located" units as opposed to "just in time" Move Mode ones coming in from far away. It also helped

address what we were calling “Raider” issues as a unit might have to wait a turn before it could influence something else with its ZOC. This takes care of most of the issues, for those who play with guys into gamey techniques, I’ll refer you to the more extreme, runner-up, rules in the optionals.

Making HQs suffer DG (like any other unit) and allowing each artillery unit to be 1 strength in defense eliminates some special rules cases and (at times) gamey tactics. No longer will a city with several DG-proof HQs form a “good” defense.

I simplified the daylights out of the air system mechanically, air combat, flak, and special rules. Losses were bumped up a touch as **v3.1** was showing to be too docile (these went back to older system values). I eliminated Advantage from Air Combat as it was very rules heavy and represented a kind of double-dipping on the part of more numerous fighter forces. I reduced the Both Abort zone on the Air Combat roll to make for fewer indecisive air combats. The new flak system is, well, the result of months of blood, sweat, and tears to come up with a system that did a large number of jobs, where the various effects we were after were shown and in the simplest manner possible.

The Barrage Table was modified a little so that “gunning for blood” was less productive than before, while smaller barrage values still gave decent bang-for-the-buck in creating DG results for ground units to use.

Changes to the handling of dumps, trucks and extenders (elimination of the Barrage vs Dump/Truck Table and handling of extenders with respect to enemy units entering their hex) exist to eliminate play techniques based on either eye-balling enemy stacks or memorization of set up data. Some have incorrectly ascribed this to a change in the “guard your extenders or else” theory that has been a keystone of **OCS** since the very beginning. Not so as I’m sure you’ll find out.

Over the last six years working on these rules, we have looked and looked again at all manner of alternatives. Concepts came, were examined, and put away when found to be not the best. Only the cleanest and most robust survived. Some will be happy to find their pet peeve addressed and (possibly) changed to their liking, others will not recognize that their issue was addressed and found to be not worth the change, out of scale, or otherwise not a positive inclusion. I’m sure there will be

those who feel **their** idea couldn’t possibly have been examined. It (or something just like it) was, I can assure you.

No stone was left unturned. The effort drove many around me to wonder **why** I was looking at this or that yet again. It was done so I could set aside these rules as the pinnacle of **OCS** development and I could move on to new design projects. They are and I am.

Player’s Notes

Warning: this game system takes time to play. Game turns take longer to get through than you think (and much longer than it seems, since time seems to fly). It is not designed for beginners. The best bet in larger games in this series is to play sessions when you can and let the game stand between them. Suffice it to say, you’ll need your “A” game in this arena.

I hope to give you a few pointers here to stave off catastrophe long enough for most players to get used to the system. Some of the things here are “tricks of the trade” learned over the years, others are critically important “do them if you want to live” things. To help let you know which is which, I have annotated each one as “Technique” or “Critical” as appropriate.

1) Rear Area Security (Critical). Garrison everything you hold dear: SPs, important railheads, air bases, HQs. Failure to do so will (with the limited ZOC effects) cause you to lose them—and lack of supply dooms armies in this game. Solid combat units should be stacked with each of these important items. This should also make it clear that you need to keep them organized and consolidated so your whole army isn’t off defending your rear services. Beware of allowing enemy columns to rove freely in your rear. You have a large number of units (usually) whose job for you will be rear area security (Police and, of course, Security units, for example). If you find yourself making use of them in the frontlines, be careful: You are inviting a disaster someplace where you least expect it. Usually a step or two of such units is plenty to garrison a node in your supply network (major replacement centers and supply hubs will have lots of units floating about to add to the defense in a pinch), so there is no reason to think you need to send combat infantry divisions to do this job—the only goal is to make sure the hex cannot be taken on the fly by minimal forces (not to stave off an attack by an Armored Corps!).

2) Use of Reserves (Technique). The proper employment of reserves is vital to the efficient use of your resources in this game. On the attack, reserve mode can be used to get a little extra movement out of units during the Movement Phase and full use of the Exploitation Phase after you have made a breach in the Movement and Combat Phases. In the defense, reserves can be used to disrupt enemy attacks during the Reaction Phase using overruns (or by reinforcing defensive hexes), and provide Barrages. Beware of the localized nature of reserve use in the Reaction Phase and the rewards the system gives for being the active player (the one who generates situations) instead of the reactive player (the one who waits for things to happen). Layering your attacks so that you have waves designated to create a breach and others to exploit (literally) it afterward can multiply the effectiveness of your offensive (even more so if your Action Ratings are high and you can Hip Shoot with your air force—then you’ll be in a prime position to see what an Expanding Torrent **really** looks like).

3) Armor in the Defense (Technique). The Terrain Effects on Combat modifiers are designed to give pure armor units an advantage in the attack, but not in the defense. I feel the proper role of armor in defensive operations is the limited counterattack against the attacking enemy units. In other words, when used correctly, armor in the defense should be in Reserve Mode ready to attack in the Reaction Phase. Targets? I would aim at weak links in the enemy attack. Depending on the way the enemy attack is organized, you may very well be able to substantially reduce its effectiveness if not derail it entirely. You’ll know by the muttering your opponent emits which one you got.

4) Combined Arms (Technique). The comments above bring up combined arms as it is shown in **OCS**. Traditional wargames give a magical “combined arms benefit” for units of different types which stack together, regardless of terrain. I don’t agree with that assessment at all. So in this game, a combined arms unit (such as a German Panzer Division) has the ability to make use of differing terrain types because each of its component parts will be able to take full advantage of each terrain type in turn. Tanks in bad tank country are limited, period. Giving infantry to the tanks allows them to be more protected from ambush, but in no way makes the tanks more powerful. Suffice to say that combined arms works in this

game because these units will be able to function better overall in differing terrain than could units of only one arm.

5) Surprise and Set-Piece Battle (Technique).

The surprise rule (one of my favorites) is designed to favor surprise in Overrun situations. Good troops vs. bad troops in an Overrun have the best chance of achieving surprise. Bad troops attempting an Overrun against good ones will most likely screw up and suffer defender surprise. Set-piece battles (those in a Combat Segment) have a much smaller surprise component. Poor troops, given time to prepare, will be able to pull off a credible show. Good troops which take their own sweet time in getting ready will have a bigger chance of getting compromised and losing attacking surprise. As a result, surprise plays a much greater role in Overruns. In set-piece actions surprise is much harder to obtain and plays a smaller role. To make a long story short, if you have good troops, attack using Overruns. If you have poor troops, attack in the Combat Segments. Make these selections and you'll maximize the abilities of the army you have been dealt. Choose poorly and you'll at best waste advantages or at worst get crushed.

6) Disorganize and Destroy (Technique). A successful barrage has a dramatic effect on a subsequent attack. DG Mode confers four disadvantages on the defender. First, it halves the stack's combat strength, which means a 4:1 attack jumps to an 8:1. Second, it lowers the stack's AR by 1, which alters both the surprise chances and the combat roll. Third, a stack that is already DG will lose a step when it retreats (on an option result) into a ZOC. Fourth, DG Mode halves MA, so during the enemy player's next Movement Phase it's that much harder to reform a shattered line. Air barrages are usually the cheapest method (in terms of supply cost), but don't discount the big guns and their increased chance for inflicting losses.

7) Supply Organization (Critical). Unless you own stock in an aspirin company, keep your supply system organized, neat, and under control. The supply rules are not difficult to use, but they do require players to both plan ahead and keep their forces organized. If you let them get out of control, it will be a while before you get them straight again, and in the meantime the enemy will be dancing on your head. Set up a few, well-developed supply lines. Build up enough of a stockpile at the front to make up for any interruptions that might occur—be prepared, it will save you much grief if your lines get cut for a

turn or two. Keep multi-unit formations together so they draw from only one source. Remember: You will never have all the SPs you think you need, so use what you get wisely.

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by Dave Mignerey

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Changes from v4.0

This change-list draws attention to the new rules that are in v4.1, and explains the rationale behind them:

Air Drops. Planned air drops (the ones involving combat units) can only be done during the Movement Phase. Units dropped are also automatically in trace supply on the drop turn.

***Design Note:** This has been official errata for awhile now. Allowing air landings in any phase gave them too much flexibility. Because of the position of the Supply Phase in the turn, they would also typically be done during Exploit, which seemed wrong (at D-Day & Market-Garden the landings kicked off the attack, they weren't part of the follow-up). Automatic trace supply is now given to make the "early" drops viable.*

Air Mission Phasing. There is no longer an "add planes to the mission" step in the sequence, so you can no longer have what essentially begins as a Sweep evolve into a Barrage. There is also a procedural simplification: rather than fly from one base at a time, now the mission planes all arrive together.

***Design Note:** This was done to sharpen the distinction between a Sweep and a Barrage mission.*

Breakdowns. Both breakdown and parent must now have the same mode/marker status at instant of creation/absorption.

***Design Note:** This is a tough area. Allowing breakdowns to always adopt the Mode of the parent led to abuse such as Strat moving a breakdown forward to a new parent. In this change, we risk going to a different kind of abuse: stiffening a poor-quality division in Combat Mode with a better-quality breakdown in Move Mode. This is not the intended outcome, and players are asked to resist temptation!*

Breakout. In initial breakout situations, breakout success is increased and there are fewer restrictions.

***Design Note:** This has been official errata for awhile now, but is a change from v4 as printed.*

Divisional Lines. This optional rule has been eliminated. Players with a copy of the old rules and markers can, of course, continue to use it.

***Design Note:** This was an option that didn't seem to be used anyway, and had the added problem of requiring some slots on the generic marker sheets. We decided to put those slots to better purpose.*

Engineering & Repair. The rule saying that "HQs ignore DG Mode when doing their special stuff" has been extended to include Rail Repair and non-HQ engineers.

***Design Note:** The change is fairly simple and adds some logical consistency.*

Enhanced Construction Options. This is a grab-bag of new options related to port repair and hedgehog construction.

***Design Note:** The Small Port Repair option has been on the semi-official House Rule list for awhile now, and is now an official option in v4.1.*

The Big Hogs option reflects the need for some serious engineering and mine-laying to improve a hedgehog beyond Level-1.

Enhanced Transport Options. This is a grab-bag of new options related to air transport, sea cap, and Strat Mode.

***Design Note:** The XYZ Air Transport option is something that Dean ruled was allowed under v4. It seems like such a special exception to a normal mission that we decided to downgrade it to part of this official option.*

The Cloak of Night option is written with an eye toward the OCS games that were designed under v4 — specifically its allowing negation of ZOC where ports are concerned. Combining this option with the (better) ZOC-handling in v4.1 still allows a trickle of literal transport into a port.

Strat Mode Spacing is a modest reflection of how strung out road columns soon become. The stacking limit of Strat Mode units in a hex is now one division. (Units in other modes can still bring the stack to the regular 10 RE limit.)

Revised Rebuilds. A radical option probably best for long campaigns where the Repl rates often seem insufficient to recreate history.

***Design Note:** Some groups report terrific results in **GBII** and **Case Blue**.*

Flak & Interception. These have been split into two separate rules sections so that Interception, which is a mission type,

can have its own numbered section. But no real changes aside from an official way to randomize loss in 4-plane missions (see charts).

Fueled HQs. An HQ with a fuel marker can only throw fuel from a single hex in a given phase. So an HQ with a fuel marker is moving, it must now choose to throw the "free" fuel from either its starting hex or its ending hex.

***Design Note:** The ability of an HQ to use its fuel marker from two different hexes really abuses what was intended as just a simplification of fuel payment for playability.*

Hedgehogs. An Engineer can now build hogs within its 2-hex construction radius.

***Design Note:** Just fills out their ability list.*

Hip Shoots. These must always have a spotter.

***Design Note:** Requiring a spotter for hip shoots versus Facility targets has been official errata for awhile now, and now it is just a blanket restriction of these special barrages.*

Rail Conversion. This is now done when a RR unit moves into the hex (not when it leaves the hex).

***Design Note:** This just seems more natural.*

Stacking. It is now specified that a Fighter must be top air unit (to make PZ obvious).

***Design Note:** This is an example of a rule that is geared toward making it easy to walk away from the table for awhile while your opponent takes his turn. Having a PZ be obvious is akin to having a ZOC obvious in that regard.*

Voluntary Aborts. This is now always an option (before it couldn't be done during Interception combats).

***Design Note:** The change is minor. Just gets rid of a special exception that isn't really needed.*

ZOCs and Ports. Negation is no longer allowed for literal shipping into a port. **DAK** still has its special exception.

***Design Note:** This was an idea of Rod Miller's which grew out of some discussions of how to back-fit v4 to games like **Tunisia**. Treating ports and RRs the same with respect to ZOCs has been on the House Rule list for awhile, and is now official in v4.1.*

Hex: _____ Level: _____

Inactive Air Units	Active Air Units
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Hex: _____ Level: _____

Inactive Air Units	Active Air Units
--------------------	------------------

Hex: _____ Level: _____

Inactive Air Units	Active Air Units
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Hex: _____ Level: _____

Inactive Air Units	Active Air Units
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Hex: _____ Level: _____

Inactive Air Units	Active Air Units
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Hex: _____ Level: _____

Inactive Air Units	Active Air Units
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Hex: _____ Level: _____

Inactive Air Units	Active Air Units
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Hex: _____ Level: _____

Inactive Air Units	Active Air Units
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Hex: _____ Level: _____

Inactive Air Units	Active Air Units
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The Gamers