BLITZKRIEG
DELUXE

LIGHTNING WARFARE

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MULTI-PLAYER OPTIONS

Even though Blitzkrieg Deluxe was designed as a two-player games, there is enough going on to allow multiple players per game. In fact, there is so much going on, that it might be a good idea to consider multiple players from the outset.

Divide the players into two teams. If there are two players per side, either divide units up geographically or have one player manage the ground forces, while the other player manages the land and sea-base units. If there are three players per side, one player should be the over-all commander responsible for the placement of reinforcements and replacements as well as air units. Divvy the other units up between the other players.

RE-DESIGNERS NOTES

Blitzkrieg Deluxe is the result of no small measure of insanity on my part. It grew first from a desire to practice the map making skills employed in other game design projects, which then extended to the counters, the play-aid cards, and then — of course — the rules you hold in your hands. In for a penny, in for a pound, as they say.

Given that this is not a new design, I am compelled (as should anyone who does this sort of thing) to acknowledge *The Avalon Hill Game Company* as the original publisher of the game and its designer Lawrence Pinsky and re-designer David Roberts. I should also note Wendell Martin, Richard Wein, and Richard Hamblen, who had a hand in putting together a substantial quantity of errata and clarifications for the original design.

Blitzkrieg was one of the first war games I ever purchased. At the time, its complexity rating was about as high as it could be. However, when looked at through a 21st Century lens, the rules are pretty straight-froward, even thought there is quite a bit to keep track of. I'm hoping that the new game components will ease that burden a bit.

Rather than simply rewriting the rules to consolidate all of the "basic, optional, and tournament" rules into a coherent whole, I took the opportunity to incorporate many of the errata and clarifications noted over the years. However, players familiar with the original rules will note that I've contradicted some of these clarifications for the sake of game play. For instance, the suggestion that resolved events be retroactively restored due to the affects of air combat activities just does not work. The game system needs to account for these events smoothly. I've also modified the attrition results table.

I've also taken the opportunity to add some additional mechanics to add a little more chaos to the system, including player initiative, random game-end, and combat straining. So, it's important that those familiar with the original design take the time to read through this rules set to see what's been changed.

Even though players are able to play the game with the new components and the old rules set without trouble, they are encouraged to give this updated rules set a try.

BLITZKRIEG DELUXE

Blitzkrieg was published by *The Avalon Hill Game Company* in 1968. At the time it was considered a "monster" game with two large maps, and hundreds of game pieces. The game also garnered a "10" complexity level as compared to other games in *Avalon Hill's* catalog. Other than it's perceived complexity, what made *Blitzkrieg* different was its generic nature. Rather than pitting the Germans against … well, anyone … in a historical World War 2 setting (as one might expect from the game's very name), *Blitzkrieg* uses a generic setting that pits "Big Red" against "Great Blue," as one might expect from a more formal *Rand* think-tank activity. By removing historical actors and locations from the game, players can focus more on how strategy works in a broader context.

The goal of *Blitzkrieg Deluxe* is to update the original design both graphically and in game play. The original game was broken into two versions, the Basic Game and the Tournament Game. By today's standards, even the Tournament Game is only moderately complex. There are quite a few moving parts, but the game mechanics are easily graspable through a fairly static sequence of play. These rules are organized in a manner that follows the sequence of play, and even those players who have been around long enough to have committed the original's game system to memory are encouraged to read through the rules for the slight tweaks that have been made.

Blitz on!

1.0 Game Components

The following provides a description of the game's components. As the game is currently offered as "print-and-play," the components must be printed, mounted, and cut-out as needed in order to play the game.

1.1 Game Board

The game board is a 34" by 55" map depicting the terrain over which the players will battle. The map is overlaid with a grid of hexagons that are used to regulate the movement of game pieces (or combat units) on the map as described by the movement rules. The map is decorated with different types of terrain that affect movement such as cities, woods, mountains, desert, beaches, and rivers in addition to open sea that surrounds much of the battle area. National boundaries for the fictitious nations are depicted by dashed lines, most of which are black, while the blue and red lines indicate the borders of the two player-nations, Great Blue and Big Red, respectively.

1.2 Unit Setup Charts

Each player receives two unit setup charts. These charts indicate which units (game pieces) start the game on the map, and on which turns reinforcements arrive. Each set of charts should be placed within easy reach of the appropriate player.

When initially setting up the game, those units that are noted as beginning on the map are placed by each player as desired within the borders of their home country. These units may be held back and placed onto the map during future turns as reinforcements.

1.3 Player Aid Card

At least one of these cards should be made available to the players. The Player Aid Card includes all of the tables that must be referenced during play, along with instructions on their use. The tables on this card are also printed along the edges of the map, but without the extra verbiage. Once a few game turns have been played through, the need to refer to this card should decrease and the tables on the map should be sufficient.

1.4 Combat Units

Combat units are represented by square markers printed with the details of a military formation in a color belonging to one side or the other (blue or red). These are the "chess pieces" used to move across the map, engage in combat, and conquer locations in an effort to achieve final victory. Players are limited to the combat units included in the game. Each combat unit shares several basic factors:

1.4.1 **Type** – The NATO symbol at the center of each combat unit indicates its type.

1.4.2 **Size** – The characters above the type symbol indicate the size of the unit (division or wing, brigade, battalion or squadron).

1.4.3 **Organization** – This code represents the higher level echelon (typically a corps) to which the unit belongs. If this code is an "S" the unit is a supplemental unit used to indicate a loss of strength following combat.

1.4.4 **Identification** – This code identifies the unit's name within its organization.

1.4.5 **Movement Factor** – This code indicates the pool of points a unit receives when activated that are used to pay for movement across the map. As a unit moves from hex to hex, these points are spent. Once a unit has exhausted its pool of points, it must stop moving.

1.4.6 **Combat Factor** – This code indicates the strength of a unit when engaged in combat. Most units have only a single value that is used whether the unit is attacking or defending. Artillery units, however, have two separate values. The first is used when an artillery unit is bombarding, while the second is used when engaged in attrition combat.

1.4.7 **Appearance** – Roughly half of each army's units includes a number or letter in the upper right corner. This letter or

UNIT SIZES

XX – Division or Wing	X – Brigade	II – Battalion or squadron

UNIT TYPES

Infantry		Artillery	
Rangers		Strategic Bombers	SAC
Airborne		Medium Bombers	MDM
Armor		Tactical Bombers	TAC
Air Assault		Fighters	FTR

number indicates the turn on which the unit enters play. An "O" means that the unit begins the game "On" the map. A number indicates that the unit enters the map as a reinforcement on that numbered turn (even the first turn).

1.5 Markers

There are three types of non-combat unit markers used in the game. In most respects, there is no limit to the number of markers included in the game. If more of these units are required than are included with the game, additional markers can be mocked up as needed.

1.5.1 **Turn/Weather/Initiative** – These markers do triple-duty in both indicating the current turn on the turn track on the map, noting the state of the weather during that turn, and which side currently holds the initiative for that turn. To this end, each player receives a set of six turn markers where each specifies a weather state. The player who wins the initiative at the start of a turn should place their marker with the correct weather state into the current turn box on the turn track, replacing the one located in that box if necessary.

1.5.2 **Control** – These markers are noted with flag symbols and are used to indicate who controls city hexes within a neutral country. When a player invades a neutral country, the opposing player places a control marker of their color in each city hex within that country. When an invading player reduces an enemy-controlled city, the control flag is replaced by the control marker of the invading side. This exchange may reoccur as a city changes hands several times during the course of the game.

1.5.3 **Reduction** – These markers are noted with a lined circle or cancellation symbol. When an industrial center, port or city road hex is reduced, these markers are used to note that these hexes cannot be used for production purposes on that turn.

2.0 Sequence of Play

Each game turn follows a strict sequence of steps. These steps must be followed and completed in the order noted. Some steps may be skipped if they do not apply at the time the step occurs, but steps may not be completed out of the order indicated.

2.1 Initiative Determination

Both players roll a die, with the high roller taking the initiative. In case of ties, the player that held the initiative on the previous turn (or the Blue player on the first turn), retains the initiative. The die roll is modified by a couple of factors. The player that controls more non-reduced cities adds one to the die result. The player that controls more unreduced critical resource hexes adds one to the die result. The player that has naval ascendancy adds one to the result. These modifiers are cumulative (so a player with all three would add +3 to the die roll).

2.2 Weather Determination

The player holding the initiative rolls a die and cross-references the result on the with the current turn on the Weather Chart. Note that weather is always "clear" until the eighth turn, so no die roll is required until that turn. If necessary, the player holding the initiative replaces the turn marker with one matching his or her nation's color that shows the appropriate weather condition. The numbers in parenthesis indicate turns beyond twenty if players opt to extend the game. Results are as follows:

2.2.1 **Clear** – All conditions normal.

2.2.2 **Rain** – Attack factor of fighter and bomber units halved; all off-the-road movement is halved except in desert, where it does not rain.

2.2.3 **Gale** – No air operations; all off-the-road movement halved including armored movement in the desert where there are dust storms; movement on the road itself is at basic MF, no triple bonus on the road; all units at sea must land in a friendly port that turn if possible, or be eliminated; no invasions and no supply by sea through ports or beaches.

2.2.4 **Fog** – No air operations; infantry attack at double their normal strength.

2.2.5 **Ice** – No air operations; all units on mountains may not move that turn, they are eliminated if forced to retreat; no road movement bonus.

2.2.6 **Snow** – Air units attack strength halved; rivers are frozen and don't double; no road or desert bonus; all off-the-road movement halved; units on mountains may leave, but no ground units may move onto mountains.

2.3 Player Order Determination

The player holding the initiative decides if their forces will be activated first or second during the turn. Although it may seem obvious that a side would want to go first, it may be preferable to react to what the enemy is doing, rather than letting the enemy react. The player determined to go first during a turn is the "First Player" while the other is the "Second Player."

2.4 First Player Activity

The First Player now performs combat unit activities, with the enemy occasionally interrupting as able.

2.4.1 **Critical Resources** – The First Player checks the impact of lost or reduced critical resource cities.

2.4.2 **Naval Ascendency** – The First Player checks the impact of naval ascendency.

2.4.3 **Reinforcements** – The First Player places reinforcements and replacements. Unit recombination occurs as this time.

2.4.4 **Ground Movement** – The First Player moves ground units as desired and able.

2.4.5 **Air Movement** – The First Player moves air units as desired and able.

2.4.6 **Air Interception** – The Second Player moves intercepting fighters as desired and able and completes interception attacks.

2.4.7 **Bombing and Strafing** – The First Player completes bombing and and both players complete strafing missions.

2.4.8 **Ground Combat** – The First Player completes all ground combat.

2.4.9 **Overrun Movement** – The First player completes overrun movement, if any.

2.4.10 **Guerrilla Combat** – The First Player sustains losses due to guerrilla combat, if applicable.

2.4.11 **Industrial Recovery** – The First Player removes reduction markers from friendly cities.

2.5 Second Player Activity

The Second Player now performs combat unit activities, with the enemy occasionally interrupting as able.

2.5.1 **Critical Resources** – The Second Player checks the impact of lost or reduced critical resource cities.

2.5.2 **Naval Ascendency** – The Second Player checks the impact of naval ascendency.

2.5.3 **Reinforcements** – The Second Player places reinforcements and replacements. Unit recombination occurs at this time.

2.5.4 **Ground Movement** – The Second Player moves ground units as desired and able.

2.5.5 **Air Movement** – The Second Player moves air units as desired and able.

2.5.6 **Air Interception** – The First Player moves intercepting fighters as desired and able and complete interception attacks.

2.5.7 **Bombing and Strafing** – The Second Player completes bombing and both players complete strafing missions.

2.5.8 **Ground Combat** – The Second Player completes all ground combat.

2.5.9 **Overrun Movement** – The Second Player completes overrun movement, if any.

2.5.10 **Guerrilla Combat** – The Second Player sustains losses due to guerrilla combat, if applicable.

2.5.11 **Industrial Recovery** – The Second player removes reduction markers from friendly cities.

Clarification: The turn sequence seems fairly complex, but it's actually quite straight-forward. Essentially, each player checks the status of their supply and resources as affected by control of sea zones. A player then places any reinforcements or replacements received during the turn. Next, a player moves ground forces, followed by air units. The opposing player moves intercepting air units and resolves attacks against enemy air units. Any surviving air units complete bombing and strafing attacks. Surviving ground units completes ground combat. Next, any units not involved in combat that are next to overrun enemy units may advance. Any units eliminated due to guerrilla actions are removed and then reduced city markers are removed.

2.6 Advance Turn Marker

The player holding the initiative rolls a die. If the roll is equal to or less than the number indicated in the box on the turn track occupied by the turn marker, the game ends immediately and victory determined. Otherwise, the player holding the initiative advances the turn marker to the next box on the turn track. If the players are using the extended play option, no game end die roll is made. Instead, the marker is simply advanced to the next box on the turn track. At the end of the twentieth turn, move the turn marker back to the first box on the turn track and continue play normally.

3.0 Player Activities

During each turn, both players must follow a series of steps in order to complete their part of the turn sequence. The First Player does this first, followed by the Second Player. A step may only be skipped if it cannot otherwise be completed. The following rules sections break down each step in this sequence.

3.1 Cities and Critical Resources

On the map, city hexes are indicated as being resource centers through the printing of a small round icon overlaying at least one hex of a multi-hex city. With regards to multi-hex cities, the icon applies to all of the hexes within that city, not just the one that the badge touches. There are three types of critical resource hexes: Petrochemical (an oil derrick icon), Basic Industry (a factory icon), and Naval Stores (a cargo crane icon).

3.1.1 **Critical Resource Control** – The icon for each resource city indicates who controls it. Red icons are controlled by the red player, while blue icons are controlled by the blue player. Even if a player captures an opponent's resource city, he or she does not control the resource, but simply makes it unavailable to the owner. Neutral, white icon cities, however may be controlled and used by the side that controls them at the beginning of a player's turn.

3.1.2 **Resource Denial** – A friendly city's resources, including their use as airbases and ports, are unavailable if a city is occupied by or adjacent to an enemy unit. A Neutral city's resources are available as long as they are occupied by a friendly unit and not adjacent to an enemy unit.

3.1.3 **Overreaching** – If, following the status determination of critical resource control, there are too many units in play than allowed, those excess units must be moved in such a way that the control limits are complied with by the end of the turn. Otherwise, they are eliminated from play.

3.1.4 **Petrochemical** – These city hexes represent oil and fuel refinement capacity. The effects of control are as follows:

- **Three or more** – a player may operate normally.

- **Two** – a player may only fly (including active patrols) forty factors of air missions that player-turn, including air transport and rebasing. All armor units lose two movement factors and may not use strategic movement or advance after combat. No more than five air and ground units combined may be left at sea.

- **One** – a player may fly (including active patrols) no more than twenty factors of air missions. Armor, air assault, and artillery units may only move one hex and no units may use strategic movement or advance after combat. No more than five units at sea and these may only be in sea zones that include a friendly port.

- **None** – a player may fly (including active patrols) no more than eight factors of air missions, twelve factors of infantry retain normal movement, there is no strategic movement or advance after combat, and all other units are limited to one hex movement. No units are allowed at sea.

3.1.5 **Basic Industry** – These cities represent centers of production for industrial products necessary to the war effort (ball bearings, electricity, etc.). The effects of control are as follows:

- **Three or more** – a player may operate normally.

- **Two** – a player's air units bomb and attack at half-strength, all attacks above 4-1 on the Attrition Table are rolled at 4-1 instead, and artillery may not attack on the Barrage and Bombardment Table. Sea zones of friendly superiority are considered contested instead.

- **One** – a player may not attack with air units, except for fighters that attack at half-strength. Fighters may not contribute to naval ascendancy point calculations. Only three attacks greater than 1-1 on the Attrition Table may be resolved, and these may not be above 4-1. Artillery cannot attack using the Barrage and Bombardment Table. Sea zones of friendly superiority or contested are considered uncontrolled instead.

- **None** – a player may not perform any air combat, all attacks greater than 1-1 are treated as 1-1 on the Attrition Table, no artillery may attack using the Barrage and Bombardment Table. All sea zones are considered uncontested or of enemy superiority.

3.1.6 **Naval Stores** – These cities represent naval command and control centers as well as naval production centers. The effects of control are as follows:

- **Three or more** – a player may operate normally.

- **Two** – a player may have no more than five air and/or ground units (total, ten) at sea.

- **One** – a player may have no more than five units at sea and may only operate in sea zones that include a friendly port.

- **Zero** – a player may not have any units at sea. Any units at sea must land. If a player's Naval Stores capacity is reduced to zero, it remains at zero for the rest of the game (his or her navy has been destroyed).

3.2 Naval Ascendancy

Naval ascendancy represents the ability of a side to control the sea lanes and thereby transport ground and air forces by sea. During this phase of a player's activation, each player checks their side's level of ascendancy in each sea zone. A player earns one naval point per attack factor at sea in a zone, one point for each available, non-reduced friendly port within that zone, and a point for each factor of combat ready tactical, medium, or fighter combat factors in ports within that zone. Each player also receives naval points equal to the remaining number of factors with which the player invaded within that sea zone during the previous player turn. The attack factors used to calculate naval points that are not at sea are subject to the effects of weather, critical resources and supply. Players compare their total naval points within each zone to determine their level of naval ascendancy within that zone. There are four levels naval ascendancy:

3.2.1 **Naval Superiority** – A player has at least ten naval points and at least twice as many points has the enemy within the zone.

3.2.1.1 **Enemy Control** – a player may not move to sea from ports, invade, or trace supply through the zone. Units that begin the turn within the zone are not supplied and may land in a friendly port within the zone. Additional units may be moved into the zone from adjacent sea zones.

3.2.1.2 **Friendly Control** – invading units are doubled when attacking from full sea hexes, and if still on sea hexes after combat may automatically push adjacent defenders on beach hexes back one hex and occupy the vacated beach hex.

3.2.2 **Contested** – A player has at least ten naval points, but neither player has twice as many points as the other player. Both players may operate normally within a contested zone.

3.2.3 **Uncontrolled** – Both sides have between one and nine naval points in the zone. Neither player may invade from an uncontrolled sea zone, but otherwise operate normally.

3.2.4 **Uncontested** – One player has no naval points while the other player has nine or fewer points.

3.2.4.1 **Zero points** – a player that has no points within a sea zone may not supply or invade with units moving in from other sea zones, but may otherwise operate normally.

3.2.4.2 **Any points** – a player that has one or more points in an uncontested zone may operate normally.

3.3 Reinforcements and Replacements

Each turn, a player may receive scheduled reinforcements as organized on the setup cards or as replacement points that can be used to purchase units from the supply of supplemental units to rebuild reduced units or create new ones.

3.3.1 **Reinforcements** – Reinforcements are units scheduled to arrive during a certain turn, as stipulated by each army's setup cards as well as the number located in the upper right corner of a reinforcing unit. The noted turn of arrival is not a requirement, as reinforcements may be held and placed on the map on a later turn, if desired. Reinforcements are placed in any friendly city within an army's home country, and may temporarily exceed stacking limitations (as stacking is enforced at the end of the movement process).

3.3.2 **Replacements** – Beginning with the fifth turn, both countries receive six counters from the collection of substitute units. Any substitute units that are not selected at this time are lost (so use them or lose them). These units are placed on the map in the same fashion as reinforcements. The replacement units that can be selected are limited as follows:

3.3.2.1 **Unique** – Only one unit of a specific type may be chosen (one infantry, one armor, one SAC, etc.).

3.3.2.2 **Ground Units** – Up to three of the units selected must be ground (non-aircraft) units and of these, one must be an infantry unit. Only one elite unit (airborne, air-assault, or ranger) may be selected.

3.3.2.3 **Air Units** – Up to three of the units selected must be air units (SAC, MDM, TAC, and FTR). If, owing to substitute unit availability, only an odd number of units can be taken, the odd unit must be an air unit. For example, if only five units can be taken overall, three would be air units. Substitute air units may only be placed in cities marked with a friendly propeller icon. A player may also opt to increase their air-transport capacity by a half-point not building one of its substitute air units during the current turn.

3.3.3 **Reconstitution** – Eliminated starting and reinforcing units cannot be used as replacements. However, a starting or reinforcing unit may be reconstituted after replacements have been placed with units of the same type. For example, a 6-6 armor unit that lost four steps could be rebuilt by replacing three two-point replacement armor units with the original combat unit. The replacement units are then returned to the replacement pool for use in later turns. Units may be reconstituted in any in-supply hex that is not adjacent to an enemy units (including sea zones).

3.3.4 **Break-down** – Any unit may be broken down into its constituent substitute units at any time within any hex that is not adjacent to an enemy unit (including sea zones).

3.4 Combat Supply

All units must trace a line of supply at the beginning of each player turn to a friendly home country city or suffer negative effects. Supply is determined for both attacking and defending units before any movement or combat takes place during the current player turn.

3.4.1 **Road Supply** – A supply line is a path of connected hexes that is no more than ten hexes in length that leads from a combat unit's hex to a road hex which, in turn, leads back to a friendly home country city or a city that is connected through sea or air supply to a friendly home country city. The hexes in a supply line may not be within an enemy ZOC, and may not be within a neutral or unfriendly country. Road supply may supply any number of friendly units.

3.4.2 **Air Supply** – Air transport capacity may be used to supply up to four non-armor or non-artillery units. Units supplied in this fashion may trace road supply to a friendly city, and then forty hexes to another friendly city, and then through road supply again to a friendly home country city.

3.4.3 **Sea Supply** – A supply route may be drawn from any friendly home port, out to sea any distance to another friendly port or to a friendly beach hex invaded by friendly forces the previous turn. Drawing supply from a beach hex is limited to ten hexes for ten units maximum. A road net leading to and from a friendly port is handled as road supply, normally.

3.4.4 **Out-of-Supply Effects** – Each unit that is unable to trace a supply route at the beginning of its player-turn has its basic movement factor halved, its attack factor halved (rounding up), and may not use strategic movement or advance after combat in that player-turn. Non-supplied units always defend at full strength. Units are never eliminated for lack of combat supply.

3.5 Ground Movement

Combat units are moved one at a time. A unit may move from its current location a number of hexes equal to its movement value (a unit with a movement value of four could move up to four hexes away from its current location while a unit with a movement value of six could move up to six hexes away from its current location). A unit's movement rate may be increased, decreased, or restricted by terrain or the presence of enemy units. These modifications are described as follows:

3.5.1 **Stacking** – Stacking represents how many units may be placed in a hex at the same time. During the movement process, a unit may pass through or share a hex with any number of friendly units. A ground unit may not move into a hex that contains an enemy unit, but an air unit may do so. Once all units have completed movement, there may be no more than three units stacked together in a single hex (not including a fighter unit on combat air patrol, see below).

3.5.2 **Zones of Control** – The six hexes adjacent to a combat unit represent its zone of control (ZOC), or an area influenced by its presence through the deployment of scouts, pickets, intrinsic artillery, temporary defenses, etc. A ZOC extends into all kinds of terrain hexes as well as enemy-occupied hexes. A ZOC affects the movement of enemy units depending upon their type:
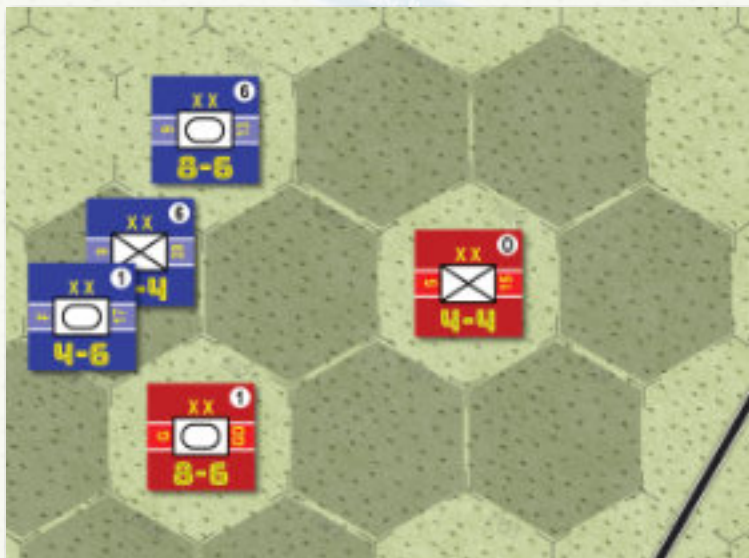
Zone of Control Example: It is the beginning of Blue's turn. There is no combat until movement has been completed. Since the 28th Infantry starts within an enemy zone of control, that unit may not move and must battle during the ensuing combat phase.

3.5.2.1 **Infantry, Airborne, and Artillery** – These unit types must halt when entering an enemy ZOC. When beginning their turn within an enemy ZOC, they are considered "engaged" and my not move.

3.5.2.2 **Armor and Air-Assault** – These unit types must only halt movement when entering the ZOC of an enemy armor or air-assault unit. When beginning their turn within an enemy ZOC, these unit types may exit their current hex, but must stop upon entering another enemy armor or air-assault unit's ZOC (even if the ZOC hex belongs to the same unit to which they were adjacent at the beginning of the turn).

3.5.2.3 **Aircraft** – Aircraft units are not affected by the presence of ZOC hexes (exception: air units on combat air patrol) and may move into and through them with impunity.
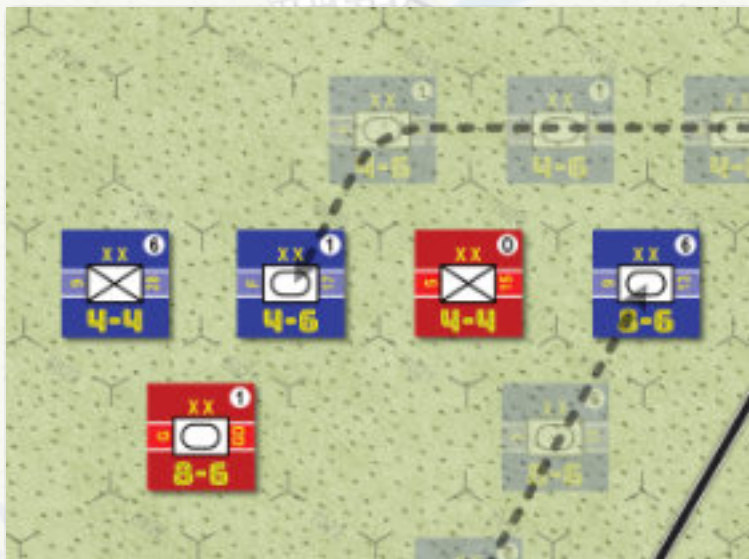
Movement Example: The 13th Armor has moved through the 15th Infantry ZOC to reach a better attack position. The 17th LT Armor can move through enemy ZOC, but must top next to GD Armor, which is the first armor ZOC that it has entered this turn. The 28th Infantry cannot move as it is "engaged" against the GD Armor at the beginning of the turn.

3.5.3 **Movement Bonuses** – Use of roads and certain types of terrain may temporarily increase a unit's movement allowance when moving through them:

3.5.3.1 **Roads** – All non-air units move three times faster than normal when moving along roads and through cities. For instance, a unit with a movement factor of four could move twelve hexes along roads. A unit may combine road and non-road movement in a turn, with any remaining fractions being carried over non-road movement until road movement resumes or until only that fraction remains, which is not sufficient to enter a non-road hex and is therefore lost (exception: Desert Movement). Road bonus movement is only derived with moving from a road hex along a connected road segment. Entering a road hex from a non-road hex or an unconnected road segment costs one movement point and movement is subject to any other terrain in the hex.

3.5.3.2 **Cities** – It costs all non-air units one movement point to enter a city, unless the city hex is entered from a connected road segment, in which case the city is assumed to be part of the same road.

3.5.3.3 **Desert** – Armor and air-assault units move twice as fast through desert hexes. This bonus cannot be used if the moving unit is using a road movement bonus (a player must note if the unit is taking advantage of the double rate bonus for the desert terrain OR the triple rate bonus for road use).

3.5.3.4 **Strategic Movement** – A unit that does not begin its turn adjacent to an enemy unit or an unfriendly city, does not move adjacent to an enemy unit or unfriendly city, and does not invade a beach hex, may add four movement points to their movement value. This bonus may be combined with other movement bonuses.

3.5.3.5 **Air Transport** – Up to four units of any type except armor and artillery may be "flown" up to forty hexes from one friendly city to another friendly city each turn. The transported units must begin their turn in the city transported from, but may move from the destination city transported to normally. Reinforcements and Replacements may be transported in this fashion once initially placed in a friendly city. The destination city may not be within an enemy ZOC unless the destination city is occupied by a friendly unit. Terrain and/or enemy ZOC impose no penalties (see below) on air movement (which flies "over" such obstacles).

3.5.3.6 **Air Assault** – Airborne, air-assault, and ranger units may be airdropped in any hex (with two exceptions) within twenty hexes of their take-off city, instead of being flown up to the full forty hexes. They may be dropped in a hex that is not adjacent to an enemy unit. Units using air assault may move one hex after landing unless dropped into mountain or forest hexes. Air-assault units may not be dropped into forest hexes. Air assault units may be intercepted in their destination hex by enemy fighters and attacked prior to the "landing" of the assaulting units.

3.5.4 **Movement Penalties** – Certain types of terrain may negatively impact a unit's ability to move:

3.5.4.1 **Mountains** – All units must stop upon entering a mountain hex. This means that a unit may only move into one mountain hex per turn, unless moving along a road. Units may exit a mountain hex without penalty.

3.5.4.2 **Forest** – All units must stop upon entering a forest hex. Armor, air-assault, and artillery units may not enter forest hexes, but are free to attack units within forest hexes.

3.5.4.3 Water – No units may enter water (sea or lake) hexes unless as part of sea movement and invasions or ranger units performing a lake-based invasion.

3.5.4.4 Neutral – No units may enter gray, neutral country hexes.

3.5.4.5 Supply Effects – Any unit that cannot trace a supply route when activated has its movement value halved and may not use strategic movement.

3.5.5 Overrun – As soon as enough units are in position against defending units in a given hex to create odds of at least 7-1, or 5-1 if the surrounded units have no legal retreat possible, the defending units are ignored for the remainder of the turn, as if they were not present. Flip the units upside down as a reminder of this status. After all movement and combat are completed, remove the overrun units. All units adjacent to the vacated hex may immediately move four more hexes, with the first hex being the hex vacated by the eliminated enemy units. No road bonuses or strategic movement is allowed, and units must stop upon entering an enemy ZOC.

3.5.6 Grounded Aircraft – If any ground units move adjacent to a city (airbase) hex that holds enemy aircraft units without any enemy ground units, the aircraft units are immediately eliminated as if they had never existed. This elimination does not affect the moving ground units in any way.

3.6 Sea Movement and Invasions

Surrounding the land portion of the map are five contiguous sea zones, each noted with a sea zone box marked A through E. During initial placement, each side may place up to ten units at sea, either in a single zone box or spread across multiple zone boxes. In any case, there may never be more than ten units per side at sea.

3.6.1 Ports – Each city hex that is adjacent to a sea zone is marked with an anchor symbol, indicating that it is a port. Each hex in a multi-hex city that touches a sea zone is considered a port hex, even if only one hex is marked with an anchor symbol (1712 and 1713 are both port hexes), unless an "in-land" port hex. There are also four "in-land" ports (hexes 0534, 1318, 4906, and 6330) that act as ports in every way unless any river hexes between the port and the sea are within an enemy ZOC or occupied by an enemy unit. No port may be used as such if occupied by an enemy unit or if enemy ZOC hexes otherwise block access to the open sea (such as enemy units occupying 3633 and 3844, which puts ZOC hexes into 3634 and 3734, blocking 3733 from the sea). Only the hex nearest to the sea in an in-land port is considered a port hex.

3.6.2 Movement to Sea – A unit may move to sea immediately upon entering a port hex at no additional cost, noting that the limit of ten units at sea is in effect at all times (if ten units are currently at sea, one must land before one can embark). Units may not land at ports, invade, or move to an adjacent sea zone on the turn in which they embarked. Reinforcements and replacements may be placed at sea on the turn in which they arrive.

3.6.3 Movement at Sea – A unit at sea may move to an adjacent sea zone. A unit at sea may land at a friendly port or make an invasion in either their current sea zone or an adjacent sea zone. Landing at a port or on a beach costs one movement point from a unit's basic movement allowance. Units landing at a port may take advantage of road, desert, and/or strategic movement bonuses. Units landing on a beach may only use their base movement allowance. Units may not return to sea on the turn that they land.

3.6.4 Enemy Units at Sea – Opposing units may be in the same sea zone indefinitely, but may not attack each other or be attacked.

3.6.5 Invasions – An invasion is the act of moving combat units into beaches, the continuous chains of yellow coastal hexes. The entire coast of the Koufax Desert is one beach for invasion purposes. Only one beach may be invaded per turn. A beach that was invaded by the enemy during their previous turn cannot be re-invaded by friendly forces on the subsequent player's turn (the enemy's fleet is still present off that coast). The invasion process is as follows:

3.6.5.1 Preparation – Transfer units from one or more At Sea boxes to full sea hexes adjacent to beach hexes being assaulted. Stacking is enforced as all times. Enemy ZOC extending into full sea hexes does not prevent invading units from reaching desired assault hexes.

3.6.5.2 Assault – Move the assaulting units directly onto unoccupied, adjacent beach hexes, even if doing so might violate ZOC restrictions.

3.6.5.3 Unopposed Landing – A unit moving on to a beach hex that is not adjacent to an enemy unit must stop, even though it might not be within an enemy ZOC.

3.6.5.4 Opposed Landing – Units that cannot land on a beach hex due to the presence of an enemy unit or that move into an enemy ZOC when advancing onto a beach hex must engage in combat normally. Since combat does not occur immediately upon landing, the active player has time to advance land-based forces to support an invasion, if possible.

3.6.5.5 Swamped Units – Any invading unit that is unable to advance onto a beach hex prior to, or following combat resolution (due to enemy retreats or elimination) that still occupies a full sea hex is eliminated.

3.6.5.6 Rangers – Rangers are units specialized for invasions and their use may break the rules outlined above in several ways:

- **Multiple Invasions** – Any number of ranger units may perform their own mini-invasions separately from the single invasion allowed by non-ranger units.

- **Non-Beach Terrain** – Rangers may invade any coastal hex, not just beach terrain.

- **Enemy Follow-Up** – A coastal hex invaded by a ranger unit may be invaded the following turn by enemy units.

- **Sea Withdrawal** – Ranger units may withdraw to a sea zone from any coastal hex not in an enemy ZOC.

- **Lake Invasions** – If ranger units begin their turn in a city adjacent to a lake, they may invade coastal hexes on that lake.

3.7 Air Operations

There are four types of aircraft combat units that can be used to support ground units in combat or attack hexes on the map through bombing in an effort to disrupt the enemy's ability to mount successful operations. The following rules section describes how to move these units, as they function differently from regular ground units.

3.7.1 Airbases – Airbases are represented by city hexes. There is no specific indication on the map of this fact (no icons), since all cities are airbases by default. Each airbase may hold up to three full units if aircraft, in addition to the three ground unit

stacking limit. Substitute aircraft units are considered to be half of an aircraft unit for stacking purposes. When initially placed, aircraft units may be placed in any friendly city in their home country.

3.7.2 **Carriers** – One full unit or its equivalent of TAC or FTR aircraft may be based at sea, in addition to the maximum ten ground units. For the purposes of combat actions, the "carrier" is located in any hex of the sea zone in which the aircraft is located. Its exact location is at the discretion of the owning player and the circumstances at hand. The carrier is assumed to be a floating airbase. When returning from a combat operation, aircraft may only return to a friendly airbase or the sea zone from which they departed.

3.7.3 **Movement** – Aircraft take off from friendly bases (or carriers) and may move up to their movement value in hexes, ignoring any terrain or enemy ZOC hexes (which they're flying over). When their operation has been completed, aircraft are returned to any friendly base (even one that was just freed of enemy ZOC or occupation) within range of their movement value that is not occupied or within an enemy ZOC, subject to stacking limits. Any aircraft that cannot return to a base when required is eliminated.

3.7.4 **Staging** – Staging is the process of shuttling aircraft from airbase to friendly airbase without engaging in combat operations. An aircraft unit may stage to any friendly airbase that is within a chain of friendly airbases (unoccupied by enemy units or ZOC) where no airbase is further than twice the moving aircraft's movement value from the previous airbase in the chain. Air units may not perform any other operations when staging, and all staging must be completed before any combat is resolved.

3.7.5 **Bombing** – Bombers initiate their move from any friendly airbase that is not within an enemy ZOC. Bombers may move their full movement rate to an enemy-controlled city hex or other enemy-occupied target hex, ignoring terrain, enemy ZOCs, and other enemy aircraft (except enemy air patrols). After bombing their target, bombers must move up to their movement rate to a friendly airbase that is not within an enemy ZOC. They need not return to the base from which they originally came. If a bomber unit cannot return to a friendly base owing to enemy ZOC or stacking limits, the bomber unit is eliminated. A bomber than moves less than half of its movement rate to a target (and subsequent return to an airbase) doubles its combat strength for bombing purposes.

3.7.6 **Interdiction** – Interdiction is the process whereby tactical bombers (TAC) and fighters (FTR) are used to affect ground forces. Unlike positioning aircraft to bomb explicit enemy units or city hexes, aircraft used for interdiction are placed in open hexes, and project a ZOC into the surrounding hexes as if the aircraft units were armor units, provided that there are at least four modified strength points within the hex. Interdictors may initiate their movement from any friendly airbase that is not within an enemy ZOC. Interdictors may move their full movement rate to their destination hex, ignoring terrain, enemy ZOCs, and other non-patrolling enemy aircraft. At the end of the next enemy player's turn, interdictors must return to a friendly airbase that is not within an enemy ZOC. They need not return to the base from which they originally came. If the interdictor cannot return to a friendly base when required, the interdicting units are eliminated.

3.7.7 **Fighters** – Fighter units can be used in a variety of ways. Fighters may only take off from friendly airbases that are not in an enemy ZOC. Fighters must return to friendly airbases that are not within and enemy ZOC and within stacking re-

strictions. Resolution of air combat is noted in the rules section describing the combat process.

3.7.7.1 **Escort** – A fighter may move into a hex targeted by friendly bombers. The escorting aircraft must land after the bombing mission has been resolved.

3.7.7.2 **Hunters** – A fighter may move into a hex that is adjacent to a hex targeted for bombing or a friendly airbase with the purpose of attacking enemy intercepting or strafing fighters. If the adjacent hex is attacked by enemy interceptors, the hunting fighters must land immediately following the resolution of the attack.

3.7.7.3 **Patrol** – A fighter may move to any hex that is not adjacent to a friendly bombing mission to patrol that hex. Any enemy aircraft (including air transport and staging) unit that moves adjacent to a patrolling fighter must stop. Patrolling fighters must return to a friendly airbase that is not in an enemy ZOC at the conclusion of the enemy player's next turn.

3.7.7.4 **Interdiction** – As noted above, fighters may be used for interdiction in order to halt movement of ground units. However, if both ground units and air units are in an interdicting fighter's ZOC, the fighters must patrol against the enemy fighters before they can interdict against ground forces (see air combat, below).

3.7.7.5 **Interception** – Intercepting fighters are the only combat units that may be moved during the enemy player's turn. Immediately following the movement of a bomber unit, an opposing fighter unit may be moved from a friendly airbase that is in supply and not within an enemy ZOC at the beginning of the opposing player's movement up to its movement rate in hexes (including moving zero hexes to intercept units attacking its own hex), but no more than the maximum number of hexes moved by a bombing unit in order to enter a bombing unit's hex. Intercepting units must stop upon entering a hex adjacent to patrolling enemy aircraft.

3.7.7.6 **Strafing** – Aircraft units assigned to hunt, patrol and interception missions may strafe enemy airbases that hold aircraft that were not or could not be used for air combat missions. After all bomber movement has been completed, any fighters not used to intercept bombing missions may be moved adjacent to enemy airbases for the purpose of strafing. After resolving a strafing attack, the intercepting or hunting air unit must return to a friendly airbase that is not in and enemy ZOC, subject to stacking limits. If intercepting air units are adjacent to hunting air units after completing a strafing attack, that intercepting units are subject to attack by the hunting units prior to returning to an air base.

3.8 Combat

Combat occurs after all movement has been completed. Combat is resolved in any order desired by the moving player, noting that some combat actions may trigger interception combat from enemy fighters. There are three types of combat: Attrition (ground) Combat, Bombing and Barrage, and Air Combat. Each is described in detail below.

3.8.1 **Attrition Combat** – Attrition combat takes place between ground combat units, possibly with the support of artillery and air units. During the combat phase, all enemy units that occupy friendly ZOCs must be attacked, regardless of the calculated odds. An attacking unit may only attack once per turn, and a defending unit may only be attacked once per turn. The process of resolving ground combat is as follows:

3.8.1.1 **Attacking Factors** – When multiple units attack an enemy

hex, add the combat values of all attacking units into one total combat value. Armor, infantry, and artillery units attack adjacent enemy units. Air units attack enemy units within their hex.

3.8.1.2 Defending Factors – When one unit attacks multiple defending units in one or more adjacent hexes, add the combat values of all defending units into one total combat value.

3.8.1.3 Mass Attack – When multiple attackers can attack multiple defenders, the attacking units may be divided up to attack different adjacent hexes, so long as all adjacent hexes are attacked. Each defending hex is always treated as a whole and may not be divided up.

3.8.1.4 Individual Units – Under no circumstances may the combat value of an individual unit be divided between multiple defending hexes.

3.8.1.5 Soaking-Off – An attacking unit may purposely attack at unfavorable odds in order to allow other friendly units to attack at better odds. This is referred to as "soaking-off." The odds of a soak-off attack can never be less than 1-6 (see below).

3.8.1.6 Illegal Attack – If a unit cannot attack at odds of at least 1-6 (see below), it is eliminated and removed from the map before any combat is resolved, as if it never existed.

3.8.1.7 Terrain Effects – Attacking unit combat values are never affected by terrain. Defending unit combat values are doubled when in city or mountain hexes. Defending unit combat values are doubled when all attacking units occupy river hexes (noting that just a single attacking unit that does not occupy a river hex would nullify this defensive bonus).

3.8.1.8 Supply Effects – An attacking unit that is unable to trace a supply route at the moment of combat has its combat value halved (rounded up) and may not advance after combat (see below). Non-supplied defending units always defend at full strength.

3.8.1.9 Tactical Bombing – TAC and MDM bomber units stacked on a target hex add their combat strengths to the attack. The *modified* strength of the air units may not exceed the strength of ground units attacking the target hex. If the *printed* strength of the bombing units at least equals that of the defending units in the hex, a river defense bonus is nullified. At least half (a minimum of one) of any losses sustained by the attacker must be taken from the supporting bombers due to anti-aircraft fire.

3.8.1.10 Combat Ratio – To resolve combat, a ratio between the attacking and defending units must be determined. To do this, divide the smaller combat factor both into itself, and into the larger combat factor. The resulting two numbers (one of which is "1") are expressed as a strength ratio, placing the number which represents the attacker first in the ratio. Fractions of any size are rounded up or down to a whole number favorable to the defender in each attack.

Examples: Attacker 14, defender 8. dividing both by 8 gives attacker 1 6/8, defender 1. Since 1 6/8 is converted in favor of the defender this becomes 1:1. 8 to 14 becomes 1:2; 14 to 6 becomes 2:1; 4 to 14 becomes 1:4; 4 to 18 becomes 1:5. etc.

3.8.1.11 Straining – If the attacker does not have sufficient combat strength points to achieve the next highest odds ratio, the attacker has the option to strain. When straining, the attacker may add up to five additional strength points to
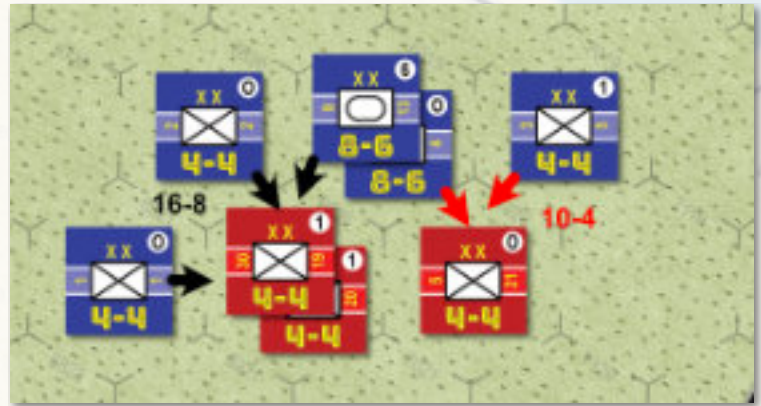
Mass Attack Example: Blue's attacks against Red's 19th, 20th, and 21st Infantry must be two separate attacks, since 1st and 2nd Infantry aren't adjacent to the 21st. Thus, Blue's 5th must attack the 21st and Blue's 1st and 2nd must attack the 19th and 20th. The 19th and 20th may not be attacked separately, but must be attacked as a combined unit. Only the 13th Infantry and 4th Armor have a choice of how to attack. Blue has opted to divide the stack of armor units to attack different hexes.

achieve the next highest odds ratio (to a maximum ratio of 6-1). Following the resolution of combat, the attacker must roll a die. If the roll is less than or equal to the number of strength points added to the attack, the attacker suffers an additional number of losses equal to one-half the number of losses sustained in the attack (rounding up).

3.8.1.12 Combat Resolution – To resolve the attack, cross-reference the roll of a die with the column matching the odds ratio on the Attrition table. The A row indicates the results affecting the attacker, while the D row indicates the results affecting the defender. The combat results found within the Factors Lost (L), Retreat (R), and Advance (A) columns are as follows:

- **Factors Lost (L)** – The loser has the choice of which units lose factors. Substitute units are used to replace units that are partially eliminated. Example: under 4-1 with a die roll of 5, the defender must lose 3 factors. Thus, a 6-factor unit is removed and replaced by units whose combat factors total 3. Artillery units always lose factors based upon their defensive value (regardless of whether a unit is attacking or defending). Each partially eliminated unit must be replaced by its own type; armor for armor, infantry for infantry, etc. Also in this example, the attacker must eliminate 1 factor in the

River Effects Example: Blue's 1st and 2nd Marines attack Red's 1st Infantry at basic odds, even though the 2nd Marines are in a river, because the 1st Marines are not in the river. Red's 2nd Infantry is doubled because Blue's 3rd Marines are in a river hex.

same manner. In cases where the table specifies losses greater than units engaged, only the units engaged are eliminated.

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- **Retreat (R)** – The loser must retreat all surviving combat units the full number of hexes specified. Example: in the 4-1, 5 die-roll situation, the defender retreats all surviving units 3 hexes. The loser may retreat his units in any direction through friendly units, across rivers, through mountains, forests, cities, and the desert. Retreats along roads and through forests is done as if they were clear terrain hexes. Units cannot retreat through enemy zones of control, off the board, into the sea or lake, into the neutral country or placed on friendly units that would result in stacks exceeding the 12-factor maximum. Thus, retreating units are eliminated, instead, if they only available retreat route is through these areas.

- **Advance (A)** – After losing units have been retreated, the opponent has the option to advance all remaining victorious units up to the number of hexes specified. In the above 4-1 example, the attacker has his choice of moving some or all of his surviving Units 0, 1, or 2 hexes. Units may advance in any direction according to the following restrictions: (a) the first hex of advance must be the loser's vacated hex and (b) advancing units must stop as soon as they enter an enemy ZOC hex. Units that advance adjacent to enemy units whose battles have not been resolved cannot participate in such battles ... however, their presence does serve to cut off retreat routes. In the event retreating units must be eliminated, because retreat routes are blocked, the winner may advance his units the full number of hexes specified.

Ground Combat Resolution Example: Great Blue's First and Second Marine divisions are attacking Big Red's First Infantry Division at a ratio of 12 to 4, reduced to 3 to 1. Blue rolls a 3 on the die, resulting in two losses to the defender, so Red replaces the First Infantry unit with a 2-factor supplemental infantry unit. The die result also requires that Red retreat two hexes, while Blue may advance one hex (which must be into the hex just vacated by Red).

3.8.2   Bombardment and Barrage – Rather than engage in direct, attrition combat, some units (bomber aircraft and artillery) may attack the enemy indirectly through bombardment and barrage. These attacks all use the bombardment and barrage table, and apply the results of the attack somewhat differently based upon the type of target attacked.

3.8.2.1   Enemy Forces – SAC and MDM units that are moved into an enemy occupied hex may bomb those units. These bombing attacks may not be combined with artillery units (see below), and must be resolved prior to artillery barrages. Not subject to night bombing.

- **Bombing Process** – The combat values of any bombing units moved into the enemy hex are summed, with the total cross-referenced against a die roll on the bombing and barrage table. The resulting number indicates the total combat factors lost by the defending units.

- **Bombing Results** – The defender uses supplemental units to note the reduction in strength. Only ground units are affected (air units are assumed to have taken off in advance of the bombers arriving). Strategic bombing is immune to anti-aircraft fire.

Enemy Forces Bombing Resolution Example: Big Red is bombing a stack of Great Blue's units with eighteen factors of bombers. Red rolls a 3 on the die, resulting in three losses to the defending units. If the defenders were occupying mountain or a city hex, this result would be halved (rounded up) to two losses.

3.8.2.2   Airbases – TAC and MDM bombers may be moved into a city hex in order to attack enemy air units on the ground in that hex. The bombing units are subject to simultaneous anti-aircraft fire. Not subject to night bombing (see below).

- **Bombing Process** – The combat values of bombing units moved into the enemy hex are summed, with the total cross-referenced against a die roll on the bombing and barrage table. The resulting number indicates the total combat factors lost by the defending air units.

- **Anti-Aircraft Fire** – The airbase returns fire on the air combat table using a number of factors equal to half the combat factors of the grounded air units in the target hex, rounded up. Roll a die and cross-reference the roll with the number of attacking anti-aircraft factors to determine the number of bombing factors lost.

- **Bombing Results** – Both sides use supplemental units to note the reduction in strength. Invert the surviving defending air units to indicate that they cannot be used for combat missions during the following player turn (but may use staging). The airbase itself is unaffected by these attacks and may be used to land air units as required.

Airbase Bombing Resolution Example: Great Blue is bomb-

ing one of Big Red's airbases that is currently stacked with ten factors of grounded air units. Blue is bombing with twelve factors and rolls a 1 on the die, resulting in a loss of seven of Red's factors. Red fires back with anti-aircraft fire equal to half of the grounded air units in the hex, or five. Red rolls a die and also gets a 1 for a loss of three of Blue's attacking air factors. Since these attacks are simultaneous, the results of the attacks are not applied until both sides have fired. After results are applied, Red units are flipped to indicate that they cannot be used during Red's next turn.

3.8.2.3 **Ports** – SAC and MDM units may bomb port hexes. Bombing units are not subject to anti-aircraft fire. Subject to night bombing (see below).

- **Bombing Process** – The combat values of bombing units moved into the port hex are summed and the total cross-referenced with a die roll on the bombing and barrage table. Any numeric result (regardless of the amount), damages the port for one complete turn.

- **Bombing Results** – A successfully bombed port may not be used for movement to or from adjacent sea zones or for sea supply. Place a reduction marker in the port symbol's hex (adjacent to the port city hex) until the end of the bombing player's next turn.

Port Bombing Resolution Example: Big Red has sent a medium (MDM) bomber unit with one combat factor to bomb one of Great Blue's ports. Red rolls a 1 on a die, resulting in a single point of damage on the barrage and bombing table. This is sufficient to disrupt the use of the port for a full turn. Blue places a reduction marker in an open sea hex adjacent to the port hex to indicate this status.

3.8.2.4 **City-Road Network** – SAC and MDM units may bomb the road-network in a city hex to deny the city from providing a road bonus or acting as a link in a supply chain. Bombing units are not subject to anti-aircraft fire. Subject to night bombing (see below).

- **Bombing Process** – The combat values of bombing units moved into the city hex are summed and the total cross-referenced with a die roll on the bombing and barrage table. Any numeric result (regardless of the amount), damages the city's road network for one complete turn.

- **Bombing Results** – A successfully bombed city hex may not be used for road movement bonuses or as a link in a supply chain. Place a reduction marker in the city hex until the end of the bombing player's next turn.

City-Road Network Bombing Resolution Example: Great Blue has sent a strategic (SAC) bomber unit with one combat factor to bomb one of Big Red's city hexes in order to disrupt its road network, thus shortening a supply line. Blue rolls a 1 on a die, resulting in a single point of damage on the barrage and bombing table. This is sufficient to disrupt the use of the road network for a full turn. Red places a reduction marker in the city hex to indicate this status.

3.8.2.5 **Supply and Industry** – SAC and MDM units may bomb the supply and industrial capacity of a city hex so that the city hex may not be used for supply or critical resources. Note that all hexes of a multi-hex city must be successfully bombed in order to deny this capacity. Bombing units are not subject to anti-aircraft fire. Subject to night bombing (see below).

- **Bombing Process** – The combat values of bombing units

moved into a city hex are summed and the total cross-referenced with a die roll on the bombing and barrage table. The total attacking factors are halved if the bombers are intercepted without escort. Any numeric result (regardless of the amount), damages the city hex for one complete turn.

- **Bombing Results** – A successfully bombed resource may not be used. Place a reduction marker in the hex adjacent to the critical resource icon until the end of the bombing player's next turn if all hexes in the city are successfully bombed.

Supply and Industry Bombing Resolution Example: Big Red has sent a medium (MDM) bomber unit with one combat factor to bomb one of Great Blue's industrial centers. Red rolls a 1 on a die, resulting in a single point of damage on the barrage and bombing table. This is sufficient to disrupt the use of the port for a full turn. Blue places a reduction marker in a hex adjacent to the industry hex to indicate this status.

3.8.2.6 **Night Bombing** – SAC and MDM units may opt to attack at night. Units that do so are not subject to enemy fighter interception, but the attack is resolved with a three column shift to the left on the bombing and barrage table. Additionally, prior to resolving a night attack, the attacking units are subject to a die roll on the 13-16 column on the air combat table to account for operational hazards due to flying at night.

3.8.2.7 **Artillery Barrage** – An artillery unit represents an independent mass of artillery whose intent is to reduce defending forces. Artillery units may attack an enemy hex that is two hexes distant through bombardment. Artillery units that are adjacent to enemy units must attack the enemy using the attrition combat process.

- **Barrage Process** – Artillery units that are not adjacent to the enemy may use the bombing and barrage table by adding up the total combat values of barraging artillery on a single hex and cross referencing that total on the barrage and bombardment table with a die roll. The resulting number is the number of defending factors lost. If the defenders are in a city or mountain hex, the number result is halved (round up).

- **Barrage Results** – The defender uses supplemental units to note the reduction in strength. Unless the barrage was preceded by strategic bombing, any grounded air units must absorb all losses before ground units are reduced. Otherwise, the defender may reduce units as desired.

- **Combined Attack** – A defending unit may only be attacked once per turn through barrage, but may be attacked again through attrition (ground combat). When combining a barrage with an attrition attack, both attacks must be resolved sequentially. Any advancement results are limited to one hex, regardless of the outcome of the attrition attack (the attacker may only advance into the defender's vacated hex).

Artillery Barrage Combination Attack Example: Great Blue is attacking one of Big Red's cities. Red is defending with five factors of infantry units and a two-factor fighter unit parked at an airbase within the city. Blue is attacking with ten factors of armor units, six factors of infantry units, and four defensive factors of artillery units (adjacent to the city) for a total of twenty. Blue also has eight factors of artillery units two hexes away from the city. The artillery factors that are adjacent to the city must attack as part of the ground assault, and in so doing, must use their defensive factors. The non-adjacent artillery must complete a barrage attack before the ground assault takes place. Blue rolls a 3 on the barrage and bombing table, resulting in Red losing two factors before the ground assault happens. Since Red is defending in a city,

these losses are halved to one. This loss must come from the air units, so Red is left with five infantry factors and a single air factor. The attrition attack ratio is twenty to six, but since Red is defending in a city, the defending factors are doubled, so the attack is twenty to twelve or one to one. In order to increase the odds to two to one, Blue would have to strain for four points, and opts to do so. Blue rolls a die to resolve the attrition attack and rolls a 2. Each side loses one factor, but Red must also retreat one hex. As Red's remaining air factor cannot retreat, and enemy units are adjacent to its hex, it is immediately eliminated. Blue resolves his straining result and rolls a 5. Since this is greater than the number of straining points added to the attack, there is no additional result.

3.8.3   Air Combat – Air combat is performed between enemy aircraft units. Air combat is initiated by intercepting or hunting FTR units. This process is simultaneously resolved on the air combat table with combat strengths possibly modified by the type of mission defense attacked. In each case, cross-reference the (modified) total combat strength of the firing units with a die roll on the air combat table. The resulting number indicates that number of combat factors lost by the opposing side. Use substitute units to show the reduction in unit strength.

3.8.3.1   vs Escorts – When entering a hex that contains escort fighters, the bombers and escorts defend with half of their total combat strength, rounded up. The interceptors attack at double strength if the bombers are escorted, or triple strength if unescorted. Air transport has no defense other than escorting fighters. Any hits sustained by the defender must be taken from escort units before bombing or transporting units.

Escort Attack Example: Big Red has moved eight factors of intercepting fighters to attack ten incoming factors of Great Blue bombers protected by two factors of escorting fighters. The interceptors are doubled to sixteen factors (which would have been twenty-four factors had the escorts not been present). Red rolls a 3 on the air combat table, eliminating three factors. This eliminates the two escort fighters and one factor of bombers. Blue halves his factors to six and rolls a 3, eliminating one factor of intercepting fighters.

3.8.3.2   vs Hunters – Following the resolution of air combat or strafing in a target hex between interceptors and bombers, air transport, and/or escorts, hunter units in an adjacent hex immediately attack surviving interceptor aircraft. The hunters attack at full strength, and may not be attacked by the interceptors. If the interceptors attack the hunters directly (rather than attacking a bomber or air transport unit), both sides fire at each other simultaneously at normal strength.

Hunter Attack Example: Carrying on from the example above, Great Blue has placed six factors of hunters adjacent to the hex that Big Red's interceptors just attacked. Blue rolls a 2 on the air combat table and eliminates two more factors of interceptors. The interceptors may not return fire on the hunters.

3.8.3.3   vs Patrols – Upon entering a patrolling air unit's ZOC, intercepting units must stop. The intercepting units are not required to attack the patrolling units, but if they opt to do so, each side attacks at normal strength. After applying combat results, the smaller force must withdraw to a friendly base. The larger force must withdraw the same number of factors to a friendly base as well. Remaining patrol factors may remain on patrol. Remaining intercepting units may continue to move.

Patrol Attack Example: Great Blue is attempting to intercept incoming Big Red bombers with ten factors of interceptors, but Red has previously placed six factors of Patrol aircraft between the Blue airbases and the target city. The interceptor aircraft must stop when moving adjacent to the Red patrol aircraft and decides to attack. Blue rolls a 3 and eliminates two factors of Red's patrol. Red rolls a 1 and eliminates three factors of interceptors. This leaves Red with four patrol aircraft to eight Blue interceptors. Since Red is the smaller force, it must withdraw to friendly airbases, while four of the Blue interceptors must do the same. This leaves four Blue interceptors to continue against the Red bombers.

3.8.3.4   vs Interdiction – Upon entering an interdicting air unit's ZOC, intercepting units must stop. The intercepting units are not required to attack the interdicting units, but if they opt to do so, FTR units (from either side) attacks at normal strength, while TAC units fire at half strength, rounded up. After applying combat results, the smaller force must withdraw to a friendly base. The larger force must withdraw the same number of factors to a friendly base as well. Remaining intercepting units may continue to move. Remaining interdicting factors may attack adjacent ground units within their ZOC at double strength on the air combat table. Ground units attacked through interdiction return fire upon the interdicting units with anti-aircraft fire at half strength (rounded up) on the air combat table.

Interdiction Attack Example: Big Red is attempting to intercept a group of Great Blue's fighters (six factors) and tactical bombers (four factors) that are interdicting against Red's adjacent ground forces. Red is intercepting with twelve factors. Red rolls a 1, eliminating three of Blue's aircraft factors. Blue's tactical bombers are halved, for a total of eight factors, and rolls a 6, which has no effect. Since Blue now has seven factors to Red's twelve, Blue must withdraw back to an airbase and Red must also withdraw seven factors back to base. The remaining interceptors may continue to move. If the losses were reversed and the interdictors had factors remaining, these factors could attack the ground units at double strength, while receiving half-strength return anti-aircraft fire on the air combat table.

3.8.3.5   Strafing – Strafing is the process of attacking enemy aircraft units on the ground. Intercepting and hunting units may strafe enemy airbases that contain aircraft units if they did not perform any other kinds of attacks during the current turn. Intercepting units attack at normal strength, while hunters attack at double strength. The grounded air units return fire as anti-aircraft fire at half-strength (rounding up). Strafers return to base following these attacks.

Strafing Example: Great Blue has moved ten factors of interceptors adjacent to six factors of grounded aircraft in one of Big Red's airbases. Blue rolls a 4 on the air combat table, which has not affect. Had Blue's aircraft been hunters, the factor total would be twenty and the result would have eliminated two of Red's aircraft factors. Red's factors are halved, and a 2 is rolled, which eliminates one of Blue's factors.

3.8.3.6   Overrun Cancellation – If the result of interception eliminates sufficient enemy air factors involved in an overrun to cancel it, flip the overrun enemy units back to their front sides and complete the attrition combat normally.

3.9 Turn End Activities

Following the completion of all combat, each player performs a series of end-of-turn activities as needed, particularly in determining if victory has been achieved. Complete these steps as follows:

3.9.1 **Ready Aircraft** – The current player flips any friendly inverted aircraft to their ready side.

3.9.2 **Reduction Status** – The current player removes any flipped reduction markers on any friendly cities. After removing the flipped markers, flip any remaining reduction markers on friendly cities.

3.9.3 **Victory Determination** – At the end of each player turn (not the full turn itself), each player may check to see if victory has been achieved. This is accomplished in one of three ways:

3.9.3.1 **Annihilation** – A player wins if all of the enemy's units have been eliminated, while having at least fourteen friendly units remaining in play.

3.9.3.2 **Conquest** – A player wins if their forces occupy or are adjacent to all of the city hexes in the opponent's country through two consecutive player turns (ex: Red completing a turn and then Blue completing a turn).

3.9.3.3 **Exhaustion** – A player wins at the end of the last full turn if thirty-five or more city hexes are friendly. Any other situation is considered a marginal victory to whichever player has lost the most units.

3.9.4 **Turn Marker Adjustment** – Following the end of the second player's game turn, the second player checks for game-end. If the current turn includes a game-end die roll indicator (turns fifteen through twenty), the second player rolls a die. If the result is equal to or less than the game-end die roll indicator, the game ends immediately. Otherwise, the turn marker is advanced to the next space on the turn track.

4.0 Minor Countries

Apart from the two major countries on the map that represent home territory to the two players, there are five minor countries between them. These countries begin the game neutral to the struggles between the players, and react when this neutrality is challenged through invasion by either player.

4.1 Minor Country Control

The first player to cross the border *for any reason* (including retreating) or attack into a minor country becomes an aggressor against that country, while the other player becomes allied to that minor country as a liberator. All cities within an invaded minor country are friendly to the liberator, as long as they are not within the ZOC of an aggressor's unit. At the end of the player-turn in which a minor country is invaded, place the liberator's control markers in each city that has not been reduced by the aggressor to indicate the alliance.

4.2 Control Effects

A liberator may move through friendly cities at any time and may base aircraft units there. The liberator may also stack ground units normally in unreduced (see below) minor country cities. If attacked, the aggressor must attack both the unreduced city and any liberating ground units within it.

4.3 Minor City Reduction

Minor country cities each begin with their own ZOC as if an infantry unit were stacked within the city. All aggressor units other than armor and air-assault must stop if they move adjacent, and all aggressor units must attack if they end their movement adjacent to a minor country city hex. The aggressor may not enter minor country cities until they have been reduced on the minor city reduction table. To reduce a city, the aggressor adds all attacking factors including supporting MDM or TAC aircraft units and cross-references this total with a die roll on the minor city reduction table. No more aircraft factors may be used than ground unit factors involved in the attack. The resulting number indicates that number of factors lost by the aggressor. If the result is also marked with an asterisk, the minor city is reduced. Otherwise, the aggressor units must retreat two hexes. An aggressor may not enter a reduced city if enemy (liberator) units occupy it. These units may be attacked in lieu of reducing the city or at the simultaneously with a reduction attempt but by different attacking units. Remove the control marker from reduced cities.

4.4 Garrisons

To keep a captured minor city friendly, it must be continually garrisoned by at least one ground unit. This applies to both players following the reduction of a minor city. After a city has been reduced, it may be entered normally.

4.5 Guerrillas

At the end of any player turn where an aggressor occupies a minor country, but does not garrison every city within that country, that player must eliminate two factors from the forces within the country due to guerrilla actions. If the aggressor as simply moved through or flown over the minor country, losses must be removed from those units that violated its territory.

Note that if an aggressor loses control of a single city, even after reducing all of them, guerrilla attacks resume.

4.6 Supply Effects

Combat supply may not be traced freely through or over a minor country that is currently neutral. An aggressor may not trace supply lines through a minor country unless all of the cities within that country are garrisoned at the beginning of the turn that supply is traced or two combat factors are eliminated from friendly units within that country. Note that these losses are exclusive of and in addition to any effects of guerillas. A player may avoid this loss by simply not tracing supply through or over a neutral country.

5.0 Optional Extended Play

The following rules are provided to add variety and additional challenges to game play. They may only be used if both players agree to use them in advance of play.

Rather than use the game-end die roll to determine when play ends, use the "extended play" boxes below the turn track to complete one years' worth of play. Players may opt to continue play into a second year, lengthening the game according to the guidelines noted below:

5.1.1 **Sudden Death** – Play continues until a player achieves either the annihilation or conquest victory conditions.

5.1.2 **Added Time** – Specify a fixed number of additional turns to play. This can be with or without the random game-end mechanic. If used with this mechanic, specify a turn on which the second player should start rolling for game-end.

5.1.3 **Weather** – The only game mechanic that is directly affected by using extended play is determining weather. Note that the weather chart includes columns for each two-week period beyond the first seven turns. When starting a new year, the weather for the first seven turns is automatically "clear."

Combat Strength Modifications

Cause	Units Affected	Modification
Fog	Infantry Units	Doubled
Rain	Air Units	Halved (round up)
Snow	Air Units	Halved (round up)
Short Haul	Bomber Units	Doubled
Attackers in River	All Defending Units	Doubled
Intercepted	Bombers and Escorts	Halved (round up)
Intercepting Bombers and Escorts	Fighters	Doubled
Intercepting Bombers Only	Fighters	Tripled
Interdicting	Fighters and TAC	Doubled
Interdicted Ground Units	All Defending Units	Halved (round up)
Strafing	Hunters	Doubled
Out of Supply	All Units	Halved (round up)
Invading from Controlled Sea Zone when occupying Full Sea Hex	Attacking Infantry	Doubled

Movement Modifications

Cause	Units Affected	Modification
Rain	Infantry, Armor, Artillery	Off-Road Movement halved except in Desert
Gale	All Unit Types	Off-Road Movement halved no road bonuses; no air operations
Fog	Air Units	No air operations
Ice	All Unit Types	No air operations; units in mountains may not move; no road bonuses
Snow	Infantry, Armor, Artillery	All movement rates halved (round up); no road or desert bonuses; units may not enter mountains
Out of Supply	All Unit Types	Halved (round up)
Two Petrochemical Sources	Armor	Movement values reduced by two
One Petrochemical Source	Armor, Air Assault, Artillery	Movement limited to one hex only

Critical Resource Effects

Controlled Cities	Petrochemical	Basic Industry	Naval Stores
Three or more	A player may operate normally.	A player may operate normally.	A player may operate normally.
Two	A player may only fly (including active patrols) forty factors of air missions that player-turn, including air transport and rebasing. All armor units lose two movement factors and may not use strategic movement or advance after combat. No more than five air and ground units combined may be left at sea.	A player's air units bomb and attack at half-strength, all attacks above 4-1 on the Attrition Table are rolled at 4-1 instead, and artillery may not attack on the Barrage and Bombardment Table. Sea zones of friendly superiority are considered contested instead.	A player may have no more than five air and/or ground units (total, ten) at sea.
One	A player may fly (including active patrols) no more than twenty factors of air missions. Armor, air assault, and artillery units may only move one hex and no units may use strategic movement or advance after combat. No more than five units at sea and these may only be in sea zones that include a friendly port.	A player may not attack with air units, except for fighters that attack at half-strength. Fighters may not contribute to naval ascendancy point calculations. Only three attacks greater than 1-1 on the Attrition Table may be resolved, and these may not be above 4-1. Artillery cannot attack using the Barrage and Bombardment Table. Sea zones of friendly superiority or contested are considered uncontrolled instead.	A player may have no more than five units at sea and may only operate in sea zones that include a friendly port.
None	A player may fly (including active patrols) no more than eight factors of air missions, twelve factors of infantry retain normal movement, there is no strategic movement or advance after combat, and all other units are limited to one hex movement. No units are allowed at sea.	A player may not perform any air combat, all attacks greater than 1-1 are treated as 1-1 on the Attrition Table, no artillery may attack using the Barrage and Bombardment Table. All sea zones are considered uncontested or of enemy superiority.	A player may not have any units at sea. Any units at sea must land. If a player's Naval Stores capacity is reduced to zero, it remains at zero for the rest of the game (his or her navy has been destroyed).