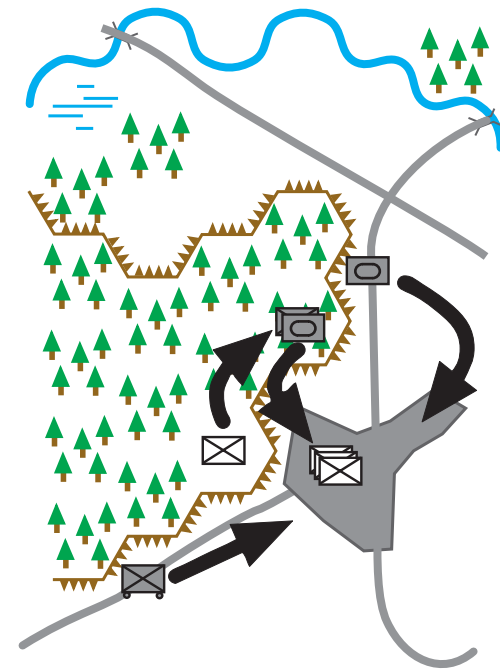


COMBAT OPERATIONS

Public Beta 1 Release



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Cover Illustration by Some Guy Named Joe
Playtesting by Your Name Here!?

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Public Beta 1 Release

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1.0 Introduction

Combat Operations is a regimental/battalion level simulation that incorporates many features of 'hard core' wargames. While maintaining a generic and theoretical approach, not based on any one specific historical period, this game hopes to appeal to the wargamer as well as the novice.

By incorporating into the game units whose specific value is unknown, variable reinforcements, and variable game lengths, the fog of war is simulated. In Combat Operations players are forced to think about using maneuver and strategy to win their objectives rather than brute force.

Combat Operations game is simple to play but hard to win. Players have to manage their forces carefully in order to win as the game system is bloody and the combat system has a built in high attrition rate.



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This beta of Combat Operations is intended to determine if the systems used, and the rules to communicate those, are viable for a released game. Thus far our playtesting shows the approach this game takes has much promise, and now we need to have it play tested by others to see what final tweaks may need to be made for an eventual commercial release of the game.

As this is a beta there are some things to keep in mind. The scenarios offered are intended to test the game system, and are not necessarily fair or balanced. Shipping scenarios will be developed and made available at a later date, if the public beta warrants it. The presentation of the rules, and as needed the rules themselves, will also change.

If all goes well we plan to do a short series of titles using this basic system, each with rules adjusted as needed for the specifics of the game. We hope you enjoy play testing Combat Operations, and look forward to your feedback. Playtesters who contribute meaningfully to Combat Operations will receive play test credit.

1.1 Building the Game

This public beta of Combat Operations, due to the format it is being distributed in, needs just a little bit of work done to get it ready for play. The counters and the board need to be built.

To build the counters copy the sheet of counters onto both a red and blue sheet of stock paper. Cut each set out, discarding the half of each sheet with the counters of the other color (discard blue counters from the red sheet of paper). Fold the counters in half, along the thick center line, gluing each side together. The counters are now to be cut out, with the result being two sided counters, one set in red and one in blue.

To build the board place the two pages of the board next to each other, finding how the two should be put together by seeing the overlap area on each. From the second page (the smaller section of the board) cut a clean edge in the overlap area then tape it to the first page so that the two sections of the map match up evenly. The board pieces can be copied to card stock if desired, but it is not necessary.

Our plans for Combat Operations do not include having to build the counters and board, but then again, the game won't be given away like the public beta is. One point of feedback concerning the state of pieces: Considering the base price of this game is targeted at between \$5 and \$8, would the board being in color be worth an extra \$1 to the cost? Would the counters being real counters (not just light cardboard you have to cut out) be worth an extra \$3 cost?

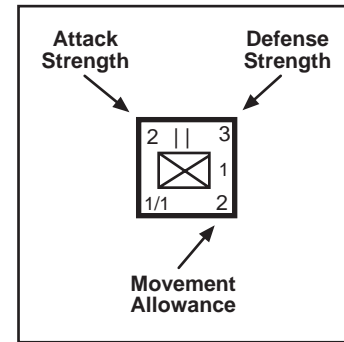


Figure 1

The top right number is the defense strength of the unit. The bottom right number is the movement rate of the unit. Reference Figure 1.

Figure 4 shows a bridge counter. The bridge counter is used to represent an engineer placed bridge and is placed across the hexside that the player wants to bridge. There are two types of bridges in Combat Operations: infantry and armor.

Figure 5 shows a reinforcement counter. Reinforcement counters are drawn during the game turn and are used to bring reinforcements into the game and to prematurely end the game.

3.0 Play Set Up

The players decide which scenario and side to play. Players secretly assign their reinforcements to reinforcement counters as instructed by the scenario

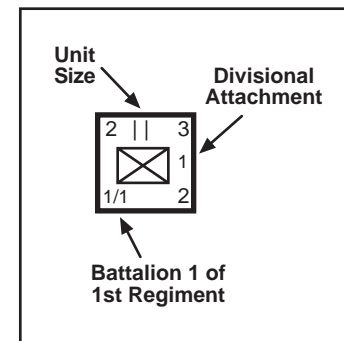


Figure 2

2.0 Playing Pieces

There are two types of playing pieces used to play Combat Operations: combat counters and utility counters.

2.1 Combat Counters

Each combat counter represents a combat unit in the game. The front side of the combat counter shows the characteristics of the counter. The backside shows the type (armor, infantry, etc.) and movement rate but nothing else. The top left number is the attack strength on the unit.

The defender sets his pieces up, face down, on the board per the scenario instructions. Once the defending player is finished, the attacking player sets his pieces up, face down on the board, as per the scenario instructions. Play now begins at Turn 1.

4.0 Game Turn Sequence

Combat Operations is played in turns with the attacker executing his phases prior to the defending player. Once the defender is finished, play moves to the next turn. The turn sequence used in the game is shown below.

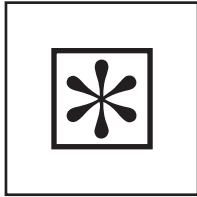


Figure 3

1. Attacker and Defender determines current supply status of units
- Steps 2 - 6 are done by the Attacker first...
2. Attacker draws reinforcement counter
3. Attacker moves units
4. Attacker conducts combat and implements results
5. Attacker conducts exploitation movement
6. Attacker conducts exploitation combat and implements results

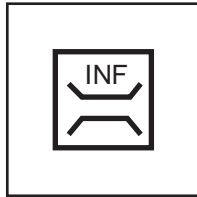


Figure 4

The defender then repeats steps 2 - 6 described above as the attacker. Once the defending player has finished, play proceeds to the next turn.

5.0 Zone of Control

All combat units except headquarter (HQ) combat units in Combat Operations exert a zone of control (ZOC) around the counter. Headquarter units exert no ZOC into any hex. The ZOC exits in the hex the unit occupies and the 6 hexes surrounding the unit. Reference Figure 6.

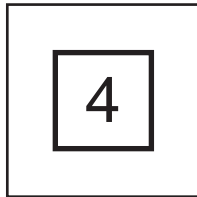


Figure 5

5.1: All enemy units must stop when they enter the ZOC of an opposing unit. Combat units may not trace a line of supply back to their headquarter unit or scenario designated supply head unless the enemy exerted ZOC is occupied by a friendly unit.

5.2: Units that must retreat through an unoccupied enemy ZOC suffer a step loss.

6.0 Stacking

No more than 4 battalions worth of friendly units may stack in the same hex at the end of steps 3 and 6 of a player's turn.

7.0 Supply

All units in the game must be able to trace a line of supply to either the HQ unit or a scenario designated supply head in order to attack and defend with the unit's full attack and defense strengths. The supply status of both sides is determined only during the attack's turn.

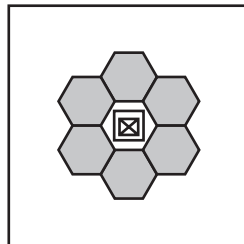
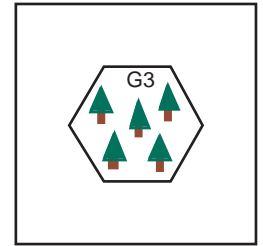


Figure 6

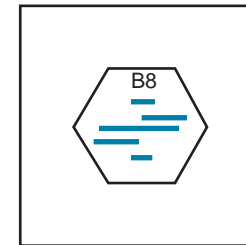
7.1: Units are out of supply if the unit cannot trace an unblocked line of supply to the scenario designated supply head or headquarters unit. The headquarters unit must be in supply itself for it to function as a supply head. The route chosen must always be towards the permissible supply points and cannot first move towards an enemy line. Supply can never be traced over impassable terrain such as swamps and rivers except along roads and bridges.



Woods

7.2: Units that are out of supply have their attack strength quartered. Units that are out of supply also have their defense and movement rates halved. In all cases round down to a minimum value of 1.

7.3: Units that are out of supply still exert a ZOC.



Swamp

8.0 Movement

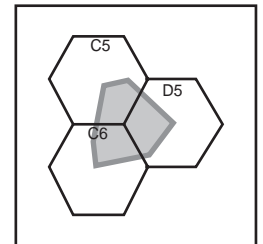
Each unit has a movement value shown on both sides of the counter. Units can expend movement points up to enter into hexes. Each unit must spend at least 1 point to enter each hex. The amount of movement points a unit expends depends upon the type of terrain in each hex. The Terrain Effects Chart lists the effect that each type of terrain has on movement. Movement points cannot be saved from turn to turn. No unit may enter a hex occupied by an enemy unit. A unit can always expend all of its movement points to enter into a non-prohibited hex.

9.0 Terrain Types

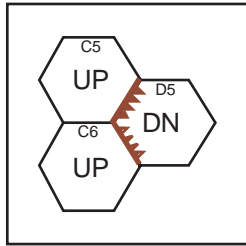
The various types of terrain used in Combat Operations and their effect on movement and combat are listed in the following paragraphs.

9.1 Clear

Clear terrain represents relative flat or low rolling hills that are either grasslands or cultivated fields. Clear terrain costs 1 movement point for all units to enter. Armor, armored cavalry, antitank, and antiaircraft artillery battalions receive an additional +1 to the attack and defense strengths of those units when in clear hexes.



Town



Elevation Change

9.2 Wood

Wood hexes represent thick stands of trees that are difficult for wheeled and tracked units to enter and fight in. All mechanized units must pay 3 movement points to enter into a woods hex. All other units spend 2 movement points to enter into wood hexes. All battalions defend with a +1 bonus to their defense strengths when in a woods hex. All mechanized battalions except motorized infantry and armored infantry battalions suffer a -1 to their attack strengths when attacking into a woods hex.

9.3 Swamp

Swamp hexes represent soft ground located around river flood plains. Swamp hexes cannot be entered by artillery or motorized units except along roads. No combat unit can trace a supply line through a swamp hex except along a road through a swamp hex. It costs all of a non-motorized unit's movement points to enter a swamp hex unless moving along a road. Combat units in a swamp received a defense bonus of +1 while in the swamp hex. All non-infantry attacks into a swamp hex are quartered.

9.4 Town

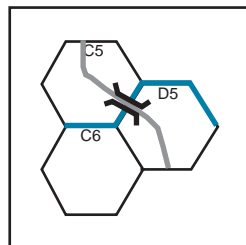
Town hexes represent build up areas with many buildings. It costs non-motorized units 2 movement points to enter a Town hex. It costs all motorized units 3 movement points to enter a town hex. All units in a town hex receive a +2 bonus to their defense strengths. All non-infantry battalions suffer a -1 to their attack strength when attacking into a Town hex.

9.5 Elevation Change

All units must spend an additional 1 movement point to move from a lower elevation hex to a higher elevation hex. Battalions attacking from a lower elevation to a higher elevation suffer a -1 to their attack strength.

9.6 Rivers

Rivers in Combat Operations represent large rivers that require permanent or pontoon bridges in order to cross. Units can trace a line of supply across a river only through a bridge hex. Combat units do not exert a zone of control across a river hex. All combat units except artillery units that attack across a river hex have their combat strength halved.



Bridge & Roads

9.7 Bridges

All units must pay an additional +2 movement points to cross a bridge. There are two types of bridges used in Combat Operations: infantry bridges and armor bridges. Infantry bridges are created by engineer battalions and allow only non-motorized units to cross. Armor bridges allow any type of unit to cross and include all permanent map bridges and all armor bridges constructed by engineer battalions. Combat units, except artillery, that attack across a bridge hex have their attack strengths halved.

A single engineer battalion can construct an infantry bridge across a river if the battalion remains adjacent to the river hexside for two consecutive turns. A single engineer unit that remains in the same hex for four turns can construct an armor bridge. Multiple engineer battalions can team up to speed up the construction of a bridge. Two engineer battalions can erect an infantry bridge in 1 turn and an armor bridge in 2 turns.

An engineer battalion can destroy any bridge if that battalion spends an entire turn in any bridge hex.

9.8 Roads

Roads represent broad, paved roadways. All units pay half the cost of the base hex movement rate or 2, whichever is less. Combat units moving along a road pay elevation and bridge movement costs. Roads have no other effect on movement or combat.

10.0 Exploitation Movement

Exploitation movement represents the ability of motorized units to use gaps created in an enemy's line to break out and attack the enemy or to chase down and attack fleeing enemy units. In order to use exploitation movement, the unit must have neither moved nor participated in an attack in the current turn. To conduct exploitation movement, the player first moves all of their exploiting motorized units using the normal rules for movement. No unit moving during the exploitation phase can move out of supply so the order that units move will be important. Once all units that are exploiting have moved, those units that were eligible for exploitation movement can now conduct combat normally.

11.0 Combat

Combat in Combat Operations is conducted by the attacker revealing his units that are attacking a hex, any supporting artillery units and then sums the total of their attack strengths. The defender then reveals his units that are being attacked, commits any supporting artillery, and sums up the total defense strength of the units in the hex. Any modifiers for unit types are now added to

each side's respective forces. The resultant attack strength of the attacker is then compared to the resultant defense strength of the defender. Round the odds down to the closest ratio of either 1-4, 1-3, 1-2, 1-1, 2-1, 3-1, and 4-1. All odds below 1-4 are treated as 1-4. All odds greater than 4-1 are treated as 4-1.

11.1 Combat Results = 1-4

The attacker has grossly underestimated the strength of the defender. The attacker loses the number of steps equal to the number of steps that the defender has in the hex. The attacker must retreat 1 hex with any remaining units that participated in the attack. The defender suffers no loss.

Example: If the defender has 2 battalions so the attacker must lose 4 steps among his attacking units ($2 \times 2 = 4$). The attacker must now retreat 1 hex away with the remaining units that attacked the hex.

11.2 Combat Results = 1-3

The attacker has underestimated the strength of the defender's position. The attacker loses $1/2$ the number of steps that the defender has and must retreat 1 hex. The defender loses a number of steps equal to $1/8$ the number of steps that the defender. Round any fractions down.

Example: If the defender has 3 battalions, the attacker must lose 3 steps ($3 \times 2 \div 2 = 3$) and retreat 1 hex away with any units. The defender loses no steps ($3 \times 2 \div 8 = .75 \Rightarrow 0$).

11.3 Combat Results = 1-2

The attacker has run up against the stout defenses of the defenders and has been rudely thrown back. The attacker loses a number of steps equal to $1/3$ the number of steps that the defender has in the hex. The attacker must retreat 1 hex. The defender loses a number of steps equal to $1/6$ the number of steps that the defender has. Round any fractions down.

11.4 Combat Results = 1-1

Both the attacker and defender lose a number of steps equal to $1/4$ the number of steps that the defender has. Neither side retreats. Round any fractions down.

11.5 Combat Results = 2-1

The attacker inflicts significant damage on the defender. The defender loses a number of steps equal to $1/3$ the number of steps that the defender has. The defender must also retreat one hex. The attacker loses a number of steps equal to $1/6$ the number of steps that the defender has. Round any fractions down.

Example: The attacker attacks two defending battalions. The defender loses 2 steps ($2 \times 2 \div 3 = 1.33 \Rightarrow 1$) and retreats 1 hex with any remaining units. The attacker loses 0 steps since ($2 \times 2 \div 6 = .66 \Rightarrow 0$).

11.6 Combat Results = 3-1

The attacker has inflicted a significant defeat on the defender. The defender loses a number of battalions equal to $1/2$ the number of steps that the defender has. The defender must also retreat one hex. The attacker loses a number of steps equal to $1/8$ the number of steps that the defender had.

11.7 Combat Results = 4-1

The attacker has inflicted a crushing blow on the defender. The defender is eliminated. The attacker loses 1 step.

11.8 Advance After Combat

If a defender is forced to retreat a hex, the attacker has the option of moving any units that attacked into the vacated hex. The advancement is optional and never mandatory. If an attacker is forced to retreat, the defender cannot advance into the vacated hex.

11.9 Soak Off-Attacks

An attacker is required to attack all enemy units that are adjacent to any friendly combat unit (except artillery) that attacks an enemy unit. Artillery units cannot be used to satisfy this requirement but can be used to support the attacks of non-artillery units (see section 13.4). These attacks can come from other hexes.

Example: In Figure 7, a player with units in hex X would have to be able to attack any defending units in the hexes marked A and B if that player wanted to attack from hex X.

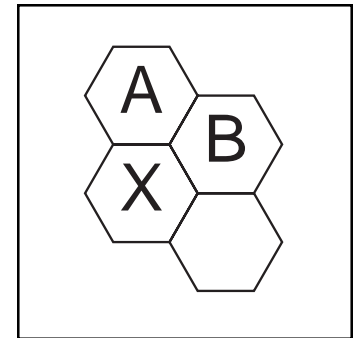


Figure 7

12.0 Damage to Units

When damage is inflicted on the units of a player, every unit that participated in the attack must take a step loss before a unit can receive an additional step loss.

Example: A player attacks with 4 battalions and suffers 5 step losses. Each battalion must suffer a step loss before any other battalion can accept a second loss and be eliminated.

13.0 Combat Unit Modifiers

Certain combat units have their combat values adjusted when attacking certain units or when used in certain situations. These units are discussed below.

13.1 Regimental Integrity

When all of the constituent battalions of a regiment participate in an attack into the same hex then the combat strength of each battalion is increased by 1 point. If the constituent battalions are defending the same hex then the defense strength of all of the battalions are increased by 1 point. Regiment counters in the game reflect the increased strength of the battalions due to regimental integrity.

13.2 Armor Bonus

When armor and armored calvary battalions participate in an attack against a stack of enemy combat units that do not contain any defending armor, armored calvary, engineer, antitank, or antiaircraft battalions, the odds ratio increase one level in favor of the attacker.

Example: In an attack against a defending stack of infantry battalions, the odds were calculated as 2-1. If an armored or armored calvary battalion were present then the final odds would be 3-1.

13.3 Armor Vulnerability

If a stack of armor attacks an enemy infantry unit without supporting infantry of its own then the final odds of the attack are reduced by one level.

Example: In an attack two armored battalions attack an enemy infantry battalion at 3-1 odds without any infantry participating in the attack. The final results would be 2-1.

If armor units participate in an attack against a stack of defending units that contain opposing armor, armored calvary, antitank, or antiaircraft battalions then any damage suffered by the attacker must be first sustained by the armored units before any other units can take damage. Likewise, any damage suffered by the defender using armor, armored calvary, antitank, or antiaircraft against units attacking with either armor or armored calvary battalions must take their losses with those units prior to any other unit taking losses.

Example: An attacker suffers a step loss as a result of an attack. If the defending stack of enemy units contained any armor, armored calvary, antitank, or antiaircraft battalion then that step loss must be inflicted on the attacking armored unit. In the same attack, the defender suffered the loss of three battalions. These losses must first be inflicted on any defending armor, armored calvary, antitank, or antiaircraft battalions that the defender has.

13.4 Artillery

Artillery units are either light, medium, or heavy in Combat Operations as shown on the counters. Light Artillery has a range of 2 hexes. Medium artillery has a range of 3 hexes. Heavy Artillery has a range of 4 hexes.

The attack strength of an artillery battalion can be added to an attack that is within range of the unit. A friendly non-artillery unit must be attacking the target hex for the artillery battalion to be able to support the attack.

The attack strength of an artillery battalion can be added to the defense of a unit that is being attacked and is within range of the artillery unit. Artillery units cannot defend themselves. Use the defense strength of the artillery unit as shown on the counter when attacked.

Artillery units can support attacks and defenses in phases 4 & 6 of the same player's turn but may attack or defend only once per phase.

Artillery units do not suffer damage unless the unit is in the hex that is being attacked.

13.5 Engineers

In addition to their ability to build and destroy bridges, engineer units increase the odds of an attack by 1 step when participating in an attack into a town hex. The engineer unit must participate in the attack with at least 1 other non-artillery unit to gain this bonus.

14.0 Reinforcements

Reinforcements in are designated by the scenario description and are implemented as random events during the game. Each player secretly assigns each individual reinforcement to a numbered chit. If that numbered chit is drawn by the player during phase 2 of their turn, then that reinforcement arrives during the movement phase of their current turn. If an opponent draws the chit then the reinforcement does not come into the game.

Some games are of double length and such scenarios will which reinforcements can arrive in the first half of the game and which reinforcements can arrive in the second half of the game.

Example: A player has three reinforcements this game and assigns them in order to chips 1,2 and 3. If his opponent draws chip 2, then the player will not receive that reinforcement this game.

14.1: Step loss replacements can be added directly to any battalion that has a step loss counter and is in supply.

14.2: Unit reinforcements enter at the supply head hex or the nearest empty edge hex if the supply head hex is occupied by an enemy unit.

15.0 Variable Game Length

Scenarios that are double length have variable game lengths. The scenario description will designate which reinforcement chit will indicate the end of the game. Once that reinforcement chit is drawn, the current player's turn is the last turn of the game.

Example: A scenario is a double length game of 10 turns and designates turn 10+ as the end of game chit. After 5 turns (each player draws a chit per turn) the chits are replaced in a cup and reused. After two more turns, a player draws the 10 chit. The current turn is the end of game turn.

16.0 Winning the Game

The player who satisfies the victory conditions as listed in the scenario instructions first is the winner of the game.

17.0 Scenarios

The following sections lists some of the scenarios for use with Combat Operations. These scenarios are in development and have not yet been play-tested for balance. Note that the listed regiments can be broken down into their constituent battalions for set up and play.

17.1 Red Attack

Situation: Red has reinforced its front line in this sector with an infantry and armored division to attack an under strength Blue Infantry division occupying this sector. Game length (double) 10+. End of game chit is 10+

Blue sets up first anywhere north of the river on Map 1 with the following forces:

1st & 2nd Inf. Reg., 36th Inf. Div.
1 Engineering battalion (E/36), 36th Inf. Div.
1:1, 2:1, & 3:1 Artillery battalions, 36th Inf. Div.
36th Inf. Div. Headquarters & 1 Dummy Inf. Reg.

Blue Reinforcements

A(-) - 3rd Inf. Reg., 36th Inf. Div.
B(-) - 1st Armored Reg., 2nd Arm. Div. (attached to 36th Inf. Div.)
C(-) - 1 Dummy Arm. Reg.
D(-) - 1 Dummy Arm. Reg.
E(+) - 1 step Infantry replacement

F(+) - 1 step Infantry replacement

Blue supply head is hex G1 or hex O1.

Red begins the game with the following forces and moves onto the maps from the south with the following forces:

1st & 2nd Infantry regiments, 49th Inf. Div.
Engineering battalion (E/1) and Anti-tank battalion (AT/1), 49th Inf. Div.
Artillery battalions 1:1, 2:1, 4:1, & 4:1 49th Inf. Div. and 49th Div. HQ
1 Dummy Inf. Reg.
1st Armored Reg., 21st Arm. Div.
1st Armored Inf. Reg., 21st Arm. Div.
Armored calvary battalion (1/21), 21st Arm. Div.
Engineering battalion (E/21), Anti-tank battalion (AT/21), 21st Arm. Div.
Medium Artillery battalion (1/21) & Heavy Artillery battalion (3/21), 21st Arm. Div.
21st Arm. Div. Headquarters
1 Dummy Armored Reg.

Red Reinforcements

A(+) - 2nd Motorized Inf. Reg., 21st Arm. Div.
B(+) - Dummy Motorized Inf. Reg.
C(-) - 1 step Infantry replacement
D(-) - 1 step Infantry replacement

Red supply hexes are G13 and O13.

Special Rules: None

Victory: Red wins a major victory by capturing all of the town hexes (G2, G3, H2 & H3) by the end of the game and still having 2/3 of his battalions remaining. Red wins a minor victory if Red captures all town hexes but has less than 2/3 of his battalions remaining. If Red fails to capture all town hexes but has 2/3 of his battalions remaining then Blue wins a Minor victory. Blue wins a major victory if Red fails to capture all town hexes and has less than 2/3 of his battalions remaining.

17.2 Blue Attack

Blue is poised to attack along a broad front along the River Wideflow. Blue's 36th Infantry Division is to secure the East-West road while Blue's 2nd Armored division breaks out to the West. Game length (double) 10+. End of game chit is 10+

Red sets up first, West of hexrow Q on Map1 with the following forces:

1st, 2nd & 3rd Inf. Reg., 49th Inf. Div.
Engineering battalion (E/1) and anti-tank battalion (AT/1), 49th Inf. Div.
1:1, 2:1, & 4:1 Artillery battalions, 49th Inf. Div., 49th Inf. Div. HQ
1 Dummy Inf. Reg.

Red Reinforcements

A(+) - 502 Heavy Armor battalion
B(+) - Dummy armor battalion
C(-) - 1 step Infantry replacement
D(-) - 1 step Infantry replacement

Red supply head is hexes A7 to A13.

Blue sets up second, East of hexrow Q and south of the river on Map 1 with the following forces:

1st & 2nd & 3rd Inf. Reg., 36th Inf. Div.
Engineering battalion (E/36), 36th Inf. Div.
Armored Calvary battalion (1/36), 36th Inf. Div.
1:1, 2:1, & 3:1 Artillery battalions - 36th Inf. Div., 36th Inf. Div. HQ
1st & 2nd Armored Reg., 2nd Arm. Div.
1st Armored Inf. Reg., 2nd Arm. Div.
1:1, 2:1, & 3:1 Artillery battalions - 2nd Arm. Div.
Motorized Engineer battalion (E/2), 2nd Arm. Div., 2nd Arm. Div. HQ
1 Dummy Armored Reg.

Blue Reinforcements

A(+) - 1 step Armor replacement
B(+) - 1 step Armor replacement
C(+) - 1 step Infantry replacement
D(+) - 1 step Infantry replacement

Blue supply head are hexes T6 to T12.

Special Rules: If a Blue engineer battalion sets up adjacent to a river hexside, then the Blue player can place an Armor bridge across that hexside at the start of the game.

Victory: Blue wins a major victory if he controls (no red units in supply exerting a ZOC on the road hexes) the East-West road and has more than 2/3 of the 2nd Armor division intact at the end of the game. Blue wins a minor victory if he controls all of the East-West road but has less than 2/3 of the 2nd Armor division remaining. Red wins a minor victory if Blue controls the road but less than 1/2 of the 2nd Armor division is in play. Red wins a major victory if Blue fails to gain control of the East-West road.

Unit Symbol	Name	Mechanized	Unit Symbol	Name	Mechanized
	Infantry	No		Mechanized Artillery	Yes
	Armored Infantry	Yes		Engineer	No
	Motorized Infantry	Yes		Motorized Engineer	Yes
	Armor	Yes		Head-quarters	No
	Armored Cavalry	Yes		Motorized Head-quarters	Yes
	Artillery	No		Anti-Tank	Yes
	Motorized Artillery	Yes		Anti-Aircraft	Yes

Attacker	ODDS	Defender
Suffer 1 step loss per step of defending units in hex. Retreat 1 hex	1-4	None
Suffer 1/2 step loss per step of defending units in hex. Retreat 1 hex.	1-3	Suffer 1/8 step loss per step of defending units in hex.
Suffer 1/3 step per step of defending units in hex. Retreat 1 hex.	1-2	Suffer 1/6 step loss per step of defending units in hex.
Suffer 1/4 step loss per step of defending units in hex.	1-1	Suffer 1/4 step loss per step of defending units in hex.
Suffer 1/6 step loss per step of defending units in hex.	2-1	Suffer 1/3 step loss per step of defending units in hex. Retreat 1 hex.
Suffer 1/8 step loss per step of defending units in hex.	3-1	Suffer 1/2 step loss per step of defending units in hex. Retreat 1 hex.
Suffer 1 step loss.	4-1	Defender is eliminated.

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Turn Sequence

- 1 Attacker and Defender determines current supply status of units (Steps 2 - 6 Attacker first, then Defender)
- 2 Attacker draws reinforcement counter
- 3 Attacker moves units
- 4 Attacker conducts combat and implements results
- 5 Attacker conducts exploitation movement
- 6 Attacker conducts exploitation combat and implements results

Terrain	Movement Effects	Combat Effects
Clear	All 1 movement point (MP)	+1 Attack & Defense strength for all Armor, Armored cavalry, Anti-tank, & Anti-aircraft units.
Wood	All mechanized units 3 MPs; all others 2 MPs.	All non-infantry mechanized units suffer a -1 Attack strength when attacking into a woods hex. All units in woods have +1 Defense strength.
Swamp	Prohibited to all mechanized units. Requires all MPs for non-motorized units. Supply cannot be traced through a swamp hex.	All units in swamp receive a +1 Defense bonus. All attacks into a swamp hex are quartered.
Town	All mechanized units 3 MPs to enter; all others 2 MPs	All units in town receive a +2 Defense strength bonus. All non-infantry units suffer -1 Attack strengths when attacking into a town hex.
Elevation Change	All units expend an additional +1 MP to enter.	All units attacking from a lower to a higher elevation suffer a -1 to their Attack strength.
Rivers	No unit can cross a river except at a bridge. Units do not exert a zone of control across a river.	N/A
Bridges	All units expend an additional +2 MPs to cross a bridge.	N/A
Roads	All units pay 1/2 normal hex costs or 2 MPs, whichever is less.	N/A

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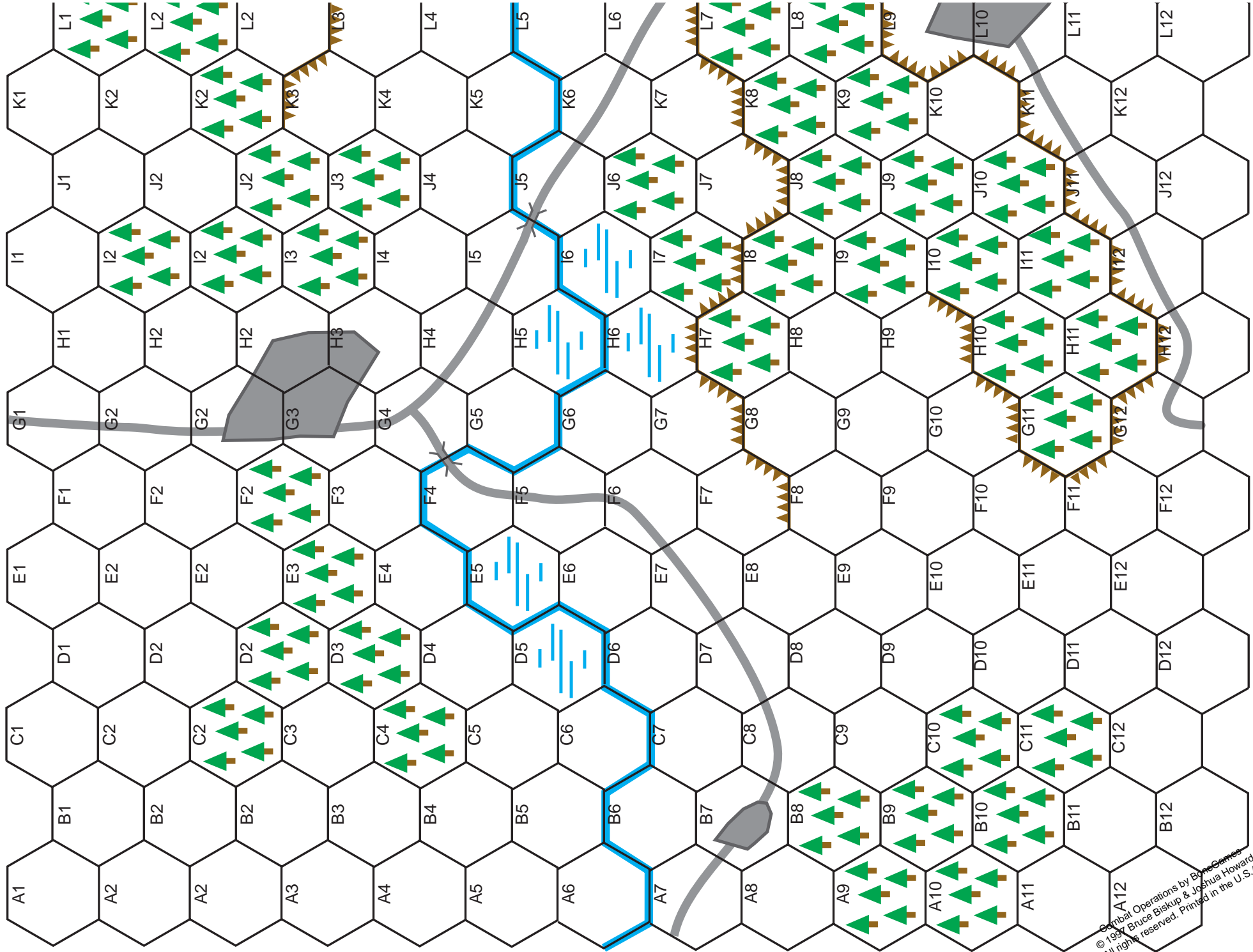
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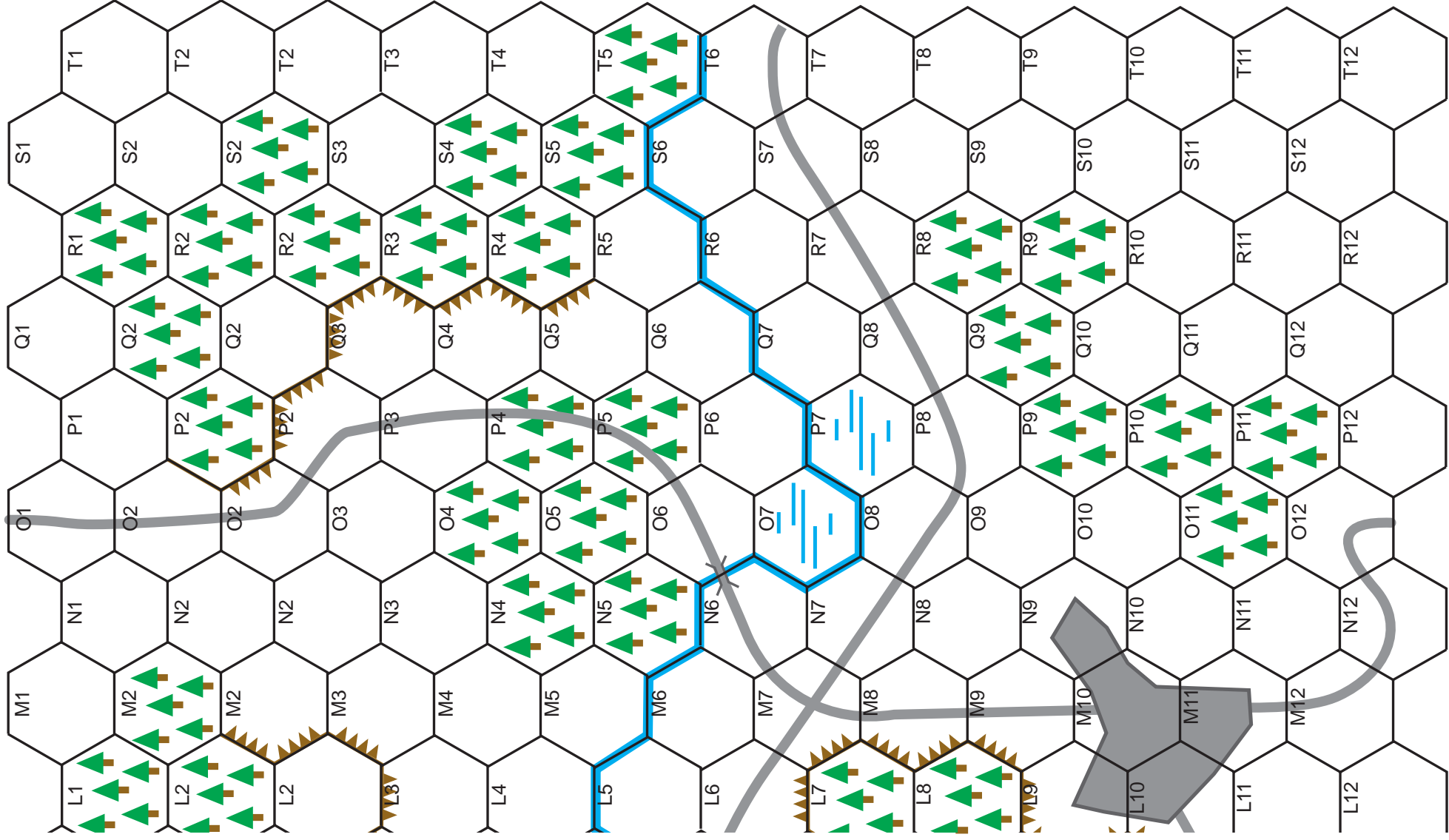
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Red Counters Front

Red Counters Back

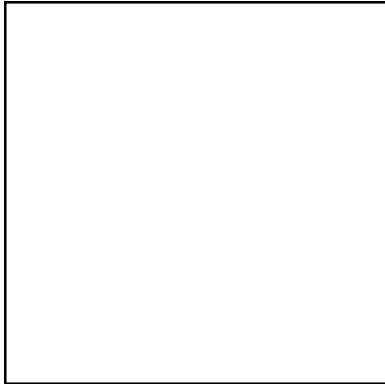
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About BoneGames

Information about BoneGames, including email, web site, and a bit of other stuff. Should take up a few lines.



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Combat Operations Public Beta 1 Errata

This document responds to the many items of feedback we have received from the ComOps beta 1.

1.0 What is the hex and time scale of Combat Operations?

Combat Operations has no scale in either hex or time. This is because the game is designed as a simple operations level wargame and not a detailed tactical or historical simulation. The game is not designed to represent a specific period. Our intent with this game is to experiment with two concepts: hidden units and a fixed combat results system to make a simple, operational level war game. If these ideas work, then the game engine can be modified to portray a historical battle where scale and time become more important. We also want Combat Operations to be different than other games. The intent here is to make the game unique so that it stands out as something other than just another war game. Hopefully, once finished, Combat Operations will not only be a different war game but a game that players will want to play.

2.0 Playing Pieces: In the text, there is a skip from Figure 1 to Figure 4, but never mention Figures 2 or 3. Particularly, what is represented in Figure 3? The terrain figures are labeled, all Figures should be labeled.

For clarification, Figure 3 is a hit marker used to indicate a step loss on a unit. Figure 4 is a bridge marker (Infantry bridge shown, armor bridge on the reverse side). Figure 5 is a number chit that is used to determine if reinforcements arrive or the end of the game is achieved. In the next version of this game, all figures will be labeled correctly.

2.1 The example in figure two is poor for showing Battalion/Regiment identification “1/1” Which “1” is which? Change to “2/3” for Battalion 2 of 3rd Regiment, or something like that.

We have had several comments about this. We are still deciding if we really want the units labeled as such. This is suppose to be a simple game and we do not want players struggling with trying to decide if the correct unit is in play. We are considering other solutions, and will see what we can up with that is better.

3.0 ZOC: HQ exert no ZOC. That is fine. But how is the other side to know that? Inverted, it looks like any other counter of its type. So, you need to tell the other player when he can move next to and past a unit, in effect flagging the existence of the HQ.

A great example of why you beta test... This is a dumb miss on our part. The easiest fix is to allow HQ units to exert a ZOC like all other units.

3.1 Do friendly units negate ZOC?

Yes for retreating and supply tracing. No for movement. Rules 5.1 and 5.2 describe the effects of ZOC.

4.0 Stacking: What is the effect of over stacking? A retreat during combat may over stack a hex? Could I instead retreat through the hex?

The section dealing with this was inadvertently left out. The section on retreating was probably in the pre-beta but we lost it in the ether of electrons somewhere. The following section will be added (back) to the rules. For now add the following section:

11.10 Retreats: Units retreat a number of hexes as described in the combat results. Units that retreat through an enemy ZOC suffer an additional step loss as per 5.2. Units can retreat through friendly ZOC at no detriment but cannot violate the stacking rule (6.0). Units that violate the stacking rule are eliminated instead.

4.1 Stacking: What is the stacking value of a Regiment counter? I know that it is the number of battalions in the counter, but the number was not at first obvious. When setting up the Blue Attack, as the Red player I spent some time looking for the third battalion for each of my regiments before I happened to notice that the regiment counters for the 49th ID had strengths of 6/8, not 9/12.

Add this line to section 13.1.

Red regiments have two battalions per regiment unless otherwise stated in the scenario. Blue regiments have three battalions per regiment unless otherwise stated in the scenario.

5.0 Supply: What is the purpose of HQ? If a unit could trace supply to a HQ unit, it could trace supply to a supply head.

This is a place-holder rule. An earlier version of this game had supply lines defined as a length of hexes. In that situation, the HQ unit acts as an extension of the supply head. We were also planning to have HQ have an inherent supply capability of # number of turns so that the HQ could be out of supply but the units it supports with be in supply for a few turns. The supply rules are still evolving. If we ever include the supply length rules then the HQ units can be removed from the game.

6.0 Movement: Second sentence of first paragraph has a typo?

Typo. The second line in section 8.0 should read as follows:

Each unit can expend movement points up to the maximum listed on the counter to enter into hexes.

7.0 Terrain: Should list when artillery is affected by terrain. For instance, is artillery affected by woods, swamp, elevation change? My guess is only woods and swamps, but not elevation change, but rules say “all” units.

To keep the game simple, artillery is modeled as extra attack or defense points that are added to the total strength of a stack of units. Artillery cannot attack on its own and must always support another unit. The unit supported determines the effect of terrain on the attack. With such a system, artillery points are not modified by terrain. We know this is not strictly speaking correct but it does help simplify the game since player will not have to keep track of terrain effects for artillery.

7.1 Terrain: Rules imply only bridges which exist are ones created by engineers: “There are two types of bridges used in Combat Operations: infantry bridges and armor bridges.” Should instead list three types and specify the ones printed on the map. Can map printed bridges be destroyed? Can they carry armor?

Section 9.7 describes all permanent map bridges as armor bridges. A permanent map bridge can be destroyed by engineers as per the third paragraph of section 9.7. In such a case, the players will have to note on a piece of paper that the bridge is destroyed.

7.2 Terrain: Do roads go *through* town hexes? If so, which hexes specifically? All? Or do I need to trace a path through the town?

Roads do not go through towns. Towns are always treated as a separate terrain for combat and movement. We probably should add a line to section 9.8 to read as follows:

Roads do not pass through town hexes.

7.2 Terrain: It seems to easy for a ENG unit to build lots of bridges. How many amour bridge sections do they carry? It wasn't until after W.W.II that even carrying such equipment was common as part of a combat units equipment. Usually, it had to be called in. Do this: Make the bridge counter a maneuver unit. It must stack with the Eng unit to be placed across a bridge. It could be dismantled for use elsewhere? Give it an attack 0 and defense 1 (or 1 for inf. and 2 for armor), and move of 1 or 2.

We have to agree with this one. We think the suggestion to make the bridge unit a maneuver unit has merit. We will look into this.)

8.0 Damage to Units: At first, I though each battalion had only one step, and step loses referred to regiment units. A second reading convinced me otherwise, but that is *very* unclear in the rules. Nowhere does it *state* that battalions are two step units. How do I mark battalions which have taken a step loss (is that what Figure 3 is used for?). How do I show step losses to a regiment counter? I can guess that a regiment of the Red 49th infantry has two battalions and thus four steps, but how do I lose those steps? Can I keep the regiment counter together through all four step losses? Or must I reduce it to a battalion counter after the third step loss? For a Blue three battalion regiment, can I keep the regiment counter through 6 step losses, or must I break it up after the fourth step loss?

This is another example of something being left out. Section 12 will need to be expanded as follows:

Each battalion can suffer 1 step loss. Upon receiving a second step loss the battalion is eliminated. A unit with a step loss marker has no other detriments. A regiment can sustain a number of step losses equal to the number of battalion in the regiment before a battalion is eliminated and the regiment must be broken down.

A Red regiment has two battalions. The regiment can sustain 2 step loss marker. Upon receiving a third step loss marker, 1 battalion is eliminated, the regiment unit is replaced with the remaining battalion, and that battalion has 1 step loss marker on it.

9.0 Combat Unit Modifiers: Artillery should logically have its own section. For clarification, when supporting an attack, is the range to the target hex or to an attacking unit?

Section 13.4 describes artillery. The range is to the target hex for artillery units supporting an attack and to the defender's hex for used for defensive artillery. Section 13.4 should be rewritten to state this more clearly.

9.1 Combat Unit Modifiers: If a hex contains an infantry unit and an artillery unit which is being attacked, can the artillery use its attack strength to aid the defense? Can it use its defense strength to aid the defense? In some cases, one is better than the other (for instance, a town gives a +2 to a units defense strength, so a Red artillery units defense of 1 +2 = 3 is better than its attack strength).

The intent was to make artillery a support unit. It is not something one should put into the line so lightly. This is why all artillery units have a defensive strength of 1. The rules state that an artillery unit cannot defend itself so the attack strength of the artillery unit cannot be used to defend itself or any other unit in the same hex. This should be defined to mean that the attack strength of the artillery unit can never be used to defend the hex that the artillery unit occupies. As for the last comment, there are quite a few units whose defensive strength is going to be higher than it's attack strength due to the combat modifiers.

10.0 Reinforcements: I spent a while looking for Red reinforcement counters 1-5, while my opponent spent a while looking for Blue 6-10. Only when we mentioned it to each other did we realize what was going on. This should be made clear in the rules. Also, do something to distinguish between a “6” and a “9”.

The criticisms on this are quite valid and will be rectified in the next version of the game. The reinforcement system may be overhauled completely.

11.0 Scenario Blue Attack: Red Setup — Could not find a “E/1” or AT/1.

Typo. The Red division were numbered 1 and 2 in an earlier edition. The unit designations should read:

E/49 and AT/49.

11.1 Scenarios Blue Attack: There is no hex A13 (designated as a supply head).

For space reasons we had to shrink the board, but missed this reference to the old board. Change the hex A13 to A12.

12.0 Counters: Some Blue counters had typo’s, but I do not remember what they were and I loaned a my printed copy of the rules that I made notes on to a third friend.

The problem is probably with the unit designation of the blue motorized infantry units. As previously stated, we are working on a better way to designate the individual battalions.

13.0 Where is this: Aircraft

In order to keep the game as simple as possible, aircraft are not included in the game. We have considered how it might be added, but have yet to come up with a system that works for us.

14.0 Miscellaneous: Despite good play on Red’s part, Red was reduced to five battalions (1 infantry, 1 artillery, 1 HQ, and 1 Eng pushed south of the road on the ridge and one coming on as reinforcement a long way away) and conceded the game after turn four. We concluded that this was VERY unbalanced, but we also played that each battalion was a one step unit. Two steps would obviously change this, but the situation would be more fun if Blue had another regiment to cover its left flank along the river. Otherwise, it was just too easy for Red to spread Blue out.

The scenarios in the beta are not play balanced but should be sufficient to stress the system. Play balance is probably going to be the hardest problem to tackle in this game. We played the Blue attack scenario at Origins and Blue stomped Red but still lost the game since Red did not fully control the road. One of the things that came out from our experience was the need for more dummy units on the defenders side. Since even dummy units exert ZOC, they can be used to slow down an attacker’s progress and gives time for the random reinforcements to make their impact. Both scenarios currently lack enough dummy units for the defender. Feel free to experiment with the scenario mix and report back what you find that works and does not work.

14.1 Miscellaneous: Concerning Anti-Tank and Anti-Aircraft battalions. While artillery battalions often did exist as “units” for support, the others did not. While there were exceptions, such assets were usually spread out among the division’s other units as needed. Though it would require more counters, it might make more sense to break them down into companies to let the player distribute them as needed.

Anti-tank units can represent several different things such as towed artillery pieces or separate tank destroyer units. Rather than breaking them down into companies, we would probably eliminate them from the game. The unit scale is large enough that their removal from the game would not adversely impact the game.

14.2 Miscellaneous: Why give an anti-aircraft unit an anti-tank ability? First, in modern warfare surface to air missiles just simply can not be used against ground targets. The small caliber multi-barrel canons such as 40mm AA guns are ineffective against most hard targets. Then, while WWII style armies did use high caliber high velocity flak guns (such as the German 88 flak), not all armies used their guns in anti-tank roles. And there was a difference between the German 88 flak and pak 88.

ComOps, in its current form, is not a historical wargame - but a wargame system in playtest. Our hope is that as a system it will hold enough promise to warrant investing the time to build historical wargames with.

If and when, Combat Operations is used as the basis of a simulation of a historical battle, then the technical details become important since those details are needed to shape the feel of the conflict. The technical details are not as important to us as the game play is within the scope of Combat Operations. Too many games get overwhelmed with the technical details that may or may not add to the game.